JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) DEPARTMENT OF PUBLIC WORKS AND TOWN AND COUNTRY PLANNING (DPT), MINISTRY OF INTERIOR (MOI)

> THE STUDY ON DEVELOPMENT OF A BUILDING SAFETY SYSTEM FOCUSING ON FIRE PREVENTION IN THE KINGDOM OF THAILAND

# **FINAL REPORT**

**VOLUME IV** 

**APPENDIX** 

FEBRUARY 2003 THE BUILDING CENTER OF JAPAN NIPPON KOEI CO., LTD. THE STUDY ON DEVELOPMENT OF A BUILDING SAFETY SYSTEM FOCUSING ON FIRE PREVENITON IN THE KINGDOM OF THAILAND

FINAL REPORT

## **VOLUME OF REPORT**

**VOLUME I SUMMARY** 

**VOLUME II MAIN REPORT** 

VOLUME III TECHNICAL MANUAL FOR PLANNING OF FIRE PREVENTION SYSTEM

**VOLUME IV APPENDIX** 

## **VOLUME IV: APPENDIX**

## TABLE OF CONTENTS

Page

A:		GAL ANSL					N (ENGLISH	.A1-1
A.1	Control	of Bu	ilding Act					.A1-1
	A.1.1	First	Edition (197	9)				.A1-1
	A.1.2	Seco	nd Edition (1	992)				A1-12
	A.1.3	Third	l Edition (20	00)				A1-20
A.2	Ministerial Regulation for Technical Requirements of Fire Prevention System							
	A.2.1	Minis	sterial Regul	ation N	o. 33			.A2-1
	A.2.2	Minis	sterial Regul	ation N	o. 39			.A2-7
	A.2.3	Minis	sterial Regul	ation N	o. 42			.A2-9
	A.2.4	Minis	sterial Regul	ation N	o. 47			A2-10
	A.2.5	Minis	sterial Regul	ation N	o. 48			A2-13
	A.2.6	Minis	sterial Regul	ation N	o. 50			A2-16
	A.2.7	Minis	sterial Regul	ation N	o. 55			A2-20
A.3	Ministe	rial Re	egulation for	Buildir	ng Admir	nistration		.A3-1
	A.3.1	Minis	sterial Regul	ation N	o. 1			.A3-1
	A.3.2	Minis	sterial Regul	ation N	o. 2			.A3-2
	A.3.3	Minis	sterial Regul	ation N	o. 3			.A3-3
	A.3.4	Minis	sterial Regul	ation N	o. 5			.A3-5
	A.3.5	Minis	sterial Regul	ation N	o. 7			.A3-6
	A.3.6	Minis	sterial Regul	ation N	o. 8			.A3-7
	A.3.7	Minis	sterial Regul	ation N	o. 9			A3-10
	A.3.8	Minis	sterial Regul	ation N	o. 10			A3-11
	A.3.9	Minis	sterial Regul	ation N	o. 11			A3-14
	A.3.10	Minis	sterial Regul	ation N	o. 12			A3-15
	A.3.11	Mini	sterial Regul	ation N	o 14			12 16

	A.3.12	Ministerial Regulation No. 23	A3-17		
	A.3.13	Ministerial Regulation No. 38	A3-18		
	A.3.14	Ministerial Regulation No. 45	A3-19		
	A.3.15	Ministerial Regulation No. 56	A3-20		
	A.3.16	Ministerial Regulation No. 57	A3-21		
	A.3.17	Ministerial Regulation Specifying Other Structures as Buildir under Law Governing Building Control (legislated as the 58 issue of the Ministerial Regulations)	th		
	A.3.18	Ministerial Regulation (under procedure for issuance in the Government Gazette by the Council of State)			
A.4	Ministe	rial Regulation for Other Related Requirements of Buildings	A4-1		
	A.4.1	Ministerial Regulation No. 1 under the Control of Buildir Control Act	0		
	A.4.2	Ministerial Regulation No. 6	A4-12		
	A.4.3	Ministerial Regulation No. 7 under the Control of Buildir Control Act			
	A.4.4	Ministerial Regulation No. 18			
	A.4.5	Ministerial Regulation No. 21	A4-22		
	A.4.6	Ministerial Regulation No. 42	A4-23		
A.5	Fire Fig	ghting and Prevention Act and Ministerial Regulation	A5-1		
	A.5.1	Fire Fighting and Prevention Act	A5-1		
	A.5.2	Ministerial Regulation No. 1	A5-5		
	A.5.3	Ministerial Regulation No. 2	A5-7		
	A.5.4	Ministerial Regulation No. 3	A5-8		
	A.5.5	Ministerial Regulation No. 4	A5-11		
A.6	Architect Act and Engineer Act				
	A.6.1	Architect Act	A6-1		
	A.6.2	Engineer Act	A6-10		
A.7	BMA B	Bye-Law (2nd edition, 2000)	A7-1		
A.8	EIT Sta	ndard	A8-1		
	A.8.1	Part 1: Definitions and Abbreviation	A8-1		
	A.8.2	Part 2: Standard of Building	A8-15		
	A.8.3	Part 3: Mean of Egress Standard	A8-41		
	A.8.4	Part 4: Fire Protection System Standard	A8-71		
	A.8.5	Part 5: Fire Protection Standard	A8-79		
	A.8.6	Part 6: Special Fire Extinguishing Systems	A8-136		
	A.8.7	Appendix of EIT Standard	A8-150		

B:	REQUIREMENTS IN THE MINISTERIAL REGULATIONS CONSULTED FROM NFPA	<b>B-</b> 1					
C:	ON SITE SURVEY AND CASE STUDY OF IMPROVEMENT OF EXISTING BUILDINGSC1-						
C.1	On Site Survey on Existing Buildings						
C.2	Case Study of Improvement on Existing Buildings						
D:	DEMONSTRATON OF FIRE TESTING ON BUILDING MATERIALSD-1						
D.1	IntroductionD-1						
D.2	Basic Principle of Fire TestingD-1						
D.3	Current Condition of Fire Testing in ThailandD-2						
D.4	Selection of Testing Method	D-4					
D.5	D.5 Outline of Transferred Testing Method						
	D.5.1 Noncombustibility Test (ISO 1182)	D-4					
	D.5.2 Ignitability Test (ISO 5567)	D-5					
	D.5.3 Reduced Scale Model Box Test (ISO 17431)	D-6					
D.6	Demonstration and Fire Testing in Thailand	D-6					
D.7	Technical Assistance	D-10					
D.8	Proposal of Evaluation MethodsD-10						
D.9	Attachment	D-11					
E:	FIRE PREVENTION SYSTEMS IN JAPAN AND DIFFERENT COUNTRIES	E1-1					
D.1	Japan	E1-1					
D.2	United States						
D.3	United Kingdom						
D.4	Australia						
D.5	Malaysia						
D.6	Indonesia	E6-1					
F:	EVALUATION METHOD FOR FIRE INSURANCE	F-1					
F.1	Evaluation Method of Premium Rate in ThailandF-1						
F.2	Evaluation Method of Fire Insurance in Japan F-5						

## A LEGAL SYSTEM FOR FIRE PREVENTION (ENGLISH TRANSLATION)

## A. LEGAL SYSTEM FOR FIRE PREVENTION (ENGLISH TRANSLATION)

## A.1 CONTROL OF BUILDING ACT

## **A.1.1** First Edition (1979)

BUILDING CONTROL ACT

1979

BHUMIBOL ADULYADEJ REX.

Given on the 8<sup>th</sup> day of May 1979

Being the 34<sup>th</sup> year of the Present Reign

By Royal Command of the His Majesty King Bhumibol Adulyadej it is hereby Proclaimed that:

Whereas it is expedient to amend the law on the law on the control of the construction of buildings and the law on re-construction of fire area control and congregate them into one same law;

His Majesty the King, by and with the advice and consent of the National Legislative Assembly, in its capacity as Parliament, as follows:

SECTION 1. This Act shall be called the "Building Control Act 1979".

SECTION 2. This Act shall come into force on the day following its publication in the Government Gazette. A Royal Decree shall be issued to specify the localities and their area to which the Act applies.

SECTION 3. The following shall be repealed

The control of the Construction of Buildings Act 1936;

The control of the Construction of Buildings Act (No. 2) 1961;

Announcement of the Revolutionary Party No. 192 dated 31 July 1962;

Re-Construction of Fire Area Control Act 1933;

Re-Construction of Fire Area Control Act (No. 2) 1953.

SECTION 4. In this Act:

"Building" means any masonary or timber dwelling house, shed, shop, floating house, warehouse, office or other structure in which persons may dwell or use, including:

any spectator's stand or other erection for people to assemble;

(2) any dam, bridge, culvert, passage or drain, dock, slipway, landing stage, wharf or landing, fence or wall including gate abutting or near public ways or any structure for use by the public in general;

any signboard or structure for fixing or installing signboard:

being fixed or installed over a public way and having a area exceeding one square metre or weighing, with the structure included, more than ten kilogrammes;

being fixed or installed at a place where the horizontal distance from a public way being less than the vertical distance from the ground level and having an area

or weight exceeding that prescribed in the Ministerial Regulations;

(4) any area or structure for vehicle parking, turning around, and entrance of a building specified under Section 8 (9).

(5) any other structure specified in the Ministerial Regulation.

Which shall include the various parts of such building.

"Public place" means any place that is open to the public or that the people in general are allowed to enter or pass through whether payment is required or not.

"Grounds-plan" means a map of the area of land showing the outlines, location and boundaries of the land and building constructed, modified, torn down, removed, used or reused, including the brief outlines and boundaries of the adjoining public place(s) and building(s).

"Design plan" means a drawing or outline made for the benefit of constructing, modifying, tearing down, removing, using or reusing a building, which shows essential particulars of the various parts, dimensions and symbols of materials, and functions of the building sufficiently complete for such purpose.

"Supplementary particulars to a design plan" means detailed information on quality and kind of the materials

and the method for implementation or construction, modification, tearing down, removal,

use or reuse of the building to be in accordance with the design plan.

"To modify" means to alter, add to, reduce or expand the physical characteristics of the boundaries, design, shape, proportions, weight or area of the structure of the building or its various members already existing to be different from the original, and which is not a repair or modification specified in the Ministerial Regulations.

"To repair" means to restore or replace the various parts of the building back to good condition.

"To remove" means to take off or away such parts which form the structure of the building as a post, beam, joist or other parts of the structure specified in the Ministerial Regulations.

"Fire area" means an area in which a fire broke out and burnt down from 30 household buildings and up or covered an area from one rai and up, including the surrounding area within the thirty-metre redius.

"Supervisor" means a person who is charged with the duty of direction and control of the construction, modification, tearing down or removal of the building.

"Operator" means the owner or possessor of the building who constructs, modifies, tears down or removes the building himself, including the person who undertakes to perform the said work for money payment or not and the sub-contractor.

"Inspector" means the person appointed by the local authority as the inspector.

"Engineer" means an engineer or architect of the Department of Public Works or who is appointed by the local authority as the engineer.

"Local authorities" means Municipalities, Sanitary Districts, Changwat Administrative Organizations, Bangkok Metropolis, Pattaya City, and other local administrative organizations announced by the Minister as the local authorities under this Act.

"Bye-law" means a law or regulation issued by virtue of the Legislative power of the local authorities such as Municipal ordinances, Sanitary Districts' regulations, Changwat's bye-laws, bye-laws of Bangkok Metropolis, or bye-laws or Pattaya City, etc.

"Local Competent Officer" means:

the mayor, for a municipal area;

the sanitary council chairman, for a sanitary district area;

the Changwat Governor, for a Changwat Administrative Organization;

the Bangkok Metropolis Governor, for the Bangkok Metropolitan area;

the Pattaya City Deputy, for the Pattaya City area;

the head of a corporation of a local administrative organization announced by the Minister as a local authority under this Act, for such local authority area.

"Minister" means the Minister in charge and control of the execution of this Act.

SECTION 5. The Minister of Interior shall have charge and control of the execution of this Act and shall have the power to issue Ministerial Regulations to

prescribe fees not the exceed the rates in the schedule annexed to this Act or to exempt fees;

prescribe application form for permission, license certificate, substitute, and order or other forms required for the execution of this Act;

prescribe other activities for the execution of this Act.

Ministerial Regulations shall come into force upon their publication in the Government Gazette.

CHAPTER 1

General Provisions

SECTION 6. This Act shall not apply to the throne or Royal Palaces.

SECTION 7. The Minister shall have the power to issue Ministerial Regulations granting exemption from or easing restriction on or specifying conditions for the execution of this Act in connection with the following building either in part or in the entirety:

the buildings of Ministries, Bureau and departments under official use or use for public benefits;

the buildings of local authorities under official use or use for public benefits;

the buildings of state organizations lawfully established under use for activities of the organizations or use for public benefits;

ancient places, monasteries and temples, and various building used for religious activities and construction of which is specifically and already controlled by law;

office buildings of international agencies or office buildings of the agencies established under the agreements between the Thai Government and the Governments of foreign countries;

office buildings of foreign embassies or consulates;

temporary building for use in constructing permanent buildings or buildings for temporary use with a definite period set for removal.

SECTION 8. For the benefits of strength, safety, fire prevention, public health, environment conservation, city planning, architecture, and facilitating traffic and other activities required for the execution of this Act, the Minister, by advice of the Buildings Control Committee, shall have the power to issue Ministerial Regulations specifying:

the characteristics, design, shape, proportion, area and site of building;

(2) weight bearing, withstanding, endurance, and characteristics and properties of the materials used;

(3) weight bearing, withstanding and endurance of the building or the ground supporting the building;

design and method pertaining to the installation of the system of water supply, electricity, gas and fire prevention;

design and number of bath-rooms and toilets;

electrical lighting system, ventilation, drainage and garbage and refuse disposal;

characteristics, level and area of open space outside the building or the building line;

distance or level between a building and another building or boundary of other person's land, or between a building and a road, trok, soi, footpath, or public land;

area or structure for vehicle parking and turning ground and entrance to a building of some type or category, including characteristics and size of such area or structure;

area prohibited for construction, modification, tearing down, removal and use or reuse of building of some type or category;

criteria, procedures and conditions for construction, modification tearing down, removal, use or reuse of a building;

criteria, procedures and conditions for application for permission, permission approval, license renewal, issuance of certificate and substitutes under this Act.

SECTION 9. Subject to the provision under Section 10, a local authority shall have the power to issue by-laws specified under Section 8 in so far they are not in-consistent with the Ministerial Regulations issued under Section8.

SECTION 10. In the case of a necessity or where it is justificable by specific special reason, a local authority may issue bye-laws on some certain matter that are inconsistent with or contrary to those provided in the Ministerial Regulations issued under Section 8, upon having the consent from the Buildings Control Committee and the approval from the Minister.

SECTION 11. The bye-laws issued under Section 9 or Section 10 shall be effective upon their publication in the Government Gazette.

SECTION 12. The Ministerial Regulations issued under Section 8 or the bye-laws issued under Section 9 or Section 10 that are in consistent with or contrary to the law on city-planning shall be prevailed by the law on city-planning.

SECTION 13. In the case it deems appropriate that construction, modification, tearing down, removal and use or reuse of a building of any type or category in any area of the time no Ministerial Regulation or bye-law under Section 8 (10) has been issued, the Minister, by advice of the Public Works Department Director-General or the local competent officer, as the case may be, shall have the power to announce in the Government Gazette the temporary prohibition for construction, modification, tearing down, removal and use or reuse of the building in such area and shall proceed to issue Ministerial Regulations or bye-laws within one year from the effective date of the said announcement.

If the Ministerial Regulations or bye-laws are not issued within the period pursuant to paragraph one, the said announcement shall be repealed.

#### CHAPTER 2

**Buildings Control Committee** 

SECTION 14. There shall be a Buildings Control Committee comprising the Public Works Department Director-General as the Committee Chairman, one representative each of the Ministry of Public Health, the Ministry of Industry, the Department of Local Administration, the Highways Department, the Office Public Prosecutions, the Department of Town and Country Planning, the Office of the National Environment Commission, the Bangkok Metropolis, the Office of the Board for the Control of Engineering Profession and the Office of the Board for the Control of architectural Profession, and not more than four qualified persons who are appointed by the Minister as Committee Members, and the Head of the office of the Buildings Control Committee as the Member and Secretary.

SECTION 15. A Member who is appointed by the Minister shall hold office for a term of three years.

In the event of an appointment of either an additional or replacement Member during the term of office of the Member already appointed, the newly-appointed Member shall hold office for the remaining period of the term of office of the already appointed Members.

A Member who terminated office may be re-appointed but not for more than two successive terms.

SECTION 16. Besides vacating office upon expiration of the term of office pursuant to Section 15, the Members shall vacate office upon:

death;

resignation;

being dismissed by the Minister;

becoming a bankrupt;

becoming an incompetent or quasi-incompent person;

being sentenced to imprisonment by final judgement or being imprisoned by lawful order, except where the offence has been committee through negligence or is petty one.

SECTION 17. A meeting of the Buildings Control Committee is required to be attended by not less than half the total number of the Committee Members to constitute a quorum. In the event the Committee Chairman is absent or is unable to perform his duty, the attending Members shall elect one Member among them as the meeting chairman.

A decision of the meeting shall be determined by a majority.

A Committee Member shall have one vote and, when votes on each side are equal, the casting vote shall be given by the meeting chairman to decide the question.

SECTION 18. The Building Control Committee shall have the power and duty to

give advice in the issue of the Ministerial Regulations under Section 8;

give consent for the issue of the bye-laws under Section 9 or Section 10;

give recommendations and suggestions to the local competent officers in their execution of this Act;

execute other duties provided in this Act.

SECTION 19. The Building Control Committee may a sub-committee for consideration and execution of any task entrusted by the Buildings Control Committee.

The provision of Section 17 shall be applied to the meetings of the sub-committee mutatis mutandis.

SECTION 20. The Office of the Buildings Control Committee shall be established within the Department of Public Works and shall have the duty to administer technical and administrative work for the Buildings Control Committee, to give consultation and suggestion to the Committee for Appeal Consideration, and to co-ordinate work and give assistance to the Local Authorities in the execution of this Act.

#### CHAPTER 3

Construction, Modification, Tearing Down, Removal,

And Use or Reuse Buildings

SECTION 21. No person shall construct a building unless the owner of such building has obtained the license from the local competent officer.

SECTION 22. No person shall modify a building, unless the owner of such building has obtained the license from the local competent officer.

SECTION 23. No person shall tear down the following buildings, unless the owners of such buildings have obtained the licenses from the local competent officer;

a building of more than fifteen metres in height which the distance between the building and another building or a public land is less than the height of the building;

a building which is less than two metres distant from another building or a public land.

SECTION 24. No person shall remove a building, unless the owner of such building has obtained the license from the local competent officer.

SECTION 25. The local competent officer shall refuse to consider any application for construction, modification, tearing down or removal of a building that has the characteristics of or is classified under the controlled engineering profession or under the controlled architectural profession under the architectural profession, if the engineer or architect responsible for such work implementation as specified in the application is not a licensee for engagement is the controlled engineering profession or in the controlled architectural profession, as the case may be.

SECTION 26. Upon receiving the application pursuant to Section 21, Section 22, Section 23 or Section 24, the local competent officer shall consider and issue a license or a written notification of disapproval order together with reasons for disapproval to the applicant within forty-five days from the day on which the applicant is received.

In the event the local competent officer is unable to issue the license or the notification of disapproval order within the time period specified in paragraph one due to a cause, such period may be extended not more than two times and each time for not more than forty-five days. In such event, however, the applicant must be notified in writing of the period extension and its justification each time before the expiration of the time period specified in paragraph one or the extension thereof, as the case may be.

In the event the local competent officer issues a license or disapproval order, he shall notify the applicant of such action without delay.

SECTION 27. In considering the applicant pursuant to Section 26 the local competent officer shall have the power to order the applicant to modify the site plan, design plan, supplementary particulars to the design plan, or calculation sheets already submitted to be correct to and in accordance with the Ministerial Regulations issued under Section 8 or the bye-laws issued under Section 9 or Section 10, and Section 26 paragraph three shall be applied mutatis mutandis.

After the applicant for the license has modified the site plan, design plan, supplementary particulars to the design plan, or calculation sheets in accordance with the order of the local competent officer, the competent officer shall make examination and consideration and issue the license within thirty days. But if and in the case the applicant has modified same in deviation in material part from that ordered by the local competent officer, it shall be regarded that the application is newly submitted and the proceeding pursuant to Section 26 shall be taken.

SECTION 28. In the case the person who calculates the design plan, supplementary particulars to the design plan and calculation sheets submitted together with the application pursuant to Section 21, Section 22, Section 23 or Section 24 is a licensee for engagement in the controlled engineering profession under the law on engineering profession, the local competent officer shall examine and consider only the parts that do not deal with particulars pertaining to technical engineering and, however, in accordance with the criteria, procedures and conditions prescribed in the Ministerial Regulations.

SECTION 29. In applying for permission to construct, modify, tear down, or remove a building, the applicant for the license shall specify the name together with the statements or consent of the work supervisor in the application for the license.

The work supervisor may be any person or the owner of the building, except where it is prohibited by the law on engineering profession or the law on architectural profession.

SECTION 30. If the licensed person is to remove the work supervisor whose name is specified in the license or the work supervisor is to resign from the duty, the local competent officer shall be so informed, in writing in so far as, however, it does not affect the civil duty and rights between the licensed person and such work supervisor.

In the event of removal or resignation pursuant to paragraph one, the licensed person shall temporarily suspend the work implementation until the new work supervisor is available and a written notification together with a letter of consent of the new work supervisor has been submitted to the local competent officer.

SECTION 31. No person shall arrange to have a building constructed, modified, torn down, or removed in deviation from the approved site plan, design plan and supplementary particulars to the design plan and the methods and conditions specified by the local competent officer in the license, however, except;

Where it is not in consistent with the Ministerial Regulations issued under Section 8 or the bye-laws issued under Section 9 or Section 10;

Where it is a case prescribed in a Ministerial Regulations.

In the event the construction, modification, tearing down or removal of a building is in violation of the provision in paragraph one, it shall be regarded that it is an act of the work supervisor, unless he can prove it to be other person's.

SECTION 32. Building classified under the controlled use category are the building for use for the following business.

warehouses, theatres, hotels or medical treatment places;

commerce, industry, education, public health or other activities prescribed by Ministerial Regulations.

Upon the licensed person having completed the construction, modification or removal of the building classified under the controlled use category, the owner or possessor of the such building shall not use or allow other person to use the building for the activities specified in the license, unless the local competent officer has issued a removed accordingly as licensed.

The owner or possessor of the building pursuant to paragraph two shall not use or allow other person to use such building for any activity pursuant to paragraph one except that specified in the license for construction or modification or removal.

SECTION 33. The owner or possessor of a building which is not classified under the controlled use category shall not use or allow other person to use the said building for any activity specified under Section 32 paragraph one, unless the license has been obtained from the local competent officer and the provisions of Section 26 and Section 27 shall be applied mutatis mutandis.

The provision of paragraph one shall be applied to the reuse of a building classified under controlled use category for one activity to other activity mutatis mutandis.

SECTION 34. The owner or possessor of the building, that is required to have an area or structure for vehicle parking, turn about or entrance pursuant to Section 8 (9), shall not modify or use the vehicle park, turn about or entrance for other activity either in the entirety or in part unless the license has been obtained from the local competent officer.

SECTION 35. The license issued under Section 21, Section 22, Section 23 or Section 24 shall be valid throughout the period specified in the therein. The person who wishes to renew the license shall submit an application before such license expires and, after having submitted the said application, may carry on his business until the local competent officer orders disapproval for renewal of such license.

SECTION 36. The license issued under Section 21, Section 22, Section 23, Section 24 or Section 33 shall not be transferable, unless written permission has been obtained from the local competent officer.

SECTION 37. In the event that a person who has obtained the license under Section 21, Section 22, Section 23, Section 24 or Section 33 dies, his heir or executor who wishes to continue to construct, modify, tear down, remove, use or reuse such building shall notify the local competent officer in writing within thirty day from the day of the death of the licensed person. In this case, it shall be regarded that the said heir or executor is the person who obtains the license on behalf of other person.

SECTION 38. During the construction, modification, tearing down or removal, as the case may be, of a building, the licensed person is required to keep one set of the license, site plan, design plan, and supplementary particulars to the design plan the area of the said licensed work ready for inspection by the Engineer or the Inspector.

The possessor of a building classified under the controlled used category shall display the certificate pursuant to Section 32 or the license pursuant to Section 33 at a conspicuous place of the building.

SECTION 39. In the event a license or certificate is lost, destroyed or damaged at a material part, the holder of such license or certificate shall apply to the local Competent Officer for a submitted license or certificate within fifteen days from the day of knowledge of the loss, destruction or damage.

Application for a substitute license or certificate and issue of a substitute license or certificate shall be in accordance with the criteria, procedures and conditions prescribed in the Ministerial Regulations.

The substitute license or certificate shall be effective according to the law as the license or certificate, as the case may be.

#### CHAPTER 4

#### Authority and Duty of Local Competent Officer

SECTION 40. In the event that there arises a violation of Section 21, Section 22 or Section 24, or any construction, modification or removal of any building that violates Section 31, the local competent officer shall have the power to order the owner or the possess or of the building, the operator or work supervisor, as the case may be, to order suspension of the activity implementation. And if the building may endanger health, life, body or property, the local competent officer may forbid the owner or possessor of the building to use or allow other person to use the building in the entirety or in part.

After having effected the order pursuant to paragraph one, the local competent officer shall consider to issue order pursuant to Section 42 paragraph one or Section 43 paragraph one, as the case may be, without delay but not to be later than thirty days from the day of receipt of the order for the said suspension.

SECTION 41. In the event that there arises a violation of Section 23, or any tearing down of any building that violates Section 31, the provisions of Section 40 paragraph one and Section 43 shall be applied mutates mutandis, provided that the local competent officer issues his order pursuant to Section 43 promptly and not to be later than thirty days from the date of the order for the suspension of the tearing down of the building.

In the event of non-compliance with the order of the local competent officer pursuant to paragraph one, if the local competent officer is of the opinion that the building of which the removal has been suspended may endanger health, life, body or property, the local competent officer shall have the power to have the removal carried out and have the provisions of Section 42 paragraph three, paragraph four and paragraph five applied mutates mutandis.

SECTION 42. In the event that the procedures pursuant to Section 40 have been effected and such acts have brought about no changes in accordance with the Ministerial Regulations issued under Section 8 or the bye-laws issued under Section 9 or Section 10, the local competent officer shall have the power to order the tearing down of the building in the entirety or in part within the prescribed period which shall not be less than thirty days except where there is reasonable cause, may be extended by the local competent officer.

The person whom the local competent officer orders to tear down building pursuant to paragraph one shall tear down the building in accordance with the criteria procedures and conditions prescribed in the Ministerial Regulations issued under Section 8 (11) or the bye-laws issued under Section 9 or Section 10.

In the event of non-compliance with the order of the local competent officer pursuant to paragraph one, the local competent officer shall bring the matter to the Court requesting order for the tearing down of the building. If the facts found through legal proceedings are that there is actually a violation f Section 40, the Court shall order the tearing down of the building and in such order the tearing down of the building and in such order the Court may specify the owner or possessor of the building, the operator or the work supervisor or the local competent officer as the person responsible for the tearing down, the local competent officer may proceed to tear down the building only after an announcement to that effect has been posted up at the area specifying the schedule for tearing down not less than seven days in advance.

In the case the tearing down is to be done by the local competent officer, proper must be taken. However, no person shall command any indemnity from the local competent officer and all expenses for such work shall be borne by the owner of the building.

The local competent officer shall have the power to confiscate all the construction materials and articles removed from the part of the building that is torn down for sale and hold the proceeds in lieu of the property in accordance with the criteria, procedures and condition prescribed in the Ministerial Regulation. And if the Owner does not claim for the property or the proceeds within one year from the day of notification for tearing down, the property and proceeds shall become the property of the state.

SECTION 43. In the event the act pursuant to Section 40 is not inconsistent with the Ministerial Regulations issued under Section 8 or the bye-laws issued under Section 9 or Section 10 or is in consistent but still cannot be corrected or put right, the local competent officer shall have the power to order the owner of the building to apply for the license or order the owner of the building or the operator to put the building right within the prescribed period, which must not be less than thirty days and, if with reasonable cause, may be extended by the local competent officer.

In examining the application for the license pursuant to paragraph one, the local competent officer shall have the power to order the applicant to modify the site plan, design plan, supplementary particulars to the design plan or calculation sheets already submitted to be correct and in accordance with the ministerial Regulations issued under Section 8 or the bye-laws issued under Section 9 or Section 10 within the prescribed period.

If the owner of the building does not submit the application or the owner of the building or the operator does not correct the building pursuant to paragraph one or does not amend the application for the license pursuant to paragraph two, the local competent officer shall have the power to order the tearing down of the said building in the part deemed appropriate and the provisions of Section 42 paragraph two, paragraph three, paragraph four and paragraph five shall be applied mutates mutandis.

SECTION 44. In the event Section 32 or Section 33 is violated, the local competent officer shall have the power to order the owner or the possessor of the building to the use of the building in the part that has not been

certified or licensed until Section 32 or Section 33, as the case may be, is complied with.

SECTION 45. In the event Section 34 is violated, the local competent officer shall have the power to order to owner or possessor of the building to suspend such act. And it is the act to modify the area or structure for vehicle parking, turn about or entrance, the local competent officer shall have the power to order it be restored to its former condition within the prescribed period and the provision of Section 42 shall be applied mutates mutandis.

SECTION 46. In the event the building being constructed, modified or removed with a license under this Act or having been constructed modified or removed before the day on which this Act comes into force is in the condition or is used in the manner that may endanger health, life, body or property or may not be safe from fire or may cause nuisance to or may affect maintenance of quality and environments, the local competent officer shall have the power to order improvement to be in accordance with the criteria, procedures and conditions prescribed in the Ministerial Regulations.

In event of a failure to comply with the order of the local competent officer pursuant to paragraph one and such building may cause serious harm to health, life, body or property, the local competent officer shall have the power to order the building to be torn down and the provision of Section 42 shall be applied mutates mutandis.

SECTION 47. An order or notification of the local competent officer under this Act shall be made in writing and forwarded by registered mail to an applicant a license, licensed person, the owner or possessor of a building, operator or work supervisor, as the case may be, at his domicile, or in a memorandum to be signed by the said person in acknowledgement.

In the event the local competent officer cannot forward a written order or a memorandum for acknowledgement pursuant to paragraph one, such order or notification, as the case may be, shall be posted up at an open and conspicuous place at the building or site of building being constructed, modified, torn down, removed, used or reused and it shall be regarded that the applicant for the license, licensed person, owner or possessor of the building operator, or work supervisor has such order or notification since the day following the seven day period after the the order or notification being posted up

SECTION 48. In performing his duty under this Act, the local competent officer is empowered to enter the building or the building grounds, that causes reasonable suspect that this Act is being violated or is not being complied with during the time from sunrise to sunset or during work hours of such place and, for this purpose, shall have the authority to question for facts or order the persons being present at the place to present documents or other relevant evidence

SECTION 49. The local competent officer shall have the power to appoint any Government official or local authority official, who is knowledgeable or qualified as prescribed m the Ministerial Regulation, as the Inspector or Engineer. Final Report-Volume IV: Appendix

CAPTER 5 Appeals

SECTION 50. There shall be a committee for appeals consideration:

(1) for the Bangkok Metropolis or a Changwat Administrative Organization to comprise the Interior Ministry Under-Secretary of State as Committee Chairman, the Public Works Department Chief Engineer as a Committee Member and other persons, not to be more than six, appointed by the Minister as Committee Members and the head of the Office of the Buildings Control Committee as Committee Member and Secretary.

The Committee Members appointed by the Minister must not be the officials of the Bangkok Metropolis or Changwat Administrative Organization members of Bangkok Metropolis Council or a Changwat Council.

(2) for a municipality, sanitary district, the Pattaya City, or other local authority to comprise the local Changwat Governor as the Committee Chairman, the Changwat Public Prosecution Officer Chahgwat Provincial Police Chief, Changwat Chief Physician and other persons, not to be more than five, appointed by the Interior Ministry Under-Secretary of State as Committee Members and a Committee Member elected by the Committee for Appeals consideration as Secretary.

The Committee Members appointed by the Interior Ministry Under-Secretary of State must not be the officials of the local authority or the local authority council

The provisions of Section 15, Section 16 and Section 17 shall apply to the Committee for Appeals Consideration mutatis mutandis.

SECTION 51. The Committee for Appeals Consideration shall have authority and duty as follows:

(1) to consider and rule appeals against the orders of the local competent officer;

(2) to summon by written letter any concerned person to give statements or to order such person to submit documents or other relevant evidence for consideration in ruling appeals;

In performing the duty under (3) the Committee for Appeals Consideration or the person authorized by the Committee for Appeals Consideration may enter the building or building grounds which is the cause for the appeal during the time from sunrise to sunset

SECTION 52. Any applicant for a license, licensed person and person who is given an order by the local competent officer pursuant to Section 26 paragraph one, Section 27 paragraph one, Section 41 paragraph one, Section 42, Section 43, Section 44, Section 45 or Section 46 who disagrees with an order of the local competent officer is entitled to appeal to the committee for appeals consideration against such order by filling a written petition to the official at the Office of the Under-Secretry of State for the Bangkok Metropolis or a Changwat Administrative Organization area or at the Changwat or Amphoe Office for a municipality, sanitary district, the

Pattaya City or other local authority area within thirty days from the day of receipt of such order.

The Committee for Appeals Consideration shall rule the appeal within thirty days from the day of receipt of such appeal and then notify the ruling to the appellant and the local competent officer. The ruling shall be final. But if the appellant still disagrees with the ruling, he may bring the case to the court of justice within thirty days from the day of receipt of the ruling notification.

The local competent officer shall act in accordance with the ruling of the Committee for appeals consideration or decision or judgement of the court of justice.

During the appeal the appellant or the local competent officer shall not treat the building which is the cause for the appeal in any way, except that the building is dangerous to persons or property or is in the state that requires immediate action.

The provision of Section 47 shall apply to the notification of the appeal ruling mutates mutandis.

#### CHAPTER 6

The Technician and the Inspector

SECTION 53. The Technician of the Inspector shall have the authority to enter the site I which construction, modification, tearing down or removal of a building is under way to see whether this Act is being complied with or not and, for this purpose, shall have the power to question for facts or order the being present or working at the place t present documents or other relevant evidence.

SECTION 54. When there is reasonable cause to suspect that any building has been constructed, modified, torn down or removed in away that violated or did not comply with this Act, or there is reasonable cause to suspect that any building is being used or reused in such a way that violates or does not comply with Section 32, Section 33 or Section 34, or any building that has characteristics pursuant to Section 46, the Engineer shall have the power to enter such building and the building grounds to insect and, for this purpose, shall have the authority to question for facts and order the persons being present or working at the place to produce documents or other relevant evidence.

SECTION 55. In performing the duty pursuant to Section 53 or Section 54, the Engineer or the Inspector shall do so during the time from sunrise to sunset or during the work time of such place and, for this purpose, shall produce his identification card upon request by the persons concerned.

The identification card shall be in the form prescribed in the Ministerial Regulation.

#### CHAPTER 7

#### Fire Area

SECTION 56. When a fire breaks out in any area that has the characteristics of a fire area, the local competent officer shall announce the display of the fire are at the office of the local authority and at the place of the fire by having a brief map showing the boundary lines of the fire area and specifying prohibitions under this Act.

SECTION 57. Within forty-five days from the day the fire broke out, no person shall construct, modify, repair, tear down or remove any building in the fire area and the person licensed to construct, modify, tear down or remove buildings in the said area before the day of the fire shall suspend his activity under the license during the said period.

The provisions of Section 40, Section 41, and Section 42 shall apply to the violation in paragraph on mutatis mutandis.

The provision in paragraph one shall apply to:

(1) construction of temporary buildings for the benefits of relief of distress carried out or controlled by the authorities;

(2) modification or repair buildings as necessary for temporary dwelling or use.

SECTION 58. The local competent officer shall consider whether the fire area should be improved or not by taking into consideration the benefits in fire prevention, public health, environmental quality maintenance town and country planning, architecture and traffic facilitation, then submit his recommendations along with a brief map showing the boundary lines of the fire area. In the case that the fire area cover the areas under more than on local competent officers, the local competent officers concerned shall jointly consider and submit recommendations within fifteen days from the date of the fire.

The Buildings Control committee, after having considered the opinions of the local competent officer, shall submit its opinion together with notes to the Minister for consideration and instructions for the local competent officer to announce to the people in the fire area as to whether the area will be improved or not. The said announcement shall be posted up at the office of the local authority and at the place where the fire broke out within forty-five day from the date of the fire.

SECTION 59. In the case it is announced that there is to be no improvement of the fire area, the prohibitions pursuant to Section 57 paragraph one shall then be cancelled.

In the case it is announced that the fire area is to be improved, the prohibitions pursuant to Section 57 paragraph one shall remain in force for another sixty days from the day of the improvement announcement, and the Office of the Buildings Control Committee shall make an improvement diagram of the fire area to be submitted to the Minister for announcement in the Government Gazette as the effective improvement diagram of the fire area within the said time period.

SECTION 60. After the improvement diagram of the fire area has been announced, no person shall construct, modify, tear down, or remove buildings in the area according to the improvement diagram of the fire area to deviate from those prescribed in the diagram and all the licenses for construction, modification, tearing down or removal of buildings issued before the improvement

diagram of the fire area is announced and become effective which are in consistent with the said diagram shall be cancelled.

The provisions of Section 40, Section 41 and Section 42 shall apply to the violation of the provision in paragraph one mutates mutandis.

SECTION 61. In the case where it is necessary to acquire any land or immovable property for utilization as prescribed in the improvement diagram of the fire area, such land or immovable property shall be appropriate by applying the law on immovable property appropriation mutates mutandis.

SECTION 62. If a fire breaks out in any locality that has the characteristics of a fire area, if such locality still has no Royal Decree, this Act shall apply and it shall be regarded that there is a Royal Decree promulgating this Act in such locality as from the day the fire break out. But if, later on, it is announced that there is to be no improvement in the fire area pursuant to Section 58, it shall be regarded that the said Royal Decree is cancelled as from the day on which the local competent officer effects the announcement.

### CHAPTER 8

#### Miscellaneous Provisions

SECTION 63. In the duty performance of the Committee for Appeals Consideration, the persons assigned by the Committee for Appeals Consideration, cases comparison committee members, local competent officers, Engineers or Inspectors under this Act, the applicants for license, licensed persons, owners or possessors of buildings, operators, work supervisors or concerned persons being present at the places shall provide them appropriate facility and assistance.

SECTION 64. In performing duty under this Act the Committee for Appeals Consideration, persons assigned by the Committee for Appeals Consideration, cases comparison committee members, local competent officers, engineers and inspectors shall become the officers under the Criminal Code.

#### CHAPTER 9

#### Penalty Provisions

SECTION 65. Any person who violates or does not comply with Section 21, Section 22, Section 23, Section 24, Section 31, Section 32,...Section 33, Section 34, Section 42 paragraph two, Section 52 paragraph four, Section 57 or Section 60 is liable to a fine of not exceeding ten thousand bath.

In addition to the penalty pursuant to paragraph one, a person who violates or does not comply with Section 31, Section 32, Section 42 paragraph two or Section 57 shall also be liable a fine of five hundred baht per day throughout the time he still violates or until he performs correctly. A person who violates Section 34 shall also be liable to a fine of one thousand baht per day throughout the time he still violates. SECTION 66. Any person who does not comply with Section 30 paragraph one, Section 38 or Section 39 is liable to a fine of not exceeding one thousand bath

SECTION 67. Any person who violates Section 30 paragraph two or violates the order of the local competent officer pursuant to Section 40 paragraph one or Section 44 is liable to a fine five hundred bath per day throughout the time he still violates.

#### SECTION 68. Any person

(1) who does not come forward to give statements or to deliver documents according to the written summon of the Committee for Appeals Consideration pursuant to Section 51 (2) without meaningful reason; or

(2) who obstructs the duty performance of the Committee for Appeals Consideration, persons assigned by the Committee for Appeals Consideration, local competent officers, engineers or inspectors pursuant to Section 48, Section 51, Section 53 or Section 54, or does not comply with Section 51, Section 53, Section 54 or Section 63, as the case may be.

Shall be liable to imprisonment for not exceeding one month or to a fine of not exceeding one thousand baht or to both.

SECTION 69. If an offence under this Act is committed by an operator, the offender shall be liable to twice the penalty provided for such offence.

SECTION 70. If an offence under this Act is committed in connection with a building for agriculture, industry, education or public health or is an act in the trade for rent, hire-purchase, sale or distribution in return for money payment of any building, the offender shall be liable to imprisonment for not exceeding two years or to a fine of ten times the penalty provided for such offence or to both.

SECTION 71. In the event of a violation of or not comply with Section 21, Section 22, Section 23, Section 24, Section 34, Section 42 paragraph two, Section 52 paragraph four, Section 57 or Section 60, it shall be regarded as being the act of the owner or possessor of the building, operator, work supervisor or the appellant pursuant to Section 52 paragraph four, as the case may be or being the act made according to the order of the said persons unless such persons can prove that it is the act of other person.

SECTION 72. In the event a juristic person commits an offence under this Act, it shall be regarded that all the Directors or Managers of such juristic person are the joint offenders with the juristic person, unless it can be proved that such act of the juristic is made without their knowledge or consent.

SECTION 73. In the event of an offence under this Act, it shall be regarded that the owner or possessor of the land or building nearby or adjoining the building where the offence occurs or the persons whose living or use of the land or building is affected by the said offence is the injured person according to the law on the criminal procedure.

SECTION 74. There shall be a Cases Comparison Committee

(1) for Bangkok Metropolis, to comprise the Bangkok Metropolis Governor, representative of the Public Prosecution Department and representative of the police Department;

(2) for other Changwat, to comprise the Changwat Governor, Changwat Public Prosecution Officer who is assigned by the Public Prosecution Department Director-General and the Changwat Provincial Police Chief.

In the event the investigation officer shall deliver the case of a person, who has committed an offence pursuant to paragraph one who has submitted to being fined, to the Cases Comparison Committee for imposing fine within seven days from the day of the consent to fine.

#### TRANSITORY PROVISIONS

SECTION 75. All the applications for any permission submitted before the day this Act comes into force and are still under consideration by the local competent officer of the Public Works Department Director-General and any permission granted under the law on control of the construction of buildings or the law on re-construction of fire area or the performance by the licensed persons according to the licensed activity, as the case may be, it shall be regarded that they are applications for permission and the granting of permission under this Act mutatis mutandis.

In the event that the said application for permission or the consideration to grant permission is different from the application for permission or the consideration to grant permission under this Act, application for permission or consideration to grant permission shall be in accordance with this Act and the local competent officer shall issue an order pursuant to Section 27 for the applicants for license to perform correctly within thirty days. If an applicant for a license does not comply with the order for the local competent officer within the said period, his application shall not be considered.

SECTION 76. A licensed building for construction or modification that has been completed before the day this Act comes into force, even if it has the characteristics of a building classified under the controlled as category, shall be exempted from having to comply with Section 32 paragraph two.

SECTION 77. Any locality in which a great number of buildings have bee constructed in the state's public land before the day this Act comes into force has turned into or may cause condition that is unsuitable or unsafe for dwelling, fire prevention, public health, environmental quality maintenance, town and country planning and traffic facilitation, upon the Royal Decree prescribing buildings improvement area being issued in that locality, the local competent officer shall issue order, one or many, as follow:

(1) issue an order for the owners or possessors of the buildings tear down the buildings within a period not exceeding six months from the day of receipt of the order, but such order for tearing down buildings shall be made with the purpose of orderliness of the country, local development or for the benefits of the public in using public land;

(2) issue an order within thirty days from the day the royal Decree prescribing buildings improvement area comes into force for the owners or possessors of the buildings to modify or alter the buildings to be correct according to this Act within a period not exceeding sixty days from the day of receipt of the order;

(3) issue an order for the owners or possessors of the buildings to get rid of or stop the cause that brings about or may bring about condition that is unsuitable or unsafe for dwelling, fire prevention, public health, environmental quality maintenance, town and country planning and traffic facilitation within a period not exceeding sixty days from the day of receipt of the order;

(4) issue an order for the owners of the buildings to sign the land lease with the local competent officer according to the criteria, procedures, conditions and rates of rent specified by the Ministry of Interior.

An owner or possessor of the building who complies with the order of the local competent officer pursuant to paragraph one shall be exempted from punishment; but if such a person does not comply, he shall be liable to a fine of not exceeding fifty thousand bath and shall be also ordered by the local competent officer to tear down the building within a period to be prescribed. If such person refuses to tear down the building within the said period, he shall be liable to a fine, on a daily basis, of one thousand bath per day throughout the time he still does not comply or until he consents to the local competent officer having the building torn down. In the latter case, the provisions of Section 42 paragraph four and paragraph five shall apply mutates mutandis.

The Royal Decree pursuant to paragraph one shall have a map showing the boundary lines of the area annexed to the Royal Decree, and the local competent officer shall have the power to arrange for the lease of land in that area for revenue for local maintenance. However, the land shall still remain the state's public property.

The land lease pursuant to paragraph one (4) shall have the lease period as agreed upon but shall not exceed ten years. The lease shall not be renewed. Upon expiration of the land lease period, any owner or possessor of a building who refuses to tear down and remove his building out of the area prescribed in the Royal Decree shall be liable to imprisonment for not exceeding three years or to a fine of not exceeding thirty thousand baht, or to both, as well as to a fine, on a daily basis, of one thousand baht per day throughout the time he still refuses or until he consents to the local competent officer tearing down the building. In the latter case, the provision of Section 42 paragraph four and paragraph five shall apply mutatis mutandis.

SECTION 78. The appeals under the law on control of the construction of buildings field before the day this Act comes into force are appeals against the orders of the

local competent officer that have been submitted to the Committee for Appeals Consideration under this Act.

SECTION 79. All the Ministerial Regulations, bye-laws, Changwat's bye-laws, regulations, rules, notification or orders issued under the Control of the Construction of Buildings Act 1936 or the Re-Construction of Fire Area Control Act 1933 shall remain in force only in the parts that are not in consistent with or contrary to the provisions of this Act.

SECTION 80. Any locality that had Royal Decree promulgating the Control of the Construction of Buildings Act 1936 or the Re-construction of the Fire Area Control Act 1933 before the day this Act comes into force shall be regarded as having the Royal Decree promulgating this Act.

Counter-signed

S. HOTRAKIJ

Deputy Prime Minister

Schedule of Fees

- (1) Construction license each 200 baht
- (2) Modification license each 100 baht
- (3) Tearing down license each 50 baht
- (4) Removal license each 50baht
- (5) Reuse license each 200 baht
- (6) Certificate license each 50 baht
- (7) Substitute license or certificate each 10 baht
- (8) License renewal the same as (1) to (4)

(9) Inspection of construction plan or building modification, as follows:

(a) building of not more than three storeys or not more than fifteen metres tall, fees shall be calculated from the total area of all the floors at 2 baht per square metre;

(b) building of more than three storeys or more than fifteen metres high, fees shall be calculated from the total area of all the floors at 4 baht per square metre;

(c) building of the category that any one of its storey floor has to receive weight exceeding five hundred kilograms per sq.m. fees area of all the floor at 4 baht per sq.m.

(d) sign board, the fees are calculated from the total area determined by the longest part times the widest part at 4 baht per sq.m.

(e) building of the type that its length must be measured such as dam, drainage, fence or wall, fees are calculated by the length at 1 baht per metre.

In calculated fees for design plan inspection fraction of square-metre or metre from one half up shall be regard as one full unit, less than one half shall be disregarded.

### A.1.2 Second Edition (1992)

CONTROL OF BUILDING ACT (No. 2)

B.E. 2535

BHUMIBOL ADULYADEJ, REX.

Given on 29th March B.E. 2535

Being the 47 Year of the Present Reign

His Majesty King Bhumibol Adulyadej has commanded it be proclaimed that;

Whereas it is appropriate to amend the law on control of building;

His Majesty the King s graciously pleased to have enacted an Act by the advice and consent of the National Legislative Council, acting as Parliament, as follows:

Section 1. This Act is called "Control of Building Act (No. 2) B.E. 2535."

Section 2. This Act shall be enforced a and on the expiry of sixty days after the date of publication in government Gazette.

Section 3. The provision under Section 9 and Section 10 of the Control of Building Act, B.E. 2522, shall be repealed and replaced by the following:

"Section 9. In case there is issue of Ministerial Regulation prescribing any matter under Section 8, the local authority shall comply with that Ministerial Regulation, except for the case under Section 10.

In case there is no Ministerial Regulation prescribing any matter under Section 6, the local authority shall have authority to issue a Bye-law prescribing that matter.

In case there is local Bye-law prescribing any matter under paragraph two, if later there is Ministerial Regulation issued prescribing that matter, the provision of the By-law which is contrary to or in conflict with the Ministerial Regulation shall be cancelled, and those prescriptions in the Bye-law which is not contrary to or in conflict with the Ministerial Regulation shall still be enforced until there is new Bye-law issued under Section 10. but shall not exceed one year from the date of enforcement of that Ministerial Regulation.

The Cancellation of the local Bye-law under paragraph three shall not effect the actions which have been executed correctly under that local Bye-law.

Section 10. In case there is no Ministerial Regulation issue under Section 6, the local authority shall be entitled to issue a Bye-law in that matter under the following cases.

(1) Issue local Bye-law prescribing details in the matter in addition as prescribed in the Ministerial Regulation without contrary to in conflict with said Ministerial Regulation.

(2) Issue local Bye-law prescribing that matter which is contrary to or in conflict with said Ministerial Regulation due to being necessary or there is special reason for the local area. Issue of the local Bye-law under (2) shall be enforced only with approval of the Building control Committee and has been approved by the Minister.

The Building Control Committee shall consider to approve or not to approve in the Bye-law under (2) properly within sixty days from the date of receiving that Bye-law. If it is not approved the reason shall be given to that local authority also.

If the Building control Committee has not completed the local Bye-law within the period of time prescribed under paragraph three, it shall be considered that the Building Control Committee has approved the Bye-law and the local authority shall submit it to the Minister for his order. If the Minister shall not order within thirty days from the date of receiving that local Bye-law, it shall be considered that the Minister has approved under paragraph two."

Section 4. Add the following as Section 10 Bis of the Control of Building Act, B.E. 2522 :

"Section 10 Bis. In case the Minister by the advice of the Building Control Committee shall see that any local Bye-law issued under Section 10 (1) is contrary to or in conflict with Ministerial Regulation issued under Section 8 or Bye-law issued under Section 10 (2) has prescription which cause burden or difficulty to the public more than necessary or may be a danger to the health, life or property of the public, the Minister shall have authority to notify that local authority to cancel or revise that Bye-law.

For the case under paragraph one, the local authority shall proceed with the action within One Hundred and Twenty days from the date of being notified by the Minister. Said date shall mean the days during the session of that local authority.

The cancellation or revision of the local Bye-law under paragraph one shall not effect the action which has been carried out properly in accordance with that local Bye-law."

Section 5. Add the following as Section 13 Bis and Section 13 Ter of the control of Building Act, B.E. 2522:

"Section 13 Bis. For the benefit of according convenience to the public who will have to comply with this Act:

(1) The authority and agencies having authorities as other law prohibit, limit or other information relating to construction, modification, demolition, or moving building or carrying out other things under this Act, shall let the local authority concerned to know in order to carry out (2).

(2) The local authority shall provide document to propagate the criteria, procedures and condition in applying for permission and the permits under this Act, including information as stated under (1), for sale to the general public who will have to comply with this Act.

(3) The local competent official shall put up the notice as stated in the permit issued under this Act that the permit holder under this Act has still the responsibility to apply for the building under other law concerned.

(4) The local authority may provide drawings of various buildings which are of standard and correct with the

provision of this Act, Ministerial Regulation and/or local Bye-law issued under this Act, for sale or to be given to the general public.

Section 13 Ter. If those who have to comply with this Act has doubt about:

(1) Prescription about distance or level of building and building or land boundary of other person, or between the building and road, lane, foot-path or public way, or

(2) Prescription prohibiting the construction modification, move, transfer and use or change the use of any type or class of building.

That person shall be entitled to consult the local competent official in writing, and the local competent official shall replay the consultation within thirty days from the date of receiving the writing, but if the local competent official shall consider that it is necessary to seek for advice of the Building control Committee first, or there is other necessary reason said period of time may be extended for not more than two times, each of not more than thirty days.

In case the person who seeks consultation under paragraph one has carried out the construction, modification, removal or transfer the building by complying with the replay to the consultation of the local competent official, if later it appears that the local competent official has made wring judgement on the consultation causing the person seeking the consultation to act wrongly in accordance with the provisions of this Act, Ministerial Regulation or Bye-law issued under this Act or other law concerned, that person shall not be penalised."

Section 6. The provision under Section 18 of the Control of Building Act, B.E. 2522, shall be repealed and replaced by the following:

"Section 18. The Building Control Committee shall have the following authority and responsibility:

(1) Advise the Minister in the execution of Section 8 or Section 10 Bis.

(2) Approve the issue of Bye-law under Section 10 (2).

(3) Act in other way as prescribed in this Act."

Section 7. The provision under Section 21 and Section 22 of the Control of Building Act, B.E. 2522, shall be repealed and replaced by the following:

"Section 21. Whoever shall construct, modify or move building shall have to receive permit from the local competent official or notify the local competent official, and act according to Section 39 Bis.

Section 22. Whoever shall demolish the following building shall have to receive permit from the local competent official or notify the local competent official, and act according to Section 39 Bis.

(1) Building which is higher than fifteen meters which is at distance from other building or public area by less than the height of the building.

(2) Building which is at distance from other building or public area by less than two meters."

Section 8. The provision under Section 23 and Section 24 of the control of Building Act, B.E. 2522, shall be repealed.

Section 9. The provision under Section 25, Section 26, Section 27, Section 28, Section 29, Section 30, Section 31, Section 32, Section 33, Section 34, Section 35, Section 36 and Section 37 of the Control of Building Act, B.E. 2522, shall be repealed and replaced by the following.

"Section 25. In case it is the submission of the application for the permit, the local competent official shall consider and issue the permit or send a letter notifying the order not to approve together with the reason to the applicant for the permit within forty-five days from the date of receiving the application.

In case it is necessary tat the local competent official cannot issue the permit or cannot issue and order not to approve within the prescribed period under paragraph one, the time may be extended by not more than twice each of not more than forty-five days, but he shall issue a letter stating the extension of time and the necessary reasons in each time to he applicant for the permit to know before the expiry of the period of time prescribed under paragraph one or as extended, as the case may be.

In case the local competent official has issued a permit or an order not to approve the local competent official shall notify the applicant for the permit without due delay.

Section 26. In case there is construction, modification, demolition r moving the building applying for the permit has the characteristic or is under the class stipulated to be control engineering profession under the law on engineering profession or is under control architecture profession under the law on architecture profession, if the engineer or architect responsible as specified in the application is not the holder of license to carry out the control engineering profession or control architecture profession under said lae, as the case may be, the local competent official shall refuse to consider that application.

Section 27. In the inspection and consideration of the application for the permit, the local competent official shall have authority to order the applicant for the permit to ratify and amend the drawings of the area, plan, specifications or calculation details submitted so that they are correct and comply with Ministerial Regulation issued under Section 8 or Bye-law issued under Section 9 or Section 10, and the provision of Section 25, paragraph three, shall apply mutates mutandis.

When the applicant for the permit has ratified and amended the drawings of the area, plan, specifications or calculation details according to the order of the local competent official, the local competent official shall inspect and consider and issue permit within thirty days. But if the applicant for the permit has changed the essence differently from the order of the local competent official, in such case it shall be considered to be submission of a new application, and proceed under Section 25.

Section 28. In case the person who calculates the plan, supplementary details of the plan and details of calculation submitted together with the application for the permit, is the holder of the permit is the person who carries out control engineering profession under the law on engineering profession, the local competent official shall consider only

the part which is not concerned with the details according to the engineering principles. This is according to the criteria, procedures and conditions prescribed under Ministerial Regulation.

Section 29. After having received the permit, the holder of the permit shall send a letter notifying the name of the work supervisor and the date of commencement and date of termination of the work permitted, to the local competent official together with attaching the form of letter showing consent of the supervisor also.

The work supervisor may be any person or owner of the building, except that it is prohibited under the law on engineering profession or architecture profession.

Section 30. If the holder of permit shall terminate the work supervisor as notified his name or the work supervisor shall terminate the fact of being the work supervisor, same shall send a notice to the local competent official. But this shall not effect the right and civil responsibility between the holder of permit and that work supervisor.

In case there is termination under paragraph one, the holder of permit shall cease the action as permitted temporary until a letter notifying the name and letter of consent of the new work supervisor have been sent to the local competent official.

Section 31. It is prohibited that anyone shall provide or carry out the construction, modification, demolition or move the building differently from the area plan, drawings and supplementary details of the drawings which have been permitted, including the procedures or conditions which the local competent official has stipulated in the permit or differently from those stated under Section 39 Bis, except that:

(1) The owner of that building shall have submitted an application for the permit and has received the permit from the local competent official to carry out the change.

(2) The owner of that building has stated the details of the change to the local competent official, or

(3) The said act shall not be contrary to Ministerial Regulation or Bye-law concerned, or being the case as prescribed under Ministerial Regulation.

The provisions of Section 25 or Section 39 Bis shall apply to the act under (1) or (2) as the case may be, mutates mutandis.

In case there is construction, modification, demolition or move the building in violation of paragraph one, it shall be considered as an act of the work supervisor, except that the work supervisor shall prove that it is an act of other person whom the work supervisor has protested in writing against such act to the owner or possessor of the building and the operator, but said person has not complied with.

Section 32. Building under control of use are the followings:

(1) Building use as warehouse, theatre, hotel, condominium or place of treatment.

(2) Building for commercial use, industrial, education, public health or for other activity. This is as prescribed under Ministerial Regulation.

When anyone has received a permit for the construction, modification or move the building which is under control of the use, or the person who has notified under Section 39 Bis has carried out such act, he shall notify in writing to the local competent official according to the form prescribed by the local competent official in order to inspect the construction, modification or move of that building within thirty days from the date of being notified.

It is prohibited that anyone shall use that building for the action as stipulated in the permit or as notified under Section 39 Bis, within the period of time as prescribed under paragraph two.

If the local competent official has carried out the inspection and saw that the construction, modification or move of that building is correct as in the permit or as notified under Section 39 Bis, he shall issue a certificate to the holder of permit or the person who make the notification under Section 39 Bis, so that the building may be used according to the permit or as notified under Section 39 Bis. But if the local competent official has not made the inspection within the period of time prescribed under paragraph two the owner or possessor that building shall use or allowed any person to use that building for the activity as stated in the permit or as notified under Section 39 Bis further.

It is prohibited that the owner of possessor of the building under control of the use shall use or allow any person to use that building for other activity apart from that prescribed in the permit or notified under Section 39 Bis.

Section 33. It is prohibited that owner or possessor of building which is not building under control shall use or allow anyone to use said building for the activities under Section 32, except with permit from the local competent official or has notified the local competent official and type provision of Section 25 and Section 27 or Section 39 Bis, as the case may be, shall apply mutates mutands.

The provision of paragraph one shall apply to the change of the use of building under control for the use of certain activity to be building under control of the use of another activity, mutates mutands.

Section 34. It is prohibited that the owner or possessor of building which must area or construction for use as car park, car turning area and entry-exit for vehicle as prescribed under Section 8 (9), to modify or use or allow other person to modify to use the car park, car turning area and entry-exit for other purpose. This is no matter whole or part, except with permit from the local competent official.

The prohibition under paragraph one shall be considered as obligation in that immoveable property directly as long that building exists. This no matter the car park, car turning area entry-exit is transferred to other person or not.

Section 35. The Permit issued under Section 21 or Section 22 shall be applicable only for the period of time prescribed in the Permit. If any permit holder shall wish to renew the Permit he shall apply before the expiry of the Permit, and when said application has been made the operation may be carried on until the local competent official shall order non-approval to renew that Permit. Section 36. The Permit issued under Section 21, Section 22 or Section 33, is not transferable except with approval in writing from the local competent official.

Section 37. In case the holder of permit under Section 21, Section 22 or Section 33 dies, the heir or estate administrator of said person who wishes to carry out the construction, modification, demolition, move, use or change the use of that building, a written notice shall be sent to the local competent official within thirty days from the date the holder of the permit has dies. In such case it shall be the permit holder."

Section 10. Add the following as Section 39 Bis and Section 39 Ter of the Control of Building Act, B.E. 2522:

"Section 39 Bis. Whoever shall construct, modify, demolish or move building without submitting an application for the Permit from the local competent official by informing the local competent official, and shall have to carry out the following:

(1) Notify the local competent official according to the form prescribed by the local competent official including to provide information and submit the following documents also:

(a) Name of the person responsible for the design of the building, who shall have to be the person the holder of permit allows to be, of the person carrying out control architecture profession as qualified architect under the law on control architecture profession and shall not be person whose name has been circulated under Section 49 Bis.

(b) Name of the person responsible for the design and calculation of building who will have to be holder of license to carry out control engineering profession as qualified engineer under the law on control engineering profession and shall not be person whose name has been circulated under Section 49 Bis.

(c) Name of work supervisors who shall be persons holding the license to carry out control architecture profession under the law on control architecture profession and holding the license to carry out control engineering profession under the law on control engineering profession, and shall not be persons whose names have been circulated under Section 49 Bis.

(d) copy of license of persons under (a), (b) and (c).

(e) Certificates of persons under (a), (b) and (c) showing to be persons who design the building, is the designer and calculator of the building, or the work supervisors, as the case may be, including to certify that the construction, modification, demolition or move of the building correct with this Act, Ministerial Regulation and Bye-law issued under this Act, and other law concerned, in all respects.

(f) Drawings of area, plan, supplementary details and calculation details of the building to be constructed, modified, demolished or moved, with certification of person under (a) and (b), there he has designed the building and design and calculated that building.

(g) Date of commencement and expiry of such acts.

(2) Pay the fee for the inspection of the drawings for construction or modification in case it is notification of construction or modification of the building.

If the person who notifies has carried out the act as prescribed under paragraph one in all, the local competent official shall issue a receipt for the notification according to the form the local competent official has prescribed in evidence of notifying to that persons within the date of have been notified, and the person who notifies shall commence the construction, modification, demolition or move the building as notified as the date of receiving the receipt for the notification.

The provision of Section 38 and Section 39 shall apply to the receipt under this Section mutates mutandis.

Section 39 Ter. In case the competent official has found later that the person who notifies has given incorrect data or documents or not fully as specified under Section 39 Bis, the local competent official shall have authority to order the person who gives the notification to ratify it properly or in full within seven days from the date of receiving such order.

Within a period of one hundred and twenty days from the date of issue the receipt for the notice under Section 39 Bis or counting from the date of commencement of construction, modification, demolition or move the building as notified, as the case may be, if the local competent official shall find that the construction, modification, demolition or move the building as notified, plan of area, drawings, supplementary details or calculation details of the building submitted under Section 39 Bis is not correct with the provision of this Act, Ministerial Regulation or Bye-law issued under this Act or other law concerned, the local competent official shall send a letter of protect to the person who submits the notice under Section 39 Bis for information as soon as possible and shall have authority to proceed under Section 40, Section 41, Section 42 or Section 43 as the case may be.

If the local competent official has not sent a written protest to the persons who gives the notice under Section 39 Bis within the period of time prescribed under paragraph two, it shall be considered that the construction, modification, demolition or move or said building has been permitted by the local competent official, except for the followings:

(1) The said act is encroachment of public land.

(2) The said act concerns with the distance or level between the building and road, lane, footpath or public area, is in violation of Ministerial regulation, notification or Bye-law issued under this Act, or

(3) The said act concerns with the area prohibited to carry out construction, modification, demolition or move and use or change the use of any type of class of building, is in violation of Ministerial Regulation, notification or Bye-law issued under this Act or other law concerned."

Section 11. The provision of Section 40, Section 41, Section 42, Section 43, Section 44 and Section 45 of the Control of Building Act, B.E. 2522, shall be repealed and replaced by the followings:

"Section 40. In case there is construction, modification, demolition or move the building in violation of this Act, Ministerial Regulation or Bye-law issued under this Act, or other law concerned, the local competent official shall have authority to carry out the followings:

(1) Order the owner or possessor of the building, the work supervisor, the operator, employee or servant of said persons to cease to carry out such act.

(2) Order the prohibition against any person to use or enter any part of the building or area where there is such act, and to provide marking showing the prohibition in conspicuous place and easily seen at the said building or area, and

(3) Consider the order under Section 41 or Section 42, as the case may be within thirty days from the date there is an order under (1).

Section 41. If the act under Section 40 is the case which can be changed correctly, the local competent official shall have authority to order the owner of building to submit an application for approval or to provide the notice under Section 39 Bis or to ratify it properly within the period of time specified but shall be not less than thirty days. In case there is reasonable cause the competent official may extend said period of time further, and the provision of Section 27 shall apply mutates mutandis.

Section 42. If the act under Section 40 is the case which cannot be changed correctly, or the owner of building has not complied with the order of the local competent official under Section 41, the local competent official shall have authority to order the owner or possessor of the building, the work supervisor or the operator to demolish that building entirely or partly within prescribed period, but no less than thirty days, by carrying out the demolition according to the criteria, procedures and conditions prescribed under Ministerial Regulation issued under Section 8 (11) or Bye-law issued under Section 9 or Section 10.

Section 43. If the building is not demolished according to the order of the local competent official under Section 42, the local competent official shall have the authority as follows:

(1) Submit an application alone by applying to the Court, from the expiry of the time prescribed under Section 42, requesting the Court to issue and order for the arrest and detention of person who does not comply with the order of the local competent official under Section 42, by enforcing the Civil Procedure code mutates mutandis.

(2) Carry out or arrange the demolition of said building without putting up the notice for demolition in that area for not less than seven days, and the owner or possess or the building, the person responsible for the design of the building, the person responsible for the design and calculation of the building, the work supervisor and the operator shall have to jointly pay for the expense in such, except that said person shall prove that he has no part in participating in the action in violation of the law.

In carrying out the demolition of the building under paragraph one, when the local competent official or the person acting for the local competent official has exercised reasonable care, the persons under paragraph one may not demand for any damage from the local competent official or the person acting for the local competent official.

The construction materials demolished and items removed from the building the part of which has been

demolished, the local competent official shall have authority to seize and keep in cutody or sell and keep the cash proceed. This is according to the criteria, procedures and conditions prescribed under ministerial Regulation, and if the owner has not demanded back the property or cash proceed within thirty days from the date of demolition, that property or cash proceed shall belong to that local authority to be used as expenses in the demolition of the building under this Act.

Section 44. In case there is violation of Section 32 paragraph three or Section 33, the local competent official shall have authority to order the owner or possessor of the building to cease to use the building which has not been certified, the permit or that which has not be notified under Section 39 Bis until receipt of the certificate, permit or notice under Section 39 Bis.

Section 45. In case there is violation of section 34 the local competent official shall have authority to order the owner or possessor of the building, possessor of the said area or construction or the offender under Section 34 to cease such act, and to order said person to put the area or construction back to its original condition within the period of time prescribed, and the provision of Section 43 shall apply mutates mutandis.

Section 12. The provision of Section 47 of the control of Building Act B.E. 2522 shall be repealed and replaced by the following:

"Section 47. The order or notice of the local competent official under this Act, apart from the case under Section 40 (2) and Section 47 Bis, shall be made in writing and sent by reply registered mail to the applicant, holder of the permit or the person making the notice under Section 39 Bis, the owner or possessor of the building, the operator or work supervisor, as the case may be, at the domicile of that person, or may be made in memorandum and have the said person sign in acknowledgement.

In case the local competent official cannot carry out the act as mentioned under paragraph one, the copy of the order or notice, as the case may be, shall be put up in conspicuous place and easily seen at the building or area where the building is constructed, modified, demolished, moved or changed the use and it shall be considered that the applicant, holder of permit, person who notifies under Section 39 Bis, owner or possessor of the building, operator or work supervisor for their information on the order or notice, which shall be considered as known after the expiry of seven days from the date said notice is put up."

Section 13. Add the following as Section 47 Bis of the control of Building Act, B.E. 2522:

"Section 47 Bis. Order of the local competent official to cease the act in violation of this Act or to demolish that building, shall be made in writing sent by reply registered mail to the person who has to receive said order at the domicile of that person, and said order shall be put up in conspicuous place and easily seen at the building or where there is such act, and it shall be considered that the person who has to receive said order has acknowledged same after the expiry of three days from the date said notice has been put up."

Section 14. Add the following as Section 49 Bis of the Control of Building Act, B.E. 2522:

"Section 49 Bis. In case there is construction, modification, demolition or move the building in violation of the provisions of this Set, Ministerial regulation or Bye-law issued under this Act or other law concerned, the local competent official shall issue an order as follows:

(1) Circulate the name and act of the person responsible for the design of the building, the person responsible for the design and calculate the building and the work supervisor, which acts or participate in the said act, to the official concerned to stop the issue of the permit to the applicant for the construction, modification, demolition or move the building or to stop the issue of the receipt of the notice to the person who notifies under Section 39 Bis, having said person as the responsible for the design of the building, for the design and calculation of the building or the work supervisor, for a period of five years from the date there is such order, and

(2) Notify the name and act of such person to the Building Contl Committee, and the Building Control Committee shall circulate the nme and act of such person to the other local competent official to stop the issue of the permit or receive the notice as stated under (1), and the Building Control Committee shall notify the name and act of such person to the Committee for Control of Architecture Profession and Committee for Control of Engineering Profession for information to consider action under the law on architecture profession and the law on engineering profession.

In case the local competent official has cease the construction, modification, demolition or move the building incorrectly, or to order the change of the act improperly to demolish the building, and there is any act according to that order, the local competent official shall not circulate the name under paragraph one.

In case the local competent official has ordered under paragraph one, that order shall be send to the person whose name has been circulated.

The person whose name has been circulated under paragraph one shall be entitled to appeal against said order to the Appeal Consideration Committee within thirty days from the date of the notice."

Section 15. The provision of Section 50 of the Control of Building Act, B.E. 2522, shall be repealed and replaced by the following:

"Section 50. There shall be an Appeal Consideration Committee:

(1) In Bangkok Metropolis or in the area of the Provincial Administrative Organization, the Committee shall comprise of the Permanent secretary of Interior as chairman, Director-General of Municipal Work Department, Representative of Attorney general, representative of the National Jurdicial Council, Representative of Committee for Control of engineering Profession and Representative of Committee for Control of Architecture profession as Committee Members and other Committee Members of not more than six person whom the Minister appointed from among qualified persons among whom there are at least two qualified Committee members from the public sector, and the chief of Office of Committee for Control of Building shall be Member and Secretary. Committee Members who the Ministry appointed under paragraph one (1) shall not be persons who execute official duty of Bangkok Metropolis or Provincial Administrative Organization or Member of Bangkok Metropolic Council or Provincial Council.

(2) In municipal area, sanitation area, Muang Pataya pr pther provincial authority comprising the provincial governor as Chairman, provincial public prosecutor as Member and other Members of not less than seven persons whom the Permanent Secretary of Interior appoints, among whom there are at least two qualified Committee Members from the public sector, and the Appeal Consideration Committee shall appoint a government official as Member and Secretary.

The Member and Secretary under paragraph one (2), shall not be person who executes official duty of the local government or member of the local council.

The provisions of Section 15, Section 16 and Section 17 shall apply to the Appeal Consideration Committee mutates mutandis."

Section 16. Add the following as Section 51 Bis of the control of Building Act, B.E. 2522:

"Section 51 Bis. The Appeal Consideration Committee shall appoint one or several Sub-committees for the consideration or act as assigned.

The provisions of Section 15, Section 16, Section 17 and Section 51 shall apply to the sub-committee mutates mutandis."

Section 17. The provision of Section 52 of the Control of Building Act B.E. 2522 shall be repealed and replaced by the following:

"Section 52. The applicant for the permit, holder of the permit, person who notifies under Section 39 Bis and person who receives the order from the local competent official under this Act shall be entitled to appeal to said order to the Appeal Consideration committee within thirty days from the date of learning of the order.

The appeal under paragraph one shall be in writing and submitted to the local competent official who issues said order and the local competent official shall send the appeal and documents evidence concerned to the Appeal Consideration committee within ten days from the date of receiving the appeal.

The Appeal consideration Committee shall decide on the appeal under paragraph one within sixty days from the date of receiving the appeal and notify the decision together with the reason to the appellant and the local competent official.

If the appellant disagrees with the appeal decision, it shall be submitted to the Court within thirty days from the date of receiving the decision on the appeal.

In case the Appeal Consideration Committee or the court has decided, what ever is the judgement the local competent official shall comply with.

During the appeal, it is prohibited that the appellant or the local competent official shall do anything to the building which is the cause of the appeal, except that the building is I that Report-volume

dangerous to the public or property or having the nature which the wait cannot be delayed.

The provision of 57 shall apply to the appeal decision mutates mutandis."

Section 18. The provision of Section 57 of the Control of Building Act B.E. 2522 shall be repealed and replaced by the following:

"Section 57. Within a period of Forty-five days from the date of the fire, it I prohibited that anyone shall construct, modify, demolish or move building in the area of the fire, and the person permitted to carry out the construction, modification, demolition or move the building or the person who notifies under Section 39 Bis in said area before the date of the fire, shall cease to carry out that permitted or that notified within the said period of time."

The provision of Section 40, Section 42 and Section 43 shall apply to the violation of the provision under paragraph one mutates mutandis.

The provision under paragraph one shall not apply to:

(1) Construction of temporary building for the benefit of public relief or made under control of the authority.

(2) Modification of maintenance of the building only for residence or for use temporary."

Section 19. The provision of Section 60 of the Control of Building Act B.E. 2522 shall be repealed and replaced by the following:

"Section 60. When there is Notice of enforcement of Improvement of fire area, it is prohibited that anyone shall construct, modify, demolish or move building in the area under the Improvement Area different from that prescribed in the plan and all the permis for the construction, modification, demolition or move the building or the receipt of the notice under Section 39 Bis issued before the date of enforcement of Notice of Enforcement of Improvement of Fire area, shall be cancelled.

The provisions of Section 40, Section 42 and Section 43 shall apply to the violation of the provisions as prescribed under paragraph one mutates mutandis."

Section 20. Add the following as Section 60 Bis of the control of Building Act, B.E. 2522:

"Section 60 Bis. The local competent official shall commence the improvement of the fire area according to under Section 60 within two years from the date of enforcement of said notice.

In case it is necessary to expropriate the land or any immovable property for the benefit as prescribed under the Notice of Enforcement of Improvement of fire area, compensation shall be made to the person entitled to the compensation before carrying out the improvement of the fire area by prescribing the appraisement value according to the Land Code applicable on the date there is Notice of Enforcement of Improvement of Fire Area. But if compensation cannot be made within two years from the date of enforcement of said Notice, the appraisement value shall be fixed on the 1<sup>st</sup> January of the year there is payment of compensation.

If the local competent official has not commenced the improvement of the fire area within the time prescribed under paragraph one, said Notice shall be cancelled."

Section 21. Add the following as Section 64 Bis of the Control of Building Act. B.E. 2522:

"Section 64 Bis. The local authority shall be entitled to withhold thew fee for inspection of construction drawings or modification drawings received from the applicant for the permit or the person who notifies under section 39 Bis, by an amount of not more than ten per cent of the said fee to be appropriate as remuneration to the official who inspects the drawings for construction or modification of the building, the engineer and the inspector according to the criteria and rate prescribed in the Bye-law."

Section 22. The provision of Section 65 and Section 66 of the Control of Building Act B.E. 2522 shall be repealed and replaced by the following:

"Section 65. whoever shall violates not fails to comply with Section 21, Section 22, Section 31, Section 32, Section 33, Section 34, Section 52, paragraph six, section 57 or Section 60, shall be penalized with a termo of imprisonment of not more than three months or a fine of not more than Sixty Thousand Baht, or both.

Apart from the penalty under paragraph one, the violator or offender who does not comply with Section 21, Section 31, Section 32, Section or Section 57, shall be fined daily at the rate of not more than ten thousand Baht throughout the time of the violation or until it shall be complied with correctly."

Section 66. Whoever does not comply with Section 30, paragraph one, Section 38, Section 39 or Section 39 Ter, paragraph one, shall be fined not more than ten thousand Baht."

Section 66 Bis. Whoever does not demolish the building according to the order of the competent official under Section 42, without being under the appeal of said order, shall be penalized with a term of imprisonment of not more then six month or a fine of not more than one hundred thousand Baht, or both.

Apart from the penalty under paragraph one, the violator shall be penalized with a fine of not more than thirty thousand Baht per day until the order of the local competent official shall be complied with.

Section 24. The provision of Section 67 of the Control of Building Act B.E. 2522 shall be repealed and replaced by the following:

"Section 67. Whoever shall violate Section 30, paragraph two, or violates the order of the local competent official under Section 40, Section 44 or Section 45, shall be penalized with a term of imprisonment of not more than six month or a fine of not more than one hundred thousand Baht, or both.

Apart from the penalty under paragraph one, the violator shall be penalized with a fine of not more than thirty thousand Baht. Per day throughout the violation or until it shall be complied with properly."

Section 25. The provision of Section 70 and Section 71 of the Control of Building Act B.E. 2522 shall be repealed and replaced by the following:

"Section 70. If the offence under this Act is an offence relating to building for commerce, industry, education or public health, or is an act for commerce, lease, hire-purchase, sale or distribution with remuneration of any building, the offender shall be penalized double the penalty prescribed for such offence.

Section 71. In case there is violation or failure to comply with Section 21, Section 22, Section 34, Section 42, Section 52, paragraph six, section 57 or Section 60, it shall be considered as an act of the owner or possessor of the building, the operator, work supervisor or appellant under Section 52, as the case may be, or is an act of said person, except that said person shall prove that it is an act of other person."

Section 26. The provision of Section 74 of the Control of Building Act B.E. 2522 shall be repealed and replaced by the following:

"Section 74. There shall be a Committee on Comparison of Cases:

(1) In Bangkok Metropolis, the Committee shall comprise of the Governor of Bangkok Metropolis. Representative of the Attorney General and Representative of the Police Department.

(2) In other province, the Committee shall comprise of the Provincial governor, the Provincial Public Prosecutor and Chief of Provincial Police or Chief Police Superintendent, as the case may be.

The offence under section 65, paragraph one, Section 66, Section 66 Bis, paragraph one, Section 67, paragraph one, Section 68, Section 69 or Section 70, the Committee on Comparison of cases shall have authority to make the comparison if it is seen that the offender shall not be sued or be penalized with a term of imprisonment, the fine which the offender should pay if the offender and the damaged party, if any, agreed to that. When the Offender has paid the fined as compared within thirty days from the date of the comparison, it shall be considered that the case is dismissed under the criminal Procedures Code.

In case the investigation officer has discovered that anyone has committed an offence underparagraph two and that person agreed to the comparison, the investigation officer shall submit the case to the Committee on Comparison under paragraph one within seven days from the date that person has agreed to the comparison."

Section 27. The Appeal Consideration Committee who are in office on the date of enforcement of this Act, shall still carry with the responsibility until there shall be appointment of New Appeal Consideration Committee under this Act.

Section 28. Any application for permit submitted before the date of enforcement of this Act and is still under consideration of the local competent official, if the applicant has not come for the return from the local competent official within thirty days from the date of enforcement of this Act, the local competent official shall consider said application further according to the provision of the Control of Building Act, B.E. 2522, as amended by this Act.

Section 29. All the fire consumed area which have been enforced under the Plan for Improvement area under Section 60 of the Building Control Act, B.E. 2522 before the enforcement of this Act, the local competent official shall commence the improvement within two years from the date of enforcement of this Act, and Section 60 Bis shall apply mutates mutandis.

Section 30. All the Ministerial Regulation, Bye-law or order issued under the Building control Act, B.E. 2522 before the enforcement of this Act, shall still be applicable so long as they are not contrary to or do no conflict with the provision as amended by this Act.

Section 31. The Minister of Interior shall be in charge and control of this Act.

Counter-sign by:

Anand Punyarachun

Prime Minister

Remark:

The reason for the publication of this Act is that whereas it is appropriate to revise the provisions in the Control of Building Act, B.E. 2522, relating to issue of sub-Section of this Act to make it more appropriate and flexible, add the provisions relating to notice to the local competent before the construction, modification, demolition or more the building in place of the permit in order that it may be more convenient and quickly done for the general public, improvement the authority of the local competent official in enforcement of this Act to be more efficient, improve the penalty, rate of penalty and authority of the Committee of Comparison to be suitable to the economic condition and nature of the offence, and revise other provisions concerned so that they conform with the above mentioned provision to be more appropriate and clearer, therefore, it is necessary to enact this Act.

## A.1.3 Third Edition (2000)

Royal Emblem

Building Control Act (No. 3)

B.E. 2543 (2000)

BHUMIBOL ADULYADEJ, REX.

Given on 4 May 2000

Being the 55th Year of the Present Reign

His Majesty King Bhumibol Adulyadej is graciously pleased to proclaim that :

Whereas it is deemed appropriate to amend the law governing building control,

This Act has certain provisions concerning restriction of an individual's rights and freedom stipulated under Section 29, Section 35, Section 48 and Section 50 of the Constitution of the Kingdom of Thailand,

Be it, therefore, enacted by His Majesty the King, by and with the advice consent of the Parliament, as follows:

Section 1. This Act shall be called the "Building Control Act (No. 3), B.E. 2543 (2000)."

Section 2. This Act shall come into force after one hundred and eighty days from the date of its publication in the Government Gazette.

Section 3. The Prevention of Hazard Deriving from Entertainment Act, B.E. 2464, shall be repealed.

Section 4. The following shall be added as the second paragraph and the third paragraph of Section 2 of the Building Control Act, B.E. 2522 (1979) :

"For the area under enforcement of the town plan in accordance with the law governing town planning or the area where there used to be enforcement of the town plan, this Act shall be in force according to the boundary of the said town planning, without having to enact a Royal Decree.

For high-rise building, special large building, public building and theatre, the provisions of this Act shall be in force, whether such building is situated in the area under the Royal Decree enforcing this Act or not."

Section 5. The definition of the words "high-rise building," "special large building public building" and "theatre" shall be added between the definition of the words "building" and "public place" in Section 4 of the Building Control Act, B.E. 2522 (1979) :

"High-Rise Building" means a building in which persons may dwell or use, with the height twenty three metre and upwards. The building's height is measured from the ground level at the site up to the top deck, or from the ground level at the site up to the top of the highest floor of a building with gable or "panya" roof.

"Special Large Building" means a building which has been constructed for using the space therein or any part thereof for dwelling or operating one or several types of business, with the total area collectively of every story therein of ten thousand square meter and upwards.

"Public Building" means a building in which persons may assemble with the total area of one thousand square metre and upwards, or for the number of five hundred persons and upwards.

"Theatre" means a building or any part thereof which is used as a venue for showing movies, play, concert or other entertainment, and open to the general public as the normal activity, either with or without charge.

Section 6. The definition of the words "building possessor" and "controller" shall be added between the definition of the words "operator" and "inspector" in Section 4 of the Building Control Act, B.E. 2522 (1979) :

"Building Possessor" means to include the Manager of the Condominium Jutistic Person for the common property in accordance with the law governing condominium.

"Controller" means a person who has obtained a license to operate the control engineering profession, or a person who has obtained a license to operate the control architectural profession, in accordance with the law governing such matter, as the case may be, and has registered under this Act.

Section 7. The definition of the words "foreman" and "local competent official" shall be repealed and replaced with the following :

"Inspector" means a civil officer or staff of the local administration who has been appointed by the local competent official as an inspector, or an engineer or architect who has been appointed by the Director-General of the Public Works Department as an inspector.

"Local Competent Official" means

(1) Mayor, for municipality;

(2) Chairman of the provincial administrative organization, for the area under the provincial administrative organization;

(3) Chairman of the Sub-district administrative organization, for the area under the Sub-district administrative organization;

(4) Bangkok Governor, for Bangkok Metropolis;

(5) Mayor of Pattaya City, for Pattaya City;

(6) Local administrator of other local administrative organization that the Minister has announced, for the area under the said local administrative organization"

Section 8. Section 8 of the Building Control Act, B.E. 2522 (1979) shall be repealed and replaced with the following :

"Section 8. For the benefits of sturdiness, strength, safety, fire prevention, public health, preservation of the environment, town/city planning, architecture, and facilitating traffic and other activities required for the execution of this Act, the Minister, by advice of the Building

Control Committee, shall have the power to issue Ministerial Regulations specifying :

(1) type, characteristics, design, shape, proportion, size, space, and location of a building;

(2) weight bearing, strength, durability, as well as characteristics and properties of the materials used;

(3) weight bearing, strength, sturdiness of the building and the ground supporting the building;

(4) design and method pertaining to installation of the water supply, gas, electricity, mechanical systems, and safety system regarding fire or other disaster, and prevention measures in case of chaos;

(5) design and number of bathroom and toilet;

(6) environmental management systems of the building such as lighting, ventilation, air-conditioning, air purification, drainage, waste water treatment and disposal of garbage, trash and refuse;

(7) characteristics, level, height, open space outside the building, or building lines;

(8) distance or level between the building and other person's building or land boundary, or between the building and a road, trok, soi, footpath, way or public land;

(9) area or structure built for parking vehicles, making U-turn and access for vehicles for certain type or category of building, as well as characteristics and size of the said area or structure;

(10) prohibited areas for construction, renovation, demolition, removal and use, or change of the use of any type or category of a building;

(11) procedure, method and conditions on construction, renovation, demolition, removal, use or change of the use of a building;

(12) procedure, method and conditions on applying for the permit, approval of permit, renewal of permit, transfer of permit, issuance of certificate and substituted certificate under this Act;

(13) duties and responsibilities of the designer, controller, constructor, possessor and owner of a building;

(14) specific and prohibited qualifications of the controller, as well as procedure, method and conditions on registration and obtaining a license and revocation of license of the controller;

(15) procedure, method and conditions on inspection of building, installation and inspection of building equipment; and

(16) type or category of building which requires the building owner or possessor or constructor to arrange for insurance covering liabilities according to law for life, body and property of a third party."

Section 9. The following shall be added as Section 8 bis, of the Building Control Act, B.E. 2522 (1979) :

"Section 8 bis. For safety of the general public, the Minister, by advice of the Building Control Committee, shall have the power to issue a Ministerial Regulation specifying category or characteristics of the thing made for transporting people, in any area, in the form of cable car or other things made for the same purpose, or to issue a Ministerial Regulation specifying category or characteristics of the things made for games in an amusement park or other places for the same purpose, to be a building under this Act.

The Ministerial Regulation prescribed in the first paragraph shall specify procedure, method and conditions on construction, license for use, inspection, weight bearing standards, safety measures and properties of the materials or equipment related to such things, which must be suitable for each type or category of the things having been made, which may differ from the provisions of this Act."

Section 10. Items (3) and (4) of Section 18 of the Building Control Act, B .E. 2522 (1979), amended by the Building Control Act (No. 2), B.E, 2535 (1992), shall be repealed and replaced with the following :

"(3) give advice and recommendations to the local competent officials or the government agencies in their execution of this Act;

(4) regulate and review performance of the local competent officials and those who have the duties to execute this Act."

Section 11. The following shall be added as items (5) and (6) of Section 18 of the Building Control Act B.E. 2522 (1979), amended by the Building Control Act (No. 2), B.E. 2535 (1992) :

"(5) register and issue license and revoke license of the controller; and

(6) execute other duties provided in this Act,"

Section 12. Section 20 of the Building Control Act, B,E. 2522 (1979) shall be repealed and replaced with the following :

"Section 20. Office of the Building Control Committee shall be established in the Department of Public Works, and shall have the following duties :

(1) perform administrative function and technical tasks for the Building Control Committee;

(2) perform administrative and fact finding tasks, and give recommendations to the Appeal Committee;

(3) co-ordinate and assist the local administration, the state and government agencies in performing their duties according to this Act, as well as providing consultation to the private sector; and

(4) perform other tasks as assigned by the Building Control Committee."

Section 13. The following shall be added as Section 21 bis. of the Building Control Act, B.E. 2522 (1979) :

"Section 21 bis. For construction, renovation or relocation of a building of the type or category specified by the Ministerial Regulation that a review of the design and calculations of the building structure is required, the applicant for the permit or the informant under Section 39 bis. shall arrange to have a review of the said design and calculations in compliance with the procedure, method and conditions specified in the Ministerial Regulation."

Section 14. Section 28 of the Building Control Act, B.E. 2522 (1979), amended by the Building Control Act (No. 2), B.E. 2535 (1992), shall be repealed and replaced with the following :

"Section 28. In case the plans, specifications and calculations, submitted together with the application for permit, have been prepared by a person who has obtained a license to operate the control engineering profession in accordance with the law governing engineer, the local competent official shall review only the parts not concerning the calculations."

Section 15. The following shall be added as Section 28 bis. of the Building Control Act B.E, 2522 (1979) :

"Section 28 bis. In case the plans, specifications and architectural details of a building which is not under category for restriction of use and submitted together with the application for permit, have been prepared by a person who has obtained a license to operate the control architectural profession in accordance with the law governing architect, the local competent official shall review only the parts not concerning architectural details inside the building, except fire escape and fire stairs.

Section 16. Item (1) of Section 32 of the Building Control Act, B.E. 2522 (1979), amended by the Building Control Act (No. 2), B.E. 2535 (1992), shall be repealed and replaced with the following :

"(1) Warehouse, hotel, condominium or medical facilities;"

Section 17. The following shall be added as Section 32 bis. of the Building Control Act. B.E. 2522 (1979) :

"Section 32 bis. The owner of a

- (1) high-rise building, special large building;
- (2) public building; or
- (3) building specified in the Ministerial Regulation

shall arrange to have the control engineer or the control architect, as the case may be, to inspect condition and structure of the building, the various equipment pertaining to electrical system, lighting system, alarm system, fire prevention and extinguishing system, prevention of danger in case of chaos, air ventilation system, drainage system, waste treatment facilities, mechanical system or other systems of the building required for prevention of hazard to health, life, body or property; and to submit a report on results of the inspection to the local competent official in compliance with the procedure, method and conditions specified in the Ministerial Regulation.

The local competent official shall review the report on results of inspection of the building prescribed in the first paragraph promptly for issuance of a certificate of building inspection, or to proceed according to Section 46 or Section 46 bis., as the case may be."

Section 18. Section 37 of the Building Control Act, B.E. 2522 (1979), amended by the Building Control Act (No. 2), B.E. 2535 (1992), shall be repealed and replaced with the following :

"Section 37. In case the recipient of a permit under Section 21, Section 22 or Section 33 dies, the heir or administrator of the estate of the said person who wishes to carry out construction, renovation, demolition, relocation, use or change of use of such building, shall forward a written notice to the local competent official within ninety days from the date of death. In this case, the heir or administrator of the estate of the said person shall be the recipient of the said permit instead."

Section 19. The following shall be added as Chapter 3 bis., Permission for Use of Building for Operating Theatre. Section 39 fourth, Section 39 fifth and Section 39 Chor, of the Building Control Act. B.E. 2522 (1979) :

"Chapter 3 bis.

Permission for Use of Building for Operating Theatre

Section 39 fourth. Construction, renovation, relocation, demolition or inspection of a building used for operating theatre shall proceed in accordance with the provisions of this Act.

Section 39 fifth. It is prohibited for the building owner or possessor to make use, or allow any person to make use of the building, or any part thereof, for operating theatre business; unless a permit for use of building for operating theatre business has been obtained from the Committee empowered to make consideration according to the second paragraph, as the case may be.

The Committee for Consideration of Theatre Operation shall be established, with the authority to issue, revoke, renew, transfer a permit, and issue a substitute permit for operating theatre business, as follows :

(1) In Bangkok Metropolis : the Director-General of the Department of Public Works shall be the Chairman, the members shall comprise of a representative from Bangkok Metropolitan Administration; a representative from the Department of Health, the Ministry of Public Health; a representative from the National Police Bureau; and the Director of the Construction Supervision Division, the Department of Public Works shall be a member and secretary;

(2) In other province : the Governor shall be the Chairman, the members shall comprise of the local competent official of the concerned locality, the Provincial Public Health Officer, and the Chief of Provincial Police Bureau, and the Provincial Public Works officer shall be a member and secretary;

Decisions at the Committee meeting shall be made by majority vote. The Chairman of the Committee for Consideration of Theatre Operation prescribe in the second paragraph, as the case may be, shall have the authority to sign his name for issuance, revocation, renewal, transfer of a permit and issuance of a substitute permit according to the second paragraph.

Categories of theatre, safety measures and prevention of hazards which may occur to the audience, and the number and distances of things or various parts inside and outside the building used as theatre such as projector room, accesses, doors, seats for the audience, walkways shall be as specified in the Ministerial Regulation.

Section 39 Chor. A permit for use of building for operating theatre business shall be valid for two years, until 31 December of the second year of issuance.

Procedure, method and conditions on applying, approval, renewal, transfer of a permit, and issuance of a substitute permit for operating theatre shall be as specified in the Ministerial Regulation.

Any building owner or possessor, who wishes to renew the permit for use of building for operating theatre, shall submit an application for renewal of permit prior to the expiration date of the existing permit; and shall be able to continue to operate the theatre after having submitted the said application until the person authorized to approve the permit under Section 39 fifth shall issue an order of disapproval of the permit."

Section 20. The following shall be added as Section 46 bis. of the Building Control Act, B.E. 2522 (1979) :

"Section 46 bis. In case the various equipment pertaining to electrical and lighting system, alarm system, fire prevention and fighting system, hazard prevention in case of chaos, air ventilation system, drainage system, waste treatment facilities, mechanical system or other systems of the building according to Section 32 bis. appear to be in hazardous condition or its use may be hazardous to health, life, body or property or may not be safe from fire or causes nuisance or impact to preservation of quality of the environment, the local competent official shall have the authority as follows :

(1) issue an order to the building owner or possessor for restriction to use or allow any person to use the concerned equipment, and to have a sign showing such restriction openly at the equipment and where it can be seen easily near the equipment;

(2) issue an order to the building owner to take the corrective action to have the various equipment be in safe and good working condition within a prescribed period, but not less than thirty days, whereby if it is deemed reasonable, the local competent official may extend the said period.

In case of non-compliance with an order of the local competent official as described in the first paragraph, and the said equipment causes the building to be in hazardous condition or the use thereof may be hazardous to health, life, body or property, the local competent official may issue an order prohibiting the use of building, either in whole or in part, and the sign showing such prohibition shall be displayed openly and where it can be seen easily at the building or in the compound."

Section 21. Section 49 of the Building Control Act B E 2522 (1979) shall be repealed and replaced with the following :

"Section 49. The local competent official shall have the power to appoint any civil officer or local staff who has the knowledge or qualifications as specified in the Ministerial Regulation to be an inspector or foreman.

In case of necessity, or as requested by the local competent official, the Director-General of the Department of Public Works shall have the power to appoint an engineer or architect as the foreman according to the procedure specified in the Ministerial Regulation." Section 22. Section 49 bis. of the Building Control Act, B.E. 2522 (1979), amended by the Building Control Act (No, 2), B.E. 2535 (1992), shall be repealed and replaced with the following :

"Section 49 bis. In case of construction, renovation, demolition or relocation of a building in violation of this Act, the Ministerial Regulation, or the by-law issued under this Act, and the local competent official has proceeded according to Section 40, Section 41, or Section 42, as the case may be, but there appears to be non-compliance with the said order of the local competent official and there is reasonable doubt that the person responsible for the design and calculations of the building, or the person responsible for the building design, or the controller, might act or conspired in such act the local competent official shall notify the said person, then a written document must be submitted within thirty days to prove that it was an act of other person, and if it cannot be proven that it was an act of other person, the local competent official shall notify the name and action of the said person to the Building Control Committee, and notify to the Board of Control Engineers and the Board of Control Architects for proceedings in accordance with the law governing engineer and the law governing architect."

Section 23. Item (2) of Section 50 the Building Control Act, B.E. 2522 (1979), amended by the Building Control Act (No. 2), B.E. 2535 (1992), shall be repealed and replaced with the following :

"(2) For a municipality, the Pattaya city, or the area under other local administration, the Governor shall be the Chairman, the members shall comprise of the Provincial Public Prosecution Officer who is the Chief of Provincial Public Prosecution and other persons to be appointed by the Permanent Secretary of the Ministry of Interior, for not exceeding six persons and two of whom shall be from the private sector, and the Provincial Public Works Official shall be a member and secretary."

Section 24. The heading of Chapter 6 of the Building Control Act, B.E. 2522 (1979) shall be repealed and replaced with the following :

"Chapter 6

Foreman, Inspector and Controller"

Section 25. The following shall be added as Section 55 bis. and Section 55 ter. of the Building Control Act, B.E. 2522 (1979) :

"Section 55 bis. No person shall perform an inspection as prescribe in Section 32 bis., except a person who is the controller under this Act.

"Section 55 ter. In case the controller who has performed an inspection of a building as prescribed in Section 32 bis. has violated the provisions of this Act, or the Ministerial Regulation or the by-1aw issued under this Act, Section 49 bis. shall be applied mutantis mutandis."

Section 26. The following shall be added as Section 65 bis., Section 65 ter., and Section 65 fourth of the Building Control Act, B.E. 2522 (1979) :

"Section 65 bis. Any person who fails to comply with Section 32 bis. shall be subject to imprisonment for a term

not exceeding three months or a fine not exceeding sixty thousand Baht, or both.

In addition to imprisonment as prescribed in the first paragraph, the person who fails to comply with Section 32 bis. shall be subject to a daily fine not exceeding ten thousand Baht, until compliance has been made accordingly.

Section 65 ter. Any person who violates the first paragraph of Section 39 fifth shall be subject to imprisonment for a term not exceeding three months or a fine not exceeding sixty thousand Baht, or both.

In addition to imprisonment prescribed in the first paragraph, the person who violates the first paragraph of Section 39 fifth shall be subject to a daily fine not exceeding ten thousand Baht, until compliance has been made accordingly.

Section 65 fourth. Any person who violates or fails to comply with the order of the local competent official according to Section 46 bis. shall be subject to a fine not exceeding thirty thousand Baht.

In addition to the fine prescribed in the first paragraph, the person who violates or fails to comply with Section 46 bis. shall also be subject to a daily fine not exceeding five thousand Baht, throughout such period or until compliance has been made accordingly."

Section 27. Section 74 of the Building Control Act. B.E. 2522 (1979), amended by the Building Control Act (No. 2), B.E. 2535 (1992), shall be repealed and replaced with the following :

"Section 74. There shall be the Committee for Settling the Case

(1) in Bangkok Metropolis, comprising of the Governor of Bangkok Metropolis, a representative from Office of the Attorney-General, and a representative from the National Police Bureau;

(2) in other province, comprising of the Provincial Governor, the Provincial Public Prosecutor who is the Chief of Provincial Public Prosecution, and the Chief of Provincial Police Bureau.

The Committee for Settling the Case shall have the authority to settle the cases of the offences under the first paragraph of Section 65, the first paragraph of , Section 65 bis., the first paragraph of Section 65 ter., the first paragraph of Section 65, Section 66, the first paragraph Section 66 bis., the first paragraph of Section 67, Section 68, Section 69 or Section 70.

In case the inquiry officer finds that any person has committed an offence according to the second paragraph, if the person having committed the said offence and the injured person, if any, agree to settle the case, the inquiry officer shall forward the case to the Committee for Settling the Case according to the first paragraph, within seven days from the date on which the said person has agreed to settle the case.

If the Committee for Settling the Case sees that the alleged offender should not be charged or subject to imprisonment, a fine shall be imposed, to be paid by the alleged offender. If the alleged offender and the injured person, if any, agreed to the fine, after the alleged offender has paid the fine accordingly, it shall be deemed that the case is dismissed in accordance with the Criminal Procedure Code.

If the alleged offender refuses to pay the fine, or has consented but fails to pay the fine within the period prescribed in the fourth paragraph, the case shall be proceeded further.

The fines charged under this Act shall be the income of the local administration, whereby it is not necessary to forward the same as the state income.

Section 28. Item (6) of the Schedule of Fees annexed to the Building Control Act, B.E. 2522 (1979) shall be repealed and replaced with the following :

"(6) Certificate Baht 100 each"

Section 29. The following shall be added as (6 bis.) and (6 ter.) of the Schedule of Fees of the Building Control Act. B.E. 2522 (1979) :

"(6 bis.)	Permit for Use of Building for
Operating Theatre	Baht 500 each

(6 ter.)Certificate of Building Inspection Baht 100 each"

Section 30. The following shall be added as (8 bis.) of the Schedule of Fees annexed to the Building Control Act, B.E. 2522 (1979) :

"(8 bis.) Renewal of the Permit for Use of Building for Operating Theatre shall be at the same rate as specified in (6 bis.)"

Section 31. Any law, rule, regulation, directive, resolution or order citing the Prevention of Hazards Deriving from Entertainment Act, B.E. 2464, the said law, rule, regulation. directive, resolution or order shall be deemed as citing the theatre stipulated in the Building Control Act, B.E. 2522 (1979), which has been amended by this Act.

Section 32. All applications under the Prevention of Hazard Deriving from Entertainment Act, B .E. 2464, having been filed prior to the date of enforcement of this Act that are still under consideration of the competent official appointed by the Minister, shall be deemed as the applications under the Building Control Act, B.E. 2522 (1979), amended by this Act.

Section 33. The permit for construction of a theatre and the permit for renovation of a theatre issued under the Prevention of Hazards Deriving from Entertainment Act, B.E. 2464, prior to the date of enforcement of this Act, shall continue to be valid, and it shall be deemed the permit for construction of a theatre of the permit for renovation of a theatre, as the case may be, under the Building Control Act, B.E, 2522 (1979), amended by this Act.

Section 34. The permits for using the place as theatre issued under the Prevention of Hazards Deriving from Entertainment Act, B.E. 2464, prior to the date of enforcement of this Act, shall continue to be valid until its expiration date. If the recipient of the permit wishes to continue making use of the place as theatre after expiration date of the permit and has submitted an application for using

the said place as theatre prior to the expiration date of the previous permit, the applicant may continue to make use of the theatre according to the previous permit, unless the person authorized to grant permit according to Section 39 fifth of the Building Control Act, B.E. 2522 (1979) amended by this Act, shall issue an order of disapproval of the use of such place as a theatre under this Act.

Section 35. All applications for permit which have been filed prior to the date of enforcement of this Act and are still under consideration of the local competent official, shall be deemed the applications under the Building Control Act, B.E. 2522 (1979), amended by this Act. In case the said application deviates from the application under the Building Control Act, B.E. 2522 (1979), amended by this Act, the local competent official shall have the authority to make the amendment as necessary to be in compliance with the Building Control Act, B.E. 2522 (1979), amended by this Act.

Section 36. All permits issued to any person prior to the date of enforcement of this Act shall be valid until its expiration date.

Section 37. All ministerial regulations, by-laws or orders issued under the Building Control Act. B.E. 2522 (1979), and the Building Control Act, B.E. 2522 (1979) amended by the Building Control Act (No. 2) B.E. 2535 (1992), which are in force on the effective date of this Act, shall remain in force to the extent that they are not contrary to or inconsistent with the provisions having been amended and added under this Act, until there are new Ministerial Regulations, by-laws or orders issued under the Building Control Act, B.E. 2522 (1979) amended by this Act, for that particular matter.

Section 38. The Minister of Interior shall be the Minister in charge of this Act.

Countersigned :

Chuan Leekpai

Prime Minister

Note :- The reasons for the promulgation of this Act are follows : Whereas development of the county has as progressed rapidly, especially pertaining to construction of buildings in cities and town. The existing law governing building control is inappropriate and not in line with the current situation. Therefore it is deemed appropriate to make amendments and additions to the laws governing building control in order to stipulate standards on control of sturdiness, safety, fire prevention, public health, preservation of environment, city and town planning, architecture and facilitating traffic. Moreover, the law governing prevention of hazards deriving from entertainment has been in force for a long time and is not suitable for the current conditions, and theatre is a type of building, it is deemed appropriate to stipulate regulation on permission for use of theatre in the same law as the law governing building control for convenience of execution of the law. Furthermore, it is deemed appropriate to stipulate that the thing made for transporting people in the form of cable car or other things made for games in amusement parks or other places, in the same manner as the law governing building control. Therefore, it is necessary to enact this Act.

## A.2 MINISTERIAL REGULATION FOR TECHNICAL REQUIREMENTS OF FIRE PREVENTION SYSTEM

## A.2.1 Ministerial Regulation No. 33

MINISTERIAL REGULATION No.33 (B.E.2535) Issued under the provisions of the Building Control Act, B.E.2522-----

By virtue of the provision of Section 5 (3) and Section 8 (1), (4), (6), (7) and (8) of the Control of Building Act, B.E.2522, the Minister of Interior by the advice of the Board of Building Control hereby issues Ministerial Regulation as follows:

Clause 1 In this Ministerial Regulation: "High Rise Building" means the building which person can enter to live or utilize, having the height from 23 meters upwards. In measuring the height of the building, it shall be measured from the ground level of the construction to the roof deck. For the gable roof or hip roof building, the height shall be measured from the ground level to the height of the top height the wall on the highest floor. "Extra Large Building" means a building constructed for use of the building or part as residence or operate one or several businesses, having combined area on all stories or any one story in the same building from 10,000 square meters upwards. "Floor" means the floor area of a building which persons are living or utilizing, within the scope of the beam or joist or within said area or within the scope of the wall, including balcony but excluding poach and roof deck. "Floor area" means the floor to be used for calculation of the ratio of the floor of building next to the ground area, which does not include the area of the roof, stairs outside the roof, area for installation of machinery as necessary. "Vacant Space" means the area without any roof or cover building, such as water well, swimming pool or car park, and means to include the floor area of the structure of building which is not higher from the ground floor by 1.20 meters and there is no roof or cover above that level. "Public Road" means the road opening or permitting to the public to enter and use as traffic way, no matter a toll fee is collected or not. "Fire Resistance Material" means a construction material which is not combustible. "Fire Resistance Wall" means a solid brick wall, made of ordinary brick of not less than 18 cm thick and there is no space for the fire or smoke to go through, or solid wall, made of other fire resistance material having the property in preventing fire better not less than ordinary brick wall of 18 cm thick. If it is reinforced concrete wall, it shall be no less than 12 cm in thickness. "Standpipe System" means water supply pipe and equipment for fire fighting. "Waste Water" means liquid which has been used of all types, with or without residue. "Reservoir for Waste Water" means public drain, ditch, canal, river, sea and public water source. "Waste Water Treatment System" means the process for making or improving wastewater to have the quality to be drain water, including draining water from the building. "Water Supply System" means water supply for using and drinking. "Refuse" means refuse under the law on public health. "Refuse Storage" means equipment or place for storage of refuse to wait for the moving to the common refuse storage. "Common Refuse Storage" means the

equipment or place for storage of refuse to waiting moving for eradication. "Fireman Lift" means the lift which the fire fighting personnel can control during that building being on fire.

Chapter 1 Shape of Building and Open Space outside the Building and Line of Building

Clause 2 The Land for the site of high rise building or extra large building with total area of not more than 30,000 square meters with one side of the land being longer not less than 12 meters which is adjacent to the public road that has width of road way of not less than 10 meters, and that public road shall have width of road way of not less than 10 meters continuously throughout from the site of the building to connect with other public road having width of road way of not less than 10 meters. For the site of high rise building or extra large building with total area of more than 30,000 square meters, one side of that land shall be longer than 12 meters which is adjacent to the public road shall have width of road way not less than 18 meters, and that public road shall have width of road way not less than 18 meters throughout, for a distance of not less than half of the length of that public road or not less than 500 meters.

Clause 3 The high rise building or extra large building shall have the road or vacant space all round the building of not less than 6 meters in width, and the fire department vehicle can approach it with ease. The vacant space under paragraph one shall include the distance prohibited for construction of certain type or category of building on the edge of the road or highway under the local By-law or other law concerned, as the vacant area. In case there is local By-law or other law concerned which prescribed the line for construction or expansion of the road applicable, the vacant area under paragraph one shall commence from that line.

Clause 4 The floor or wall of high rise or extra large building shall have to be set apart from the land of other person and public road by not less than 6 meters.

Clause 5 High rise or extra large buildings shall have maximum ratio of the total floor area of all stories against the land of all buildings constructed in the same plot of not more than 10 to 1.

Clause 6 High rise or extra large building shall have vacant land without cover of not less than the following ratio:(1) Residential building shall have vacant space without cover of not less than 30% of the area of that plot of land.(2) Commercial building, factory, public building and other building which is not used for residential must have vacant space without cover of not less than 10% of the land of that plot. But if that building is used also as residence, there must be uncovered vacant space as under (1).

Clause 7 High rise or extra large building with part of the building below the level of the ground must have air ventilation system and water treatment system and waste drainage following chapter 2 and 3, separate independently

from the air ventilation system and water treatment system, and water drainage above the ground. The part of the building which is below the ground level under paragraph one must not be used as residence.

Clause 8 The part of the building which is lower than the level of the road in front of the building, from the 3rd floor down, or lower to the level of the road in front of the building from 7 meters down, there shall be elevator under Chapter 6, and there shall be fire escape stairs with lighting system and pressurization system at pressure of not less than 38.6 Pascal operating all time. All sides of fire escape stairs shall be reinforced concrete of not less than 10 cm. thick, in order to be used as fire escape in case of emergency. This fire escape shall be at distance of not less than 60 meters, measuring from the path of the walkway.

Chapter 2 Ventilating system, electricity system and fire protection system

Clause 9 Ventilating system in high rise building or extra large building shall have ventilating system by natural way or mechanical method as follows:(1) Natural ventilation by natural means shall be used only with the floor having at least one out side wall constructed by having space opening to the outside, such as door, window or pane, which must be open during use of that area and the opening shall be not less than 10% of the area.(2) Mechanical ventilation of the air ventilation by mechanical means may be used with any area by having mechanical equipment to suck or move the air to create outside air under the following rate: see table: Ventilating Rate For the kitchen of the shop selling food and drink, there may be ventilating rate less than prescribed; but there shall be ventilation to discharge the source of smell, smoke or gas. This shall be not less than 12 times of the volume of the room per hour. Other places not prescribed in the Table shall use the rate of ventilating rate of the place of similar nature. Position for mechanical air intake vent by mechanical means shall be far from source of foul air and air vent of not less than 5 meters, being high from the floor of not less than 1.50 meters. Air in-take and air discharge by mechanical means shall not cause disturbance to the people living nearby.

Clause 10 Air ventilation in high rise or extra large building with air-conditioning system shall be of the following features:(1) There shall be supply of external air into the area of the air condition or exhaust of air from inside the area to outside at least not less than the rates in Table MR33/1. Other places not specified in the table shall be according to the ventilating rate of the place of similar nature.(2) It is prohibited that refrigerant which is harmful to person or highly flammable shall be used with the air-conditioning system using refrigerant directly.(3) Air condition system by water, it is prohibited that water pipe of the air-conditioning system shall be connected to the water supply pipe directly.(4) The air duct of the air-conditioning system shall have the following characteristics:(a) The air duct, material covering the duct and lining material inside the air duct shall be noncombustible material and shall not cause smoke when there is a fire.(b) The air duct installed through the fire resistant wall or area made of fire resistant materials, shall be installed with automatic damper to protect against fire when temperature is over 74 degree centigrade, and the valve shall have fire-resistance rating rate of not less than 1 hour 30 minutes.(c) It is prohibited to use corridors, stairs, staircases, elevator shafts of the

building as part of the air-duct system for supply air or return air, except for the space between the ceiling and the floor above or the roof with component of ceiling with fire-resistance rating of not less than 1 hour.(5) Circulation of the air by the air-conditioning system shall have the following characteristics:(a) There shall be switch of the fan manually operated, installed at suitable area and enabling to turn off the switch when there is a fire.(b) Air-conditioning system with circulated air-flow from 50 cubic meter per minute upwards, shall be installed with smoke detection equipment or fire detection equipment, having efficiency of not less than smoke detection equipment, which can control the switch to stop the operation automatically. Anyway, the design and installation control of the air-conditioning system and air vent system in high rise or extra large building shall have to be carried out by the authorized person with license to operate control engineering, from Ordinary Class upwards, under the law on control of engineering profession.

Clause 11 High rise or extra large building shall have electricity distribution system for the lighting or power, which require wiring and installation of electrical equipment according to standard of Metropolitan Electricity Authority or Provincial Electricity Authority, and the area out of MEA and PEA the safety standard of electricity of National Energy Administration shall be used. In the power distribution system there shall be main switch installed in special place provided separately from the utilized area for other purpose. In this case, a separate room may be provided for the case of installation inside the building, or a separate building may be constructed for the purpose. Installation of the transformer or generator, the provision of paragraph two shall apply by including the area for installation of main switch, transformer and generator in the same place. When current is fully consumed as prescribed in the plan for electricity, the voltage in the wire of the sub-circuit may be different from the voltage at the main switch of not more than 5%.

Clause 12 All sub-circuit switches of the power supply system shall be grounded. In grounding, the main ground cable and method of connection shall be according to the standard of Metropolitan Electricity Authority or Provincial Electricity Authority. In case it is outside the responsibility of Metropolitan Electricity Authority or Provincial Electricity Authority, the safety standard of electricity of National Energy Administration shall be used.

Clause 13 High rise building shall have the system from protection from lightning system, which consists lightning arrester, cable, conductor, ground cable and main ground cable which are connected as a system. For the ground cable it shall have sectional area of not less than twisted copper cable of 30 square millimeters. This ground cable shall be independent from other ground cable system. Each building shall have conductor all round the building with ground cable at every 30 meters distance, measuring from the outer circumstance of the building. The ground cable of each building shall be no less than two. Reinforced steel or structural steel in the building may be used as ground conductor, but there shall be system for transfer of electricity charge from the structure to the main ground cable, correct with the technique. Lightning arrester system shall be according to the safety standard of the National Energy Administration.

Clause 14 High rise or extra large building shall have reserve power supply system for emergency, being independent from other system, and capable of operating automatically, when the normal system does not function. The emergency power supply system under paragraph one shall be capable of supply electricity sufficiently under the following criteria:(1) Supply electricity for a period of not less than two hours for the marking for emergency exits, corridors, lobbies, stairs and fire alarm systems.(2) Supply electricity throughout the time of the elevators for firefighters, fire pumps, emergency rooms, communication systems, for the safety of the general public and industrial production process which may cause harm to the life and health of people when there is electricity shut down.

Clause 15 Electricity current to be used with the elevator for firefighters shall be connected to the main switch of the building as independent circuit from the general circuit. Reserve electricity circuit for the elevator for firefighters shall be sufficiently protected against damage due to fire, as appropriate.

Clause 16 In high rise or extra large building there shall be fire alarm system on all stories. The fire alarm system shall at least consist of:(1) Equipment for transmitting sound or signal to those in the building to hear or know.(2) Fire alarm equipment shall be both automatic and manual for the equipment under (1) to operate.

Clause 17 Electrical drawings shall consist of:(1) Electrical circuit diagram for each story of the building of the same scale as prescribed under Ministerial Regulation, relating to the drawings to be submitted for permit in construction of building, which shall show:(a) Details of wiring and installation of all electrical equipment in each sub-circuit of the lighting and power system.(b) Details of wiring and installation of equipment of all fire alarm systems.(c) Details of wiring and installation of all emergency power supply system.(2) Electrical circuit diagram showing details of ground wire and cables, main cable, including details for protection of said main cable and all electrical equipment of all systems.(3) Details supplementing the drawings showing details of the use of electricity.(4) Drawings of circuit and installation of transformer, control panel or switchboard for power supply and the system for discharging electricity reserve.(5) Drawings and details of wiring and installation of all equipment system for protection against lightning.

Clause 18 High rise or extra large building shall have fire protection system which consists of standing pipe, water reserve tank, and fire department connection as follows:(1) The standing pipe shall be plain metal surface capable to operate at pressure of no less than 1.2 mega Pascal, said pipe shall be painted red installed from the lowest to the highest story of the building. All standing pipe system shall be connected to the main water pipe and water supply pipe from the building and from the fire department connection outside the buildings.(2) All stories of the building shall have fire hose cabinet which consists of fire fighting nozzle and hose of diameter 25 mm. (1 inch) and the quick coupling fire fighting nozzle, diameter 65 mm (2.5"), including cover and chain, at every 64 meters distance; and when using the fire hose, it shall be not more than 30.00 meters long, connected from the fire hose cabinet, which can be used to put out fire in that story.(3) High rise building shall have reserved water tank for use only in fire protection.

and shall have minimum water supply system at the top-most story with minimum nozzle pressure at not less than 0.45 mega Pascal, but not more than 0.7 mega Pascal, with flow rate of 30 liters per second, and there shall be water opening and shut off valve and automatic flow control valve.(4) The fire department connection installed outside the building shall be connecting type, quick coupling, diameter 65 mm. (2.5") which can receive water from the fire department vehicle with quick thread coupling, diameter 65 mm. (2.5"). At the fire department connection there shall be cover and chain. All sets of standpipe system shall have outside fire department connection at the place where the fire fighting personnel may reach with ease and being as near as possible to the public fire department connection. At the area close to the public hydrant outside the building there shall be writing with reflective paint "fire department connection"(5) The capacity of supply water shall have discharge volume of not less than 30 liters per second, for the first standpipe, and not less than 15 liters per second for each additional standpipe in the same building, but in total it shall be more than 95 liters per second, and capable of discharging reserve water of not less than 30 minutes.

Clause 19 High rise or extra large building, apart from having fire protection system under Clause 18, it shall be installed with portable fire extinguishers, according to the type and size as appropriate to put out the fire cause by the type of material in each story. There shall be one unit to an area of 1,000 square meters, at every distance of not more than 45 meters, but not less than 1 unit per story. Installation of the portable fire extinguisher under paragraph one shall be installed with the top most of the unit high above the floor of the building of not more than 1.50 meters, in conspicuous place and the instruction can be read and capable of taking it out for use with ease. The portable fire extinguisher shall be the size which can be filled with no less than 4 kgs. Of chemical.

Clause20 High rise or extra large building shall have automatic fire extinguishing system such as Sprinkler System, or other system which is equivalent, which can operate automatically when there is a fire by covering all the area in all floors. In this, the drawings and details supplementing the automatic fire extinguishing system for each floor should be submitted.

Clause 21 The drawings of the water pipe system in each floor of the building shall be of the same scale as prescribed in Ministerial Regulation relating to the size of the plan to be submitted for permission for construction of building, by having the following details:(1) Water supply pipe showing piping as a system from the water source supply to all the equipment and sanitary equipment.(2) Fire fighting pipe-showing piping as a system from the water source supply or fire department connection to the hose cabinet and water reserve tank.(3) Water drainage system showing installation plan of rain drainage pipes or waste water pipes from sanitary equipment and other drain pipes as well as the waste water treatment, system and air vent of the drain pipe.(4) Storage and supply system of water from reserve tank.

Clause 22 High rise building shall have fire escape staircase from the highest story or roof deck to the ground, by at least 2 units, situated in the place where anyone at any point of the building can reach with ease, and each fire escape staircase shall be at distance of not more than 60

meters, measuring from the line of walkways. The fire escape stair system under paragraph one shall show by calculation that it can transport all the persons out of the building within 1 hour.

Clause 23 The fire escape stairs shall be made of fire resistance material and not corrosive, such as reinforced concrete, having the width of not less than 90 cm. With tread of not less than 22 cm. And riser of not more than 20 cm., having landing between the stairs of not less than 90 cm. Wide, and with handrail at least on one side. The fire escape stairs shall not be constructed as spiral staircase.

Clause 24 The fire escape stairs and landing outside the building shall have the wall which the stairs is based upon, as fire resistance wall.

Clause 25 The fire escape stairs within the building shall have air ventilation from outside the building, but each floor shall have air vent in total area of not less than 1.4 square meters, which is open to the outside; or there is pressurization system within the fire escape staircase with air pressure while in operation at no less than 38.6 Pascal, operating automatically when there is a fire.

Clause 26 The fire escape stairs within the building shall have fire resistance wall all round except the air vent and there shall be lighting from the emergency electricity, capable of lighting the path while there is fire, and sign showing the fire escape route, both inside and outside the fire escape door of every floor with size of character which can be seen clearly, of not less than 10 cm.

Clause 27 The fire escape door shall be made of fire resistance material, opening to the outside, complete with equipment which can be closed automatically. The clear width and height shall be not less than 90 cm. and 1.90 cm. respectively, and can be opened to the outside with ease all the time. The door to the fire escape stairs shall not have steps or threshold or edge.

Clause 28 High rise building shall have special space for person from outside to enter for public rescue in the building in all floors. This space may be fireman lift or fire escape stair; and on every floor there shall be vacant room with space of not less than 6 square meter, connected to this space, and being the area free from flame and smoke in the same manner as the fire escape stairs and is the erection location of the fire hose cabinet and nozzle for certain floor of the building.

Clause 29 High rise building shall have roof deck and area on the roof deck of not less than 6.00 meters in width and length as vacant area to escape fire by air, and there shall be fire escapes stairs on roof top floor to any fire escape stairs with ease and with equipment to assist in escaping from the building to the ground with safety.

CHAPTER 3 Water treatment system and water drainage

Clause 30 The design and calculation of details for water treatment system and water drainage from high rise or extra large building shall be carry out by the person who holds the license to operate controlled engineering profession, from ordinary engineer upwards under the law on engineering profession. Clause 31 Drainage of rainwater from high rise or extra large building may be drained directly to the reservoir, but it shall not cause harm to health, life or property or effecting the conservation of environment.

Clause 32 Wastewater treatment shall be an independent system, as a separate building or combined with the central unit, but it shall not cause sound, foul smell, foam, residual or other thing to the extent it may cause harm to the health, life, or property, or effecting the conservation of environment or annoyance to the public living in the neighborhood.

Clause 33 Wastewater shall have to go through the treatment system before draining to the source of drainage. The quality of drainage water shall be according to notification of office of National Environment; Re: Prescribing standard of quality of drainage water from building.

Clause 34 Drainage must be able to be checked and cleaned with ease. In case the drain is a closed type, there shall be manhole for the inspection of water at every distance of 8.00 meter and at every turning corner.

Clause 35 In case the source for receiving drainage water is not sufficient to receive the water drained from the building during the hour of maximum use, there shall be a place for receiving water in reserve to accept the excess of water from the source before draining water to the source.

CHAPETER 4 Water supply system

Clause 36 High rise or extra large building shall have reserved water tank which can supply water during maximum hour of use for no less than 2 hours, and there shall be piping system with pressure in the supply pipe and quantity as follows:(1) Pressure in the supply pipe to the sanitary ware during maximum hour of use, of not less than 0.1 mega Pascal.(2) Quantity of water to be supply to user in the building for each type of sanitary ware, shall be according to the following criteria: Comparison Table MR33/2 for water supply in unit of sanitary ware to find volume of water Sanitary unit means the figures showing the quantity of use of water or water drainage, as compared to different type of sanitary ware. Other sanitary ware not specified shall be compared to the above figures.

Clause 37 The water supply pipes shall have method of protection against foreign matter from getting inside. In case the water discharge pipes are separated between usable and potable water, the discharge pipe shall be clearly separated. The two types of pipes shall not be connected.

#### CHAPTER 5 Refuse Disposal System

Clause 38 In high rise or extra large building, the refuse shall be collected by means of conveyance or drop into the refuse chute.

Clause 39 Calculation of volume of refuse occurred in the building shall be made from the following ratio of use:(1) Use for resident, the volume of refuse shall be not less than 2.40 liters per person per day.(2) Use for commercial purpose or other, the volume of refuse shall be not less than 0.4 liter per one square meter per day.

Clause 40 High rise or extra large building shall have common refuse collection as follows:(1) There shall be

capacity of not less than 3 times the amount of refuses occurred each day under Clause 39.(2) The wall shall be made of permanent and fire resistance material.(3) The interior surface shall be smooth and anti-seepage.(4) There shall be protection against foul smell and rainwater.(5) There shall be drainage of wastewater from the refuse to the water treatment system.(6) There shall be air vent and waterproof. The common refuse collection shall be at distance from the place of cooking or food storage by no less than 4 meters. But if the common refuse collection has capacity of over 3 cubic meters, it shall be at distance from said area by not less than 10 meters and can be easily reached to remove the refuse.

Clause 41 The refuse collection of the high rise or extra large building shall have the following characteristics:(1) Partition, wall and door shall be strong and durable. The door shall be completely sealed to prevent foul smell.(2) The size shall be suitable to the place and convenient to clean.

Clause 42 Refuse chute of high rise or extra large building shall have the following characteristics:(1) Made of fire resistance material having the width on each side or having diameter no less than 60 cm. Smooth internal surface, easily clean and there is no part which will cause the refuse to become stuck.(2) The door or refuse chute space shall be made of fire resistance material and tightly sealed in order to prevent refuse from being drawn back or become stuck.(3) There shall be air vent to prevent foul smell.(4) The end of the refuse chute shall have tightly sealed door to prevent foul smell

#### CHAPTER 6 Elevator system

Clause 43 Passenger elevator and firemen lift for high rise building shall have loading capacity of not less than 630 kg.

Clause 44 High rise building shall have at least 1 set of firemen lift, with details as follows:(1) firemen lift shall be able to stop on all floors of the building and shall have special control for the fire fighter for their use while fighting fire.(2) The area of the lobby of the firemen lift on all floor shall be installed with fire hose cabinet or fire hose connection and other fire fighting equipment.(3) The firemen lift lobby at every floor shall have wall or door made of fire resistance material to prevent the fire or smoke from entering with window opening to the outside of the building directly, or there is pressurization system inside the firemen lift lobby at operating pressure of not less than 38.6 Pascal scale, and operating automatically when there is a fire.(4) During the time the firemen lift is moving continuously between the top floor and the ground floor, it shall not exceed 1 minute. During normal time the firemen lift may be used as passenger elevator.

Clause 45 In the elevator shaft, it is prohibited to install wire duct, water pipe, drainage and other equipment except for parts of the elevator or as necessary for the operation or maintenance of the elevator.

Clause 46 The elevator shall have the system and equipment to provide safety and welfare and health of the passengers as follows:(1) There shall be operating system to make the elevator to stop at the ground level and the elevator door shall be opened automatically when the electricity is off.(2) There shall be warning signal and the elevator shall not move when overloaded.(3) There shall be

equipment to stop the elevator as specified automatically when the elevator is running at excessive speed. (4) There shall be system to prevent the elevator door from squeezing the passengers.(5) The elevator shall not move when the elevator door is not properly closed.(6) The elevator door shall not open while the elevator is moving or does not park properly.(7) There shall be system for communication with outside the elevator and signal to indicate obstruction.(8) There shall be ventilating system in the elevator and door front where the elevator is parked.(9) There shall be air vent system in the elevator as prescribed under Clause 9(2).

Clause 47 There shall be operating instruction, help request, giving assistance and prohibition of use as follows:(1) The operating instruction and help request shall be installed in the elevator.(2) The rescue method shall be affixed in the engine room and the room of the caretaker of the elevator.(3) The prohibition to use the elevator shall be fixed at the outside of the elevator door on all floors.

Clause 48 Control of installation and inspection of the elevator system shall be carried out by the electrical engineer or mechanical engineer who holds license to practice control engineering under the law on engineering profession, from ordinary engineer upwards.

Clause 49 The construction, modification or change the use of high rise or extra large building which has been applied for or has been authorized under the law on control of construction prior to the date of enforcement of this Ministerial Regulation, shall be exempted from applying under this Ministerial Regulation.

Given on 14th February B.E.2535

Gen. Issarapong Noonpakdi Minister of Interior

Remark: The reason for the publication of this Ministerial Regulation is due to the fact at present there are construction of high rise and extra large building for use as residence or operation under one or several activities. The structure and equipment as part of the construction are different according to the type of use. It is appropriate to control the use of high rise and extra large building, especially for the sake of securities, safety, fire protection, sanitation, conservation of environment, town planning, architecture and traffic direction, including planning and development of public utilities of the state. Therefore it is necessary to issue this Ministerial Regulation.

Government Gazette, Vol. 109, Part 11, dated 17th February BE.2535

Item	Place	Cu.m/Hour/Sq.m
1	Department Store (Shopping Corridor)	2
2	Factory	2
3	Office	2
4	Massage parlour	2
5	Floor for business contact with bank	2
6	Room in hotel or condominium	2
7	Operation room	2
8	Barber	3
9	Bowling alley	4
10	Theatre (seat for the spectators)	4
11	Study room	4
12	Physical health room	5
13	Beauty salon	5
14	Conference room	6
15	Bathroom, toilet	10
16	Place for sale of food and drink (for eating)	10
17	Night –club, bar or dance hall	10
18	Kitchen	30
19	Hospital	
	Patient room	2
	Operating room and child delivery room	8
	I.C.U. Unit	5

# Table MR33/1 : Air Ventilation for the Case of Air

Table MR33/2: Compari	son for Water Supply in	Unit of Sanitary	Ware to Find Volume of Water
-----------------------	-------------------------	------------------	------------------------------

Sonitory Faminmont	Type of Control	Fixture Unit		
Sanitary Equipment		Personal Sanitary Unit	Public Sanitary Unit	
Toilet	Flush Valve	6	10	
Toilet	Flush Tank	3	5	
Piss Pot	Flush Valve	5	10	
Piss Pot	Flush Tank	3	5	
Wash basin	Water Tap	1	2	
Shower	Water Tap	2	4	
Bathtub	Water Tap	2	4	

## A.2.2 Ministerial Regulation No.39

#### MINISTERIAL REGULATION No.39 (B.E.2537)

Issued under Provisions in Building Control ActB.E.2522

By virtue of provisions in Section 5(3) and Section 8(4), (5) and (6) of Building Control Act B.E.2522, Minister of the Interior, with advice of the Building Control Commission, hereby issues a ministerial regulation as follows:

Clause 1. In this Ministerial Regulation, "Row-unit" means a building of two and more connected units, with a common wall between two units and mainly with nonfire-resistant materials; "Row-building" means a brick building of two and more connected buildings, with a common wall between two buildings and mainly with fire-resistant materials; "Row-house" means a row-unit building or row-room brick building used as housing, with a space on the front and on the rear between the fence or the land border line and each unit; "Twin House" means a building used as housing, divided by a common wall into two living units, with a space between the fence or the land border line and the building on the front, the rear and the side of each unit and with a separate entrance for each unit; "Common Housing Building" means a building or any part of a building used as housing for several families, divided into units, each for a family, with bathrooms, toilet rooms, corridor, entrance, and stairs or elevators, separate or common.

Chapter 1 Types of and procedures for Installation of Fire prevention System

Clause 2. The following buildings must have procedures for fire prevention as prescribed in this Ministerial Regulation:(1) Row-room buildings, row-room brick buildings, row-house building, complex houses;(2) Buildings use for public gathering, such as theatres, meeting halls, hotels, hospital, educational institutes, libraries, indoor sports stadiums, marketplaces, department stores, shopping centres, entertainment, airports, parking buildings, mass transit terminals, parking lots, harbors, restaurants, offices, government offices, factories, and commercial building;(3) Common housing buildings with 4 and more living units and dormitories;(4) Other buildings besides those pursuant to (1),(2) and (3), with 3 and more stories.

Clause 3. A row-room building, row-room brick building, row-house building, and duplex house with not more than 2 stories must be installed with portable fire extinguisher of the kind and capacity as prescribed in Table 1 annexed hereto, one for each room or unit. Other building besides those pursuant to paragraph one must be installed with hand-held fire extinguishers of the kind and capacity as prescribed in the Table pursuant to paragraph one for putting out a fire occurring from the type of materials on each floor, 1 extinguisher per a building area not exceeding 1,000 s.q.m. at every distance not exceeding 45 meters, but not less than 1 extinguisher for each floor Fire extinguishers pursuant to paragraph one and paragraph two must be so installed that their top part is not exceeding 1.50 m. high from building floor level, where the instructions for use are clearly legible and the fire extinguishers are conveniently accessible and are maintained in always serviceable condition.

Clause 4. A row-room building, row-room brick building, row-room brick building, row-house building, and duplex house with less than 2 stories must be installed with at least 1 fire alarm system in every unit on every floor.

Clause 5. Other building besides those pursuant to Clause 3 paragraph one, with an total area exceeding 2,000 s.q.m. must also be installed with a fire alarm system on every floor.

Clause 6. The fire alarm system pursuant to Clause 4 and Clause 5 must be composed of at least.(1) The emergency equipment both automatically activated and manually operated;(2) The fire alarm equipment to give signal or sound to warn people of fire.

Clause 7. The building under Clause 2(2) and (3) with 2 and more stories and the building under Clause 2(4) with a total area exceeding 2,000 s.q.m. must have on each floor signboards showing the floor number and the direction to fire escapes, with letters not less than 10 centimeters in height or symbols placed conspicuously and clearly legible at all times, and must have sufficient light from emergency lighting systems to make the fire escape way clearly visible at the time of the fire.

Chapter 2 Design and Number of Bathrooms and Toilet rooms

Clause 8. A building which persons may enter to live or use must have bathrooms and toilet rooms in a number not less than that prescribe in Table 2 annexed hereto. Number of bathrooms and toilet rooms prescribe in the table pursuant to paragraph one is the minimum of bathrooms and toilet rooms which be available, even if such building may have an area or number of person less than that prescribed in the table pursuant to paragraph one .If the building has an area or number of persons greater than that prescribed in the table pursuant to paragraph one, there must be an addition of bathrooms and toilet rooms in proportion to the excess area of the building or number of persons, a fraction, if any, shall be counted a whole number. For a kind or type of building not included in the table pursuant to paragraph one, number of bathrooms and toilet rooms shall be determined as a rule to be the same as that of building, with comparable nature of use, as prescribed in said table.

Clause 9. The bathroom and the toilet room may be one same room or separate ones, but must be conveniently maintained and have air vents area at a rate not less than ten percent of the room area or adequate exhaust fans. The vertical distance from the room floor to the top wall or ceiling must not be less than 1.80 m. In case the bathroom and the toilet are separate, each must have an area not less than 0.90 s.q.m. and an internal width not less than 0.90m. But the room with both a bath and a toilet must have an interval area not less than 1.50 s.q.m.

Clause 10. The toilet cesspit or latrine pit must be situated at a distance not less than 10 m. from a river, ditch, canal, or public water resource, except a toilet with proper

sewage disposal system according to public health principle in a suitable size, however, as promulgated in the Government Gazette by Ministry of the Interior with approval of Ministry of Public Health.

Chapter 3 Lighting and Ventilation Systems

Clause 11. The various parts of the building must have a lux of illumination not less than that prescribed in Table 3 annexed hereto. For other place not included in the table pursuant to paragraph one, the lux of illustration shall be the same as that of a place of similar nature prescribed in said table.

Clause 12. The building may be equipped with natural or mechanical ventilation systems.

Clause 13. In case the building is equipped with natural ventilation systems, rooms in the building of any kind or type must have doors, windows, or air vents on the side adjacent to outside air in an total area not less than ten percent of the area of such room, not including the area of the doors, windows, and air vents adjacent to other room or corridor within the building. The provision in paragraph one shall not apply to building or places for storage of material or goods.

Clause 14. In case natural ventilation system pursuant to Clause 13 cannot be made available, mechanical ventilation system shall be provided, using mechanical equipment to circulate air. This equipment must operate all the times during the period of use of such area and air from outside must be brought into the area at a rate not less than that prescribed in Table 4 annexed hereto. For the kitchen of a place where food and beverage is served, if ventilation is to be provided source of smell, smoke, or gas to be ventilated at a suitable rate, ventilation in other part of such kitchen may be at a rate less than that prescribed in the table pursuant to paragraph one, but not less than that prescribed in the table pursuant to paragraph one, but less than 12 times the room volume in 1 hour. In other place not included in the table pursuant to paragraph one, the rate of ventilates shall be the same as that of the place with similar nature as prescribed in said table.

Clause 15. In case ventilation with air-conditioning system is provided, fresh air must be brought the conditioned area or air must be pumped out of the conditioned area at a rate not less than that prescribed in Table 5 annexed hereto. In other place not included in the table pursuant to paragraph one, ventilation shall be the same as that of the place with similar nature as prescribed in said table.

Clause 16. The vent bringing air from outside by mechanical means must be located at a distance from the exhaust source and vent not less than 5 meters and at a high not lower than 1.50 m. above the ground. In bringing in air from outside and letting out exhaust by mechanical means, no trouble or nuisance must not be caused to the population in the neighboring areas.

Clause 17. A factory, hotel, theatre, meeting room, indoor stadium, hospital, mass transit terminal, office, department store, or market place must provide standby energy supply system, such as battery or generator, separate from the regular system and capable of automatically function upon failure of the regular power supply system.

The standby emergency power supply source pursuant to paragraph one must be capable of supplying electrical energy sufficiently in accordance with requirements as follows.(1) Supplying electrical energy for a period not less than 2 hours for signs showing electrical emergency exit, corridor, hall, stairs, fire escape, and fire alarm system.(2) Supplying electrical energy throughout the operational period for the I.C.U. room, C.C.U. room, Emergency Room, communications system, and fire fighting water pump for public safety, and industrial production process likely to cause harm to life or health upon electricity failure.

Chapter 4 Miscellaneous

Clause 18. In applying for permission to construct a building pursuant to Clause 2, the applicant must produce the design of and procedure for installation of fire prevention systems, design and number of bathrooms and toilet rooms, an lighting and ventilation system for said building along with the application.

Clause 19. In case there exists in effect other law prescribing criteria for design of and procedure for installation of fire prevention systems, design and number of bathrooms and toilet rooms, and lighting and ventilation systems in particular for any building, the criteria for said matter shall apply as required by that law.

Clause 20. A building pursuant to Clause 2 already constructed before the effective date of this Ministerial Regulation, if to be subsequently altered or changed in use, such alteration or change shall be made in accordance with this Ministerial Regulation.

Given on the 31st May B.E.2537Gen. Chavalit Yongjaiyuth Minister of Interior

# A.2.3 Ministerial Regulation No.42

MINISTERIAL REGULATION

No.42 (B.E.2537)

Issued under Building Control Act, B.E.2522

By virtue of the provision of Section 5(3) and Section 8(1)(4)(6)(7) and (8) of the Minister of Interior by the advice of the Board on Building Control, hereby issue Ministerial Regulation as follows:

Add the following as Clause 1 bis of Ministerial Regulation No.33 (B.E.2535) issued under Building Control Act, B.E.2522.

"Clause 1bis. This Ministerial Regulation shall not apply to car park building installed system of moving the cars by mechanical means which has been designed for the benefit of parking the car specially"

Given on the 22nd August B.E.2537

Gen. Chaowalit Yongjaiyuth

Minister of Interior

## A.2.4 Ministerial Regulation No.47

MINISTERIAL REGULATION No.47 (B.E.2540)Issued under the provision of Building Control ActB.E.2522

By virtue of the provision of Section 5(3) and Section 46 paragraph one of Building Control Act B.E.2522, the Minister of Interior hereby issued under Regulation as follows:

Clause 1. Ministerial Regulation No.38 (B.E.2536) issued under the provisions of Building Control Act B.E.2522 shall be repealed.

Clause 2. In this Ministerial Regulation, "Tall building" means a building which persons may enter to live or to use, is 23.00 meters and more high, measured from the ground level to the sun deck level and, for a gabled or hip roof building, from the ground level to the wall top on the highest floor; "Extra large building" means a building constructed for use of the whole building or any part thereof for dwelling or for operating business in a single or several categories, with a total area on all floors or either one floor in the same building with floor area from 10,000 m2 up ward "Large building" means a building constructed for use of the whole building or any part thereof dwelling or for operating business in a single or several categories in the same building, with a total area on all floors or on any one floor exceeding 2,000 square-meters, or building having a height of 15.00 and more meters and having a total area on all floors or on any or on any floor in the same building exceeding 1,000 square-meters but not exceeding 2,000 square meters measured from the ground level to the top floor and, for a gabled or hip roof building, from the ground level to the wall top on the highest floor; "Public building" means a building which the general public can use in operating official, political, educational, religious, social, recreational, or commercial activities, such as theatres, meeting halls, hotels, hospitals, educational institutes, libraries, outdoor sports stadiums, indoor sports stadiums, marketplaces, department stores, trade centers, entertaining, airports, tunnels, bridges, parking buildings, bus terminals, harbors, pontoons, cemeteries, crematorium, monasteries, etc; "Common housing building" means a building or any part thereof which is used for several families to live in, divided into units of the respective, with separate or common bathrooms, lavatories, corridor, entrance, exits and stairs or lifts; "Factory" means a building or any part thereof which is used as a factory under the law governing factories; Restaurant" means a building or any part thereof which is used for selling food or beverage, with a space for tables and chairs within or outside the building of 300 and more square meters; "Office" means a building or any part thereof which is used as office or workplace with an area of 300 and more square-meters.

Clause 3. In the event a building which was constructed, altered, or moved by and with permission under Building Control Act B.E.2522 has condition or is used in a manner which may cause danger to health, life, body, or property or may not be safe from fire or may cause a nuisance or affect environmental quality maintenance, the local competent official shall have the power to order the owner or occupant of the building to effect correction in accordance with the ministerial regulation issued under Section 8 or local ordinance issued under Section 9 or Section 10 in force on the date of the permission or notification to construct, alter, or move the building within the period specified by the local competent official but not less than thirty days. In the case there is cause to extend the period, the local competent official way do so.

Clause 4. In the case the building which was constructed, altered, or moved before the effective date of Building Control Act B.E.2522 and is subjected to building Construction Control Act B.E.2479 or Building Construction in Fire Destruction Area Act B.E.2476 has condition or is used in a manner which may cause danger to health, life, body, or property or may not be safe from fire or which may cause a nuisance or affect environmental quality maintenance, the local competent official shall have the power to order the owner or occupant of the building to effect corrections in accordance with the ministerial regulation, municipal ordinance, provincial ordinance, rule, regulation, announcement, or directive issued under provision, of Building Construction Control Act B.E.2579 or Building Construction in Fire Destruction Area Act B.E.2476, as the case may be, in force at the time being within the period specified by the local competent official but not less than thirty days. In the case there is cause to the extend the period; the local competent official may do so.In the case of a building which was constructed, altered, or moved before the effective date of Building Control Act B.E.2522 but is not subject to Building Construction Control Act B.E. 2479 or Building Construction in Fire Destruction Area Control Act B.E.2476 has condition or is used in a manner which may cause danger to health, life, body, or property or which may not be safe from fire or which may cause a nuisance or affects environmental quality maintenance, the local competent official shall have the power order the owner or occupant of the building as necessary and fair to the owner or occupant to effect corrections as necessary and practicable within the period specified by the local competent official but not less than thirty days. In the case there is cause to extent the period, the competent official may do so.

Clause 5. In the case the building under Clause 3 or Clause 4 is a tall building extra large building, large building, public building, common housing building, factory, restaurant, and office, has condition or is used in a manner not safe from fire, the local competent official shall have the power to order the owner or occupant of the building to take necessary actions to make in safe from fire within the period specified by the local competent official but not less than thirty days. In the case there is cause to extend the period, the local competent official may do so. In ordering corrections pursuant to paragraph one, the local competent official may order to owner or occupant of the building to take actions in cases as follows:(1) For a building having four and more stories, to install fire escapes non-vertical stairs in addition to the principal stairs suitable with the area of each floor of the building to enable to evacuate all the people from the building within one hour which shall not be deemed to be building modification but an application must

be submitted to the competent official for consideration to approve and the fire escapes shall be as follows:(a) The internal escape must be enclosed all sides made of nonflammable material.(b) The door opening leading to the fire escape must be swing open and is made of nonflammable material compete with automatically closing equipment to prevent fire escape from smoke and flame, and have a clearance width not less than 80 centimeters and height on less than 2.00 meters.(2) Floor plan shall be installed in every floor showing all room layout, fire extinguishers position, fire escape door or way of such floor being clearly noticed position in hall or every lift hall on every floor. The as-build drawing must be kept available for convenient inspection.(3) Manual fire extinguishers of either kind and capacity specified in the table annexed hereto shall be installed for putting our a fire arising from the type of material on each floor, at the rate of a extinguisher on area not exceeding 1,000 square-meters at every distance not exceeding 45.00 meters, but not less than 1 extinguisher per floor. In stalling manual fire extinguishers, the top of the extinguishers must be at a height not exceeding 1.50 meters above the building at a place where can read the instruction and conveniently use, and the extinguishers must be usable at all time.(4) A fire warning system shall be installed on every floor, consist of at least:(a) Fire alarm equipment capable of sending sound or signal that can be heard by all in the building;(b) Emergency call systems, both automatic and manual, to active equipment under (a).(5) Standby lighting system shall be installed to make the corridor visible and signs indicating the floor and the fire escape inside and outside the fire escape door in every floor in letters clearly visible in a size not smaller than 10 centimeters.(6) A system preventing danger from thunderbolt shall be installed, consisting of the lightning pole, lightning line, grounding line, and grounding rod, meeting the electrical safety standards of Department of energy Development and Promotion. In case of the building pursuant to paragraph one already has the system of safety from fire but in no condition for operation, the local competent official shall have the power to order the owner or occupant of the building to effect correction of said system within the given period but not less than thirty days. In the event there is cause to extend the period, the local competent official may do so.

Clause 6. Before the local competent official orders the owner or occupant of the building to effect correction under Clause 3, Clause 4, or Clause 5, the engineer assigned by the local competent official shall make examinations of condition or use of the building or system of safety from fire and report to the local competent official for information. In such report, it must include at least results of the examination, problems to be corrected, procedures and time period therefore. If the said engineer finds that such building has condition or is used in a manner or has a system of safety from fire which may cause danger to life or body and make it necessary to urgently alleviate the cause, the engineer shall promptly report said cause and procedures to alleviate said cause to the local competent official for consideration for further action.

Clause 7. In the event the local competent official himself finds that the building under Clause 3, Clause 4, or Clause 5 has condition or is used in a manner which may cause danger to life or body or receives a report from the engineer under Clause 6 paragraph two and the local

competent official is of the opinion that it is an urgent case, the local competent official shall have the power to order to owner or occupant of the building to effect actions to abruptly alleviate the cause of such danger in accordance with the procedures prescribed by the local competent official and, if necessary, the local competent may forbid the owner or occupant of the building to use or permit other person to use the building or part of the building until completion of such corrections.

Given on the 29th September B.E.2540Sanoh Thianthong Minister of Interior

Remarks: The justification for publication of this Ministerial Regulation is: Whereas some building which were constructed, altered, or moved by and with permission under Building Control Act B.E.2522 have condition or are used in a manner which may cause danger to health, life body, or property or may be not be safe from a fire or may cause a nuisance or may affect environmental quality maintenance, it is expedient to improve rules, procedures, and conditions for the local competent official to order the owner or occupants of said buildings to improve or modify their system of safety from fire.

Table MR47/1 shows type and size of mobile fire extinguisher.

Proclaiming in Government Gazette Volume 114 Part 52 A, issued on 2nd October 1997.

Table WIK4//1. Type and Size of Wioble Fire Extinguisher		
Type of Fire Extinguisher	Content not less than	
Carbon dioxide	4 kilograms	
Dried chemical powder	4 kilograms	

# Table MR47/1: Type and Size of Mobile Fire Extinguisher

# A.2.5 Ministerial Regulation No.48

MINISTERIAL REGULATION No.48 (B.E.2540)Issued under the provision of Building Control ActB.E.2522

By Virtue of the provisions of Section 5(3) and Section 8(2) and (3) of Building Control Act B.E.2522, the Minister of Interior, by advice of Building Control Commission, hereby issues a Ministerial Regulation as follows:

Clause 1. The definition of "reliable institution" in Clause 1 of Ministerial Regulation No.6 (B.E.2527) issued under provisions in Building Control Act B.E.2522 shall be repealed and replaced by the following: "Reliable institution" means a government agency or limited company which has the objective to advice on civil engineering by qualified professional engineers under the law governing engineering profession and to certify controlled engineering tests.

Clause 2. Definitions of "fire proof material", "combustible material", "floor", "partition", "wall", "principal structure", "tall building", "large building", "hotel", "condominium", and "theatre" shall be added in between the definition of "load bearing capacity of column" and "reliable institution" in Clause 1 of Ministerial Regulation No.6 (B.E.2527) issued under the provisions in Building Control Act B.E.2522:"Fireproof material" means construction material which is not a fuel; "Combustible material" means construction material which is a fuel: "Floor" means the area of a building which persons may to live or use within the scope of the beam or joist or within such area or within the area between the building walls including the balcony or porch; "Partition" means an internal vertical part which divides the area in a building into rooms; "Wall" means an external vertical part which separates the building into units; "Principal structure" means a building component which is a column, beam, joist, or floor considered to be a important part to the sturdiness of such building; "Tall building" means a building which persons may enter to live in or use, being 23.00 and more meters tall measured from the ground level to the roof deck and, for gabled or hip-roof building, from the ground level to the height of the wall on the top floor; "Extra large building" means a building for use in the whole or any part thereof to live in or to operate business in one or several categories, having a total area or of any floor of the same building of 10,000 and more square meters; "Large building" means a building for use to live or to operate business in one or several categories, having a total area or of any floor exceeding 2,000 square-meters or a building being 15.00 and more meters high and having a total area or of any floor exceeding 1,000 square-meters but not exceeding 2,000 square-meters, measured from the ground level to the roof deck and for a gabled and hip roof building. From the ground level to the top height of the wall on the highest floor; "Hotel" means a building or part thereof under the law governing hotels; "Condominium" means a building under the law governing condominiums; "Theater" means a building or any part thereof which is use as a theatre under the law governing prevention of danger from entertainment".

Clause 3. The following provision shall be added as Clauses 23, 24, 25, 26, 27, and 28 of Ministerial Regulation No.6 (B.E.2527) issued under provisions in Building Control Act B.E.2522.

" Clause 23. Components of the fire escape or principal structure for a building taller than 3 stories must be made of material not being a combustible material.

Clause 24. Principal structure of building as follows;(1) A building for use as a warehouse, theatre, hotel, condominium, or hospital;(2) A building for use in operating commercial industrial, educational, public health service or as an office or bureau, having 3 and more stories and having a total area or of any floor exceeding 1,000 square-meters;(3) A tall building, extra large building, large building, or building or any part of the building used as a meeting hall; Shall be constructed with fireproof materials having qualities or properties as shown in Table MR48/1. In the case the principal structure has a size between those specified in the table, the value of the minimum thickness of the reinforced concrete shall be calculated by means of comparison. In the case the principal structure is constructed with reinforced concrete or pre-stressed concrete in a size or thickness less than that specified in the above table, other material shall be used or protection shall be otherwise taken to make the column or beam have a fire-resistance rate not less than three hours or joist or floor have a fire-resistance rate not less than two hours. In this connection, a supporting document certifying the fire-resistance rate for a reliable institution must be attached to the application for permission. In the case of a principal structure which is a column or beam constructed with profile steel framework not using reinforced concrete, the other method of protection to make the fire-resistance rate not less than three hours, a supporting document certifying the fire-resistance rate from a reliable institution must be attached to the application for permission. Method of test of the fire-resistance rate pursuant to paragraphs two and three shall be in accordance with ASTM E119 standards.

Clause 25. Materials used for the finishing of the building external surface or as the building wall must be securely adhered to the building by means not likely to fall and cause danger or damage.

Clause 26. Construction materials used within the building shall not cause suspended solid in the air which may cause danger to health, such as asbestos, silica, or fiberglass, unless coated or otherwise prevented from causing suspended solids and coming into contact with the air in the area of use of the building.

Clause 27. The material which is the external wall surface or is used to finish the external wall surface must have light refractive quality not exceeding thirty percent.

Clause 28. Glass used to make the external wall of a tall building, extra large building and large building must be a combination of at least 2 layers with a material in between to connect the layers and each of the glass layers must have the properties to prevent or reduce the risk of injury from them when broken and material in between must prevent the

broken fragments from being loosen or falling off. The glass attached to the rails and used as the partition of the hall or passage within a tall building, extra large building, and large building must have the properties to prevent or reduce the risk of injury from broken glass fragments."

Given on the 29th September B.E.2540 Sanoh Thianthong Minister of Interior

Remarks: - The justification for promulgation of this Ministerial Regulation is: Whereas at present the main structure of most building use material which does not resist fire long and when said buildings are under fire they collapse or tumble down easily, making it difficult to save the people or property in time and causing damage to life, body, or property of a great number of people, and whereas at present glass is used widely in building construction while the law governing building control does not prescribe properties of the glass which may cause danger to life or body of the people when broken or cracked or disturb other people with light reflection, it is expedient that qualities and properties of material used as main structure of buildings and glass used in building construction to prevent damage which may be caused by a fire; it is therefore necessary to issue this Ministerial Regulation.

	Table Mikes of Toperaes Theproof	Minimum Thickness
	Kind of Construction and Principal Structure	of Reinforced
		Concrete(mm.)
1.	Reinforced concrete	
	1.1 A quadrilateral column with the narrow side of 300 and more millimeters	40
	1.2 Circular or pentagonal or polygon at column having a diametres of 300 and more millinetres	40
	1.3 Concrete beam r crank with a width of 300 and more millimetres	40
	1.4 Floor having thickness not less than 155 millimetres	20
2.	Pressed concrete	
	2.1 A beam, pre-drawn wire	75
	2.2 A beam, post-drawn wire	
	(1) 200 millimetres wide, unrestrained	115
	(2) 300 and more millimetres wide, unrestrained	65
	(3) 200 millimetres wide, restrained	50
	(4) 300 and more millimetres wide, restrained	45
	2.3 Pre-drawn wire floor of 155 and more thickness	40
	2.4 Post-drawn wire floor of a thickness of 155 and more millimetres	
	(1)understrained	40
	(2)restrained	20
3.	Profile steel framework	
	3.1 Steel column, 150 x 150 millimetres	50
	3.2 Steel column, 200 x 200 millimetres	40
	3.3 Steel column, 300 x 300 millimetres and up	25
	3.4 Steel beam	50

## Table MR48/1 : Qualities or Properties Fireproof Materials

# A.2.6 Ministerial Regulation No.50

MINISTERIAL REGULATIONNo.50 (1997)Issued Pursuant to the Provision in the Building Control Act, 1979\_\_\_\_\_

By virtue of the authority vested in the provision in Article 5(3) and Article 8(1), (4), (6), (7), (8) and (11) of the Buildings Control Act, 1979, the Minister of Interior, on the recommendation of the Building Control Board, hereby issues a Ministerial Regulation as follows.

Clause 1. The definition of the word "floor" in Clause 1 of Ministerial Regulation No.33 (1992) Issued Pursuant to the Provisions in the Building Control Act, 1979, shall be repealed.

Clause 2. The definition of the word "building space" in Clause 1 of Ministerial Regulation No.33 (1992) Issued Pursuant to the Provisions in the Building Control Act, 1979, shall be repealed and replaced by the following; "Building space" means the space of each story of a building in which a person can enter to stay in it or enter to utilize it within the external boundary or the beams or inside that story or within the external boundary of the walls of the building and the meaning includes verandas or balconies as well but not include sundeck space and stairs outside the roof.

Clause 3. Definitions of the words "Land space which is used as the location of the building" and "sundeck" shall be added between the definitions of the words "Building space" and "Vacant land" in Clause 1 of Ministerial Regulation No.33 (1992) Issued Pursuant to the Provisions in the Building Control Act, 1979."Land space which is used as the location of the building" means the space of the plot of land which is used for application for permission for construction of a building, regardless of whether it is land under a single certificate or several certificates showing rights to land which is contiguous land. "Sundeck" means the topmost space of a building which is not covered by a roof and persons can go up to make use of it.

Clause 4. The text in the definition of the words "vacant land" in Clause 1 of Ministerial Regulation No.33 (1992) Issued Pursuant to the Provisions in Building Control Act, 1979, shall be repealed and replaced by the following; "Vacant land", means space which is without the cover of a roof or construction artifact. Such a space may be organized as a well, a swimming pool, a waste water tank, a waste holding space, a waste gathering holding space or a car park which is outside a building, and it shall also mean the space of a construction artifact or a building which is not more than 1.20 meters high from ground level and there is no roof or construction

Clause 5. The text in Clause 2 of Ministerial Regulation No.33 (1992) Issued Pursuant to the Provisions in the Building Control Act, 1979, shall be repealed and replaced by the following;

" Clause 2. With regard to land which is used as the location of a high building or an extra large building which has a total floor area of all stories not exceeding 30,000 square meters, any of the sided of that land which is not less than 12 meters long must adjoin a public road which has a

passage area not less than 10.00 meters wide and an entire contiguous length until it connects about public road which has a passage area not less than 10.00 meters wide. With regard to land which is used as the location of a high building or an extra large building which has a total floor area of all stories exceeding 30,000 square meters, any of the sides of that land which is not less than 12.00 meters long must adjoin a public road which has a passage area not less than 18.00 meters wide and an entire contiguous length until it connects another public road which has a passage area not less than 18.00 meters wide. The side of the land which adjoins a public road under paragraph one and paragraph two must have a width of not less than 12.00 meters and an entire contiguous length until it reaches the vicinity of the location of the building, and that land must be vacant so that it can be used as a convenient entrance and exit for fire engines."

Clause 6. The text in Clause 3 of Ministerial Regulation No.33 (1992) Issued Pursuant to the Provisions in the Building Control Act, 1979, shall be repealed and replaced by the following;

" Clause 3. A high building or an extra large building must provide a road with a traffic surface not less than 6.00 meters wide which is free from covers all round the building so that fire engines can enter and leave conveniently. The road under paragraph one may be inside the distance where it is forbidden to construct some types or some categories of building along the edge of a road or a highway under local legal provisions or under the relevant laws. In the case where a local legal provision or a relevant law prescribing the line for road construction or expansion is in force, the width of the road under paragraph one shall be calculated from the line".

Clause 7. The text in Clause 4, Clause 5, Clause 6, Clause 7 and Clause 8 of Ministerial Regulation No.33 (1992) Issued Pursuant to the Provision in the Building Control Act, 1979, shall be repealed and replaced by the followings;

" Clause 4. The part which is the outer most boundary of a high building or an extra large building, regardless of where it is at a level above the ground or lower than ground level, must be not less than 6.00 meters away from the boundary of land belonging to other people or public road. This shall not include the part which is the foundation of the building.

Clause 5. With regard to high building or an extra large building which are constructed on land space which used as the locations of the buildings, the maximum value of the ratio of the total building area of all the stories of all the buildings to the land space which is used as the locations of the buildings must not exceed 10 to 1.In the case where there is another building or another building will be constructed in the land space which is used as the same building location as that of a high building or an extra large building space of all the stories of all the buildings to the land space which is used as the locations of the buildings must not exceed 10 to 1.

Clause 6. A high building or an extra large building must have vacant land at not less than the following ratios;(1) A residential building must have vacant land at not less than 30 percent of the land space which is used as the location of the building.(2) A commercial building, a factory, a public building and other buildings which are not used as residences must have vacant land at not less than 10 percent of the land space which is used as the location of the building, but of that building is used as a residence as well, it must have vacant land in accordance with (1).

Clause 7. A high building or an extra large building which has building space below ground level must an air ventilation system and a waste treatment and water discharge system in accordance with Chapter 2 and Chapter 3 independent of the above-ground air ventilation system and waste water treatment and sate water discharge system. The building space which is below ground level under paragraph one is not allowed to be used as a residence.

Clause 8. A high building or an extra large building which has building space below the level of the road in front of the building from the 3rd floor downwards or below the level of the road in front of the building from 7.00 meters downwards must be provided with;(1) A lift system in accordance with Chapter 6:(2) Convenient fire escape from the lowest story to the building space which has an exit to the outside, and these fire escapes must have a lighting system and an air compression system which has a working air pressure of not less than 3.86 cubic Pascal working all the time, and the walls on all sides of the fire escapes must be reinforced concrete with a thickness of not less than 10 centimeters. Fire escape must not be more than 60.00 meters away from each other when measure along the walkway. These are to be used for escaping from danger in cases of emergency."

Clause 8. The following shall be added as Clause 8 bis and Clause 8 ter of Ministerial Regulation No.33 (1992) Issued Pursuant to the Provision in the Building Control Act, 1979;

" Clause 8 bis. A high building or an extra large building must be provided with walls or doors made of fire-resistant material which can be closed off to prevent flames or smoke during a fire from entering the vicinity of the building's stairs which are not fire escapes. In this connection, the said walls or doors must be able to withstand fire for not less than 1 hour.

Clause 8 ter. A high building or an extra large building must be provided with a layout of each story of the building affixed in the vicinity of every lift lobby of each those stories in clearly visible positions and arrangements must be made to store the drawings of all the stories of the building at the ground floor of the building so that they can be inspected conveniently. The layout of each story of the building shall consist of (1) The positions of all of the rooms on that story;(2) The positions where fire hose cabinets or valves for connecting fire hose cabinets are installed and the other fire extinguishing equipment on that story;(3) The position of the fire doors or escape on that story;(4) The positions of the fireman's lift on that story. "

Clause 9. The text in Clause 9 of Ministerial Regulation No.33 (1992) Issued Pursuant to the Provisions in the

Building Control Act, 1979, shall be repealed by the following;

"Clause 9. With regard to the ventilation of air in a high building, ventilation of air by means of natural methods or by means of mechanical methods must be provided, as follows;(1) Ventilation of air by natural methods shall be used only for a room in a building which has at lease one wall on the outside of the building, by providing an opening to the outside of the building, such as a door, window or louvers, which must be opened when that room is being used, and the space of this opening must be capable of opening not less than 10 percent of the area of that room.(2) Ventilation of air by mechanical methods shall be used for a room in a building of any characteristic, by means of providing air-ventilation mechanical equipment, which must work throughout the time that that room is being used so that air from the outside is brought inside at the rates:(The rate is shown in the attached table.)With regard to a place where food and beverages are sold, if air ventilation covering the sources of origin of smells, smoke or gases which require discharge in the appropriate ventilation has been provided for, the rate of discharge of air in the other parts of that kitchen may be less than the rate prescribed in the table. However, it must not be less than 12 times the volume of the room in 1 hour. For other place which are not stated in the table, the rate of air ventilation for places with similar characteristics and the rates prescribed in the table shall be used. The position of an opening bringing in air from the outside by means of mechanical methods must be not less than 5.00 meters away from a source of spent air and an opening for discharge of waste air and not less than 1.50 meters high from the ground. The bringing in of air from the outside and the discharge of waste air by means of mechanical methods must not create and irritate to the neighbor."

Clause 10. The text in (4) (B) and (C) of Clause 10 of Ministerial Regulation No.33 (1992) Issued Pursuant to the Provisions in the Building Control Act, 1979, shall be repealed and replaced by the following;(B) That part of a air duct which is installed through a fire wall or the floor of a building which is made of fire-resistant material must be installed with a fire damper which closes tightly automatically when the temperature is higher than 74 degrees centigrade, and the fire damper must have a fire resistance rate of not less than 1 hour and 30 minutes.(C) It is not allowed to use a corridor, a staircase opening or lift shaft of a building as part of the supply air duct system or the return air duct system, except for the part which is empty space between the ceiling and the floor of the upper story or the roof which has a ceiling component which has a fire resistance rate of not less than 1 hour.

Clause 11. The following shall be added as Clause 10 bis of Ministerial Regulation No.33 (1992) Issued Pursuant to the Provisions in the Building Control Act, 1979;

" Clause 10 bis. A high building or an extra large building which has a space inside the building as an opening penetrating through the floors of two or more stories of the building and without enclosed walls must be provided with a smoke dispersal control system which is capable of working automatically when there is a fire. This is to discharge smoke out of the building quickly."

Clause 12. The text in Clause 25 of Ministerial Regulation No.33 (1992) Issued Pursuant to the Provisions in the Building Control Act, 1979, shall be repealed and replaced by the following;

" Clause 25. A fire escape which is inside a building must have ventilation of air from the outside. Each story must have an air ventilation opening which has a total space of not less than 1.4 square meters capable of opening to the outside of the building or have an air compression system inside the fire escape which has a working air pressure of not less than 3.86 Pascal that can work automatically when there is a fire, and the fire escape which goes down to the ground floor of that building must be in a position capable of going out to the outside conveniently."

Clause 13. The text in Clause 29 of Ministerial Regulation No.33 (1992) Issued Pursuant to the Provisions in the Building Control Act, 1979, shall be repealed and replaced by the following;

" Clause 29. A high building must have a sundeck and the dimensions of the space area on the sundeck are such that the width and length are not less than 10.00 meters on each side. It must be empty and vacant so that it can be used as a fire exit by air, and fire exits must be provided on the sundeck story that will lead to all the fire escapes conveniently, including the provision of equipment and devices for escaping from fire from the building down to the ground safely."

Clause 14. The text in (3) of Clause 44 of Ministerial Regulation No.33 (1992) Issued Pursuant to the Provisions in the Building Control Act, 1979, shall be repealed and replaced by the following;"(3) The lobby in front of the fireman's lift on every story must be enclosed by walls or doors made of fire-resistant material to prevent flames or smoke from entering. There must be windows capable of opening out to the outside of the building directly or there must be an air compression system inside the lobby in front of the fireman's lift which has a working air pressure of not less than 3.86 Pascal that can work automatically when there is a fire."

Clause 15. The following shall be added as Clause 50 and Clause 51 of Ministerial Regulation No.33 (1992) Issued Pursuant to the Provision in the Building Control Act, 1979;

" Clause 50. With regard to a building exempted under Clause 49 which is currently under construction or the construction of which has already been completed, if there is a wish to apply for permission to rectify the plans in the part which has not yet been constructed or to apply for permission to modify or charge the utilization of the building or inform the local competent authority of an application to modify the building and proceed in accordance with Article 39 bis, whichever the case may be, differently from that for which permission has been granted, it may be done and shall be exempted from having to comply with this Ministerial Regulation, subject to the following conditions;(1) Arrange for an air ventilation system, and electrical system and a fire prevention system in accordance with Chapter 2 Clause 14, Clause 15, Clause 16, Clause 18, Clause 19, Clause 20, Clause 22, Clause 23, Clause 24, Clause 25, Clause 27 and Clause 29 and a lift system in accordance with Chapter 6 Clause 44 (2) and

(4).(2) It does not increase the combined total space of the building of every floor by more than two percent of the combined total space of the building of every floor for which permission had been granted at first.(3) It does not increase the height of the building.(4) It does not increase the space covering the earth.(5) It does not change the position or the boundaries of the building to be different from those for which permission had been granted at first. In this connection, the design and computation of the building must be carried out by a first class engineer of the category of qualified engineer under the law governing the engineering profession and who must not be a person whose the name circular under Article 49 bis.

Clause 51. With regard to building exempted under Clause 49, specifically in the case of buildings the construction of which has been granted permission but have not yet been constructed and the permit has not yet expired or the permit has been accepted for renewal, if there is a wish to apply for permission to rectify the plans or change the utilization of the building differently from that for which permission has been granted, it may be exempted from having to comply with this Ministerial Regulation, subject to the following conditions;(1) Arrange for an air discharge system, an electrical system and a fire prevention system in accordance with Chapter 2 and a lift system in accordance with Chapter 6.(2) It does not increase the combined total space of the building of every floor by more than two percent of the combined total space of the building of every floor for which permission had been granted at first.(3) It does not increase the height of the building.(4) It does not increase the space covering the earth.(5) It does not change the position or the boundaries of the building to be different from those for which permission had been granted at first."

Clause 16. The construction, modification or charge in utilization of a high building or an extra large building for which an application for permission has been submitted or for which permission has been granted or the local competent official has been informed and action taken in accordance with Article 39 bis, with effect from the date of enforcement of Ministerial Regulation No.33 (1992) Issued Pursuant to the Provisions in the Building Control Act, 1979, until prior to the date of enforcement of this Ministerial Regulation, shall be exempted from having to comply with this Ministerial Regulation. If there is a wish to apply for permission to rectify the plans or change the utilization of the said high building or extra large building differently from that for which permission has been granted, on or after the date of enforcement of this Ministerial Regulation, exemption shall be granted from having to comply with the provision in Clause 2, Clause 3, Clause 5, Clause 10 and Clause 25 of Ministerial Regulation No.33 (1992) Issued Pursuant to the Provisions in the Building Control Act. 1979, that have been amended by this Ministerial Regulation.

Given on the 5th November, 1997 Sanoh Thienthong Minister of Interior

No	Place	Rate of Air Discharge Not Less Than the Number of the Volume of the Room in 1 Hour
1	Bathroom, lavatory of a residence or an office	2
2	Bathroom, lavatory of a public building	4
3	Car park which is below ground level	4
4	Factory	4
5	Place of amusement	4
6	Place where food and beverage are sold	7
7	Office	7
8	Room in a hotel or condominium	7
9	Kitchen of a residence	12
10	Kitchen of a place where food and beverage are sold	24
11	Passenger lift and fireman's lift	30

## Table MR50/1: Discharge of Air

# A.2.7 Ministerial Regulation No.55

MINISTERIAL REGULATION No.55 (B.E.2543)Issued Under the Building Control Act of B.E.2522 (1979)\_\_\_\_\_

By virtue of Section 5(3) and Section 8(1), (7) and (8) of the Building Control Act of B.E.2522 (1979), certain provisions of which concerning restriction of individual's rights and freedom; whereby Section 29 and Section 31, Section 35, Section 48, Section 49 and Section 50 of the Constitutional Law of the Kingdom of Thailand stipulate to proceed by virtue of the provision of law, the Interior Minister, with the advice of the Building Control Committee, hereby issues a ministerial regulation as follows;

Clause 1. In this Ministerial Regulation "Dwelling Building" means a building in which persons dwell day and night, either permanently or temporarily. "Row Building" means a building constructed in row of more than two units, with walls dividing the building into separate units, and mostly consist of non-fireproof materials. "Row Brick Building" means a building constructed in row or more than two units, with walls dividing the building into separate units, and mostly consist of fire resistance materials.. "Row House" means a row building or a row brick building used for dwelling, having an open space in front and at the rear between the fence of land boundary and the building of which unit, and of not more than three-story height .. "Twin Houses" means a dwelling building constructed as twin houses, with a wall dividing the building into two houses, having open spaces between the fence or boundary line and the building in front, at the rear and the side of each house, and each house has separate access.. "Commercial Building" means a building used for commercial or business or industrial purpose, using machinery with production capacity less than five horse power, and means to include and other building constructed at the distance of not more than 20 meter from the road or public way which may be used for commercial purpose.. "Public Building" means a building used for congregation of the general public for the activities concerning government services, politics, education, religion, social, recreation or commerce, such as theatre, convention hall, hotel, hospital, educational premises, library, outdoor sports field, indoor sports field, market, department store, shopping center, entertain premises, airport, tunnel, bridge, car parking building, vehicle station, dock, landing pontoon, cemetery, crematorium, religious premises, for example.. "Special Building" means a building requiring special standards of sturdiness and safety, such as the following buildings;(A) Theatre, amphitheatre, convention hall, library art gallery, museum or religious premises;(B) Dock, boat rollers or pier for ship of capacity exceeding 100 ton gross;(C) Building or structure with the height exceeding 15 meter, or bridge, or building or roof structure with one portion exceeding 10 meter, or having structural characteristics which may cause danger to the general public;(D) Building for storage of inflammable materials, explosive materials or materials disseminating toxic or radiation in accordance with the laws governing such matters.. "Collective Dwelling Building" means a building or any part of a building used for dwelling by several households, dividing into separate units for each

household. "Large Building" means a building with the total area collectively of every story or of any floor, exceeding 2,000 meter, or a building with the height of 15.00 meter and upwards and having the total area collectively of every story or of any floor, exceeding 1,000 square meter but less than 2,000 square meter. The building's height is measured from the ground level at the site up to the top deck, or from the ground level at the site up to the top of the highest floor of a building with gable or "hip" roof. "Office" means a building or any part of building used as offices or working premises. "Warehouse" means a building or any part of a building used for storing goods or articles for commercial or industrial purpose. "Factory" means a building or any part of a building used as a factory in accordance with the law-governing factory. "Theatre" means a building or any part of a building used for showing movie, performing play, concert or other form of entertainment, with an objective of opening to the general public and whether receiving remuneration or not. . "Hotel" means a building or any part of a building used as a hotel in accordance with the law-governing hotel.. "Restaurant" means a building or any part of a building used for selling food or beverages, with an area for setting table for serving; inside or outside the building .. "Durable Materials" means materials normally not changing its condition too easily by water, fire or climate.. "Fire resistance Materials," means the construction materials not being flammable.. "Floor" means an area of a building, in which persons dwell or make use, within the boundary of the beam or "joist" supporting the floor or within the floor or within the area of building walls including porch or balcony.. "Partition" means a vertical structure dividing the interior of a building into different rooms.. "Wall" means a vertical structure dividing the exterior or between units of a building into separate houses or units.. "Fire Wall" means a solid wall made of normal bricks with thickness of not less than 18 cm and has no hole for fire or smoke to pass through; or a solid wall made of other fire resistance materials with specifications to resist the fire not lower than a wall made of normal bricks with thickness of not less than 18 cm; for a reinforced concrete wall the thickness must be not less than 12 cm.. "Normal Brick" means soil made into a block and baked until finished.. "Roof" means a thing covers the top of a building for protection of sunshine and rain, including a structure or any thing assembled for supporting the thing covers the top to ensure sturdiness.. "Roof Deck" means the floor on top of a building without roof, and persons can go up to make use thereof.. "Stairs Flight" means the stairs with continuing steps.. "Riser" means the distance of rising of a step of the stairs.. "Tread," means the distance of tread of a step of the stairs.. "Net Width" means the distance measured from one point to the other point without barrier.. "Open Space" means an area without roof or covering structure which may be provided for a well, swimming pool, waste water well, garbage area, garbage collection area or parking lot outside a building; including an area of a structure or a building at the height not exceeding 1.20 meter from the ground level and without roof or covering structure.. "Public Road" means a road open for or consenting the people to have an access or make use as a passageway, whether collecting a fee or not.

### Chapter 1 Characteristics of Building

Clause 2. Each unit of row building or row brick building must have the width, measuring at 90 degree angle from the center of the column in one side to the center of the column on the other side, of not less than 4 meter; the depth, measuring at 90 degree angle with the front wall of the ground floor, of not less than 4 meter and not exceeding 24 meter, with the total area of the ground floor not less than 30 square meter; and must have access doors both in front and at the rear of the building. In case the depth of the building exceeds 16 meter, an open space without cover must be arranged at the distance from 12 meter to 16 meter, the total area of which must be not less than 10/100 of the total area of the ground floor of the building. The row building or row brick building, constructed at the rim of a public road, must have the level of the ground floor at the height of 10 cm from the ground level in front of the building, or the height of 25 cm from the center of the public road in front of building, as the case may be.

Clause 3. Each unit of row house must have the width, measuring at 90 degree angle from the center of column on one side to the center of the column on the other side, of not less than 4 meter, the depth of the building, measuring at 90 degree angle with the front wall of the ground floor, or not less than 4 meter and not exceeding 24 meter, and with the total area of the ground floor of not less than 24 square meter. In case the depth of the building exceeds 16 meter, and open space without cover must be arranged at the distance from 12 meter to 16 meter, the total area of the ground floor of the building.

Clause 4. A row building, row brick building or row house shall be constructed connectedly not exceeding ten units, and the total length of the row building shall not exceed 40 meter, measuring at 90 degree angle from the center of the first column to the center of the last column on the other side; whether belonging to the same owner and using the same or separate building structure or not.

Clause 5. A fence or wall situated at the corner of a public road, which has the width of 3 meter and upwards and the angle of less than 135 degree, must be leveled off at a distance of not less than 4 meter and at the same angle with the public road at every corner.

Clause 6. A private bridge for cars must have the width for traffic of not less than 3.5 meter and the slope of not exceeding 10/100.A public bridge for cars must have the width for traffic of not less than 6 meter, the slope of not exceeding 8/100 and footpaths on both sides with a width of not less than 1.50 metre each, except a bridge constructed especially for cars which may not have footpath, and has sturdy rails along the bridge on both sides.

Clause 7. A sign or structure made for attaching or installing at the building must not block air ventilation, a window, door or fire escape.

Clause 8. A sign or structure made for attaching or installing on the roof or top deck of a building must not protrude outside the building's external wall; and the top of the sign or structure made for attaching or installing must not exceed the height of 6 meter from the top of the roof or top deck of the concerned building.

Clause 9. A sign protruding from a building's wall must not protrude the eaves, and having the height not exceeding 60 cm or the total area of the sign not exceeding 2 square meters.

Clause 10. A sign installed above the eaves, which does not protrude the building's wall, is permitted, whereby the height of which must not exceed 60 cm, measuring from the top at the end of the eaves, or the total area of the sign not exceeding 2 square meters.

Clause 11. A sign installed under the eaves must be attached to the building's wall and at the height of not less than 2.50 meter from the footpath.

Clause 12. An advertisement sign of theatre is to be installed parallel with the theatre's wall, but must not protrude from the wall exceeding 50 cm; or if having installed on the eaves, it must not protrude beyond the eaves, and the height of the sign in both cases must not exceed the building's height.

Clause 13. A sign installed directly on the ground must have the height not exceeding the distance measuring from the point of installation to the center of the nearest public road, and the length not exceeding 32 meter.

Chapter 2 Various Parts of Building

Part 1 Building Materials

Clause 14. All things made for a sign, to be attached or installed directly on the ground, must be made of fire resistance materials.

Clause 15. All columns, beams, floors. Stairs and walls of a building of three-story and upward, a theatre, convention hall, factory, hotel, hospital, library, department store, large building, service premises under the law governing service premises, airport or tunnel, must be made of fireproof durable materials.

Clause 16. The walls of a row brick building or row house must be made of durable and fireproof materials; if made of normal bricks or non-reinforced concrete the wall must have thickness of not less than 8cm.

Clause 17. A row building, row brick building or row house constructed continuously must have a fireproof wall at each distance of not exceeding five units, which must be constructed from the ground level up to the top deck and made of durable and fireproof materials. In case the roof is made of non-fireproof materials, the fireproof wall must be constructed of not less than 30 cm above the roof, along the slope of the roof.

Clause 18. A kitchen in the building must have the floor and walls made of fireproof durable materials, and if the partition and ceiling is not made of fireproof durable materials, it must be lined with fire resistance materials.

Part 2 Interior Area of Building

Clause 19. Each unit of a collective dwelling building must have the interior area not less than 20 square meter.

Clause 20. A bedroom on the building must have the width of the narrowest side of not less than 2.5 meter, and the total area of not less than 8 square meters.

Clause 21. A walkway in the building must have the width of not less than that in the table of Table MR55/1.

Clause 22. A room or part of building used for various activities must have a vertical distance of not less than that in the table of Table MR55/2. The vertical distance prescribed in the first paragraph is to be measured from floor to floor. In case of an attic, it is to be measured from the floor to the top of partition or wall of the building. In case of a room or part of the building within the roof structure, it is to be measured from the floor to the top of partition or wall of the said building which is not the roof structure. A room in the building with the vertical distance from one floor to the other of 5 meter and upwards, a mezzanine floor may be constructed therein; provided that the said mezzanine floor area shall not exceed 40% of the total area of the room, and the vertical distance from the floor of the mezzanine to the other floor must be not less than 2.40 meter and from the room floor to the floor of the mezzanine not less than 2.40 meter as well. A restroom, toilet must have the vertical distance between the floor and the ceiling not less than 2 meters.

#### Part 3 Stairs of Building

Clause 23. If there are stairs in a dwelling building, at least one stairs must have the net width not less than 80 cm, the height of each stairs flight not exceeding 3 meter, the riser not exceeding 20 cm, the tread, after deduction of the overlapping steps, of not less than 22cm, and the area in front of the staircase must have the width and length of not less than the width of the staircase. If the stairs flight is higher than 3 meter, there must have the width and length of not less than the width of the staircase. The vertical distance from the stairs or the landing to the lowest part of building above must be not less than 1.90 meter.

Clause 24. Stairs of collective dwelling building, dormitory in accordance with the law governing dormitory, offices, public building, commercial building, factory and special building, for use with the above floors of the total area of not exceeding 300 square meter, must have the net width not less than 1.20 meter; but the stairs of the said building for use with the above floors of the total area exceeding 300 square meter must have the net width not less than 1.50 meter whereby of the net width of the stairs is less than 1.50 meter there must be at least two stairs and each stairs must have the net width not less than 1.20 meter. The stairs of a building used for congregation of large crowds such as stairs of a convention hall or lecture room with the total area of 500 square meter and upwards, or the stairs of cafeteria or service premises with the total area of 1,000 square meter and upwards, or the stairs of each floor of the building which has the total area 2,000 square meter and upwards, must have the width not less than 1.50 meter of at least two stairs, or the width of 3 meter if there is one stairs. If a stairs if higher than 4 meter, there must be a landing every 4 meter or less, and the vertical distance from the stair or the landing to the lowest part of building above must be not less than 2.10 meter. The landing and the area in front of the stairs must have with width and length not less than the net width of the stairs, except the stairs has the net width exceeding 2 meter then the length of the landing and the area in front of the stairs may be not exceeding 2 meter. The stairs prescribed in the first- and second paragraph must have the riser not exceeding 18 cm, the tread, after deduction of the overlapping steps, of not less than 25 cm and rails. A stairs, with the width exceeding 6 meter and stair flight exceeding 1 meter, must have rails on both sides and the stair nosing must have materials preventing slippery.

Clause 25. The stairs prescribed in Clause 24 must have the distance not exceeding 40 meter from the farthest point of such floor.

Clause 26. The stairs prescribed in Clause 23 and Clause 24 with a curve line exceeding 90 degree may not have a landing, provided that the average width of the tread is not less than 22 cm for the stairs under Clause 23, and not less than 25 cm for the stairs under Clause 24.

#### Part 4 Fire-escape

Clause 27. A four-story building and upwards with the height not exceed 23 meter, or a three-story building with the top deck above the third floor of an area exceeding 26 meter, in addition to the regular stairs of building, must have at least one fire-escape made of fireproof materials and the walkway to the fire-escape must be without barrier.

Clause 28. A fire-escape must have slope less than 60 degree, except a row brick building and row house of not exceeding four stories which may have slope more than 60 degree and must have a landing at every floor.

Clause 29. A fire escape outside the building must have the net width of not less than 60 cm and the wall, adjacent to the fire escape, must be a solid wall and made of fireproof durable materials. If the fire escape prescribed in the first paragraph does not touch the ground floor of the building, there must be a metal stair sliding or extending or lowering to the ground floor accordingly.

Clause 30. A fire-escape inside the building must have the net width not less than 80 cm, with solid wall made of fireproof durable materials all around, except the ventilating shaft and fire-escape door, and must have air flowing in from outside the building, whereby each floor must have ventilating shaft opening to outside the building, with the total space not less than 1.4 square meter and must have adequate lighting both day and night.

Clause 31. A fire-escape door must be made of fireproof materials, with the net width not less than 80 cm and height not less than 1.90 meter, and push opening to outside only, a device must be installed for the door to have automatic closing, and the door must be convenient to open at all times. The door or exit to the fire escape must not have thread hold or edge.

Clause 32. The floor in front of a fire escape must have the width not less than the width of the stair, and the other side of not less than 1.50 meter.

#### Chapter 3 Open Space Outside building

Clause 33. Each building or unit must have open spaces as follows;(1) A dwelling building and collective dwelling building must have an open space not less than 30 of 100 parts of the floor which has the widest are in the building.(2) A row building, row brick building, commercial building, factory, public building and other type of building not being used as dwelling, must have an open space not less than 10 of 100 parts of the floor which has the most area in the

building. However, if such building is used for dwelling, the open space required shall be according to (1).

Clause 34. A row building or row brick building with the front not adjacent to a public road must have an open space in front of the building not less than 6 meter, whereby no part of the building shall intrude the said area. A row building or row brick building must have an open space not less than 3 meter at the rear of the building, for connecting each other, whereby no part of the building shall intrude in the said area; except a fire-escape outside the building which can protrude not exceeding 1.40 meter. At the side of a row building or row brick building, constructed for 10 units or having the total length of 40 meter, there must be an open space of not less than 4 meter like a channel throughout the depth of the row building or row brick building for connecting with the open space behind the building. A row building or row brick building, constructed less than 10 units or having the total length less than 40 meter but has an open space at the side of the said row building or row brick building less than 4 meter, shall not be deemed as having an open space at the side of the said row building or row brick building, but shall be deemed that the said row building or row brick building are constructed connectedly as the same row. In the open space prescribing in the first-, second-, and third paragraph, no building, fence, wall or any structure shall be constructed, and it shall not be provided for a well, swimming pool, garbage area or garbage collection area. A row building or row brick building with the side near the other person's land must have an open space at the side between the row building or row brick building and the other person's land of not less than 2 meter; except the row building or row brick building constructed as replacement of the previous one and having the area not exceeding that of the previous one and the height not exceeding 15 meter.

Clause 35. A row building or row brick building, with an open space at the rear of the building as prescribed in the second paragraph of Clause 34 and the building line has receded according to Clause 41, does not need to have an open space according to Clause 33 (1) and (2).

Clause 36. A row house must have an open space in front, between the fence or boundary line and the building wall, of the width not less than 3 meter, and an open space at the rear of the building, between the fence or boundary line and the building wall, of the width not less than 2 meter. Between the side of the row house constructed connectedly 10 units or having the total length of 40 meter, must have an open space at the side of the said row houses of not less than 4 meter as a gap throughout the depth of the row house. The row houses constructed connectedly less than 10 units or having the total length less than 40 meter, but have an open space between row at the side of the said house with the width less than 4 meter shall not be deemed as having an open space at the side of the row house, but shall be deemed as the row houses constructed connectedly as the same row.

Clause 37. Twin houses must have an open space in front and at the rear, between the fence or boundary line and the building wall, of the width not less than 3 meter and 2 meter respectively, and an open space at the side of not less than 2 meter.

Clause 38. A warehouse, having the total area of every floor collectively 100 square meter and upwards but not exceed 500 square meter, must have an open space from the boundary lines of the plot of land on which it is constructed of not less than 6 meter on both sides and not less than 3 meter on other sides. A warehouse, having the total area of every floor collectively exceed 500 square meter, must have an open space from the boundary lines of the plot of land on which it is constructed of not less than 10 meter on both sides and not less than 5 meter on other sides.

Clause 39. A factory, having the total area for operation of every floor collectively 200 square meter and upwards but not exceed 500 square meter, have an open space from the land boundary lines of the plot of land on which it is constructed of not less than 3 meter on both sides, whereby the walls on these sides must be solid and made of bricks or concrete, except the fire-escape door, and not less than 6 meter on other sides. A factory, having the total area for operation of every floor collectively 500 square meter and upwards but not exceeding 1,000 square meter, must have an open space from the boundary lines of the plot of land on which it is constructed of not less than 6 meter on every side. A factory, having the total area for operation of every floor collectively exceeding 1,000 square meter, must have an open space from the boundary lines of the plot of land on which it is constructed of not less than 10 meter on every side.

Chapter 4Building Lines and Various Distances of Building

Clause 40. Construction or Alteration of a building or any part of a building shall not include into the public place, unless permission has been obtained from the official in charge of the said public place.

Clause 41. A building, to be constructed or altered near a public road with the width less than 6 meter, the building line must be receded at the distance at least 3 meter from the center of the said public road. With regard to a building higher than two stories or 8 meter, row building, row brick building, row house, commercial building, factory, public building, sign or thing made for attaching or installing the sign, or warehouse, to be constructed or altered near the public road:(1) If the said public road has the width less than 10 meters, the building line must be receded at least 6 meter from the center of the public road.(2) If the said public road has the width 10 meter and upwards but not exceeding 20 meter, the building line must be receded at least 1/10 of the width of the public road from the boundary of the public road.(3) If the said public road has the width 20 meter and upwards, the building line must be receded at least 2 meter from the boundary of the public road.

Clause 42. A building, to be constructed or altered near a public water source such as river, trench, canal, irrigation gutter or ditch, if such public water source has the width less than 10 meter, the building line must be receded at the distance not less than 3 meter from the public water source; if such public water source has the width 10 meter and upwards, the building line must be receded at the distance not less than 6 meter from the public water source. A building, to be constructed or altered near a large public water source such as a large swamp, lake or sea, the building line must be receded at the distance not less than 12 meter from such public water source. An exception is made for a bridge, dam, fence, drainage pipe, wharf, sign, dock, boat rollers or an open space used as a parking lot, whereby receding of the building line is not required.

Clause 43. The building, to be constructed according to Clause 41 and Clause 42, must have the lowest part of the eaves or protruding architectural part at the height of not less than 3.25 meter from the footpath level but not including a decorative part protruding from the wall of not exceeding 50 cm, and must have a pipe draining water from the eaves or the roof attached to or embedded in the wall or the building's column down to a public pipe or manhole.

Clause 44. The height of a building from any point shall not exceed two times of the horizontal distance, measuring from that point to be 90 degree angle of the opposite boundary of the public road nearest such building. The building's height is to be measured vertically from the road level or the ground level of the site up to the highest point of the building, or to the top wall of the highest floor for the building with gable or "hip" roof

Clause 45. A building having two public roads of different width on either side, if the distance between the two public roads is not exceeding 60 metre and the building's width along the line of the wider public road is not exceed 60 metre, the height of the building at any point must not exceed two times of the nearest horizontal distance from that point to be at 90 degree angle of the opposite boundary line of the wider public road.

Clause 46. A building situated at the corner of two public roads of different width, the height of the building at any point must not exceed two times of the nearest horizontal distance from that point to be at 90 degree angle of the opposite boundary line of the wider public road, and the length of the building along the narrower public road must not exceed 60 meter. As for a row building or row brick building, the length of the building along the narrower public road must not exceed 15 meter.

Clause 47. A fence or wall, constructed adjacent to or at the distance from the public road less than the fence's height the fence is to be constructed not higher than 3 meters above the level of footpath or that of the public road.

Clause 48. Construction of a building near other building on the plot of land of the same owner, the floor or wall of the building with the height not exceeding 9 meter must be at the distance of not less than 4 meter from other building, while the building with height exceeding 9 meter but less than 23 meter must be at the distance of not less than 6 meter from other building. The contents of the first paragraph shall not apply to the open space used as a parking lot.

Clause 49. Construction of building at the side of a row building or row brick building:(1) If such row building or row brick building consisted of ten units or having the total length of 40 metre and upwards and the building to be constructed is a row building or row brick building, the row building or row brick building to be constructed must be at the distance not less than 4 meter from the existing row building or row brick building; but in case of other type of building, the distance from the existing row building or row brick building consisted of less than ten units or having the total length of less than 40 meter, the building to be constructed must be at the distance not less than 2 meter from the existing row building or so building; except in the case of constructing a row building or row brick building connected to the existing row building or row brick building as described in (4).

Clause 50. The building's wall with window, door, air ventilation shaft or transom, or porch of the building, must have the distance from the land boundary as follows:(1) A building with the height not exceeding 9 meter, the wall or porch must be at the distance not less than 2 meter from the land boundary.(2) A building with the height exceeding 9 meter but less than 23 meter, the wall or porch must be at the distance not less than 3 metre from the land boundary.(3) The building's wall at the distance less than prescribed in (1) or (2) must be at the building's wall at the distance not less than 50cm, unless such building is to be constructed adjacent to the land boundary and in which case the building's height must not exceed 15 meter. The building's wall adjacent to the land boundary or at the distance less than prescribed in (1) or (2) must be solid wall and the wall on this side must be a solid wall and constructed higher than the roof deck of not less than 1.80 meter. In case of construction a building adjacent to the land boundary, a written consent must be obtained of the land owner of this side as well.

Issued on 28th July, 2000Pinit CharusombatDeputy MinisterActing Interior Minister

Remarks: - The rationale for announcement of this Ministerial Regulation is because it is deemed appropriate to set forth the characteristics, design, shape, ratio, area, location of the building, level, open space outside the building or building line, and the distances or levels between building and building or other person's land or between building and road, footpath or public place, for the benefit of sturdiness, strength, safety, fire prevention, public health, preservation of quality of the environment, city planning, architecture and facilitate traffic. Furthermore, Section 8 (1), (7) and (8) of the Building Control Act of B.E.2522 (1979) has stipulated that such matters must be set forth in ministerial regulation. Therefore, it is necessary to issue this Ministerial Regulation.

## Table MR55/1: Width of Walkway

Type of Building	Width		
1. Dwelling building	1.00 metre		
2. Collective dwelling building, dormitory of accordance with the	1.50 metre		
law governing dormitory, office, public building, commercial			
building, factory, special building			

## Table MR55/2: Vertical Distance by Category of Use of Building

	Category of Use of Building	Vertical Distance
1.	Room for dwelling, row house, hotel room,	2.60 metre
	kindergarten classroom, kitchen for dwelling	
	building, special patient's room, walkway in	
	building	
2.	Room used for an office, a classroom, cafeteria,	3.00 metre
	restaurant hall, factory	
3.	Shop, convention hall, collective patients' room,	3.50 metre
	warehouse, kitchen, market and others of the like	
4.	Row building, row brick building	
	4.1 ground floor	3.50 metre
	4.2 second floor and upwards	3.00 metre
5.	Porch	2.20 metre

# A.3 Ministerial Regulation for Building Administration

# A.3.1 Ministerial Regulation No.1

MINISTERIAL REGULATION

(1981)

Issued under the Building Control Act

1979

By virtue of the provision of Section 49 of the Building Control Act 1979, the Ministry of Interior hereby issues the Ministerial Regulation as follows:

Clause1. A government servant or local administration personnel to be appointed by the competent officer as inspector must at least have either of the knowledge and qualifications as follows:

(1) having obtained a vocational upper secondary education level certificate, construction branch, survey branch, public works engineering branch and public works drawing branch: or

(2) having obtained a certificate prescribed by the Civil Service Commission as the specific qualification for the position of a public works engineering official 1 or equivalent.

Clause 2. A government servant or local administration personnel to be appointed as an engineer must at least have either of the knowledge and qualifications as follows:

(1) having obtained an advanced certificate, construction branch, survey branch, public works engineering branch and public works drawing branch;

(2) having obtained a certificate as prescribed by the Civil Service Commission as the specific qualification for the position of a public works engineer;

(3) having obtained a third grade engineer's certificate under on official course duly certified by the Civil Service Commission or having been duly licensed to carry on controlled engineering profession, branch 1, public works engineering, under the law on engineering profession: or

(4) being a person having knowledge or qualification under Clause 1 of this Ministerial Regulation and being a government servant or local administration personnel from level 3 up.

Given on the 6th of July 1981 GENERAL SITTH JIRAROJ

Minister of Interior.

# A.3.2 Ministerial Regulation No.2

MINISTERIAL REGULATION

No. 2 (1981)

Issued under the Building Control Act

1979

By virtue of the provision of Section 55 of the Building Control Act 1979, the Minister of Interior hereby issues the Ministerial Regulation as follows:

Engineer identification cards and inspector identification cards shall be in accordance with the forms annexed hereto.

Given on the 6th of July 1981

GENERAL SITTH JIRAROJ

Minister of Interior.

## A.3.3 Ministerial Regulation No.3

MINISTERIAL REGURATION

No.3 (B.E.2526)

Issued under the Building Control Act

B.E.2522

By virtue of the provisions of Section 5 (3) and of Section 42, paragraph five, of the Building Control Act, B.E.2522, the Minister of Interior hereby issues a Ministerial Regulation as follows:-

Clause 1 In this Ministerial Regulation:

"Construction material and things" means construction material which have been pulled down including things which have been moved out of the building which have been pulled down.

Clause 2 The seizure and keeping or sale of construction materials and things, and holding of money in lieu of property may be carried out by the local competent official only when:

(1) The Court has ordered an enforcement for the pulling down for which the local competent official shall have the duty in pulling down;

(2) The local competent official has put up the notice specifying the pulling down in the area to be pulled down for a period of not less than 7 days:

(3) The local competent official has carried out the pulling down at the expiry of the period of time as notified under (2).

Clause 3 In the seizure of construction materials and things, the local competent official:

(1) Shall prepare the noise for the seizure of the construction materials and things and put it up in conspicuous place at the place of the seizure:

(2) Shall prepare the list of construction materials and record the seizure;

(3) Declare the seizure of the construction materials and things to the owner or possessor of the building, the operator or the supervisor of the work, as the case may be.

The provision of 47 of the Building Control Act, B.E.2522, shall apply to the declaration of the seizure mutatis mutandis.

The seizure of the construction materials and things shall cover also the interest of such construction materials and things.

Clause 4 The local competent official shall show clearly that such construction materials and things have been sized, by putting up the tag and affixed with wax seal or stick the tag to the seized construction materials and things or make a marking as appropriate to conform with the list of construction materials and things so seized. If they can be collected in the box or cabinet, they shall be so placed in the box or cabinet, they shall be placed in the box or cabinet and put up the wax seal to it.

Clause 5 Then list of construction materials and things seized shall have particulars such as name, type, model, feature, quantity, size, weight, condition and estimate value of the construction materials and things.

If the construction materials and things seizure are numerous and of small value, they may be tied up or pied up and listed as one item.

If the construction materials and things seized are in set, they may be listed in set or separately:

Clause 6 The local competent official shall keep the construction materials and things seized at the place to seizure or they may be taken to be kept at any place as deemed appropriate, and if necessary a graduated may be hired or the place may be rent for safe keeping.

Clause 7 The local competent official shall note in the list of construction materials and things seized as how they are kept, including the expenses in the seizure and safe keeping.

Clause 8 The owner of the property shall come to receive back the construction materials and things which have been seized within thirty days form the date of having been informed of the seizure under Clause 3 (3). If the owner of the property has not come to receive back the property within said period of time, the local competent official may take out the construction materials and things so seized for action sale.

For the case several persons all claim to be owner of the property or the proceed from the sale, the local competent official shall instruct all those claiming to be the owners to settle among themselves or to take the case to court. If settlement has not been made or the case taken to court within sixty days from the date the local competent official has issued instruction, the local competent official may take the seized construction materials or things for auction sale.

If the construction materials and things which have been seized are easily deteriorating items, or if delay in safe keeping will be riskily to damage, or if the expenses for safe keeping will exceed the value of the construction materials and things, the local competent official may take those construction materials and things for auction sale or for sale by other means, before the date the owner or possessor, operator or the supervisor of he work shall have been informed of the seizure under Clause 3 (3).

Clause 9 If the owner of the property shall come to receive back to seized construction materials and things, the owner of the property shall pay for the expenses in the seizure, rent for place of safe keeping, cost for safe guarding and other expenses concerning with the seizure construction materials and things.

If the owner of the property shall not pay or shall not pay the full amount under paragraph one, the local competent official may take out the seized construction

materials and things for auction sale, and the provision of Clause 19, paragraph one, shall apply mutatis mutnadis.

Clause 10 The action sale of the seized construction materials and things shall be carried out by the local competent official preparing the particulars concerning the properties to be auctioned sale as much as they can be given, such as the name of the owner of property, date, time and place of the auction sale, name, type, model, feature, quantity, weight and condition of the property and so on.

Clause 11 The local competent official shall put up the notice of the auction sale in conspicuous place at the area where there has been the pulling down, the area for the auction sale and office of local competent official, not less than seven days before the date of auction sale.

In case the person the owner of the property to be auctioned sale in known, the local competent official shall send the notice of auction sale to the owner of the property, not less than seven days before the date of the auction sale.

The provision of Section 47 of the Building Control Act, B.E.2522 shall apply to the sending of the notice of auction sale mutatis mutandis.

In case it is deemed appropriate, the local competent official may announce the auction sake through the newspaper or radio broad casting station before the date of the auction sale.

In case of the owner of the property to be auction sale apply to the return of the property before or during sale, such auction sale shall be stopped.

Clause 12 If the property to be auctioned sale is antique or art object under the law on historical places, antique, art objects and national museum, the local competent official shall send the notice to the Department of Fire Arts not less than seven days before the auction sale.

Clause 13 If the property to be auction sale is a safe, box or steel chest which has not been opened, it shall be opened first before it can be auctioned sale.

Clause 14 In the auction sale the local competent official may appoint any official to act as sale official.

Before the auction sale, the sale official shall read out the notice of the auction sale at the place for the auction sale in public, and shall act as follows:

(1) Agreement on the sale shall be shown by banging on the wood;

(2) Shout out the price bidded the first time thrice, if there is no other person bidding higher, shout out the second time thrice, when there is no higher bidder and the price is reasonable, shout the third time together with banging the wood. But before banging the wood there is the wood there is a contester for higher price, the price shall be shouted out again from the start in said respective order;

(3) If the contester withdraw has bid before the banging of the wood, a shout for the bid shall be started again;

(4) When it is seen that the price given by the higher bidder is insufficient, the sale official may withdrawn the property form the auction sale; (5) After banging the wood, the buyer shall pay the money immediately, except that the property is valued from more than Five Thousand Baht up, the sale official may make allowance for the buyer to put up the deposit of not less than twenty-five percent of the buying price and execute a contract for the payment of the balance of the amount with a period of not less than fifteen days. When the full amount has been paid, the property may then be transferred to the buyer.

Clause 15 The sale official shall make up the record concerning with the auction sale. If the property which have been auctioned sale is value from Five Thousand Baht up, the number of persons who come to the auction sale, the bidders, including the amount bidder shall be stated in respective order.

Clause 16. When the auction sale has been completed, if the buyer has not paid or has not made the deposit or has not paid the balance, the local competent official shall take out the property for auction sale again, and inform the buyer of the date, time, and place for the auction sale. Whenever is the proceed from the last auction sale, the expenses in the previous auction sale shall be deducted first and if it does not cover the price in the last auction sale, the local competent official shall demand from the original buyer to pay for the amount so short.

Clause 17 Sale by other method under Clause 8, paragraph three shall be executed by the local competent official, as deemed appropriate and the record of such sale shall be made.

Clause 18 If the property to be sold yields interest during the seizure, the local competent official shall also sell such interest.

Clause 19 After having obtained the proceed from the sale, the local competent official shall deduct the expenses in the seizure, rent for the place of safe keeping, cost of safe-guarding and other expenses relating to the seizure and safe-guarding of the property. The remaining amount of the proceed is then to be returned to the owner.

In case the owner of the property has not come to receive it, the money shall be held in lieu of the property and shall be deposit with the treasury in the nature of outside find, for which the Regulation of Ministry of Finance relating to the keeping of the money and remittance of money to the treasury of the authority shall apply mutatis mutandis.

In case the owner of the property has not claim for that money within one year from the date there is a notice for the pulling down, the local shall make remittance of money to the treasury without delay.

Given on 5th April B.E.2526

General Sitthi Jiraroj

Minister of Interior

# A.3.4 Ministerial Regulation No.5

MINISTERIAL REGULATION No. 5 (B.E.2527)

Issued under Building Control Act

B.E.2522

By virtue of Section 5 (3) and Section 32 (2) of the Building Control Act B.E.2522, the Minister of Interior hereby issues the Ministerial Regulation as follows:-

Clause 1 Building which are subject to controlled use under Section 32 (2) according to this Ministerial Regulation are as follows:-

(1) Building to be used for commercial purpose.

(2) Building to be used for industrial purpose.

(3) Buildings to be used for educational purpose.

(4) Building to be used for conference hall.

(5) Building to be used for officer or place of business.

Clause 2 Buildings to be used for commercial purpose are buildings being used for trade or business operation or other businesses: having the space area for business operation of 80 square metres upwards.

Cause 3 Buildings to be used for industrial purpose are buildings being used for industry where machinery for production has combine production capacity or equivalent power an upwards of 5 Horse power.

Clause 4 Buildings to be used for educational purpose are buildings being used for educational purpose with space area for operation of 80 square metres upwards.

Clause 5 Buildings to be used for a conference hall are buildings being used for a meeting or conference with space area of 300 square metres upwards.

Government Gazette Vol. 101 part 37 Special issued page 1 dated 22 March 1984.

# A.3.5 Ministerial Regulation No.7

MINISTERIAL REGULATION

No.7 (B.E.2527)

Issued under Building Control Act

B.E.2522

By virtue of Section 5 (1) of the Building Control Act, B.E.2522, the Minister of Interior hereby issues a Ministerial Regulation as follows:-

Clause 1. The fee for the issue of Permit shall be as follows:

(1) Permit to construct: 20 Baht each

(2) Permit to modify: 10 Baht each

(3) Permit to pull down: 10 Baht each

(4) Permit to move: 10 Baht each

(5) Permit to change the use: 20 Baht each

(6) Certificate: 10 Baht each

(7) Substitute Permit or Substance Certificate: 5 Baht each

Clause 2. The fee for renewal of Permit shall be as follows:

(1) Permit to construct: 20 Baht each

(2) Permit to modify: 10 Baht each

(3) Permit to pull down: 10 Baht each

(4) Permit to move: 10 Baht each

Clause 3. The fee for checking the plan for construction or for modification for the construction or for the section where there is modification shall be as follows:

(1) For building which is not more than two-stories high or not more than twelve metres high, shall be charged according to the are of the floor together at 0.50 Baht per square metre.

(2) For building which is not more than three-stories high or higher than twelve meter but not more than fifteen metre high shall be changed according to the area of the floor altogether at 2.00 Baht per square metre.

(3) For building of more than three-stories high or more than fifteen metre high, shall charged according to the area of the floor although at 4.00 Baht per square meter.

(4) Building which has to carry the load in any floor of more than Five Hundred Kilogram square metre, will be charged according to the total floor area, at 4.00 Baht per square metre.

(5) Space or construction for car park, car tuning area and entrance & exit for building under section 8 (9), shall be charged according to the total floor are of the parking space, car turning are and entrance & exit, at 0.50 Baht per square metre. In case the space or building constructed for use as car park, are turning are and entrance & exit for car, for building specified under Section 8 (9) is in the building of any floor of the building, there is no fee for the inspection of the plan again.

(6) Bill board shall be charged according to the area by multiplying the widest part by the longest part, at 4.00 Baht per square metre.

(7) Construction which is measured by the length, such as dam, road or drainage, fence or wall, including the fence gate or the gate of the wall, is charged 1.00 Baht per metre in length.

In charging the fee for the checking of the plan, fraction of the square metre or metre shall be considered as on if the fraction is over half and discharged if less than half.

In counting the height of the building in metre, measure the height from the ground to the roof or the highest part of the building.

In case the building has the mezzanine, the floor shall also be including as area of the building for the calculation of the fee for checking the plan also.

Clause 4. The following buildings shall be exempted from the fee in issuing the permit under Clause 1, renewal of the permit under Clause 2, and checking of the plan for construction or modification under Clause 3.

(1) The building of Ministry, Bureau, Department for government service or public service.

(2) The building for the local administration organization for government service or for public service.

(3) Building of the state established under a law which is used for the service of the organization or for public service.

(4) Ancient place, temple or building for religious use where there is specific law governing the construction.

(5) Building which the international organization or building of the agency established under the agreement between the Thai Government and Foreign country.

(6) Building which is the embassy or consulate of foreign government.

(7) Temporary building for use in the construction of permanent building which is not higher than two stories or not over five metres and there is a period specified to be pulled down.

(8) Building for temporary purpose which not more than two stories high or not higher than nine metres and is not a public building, special building or building which the use is controlled under section 32 and there is a period of time specified to be pulled down.

Given on 8th January B.E.2528

General Sitthi Jiraroj

Minister of Interior

## A.3.6 Ministerial Regulation No.8

MINISTERIAL REGULATION No.8 (B.E.2528)

Issued under Building Control Act

B.E.2522

By virtue of Section 5(2) of Building Control Act, B.E.2522, the Minister of Interior hereby issues a Ministerial Regulation as follows:

Clause 1 The forms for Application for Permit and Certificate shall be according to those appended to this Ministerial Regulation as follows:

(1) Application for construction, modification or pulling down building shall be according to Form B.1;

(2) Application to move building shall be according to Form B.2;

(3) Application to change the use of the building shall be according to Form B.3;

(4) Application to modify or use the car park, car turning area or entrance and exit for other purpose shall be according to Form B.4;

(5) Application to construction building modify, pulling down, move, modify or use car park, car turning area and entrance and exit, for other purpose shall be according to Form B.5;

(6) Application for Certification of Construction, modification or more building, shall be according to Form B.6;

(7) Application for substitute permit or certificate shall be according to Form B.7;

(8) Application for transferring permit to construct, modify, pull down, move or change the use of building, shall be according to Form B.8;

(9) Permit to construct, modify or pull down building shall be according to Form Orr.1;

(10) Permit to move building. For the move of building to the same local area or to move building from an area where the Building Control Act, B.E.2522 enforced to an area where the Building Control Act, B.E.2522 is mot enforced, or to move building from area where the Building Control Act, B.E.2522 is not enforced to where it is enforced, shall be according to Form Orr.2;

(11) Permit to move Building, for moving building to other juristic area, shall be according to Form Orr.3;

(12) Permit to modify or use car park, car turning area and entrance and exit for other purpose, shall be according to Form Orr.4;

(13) Permit to change the use of building shall be according to Form Orr.5;

(14) Certificate of construction of building, modification of building or move building shall be according to Form Orr.6.

Clause 2. The form of order of local competent official shall be in accordance with those appended to this Ministerial Regulation:

(1) Order to change the plan of area, drawings and supplementary details or details of calculation under Section 27, paragraph one, shall be according to Form C.1;

(2) Order not to approve the renewal of permit under Section 35 shall be according to Form C.2;

(3) Order to stop the construction, modification or move building under Section 40, paragraph one, or to stop pulling down the building under Section 41, paragraph one (for the case of executing it without permit) shall be according to Form C.3;

(4) Order prohibiting to use building or allow other person to use building in manner which may be harmful under Section 40, paragraph one, or Section 41, paragraph one ( for the case of construction, modification, moving or pulling down without permit) shall be according to Form C.4;

(5) Order to stop construction, modify or move building under Section 40, paragraph one, or to stop pulling down building under Section 41, paragraph one ( for the case of performing incorrectly with the permit) shall be according to Form C.5;

(6) Order prohibiting the use of building to allow another person to use building in manner which may be under Section 40, paragraph one, or Section 41, paragraph one (for the case of construction, modification, moving or pulling down building incorrect with the permit) shall be according to Form C.6;

(7) Order to pull down the building under Section 42, paragraph one (for the case of construction, modification or moving building without the permit) shall be according to Form C.7;

(8) Order to pull down the building under section 42, paragraph one (for the case of construction, modification or moving building different from the permit) shall be according to Form C.8;

(9) Order to submit application for permit to construct, modify or move building under Section 43, paragraph one (for the case having carried out without the permit) shall be according to Form C.9;

(10) Order to make correction and to submit the application for permit to construction modify, pull down or move building under section 43, paragraph one (except for having carried out without the permit) shall be according to Form C.10;

(11) Order to apply for permit to construct, modify or move building under Section 43, paragraph one (for the case of carrying out the work differently from the permit) shall be according to Form C.11;

(12) Order to make correction and to submit application for permit to construct, modify or move building under section 43, paragraph one (for the case of carrying out the

work differently from the permit) shall be according to Form C.12;

(13) Order to carry out the modification under Section 41 and Section 43, paragraph one (from the case of pulling down building differently from the permit) shall be according to Form C.13;

(14) Order to change the plan of the area, drawings, details or calculation under section 43, paragraph two (for the case the local official order the submission of the application according to Section 43, paragraph one) shall be according to Form C.14;

(15) Order to pull down building according to section 42 and section 43, paragraph three (for the case of falling to comply with order of the local official to submit application for permit to modify building or change the application for the permit) shall be according to Form C.15;

(16) Order to stop using the building under Section 44 (for the case the certificate is not yet granted) shall be according to Form C.16;

(17) Order to stop using the building under section 44 (for the case the building is used for other purpose except that stated in the permit for construction, modification or moving) shall be according to Form C.17;

(18) Order to stop using the building under Section 44 (for the case it is not the building under control, but used for business which is under control) shall be according to Form C.18;

(19) Order to stop using the building under Section 44 (for the case the building is changed from the use under one type of business to that of another under control) shall be according to Form C.19;

(20) Order to stop using the area or building for other purpose under Section 45 in case the area or building is used as car park, car turning area and entrance and exit for car, shall be according to Form C.20;

(21) Order to stop the modification and to carry out the correction of the area or building back into original state under Section 45 (for the case the area or building is used as car park, car turning area or entrance and exit) shall be according to Form C.21;

(22) Order to pull down building under Section 42 and section 45 (for the case of not stopping the use of area or building constructed for other purpose or not correcting the area or building back into original state which has been used as car park, car turning area and entrance and exit) shall be according to Form C.22;

(23) Order to carry out the correction of the building area under section 46, paragraph one (for the case the building is under the condition or is used in the manner which may be harmful to health, life or property or not safe from fire or which may cause nuisance to effect the environment) shall be according to From C.23;

(24) Order to pull down the building under Section 42 and Section 46, paragraph two (for the case of falling to comply with the order to carry out correction of building which is in condition or may be used in manner harmful to health, life, person or property or not safe from fire or which may be a nuisance or effects environment) shall be according to Form C.24;

(25) Order to pull down building under Section 77 (1) (for the case the building is constructed on state land and there is Royal Decree to improve the building in that area) shall be according to Form C.25;

(26) Order to modify the building under Section 77 (2) (for the case the building is constructed on state land and there is Royal Decree to improve the building in that area) shall be according to Form C.26;

(27) Order to get rid of or stop the cause or which may cause unsuitable condition or not safe for living in, prevention of fire, health and maintenance of environment, town planning and according traffic convenience under Section 77 (3) (for the case the building is constructed on state land and there is Royal Decree to improve the building in that area) shall be according to Form C.27;

(28) Order to execute the land lease agreement under section 77(4) (for the case of the building is constructed on state land and there is Royal Decree to improve the building in that area) shall be according to Form C.28;

Clause 3 The form of the letter of the local official for use in the execution of Building Control Act, B.E.2522, shall be according to the forms appended to this Ministerial Regulation as follows:

(1) Letter of the local official in issuing the permit for the construction, modification, pulling down or down or moving building under Section 26 or for the use or change the use of the building under Section 33 (for the case the local official could not inform the applicant for permit other way) shall be Form Nor.1;

(2) Letter of the local official stating the order not approving the construction, modification, pulling down moving building under Section 26 or for the use or change the use of the building under Section 33, shall be according to Form Nor.2;

(3) Letter of the Local official notifying the extension of time for the issuance of permit or not to approve under Section 26, paragraph two, and Section 33. Shall be according to Form Nor.3;

(4) Letter of consent of the building supervisor (attaching to the application for permit to construct, modify, pull down or move building) under Section 29 shall be according to Form Nor.4;

(5) Letter stating the cancellation of the building supervisor of the permit holder under Section 30, paragraph one, shall be according to Form Nor.5;

(6) Letter stating the cancellation of building supervisor of the supervisor under Section 30, paragraph one, shall be according to Form Nor.6;

(7) Letter station the cancellation of building supervisor together with the letter of consent of the new building supervisor under Section 30, paragraph two, shall be according to Form Nor.7;

(8) Letter of consent of the new supervisor (attaching to Form Nor.7) under Section 30, paragraph two, shall be according to Form Nor.8;

(9) Letter of Local official notifying the approval to transfer the permit under Section 36, shall be according to Form Nor.9;

(10) Letter of the Appeal Committee notifying the ruling to the appellant under Section 52, paragraph two shall be according to Form Nor.10;

(11) Letter of the Appeal Committee notifying the rule to the local officer under Section 52, paragraph two shall be according to Form Nor.11.

Given on 8th January B.E.2528

Gen. Sitthi Jiraroj

Minister of Interior

# A.3.7 Ministerial Regulation No.9

MINISTERIAL REGULATION No.9 (B.E.2528)

Issued under Building Control Act

B.E.2522

By virtue of section 5(30 and Section 7 of Building Control Act, B.E.2522, the Minister of Interior hereby issues a Ministerial Regulation as follows:

Clause 1 The building as follows shall be exempted from having to apply for permit under Section 21, Section 22, Section 23, Section 24, Section 32, Section 33 and Section 34:

(1) The building of the Ministry, Bureau and Department which is used for official or public service;

(2) The building of the local authority which is used or official or public service;

(3) The building of the state organization established under the law, which is used for the activity of the state organization or for public service;

(4) The temple, wat or building used for religious purpose, for which there is special law for the control of construction;

(5) The building of international organization or building of the agency established under the agreement between the Government of Thailand and foreign government;

(6) The embassy or consulate of foreign government.

The person who is responsible for the building under paragraph one shall notify and submit the plan, drawings and details supplementing the plan as prescribed in Ministerial Regulation relating to prescribing the principles, method and conditions in the application for the permit, the approval, renewal of the permit, issue of certificate and issue of substitute permit or substitute certificate, in 2 sets, to the local official before carrying out the construction, modification, pulling down or moving the building, no less than 30 days; and the plan, drawings and details supplementing the plan shall be correct and be in accordance with Ministerial Regulation, local bye-law or notification of the Minister of Interior issued under Building Control Act,B.E.2522.

The provision of paragraph one shall not apply to the construction, modification, pulling down, moving, using or changing the use, adapt or use the area or construction which is used as car park, car turning area and entrance-exit for cars, for other purpose within the inner and otter area of Krung Ratanakosin.

Clause 2 When the local official has been informed and has received the plan, drawing and supplementary details under Clause 1, paragraph two, the check shall be carried out within fifteen days from the date of receiving the plan, drawing and supplementary details. This is only for keeping the line of the building along the road in good order, level of the ground floor, relation between the building and the way, road or public place or building of different owner or possessor, and area prohibited against certain type or class of building. When the local official consider there are things to corrected the person who is responsible shall be notified in writing.

Clause 3 The building which is for temporary common use of the authority, public charity or public use, and there is a time fixed for pulling down or which is constructed or under control of the authority, organization or public charity shall be exempted from having to apply for the permit under Section 21, Section 22, Section 23 and Section 24.

Clause 4 Temporary building for use in the construction of permanent building, which is not more than two storeys high or not more than nine metres from the ground to the roof or highest part of the building, and has to be pulled down when the permanent building is completed shall have to apply to permit under section 21 but shall be allowed not to comply with Ministerial Regulation, local bye-law or notification of the Ministry of Interior issued under Section 8(1),(2),(3),(4),(6),(7),(8) and (10) and shall be exempted from having to apply for the permit to pull down under Section 23.

Clause 5 The building for temporary use instead of the old building which was destroyed or damaged through natural disaster or by fire or other similar nature, which is not more than two storeys high or not more than nine metres from the ground to the roof or higher part of the building, and is not public building, special building, or building for which the use is controlled under Section 32 with demolition period of not more than twelve months, shall have to apply for the permit under Section 21 but shall be allowed not to comply with Ministerial regulation, local bye-law or notification of Minister of Interior issued under Section 8(1),(2),(3),(4),(6),(7),(8),(9) and (10) and shall be exempted from having to apply for the permit to pull down under Section 23.

Clause 6 The building which has the nature of being the tent for temporary use and is not the building for use in commerce, industry or education, with period of pulling down not more than ten days shall be exempted from having to apply for the permit under Section 21, Section 22, Section 23 and Section 24.

Given on 8th January B.E.2528

Gen. Sitthi Jiraroj

Minister of Interior

# A.3.8 Ministerial Regulation No.10

MINISTERIAL REGULATION

No.10 (B.E.2528)

Issued under Building Control Act

B.E.2522

By virtue of Section 5(3), Section 8(12) and Section 19, paragraph two, of the Building Control Act, B.E.2522, the Minister of Interior by advice of the Building Control Committee, hereby issues a Ministerial Regulation as follows:

Clause 1 Any owner of building who shall wish to receive the permit for:

(1) Construction of Building modification or pulling down the building shall submit the application according to Form B.1 together with documents as stated under Form B.1, to the local official.

(2) Moving of building shall submit the application according to Form B.2 together with documents as stated under Form B.2 to the local official where that building is situated, except for the moving of building from area not under Building Control Act, B.E.2522, to the area under Building Control Act, B.E.2522 the application shall be submitted to the local official of the area where the building will be moved to.

The application for the permit shall attach document concerning with the plan, drawing and supplementary details as specified under Form B.1 and Form B.2 in 5 sets together with the application. For the application of permit for construction of building, modification or moving the building which is under control of use under Section 32, the local official will notify the applicant for permit to attach more than five sets of such documents, but no more than seven sets.

The applicant for construction, modification or moving of building concerning with public building, special building or building constructed mainly of permanent and fire resistant material, one set of calculation shall be attached with the application under (1) or (2).

Clause 2 When the local official has received the application under Clause 1 examination of the plan, drawings and supplementary details shall be examined together with the calculation (if any), shall be carried out. When it appears that the plan, drawings and supplementary details and calculation are correct and according to Ministerial Regulation, local by-law or notification of Minister of Interior issued under the Building Control Act, B.E.2522, the local official shall issue the permit under Form Orr.1 or Form Orr.2 as the case may be.

In case there is application to move building to other area under control of other local official, when the local official where that building is situated has examined according to paragraph one and has it them to be correct, he shall issued permit for the part which the local official where the building to be moved is situated according to Form Orr.3 and send the permit and copies of documents concerning with the plan drawings and supplementary details in 4 sets together with 1 set of calculation (if any) to the area where the building will be moved to. When the local official of the area where the building is to be moved to has considered according to paragraph one and has been them to be correct, permit shall be issued for the part which the local official where that building is moving to is responsible, according to Form Orr.3.

Clause 3 When the holder of permit for construction, modification or moving the building which is under control according to Section 32, has carried out the construction, modification or moved said building properly the owner of the building or the possessor shall submit the application for the certificate from the local official according to Form B.6 together with documents as stated under Form B.6.

When the local official has received the application according to paragraph one and has examined the construction, modification or move of the building to be correct according to the permit, the local official shall issue the certificate according to Form Orr.6.

Clause 4 In case the owner or possessor of the building which is not under control according to Section 32, wishes to use the building for the activity under control, or when the owner or possessor of the building which is under control of use according to Section 32 wishes to change the use of the building for another activity the owner or possessor shall submit and application for permit to change the use of the building according to Form B.3 to the local official together with documents as stated under Form B.3.

The provision of Clause 1, paragraph two and paragraph three shall apply to the application under paragraph one for those concerning with documents to be attached with the application relating to the plan, drawings and supplementary details or the calculation mutatis mutandis.

When the local official has received the application under paragraph one he shall proceed according to Clause 2, paragraph one, and when it is seen to be correct the local official shall issued the permit according to Form Orr.5.

Clause 5 For the case the owner or possessor of the building must have the area of construction to be used as car park, car turning area and entrance-exit for car under Section 8(9), shall wish to adapt or use the car park, car turning area and entrance-exit for car, for other purpose, and has constructed the area or buildings to be used as car park, are turning area and entrance-exit for cars to replace the original car park under Section 34, the owner of possessor of the building shall submit an application according to Form B.4 to the local official together with the documents as stated under Form B.4.

The provision of Clause 1, paragraph two and paragraph three shall apply to the application for permit under paragraph one in so far as it concerns with the documents to be attached with the application relation to

plan, drawings, supplementary details or the calculation mutatis mutandis.

When the local official has received the application according to paragraph one he shall proceed according to Clause 12, paragraph one; and when it is seen to be correct the local official shall issue the permit according to Form Orr.4.

Clause 6 Any permit holder who shall wish to apply for renewal of the permit to construct, modify pull down or move building, or to renew the permit to modify or use car park, car turning area and entrance-exit for card for cars for other purpose, the application for the renewal shall be submitted according to Form B.5 to the local official together with documents specified in Form B.5 before the expiry of the permit.

When the local official has received the application according to paragraph one, the application and the reason for the renewal shall be considered. When it is deemed appropriate the local official shall grant the renewal by showing at the end of the permit or a new permit may be issued.

Clause 7 In case the permit or certificate is lost, destroyed or damaged in the important part, the holder of the permit or certificate shall apply for the substitute according to Form B.7 to the local official together with documents stated under Form B.7 within fifteen days from the date of learning of the loss, destruction or damage.

When the local official has received the application under paragraph one, the application shall be considered and if seen to be appropriate the local official shall issue the substitute for the permit or certificate to the applicant.

The substitute for the permit of certificate as the case may be shall be stamped in red as "substitute" and there shall be the date of issue of the substitute together with signature of the local official or of the person assigned by him.

Clause 8 When any holder of permit shall wish to transfer the permit for construction, modification, pulling down, moving or changing the use of the building to another person, and application according to Form B.8 shall be submitted together with the documents specified in Form B.8 to the local official.

When the local official has received the application under paragraph one, he shall consider it and if seen to be appropriate the local official shall issue a letter to notify the transfer of permit according to Form Nor.9 to the applicant for the transfer.

In case the local official has approved the transfer of the permit, it stamped in red as "Transferred", standing the name of the transferee and there shall be the date approved for the transfer, in the permit for the construction, modification, pulling down, moving or change the use of building, including the signature of the local official or of the person assigned by him.

Clause 9 The plan, drawing, supplementary details and calculation shall printed, copy, photo-copy or written in ink and shall be according to the principles and conditions as follows:

(1) The scale, size, distance, weight and units for the calculation shall be metric system.

(2) The plan of the area shall be not less than 1 : 500, showing location and area of the land and the building applied for the construction, modification, pulling down, moving, change the use, adapt or use the car park, car turning area and entrance-exit of cars for other purpose, and the application to construct the area or building for use as car park, car turning area and entrance-exit of cars to replace the former one, with the following details:

(A) External boundary of the existing building;

(B) Distance from the external boundary of the building applied for to the boundary of the land on all sides;

(C) Distance between the buildings existing and the building applied for in the area of the land.

(D) The nature and extent of the public land and the building in the adjoining area in sketch together with making of directions;

(E) In case there is no public water drain in the application for draining water to public drain or other method of draining water, including the indication of the flow and incline.

(F) Show the level of the ground floor of the building and relation to the level of the nearest way or public road and the ground level.

(G) The plan for the moving of the building shall show the original plan of the building and the plan where the new building will be moved to.

(3) The plan for the building under Section 4, except for the building, house, shop, raft, warehouse, office and other construction which people may live or use shall have details according to (A),(B),(C),(D),(E),(F) or (G), as there are according to the feature of the building.

The plan shall be of scale not less than 1 : 100, showing the followings: floor plan, side views (not less than 2 sides) cross-sections crosswise, cross-section, lengthwise, beams of the floors and foundation of the building applied for the construction, modification, pulling down, moving, change of use or modification of the car park, car turning area and entrance-exit for card for other use, including the details as follows:

(A) The plan shall have the significant details in size, marking, materials and users of the parts of the building, sufficient to be considered according to Ministerial Regulation and bye-law or notification of Minister of Interior issued under the control of Building Act, B.E.2522;

(B) The plan for the construction of building shall show the parts to be construction clearly;

(C) The plan for modification of the building shall show the original parts and the parts to be modified clearly;

(D) The plan for pulling down the building shall show the step, method and safety measures in pulling down the building;

(E) The plan for moving the building shall show the steps of the method, security and safety measures in moving the building.

For building with cross-section crosswise or lengthwise having the width, length or height of over 90 metres, the plan may be smaller than 1 : 100, but not less than 1 : 250.

(F) The plan for the change of the use of the building shall show the original part and the parts to be changed clearly.

(G) The plan for modifying or using the car park, car turning area and entrance-exit for cars for other purpose shall show the original parts and the parts to be constructed to replace the original. For the construction of building as car park, car turning area and entrance-exit for cars the difference parts of the building to be constructed shall be clearly shown.

The plan of the building under section 4, except for the brick house, row tenement, shop, raft, warehouse, office and building for other purpose which people may live in or use shall show details according to (A),(B),(C),(D),(E),(F) and (G), as there are according to the feature of the building.

(4) The supplementary details shall show the details of the quality and type of material, including the method of performance or method of construction, modification, pulling down, moving, change the use or modification of the car park, car turning area and entrance-exit for card for other purpose.

(5) The calculation details shall show the method according to the engineering principles by calculating the strength of materials, load and resistance of different parts of the building.

Clause 10 The person in charge of the design or the person in charge of the design and calculation shall sign and write down his name in the plan, drawings, supplementary details and calculation sheets, and state the office or address together with qualification of the person in charge in each set of the plan, drawing, supplementary details and calculation sheets, or the print, copy, photo-copy of the work of the person in charge of the design or design and calculation which he has sign and write down his name may be used instead.

In case the person in charge of the design or the person in charge of the design and calculation is the licensee to practice the profession of architecture under control or engineering under control under the law on architecture profession or engineering profession, his license number shall also be stated.

Given on 8th January B.E.2528

Gen, Sitthi Jiraroj

Minister of Interior

## A.3.9 Ministerial Regulation No.11

Ministerial Regulation N0.11 (B.E.2528)

Issued under the provision of the Act on Building Control

B.E. 2522

By virtue of the provisions of Section 4 and Section 4 (3) of the Act on Building Control B.E. 2522, the Minister of interior hereby issues the Ministerial Regulation as follows:

Clause 1 The following actions are not regarded as building alteration:

(1) Changing the structure of the building by using materials of the same size, number and type as the original ones, excluding the change of the structure of the building which is reinforced concrete, compressed concrete or pattern structured steel.

(2) Changing various parts of the building not being structure of the building by using the same materials as the original ones or other materials not adding load to the structure of the original building in any parts more than 10 percent.

(3) Changing, extending, adding, decreasing or expansion of boundary character, model, shape, ratio, weight, area of various parts of the building not being structure of the building and not adding load to the structure of the original building in any parts more than 10 percent.

(4) Decreasing or expanding the area of any floors to lessen or enlarge the area not more than 5 square metres altogether, in this regard, by not decreasing or increasing number of posts or beams, or

(5) Decreasing or expanding the area of the roof to enlarge the area not more than 5 square metres altogether, by not decreasing or increasing number of posts or beams.

In this regard, the actions under paragraph one must not be contradictory to the ministerial regulation issued under Section 8, local provision issued under Section 9 or Section 10 or notification of the Minister issued under Section 13 or Section 59 of the Act on Building Control B.E. 2522.

Clause 2 Demolition of other parts of the following structure of building is regarded as the building demolition:

(1) Reinforced concrete canopy.

(2) Partition or wall which is the structure of the building or reinforced concrete partition

or wall.

(3) Reinforced concrete staircase.

(4) Reinforced concrete floor up from the 2nd floor of the building and over.

In case there is razing of other parts of the structure of the building under paragraph on for action as per clause 1 in part of the building alteration, the razing of that parts is not regarded as building demolition.

Given on 26th August B.E. 2528

General Sitthi Jirarote

Minister of Interior

Remark : - The reason for the publication of this Ministerial Regulation is that, Section 4 and

Section 5 (3) of the Act on Building Control B.E. 2522 have prescribed that the minister has the authority to issue the Ministerial Regulation prescribing the action not regarded as building alteration and prescribing other parts of the building structure of which the razing is regarded as the building demolition, it is therefore necessary to issue this Ministerial Regulation.

Proclaiming in Government Gazettee, Special Issue, Volume 102 Part 134, issued on 26th September 1985

# A.3.10 Ministerial Regulation No.12

Ministerial Regulation

No.12 (B.E. 2528)

Issued under Control of Building Act, B.E. 2522

By virtue of Section 5 (3) and Section 31 (2) of the Control of Building Act, B.E. 2522, the Minister of Interior hereby issues Ministerial Regulation as follows:

The construction, modification, demolition or moving building differently from the area plan, drawing and details supplementing the drawings approved, including the method or condition which the local competent official has specified in the permit, may be carried out in the following cases:

(1) Not changing the area plan, except that the distance of the location of the building to the boundary of the land or edge of public land is different from the plan approved by more than twenty percent.

(2) Not changing , adding, increasing, decreasing or expanding the characteristic, scope, form or shape of the structure of the building, except:

A. The structure of the building will be different from the plan or details supplementing the plan approved by more than five percent, or

B. When the calculator of the plan, details supplementing the drawings and details of calculation under Section 28, has considered that it is necessary to change, add, increase, decrease or expand the structure of the building for strength, without causing the characteristic, form or shape, area and location of the building different from that approved and has informed the supervisor and owner of the building, including to notify in writing the local competent official with reason for the necessity, including the drawings, details supplementing the drawings and details of the calculation of the structure of that part of the building. However, it shall be notified before the permit for the construction, modification, demolition or move of the building shall have expired.

(3) Not changing, adding, increasing, decreasing or expanding the characteristic, scope, form or shape of the structure of the building or area of other parts of the building which are not structure of the building, which is increasing the weight to the structure of the building in any part by more than ten percent.

The case under paragraph one shall not contradict the Ministerial Regulation issued under Section 8, local by-law issued under Section 9 or Section 10, or Notification of the Minister issued under Section 13, or Section 59 of the Control of Building Act, B.E. 2522

Given on 26th August B.E. 2528

Sitthi Jirarote

Minister of Interior

# A.3.11 Ministerial Regulation No.14

#### MINISTERIAL REGULATION No.14 (B.E.2529)

Issued Pursuant to the Provision in the Building Control Act

B.E.2522

By virtue of the powers in the provisions in Section 5(3) and Section 7 of the Building Control Act, B.E.2522, the Minister of Interior hereby issues a Ministerial Regulation as follows:

The provisions in paragraph four of Clause 1 of Ministerial Regulation No.9 (B.E.2528) issued Pursuant to the Provisions in the Building Control Act, B.E.2522, shall be repealed and replaced by the following:

"The provisions in paragraph two and paragraph three shall not apply to buildings in paragraph one which are related to the security of the government, armed forces or police or to buildings mentioned in paragraph one (1) and (5) permitted by the Cabinet of Ministers in cases having special reasons. In this connection, conditions may be prescribed as well"

Given on 14th May B.E.2529 General Sitthi Jiraroj Minister of Interior

# A.3.12 Ministerial Regulation No.23

Ministerial Regulation No. 23 (B.E. 2532)

Issued under the provision of the Act on Building Control B.E. 2522

By virtue of the provisions of Section 4 and Section 5 (3) of the Act on Building Control B.E. 2522, the Minister of Interior hereby issues the Ministerial Regulation as follows :

The following is regarded as a building under Section 4; the signboard or structure built for fixing or installing signboard fixed or installed in a distance from public site, which upon horizontally measured the distance from public site is less than the height of that signboard measured from the ground, and width of signboard exceeding fifty centimetres, or its length exceeding one metre, or area of signboard exceeding five thousand square centimetres, or the weight of signboard or built structure used for fixing or installing signboard, any or both of them having the total weight exceeding ten kilograms.

Given on 27th September B.E. 2533

Banharn Silpa-archa

Minister of Interior

Remark :- The reason for the publication of this Ministerial Regulation is that, since Section 4 of the Act on Building Control B.E. 2522 has prescribed the meaning of "Building" to include signboard or structure built for fixing or installing at the distance from public site which upon horizontally measured the distance from public site is less than the height of that signboard measured from the ground, with size or weight exceeding the limit in the ministerial regulation, it is therefore necessary to issue this Ministerial Regulation.

Proclaiming in Government Gazette, Special Issue, Volume 107 Part 198, issued on 3rd October 1990

# A.3.13 Ministerial Regulation No.38

#### MINISTERIAL REGULATION No.38

Issued under the provision of the Act on Building Control B.E.2522

By virtue of the provisions of Section 5 (3) and Section 46 paragraph one of the Act on Building Control B.E.2522, the Minister of Interior hereby issues the Ministerial Regulation as follows:

Clause 1 In case the building which has been constructed, altered or moved with permission under the Act on Building Control B.E.2522, has the condition or usage which may cause damage to health, life, body or property or unsafe from hazard or causing disturbance or detrimental to environment quality preservation: the local competent officer has the authority to instruct owner or occupant of the building to proceed with corrective improvement to comply with the ministerial regulation issued under Section 8 or local provision issued under Section 9 or Section 10 begin in force on the day of receiving the license or order for construction, alteration or moving of the building, to be completed within the time possibly extended by the local competent official.

Clause 2 In case the building being constructed, altered or moved prior to date of the Act on Building Control B.E.2522 being in force, and under the enforcement of the Act on Building Construction Control B.E.2479 or the Act on Building Construction Control within Fire Blazing Area B.E.2476, has the condition or usage which may be detrimental to health, life, body or property, or usage from the hazard or causing disturbance or detrimental to preservation of environmental quality, the local competent officer shall have authority to instruct owner or occupant of building to proceed with corrective improvement to comply with the ministerial regulation, municipal provision, provincial provision, rule, regulation, notification or order issued by virtue of Act Building Construction Control B.E.2479 or the Act on Building Construction Control within Fire Blazing Area B.E.2476, as the case may be, being in force at that time and to be completed in time as fixed by the local competent officer but not less than 30 days and in case of appropriate reason the local competent officer may allow a further extension.

In case of building being constructed, alerted or moved prior to date to the act on Building Control B.E.2522 being in force, but not under the enforcement of the Act on Building Control B.E.2479 or the Act on Building Construction Control within Fore Blazing Area B.E.2476, has the condition or usage which may be detrimental to health, life, body or property, or unsafe from fire hazard or causing disturbance or detrimental to preservation of environmental quality, the local competent officer shall have authority to instruct the building owner or occupant to proceed with corrective improvement as possible under necessity and justice to the building owner or occupant, to be completed in time as fixed by the local competent officer but not less than 30 days and in case of appropriate reason the local competent official may allow a further extension. Clause 3 Prior to the local competent officer will instruct the building owner or occupant to proceed with improvement as per Clause 1 or Clause 2, the engineer authorized by the local competent officer shall inspect condition or usage of the said building and report the outcome to the local competent officer. Such report must at least consist of reason, necessity and procedure of corrective of the building in addition to duration needed for improvement.

In case the engineer has inspected the condition or usage of the building and opined that the condition or usage of the said building may be detrimental to life and body, he shall report it to the local competent officer for acknowledgement. At lease that report must comprise the reason and necessity and procedure needed for the proceeding to alleviate cause of that detriment.

Clause 4 In case the building under Clause 1 or Clause 2 has condition or usage which may be detrimental to life or body and it is needy to proceed with no delay, the local competent shall have authority to instruct the building owner or occupant to immediately alleviate cause of such detriment. Prior to the improvement proceeding by the building owner or occupant under Clause 1 or Clause 2, the local competent officer shall prohibit the building owner or occupant to use the building or allow the other persons to use that building wholly or partly.

Clause 5 The order to proceed corrective improvement of the building under Clause 1, Clause 2 and Clause 4 shall be applied with Kor.23 Form annexed to Ministerial Regulation No.8 (B.E.2522) issued under provision of the Act on Building Control B.E.2522.

Given on 27th February B.E.2536

Gen. Chacalit Yongchaiyudh

Minister of Interior

Remark:- The reason for the publication of this Ministerial Regulation is that, since it is appropriate to suitable principle, procedure and condition to give authority to the local competent officer to instruct owner or occupant of the building to proceed with corrective improvement in case the building being constructed, altered or moved with permission under the Act on Building Control B.E.2522, or being constructed, altered or moved prior to the Act on Building Control B.E.2522 being in force, which has condition or usage being possibly unsafe from fire hazard or causing disturbance or detrimental to conversation of environmental quality, and Section 46 paragraph one prescribed that stipulation of the said principle, procedure and condition must be as specified in the ministerial regulation. It is therefore necessary to issue this Ministerial Regulation

Proclaiming in Government Gazette, Special Issue, Volume 110 Part 29, issued on 12th March 1993

# A.3.14 Ministerial Regulation No.45

MINISTERIAL REGULATION No.45 (B.E.2538)

Issued under Building Control Act, B.E.2522

By virtue of the provision of Section 5(3) and Section 8(12) of the Building Control Act, B.E.2522, the Minister of Interior, by advice of the Building Control Committee, hereby issues a Ministerial Regulation as follows:

The provision in paragraph four of Clause 1 of Ministerial Regulation, No.10 (B.E.2528), issued under Building Control Act, B.E.2522, as amended by Ministerial Regulation No.29 (B.E.2534) issued under Building Control Act, B.E.2522 shall be repealed and replaced by the followings:

"Application for construction of building, modification of building, demolishing building or relocating building in the sanitation area or area of provincial administration organization, but not in the area where there is Ministerial Regulation Bye-law under Section 13, enforced. If it is the following buildings attach only the map of the area of the site of building and copy of document showing right in the land with the application:

(a) Residential building of not move than two storeys and having total area in all floors under the same roof of not more than 150 sq.m.

(b) Building for storage of agricultural produce having total area in all floors in the same building of not more than 100 sq.m.

(c) Livestock building having total area in all floors of not more than 100 sq.m.

(d) Fence, wall, door, hut or stall.

(e) Water tower which is not more than 6 metres high.

Given on 13th March B.E.2538 Maj.Gen. Sanan Khachonprasat

Minister of Interior

# A.3.15 Ministerial Regulation No.56

MINISTERIAL REGULATION

No.56

Issued under the provision of the Act on Building Control B.E.2522

By virtue of the provision of Section 5(3) and Section 8(12) of the Act on Building Control B.E.2522, which contains some provision pertaining the restriction of rights and freedom of an individual, under which the provision of Section 29 in addition to Section 31, Section 35, Section 48 and Section 50 of the constitution of the Kingdom of Thailand prescribes it can be conducted by virtue of legal provisions, the Minister of Interior, by advice of the commission on building control, hereby issues the ministerial regulation as follows:

It is to repeal to text in paragraph four of clause of the ministerial regulation No.10 (B.E.2528) issued under provision of the Building Control Act B.E.2522 with amendments by the ministerial regulation No.45 (B.E.2538) issued provision of the Building Control Act B.E.2522, and be repeated by the following text:

"Application for building construction, building alternation, building demolition or removal of building within boundary of the provincial administrative body in are of Tambon council or area of the Tambon administrative body but not being in area as fixed by the ministerial regulation or rural provisions under Section 8(10), or the notification of Interior Ministry issued by Minister of Interior under Section 13 being in force: in case of the following buildings, outlined mapping for buildings and copy of land right document together with applicant shall be attached:

(a) Dwelling building having not more than two storeys with combined area in every floor in the same building not exceeding 150 square metres.

(b) Agriculture produce storage building having combined area in every floor in the same building not exceeding 100 square metres.

(c) Livestock feed building having combined area in every floor in the same building not exceeding 100 square metres.

(d) Fence, wall, gate, projecting roof or street stall.

(e) Water tank tower with height not exceeding 6 metres."

Given on 20th September 2000 Pinit Charusombat Deputy Minister acting on behalf of Minister of Interior

Remarks:- The reason in proclaiming this ministerial regulation is since it is suitable to be lenient for stipulation concerning documents to be attached with permission application for building construction, building alteration, building demolition or building removal for some certain categories location in area of provincial administrative body only in area within the Tambon council of area of Tambon administrative body, but not being in area as fixed by ministerial regulation or provision of rural body under Section 8(0) of the Act on Building Control B.E.2522 or notification of Interior Ministery issued by Minister of Interior under Section 13 of the said Act being in force, and to repeal leniency for building in sanitation area in which the ministerial regulation No.45 (B.E.2538) issued under the Act on Building Control B.E.2522 which has leniency clause concerning the documents to be attached with the said permission application for building of some categories in the sanitation area, but since at present the sanitation local government has been cancelled by the Act on changing status of sanitation to municipal body B.E.2542, it is necessary to issue this ministerial regulation.

# A.3.16 Ministerial Regulation No.57

#### MINISTERIAL REGULATION No.57 (B.E.2544)

Issued under the provision of the Act on Building Control B.E.2522

#### Principle

Amendment to Ministerial Regulation No.10 (B.E.2528) issued under provision in the Act on Building Control B.E.2522 is as follows:

(1) To specify principle in stipulating validity of license for construction and alteration of building, and principle and condition of the said license extension (added to Clause 2/1 and Clause 6/1).

(2) To specify principle in consideration application for building construction or alteration in case the applicant is the licensee who has not applied for extension before the license expiry and has applied for a new license within specified period (added to Clause 6/2).

(3) To specify in case construction or alteration of building is not completed within license term and its extension on license or new license is not allowed, the owner of the building may apply for building alteration to the local official to build up parts of the building and to install further work on system and equipment as needed for safety use of that building (added to Clause 6/3).

#### Reason

Since the law governing building control being in force at present does not specify principle of validity of building construction and alteration license, and as well the said license extension does not specify how long the extension can be allowed, as a result, the different local competent officer has made different judgement in such matters. It is therefore expedient to specify principle of validity of license and its extension to be in the same line. Moreover, at present there are still a lot of buildings having been incomplete with construction and alteration which may be caused by license expiry or economic recession. It is therefore expedient to grant leniency to owner of the said building to apply for permission to further make construction or alteration until completion or until it can be safety used, it is therefore necessary to issue this Ministerial Regulation.

In case there is the extension of license as per paragraph one, the local competent officer can render license extension, only when the work on the whole foundation of the building has been finished, or there has been construction or alteration of building more than ten per cent of the permitted building area; and the local competent officer can extend the license not more than three times, each time for one year.

The license under paragraph two has duty in reporting advancement of building construction or alteration to the local competent officer every ninety days. In this regard, the local competent officer shall instruct the engineer or the inspector to investigate the construction or alteration every time receiving the report. In applying for license extension of building construction or alteration for every time, the license extension applicant must alter the building plan to have or improve fire hazard preventive system and safety within the building, which shall be in line with the ministerial regulation or local provision issued under provision of the Act on Building Control B.E.2522 being force while applying for that license extension.

Clause 6/2 The licensee building for construction or alteration who has not applied for license extension prior to its expiry, but the construction or alteration had been further proceeded until being unable to alter plan for applying to get the new license under the principle as fixed in the Ministerial Regulation, local provision or notification of Minister of Interior issued under provision of the Act on Building Control B.E.2522 being in force at that time, if requiring to further proceed, he shall submit permission application as per Clause 1 within ninety days from date of the license expiry. In this regard, the local competent officer shall consider issuing new license under the same principle as issuing the old license, except for the matter of fire hazard preventive system and safety system within the building which shall be in line with the Ministerial Regulation or local provision issued under provision of the Act on Building Control B.E.2522 being in force while applying for the new license.

Clause 6/3 In case the license for building construction or alteration has not been granted an extension or unable to extend after Clause 6/1 and unable to receive the new license after Clause 6/2, if it appears that the construction or alteration is still incomplete and being unable to alter plan for application to get the new license under the principle as fixed in the Ministerial Regulation, local provision or notification of Minister of Interior issued under provision of the Act on Building Control B.E.2522 being in force at that time, the building owner may submit permission application to alter the building to enable construction of various parts of the building or to further install job and equipment, in this respect, as only necessary to enable the safety usage of that building which shall not be the job of adding the height and area of the building except being the essential construction for installing system job and various equipment on the uppermost floor of the building such as, elevator mechanic room, water storage tank or fire alarm ladder room, etc.

Having received the permission application as per paragraph one, the local competent officer the engineer or the inspector to look over that building. If it is found that the permission application for building alteration is just a necessity to enable the safety usage of that building, the local officer shall issue the license to the permission applicant as per paragraph one.

The permission application under paragraph one and license under paragraph two shall be applied with Khor 1 Form and Or 1 Form annexed to the Ministerial Regulation No.8 (B.E.2528) issued under provision of the Act on Building Control B.E.2522.

Clause 3. The license for building construction or alteration issued prior to the enforcement date of this ministerial regulation shall be valid as specified in the license. For the license extension it shall be proceeded as specified in Clause 6/1.

Clause 4. For the license for building construction or alteration which has need extended prior to the enforcement date of this Ministerial Regulation, if a further extension is required, it shall be proceeded as specified in Clause 6/1 paragraph two, paragraph three and paragraph four.

Given on 23rd July B.E.2544

Signature

(Mr.Sora-art Klinprathum)

Deputy Minister acting for

Minister of Interior

23rd July 2001

## Signature

Assistant Secretary to Minister

Acting for Secretary to Minister of Interior

20th July 2001

Correct copy

## Signature

(Mrs. Sompis Sophonpongse)

Administrative officer 5, Legal division

Public Works Department

# A.3.17 Ministerial Regulation Specifying Other Structures as Building Under Law Governing Building Control (legislated as the 58th issue of the Ministerial Regulations)

#### Ministerial Regulation

Specifying other structures as building under law governing building control

Administrative officer 5, Legal division Public Works Department

B.E. 2544

By virtue of the provisions of (5) of the definition of "Building" in Section 4, Section 5 (3) and Section 7 of the Act on Building Control B.E. 2522, which is the Act containing provisions pertaining the restriction of rights and freedom of an individual in which Section 29 together with Section 31, Section 35, Section 48 and Section 50 of the constitution of the Kingdom of Thailand prescribe it can be conducted by virtue of the provision of the law, the Minister of Interior hereby issues the Ministerial Regulation as follows :

Clause 1 The following structures are regarded as buildings under the Act on Building Control B.E. 2522.

(1) Storage tank with capacity over 100 cubic meters.

(2) Swimming pool outside the building with capacity over 100 cubic meters.

(3) Earth barrier wall or water barrier wall having to bear the pressure of earth or water with the height over 1.50 meters.

(4) Structure useful in radio or television transmission with the height from foundation level of the structure over 10 meters, and having total weight over 40 kilograms.

(5) Other structures apart from (1) (2) (3) and (4) with the height from foundation level over 10 meters.

Clause 2 Structures as specified in clause 1 of the ministries, bureau, department, local state bodies or state organizations established under law for use in

the state agency, activity of organization or public benefit use, shall be exempt from being under the ministerial regulation or local provision governing distance between building and building or land boundary of the third party, or between the building and road, lane, soi, footpath or public places.

Given on 1st August B.E. 2544

Pol Capt Signature

(Purachai Piemsomboon)

Minister of Interior

Correct copy

Signature

(Mrs. Sompis Sophonpongse)

# A.3.18 Ministerial Regulation (under procedure for issuance in the Government Gazette by the Council of State)

#### Existing

Principle and Reason Referendum

considered with the ministerial regulations mentions the auditor's qualifications, the principles of achieving license, the stipulations of license application abrogation and the principles of building audit under the law of building control B.E. .....

#### Principle

set up the criterions of building audit under the law of building control.

#### Reason

Section 8 (13) (14) (15) and Section 32 (second) of Building Control Act B.E. 2522, amended by Building Control Act (No. 3) B.E. 2543, stipulate the minister's authority to promulgate the ministerial regulations, to designate the role and the responsibility of architect, foreman, contractor, building assuming person and the building owner, to issue the auditor's qualifications and prohibited characters, including the principle, the procedure and the stipulation of license application abrogation and of the audit, the installation and the equipment audit of the building, that all are issued for the benefit of strong, safety, fire protection, sanitary, environment, city plan and architecture

#### The Draft of Ministerial RegulationsNo. 58

set up the auditor's qualifications, the principle of achieving auditor license , the stipulation of auditor application abrogation and the principle of building audit issued under the law of Building Control B.E. ....

The provisions of Section 5 (2) and (3), Section 8 (13) (14) and (15) and Section 32 (second) of Building Control Act B.E. 2522, amended by Building Control Commission (No. 3) B.E. 2543, mention about human right limitation; but Section 29, Section 31, Section 35, Section 48 and Section 50 of Thai constitute mention that human right limitation will be issued by the authority of the provisions of the law, the Minister of Interior, by advice of Building Control Commission issuing the Ministerial Regulations as follows

#### Clause 1. For these Ministerial Regulations

" building audit" means official examination of building that has been used for a period in order to examine the building, system and additional equipments such as service and facility system, sanitation and environment system or fire protection and suppression system, if all are efficient and safe for the inhabitants in that building.

" audit operation team" means auditors who generally examine the building may be engineer or architect in any field which auditor selects to work for searching and collecting building data, yearly auditing the building, arranging the audit report and yearly training the building inhabitants for evacuation. " audit expertise team" means auditors who are expert in auditing the building may be specified field engineer or architect in the form of person or juristic person working for particularly auditing the building, arranging the operational plan for building and equipment system maintenance, producing the manual for building supervisor and arranging yearly building audit plan.

" approve auditor team" means auditors who are specially expert in auditing the building may be specified field engineer or architect working for re-auditing the building audit report in order to examine that the audit and academic analysis are under the provisions of law of Building Control, other involved laws and safety standard which is set up by International Standard or Academic Building Audit Training Institute. Then, sign the name for approve.

" building owner" includes the manager of juristic person of the building under the law of Building.

"Building Audit Training Institute" means the institute training the person concerned with building audit and setting safety standard of building namely : The Engineering Institute of Thailand under H.M. the king's patronage, The Architect Institute of Siam under H.M. the king's patronage, Council of Engineers, Council of Thai Architects and public or private organizations approved by Building Control Commission or by Council of Engineers or Council of Thai Architects.

"License" refers auditor permission document, audit officer permission document, audit expertise permission document ,and approve auditor permission document, depending on case.

" registrar" means Secretary to Building Control Commission who is the head of Building Control Office

#### Chapter 1General

Clause 2. The following buildings must have auditors for auditing the building(1) high-rise building or extra large building(2) assembly building(3) theatre under the law of building controls(4) hotel under the law of hotels having 80 rooms and over(5) service place under the law of service places only for dancing and massage, except the place for herbal massage or health massage(6) under the regulation of Clause 38, condominium or dwelling building having area 2,000 square-meters and over(7) Factory building under the law of factories having the height more than 1 story and having used area 5,000 square-meters and over

Clause 3. To audit the building appropriately suitable with auditor's ability, working experiences and preparations, the auditors are divided to 2 groups as follows : (1) first auditor group is juristic person or public section having authority to audit all type of buildings regulated for audit as Clause 2.(2) second auditor group is juristic person or public section having authority to audit the buildings as Clause 2 (2) (3) (4) (5) (6) and (7)

Clause 4. Building owner as Clause 2 must have building supervisor working for building and equipment system supervision and maintenance following the maintenance operational plan that is regulated by the auditor and recording the maintenance data in the period in order to inform the auditor and for helping to yearly train the inhabitants for evacuation. The building supervisor as paragraph 1 must have the qualifications by the followings :(1) Bachelor's Degree in Engineering or Architecture, or High Vocational Certification in building worker(2) certified for building supervision and maintenance by Building Audit Training Institute

Chapter 2Auditor's specified qualifications and prohibited characters

Clause 5. Person who will be an auditor must apply for permission, and must have qualifications under the provisions and stipulations of ministerial regulations

Clause 6. First auditor group must have qualifications as follows:(1) being juristic person under Thai law; at least 1/2 of partners or shareholders must be Thai, the assets for license application must be valued not less than two million Baht, and at least 1/2 of those assets must be Thai partners or shareholders'(2) could not operate as a contractor, producer, installer or vendor involving with system , equipment and building tools or business of construction and building maintenance that may be interested in the building audit(3) having permission document for certificated engineering under the law of engineering or for certificated architecture under the law of architect, depending on case(4) academic personal as follows :(a) Audit operational team consists engineer in the field of civil engineering, mechanical engineering, electrical engineering, environmental engineering and architect in the field of architecture that all are permitted as an auditor permanently working for that auditor office, not less than 9 persons selected from all above fields, but fellow engineer, fellow architect, charter engineer or charter architect, not less than 3 persons, must be selected from different fields(b) Audit expertise team consists of fellow engineer or charter engineer in the field of civil engineering, mechanical engineering, electrical engineering, environmental engineering and fellow architect or charter architect in the field of architecture that all are permitted as an audit expertise permanently working for that auditor office, or temporarily working but they must have acquiescent document for affirmatively auditing only some case, not less than 1 person in each field and may assemble juristic person that is permitted as an audit expertise in any above fields(c) Approve auditor team consists of charter engineer in the field of civil engineering, mechanical engineering, electrical engineering, environmental engineering and charter architect in the field of architecture that all are permitted as an approve auditor permanently working for that auditor office, or temporarily working but they must have acquiescent document for affirmatively auditing only some case(5) being second auditor group not less than 2 years(6) having permanent office, sufficient operational area and appropriate working environment(7) Auditor license is not cancelled or hold back.(8) The provisions in paragraph (1) (3) (5) and (6)could not regulate the public section

Clause 7. Second auditor group must have qualifications as follows :(1) being juristic person under Thai law; at least 1/2 of partners or shareholders must be

Thai, the assets for license application must be valued not less than one million baths, and at least 1/2 of those assets must be Thai partners or shareholders'(2) could not operate as a contractor, producer, installer or vendor involving with system, equipment and building tools or business of construction and building maintenance that may be interested in the building audit(3) having permission document for certificated engineering under the law of engineering or for certificated architecture under the law of architect, depending on case(4) academic personal as follows :(a) Audit operational team consists of fellow engineer or fellow architect not less than 1 person and associate engineer or associate architect not less than 2 persons that all are permitted as an auditor permanently working for that auditor office(b) Audit expertise team consists of engineer and architect in the field of civil engineering, mechanical engineering, electrical engineering and architecture that all are permitted as an audit expertise permanently working for that auditor office, or temporarily working but they must have acquiescent document for affirmatively auditing only some case, not less than 1 person in each field and may assemble juristic person that is permitted as an audit expertise in any above fields(c) Approve auditor team consists of fellow engineer that attaining the permission of fellow certificated engineer that is acquired not less than 10 years; or of charter certificated engineer under the law of engineer in the field of civil engineering, mechanical engineering, electrical engineering, environmental engineering and fellow architect that attaining the permission of fellow certificated architect that is acquired not less than 10 years; or of charter certificated architect under the law of architect in the field of architecture that all are permitted as an approve auditor permanently working for that auditor office, or temporarily working but they must have acquiescent document for affirmatively auditing only some case, not less than 1 persons in the each fields.(5) having permanent office, sufficient operational area and appropriate working environment(6) Auditor license is not cancelled or hold back.(7) The provisions in paragraph (1) (3) and (5) could not regulate the public section

Clause 8. Auditor must has qualifications as follows:(1) achieving the permission of a certificated engineering under the law of engineer in the field of civil engineering, or mechanical engineering, or electrical engineering or environmental engineering; or achieving the permission of certificated architecture under the law of architect in the field of architecture(2) certified for building audit training course by Building Audit Training Institute

Clause 9. Audit expertise must have qualifications as follows:(1) being person or juristic person(2) achieving the permission for certificated engineering under the law of engineer, not lower than a fellow engineering in the field of civil engineering, or mechanical engineering, or electrical engineering or environmental engineering; or achieving the permission of certificated architecture under the law of architect, not lower than fellow architect in the field of architecture.(3) having building auditor experiences not less than 2 years or other auditor experiences comparative with building auditor or control of building construction experience not less than 3 years(4) Certified for building audit course by Building Audit Training Institute In the case of juristic person, the qualifications pursuant to paragraph

(3) and (4) are exempted but the personals of that juristic person must have all those qualifications.

Clause 10. Approve auditor must have qualifications as follows:(1) achieving the permission of certificated fellow engineer that is acquired not less than 10 years; or of a charter engineer under the law of engineer in the field of civil engineering, or mechanical engineering, or electrical engineering, or environmental engineering; or of certificated fellow architecture that is acquired not less than 10 years; or of charter architect under the law of architect in the field of architecture(2) having audit expertise experience not less than 2 years; or other audit experience comparative with building auditor's; or control of building construction experience not less than 5 years.(3) certified for building audit course by Building Audit Training Institute

Clause 11. Auditor's authority will be ended when:(1) winding-up the juristic person(2) denouncing being auditor toward the registrar(3) not prolonging the period of auditor license(4) abrogated the license application

Chapter 3principle , procedure and stipulation of license application

Clause 12. Person who would like to be an auditor can submit the auditor application form with the support document as T.1 form attached at the end of these ministerial regulations

Clause 13. Person who would like to be an audit officer, auditor expertise and approve auditor can submit the application form, depending on case, with the support document as T.2 form attached at the end of these ministerial regulations

Clause 14. To submit the license application form in this Chapter (1) In Bangkok, submit the application form to the registrar or man assigned by the registrar at Building Control Commission Office(2) In other provinces, submit the application form to the assigned man in any province locating the office. After the assigned man got the application form and check it's information and support documents, he or she would send all of them to the registrar within 15 days since getting the application form. The assigned man must be approved by Building Control Commission and be announced as the government gazette

Clause 15. The registrar or assigned man must examine the qualifications of the applicants following Chapter 2. If theirs are completely suitable, registrar or assigned man will submit those documents to the Building Control Commission for consideration. As Building Control Commission resolve to permit those applicants, the registrar or assigned man must deal with their auditor licenses and identity cards as the form at the end of these ministerial regulations.(1) License Application Forms for auditor, audit officer, audit expertise, and approve auditor are T.1 form, T.2 form, T.3 form and T.4 form, respectively.(2) Identity cards of audit officer, audit expertise and approve auditor are B.1 form, B.2 form and B.3 form, respectively. The license application form and identity card pursuant to paragraph 1 is valid for 2 years since the issued date.

Clause 16. If Building Control Commission vote to reject the applicants, the registrar or assigned man must inform the resolution to the applicants within 45 days since the commission resolve. Whereas the applicants have right

to appeal that resolution toward the commission within 30 days since they are inform the rejection. To appeal pursuant to paragraph 1 must submit the requisition mentioning the objection, facts and reference laws to the registrar or assigned man who will send all documents to the commission for consideration and will report the progress to the appeal man within 60 days since getting the appeal requisition

Clause 17. Person who would like to validate the license could submit the application form for license validity within 60 days before it will be expired as T.3 form or T. 4 form, depending on case. In the duration of validity, the applicant could operate his duties until he is informed the rejection to validate the license by the registrar or assigned man. To submit the application form for license validity is compelled mutatis by the provisions of Clause 15 and 16 License validity would be shown at the bottom of the expired license or the applicants may get the new one. The validated license is valid for 2 years since the old one is expired Any action that the applicants do in the duration of license validity is still available, except the applicants would not finally get the validity. Building Control Commission may peruse to validate the expired license if the case is reasonable.

Clause 18. If the license, identity card, license copy or identity card copy is lose or it's important data is damaged, licensee must notify the registrar or assigned man with the support documents for acquiring new license or identity card copy. License or identity card copy has the same form as the original's, but the copied one is written or stamped "copy" with red font at the head of the form.

Clause 19. Licensee as an auditor must observe the stipulations by the followings:(1) expressing the auditor license or the copy at the distinctly apparent place in the auditor office(2) informing the registrar or assigned man about name list of audit officers, audit expertise and approve auditors with their identity card copies and the documents showing their consent to work for that auditor in order that he will examine the correction and keep all of them for evidence In the case of changing auditor, licensee must inform the name list with support documents of new auditor to the registrar or assigned man within 15 days since changing the new one. As the registrar or assigned man receives the list and documents, the auditor can continue his works until he is informed the resolution by the registrar or assigned man.(3) If the auditor would like to move the office, he must inform the location of new office to the registrar or assigned man not less than 30 days before moving.(4) If the auditor would like to transfer the license to others, he must submit the requisition of license transfer with the support documents for perusal, that is mutatis compelled by the provision of Clause 14, 15 and 16, as T.5 form at the end of these ministerial regulations

Clause 20. The registrar or assigned person who is responsible for dealing with the requisition must finish it within 45 days since receiving document. In some case that the registrar or assigned person could not deal with the requisition in the period pursuant to paragraph 1, he can extend the time, added not more than 45 days, and must inform the extension and the reason to the owner of that requisition before the end of the period pursuant to paragraph 1

# Chapter 4License Application Abrogation

Clause 21. The registrar or assigned man is responsible for controlling and supervising the applicants to observe the ministerial regulations. If the applicants break the regulations, the registrar or assigned man must caution them to rectify in the specified period or must inform them to temporarily hold back their license procedure. And if there are any actions reasonable for license application abrogation pursuant to Clause 22, the registrar or assigned man would inform Building Control Commission to go on consideration.

Clause 22. Building Control Commission have authority to abrogate the license applications if :(1) auditor or his academic personal has not all needed qualifications pursuant to these ministerial regulations.(2) auditor or his academic personal does not audit and report the reality.(3) auditor permits contraction during auditing the building or permit the academic personal who does not permanent work for him or does not have any document showing the consent to work for him auditing the building.(4) auditor breaks the stipulations pursuant to Clause 19(5) acting as an auditor or permitting his academic personal audit the building while the license is invalid(6) auditor or academic personal breaks the regulations under the law of building control.(7) auditor employees, audit officers, audit expertise or approve auditors who have not qualifications pursuant to Clause 8, 9 or 10, depending on case.(8) approve auditor signs for approving the building audit report without observing the laws, standard or professional merit.

Clause 23. License application abrogation in this chapter does not effect to the proceeding operations.

Clause 24. Person who is abrogated for license permission could not submit any requisition within 2 years since he or she is abrogated.

#### Chapter 5Building Audit Certificate

Clause 25. Local official is responsible for registering the building that must be audited following Clause 2 and for informing the building owner to prepare building audit following chapter 6

Clause 26. The building owner who registers the building as being audited following Clause 25 must have building auditor, arrange the plan of construction that is permitted by local official, the operation and maintenance manual for system and equipment from the producer and installer, record the building audit data from the building supervisor and give it to the auditor for consideration. In the case that building following paragraph 1 is old and has not construction plan or diagram, the auditor would audit the building and arrange the construction plan or diagram for the building owner.

Clause 27. Auditor would examine the building under the principle, procedure and stipulation pursuant to chapter 6 and would also arrange the audit report to the building owner.

The building owner would consign the building audit report to the local official not less than 30 days before the building audit certificate will be expired.

Clause 28. Local official would peruse the building audit report following Clause 27 unhesitatingly. If there are

recommends about rectifying, changing or improving the systems or any part of building, local official would peruse the command pursuant to Clause 46 or 46 ( bis ) of Building Control Act B.E. 2522, depending on case, so that the building owner would go on operation.

If the perusal shows that the audit report and the rectifying, changing and improving report is available and secure, the local official would certify that building audit for the building owner as the attached form at the end of these ministerial regulations.

Building audit certificate pursuant to paragraph 2 is divided to 3 colors depending on potential of fire safety as follows :(1) Orange refers the building which is repaired and added more fire protection and suppression systems following the law of building control, forcing at that moment, No. 47 (B.E. 2540) issued under the provisions of Building Control Act B.E. 2522 that the building security is in the fundamental level, using R.1 form.(2) Yellow refers the building which is installed fire protection and suppression system following the issued law of building control has security in the middle level, using R.2 form.(3) Green refers the building which is installed fire protection and suppression system following the law of building control and is overhauled to get more standard following security standard issued by Building Audit Training Institute, using R.3 form. Show the building audit certificate pursuant to paragraph 3 at the distinctly apparent place in the building.

Clause 29. Building audit certificate is valid for 1 year since the issued date or since the preceding certificate is expired

Clause 30. Local official collects the data of permitted building that must be audited following Clause 25 and arrange yearly overseen building audit report in order to inform the building control commission within March of every year following report form issued by building control commission

## Chapter 6Building audit

Clause 31. To peruse the building, systems and equipments would observe the principles, the regulations and the standard as follows :(1) under the law of building control; or under other involved laws(2) under security standard of Building Audit Training Institute(3) under the approval international standard Including under the manual of system and equipment of producer and installer (if).

Clause 32. The detail of building audit should indicate as follows :(1) the building audit; auditing the building security namely:(a) adding and adapting the building(b) changing loads on the floor (c) changing the building condition(d) changing the constructional or decorative materials(e) building decadence (f) building structural disaster(g) building base subsidence(2) To audit the building systems and equipments(a) service and facility system1) elevator system2) escalator system3) electrical system4) air-conditioning system(b) sanitation and environmental system1) water supply system2) waste water drain and treatment system3) storm drain system4) refuse system5) ventilating system6) air pollution and noise control system(c) fire protection and suppression system1) fire escape stairs and fire escape route2) exit signs and illumination of signs 3) smoke exhaust and smoke control system4) emergency electrical system5) fireman lift system6) fire alarm system7) installation of portable fire extinguishers system 8) standpipe and hose system, fire pump9) automatic fire extinguishing system10) lightning system(d) auditing the efficiency of systems and equipments by training evacuation for the building inhabitants 1) efficiency of fire escape stairs and fire escape route2) efficiency of exit signs and illumination of signs3) efficiency of fire alarm system The building control commission have authority to stipulate more details about building audit pursuant to paragraph 1 but they would announce it as the government gazette.

Clause 33. Building audit is set up for 2 type :(1) vital audit must have:(a) building audit following the provisions of Clause 32, completely examined by audit expertise(b) maintenance operational plan for building and equipment system, producing the operational manual for building supervisor for guiding audit and maintenance, and maintenance record for reporting to the auditor(c) yearly building audit plan and audit guidance for audit operation team(2) Normal audit must arrange the building audit following yearly building audit plan pursuant paragraph 1 (c) Operational plan or manual pursuant to paragraph 1 is under the provisions issued by the building control commission and announced as the government gazette

Clause 34. Old building that has never been audited or new building using for a year must be audited it's condition as vital audit following Clause 33 (1) by the auditor and must observe like this every 5 years During the year of vital audit pursuant to paragraph 1, there must be yearly audited as normal audit following Clause 33 (2), mutatis audited by audit operation team of auditor. If the normal audit pursuant to paragraph 2 discovers the damage or the flaw of the building that may be dangerous, there must have vital audit following Clause 33 (1) again.

Clause 35. If any part of building audit does not pass the reference standard pursuant to Clause 31, the building auditor will arrange the report with the recommend and the advice for changing and improving that make the building owner could achieve the standard. The building audit report and the advice pursuant to paragraph 1 is arranged following the building audit form issued by building control commission and announced as the government gazette.

Clause 36. Approve auditor examines the building report following Clause 35.

#### Temporary Provision

Clause 37. In one year since the ministerial regulations are issued, local official audits the building following Clause 2, then, registers and informs the building owner to observe following these ministerial regulations

Clause 38. Building as Clause 2 (6) having area not more than 5,000 square-meters is exempted for observing following these ministerial regulations for 7 years for building having area more than 5,000 square-meters is exempted for observing following these ministerial regulations for 5 years since the regulations are issued.

Clause 39. In 2 years since the ministerial regulations are issued, the applicants being audit officer, audit expertise and approve auditor are exempted to be trained for the building audit course by Building Audit Training Institute. The applicants following paragraph 1 must participate the building audit training course later and must inform the report of that training to the registrar or assigned man within 2 years since achieving the license. If it's over the specified period, the license will be invalid.

Clause 40. In 5 years since the ministerial regulations are issued, if the environmental engineer has not been certificated engineering yet, the auditor is able to employ the engineer in other fields that Council of Engineers approves

Clause 41. In 2 years since the ministerial regulations are issued, first auditor's qualifications pursuant to Clause 6 (5) can be exempted mutatis in the case of having building design and building calculation or control of building construction experiences more than 2 years.

Clause 42. If the building having fire protection system pursuant to the law if have necessity to installed fire escape stairs outside building, it can be done without observing following the ministerial regulations under Clause 8 (1) (7) and (8) of Building Control Act B.E. 2522 amended by Building Control Act (No. 3) B.E. 2543, but it must be approved by the certificated architecture that the fire escape stairs do not infringe the right of the area owner beside his and must be approved the strong of those stairs by the certificated engineering.

Given on .....Minister of Interior

# A.4 Ministerial Regulation for Other Related Requirements of Buildings

# A.4.1 Ministerial Regulation No.1 under the Control of Building Control Act

Ministerial Regulation

1955 (B.E. 2498)

Issued under provision of the Act on Building Construction Control

B.E. 2479

By virtue of the provision of Section 15 of the Act on Building Construction Control B.E. 2479, the Minister of Interior issues the following Ministerial Regulation: -

Clause 1 Under this Ministerial Regulation

(1) "Resident Building" means building, house, premise, hall, raft where the people normally lives both day and night.

(2) "Commercial Building" means businesses, warehouse or factory not using large machinery.

(3) "Rowed house" means resident building or commercial building successively built in a row of more than two rooms being made of objects not mainly composed of fireproof materials.

(4) "Shop house" means resident building or commercial building successively built in a row of more than two rooms being mainly composed of permanent object and fireproof materials.

(5) "Industrial factory" means building made for industrial performance with use of large machinery as a factor.

(6) "Public building" means theatrical house, meeting hall, school or place stipulated to be public gathering places such as hotel, restaurant or hospital, etc.

(7) "Building for animal feeding" means structure for housing beasts of burden such as elephant, horse, cow, buffalo.

(8) "Temporary building" means structure considered by the provincial governor for temporary usage with stipulated time for demolition.

(9) "Special building" means the following buildings :

A. Theatrical house, grandstand, meeting hall,

B. Dock, dry dock, or wharf for large vessel with size over 100 tons, and pontoon (boat landing)

C. Building with height over 15 metres, or bridge adjacent to the public path or buildings with beam or roof structure at one span being over 10 meters long.

(10) "Plan designer" means person responsible for plan drawing and calculation and specifying items used in construction. (11) "Foreman" means person who supervises the construction for the licensee.

(12) "Engineer" means engineer under provision of the Act on Building Construction Control B.E. 2479 (1936).

(13) "Layout plan" means descriptive mapping of land in the building construction area.

(14) "Construction plan" means plan useful in the building construction.

(15) "Particulars" mean descriptive explanation of the construction under the guideline of that construction plan.

(16) "Calculation list" means description explaining method in calculating resistant force of building part as appeared in the construction plan.

(17) "Outlined plan" means plan roughly drawn.

(18) "Building plan" means plan showing horizontal part of the building.

(19) "Side shape" means plan showing outside vertical part of the building.

(20) "Cross section shape" means plan showing inside vertical part of the building.

(21) "Building floor" means horizontal area of the building within boundary of beam or joist bearing that floor or within that floor, or within boundary of the building post.

(22) "Wall" means the construction part vertically dividing the building floor into rooms.

(23) "Partition" means the construction part vertically dividing the outside of the building into house or units apart.

(24) "Fireproof partition" means partition made of fire withstanding materials with no aperture for the fire to pass through.

(25) "Foundation" means weight bearing part of the building from beneath the lowest floor to part embedded deeper in the ground.

(26) "Driving pile" means piles driven deep in the ground to help carrying the building weight.

(27) "Ladder span" means the span for erecting the ladders with the stairs connected all through.

(28) "Riser" means vertical span of the stairs.

(29) "Tread" means horizontal span of the stairs.

(30) "Drainage inspection well" means the open part of the drainage pipe specified for use in cleaning the pipe.

(31) "Refuse well" means part of drainage designed to stop the refuse from being drained together with water.

(32) "Hygienic equipment" means apparatus useful in sanitation of the building.

(33) "Excrement well" means excrement resting well and other filthy well with no drainage measure in normal condition.

(34) "Lift" means apparatus carrying persons or things up and down between different floors of the building.

(35) "Main running water pipe" means running water pipes in public paths, being property of the Waterworks Authority.

(36) "Fireproof material" means constructive materials of non fuel.

(37) "Durable material" means fireproof material which is not normally transformed by water, fire or weather.

(38) "Ordinary brick" means soil molded into bar without using pressing machine and having been burnt ripen.

(39) "Compressed brick" means fabricated brick made by using pressing machine to be packed before being burnt.

(40) "Concrete" means material consisted of the mixture of cement, sand, gravel and water.

(41) "Reinforced concrete" means concrete masonry in which steel bars are so embedded that it can resist more forces than usual.

(42) "Cast steel" means steel smelt from iron ore which cannot be plated.

(43) "Purified steel" means steel admixed with other elements in trace, which cannot be plated.

(44) "Carbon steel" means steel mixed with carbon element resulting in more toughness than usual which can be successfully plated.

(45) "Reinforced steel" means carbon steel embedded in concrete substance for more reinforcement.

(46) "Soft wood" means soft wood not durable to weather and animals such as rubber wood or tabaek wood.

(47) "Heart wood" means hard wood durable to weather and animals in suitable conditions such as, tengrang wood, Malabar ironwood (Takienthong), Kiem wood.

(48) "Lime" means cohesive material produced from ingredient of limestone or mollusc shell.

(49) "Cement" means cohesive material produced mainly from lime mineral mixed with earth element.

(50) "Sand" means delicate granular stone from nature with the size not over 3 millimetres.

(51) "Pebble" means stone from nature with the size bigger than 3 millimetres.

(52) "Hard clay" means stone with decayed substance not being firm hardened lump.

(53) "Limestone" means rock composed entirely of carbonate of calcium with firm and rigid lump structure.

(54) "Sand stone" means rock composed of grains of sand cemented together by other substances in rigid lump structure.

(55) "Igneous rock" means rock of firm and rigid lump structure not cemented together by other substance.

(56) "Disastrous strength" means the sizable strength that makes the material disunited apart.

(57) "Pulling strength" means the strength to disintegrate the material apart.

(58) "Compressed strength" means the strength to break the materials into each other.

(59) "Slice strength" means the strength to make the material torn apart from each other like scissors' cut.

(60) "Safety part" means ratio of weakening the disastrous strength down to the magnitude of safety use.

(61) "Loading weight" means the weight specified to be added up on the building apart from the own weight of that building.

(62) "Slope portion" means ratios between vertical span and horizontal span of the foundation.

(63) "Public drainage" means drainage channel along the public path which is specified to drain water out of the building.

(64) "Public path" means land of which the public has the right to use as thoroughfare.

(65) "Road level" means height of road peak from the adjacent land compared to the sea level.

(66) "Road line" means boundary specified as public land thoroughfare.

#### Chapter 1

Construction Permission

Clause 2 Upon there has been the Royal Decree enforcing the use of the Act on Building Construction Control B.E. 2479 at any location, whoever wants to ask for building construction under Section 6 shall submit the application to the provincial governor as per "Yor 1" Form annexed to this ministerial regulation, together with construction layout and particulars each for 3 sets.

The building construction applicant must be owner of the building to be constructed, or his agent authorized under the law.

Clause 3 For the application for temporary license under provisions of Section 9 paragraph 2, apart from showing the intention for license application, the applicant shall clearly state steps of work within completion time in construction layout and particulars.

Clause 4 The building construction license under Section 9 shall be issued after "Yor 2" Form annexed to this ministerial regulation.

Clause 5 Instruction of the provincial governor to make alteration or addition to the construction layout plan or particulars under Section 10, is to be filled in the "Yor 3" Form annexed to this ministerial regulation and shall be sent to the applicant with his signature in return for reference, but if the mailing is not possible it shall be notified at the

advertising board of the provincial hall and at the site of construction.

Clause 6 For the building under passage in Section 14, the construction supervisory officer shall inform the provincial governor in writing within at least 30 days prior to construction schedule together with layout and construction plan for 1 set.

Clause 7 If the provincial governor makes alteration to the building under Section 14, a letter shall be issued with reason to inform the construction supervisory officer within 15 days from date receiving the information.

#### Chapter 2

Layout, construction plan and particulars

#### Part 1 Layout

Clause 8 Layout shall be used with the scale not smaller than 1 in 1,000 showing land boundary and adjacent area and showing the existing outer rim of the building and the building under new application with clear discrepancy of characteristic and sign together with direction symbol.

Clause 9 In the layout, there shall be perfect demonstration of public path adjacent with the construction land and drainage path out of that constructed building towards the public drainage path; and along the path of that public drainage, its flow direction with slope portion must be shown.

Clause 10 In the layout, there shall be demonstration of ground floor level of the building and its relation with public road level, or ground level at the construction site.

## Part 2 Construction plan

Clause 11 The construction plan shall be used with the scale not smaller than 1 in 100 showing foundation plan and different floors of that building, side shape and cross section shape in continuation not less two sides, picture showing particulars of main parts, size and symbols of construction materials clear enough to calculate the item and to inspect calculation list to proceed construction.

Construction plan showing side shape and building floor plan of industrial factory can possibly be used with scale not smaller than 1 in 200."

(Passage in the former clause 11 has been revoked and substituted by this new passage under clause 1 of the Ministerial Regulation no. 5 (B.E. 2512) issued under passage in the Act on Building Construction Control B.E. 2479)

Clause 12 Construction plan for commercial building, public building or buildings mainly constructed with durable materials and fireproof material, shall completely show the list of calculation of strength of the main parts of the building.

(Passage in the former clause 12 has been revoked and substituted by this new passage under clause 2 of the Ministerial Regulation no. 5 (B.E. 2512) issued under passage in the Act on Building Construction Control B.E. 2479)

Clause 13 As for special building, apart from having to comply with various specific regulatory laws, it shall propose calculation list in details.

Clause 14 As for the building construction plan, with alteration or change of building already in existence under the provision of Section 7 (2), it is to show plans of the former parts and new altered or changed parts to be clearly seen in contrast.

Clause 15 As for the temporary building contributing to the construction of permanent building or other purposes, it may be possible to propose an outlined construction plan.

#### Part 3 Particulars

Clause 16 The particulars shall be shown with characteristic of construction materials as main components of the building in clear details together with construction method.

#### Part 4 General

Clause 17 Scale, measurement, distance, weight and unit of various calculation of the layout and construction plan, particular or calculation list shall be applied with metric system.

Clause 18 In the layout, construction plan and particulars, it is to exhibit signature and the office or address of construction plan designers, makers of particulars and calculation list with academic qualification (if any) to show their competency.

Chapter 3

Characteristic of different buildings

Clause 19 Resident Building, rowed houses or shop houses used as living quarters, must have kitchen.

For building not constructed mainly with durable material or fireproof material, its kitchen must stay separately outside the building. The kitchen may be inside the building but the floor of kitchen must be paved, and partition, wall, ceiling of kitchen must be lined with durable material and fireproof mainly.

(Passage in the former clause 19 has been revoked and substituted by this new passage by clause 3 of the Ministerial Regulation no.5 (B.E. 2512) issued under the Act on Building Construction Control B.E. 2479)

Clause 20 Building constructed for more than two storeys must mainly use durable material and fireproof material, and building floor in each storey must be made of fireproof material.

For building constructed for more than three storeys, apart from having regular ladders, there must be fire exit at least one path, or as specified by the engineer under characteristic of the building plan. (Passage in the former clause 20 has been revoked and substituted by this new passage by clause 4 of the Ministerial Regulation no.5 (B.E. 2512) issued under the Act on Building Construction Control B.E. 2479)

Clause 21 Rowed house and shop house must have the width from middle line of partition at one side to the middle line of the other side partition not less than 3.50 metres, and must have the door or exit to let people enter in and out of both front side and back side. In case of shop house, its partition must be made of durable material and fireproof material. In case of constructing with brick or non steel reinforced concrete or other fireproof material, the partition must be thick not less than 10 centimetres.

Rowed houses and shop houses constructed in long continuous row shall have fireproof partition with thickness at least 20 centimetres, from ground level up beyond the building roof at least 50 centimeters, in every distance of not more than 5 rooms. In case the rowed houses or shop houses are constructed in the land of same ownership, the distance between each row house at least 4.00 meters shall be spared, without any hindrance and coverage in every distance of not more than 20 rooms.

Commercial building, rowed houses, shop houses, industrial factory and public building must have vacant space as walk path behind the building for use as connection all through with apparent barricade of width at least 2.00 metres, excluding in case line behind the building is next to the public path; but if that public path has the width less than 4.00 metres, walk path behind the building of 2 metres width must be spared from middle point of that public path.

In case the said buildings under paragraph three have been constructed as same unit existing at the corner of intersection of two roads and building line attached to the road, if each side is not more than 15.00 metres long, there shall be no walk path behind the building, if required.

(Passage in the former clause 21 has been revoked and substituted by this new passage by clause 5 of the Ministerial Regulation no.5 (B.E. 2512) issued under the Act on Building Construction Control B.E. 2479)

Clause 22 Every category of building shall not be constructed on the land filled up with garbage except it has transformed into earth, or being densely rammed with earth not less than 30 centimetres, with nature not detrimental to hygiene and enough safety for construction.

Clause 23 Fence or demarcated wall shall be built with height of not exceeding 300 centimeters over road level. The fence gate or car entry wall, when there is upper beam, the beam shall be laid at the height of 300 centimetres upward from the road level.

Clause 24 Advertising signboard regarded as building, must be installed not to obstruct the wind channel, window or doors, and must be installed with durable material to prevent being loosed off.

Clause 25 Bridge for vehicle crossing must have traffic width at least 300 centimetres, with slope portion not over 1 in 10; if there is roof covering, it must be laid on beam of the height at least 300 centimeters from bridge floor level. Clause 26 Construction by means of modification or alteration needed to obtain permission, has the following stipulations :

A. Area enlargement at any floor from 5 square metres and over.

B. Change or enlargement of roof to cover more area.

C. Increase and decrease of the number, or change of post, beam, ladders and partition.

#### Chapter 4

Parts of the building

Clause 27 Bed room or room as living quarters within the building shall have the width or length not less than 250 centimetres, with area altogether not less than 9 square metres, and door and windows channel shall have area altogether at least 1 in 10 of area of that room, by not counting portion of door and windows adjacent to the next room.

Clause 28 The building room accessible by persons must have enough ventilating channel when closing all the doors. The method of air ventilation shall be after format suitable to condition of that building.

Clause 29 The walk path channel within the building shall be made wide at least 100 centimetres, with no post obstruction to make any part narrower than the specified width, and having natural light visually perceived during the day time.

Clause 30 Windows and doors of the bed room or living rooms shall be made high up from floor to the top at least 200 centimetres, and can be conveniently open to be out of the room.

Clause 31 The vertical distance between floor to ceiling right at top of the wall or partition of the building, at the lowest part must not be below than what specified in the following table (Table 1).

Bathroom, Lavatory, veranda of building must have vertical distance between floor to the lowest part of ceiling at least 2.00 metres.

Garage must have vertical distance between floor to the lowest part the of ceiling at least 2.40 meters.

Room in the commercial building, industrial factory, public building which have vertical distance between floor to the ceiling right at top of the wall or partition, at lowest portion from 4.60 meters and over, floor for benefit of person in that floor can be made, with the said floor's area must not be over 1 in 3 of the room area; and the vertical distance between that floor at top of the wall or partition on the lowest portion, must not be less than 2.40 metres; and in case the room floor beneath that floor is used as floor for living quarters or as passage, the vertical distance between the room floor to ceiling of the underneath floor as mentioned, must not be lower than 2.40 metres.

(Passage in the former clause 31 has been revoked and substituted by this new passage by clause 6 of ministerial

regulation No. 5 (B.E. 2512) issued under the Act on Building Construction Control B.E. 2479)

Clause 32 The ground floor of resident building must have level at least 90 centimetres higher than the building constructed ground ; but if the floor is made of cement, brick, stone or other hard substance built solidly attached to the ground, it must have level higher than the building constructed ground at least 10 centimetres ; but if it is the building beside the road line horizontally, no matter being resident building or not, it must be higher than the road level at least 30 centimetres.

Clause 33 If the kitchen is attached to the bedroom or lavatory, it is prohibitive to have doors, windows or air ventilating channel at the side connected with each other.

Clause 34 The fire stove for industry or commercial, being the kind of lining stove or iron stove, can be installed only in the building composed mainly of fireproof material. The fire stove and smoke chimney must prevent the wall, partition or the roof from strong heat.

Clause 35 The staircases for resident building must be made of the width at least 90 centimetres, at one span not higher than 300 centimetres, and the riser not higher than 20 centimetres, the tread not narrower than 22 centimetres; if any part must be winded as spiral staircases; the narrowest part of tread must not be narrower than 10 centimetres.

Clause 36 The chief staircases for public building, industrial factory and commercial building must be made of the width at least 150 centimetres, one span not higher than 400 centimetres, the riser not higher than 19 centimetres, the tread not narrower than 24 centimetres. If there are not so many staircases sufficient enough as fire escape down path, there must be more fire escape. Any portion requires a winding there must be spiral staircases with the narrower than 10 centimetres.

Clause 37 For the ladders with span higher than distance specified, resting station must be made with the size of width and length not less than the width of that ladders.

Clause 38 The roofing material shall be made of fireproof material, except the building situated away from the other building with fireproof roofing material, or situated away from public path or land boundary over 40 metres, roofing can be made of other material.

Clause 39 Lift for carrying persons shall be installed in the building composed mainly of the fireproof material; and especially the part linking with the lift must be wholly made of fireproof material; and the lift must be a safety part at least 4 times of the weight specified for usage.

Clause 40 For the building adjacent to the public path, if deemed appropriate, the provincial governor shall possibly grant the foundation part underneath that building to overlap into the public path, but not over 100 centimetres; and must not obstruct the structure already existing in that public path; and level of foundation part penetrating into the public path must not be higher than the level specified by the provincial governor. The depth of that foundation shall be of what level will be as specified by the provincial governor.

Clause 41 The building foundation must be made of safely durable characteristic to carry the building and loading weight with safety. In case of doubt, the provincial governor shall call for the calculation list, or testing result, or both to support further consideration.

Chapter 5

Material strength and loading weight

Clause 42 In calculation of pushing strength resistance of the building part consisting of bricks with cement mixture, the specification shall not be over the following rates (Table 2).

Clause 43 Safety part shall be used with strength not over 1 in 4 of disastrous strength of steel. Resistance to various strengths of building part composes different kinds of steel with safety part used with strength not over 1 in 4 of the disastrous strength of that steel. If no other documents of specialist express other reliability, calculation shall be used with strength not over the following rates (Table 3).

Clause 44 Safety part shall be used not over 1 in 4 of the disastrous strength of wood, but bending of wood shall not be over 1/200 of beam span.

For resistance to categorized strengths of different kinds of wood, with safety part used with strength not over 1 in 4 of the disastrous strength of that wood, if no other documents of specialist express other reliability, calculation shall be used with strength not over the following rates (Table 4).

Clause 45 Safety part shall be used with strength not over 1 in 4 of disastrous strength of concrete after 28 days have completed.

For resistance to compressed strength of normal concrete with safety part used with strength not over 1 in 4 of the disastrous strength of concrete at completion of 28 days, If no other documents of specialist express other reliability, calculation shall be used with strength of the following rates (Table 5).

If the length of post is more than 12 times of the side being narrow, or of diameter, value in the above table shall be multiplied by (1.33 - L) 35 N

Remark : L = Length of post, N = Narrow side of post

This rule shall be applied to both concrete post and wooden post.

Clause 46 In calculation of tensile strength of building part composed of reinforced concrete, the calculator shall show particulars of calculation to the provincial governor until he is satisfied that it has been of safe characteristic. If no other documents of specialist express other reliability of the experiment, calculation shall be used with the following principles : -

(1) Holding schedule of concrete =  $1.4 \times 106$  metric ton per 1 sq. metre.

(2) Holding schedule of reinforced steel =  $21x \ 106$  metric per l square metre.

(3) Mixture of concrete = cement 1 sand 2 and rock 4 according to volume.

(4) Compressed strength of concrete not over 45 kilograms per 1 square centimetre.

(5) Pulling strength of reinforced steel not over 1,200 kilograms per 1 square centimetre.

(6) Slice strength of reinforced steel not over 850 kilograms per 1 square centimeter.

(7) For reinforced concrete beam, there shall be steel–covered concrete with thickness not less than 2.5 centimetres, and not less than the size of the biggest thread of reinforced steel.

(8) For reinforced concrete floor, there shall be steel-covered concrete with thickness not less than 1.5 centimetres, and not less than the size of the biggest thread of reinforced steel.

(9) There shall be free space between the parallel steel, not less than 2.5 centimetres, and not less than the size of reinforced steel; however, it must be 0.5 centimetres bigger than the stone of the biggest size.

(10) For reinforced concrete beam, the length shall be not over 24 times of the thick portion, except there is special reason, and shall not use the horizontal reinforced steel smaller than 6 millimetres.

(11) For weight carrying reinforced concrete, there must be reinforced steel, along feeder, not less than 1 thread at every corner ; if being round post must be not less than 6 threads with steel portion not less than 0.8 in 100 of the concrete ; and size of reinforced steel shall be not less than 12.7 millimetres ; volume of the banded steel must not be less than 0.4 in 100 of the concrete volume ; and distance space of banded steel must not be over 16 times of the size of axis steel, or 48 times of the size of banded steel, or not more than the narrowest side of the post column.

Clause 47 Loading weight on the floor used for calculation to design the building of different categories shall not be lower than the following specified rates : -

(1) Vehicle garage (except personal vehicle garage), machinery storing hall of industrial factory, over 500 kilograms per 1 square metre.

(2) Warehouse, library, museum, sports hall, 500 kilograms per 1 square metre.

(3) Factory, printing house, groceries, theatrical hall meeting hall, restaurant, 400 kilograms per 1 square metre.

(4) Schools from pre–university level upward, hospital, hotel, office building at 300 kilograms per 1 square metre.

(5) Schools of primary and secondary levels at 200 kilograms per 1 square metre.

(6) Resident building at 150 kilograms per 1 square metre.

But if any portion of the building shall bear carrying weight more than the said rate, namely, mechanical equipment and other components, calculation of loading weight shall be increased to be sufficient to bear such weight. Clause 48 For the maximum wind strength parallel with ground for the building portion taller than 15 metres upward, the windy strength shall be reckoned 100 kilograms per 1 square metre at minimum. For the building portion below than this, the wind strength shall be reduced to 50 kilograms per 1 square metre.

Clause 49 The earth loading weight at the building foundation shall be calculated appropriately for stability and safety ; if no other documents of the specialist express other reliability of the experiment, it must not be over specified rates of different land categories as follows : -

(1) Soft earth or densely filled up earth at 2 metric tons per 1 square metre.

(2) Medium earth or friable sand at 10 metric tons per 1 square metre.

(3) Tight soil or coarse sand at 20 metric tons per 1 square metre.

(4) Gravel or hardpan at 40 metric tons per 1 square metre.

(5) Limestone or sand stone at 80 metric tons per 1 square metre.

(6) Igneous rock at 150 metric tons per 1 square metre.

In this regard, unless otherwise stated reliably that there shall be management to increase the loading weight at the building foundation differently.

Clause 50 In calculation of load weight pressing down on top of the foundation and post of building with the height below two storeys, building weight and load weight in full capacity shall be calculated. As for load weight of the building taller than two storeys and not being special building, warehouse, library or industrial factory, it shall be calculated decreasingly proportionate to the floor level of building as follows : -

(1) The first beneath top floor, rate reduced 10 in 200.

(2) The next beneath floor, rate reduced 20 in 100.

(3) The next beneath floor, rate reduced 20 in 100.

(4) The next beneath floor, rate reduced 20 in 100.

For every floor beneath the last stipulated floor, the rate shall be reduced 50 in 100.

Clause 51 In calculation of resistance strength of the foundation, building weight shall be calculated in full, and (for foundation pile on soft soil), the pile shall carry the whole load without counting resistance strength of soil around the piles to help carry the load. For the pile end poised to hard soil, hardpan or hard surface material, that pile shall be calculated in the same way as the post column. But if the pile is in the soft soil depending on the supportive retardant strength, piles of not shorter than 300 centimeters shall be used, and soil retardant strength shall be used after the following formula : -

Given R = 400 + 35 L

R = Retardant strength of soil in kilograms per square metre of surface area of the pile

L = Length of pile in metre.

If the length of pile is over 12.00 metres, there must be test of load strength of the pile.

Whole area of the foundation must not be less than 1/10 of surface area of the whole piles underneath that foundation. In case pile driving is not possible, due to the earth surface being solid as medium soil or friable sand, in calculation of the resistance of soil underneath the foundation platter, there shall not be over 10 tons per square metre ; but if it is used more than this, a trustworthy evidence must be shown.

For manual pile driving operation

## L = (P x D) / (6 F + 15)

For pile driving machine with driving capacity not less than 40 strokes per 1 minute

L = (P x D) / (6 F + 15)

Given L = Load weight with safety in kilogram

P = Plummet weight in kilogram

D =Distance of plummet in centimetres

F = Final sink of plummet in centimetres.

#### Chapter 6

Building line and different spaces

Clause 52 Any person is prohibited from construction of building, or part of building, protruding in or above the public path, unless a permission is granted by the provincial governor in writing which shall not exceed the following stipulation:-

For canopy of first floor above road level

Protruding distance of canopy not over 200 centimetres from the wall

Level of canopy end not below 300 centimeters above pedestrian path.

The protruding distance of canopy shall not be over the stipulated formula, with

P = (W + S) / 10

For architectural neat portion of different floors

Protruding space of eaves not over 150 centimetres from the wall

Protruding space of architectural neat portion not over 120 centimeters from the wall.

The said protruding space shall not be over the below formula

P = (W + S) / 20

Given P=Protruding space from the wall in centimetres.

W = Width of road in centimetre.

 $\mathbf{S} = \mathbf{S}\mathbf{p}\mathbf{a}\mathbf{c}\mathbf{e}$  of building wall from the road line in centimetres.

Clause 53 It is prohibitive to construct building with vertical distance between the ground to ceiling right on top of the wall, or top of partition higher than the horizontal space from front partition of the building to the opposite road line, except in case of the building under clause 56, or getting special permission from the provincial governor.

Clause 54 For buildings of same roof, flanked by two roads of unequal sizes ; when the width of that building is not beyond 15 meters, they shall be given construction permit to the equal height to the wider road line for the whole building.

For the building under same roof, situated at corner of two roads of unequal sizes, construction at the narrower road side is permitted to the height of 1  $\frac{1}{2}$  times of the width of the narrower road, and construction of the said tall building shall be allowed from the length of road corner only two times the width of that narrower road.

Building beside the road not reaching the width of 800 centimetre, but not less than 400 centimetres, construction is granted with the height not over 800 centimetres.

Clause 55 Building construction is prohibited beside line of public path, with vertical space between the ground to the top partition ceiling, or the partition top, at the height over 40 metres, no matter how broad the road is at that point.

Clause 56 Building constructed adjacent to land of other person, or adjacent of another building ; if having the space less than 200 centimetres for the building of below two storeys ; or less than 300 centimeters, for building up from two storeys, it is prohibitive to have windows, doors or air ventilating channel at the side adjacent to that land or building.

However, building constructed adjacent to land of other person, shall be distant from that land not less than 50 centimeters; except having common partitioning, but shall not spoil the architectural value.

Clause 57 Buildings must be free from structural coverage not less than the following specification :

(1) Resident building, rowed house, shop house and other building with additional quartering purpose, in each building or room, shall have a vacancy 30 in 100 parts of any floor with most area in the building.

(2) Building, not used as living quarter as well, in each building or room a vacancy shall be 10 in 100 parts of any floor with maximum area of the building.

Under enforcement of clause 21, the commercial building, row houses, shop houses or public building already having windows or doors open to the outside not fewer than 20 in 100 parts of area in each floor, may have no vacant space if so required.

Windows, doors at the open end to outside, meaning open channel of partition adjacent to the public path, or at end adjacent to land of other person not less than 2.00 meters for building down from the second floor, or at least 3.00 meters for building up from the third floor."

(Passage in former clause 57 had been revoked and been substituted by this new passage by clause 7 of the Ministerial Regulation no. 5 (B.E. 2512) issued under provision of the Act on Supervision of Building B.E. 2479).

Clause 58 The provincial government is entitled to make a notification in the Government Gazette specifying kinds of building to be constructed beside the roads, as specified in the notification, as only the kind of shop houses or row houses.

This notification must specify area enforcing the construction of only some kinds of building.

#### Chapter 7

#### Sanitation

Clause 59 The constructible building must have waste water drainage to flow out of the building comfortably.

Clause 60 Making of waste water drainage from the building to public drainage must have slope portion not fewer than 1 in 200 along the most straight line as possible. In case of using round pipe for drainage, there must be drainage inspection well at every distance of 30 meters and every turning corner.

Clause 61 If waste water drainage out from the building to public waterway is not specifically prepared the provincial governor may not grant a permission, until owner of the building has managed that waste water with better qualification as deemed suitable.

Clause 62 Buildings after clause 1 (1) to (7) if main water pipe is existed in the public path adjacent to the building, connection of water pipe into the building is allowable, except in case of the resident building resided by the owner.

Clause 63 Work on waste water drainage with its connection, the water pipe, drainage pipe within the building and peripheral appliances for pipe connection and sanitation must be of correct characteristic for hygienic benefit and technical values.

Clause 64 Building of usable living quarter must have number of lavatories as suitable, but not fewer than the below specification : -

(1) One seat in every resident building.

(2) For row house or shop house, 2 seats in every 5 rooms.

(3) For hotels, there shall be 1 seat for every 10 persons of the guests available for stay in the hotel.

(4) For school and factory, there shall be 1 seat per 100 persons for specified utilization of the building.

(5) For meeting hall and theatrical hall there shall be 1 seat per 300 persons in the building utilization.

Clause 65 Lavatory must have the size not less than 1.50 square metres per 1 seat, having quality of easy upkeep, floor not leaking with suitable air ventilation channel. If being lavatory of drainage not being excrement storing well, it can be made within the living quarter. But if it is lavatory of other measure, it must be made a sole one part out of the living quarter. Control of building construction

Chapter 8

Clause 66 The building construction licensee must keep the certificate, layout, construction plan and particulars within the construction site for 1 set, to be checked by the inspection engineer always at suitable time, and construction must start within the specified period in the license, unless the new extended license permit is applied.

Clause 67 In building construction, the licensee or his agent shall supervise in compliance with condition in the permit ; and must have suitably capable foreman all the time of construction. If the foreman is not available he must appoint his supervisory agent. Instruction of the engineer to the foreman or his substitute shall be regarded as given to the licensee.

Clause 68 If the engineer has found the construction is not conformed to the layout, construction plan, particulars or condition as mentioned in the license, he shall remind the building owner or supervisory foreman, then inform the provincial governor for acknowledgement. The provincial governor shall in form the building owner for reasonable time for improvements of the construction; when beyond the time of improvements are still unfinished, he shall further proceeding as per Section 11.

Clause 69 The materials supporting building construction must be of the quality as per specification of particulars and calculation list. In case of doubt in the material quality, the engineer is entitled to inspect document of the specialist showing test of tensile strength, or call for material sample of suitable quantity from the licensee, for inspection by means of technical test, which the licensee must manage to have it sent free of charge as required.

Clause 70 If it appears to the engineer that the foundation calculation list creates uncertainty, due to the ground for foundation construction is not as expected. The engineer is entitled to instruct change in the calculation list of the foundation for a new one.

Construction of building foundation shall be done only in daytime, unless receiving a grant by the provincial governor, it can be constructed during the night time.

Clause 71 For building construction adjacent to the public path, the licensee must show the procedures and steps of work to please the engineer that it shall be safe for the public path user. If so, construction can then be started.

Clause 72 When the engineer requires to inspect the already finished building if it is in appropriate condition, he shall inform the building owner in writing at least 48 hours prior to inspection need. The building owner or his agent must give the engineer appropriate factory for inspection.

Clause 73 When the engineer has found the building not in appropriate condition and possibly detrimental to body, life or property, he shall inform the provincial governor, who shall instruct the building owner to make alteration or demolition, after "Yor. 4" Form annexed to this ministerial regulation. If the order is for alteration, that construction permission shall be regarded as urgency, by issuing temporary license at time of application.

#### Chapter 9

#### Fee

Clause 74 Fees for inspection of construction plan including the license issuance shall be collected as follows :-

(1) Living quarter made of durable material to be calculated as per area of every floor of the building at 10 satangs per square metre.

(2) Living quarter not made of durable material to be calculated as per area of every floor of the building at 5 satangs per square metre.

(3) Pipe, water drain channel, fence or wall including fence gate or gate of that wall, to be calculated as per length at 5 satangs per metre.

(4) Dike, landing or landing bridge to be calculated as per length at 20 satangs per metre.

(5) Bridge, shipyard, dry dock or advertising board to be calculated as per area at 40 satangs per square metre.

(6) Other buildings is to be calculated as per area of every floor of the building at 40 satangs per square metre but in case of the building with unusable inside area, it is to be calculated as per length at 20 satangs per metre.

In calculation of fees, fraction of metre or square metre below a half shall be written off; in case over a half it shall be adjusted to one.

Clause 75 Fee of license issuance, extension or license substitute shall be 1.00 baht per one copy.

Clause 76 Inspection of construction plan and license issuance for temporary building shall be free of charge.

#### Given on 1st June B.E. 2498

## Vice Admiral Sunawinwiwat

## Minister of Interior

Remark :- The reason in proclaiming this ministerial regulation is :- Since there had been Royal Decree proclaiming to enforce the Act on Building Construction Control B.E. 2479 in some area outside the municipality, it is deemed necessary to issue the ministerial regulation to stipulate regulation in applying for building construction in order to be a guideline for those residing within the area proclaiming the Act on Building Construction Control B.E. 2479 to properly apply for building construction to be in line with the regulation.

Proclaiming in Government Gazette Volume 949 Part 48, dated 28th June B.E. 2498.

Table 1:			
Type of building	Ground floor	Up from se	econd floor
		Non air conditioner	With air conditioner
1. Resident Building	2.40 meters	2.40 meters	2.40 meters
2. Commercial Building, industrial, factory, public building			
<ul> <li>(A) Hall, working office, class -</li> <li>room, canteen, trading or Industrial room, product or industrial material storage room, meeting hall, common patient room, cooking area</li> </ul>	3.50 meters	3.50 meters	3.00 meters
(B) Special patient room, hotel room	3.50 meters	3.00 meters	2.40 meters
3. Rowed house, Shop house			
(A) Hall, office room, commerce room, product storage room	3.50 meters	3.50 meters	3.00 meters
(B) Residing room	3.50 meters	3.00 meters	2.40 meters
(C) Kitchen for residents	2.40 meters	2.40 meters	2.40 meters
4. Animal feed building beast of burden pen			
With living quarters upstairs	3.50 meters-	-	-

# Table 2:

Brick Kind	Lime part	Cement Part	Sand Part	Pushing strength
	Per volume	Per volume	Per volume	Per sq. cm.
Ordinary	1	-	3	2 kg
33	1	1	6	3 kg
"	-	1	4	4 kg
"	-	1	3	5 kg
Pressed	1	-	3	4 kg
"	1	1	6	6 kg
"	-	1	4	8 kg
33	-	1	3	10 kg

Table 3:

Kind of steel	Pulling strength	Compressed strength	Slice strength
	Per 1 sq. cm.	Per 1 sq. cm.	Per 1 sq. cm.
Cast steel	200 Kg.	1,200 Kg	200 Kg
Purified steel	700 Kg	700 Kg.	600 Kg.
Soft carbon steel	1,000 Kg.	1,000 Kg.	800 Kg.
Reinforced steel	1,200 Kg.	1,200 Kg.	850 Kg.

Table 4:				
Kind of wood	Pulling strength along splinter	Compressed strength along splinter	Compressed strength along splinter	Slice strength along splinter
	Per 1 sq. cm.	Per 1 sq. cm.	Per 1 sq. cm.	Per 1 sq. cm.
Soft wood	100 kg	80 kg	24 kg	6 kg
Moderate Wood	110 kg	90 kg	27 kg	10 kg
Hard Wood	125 kg	100 kg	30 kg	15 kg

# Table 5:

Cement part	Sand part per	Stone part per	Different strengths as kg per 1 sq. cm			
per volume	volume	volume	Compressed strength for beam	Compressed strength for post	Slice strength	Holding strength
1	1	3	50	40	5	7
1	2	4	45	36	4.5	6
1	2 1/2	5	40	32	4	6
1	3	6	35	28	3.5	7
1	3 1/2	7	30	24	3	4
1	4	8	15	12	1.5	3

# A.4.2 Ministerial Regulation No.6

MINISTERIAL REGULATION

No.6 (B.E.2527)

Issued under Control of Building Act, B.E.2522

By virtue of the provision of Section 5 (6) and Section 8 (2) of the Control of Building Act, B.E.2522, the Minster of Interior by advice of the Control of Building Committee, hereby issues a Ministerial Regulation as follows:

Clause 1 In this Ministerial Regulation:

" Ultimate Load" means the load which will cause the matter to be separated into parts or to collapse.

" Tension" means the force to material to be separated.

"Bending force" means the force to cause the matter to bend or deflect.

" Wind Load" means the force of wind to the structure.

" Shear Stress" means the force which will cause the matter to become separated as though cut by scissors.

" Ultimate Stress" means the stress which will cause the material to be separated into parts.

" Ultimate Compaction" means the compaction which will cause the material to collapse.

" Ultimate Stress of Concrete" means the stress along the horizontal axle to cause the concrete cylinder, diameter 15 cm. height 30 cm., age 28 days, to collapse.

" Load" means the load divided by the cross-section taking that load.

"Proved Stress" means the stress obtained by drawing straight line at point 0.2 in 100 of the stress, in parallel to the straight line of relative strength between the stress and tension to intersect said line.

"Depress Load" means the load caused between the surface of the pile and the soil.

"Load at analogy" means the load at the maximum point of the straight line showing relation between the load and the tension.

" Stress" means the proportion of the expansion or contraction of the material accepting the load to the length of that material.

"Yield Strength" means the strength to pull material which yields without increasing further strength.

"Safety Part" means the figure used to divide ultimate stress to the safety factor. For material with yield strength or proved stress, the value of yield strength or proved stress shall be used instead of the ultimate stress. "Superimposed Load" means the load to be prescribed in addition to the building, apart from the load of that building.

" Ultimate Load" means maximum load prescribed for calculation under the shear Stress Theory.

"Parts of Building" means the parts of building to be shown particulars of calculation in the load and stress, such as floor, beams and foundation.

" Concrete" means materials consist of cement, fine mass such as sand, rough mass such as stone, gravel and water.

"Reinforced Concrete" means concrete having steel embedded to five more strength.

" Stress Concrete" means concrete with reinforced steel embedded inside which causes the stress in quantity to erase out the stress of the load.

"Reinforced Steel" means steel embedded in the concrete to reinforce the stress.

" Pre-stress Concrete" means reinforced steel embedded in stress concrete, which may be single wire, twisted wire or steel wire in group.

" Deformed Bar" means reinforced steel with bar at the surface.

" Twisted Bar" means reinforced steel which is twisted into thread.

" Cast Iron" means iron having carbon as mixture from 2% upwards in weight.

" Structure Steel" means steel produced with different cross sections into various shapes used for the construction.

"Soft Wood" means wood not resistant against weather and insect, such as termite, or having property as prescribed under Clause 14, such as Yang and Ta Baek.

"Medium Texture Wood" means wood resistant to weather and insect, such as termite, quite reasonably or having property as prescribed under Clause 14, such as Pine.

"Hardwood" means wood which resists weather and insect, such as termite under normal condition and/or having quality as stated under Clause 14, such as teng and takien thong.

" Soil" means natural material making the earth crust, such as rock, stone, sand, clay etc.

" Gravel" is the stone occur according to nature, being more than 3 mm.

" Sand" means fine stone not exceeding 3 mm.

" Subsoil Stone" means stone with fine texture consisting of clay or sand compacted in thin layers, whether with or without bonding agent.

" Limestone" means stone compacted hard with different colours consisting of calcite.

"Sandstone" means rough stone consisting of sand bonded together.

" Igneous rock" means rough stone caused by cool down of stone under the earth crust, consisting of feldspar, quartz, mostly are very hard.

"Pile" means the pile driven in or cast in the soil to take the load of the building.

" Efficient surface of pile" means the result of multiplication of length of pile and length of circumference of cross section of that pile.

"Foundation" means part of the building which transfer the load of the building to the soil.

"Load of soil" means the capacity of soil to take the load with slump which will not cause damage to the building.

" Load of pile" means the capacity of the pile to take the load without sinking more than the rate specified in this Ministerial Regulation.

"Reliable institute" means the local authority or juristic person having qualified engineer, civil engineering, under the law of engineering profession, as adviser and who sign in certification of the result of controlled engineering profession.

Clause 2 The building and part of the building shall be strong to take the load of the building and actual load which may occur or has occurred, for which any part of the building shall not accept the load in excess of that stipulated in this Ministerial Regulation, except there is document to prove the strength of the material accepting the load as certified by reliable institute. But this shall not include the load as specified under Clause 6.

Clause 3 In calculating the parts of the building which consists of brick or concrete block bonded by masonry material, the stress shall be not more than 8.0 megapascal (8 kilogram per square centimeter).

Clause 4 In calculating the parts of building which consists of concrete; the stress shall be not more than 33.3% of ultimate stress of concrete, but not to exceed 6 megapascal (60 kilogram per square centimeter).

Clause 5 In calculating different parts of the building made of reinforced concrete according to elastic theory or safety stress, the stress of concrete shall not exceed 37.5% of ultimate stress of concrete, but not to exceed 6.5 megapascal (65 kilogram per square centimeter).

Clause 6 In calculating the parts of building made of reinforced concrete according to elastic theory or safety stress, the reinforced concrete used shall have stress from 240 megapascal (2,400 kilogram stress per square centimeter), and the stress of reinforced concrete shall not exceed the following:

(1) Tension

(a) Round steel bar with stress of 240 megapascal (2,400 kilogram per square centimeter) upwards, shall be not more than 120 megapascal (1,200 kilogram stress per square centimeter).

(b) Deformed bar with stress of 240 megapascal (2,400 kilogram tension per square centimeter) upwards but not more than 350 megapascal (3,500 kilogram tension per square centimeter) shall be not more than 50% of tension but not more than 150 megapascal (1,500 kilogram tension per square centimeter).

(c) Deformed bar with stress from 350 megapascal (3,500 kilogram tension per square centimeter) upwards but not more than 400 megapascal (4,000 kilogram tension per square centimeter) shall be not more than 160 megapascal (1,600 kilogram tension per square centimeter).

(d) Deformed bar with stress from 400 megapascal (4,000 kilogram tension per square centimeter) upwards, may be used not more than 170 megapascal (1,700 kilogram tension per square centimeter).

(e) Twisted steel bar shall be 50% of proved stress but not more than 240 megapascal (2,400 kilogram tension per square centimeter). This shall have test result of cold bending, certified by reliable institute.

(2) Stress in reinforced concrete column

(a) Round steel bar, according to criteria specified under (1) (a)

(b) Deformed bar, may be not more than 40% of the stress, but not more than 210 megapascal (2,100 kilogram tension per square centimeter).

(c) Twisted steel bar, may be not more than 40% of the stress but not more than 210 megapascal (2,100 kilogram tension per square centimeter). This shall have test result of cold bending certified by reliable institute.

(d) Column with structural steel, shall be not more than 125 megapascal (1,250 kilogram tension per square centimeter).

(e) Cast steel shall be not more than 70 megapascal (700 kilogram tension per square centimeter).

(3) In calculating parts of reinforced concrete building using reinforced steel, shall use the stress of steel calculated under elastic theory or safety stress not more than double, but the stress calculated shall not exceed that under (1).

Clause 7 In calculating the parts of reinforced concrete building under elastic theory, ultimate load shall be as follows:

(1) For part of building not calculated for wind load, ultimate load shall be :

UL = 1.7 CL - 2.1 SL

(2) For part of building which wind load is also calculated, the ultimate load shall be : UL = 0.75 (1.7 CL 2.0 SL - 2.0 WL) or UL = 1.9 CL - 1.3 WL

for which the ultimate load is greater, But this shall not be below ultimate load in (1) also.

UL = Ultimate Load

## CL = Constant Load

## SL = Superimposed Load

WL = Wind Load

Clause 8 In calculating parts of building of reinforced concrete building under Ultimate Load Theory, the ultimate load of concrete shall not exceed 15 megapascal (150 kilogram tension per square centimeter).

Clause 9 In calculating parts of building of reinforced concrete building under Ultimate Load Theory, the tension of reinforced steel shall be as follows:

(1) Plain round steel bar shall be not more than 240 megapascal (2,400 kilogram tension per square centimeter).

(2) Other reinforced steel shall be not more than 400 megapascal (4,000 kilogram tension per square centimeter).

Clause 10 In calculating parts of pre-stressed concrete building under Ultimate Load Theory, ultimate load shall be the same as Clause 7.

Clause 11 In calculating parts of pre-stressed concrete building, the pre-stressed concrete shall be as follows:

(1) Prestressed concrete temporary transferred from prestressed steel before depreciation of prestressed concrete shall not exceed 60% of ultimate load of concrete.

(2) Prestressed load used in the calculation for the design after depreciation of prestressed concrete shall not exceed 40% of ultimate load of concrete.

Clause 12 In calculating parts of building consisting of prestressed concrete, the tension of prestressed steel shall be as follows:

(1) Tension while stressing shall not exceed 80% of ultimate load of prestressed steel or 90% of proved stress, whichever is smaller.

(2) Tension immediately transferred to concrete shall not exceed 70% of ultimate load of prestressed steel.

(3) Tension shall not exceed 70% of ultimate load or 80% of proved stress, whichever is smaller.

Clause 13 In calculating parts of building consisting of structural steel, the tension of steel shall be as follows:

(1) In case there is not tensile test for steel less than 40 mm. Thick, the stress shall be not more than 240 megapascal (2,400 kilogram tension per square centimeter). For steel over 40 mm. Thick, the stress shall be not more than 220 megapascal (2,200 kilogram tension per square centimeter).

(2) Stress, compression and bending force shall be not more than 60% of the stress under (1)

(3) Shear stress shall be not more than 40% of stress under (1)

Clause 14 In calculating parts of building consisting of various timber, the load shall not exceed the followings (Table 1):

In case there is test result of wood, safety part shall be with stress of not more than 1 ib 8 of ultimate stress or 1 in 6 of load at analogy, whichever is smaller.

Clause 15 Superimposed load for various types and parts of building, apart from the weight of the building or machinery or other equipment, shall be calculated on average not below the following (Table 2):

Clause 16 In calculating for the design if it appears that any part has to take the load of machinery or equipment or other superimposed load which is more than the superimposed load specified under Clause 15, the heavier superimposed load shall be used for that part.

Clause 17 In calculating the design for the structure of the building consideration shall be made of the wind load. If it has to be calculated and there is no document certified by reliable institute the following wind load shall be used

In this it is allowed that the load to other parts of the building, including soil resistance under the foundation, may exceed the value specified under this Ministerial Regulation by 33.3%. But it shall not cause other parts of the building be less secured when calculated normally without wind load (Table 3).

Clause 18 The soil load at the foundation of the building shall be calculated suitably for security and safety. If there is no certificate issued by reliable institute the test result or the calculation shall be shown or made not exceeding the load of the soils as follows :

(1) Soft soil or compact land fill, at 2 metric ton per square meter.

(2) Medium soil or loosed sand, at 5 metric ton per square meter.

(3) Compact soil or compact sand, at 10 metric ton per square meter.

(4) Gravel or subsoil stone, at 20 metric ton per square meter.

(5) Subsoil rock, at 25 metric ton per square meter.

(6) Limestone or sandstone, at 30 metric ton per square meter.

(7) Igneous rock not transformed, at 100 metric ton per square meter.

Clause 19 In calculating the load transferred to the column, beam or structure taking the column and foundation, the full load of the building for superimposed load shall be used as specified under Clause 15, by reducing proportionally according to the storey of the building as follows (Table 4):

For theatre, conference room, assembly hall, library, museum, half-moon, warehouse, industrial plant, car park for cars or motorcycle the superimposed load shall be calculated in full for all storeys.

Clause 20 In calculating the foundation on the pile driven in soft soil, if there is no certificate from reliable institute showing the test of soil property and maximum load of the pile, the depress of soil shall be as follows:

(1) For soil not deeper than 7 meter under MSL (Mean Sea Level) the press of soil shall be not more than 6 kilopascal (600 kilogram per square meter) of the efficient surface of the pile.

(2) For soil deeper than 7 meter under MSL, calculate for depress of soil for over 7 meter deep, according to the following formula :

Depress force in kilogram per square meter = 600 + 200 L.

Clause 21 In calculating the foundation on the pile, with certificate from reliable institute, showing the soil property, or there is test for the load of the pile in the construction site or neighbouring area, the load of the pile shall not exceed the following :

(1) Load of pile calculated from the test of soil property, the load resistence shall not exceed 40% of maximum load.

(2) Load of the pile obtained from testing shall not exceed 50% of maximum load.

Clause 22 In testing the load of pile, the sunken rate and the sunk of the pile at maximum load shall be under the following criteria :

(1) Total sunk of the pile from maximum load which left for 24 hours shall not exceed 25 mm.

(2) The sunk of the pile after taking on maximum load and left for 24 hours shall not exceed 1.25 mm. per hour.

(3) The net sunken depth of pile after taking on maximum load for 24 hours without interference shall not exceed 6 mm.

Given on 17th September 2527

Gen. Sitthi Jirarote

Minister of Interior

Remark The reason for the publication of this Ministerial Regulation is that Section 8 (2) and (3) of the Control of Building Act, B.E. 2522 prescribed that the Minister by advice of the Control of Building Committee, shall have power to issue Ministerial Regulation prescribing the load taking, resistance, including characteristic and property of construction material or for modification or repair of building and the load taking, resistance and stability of the building or soil area of the building. Therefore it is necessary to issue this Ministerial Regulation.

Table 1				
Type of wood	Unit Bending & tensile stress Megapascal (kg/cm <sup>2</sup> )	Unit compression parallel to grain Megapascal (kg/cm <sup>2</sup> )	Unit compression Grain megapasal (kg/cm <sup>2</sup> )	Unit Shear Stress parallel To grain Megapascal (kg/cm <sup>2</sup> )
1.Soft wood	8 (80)	6 (60)	1.6 (16)	0.8 (8)
2.Medium wood	10 (100)	7.5 (75)	2.2 (22)	1 (10)
3.Hard wood	12 (120)	9 (90)	3 (30)	1.2 (12)

Table 2

Types and parts of building	Unit superimposed load as
	Kilogram per square meter
(1) Roof	30
(2) Eaves or concrete roof	100
(3) House, kindergarten, toilet, bathroom	150
(4) Tenement house, tenement building used as residence, condominium: apartment, hotel and special patient room in hospital	200
(5) Office, bank	250
<ul><li>(6) (a) Commercial building, part of tenement building, tenement building use for commercial purpose, university, college, school and hospital.</li><li>(b) Hall, stair, corridor of condominium, apartment, hotel, office and bank</li></ul>	300
(7) (a) Market, department store, assembly hall, theatre, restaurant, conference room, reading room in library, parking for car or motor cycle	400
(b) Hall, stairs, corridor of commercial building, university, college and school	400
(8) (a) Warehouse, gymnasium, museum, half-moon, industrial plant, printing press, storage for document and supply.	500
(b) Hall, stairs, pathway in market, department store, conference room, assembly hall, theatre, restaurant, library.	500
(9) Storage room of library	600
(10) Parking or storage for empty truck	800

Table 3

	Height of building or part of building	Minimum wind load in kilopascal
		(kilogram load per square meter)
1	Height of building not exceeding 10 meter	0.5 (50)
2	Height of building over 10 meter, but not exceeding 20 meter	0.8 (80)
3	Height of building over 20 meter, but not exceeding 40 meter	1.2 (120)
4	Height of building exceeding 40 meter	1.6 (160)

	Floor load	Rate of reduction of load superimposed load on each floor in percent
1	Roof or roof-top	1
2	First floor from roof or roof-top	1
3	Second floor from roof or roof-top	1
4	Third floor from roof or roof-top	10
5	Fourth floor from roof or roof top	20
6	Fifth floor from roof or roof-top	30
7	Sixth floor from roof or roof-top	40
8	Seven floor from roof or roof-top	50

# A.4.3 Ministerial Regulation No.7 under the Control of Building Control Act

Ministerial Regulation No. 7 (B.E. 2517)

Issued under provision of the Act on Building Construction Control

B.E. 2479

By virtue of the provision of Section 8 paragraph two of the Act on Building Construction Control B.E. 2479, with amendment by Revolutionary Party no. 192 dated 31st July 1972 (B.E. 2515), the Minister of Interior hereby issues the following Ministerial Regulation : -

Clause 1 Under this Ministerial Regulation

(1) "Car park" means the place to be used as car park specifically for the building.

(2) "Car U-turn" means area arranged for turning the car to facilitate the parking or in-out entry of cars.

(3) "In-out access for car" means path for car to get in and out from the car park to in-out entrance for cars.

(4) "In-out entrance for car" means part of in-out access for car linking with the public path.

(5) "Bridge slope" means portion of path linking the bridge with a slope exceeding 2 in 100.

(6) "Theatrical hall" means building or any part of building used as theatrical hall under law governing prevention of danger from theatrical play.

(7) "Hotel" means building or any part of building used as hotel under law governing hotel.

(8) "Condominium" means building or any part of building used as living quarters for many families where each family has bedroom, kitchen, lavatory and bathroom independently, with walking path, upstairs ladders or elevator for common use.

(9) "Restaurant" means building or any part of building used for selling food or refreshment, with area for setting food table for service within or outside of the building.

(10) "Department" means building or any part of building used as commercial building for show or sale of different merchandises.

(11) "Office" means building or any part of building used as a working place.

(12) "Large building" means building constructed for use of the building or any part of it to perform business of single or many categories; with the height of over 15 metres above the road level; and having area altogether for every floor in the same building over 1,000 square metres; or having the area altogether in every floor or any floor in the same building over 2,000 square metres.

(13) "Assembly hall" means any part of the building used as a gathering or conference.

Clause 2 It is to specify category of building which must have car park, U-turn and in-out access for car as follows :-

(1) Theatrical hall with seating area for the audience in number over 500 persons.

(2) Hotel with room in number over 30 rooms.

(3) Condominium with area for each family over 60 square metres .

(4) Restaurant with area for setting food table from 150 square metres upward.

(5) Department with area from 300 square metres upward.

(6) Office with area from 300 square metres upward.

(7) Large building.

(8) Assembly hall of hotel as per (2), restaurant as per (4) or large building as per (7).

Clause 3 Number of car park shall be arranged as following stipulations:-

(1) In boundary of Bangkok locality, especially in capital municipality under the Revolutionary Party Notification no. 25 dated 21st December 1971 (B.E. 2514).

(A) Theatrical hall shall have car park not less than 1 car per 20 seats of audience, fraction of 20 seats is counted as 20 seats.

The theatrical hall in district of Bangkok, Thonburi, Bangrak, Pathumwan, Pomprab Satrupai and Sampantawongse, shall have car park not less than 1 car per 10 seats of the audience, and fraction of 10 seats shall be counted as 10 seats.

(B) Hotel

Hotel of not over 100 rooms shall have car park not less than 10 cars for the first 30 rooms; part of more than 30 rooms shall be counted as 1 car per 5 rooms. Fraction of 5 rooms shall be counted as 5 rooms.

Hotel of over 100 rooms, shall have car park under rate in paragraph one for the first 100 rooms, part of more than 100 rooms shall be counted as 1 car per 10 rooms. Fraction of 10 rooms shall be counted as 10 rooms.

(C) Condominium shall have car park not less than 1 car per 1 family.

(D) Restaurant

Restaurant with area for setting food table not over 750 square metres, shall have car park not less than 1 car per setting area of food table of 15 square metres. Fraction of 15 square metres shall be counted as 15 square metres.

Restaurant with area for setting food table over 750 square metres, shall have car park under rate in paragraph one for the first 750 square metres of setting area of food table, part of more than 750 square metres shall be counted

as 1 car per 30 square metres. Fraction of 30 square metres shall be counted as 30 square metres.

(E) Department store shall have car park not less than 1 car per area of 20 square metres. Fraction of 20 square metres shall be counted as 20 square metres.

(F) Office shall have car park not less than 1 car per area of 60 square metres. Fraction of 60 square metres shall be counted as 60 square metres.

(G) Assembly hall of hotel, restaurant or large building as per clause 2 (8) shall have car park not less than 1 car per the hall area of 10 square metres. Fraction of 10 square metres shall be counted as 10 square metres.

(H) Large building shall have car park as per number as specified in each category of building used as business operation premises in that large building altogether or having car park not less than 1 car per the building area of 120 square metres. Fraction of 120 square metres shall be counted as 120 square metres. In this regard, more number of car parks shall be a criterion for consideration.

Large building with nature of shop house not taller than four storeys must have car park outside the building or in the underground room of building not less than 1 car per 1 room.

(2) Within area of every municipality or in the locality under Royal Decree to enact the Act on Building Construction Control B.E. 2479 to be in force.

(A) Theatrical hall shall have car park not less than 1 car per 40 seats of the audience, and fraction of 40 seats shall be counted as 40 seats.

#### (B) Hotel

Hotel of not over 100 rooms shall have car park not less than 5 cars for the first 30 rooms; part of more than 30 rooms shall be counted as 1 car per 10 rooms. Fraction of 10 rooms shall be counted as 10 rooms.

Hotel of over 100 rooms, shall have car park under rate in paragraph one for the first 100 rooms, part of more than 100 rooms shall be counted as 1 car per 15 rooms. Fraction of 15 rooms shall be counted as 15 rooms.

(C) Condominium shall have car park not less than 1 car per 2 families. Fraction of 2 families shall be counted as 2 families.

(D) Restaurant shall have car park not less than 1 car per setting area of food table of 40 square metres. Fraction of 40 square metres shall be counted as 40 square metres.

(E) Department store shall have car park not less than 1 car per area of 40 square metres. Fraction of 40 square metres shall be counted as 40 square metres.

(F) Office shall have car park not less than 1 car per area of 120 square metres. Fraction of 120 square metres shall be counted as 120 square metres.

(G) Assembly hall of hotel, restaurant or large building as per clause 2 (8) shall have car park not less than 1 car per the hall area of 30 square metres. Fraction of 30 square metres shall be counted as 30 square metres.

(H) Large building shall have car park as per number as specified in each category of building used as business operation premises in that large building altogether or having car park not less than 1 car per the building area of 240 square metres. Fraction of 240 square metres shall be counted as 240 square metres. In this regard, more number of car parks shall be a criterion for consideration.

Large building with nature of shop house not taller than four storeys must have car park outside the building or in the underground room of building not less than 1 car per 2 rooms.

Clause 4 For the building or any part of the building used for various categories of business operation, if it is the type of building required to have car park, U-turn and in-out access for cars as per clause 2, there must be car park as per number as specified in clause 3 for each building category used as business operation premises in the building or any part of that building altogether.

Clause 5 Car park for 1 car must be rectangular shape with breadth not less than 2.50 metres, length not less than 6 metres, in which there must be sign showing character and boundary of car park in appearance.

Clause 6 Car park must be arranged within area of the building; if being outside there must be pavement not longer than 200 metres to the building.

Clause 7 Car U-turn must have sufficient area in suitable place to enable car to u-turn to the in-out access for car comfortably, by apparently marking symbol of car turning line.

In case of one way traffic arrangement from in-entrance to out-entrance, there may be no U-turn.

Clause 8 In-out access for car must not be less than 6 metres in width. In case of one way traffic arrangement, the in-out access must not be less than 3.50 metres in width, by apparently making symbol showing in-out access for car, and the in-out entrance for car must be as follows :

(1) Center point line at in-out entrance must not be at the place being common or intersection path and must be distant from curve starting point or turning point of the common or public intersection curbs, with the distance not less than 20 metres. As for the theatrical hall, the said distance must not be less than 50 metres.

(2) The center point line at in-out entrance must not be on the bridge slope portion and must be distant from the utmost point of bridge slope portion not less than 50 metres. As for the theatrical hall, the said distance must not be less than 100 metres.

Given on 30th April 1974 (B.E. 2517)

(Kamol Wannaprapa)

Minister of Interior

Remark :- The reason in proclaiming this ministerial regulation is :- Since the Act on Building Construction Control B.E. 2479 with amendment by the Revolutionary Party's Notification no. 192 dated 31st July 1972 (B.E. 2515), has specified that the owner of some category of building used in public service to gain benefit, must arrange car park for those gaining benefit from that building; and the

specification of building category, needed area to be used as car park, car U-turn and in-out access for car shall be done by ministerial regulation, it is therefore necessary to issue this ministerial regulation.

Proclaiming in Government Gazette Volume 91 Part 86, dated 21st May B.E. 2517.

(This ministerial regulation has had an amendment, please refer to the ministerial regulation no. 41 (B.E. 2537) issued under provision of the Act on Building Control B.E. 2522)

# A.4.4 Ministerial Regulation No.18

# MINISTERIAL REGULATION No.18 (B.E.2530)

Issued Pursuant to the Provision in the Buildings Control Act B.E.2522

By virtue of the powers in the provisions in Section 5(3) and section 8(11) of the Building Control Act B.E.2522, the Minister of Interior, by recommendation of the Building Control Committee, hereby issue a Ministerial Regulation as follows:

The following shall be added as Clause 21 bis of the Ministerial Regulation No.4 (B.E.2526) issued pursuant to the Provisions in the Building Control Act B.E.2522.

" Clause 21 bis. In the case where barricades, iron bars or things of a similar nature are installed in doors, windows o on the outside or in the inside of a building from the second floor upwards, which obstructs escape from the building or assistance to the persons who are inside the building or assistance to persons who are inside the licensee or the operator shall arrange for at least one way that can be opened to the outside immediately, the size of which shall not be less than 0.60 metres wide and not less than 0.08 meters long, on each floor of the building or the shopfloor".

Given on this 21st day of July 1987 General Prachuab Suntharangkul Minister of Interior

# A.4.5 Ministerial Regulation No.21

Ministerial Regulation No. 21 (B.E. 2532)

Issued under the provision of the Act on Building Control B.E. 2522

By virtue of the provisions of Section 5 (3) and Section 46 paragraph one of the Act on Building Control B.E. 2522, the Minister of Interior hereby issues the Ministerial Regulation as follows :

In case there is installment of guard Clause 1 rail, bent steel or others with the same feature, at doors, windows or inside or outside the building up from the second floor, no matter being installed before, in or after the date of the Act on Building Control B.E. 2522 being in force, which is contradictory to clause 21 Bis of the Ministerial Regulation no. 4 (B.E. 2526) issued under provision of the Act on Building Control B.E. 2522 with amendment by Ministerial Regulation no. 18 (B.E. 2530) issued under provision of the Act on Building Control B.E. 2522, which will cause that building to have dangerous effect to human life or body ; the local competent officer is empowered to instruct the building owner or occupant to proceed with corrective improvement to follow clause 21 Bis of the Ministerial Regulation no. 4 (B.E. 2526) issued under provision of the Act on Building Control B.E. 2522 with amendment by Ministerial Regulation no. 18 (B.E. 2530) issued under provision of the Act on Building Control B.E. 2522, for a completion within time specified by the local competent officer, but not less than 90 days, except for the case of suitable reason the local competent officer may give an extension of not exceeding 90 days.

The order to proceed corrective improvement of the building under paragraph 1 shall be applied with Kor. 23 Form annexed to Ministerial Regulation no. 8 (B.E. 2528) issued under provision of the Act on Building Control B.E. 2522.

Clause 2 Prior to ordering the building owner or occupant to proceed with improvement as per clause 1, the local competent officer shall authorize the inspector or the engineer to inspect condition of the said building and report the outcome to the local competent officer. Such report must at least consist of plan and side shape of the building as necessary, measure of improvement and duration needed for improvement.

Given on 19th July B.E. 2532

Sanoh Thienthong

Deputy Minister, acting for Minister of Interior

Remark :- The reason for the publication of this Ministerial Regulation is that, since it is appropriate to specify principles, procedure and condition to give authority to the local competent officer to instruct the owner or occupant of building to proceed improvement to building which is installed with guard rail, bent steel or others with same feature, which may cause that building to have dangerous effect to human life and body, and since Section 46 paragraph one has enacted principles, procedure and condition for this subject in the Ministerial Regulation, it is therefore necessary to issue this Ministerial Regulation.

Proclaiming in Government Gazette, Special Issue, Volume 106 Part 135, issued on 23rd August 1989.

# A.4.6 Ministerial Regulation No.42

MINISTERIAL REGULATION No.42 (B.E.2537)

Issued under Building Control Act, B.E.2522

By virtue of the provision of Section 5(3) and Section 8(1)(4)(6)(7) and (8) of the Minister of Interior by the advice of the Board on Building Control, hereby issue Ministerial Regulation as follows:

Add the following as Clause 1 bis of Ministerial Regulation No.33 (B.E.2535) issued under Building Control Act, B.E.2522.

"Clause 1bis. This Ministerial Regulation shall not apply to car park building installed system of moving the cars by mechanical means which has been designed for the benefit of parking the car specially"

Given on the 22nd August B.E.2537

Gen. Chaowalit Yongjaiyuth

Minister of Interior

# A.5 FIRE FIGHTING AND PREVENTION ACT AND MINISTERIAL REGULATION

# A.5.1 Fire Fighting and Prevention Act

FIRE FIGHTING AND PREVENTION ACT

B.E.2542

BHUMIBOL ADULYADEJ REX

Given on the 7<sup>th</sup> April B.E.2542

Being the 54<sup>th</sup> year of the Present Reign

His Majesty King Bhumibol Adulyadej has commanded it be proclaimed that:

Whereas it is appropriate to revise the law on prevention and fighting fire:

This Act has certain provisions relating to restriction of right of personal freedom which Section 29, together with Section 35 and Section 48 of the Constitution of the Kingdom of Thailand, had prescribed they may be exercised by virtue of the provision of the law;

His Majesty the King is graciously pleased to have enacted an Act, by the advice and consent of Parliament as follows:

Section 1. This Act is called "Fire Fighting and Prevention Act B.E.2542"

Section 2. This Act shall be enforced on the day after the expiry of one hundred and eighty days from the date of publication in Government Gazette.

Section 3. Repeal:

(1) Fire Fighting and Prevention Act B.E.2495

(2) Fire Fighting and Prevention Act (No.2), B.E.2499

Section 4. In this Act:

"Fire Prevention" means action to prevent fire from occurring and means to include the preparation to meet the incident when there is fire.

"Fire Fighting" means fighting fire and reducing loss of life, body and property due to fire.

"Thing which easily catches fire" means fuel, chemicals or other material, no matter solid, liquid or gas, which is in the condition of combustible from anything or combustible in itself. This is as prescribed by the Minister in the Government Gazette.

"Local official" means :

(1) The Governor of Bangkok Metropolis, for Bangkok Metropolis Area.

(2) Chairman of Provincial Administration Organization, for the area of provincial administration.

(3) Mayor, for municipal area.

(4) Pattaya Under-Secretary, for Pattaya area.

(5) Chairman of Sanitation Area, for the area of sanitation.

(6) Chairman of Tambon Administration Area, for Tambon Administration.

(7) Chief Administrator of other Local Administration which the law has prescribed to be local administration, for that local administration area.

In the local area where it is necessary, the Minister may appoint person whom it is appropriate to be the official in that local area by publication in Government Gazette.

"Local Fire Fighting Director" means Local Director of Civil Disaster Protection and Fire Prevention.

"Fire Fighter" means persons whom the Local Competent Official has appointed to have the responsibility to prevent fire and fire fighting.

"Fire Fighting Volunteer" means persons whom the Local Competent Official has appointed to assist the firemen to prevent fire and fire fighting.

"Minister" means the Minister in charge and control of this Act.

Section 5. In prevention of fire and fighting fire the local fire fighting director and the competent official shall have the following authority:

(1) Provide fire extinguisher, material, equipment, tools, appliance and vehicle for prevention of fire and extinguishing fire.

(2) Provide place for keeping items mentioned under (1), separating into units as necessary for prevention and extinguishing fire in time.

(3) Provide alarm signal to notify the fire.

(4) Provide rescue and preserve peace and order when a fire breaks out, according to regulation as prescribed by the Minister.

(5) Prove training and carry out the training for prevention and extinguishing fire.

(6) Prescribe regulation concerning training course and practice of fire fighting volunteer.

(7) Appoint fire fighter and fire fighting volunteer according to regulation prescribed by the Minister.

(8) Carry out other action as prescribed in this Act.

Section 6. The Minister of Interior shall be in charge and control of this Act and shall have authority to issue Ministerial Regulation to prescribe:

(1) Conditions for the use, safekeeping and possession of items, which may easily catch fire.

(2) Activity, which may easily catch fire and prescribe that the operator of said activity has person or necessary item for prevention of fire and fire extinguishing as suitable to the condition of the building or activity.

Alarm signal or marking concerning fire prevention and fire fighting.

(4) Marking of the local fire fighting director, local competent official, inspector, fire fighter and fire fighting volunteer.

(5) Uniform and ID Card of the inspector, fire fighter and fire fighting volunteer.

The Ministerial Regulation when published in Government Gazette shall be enforceable and the Minister shall have authority to issue Regulation and Notification for the execution of this Act.

#### CHAPTER 1

Fire Prevention

Section 7. The Local Fire Fighting Director or the Local Competent Official has authority to appoint the Mayor, Sanitation Director, Civil Servant, Local Civil Servant or Local Competent Office from level three upwards or Police Official from the rank of Pol.Lt. upwards to be the fire inspector for the execution of duty in that local area.

Section 8. For the benefit in preventing fire under this Chapter, the fire inspector shall have authority and responsibility as follows:

(1) Inspect things, which may easily catch fire, or things under the condition, which may easily catch fire.

(2) Inspect person who has the responsibility to prevent and fight fire as prescribed in this Act, whether said person has performed responsibility correct or not.

(3) Enter the building or place during sunrise to sunset or during the office hour of that place to inspect the storage of things which may easily catch fire, or at other time in case of emergency showing that the place is under condition which may catch fire.

(4) Give advice to the owner or possessor of the building or place to move, destroy, change or correct things, which may easily catch fire, or things under condition, which may easily catch fire.

(5) Move or destroy things, which may easily catch fire, or things underconditions, which may easily catch fire, in case of emergency.

The fire inspector shall report to the local competent official every time carrying out the act under paragraph one.

Section 9. When receiving a report from the fire inspector that the owner or possessor of the building or place did not comply with the advice of the fire inspector under Clause 8(4), or the local competent official has found by himself that there are things, which may easily catch fire, things under conditions which may easily catch fire, the local competent official shall have authority to order the owner or possessor of the building or place to ratify, improve or comply correctly or suitably.

The order of the local competent official under paragraph one shall be made in writing and specify the period of time to comply with the order as appropriate, but not more than thirty days, except for the case it is appropriate the local competent official may extend the period of time, but not more than twice, each of not more than fifteen days.

In sending the order under this Section, it shall be delivered to the domicile or building or place of the person who is mentioned in that order during sunrise to sunset, or may be delivered by registered reply mail.

In case of having delivered by the person whose name is mentioned in the order refuse to accept the delivery, the person who makes the delivery shall request the administration official or the police to witness in order to place the order at the place. But if the person who is mentioned in the order is not found, it may be delivered to any person who is of juristic age in that building or place, and if there is no one or there is but no one will accept it on behalf that order shall be affixed at the place which is easily seen in the presence of the administration official or the police who acts as witness.

After having acted under paragraph three and paragraph four, it shall be considered that the person who is mentioned under the ordered has received that order. But if it is sent by registered reply mail or by affixing the order, it shall be considered that order has been received at the end of seven days from the date the post office employees has sent or affixed that order, as the case may be.

Section 10. The person who received the order under Section 9 shall be entitled to appeal against the order of the local competent official to the Minister within seven days from the date of receiving the order.

The appeal under paragraph one shall be made in writing and submit to the local competent official who issued said order and the local competent official shall send the appeal and related document to the Minister within ten days from the date of receiving the appeal.

The Minister shall order decision on the appeal within sixty days from the date of receiving the appeal together with reason in writing to the appellant and the local competent official.

During the appeal implementation of the order shall be delayed, except that the local competent official shall see that things which may easily catch fire or things which are under conditions to catch fire easily is dangerous which cannot be waited for.

The order of the Minister shall be final.

Section 11. Under enforcement of Section 10, if there is no action under order of the Minister or there is no action under the order of the local competent official, the local competent official has authority to act or arrange for the act in order to comply with said order, the owner or possessor of the building or place shall bear the expenses in the act as actually spent including the fine at the rate of twenty-five percent per annum of said amount.

Section 12. In executing duty the fire inspector shall affix the marking and show his ID Card when the person

concerned shall request, together with explaining the reason for entering the building or place.

Section 13. For the benefit of preventing fire the local competent official shall have authority to act in the same way as the fire inspector under Section 8.

Entering the building or place, the provision of Section 12 shall apply *mutatis mutandis*.

Section 14. In case of emergency when there is event, which may cause fire, the local competent official has authority to act or order the fire fighter or fire fighting volunteer to act as follows:

(1) Prescribe area of place, which may cause fire.

(2) Organize temporary traffic regulation in the area, which is beneficial to prevent fire.

(3) Prevent those not concerned to enter the area or place prescribe.

(4) Move or destroy things, which may cause fire.

CHAPTER 2

Fire Fighting

Section 15. The local; fire fighting director, local competent official, fire fighter and police official, has the responsibility to fight fire, by affixing the marking and show ID Card when the person concerned shall request.

Section 16. The local fire fighting director has authority to command the local competent official, fire fighter and police official where there is fire.

In case there are more than on local fire fighting directors performing duty in direction fire fighting together, the authority to command shall be as prescribed by the Minister.

Section 17. In carrying out the work under this Chapter, the local fire fighting director, the local competent official, and police official may ask the fire fighting volunteer to assist in carrying out the work. In this the fire fighting volunteer shall have authority to execute the work as requested.

While executing the work under paragraph one, the fire fighting volunteer shall dress in uniform and affix the marking, and shall show ID Card when the person concerned shall request.

Section 18. The local fire fighting director, the local competent official, fire fighter and police office has authority to use the extinguisher, material, equipment, tools, instrument or vehicle of the owner or possessor of the building or place or of the owner or possessor of the building or place nearby, as necessary to fight fire.

Section 19. The local fire fighting director, the local competent official, fire fighter and police official has authority to enter the building or place under fire in order to fight fire or rescue the fire victim.

Entering the building or place nearby the fire area in order to fight fire or rescue the fire victim, permission shall have to be obtained from the owner or possessor of the building or place first, except when there is the official under paragraph one who is a civil servant, local government official or local competent official from level three upwards, or the police officer from police lieutenant upwards, is in charge and responsible for entering that building or place present.

Moving the property out of the building or place under paragraph one and paragraph two, may be carried out when the owner or possessor of the property shall request, except for the case the things which may easily catch fire, the person with authority to enter the building or place under paragraph one or paragraph two, has authority to remove it as necessary to fight fire.

Section 20. For the benefit of fighting fire, the local fire fighting director has authority to act or order the competent official under Section 15 to act as follows:

(1) Specify temporary place for moving for provide first aid the fire victim and looking after the property of the fire victim.

(2) Organize temporary traffic in the area for the benefit of fighting fire.

(3) Block those not concerned from entering the fire area and nearby.

(4) Organize peace and order and prevent the incident of robbery.

(5) Assist the fire victim.

(6) Help to move the property in the fire area and nearby when the owner or possessor of the property shall request.

(7) Use the well, pond, pile-line, water drainage and other source of water, no matter to whom it belongs.

Section 21. For the benefit of controlling the fire from spreading, the local fire fighting director has authority to order demolition, move wholly or partly destroy the building or things which may cause the fire from spreading, as necessary and cannot be avoided.

Section 22. The owner, possessor or person who is authorized to care for the building or place which is the cause of the fire has the responsibility to put out the fire as can be done, and shall have to notify the competent official under Section 15 promptly.

Section 23. Whoever discovers the fire shall have to notify the owner, possessor or person who is authorized to care for the building or place which is the cause of the fire in order to put out the fire. If said person cannot be found and the fire is in the condition that he can put it out, that fire shall be put out immediately. If that fire is in the condition that he cannot put it out, the competent official under Section 15 shall be notified immediately.

Section 24. For the benefit of training in fighting fire, the local fire fighting director and the local fire fighter or other official concerned shall proceed as appropriate and necessary as follows:

(1) Prescribing area and place for fire drill.

(2) Organize temporary traffic in area which is benefit to fire drill.

(3) Block out persons not concerned from entering area for fire drill.

CHAPTER 3

Miscellaneous

Section 25. In performing duty under this Act, the local competent official, the fire inspector, the local fire fighting director and the fire fighter shall be the competent official under the Penal Code.

Section 26. The entire fine and the fines under this Act shall be the revenue of the local area for use in preventing fire and fight fire in that area.

CHAPTER 4

Penalty

Section 27. Whoever commits and offence or fails to comply with Ministerial Regulation issued under Section 6 (1) or (2), shall be penalized with a term of imprisonment of not more than one year or a fine of not more than Twenty Thousand Baht, or both.

Section 28. Whoever obstructs and does not allow the fire inspector or the local competent official to enter the building or place under Section 8 (3), shall be penalized with a term of imprisonment of not more than six months or a fine of not more than Ten Thousand Baht, or both.

Section 29. Whoever commits an offence or fails to comply with the order of the local competent official under Section 9, paragraph one, or commits an offence or fails to comply with the order of the Minister under Section 19, paragraph three, shall be penalized with a term of imprisonment of not more than one year or a fine of not more than Twenty Thousand Baht, or both.

Section 30. Whoever enters the area, which the competent official has blocked under Section 14 (3) or Section 20 (3), without permit from the competent official, shall be penalized with a fine of not more than Two Thousand Baht.

Section 31. Whoever fails to comply with Section 22, shall be penalized with a term of imprisonment of not more than six months or fine of not more than Ten Thousand Baht, or both.

Section 32. Whoever fails to comply with Section 22, shall be penalized with a fine of not more than Five Hundred Baht.

Section 33. Whoever enters the area, which the competent official has blocked under section 24 (3) without permit form the competent official, shall be penalized with a fine of not more than Five Hundred Baht.

Section 34. Whoever put on uniform or affix marking for the local fire fighting director, the local competent official, fire inspector, fire fighter or fire fighting volunteer without the right to wear, in order to let other person to believe he is said person or showing that he is said person, and act under this Act shall be penalized with a term of imprisonment of not more than one year or fine of not more than Twenty Thousand Baht, or both.

If the action under paragraph one shall cause damage to other person, he shall be penalized with a term of imprisonment of not more than two years or a fine of not more than Forty Thousand Baht, or both.

Section 35. Whoever notifies or gives alarm signal for the fire in falsehood, shall be penalized with a term of imprisonment of not more than six months or a fine of not more than Ten Thousand Baht, or both.

Section 36. Whoever does not have authority under the law, destroys, moves the obstruction or causes obstruction to the use of the fire alarm signal, fire extinguisher or fir hydrant, shall be penalized with a term of imprisonment of not more than two years or a fine of not more than Forty Thousand Baht, or both.

If the offence under paragraph one shall cause harm to other person, the doer shall be penalized with a term of imprisonment of not more than five years or a fine of not more than One Hundred Thousand Baht, or both.

Transitory Provision

Section 37. All the Ministerial Regulation, Rule, Enforcement, Notification and Order issued under the Fire Fighting and Prevention Act B.E.2495, which are enforceable on the date of enforcement of this Act, shall be applicable so long as they do not conflict with or contrary to the provisions of this Act, until there is Ministerial Regulation, Rule, Enforcement, Notification and Order under this Act enforced.

Counter-sign by:

Chuan Leekpai

Prime Minister

<u>Remark :</u> The reason for the publication of this Act is that the Fire Fighting and prevention Act, B.E.2495 has been enforced for a long time, certain provisions do not conform and suitable to the present conditions. It is appropriate to revise the duty of the competent official who is responsible for the prevention and fire fighting, measures in the prevention and fire fighting, including the penalty and rate, clearly and fully.

It is necessary to enact this Act.

## A.5.2 Ministerial Regulation No.1

MINISTERIAL REGULATIONS

(B.E. 2496)

Issued under the provision of the Prevention and Repression of Fire

Risk Act B.E. 2495

By virtue of Section 6 of the Fire Prevention and Repression of Fire Risk Act B.E. 2495 the Minister of Interior hereby issues the following Ministerial Regulations :

Clause 1 The keeping in custody or possession of inflammable objects is governed by the following rules :

(a) The following must be kept in a room with walls and floor made of cement, iron or bricks, the roof and ceiling thereof to be made of fire resisting material. Such room must also be at least 4 metres distant in perimeter from any fire, oven or cooking place and must be properly ventilated; a place with doors or windows made of glass being entirely forbidden for their storage :

(1) Alcohol containing degree 70% or more by volume, 40 litres or more in quantity.

(2) Ether, 40 litres or more in quantity.

(3) Mineral turpentine, 200 litres or more in quantity; mixed oil paints, lacquer paint or paint oil, each or altogether for 400 kg or more in quantity.

(4) Red phosphorus, phosphorus composition including matches or match head ingredients, each or altogether for 50 kg or more in quantity.

(5) Objects containing nitrocellulose weighing 50 kg or more, or inflammable motion picture films of any size from 3,000 to 6,000 metres in length; films exceeding 6,000 metres in length must be kept in a place built under the conditions and plan ordered by the local official.

(6) Calcium carbide, 100 kg. or more in quantity.

(7) Inflammable gas contained in pressurized containers such as acetylene, oxygen, hydrogen, each or altogether for 5 tubes or more.

(8) Acetone, 40 litres or more in quantity.

(b) The following must be kept in a well ventilated place which must be at least 4 metres distant in perimeter from any fire, oven or cooking place :

(1) Turpentine or tar, each or altogether for 200 litres or more in quantity; animal or vegetable oil of any description, each or altogether for 1,000 litres or more in quantity.

(2) Coal of all kinds except anthracite for 100 tons or more in quantity.

(3) Substance which shall easily yield oxygen such as nitrate, nitride, chlorate, each or altogether for 100 kg. or more in quantity.

Passage in (3) of clause 1 (b) has been repealed and replaced by new passage under Ministerial Regulation no. 2 (B.E. 2496) etc.

(4) Ginned kapok, 500 kg. or more in quantity; ginned kapok containing seeds, raw cotton or raw jute each altogether for 1,000 kg. or more in quantity.

(5) Cotton thread, 500 kg. or more in quantity.

(6) Pitch of every description, 500 kg. or more in quantity.

Objects referred to in (1) (3) (4) and (5) may not be kept in pile exceeding 10 tons each, for object referred to in (6), it must not be kept exceeding 100 tons per pile.

(c) Yellow phosphorus must be kept in water.

All of the above passage in clause 1 has been repealed and replaced by new passage under Ministerial Regulation no. 4 (B.E. 2505) etc.

Clause 2 The operator of business vulnerable to fire hazard must be equipped with fire preventive apparatus or fire extinguishers as follows:

(1) For storing and selling fuel oil of any description, one gas spray fire extinguisher of 10 litre capacity or one liquid carbon dioxide extinguisher of pressure accumulation type of the weight excluding container weight not less than 6.8 kg. will be equipped for every 2,000 litres or fraction thereof of the quantity.

(2) For refining or producing of fuel oil or inflammable liquid and of refining or producing of vegetable or animal oil of any description, one gas spray fire extinguisher of 10 litre capacity or one liquid carbon dioxide extinguisher of pressure accumulation type of the weight excluding container weight not less than 6.8 kg. will be equipped for every 100 square metres or fraction thereof of the operation site area.

(3) For the business of foundry of any description, one soda acid fire extinguisher of 10 litre capacity or one gas spray fire extinguisher of 10 litre capacity will be equipped for every 100 square metres or fraction thereof of the operation site area.

(4) For stock piling of inflammable objects, one soda acid of 10 litres capacity or one gas spray fire extinguisher of 10 litre capacity will be equipped for every 100 square metres or fraction thereof of the operation site area.

(5) For production or dealing in nitro-cellulose, one liquid carbon dioxide fire extinguisher of pressure accumulation type of the weight excluding container weight not less than 6.8 kg. will be equipped for every 100 kg. or fraction thereof of its weight.

(6) For production or dealing in ammunition other than air gun, one gas spray fire extinguisher of 10 litre capacity or one liquid carbon dioxide fire extinguisher with pressure accumulation type of the weight excluding container weight not less than 6.8 kg. will be equipped for every 10,000 rounds of ammunition, 100 kg. of explosives, 200 kg. of fireworks or fraction thereof, as the case may be. (7) For repair, oiling or cleaning motor cars, motor boats or other motors, or for paint spraying production or dealing in oil paint of any description or lacquer, one gas spray fire extinguisher of 10 litre capacity or one liquid carbon dioxide extinguisher with pressure accumulation type of the weight excluding container weight not less than 6.8 kg. will be equipped for every 100 square metres or fraction thereof of the operation site area.

(8) For rubber industry, one soda acid of 10 litre capacity or one gas spray fire extinguisher of 10 litre capacity will be equipped for every 100 square metres or fraction thereof of the operation site area.

(9) For dry cleaning, one gas spray fire extinguisher of 10 litre capacity or one liquid carbon dioxide fire extinguisher of pressure accumulation type of the weight excluding container weight not less than 6.8 kg. must be equipped. If the operation site area is more than 100 square metres, one fire extinguisher will be added for every excess of 100 square metres or fraction.

(10) For matches factory or storage, one soda acid fire extinguisher of 10 litre capacity or one liquid carbon dioxide fire extinguisher of pressure accumulation type of the weight excluding container weight not less than 6.8 kg. must be equipped for every excess of 50 kg. of the matches or every 100 square metres or fraction thereof of the factory or storage area.

(11) For alcohol or liquor distillery, one liquid carbon dioxide fire extinguisher of pressure accumulation type of the weight excluding container weight not less than 6.8 kg,

or evaporating chemical extinguisher of not less than 4 litre capacity will be equipped for every 100 square metres or fraction thereof of the plant area.

(12) For hotel, motion picture studios and printing press, one gas spray fire extinguisher of 10 litre capacity or one liquid carbon dioxide fire extinguisher of pressure accumulation type of the weight excluding container weight not less than 6.8 kg. will be equipped for every 100 square metres or fraction thereof of the premises.

(13) For rice mills and saw mills using machinery, wood work factories or storage or storage of scantlings, and iron smith shops, one soda acid or gas spray fire extinguisher of 10 litre capacity will be equipped for every 100 square metres or fraction thereof of the premises.

(14) For production or storage of inflammable gas kept in pressurized containers such as acetylene, oxygen, hydrogen, one gas spray fire extinguisher of 10 litre capacity or one liquid carbon dioxide fire extinguisher of pressure accumulation type of the weight excluding container weight not less than 6.8 kg. will be equipped for every 100 square metres or fraction thereof of the premises.

(15) For production or storage of inflammable chemical substances such as sulfuric acid, nitric acid, caustic soda, calcium carbide, potassium chlorate, one gas spray fire extinguisher of 10 litre capacity or one liquid carbon dioxide fire extinguisher of pressure accumulation type of the weight excluding container weight not less than 6.8 kg. or one soda acid fire extinguisher of 10 litre capacity will be equipped for every 100 square metres or fraction thereof of the premises.

(16) For jute, gunny bags, cotton mills or weaving using machinery or kapok factories, one soda acid or gas spray fire extinguisher of 10 litre capacity will be equipped for every 100 squares metres or fraction thereof of the plant area.

(17) For powder rosin or shellac factories or storage of tallow, one soda acid or gas spray fire extinguisher of 10 litre capacity will be equipped for every 100 square metres or fraction thereof of the premises.

Clause 3 Apart from the obligation to have chemical fire extinguishers under Clause 2, those carrying on business under Clause 2 (2) (3) (10) (16) or running rice mills using machinery with a daily output of not less than 20 Kwiens or saw mills using machinery must further be equipped each with one fire hose water pump with pressure of 45 kg. for every 6 square centimetres with reasonable source of water supply for use of that water pump.

Clause 4 All chemical extinguishers and fire hose water pump referred to herein must be kept in good working order.

Clause 5 Those who have already carried on businesses referred to in Clause 2 on the date of enforcing the present regulations shall equip with the fire extinguishers under the ministerial regulation within 120 days.

Clause 6 No entry signs forbidding entry of vehicles or persons into forbidden area are to be circular in shape, 45 cm. in diameter, painted red with white rim 5 cm. in width. The words "Fire fighting Area. No Entry" in white letters are to appear in the centre thereof.

Given on the 7<sup>th</sup> of August B.E. 2496.

## Lt. Gen. B. DHEBHASADIN

Minister of Interior.

(70 Ror Jor 968 Part 55 issued on  $25^{\text{th}}$  August 1953 (B.E. 2496) )

Remark :- The reason for the publication of this Ministerial Regulation is, to specify the inflammable objects or having low flashing point, to stipulate condition in storing or acquiring these inflammable objects; and to specify the category of fire extinguisher for the benefit of the person in charge of the ministerial regulation to use for preventing fire risk in accordance with type of fire.

# A.5.3 Ministerial Regulation No.2

MINISTERIAL REGULATION

No. 2 (B.E. 2496)

Issued under the provision of the Prevention and Repression of Fire

Risk Act B.E. 2495

By virtue of the provision of Section 6 of the Prevention and Repression of Fire Risk Act B.E. 2495, the Minister of Interior issues the following Ministerial Regulation :

It is to repeal the passage in (3) of clause 1(b) of the Ministerial Regulation (B.E. 2496) issued under the Prevention and Repression of Fire Risk Act B.E. 2495 and shall be replaced by the following :

"(3) Substance which shall easily yield oxygen such as nitrate, nitrite, chlorate, each or altogether for 100 kg. or more in quantity."

Given on the 21<sup>st</sup> of December B.E. 2496.

Gen. D. DEJPRADIYUTH

Deputy Minister

Acting for Minister of Interior.

(70 Ror Jor 1557 Part 80 issued on 29<sup>th</sup> December 1953 (B.E. 2496))

Remark :- The reason for the publication of this Ministerial Regulation is, since the word "nitride" under (3) of clause 1(b) of Ministerial Regulation (B.E. 2496) issued under the provision of the Prevention and Repression of Fire Risk Act B.E.2495 being in force at present, is still inaccurate, the officer in charge of the ministerial regulation may misunderstand it as "nitride" which is not identical to the control purpose because "nitride" is not easily inflammable in any case. The substance needed to be controlled is nitrite which is highly inflammable.

## A.5.4 Ministerial Regulation No.3

### MINISTERIAL REGULATION

No. 3 (B.E. 2498)

Issued under the provision of the Prevention and Repression of Fire

Risk Act B.E. 2495

By virtue of the provision of Section 6 of the Prevention and Repression of Fire Risk Act B.E. 2495, the Minister of Interior issues the following Ministerial Regulation :

Clause 1 There shall be two kinds of identification for fire prevention and repression officers:

(1) identification for fire prevention officers.

(2) identification for fire repression officers.

Clause 2 The identification for fire prevention officers shall consist of ;

(1) a badge made of gold colored metal in the shape of a five pointed star with a diameter of 3.8 centimetres with two rings inside, the outer of a diameter of 2 centimetres, and the inner of 1.4 centimetres. The space between the two rings shall be an enamelled blue ground bearing the words in gold "Fire Prevention Officer". Inside the inner ring shall be a ground of white enamel bearing a gold lion ;

(2) an identification card which shall be a card folded in the middle according to form 1 annexed to this Ministerial Regulation.

Clause 3 The identification for fire repression officer shall consist of :

(1) a badge made of gold colored metal in the shape of a five pointer star with a diameter of 3.8 centimetres with two rings inside, the outer of a diameter of 2 centimetres, and the inner of 1.4 centimetres. The space between the two rings shall be an enamelled red ground bearing the words in gold "Fire Repression Officer". Inside the inner ring shall be a ground of white enamel bearing a gold lion;

(2) an identification card which shall be a card folded in the middle according to form 2 annexed to this Ministerial Regulation.

Clause 4 Fire Prevention officers shall wear the badge described in Clause 2 (1) on the right side of the shirt of any official uniform and shall carry with them the identification card specified in Clause 2 (2) as evidence.

Clause 5 Fire Repression Officers shall wear the badge described in Clause 3 (1) on any official uniform, or traditional polite attire, or in case of haste, on the right side of the shirt on any attire and shall carry with them the identification card specified in Clause 3 (2) as evidence.

Clause 6 The Department for Prevention Against Public Dangers shall write or print examples of the identification in conformity with this Ministerial Regulation as standards.

Given on the 8<sup>th</sup> of January B.E. 2498.

Gen. D. DEJPRADIYUDH,

Deputy Minister

Acting for

Minister of Interior

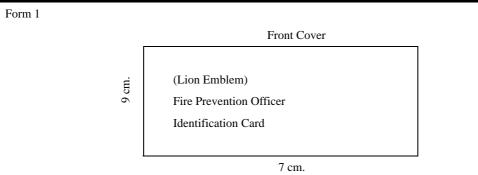
(82 Ror Jor 151 Part 8 issued on 25<sup>th</sup> January 1955 (B.E. 2498))

Remark :- The reason for the publication of this Ministerial Regulation is ;

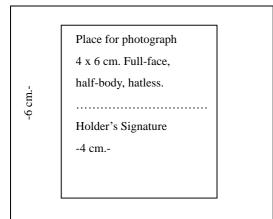
1 To cause the officers' operation to be more convenient and speedy.

2 To prevent the unauthorized person's claim as the officer to make a fraud or cause an obstruction to the officers' operation especially in the blaze area.

3 To be trustworthy to people in case of asking for the officers' help such as the transfer of belongings at the time of fire calamity etc.





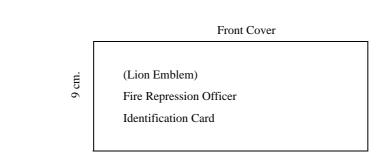


The bottom of the photograph shall bear the signature of the issuer of the identification card and a seal shall be stamped over the lower right corner of the photograph.



No. / / I certify that the photograph and signature on the left are those of...... who is a ...... Under the Fire Prevention and Repression Act B.E. 2495 within the locality of ...... (Signature)...... Position.....

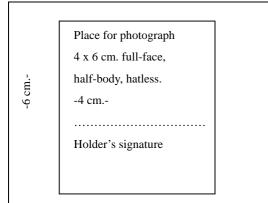
Fill in after "who is a" with the words "Local authority under Section 5" "Inspector under Section 8", or "Special Inspector under Section 14", as the case may be.







Form 2



The bottom of the photograph shall bear the signature of the issuer of the identification card and a seal shall be stamped over the lower right corner of the photograph.

### Inside right

No. / / I certify that the photograph and signature on the left are those of...... who is a ...... Under the Fire Prevention and Repression Act B.E. 2495 within the locality of ............ (Signature)...... Position.....

Fill in after "who is a" with the words "Local authority under Section 5" "Fire fighting officer under Section 5" or "Fire director under Section 15", as the case may be.

# A.5.5 Ministerial Regulation No.4

Department of Local Administration's Library

MINISTERIAL REGULATION

No. 4 (B.E. 2505)

Issued under the provision of the Prevention and Repression of Fire

Risk Act B.E. 2495

By virtue of the provision of Section 6 of the Prevention and Repression of Fire Risk Act B.E. 2495, the Minister of Interior issues a ministerial regulation as follows :

The provisions of clause 1 of Ministerial Regulation (B.E. 2496) issued under the Prevention and Repression of Fire Risk Act B.E. 2495 shall be cancelled and replaced by the following :

"Clause 1 The usage, storage or possession of inflammable articles shall be subject to the following conditions:

(a) The following must be stored in a room with walls made of brick and cement and floor of concrete, roof and ceiling to be of fire-resistant material. Such room must also be at least 4 metres distant in perimeter from any fire, oven, furnace, or cooking place and must be properly ventilated; a room with doors or windows made of glass being entirely forbidden for their storage :

(1) Alcohol of 70 degrees or stronger, of 40 litres or more in quantity.

(2) Ether, of 40 litres or more in quantity.

(3) Mineral turpentine, of 200 litres or more in quantity; mixed oil paints, lacquer or paint oil, each or altogether for 400 kilograms or more in quantity.

(4) Red phosphorus, phosphorus composition including matches or match head ingredients, each or altogether, 50 kilograms or more in weight.

24<sup>th</sup> March 1988

(5) Objects containing nitrocellulose weighing 50 kilograms or more, inflammable motion picture film of any size of 3,000 metres or more in length.

(6) Calcium carbide, 100 kilograms or more in weight.

(7) Inflammable gas in pressurized containers such as acetylene, oxygen, hydrogen, each or altogether for 5 tubes or more.

(8) Acetone, 40 litres or more in quantity.

(9) Jute, kapok or cotton, as raw materials, each or altogether for 1 metric ton or more in weight.

(b) The following must be stored in a well ventilated place and be at least 4 metres distant in perimeter from any fire, stove, oven or furnace or cooking :

(1) Turpentine or tar, each or altogether for 200 litres or more in quantity, animal or vegetable oil of any description, each or altogether for 1,000 litres or more in quantity.

(2) Coal of all kinds except anthracite for 100 metric tons or more in weight.

(3) Substances which shall easily yield oxygen such as nitrate, nitrite, chlorate, each or altogether for 100 kilograms or more in weight.

(4) Torches, 500 kilograms or more in weight.

(5) Pitch, 500 kilograms or more in weight.

Articles under (1) (3) or (4) must not be kept in piles more than 10 metric tons each. Articles under (5) must not be kept in piles more than 100 metric tons each.

(c) The following may be stored only well-wrapped or in covered containers in well ventilated places and be at least 4 metres distant in perimeter from any fire, stove, furnace, oven or any cooking;

(1) Washed jute of 100 kilograms or more in weight.

(2) Hulled kapok containing seeds of 100 kilograms or more in weight or ginned kapok of 50 kilograms or more in weight.

(3) Unhulled and unginned cotton of 100 kilograms or more in weight or hulled and ginned cotton of 50 kilograms or more in weight.

This includes jute, kapok or cotton during transportation but shall not include finished products of jute, kapok or cotton.

(d) Jute, kapok or cotton, not yet made into finished goods of weight less than those prescribed in (c) (1) (2) or (3), shall be stored wrapped or in covered containers within a perimeter at least 4 metres distant from any fire, stove, oven or furnace or cooking.

(e) Yellow phosphorus must be stored in water.

Given on the 7<sup>th</sup> day of December B.E. 2505.

General P. JARUSATIAN

Minister of Interior.

(79 Ror Jor 1308 Part 111 issued on 18<sup>th</sup> December 1962 (B.E. 2505))

Remark :- The reason for the publication of this Ministerial Regulation is, Since there have always been fire accidents causing from storage, transfer of jute, kapok and cotton. The ministerial regulation being in force is not inaccurate for the incident, it is therefore necessary to amend the ministerial regulation to control the usage, storage, possession or transfer of jute, kapok and cotton to effectively prevent the fire hazard.

# A.6 ARCHITECT ACT AND ENGINEER ACT

## A.6.1 Architect Act

BHUMIBOL ADULYADEJ, REX

Given on the 7<sup>th</sup> February B.E. 2543

Being the 55<sup>th</sup> Year of the Present Reign

His Majesty King Bhumibol Adulyadej has been graciously pleased to proclaim that :

Whereas it is expedient to revise law on architect profession.

This Act has some provisions on personal right and freedom limitations in which Section 29 combined with Section 39 and Section 50 of the Constitution of Royal Thai Kingdom prescribe they can be done by virtue of legal provision.

His Majesty the King is graciously pleased to have enacted an Act, by the advice and consent of Parliament as follows :

Section 1 This Act is called "Architect Act B.E.2543"

Section 2 This Act shall be enforced on the day after the date of its publication in the Government Gazette.

Section 3 It is to repeal the Architecture Profession Act B.E. 2508.

Section 4 In this Act :

"Architecture profession" means architecture professions with the use of science and architectural creative art and environment in the branch of principal architecture, landscape architecture branch, geo-architecture branch, interior and decorative art architecture branch and other branches of architecture as stipulated in the ministerial regulations.

"Controlled architecture profession" means architecture professions as stipulated in the ministerial regulations.

"License" means license for performing architecture profession as per this Act.

"Practitioner of controlled architecture profession" means a person who acquires a license to perform controlled architecture profession from council of architect.

"Member" means a member of council of architect.

"Committee member" means committee member of council of architect.

"Commission" means commission of council of architect.

"Secretariat" means council of architect's secretariat.

"Competent Official" means person appointed by the minister to act as per this Act.

"Minister" means minister acting under this Act.

Section 5 The Interior Minister shall perform under this Act. He is empowered to appoint competent official to promulgate ministerial regulations citing fees not exceeding rates as annexed to this Act and to include issuance of ministerial regulations in line with this Act.

The ministerial regulation shall be enforced upon proclaiming in the Government Gazette.

Chapter 1

Council of Architects

Section 6 Council of architects shall be set up, with objectives and empowered duty as promulgated under this Act.

The council of architects shall be a juristic person.

Section 7 The objectives of council of architects are as follows:

(1) Promote education, research and performing of architecture profession.

(2) Promote unity and mediate a dispute among members.

(3) Promote welfare and maintaining reputation and esteem of members.

(4) Control of behavior performance of controlled architecture profession practitioners to follow standard and code of ethics of architecture profession.

(5) Rendering assistance, suggestion, publicity, academic service to the public and other organizations concerning architecture education and technology.

(6) Giving consultation or suggestion to government concerning policy and problems of architecture and technology.

(7) Being representative of architecture profession practitioner of Thailand.

(8) Proceeding others as stipulated under ministerial regulations.

Section 8 Council of architects has an authority and function as follows :

(1) Issuance of license to applicant for controlled architecture profession.

(2) Suspending and revoking license.

(3) Recognition of degree, diploma, certificate or qualified paper regarding controlled architecture profession.

(4) Approval of knowledge and experience in performing controlled architecture profession.

(5) Suggestion to minister regarding prescription and cancellation of fields of controlled architecture profession.

(6) Setting regulations of Council of architectures concerning :

(a) Prescribing prohibited status under Section 12(6)

(b) Membership application, registration fee for membership, periodical charge and fees from member or outsiders.

(c) Selection and election of committee under Section 32.

(d) Issuance of license, license expiry, license revocation and certification of knowledge and expertise in performing controlled architecture profession.

(e) Qualification, tenure and retirement of inspector under Section 20 paragraph 2.

(f) Regulations and qualifications of each level of license applicants under Section 46.

(g) Qualifications and prohibited status of license applicants under Section49.

(h) Ethics of architecture profession, and unscrupulous behavior which will bring indignity to the profession.

(i) Performance standard of controlled architecture profession.

(j) General meeting of council of architects.

(k) Any practice as stipulated under this Act.

All the regulations of council of architects must get approval from council of special chairman, and shall be enforced upon proclaiming in the Government Gazette.

(7) Proceeding in accordance with the council of architects' objectives.

Section 9 Council of architects may have remuneration from the following sources :

(1) Membership registration, annual fee and dues under this Act.

(2) Subsidy from state budget.

(3) Benefit from asset management and business performance of council of architects.

(4) Money and assets given to council of architects.

(5) Interest from money and assets under (1), (2), (3) and (4)

Section 10 The minister shall be council of special chairman of council of architects and is empowered with duty as stipulated under this Act.

Chapter 2

Membership

Section 11 There are three categories of membership of council of architects as follows :

- (1) Ordinary membership.
- (2) Extraordinary membership.
- (3) Honorary membership.

Section 12 The ordinary membership must have qualifications and no hindrances as follows :

(1) Not lower than eighteen years old.

(2) Thai nationality.

(3) Having knowledge of architecture profession with degree, minor degree, certificate or qualified paper in the field of architecture as certified by council of architects.

(4) Not a person with unscrupulous behavior which will bring indignity to the profession as stipulated under regulations of council of architects.

(5) Never sentenced with final court judgment to imprisonment in the case concerning unscrupulous behavior which will bring indignity to the profession as stipulated under regulations of council of architects.

(6) Not a person of mental infirmity, of deformity or diseases as stipulated under regulations of council of architects.

The extraordinary membership have to perform the job relating to architecture profession, having qualification and no hindrances as stipulated under regulations of council of architets.

The honorary membership is qualified person appointed by General meeting of council of architects.

Section 13 The right and duties of ordinary membership are as follows :

(1) Expressing opinion in the general meeting of council of architects.

(2) Casting votes in the general meeting of council of architects.

(3) Expressing ideas and enquiry in writing concerning business of council of architects to the commission for consideration. In case members joining together for more than 50 persons proposing to the commission concerning business of council of architects, the commission has to consider and notify the result for their acknowledgement without delay.

(4) Elect, being elected or accept committee member appointment.

(5) Payment of membership registration, annual fee as stipulated under regulations of council of architects.

(6) Upholding the dignity of profession and behave well under regulations of this Act.

The extraordinary membership or honorary membership shall have right and duty as same as ordinary membership, except right and duty under (2) and (4).

Section 14 The membership is terminated when :

- (1) Deceased.
- (2) Resign.

(3) Membership terminated as resolved by the commission for lack of qualification under Section 12 for ordinary and extraordinary memberships, as the case may be.

(4) The general meeting of council of architects resolves to terminate the honorary membership.

(5) Failure to pay membership registration fee or annual subscription fee without appropriate reason as stipulated under regulations of council of architects.

(6) Council of architects has resolved to terminate the license under Section 64.

Section 15 Membership meeting shall be held annually as general ordinary meeting.

Any other general meeting is called general extraordinary meeting.

Section 16 The commission shall hold general meeting as necessary,

The ordinary members may request for general extraordinary meeting with rule and procedure as stipulated in the council of architects' regulations.

In this case, the commission must convene the general extraordinary meeting within thirty days from requested date.

Section 17 In the general meeting of the council of architects, if the ordinary membership in the meeting does not count up to one hundred members, and such general meeting is requested by the members, it will be cancelled. If the general meeting is not requested by the members, the meeting will be postponed and chairman of the council of architects will call again for the general meeting within forty five days.

Section 18 In the general meeting of council of architects, the chairman of council of architects will act as chairman of the meeting. In case the chairman is not in the meeting or being unable to perform duty, the deputy chairman will act in replacement under Section 34 as chairman of the meeting. In case the chairman and deputy chairman is not in the meeting or being unable to perform duty, the members in the meeting will choose one member among themselves as chairman.

Section 19 In the annual general meeting, the following business should be performed :

(1) Approving on annual proceeding plan of the commission.

(2) Considering and approving of annual balance sheet of council of architects.

(3) Electing of auditor and prescribing auditor's remuneration.

Section 20 There shall be one inspector or many as appointed by the general meeting of council of architects from members or outsiders.

Qualification, tenure and retirement will be as stipulated under regulations of council of architects.

The inspector is empowered to verify the procedures of the commission and presents a report to the general meeting of council of architects.

Section 21 Scrutinizing the proceedings of the commission, the inspector is empowered to enter the working places of council of architects during office hours. The concerned party has to grant facility assistance or give an explanation to the inspector as the case may be.

Section 22 The committee, sub-committee, officials of council of architects, employees and representative of council of architects are obliged to deliver evidence documents in charge or under power to the inspector, and give explanation concerning the proceeding in business of council of architects, in this regard, as requested by the inspector. Section 23 In case of finding that the commission did not proceed along with annual procedure plan, or proceeding causing possible damage or contradict to the objectives of council of architects, the inspector shall notify the general meeting of council of architects or of ordinary member's as deemed appropriate for further consideration.

Chapter 3

The Commission

Section 24 The commission of council of architects shall be established, comprising of :

(1) The committee members for ten in number elected from ordinary members who have no position as a lecturer of university education institute.

(2) The committee members for five in number elected from ordinary members who have a position as a lecturer of university education institute.

(3) The committee members for five in number, being appointed by the cabinet from ordinary members and proposed by the minister.

In the election and appointment of committee members as per paragraph one, judgement must be stressed on ordinary members from different sources of controlled architecture profession with suitable ratio.

Section 25 Upon appointment of committee member and the election result having been known under Section 24, the council of special chairman shall stipulate the schedule for the commission meeting within thirty days, and the meeting date is regarded as starting date of the tenure of the committeeship.

Section 26 The commission shall select committee members to fill the positions of chairman of council of architects, the first deputy chairman and the second deputy chairman of council of architects, each person for one position.

The chairman of council of architects shall select committee members to the position of secretariat, treasurer, each for one position, in this regard, with the consent of the committee.

The chairman of council of architects is empowered to discharge secretariat, treasurer and other positions per paragraph 2, in this regard, with the consent of the commission.

The chairman of council of architects, the first vice chairman of council of architects, the second vice chairman of council of architects shall be in office according to the term of elected committee members.

Whenever the chairman of council of architects is out of the position, the secretariat, the treasurer and other positions as per paragraph 2 are also out of their positions.

Section 27 The committee member must have qualification with no hindrances as follows :

(1) Being the licensee of ordinary architect level for not less than ten years, or level of qualified architect.

- (2) License never be suspended or revoked.
- (3) Being not a person of bankruptcy.

Section 28 The committee members shall be in the position for three years at a time. The elected committee member cannot be in position for more than two terms in succession.

The out of duty committee member shall remain in office for the time being until the election or appointment of new committee member will take place.

Section 29 Apart from being out of duty due to the expiration of office's term, the committee member is out of duty in the following cases :

- (1) Membership status is expired under Section 14.
- (2) Disqualification under Section 14.
- (3) Resignation.

(4) Council of architects resolves for duty termination with vote not less than two-thirds of the members attending the meeting.

(5) The positions of elected committee member are left vacant over half of the elected committee members, and the time left for the remaining committee members is less than 90 days.

(6) The minister instructs to be out of duty under Section 69 by approval of the cabinet.

Section 30 Upon the elected committee member positions are left vacant before the end of the office's term, the committee shall select members with qualification under Section 27 and Section 24(1) or (2) as the case may be, to substitute as the new committees within 30 days after positions left vacant. If the remaining term of the committee member is less than 90 days, the replacement of the committees will be optional as considered by the committee.

In case the committee members under paragraph 1 are left vacant more than half of the total members and the remaining term of the committees is more than 90 days, the general meeting is to be held to elect the committee members to replace the vacant positions.

The selected or elected committee shall be on duty for the period remained for the committee whom he replaces.

Section 31 Upon the committee member positions appointed under Section 24 (3) are left vacant before the end of the office's term, the committee shall appoint the committees to replace as the new committee member is less than 90 days, the replacement of the committees will be optional.

The replacing committee shall be on duty for the period remained for the committee whom he replaces.

Section 32 The election of the committee member under Section 24(1) and (2), selection of committee member to fill up positions under Section 26, and selection or election of committee member under Section 30 will be in accordance with regulations of council of architects.

Section 33 The commission is empowered to do the following :

(1) Administrative and proceed along with the objectives and regulations of council of architects.

(2) Taking care of and have legal proceeding against violator to this Act.

(3) Issuance of rules for the committee for any action as stipulated to be duty of the committee under this Act or as assigned by the general meeting of council of architects.

(4) Fixing of operation plan and budget of council of architects.

(5) Make judgement on an appeal by licensee against judgment by committee on code of ethics under Section 62.

Section 34 Chairman of council of architects, the first vice chairman and second vice chairman, secretariat and treasure are empowered as follows :

(1) Chairman of council of architects is empowered to :

(a) Represent council of architects in the business relating to outsiders.

(b) Preside the commission meeting and general meeting of council of architects.

(c) Proceed business of council of architects along with the committee's solutions.

(2) The first vice chairman of council of architects is authorized as assistant to the chairman of council of architects as being assigned and to perform duty in lieu of the chairman when he is absent or unable to perform his duty.

(3) The second vice chairman of council of architects is authorized as assistant to the chairman of council of architects as being assigned and representing the chairman and the first vice chairman when they are absent or unable to perform their duties.

(4) The secretariat is empowered to :

(a) Supervise each level of officials attached to council of architects.

(b) Acting as secretary to committee meeting and to the general meeting of council of architects.

(c) Proceedings as assigned by the chairman of architects council.

(5) The treasurer has the authority to control, look after, responsible for the accounting financial and budget of council of architects.

The Chairman of council of architects may authorize the vice chairman, committee member, secretariat, treasurer, official in charge of council of architects, to perform any function in his place as stipulated under regulations of council of architects.

Chapter 4

Procedures of Commission

Section 35 There must be at least not less than half of the total committee members to make a quorum for the commission's meeting.

The chairman of council of architects shall preside in the meeting. In case the chairman is not in the meeting or not available to perform his duty, the first vice chairman will act as a substitute chairman under Section 34. If the chairman and vice chairman of council of architects are not in the meeting or not available to function, the committee in the meeting will select any member to preside the meeting.

The meeting resolutions will be in effect with majority vote, one member for one vote. If the vote result is equal, the chairman will have his vote for decision.

In case being out of membership under Section 14 (3), the meeting resolution is valid with no less than two-thirds of the members attending in the meeting.

Section 36 The Council for Special Chairman will participate the meeting, and express opinions in the committee meeting or sending written opinions to council of architects for any subject matter.

Section 37 About the procedures of the committee, the committee shall prepare operation plan and annual budget before the general meeting of council of architects. Upon the approval of the meeting resolution, the operation shall then be on the move.

The Commission shall prepare annual performance result of the preceding year, policy related explanation, together with balance sheet and profit and loss statement for the year certified by auditor subject to auditor's law. The aforementioned practices shall be forwarded before the general meeting of Council of architects within one hundred twenty days after the end of calendar year.

Section 38 The commission is eligible to appoint sub-committee to consider or perform action in place of the commission.

The meeting of sub-committee will be in line with rules of the commission.

Section 39 Office of council of architects shall be set up to perform administrative jobs for the commission and council of architects.

Section 40 The chairman of council of architects shall appoint Chief of office of council of architects, as resolved by the commission, from a person with qualification and no hindrances as follows :

(1) Thai nationality.

(2) Age not below thirty years.

(3) Not in state of bankruptcy, unsound mind, incompetency or quasi-incompetency.

(4) Never be imprisoned by final court decision, except for the negligence or petty offence.

Other qualifications as fixed by the commission.

Section 41 Position appointment, removal from office, wage prescription and other conditions in working as Chief of council of architects' office shall be in compliance

with the hire contract form as stipulated by the Council of architects.

Section 42 Chief of council of architects' office is empowered as follows : -

(1) Control and be responsible of general office jobs of the council of architects.

(2) Taking care of registration records of membership, licensees and other registrations under scope of the Council of architects.

(3) Control and look after properties of council of architects.

(4) Practice others as assigned by the commission or secretariat.

Chapter 5

Regulations of Council of architects

Section 43 Draft of council of architects' regulations will be proposed only by the commission or the ordinary members.

Proposal of draft on Council of architects' regulations will be effective only with a recognition by not less than one hundred ordinary members.

The commission shall convene a general meeting of Council of architects to consider draft proposal on regulations as deemed appropriate. Consideration of draft proposal on regulations will not be an unusual agenda, but it must clearly appear in the usual agenda of the meeting appointment notice sent together with proposed draft regulations of the council of architects.

Section 44 Whenever the general meeting of Council of architects has approved the draft proposal with not less than half of the vote by the attending ordinary members, the chairman of Council of architects shall reforward it to the Council of Special Chairman without delay. The Council of Special Chairman may desist the draft proposal by giving a clear reasoning. In case the desistance is not made within thirty days from date of receiving the draft proposal from the Chairman gives a concurrent opinion to that draft proposal of the regulations.

If the council of special chairman desists any of the draft proposal, the committee board shall convene another meeting within thirty days from date of desistance received. In the latter meeting, if the vote still confirms the resolution with not less than two-thirds vote of the whole committee board, it is regarded the draft regulations receive a concurrent opinion from the council of special chairman.

Chapter 6

Control of Performance on Architecture Profession

Section 45 A person is prohibited to perform controlled architecture profession or doing any means to let people understand that he is ready to perform any branch of controlled architecture profession, unless that person has acquired a license issued by the Council of architects.

Section 46 There will be four levels of practitioners of any branch of controlled architecture profession, as follows :-

- (1) Qualified architect
- (2) Common architect
- (3) Associate architect
- (4) Special Associate architect

Criteria and qualification of practitioners of controlled architecture profession in each particular level are as stipulated in the regulations of council of architects.

Section 47 A person is prohibited to make use of word or statement to allow other people to understand that he is knowledgeable and experienced in performing controlled architecture profession, including having other person employed, having a conspiracy with other person to act on behalf, unless he is a person receiving a qualified paper or approval letter showing he is knowledgeable and experienced in that branch of architecture profession from Council of architects or an institute certified by Council of architects, or licensee with qualification stipulated under Council of architects' regulations.

Section 48 Issuance, expiry, desistance and revocation of license, including certifying of knowledge and experience will be as stipulated under rules of council of architects' regulation.

Section 49 License applicant must have qualification and no hindrances as ruled in the Council of architects' regulation.

The license applicant being natural person must be a common membership or extraordinary membership of Council of architects. If the membership is expired it will result in the license termination.

The license applicant being a juristic person, no matter how much paid-up share capital held by aliens, that juristic person must at least have following qualifications : -

(1) Head office is located in the Kingdom

(2) A partner of partnership, company's director or members in administrative team of the juristic person not less than one-half or managing partner of partnership, directors, company's managing director or sole administrator of the juristic person, all being the license recipients under this Act.

Section 50 The licensee must behave himself according to code of ethics of architecture profession stipulated under council of architects' regulation.

Section 51 A person being damaged or done against code of ethics of architecture profession by licensee, has the right to lodge an accusation to the Council of architects.

The committee member or other person may accuse the licensee of unethical action by presenting the matter to the Council of architects.

The right to accuse as per paragraph 1 or the right to impeach as per paragraph 2 will be ended after one year from date of damage received or from date the impeacher has known about such unethical behavior against controlled architecture profession, and knowing the one who behaves wrongly.

The withdrawal of accusation and impeachment which is already submitted, does not cause a suspension of proceeding as per this Act.

Section 52 When the Council of architects has received the accusation or the blaming as per Section 51 the secretariat shall propose such matter before the committee on ethics without delay.

Section 53 A committee on ethics shall be set up comprising one committee chairman on ethics and number of committee members as fixed by the commission but not less than three.

The commission shall appoint committee members on ethics as resolved by the general meeting of Council of architects, from the member with following qualification : -

(1) Being practitioner of controlled architecture profession for not less than ten years.

(2) Never been punished with unethical behavior.

Section 54 Committee on ethics shall have execution period of three years for a term, and may be reappointed, but will not be in office for two successive terms.

The committee on ethics expiring the office's term will be in office for the time being until new committee on ethics is appointed.

Section 55 Apart from being out of office at term expiration, the committee on ethics is out of office when : -

(1) Resigning

2

(2) Membership terminated as per Section 14

(3) Lack of qualification as per Section 53 paragraph

(4) Being resolved by Council of architects to resign with vote not less than two-thirds of attending members.

Section 56 When the ethics committee member is left vacant before the term ends, the committee shall proceed to fill in the vacancy, except that the term of the committee member on ethics has been left for not more than ninety days, the appointment may or may not be proceeded.

The new appointed ethics committee member shall be on duty for the period remained for the committee whom he replaces.

Section 57 The committee on ethics is empowered to consider the judgment of a licensee who behaves unethically regarding architecture profession.

The method of consideration and judgment of the committee on ethics must follow the rules of the commission.

Section 58 The committee on ethics may appoint a sub-committee to consider or take action on their behalf.

The proceeding of sub-committee as per paragraph one will follow the rules of the commission.

Section 59 For the proceeding of the commission on ethics and of the sub-committee, both parties are empowered to issue an order calling in writing to concerned persons to testify or to send documents or any objective for use of consideration, but in the case of summoning persons not being licensee, it must be approved by the Council of Special Chairman or by persons assigned by the Council of Special Chairman.

In performing duty as per this Act, the commission on ethics or the sub-committee shall be competent officers under penal code.

Section 60 The committee chairman on ethics will issue a letter to the licensee concerning accusation and blaming put on him within at least fifteen days before the start of consideration.

The person being accused or blamed has the right to make an explanation statement with any supporting evidence sent to the committee on ethics or the subcommittee within the time stipulated by the committee on ethics.

Section 61 The committee on ethics has the power to make following judgments : -

Dismiss the accusation.

- (2) Warning.
- (3) Probation.

(4) Suspending of license for an appropriate time but not exceeding five years.

(5) License revocation.

Section 62 The licensee being judged as per Section 61 (2) (3) (4) or (5) may lodge an appeal against decision to the commission within thirty days from date of receiving the decision.

The appeal is to follow rules and methods stipulated in regulations of the council of architects.

The judgment decision will be made in the form of council of architects' order with reason for judgment and it is regarded as final.

Section 63 During suspension of license usage, the licensee is prohibited to perform controlled architecture profession, or show any means making people understand he has the right or ready to perform controlled architecture profession from date of knowing of his license suspension instruction from council of architects.

Section 64 During suspension of license, the licensee who makes a violation as per Section 63 will have his license revoked by council of architects' resolution from date of final court judgment.

Section 65 The licensee who has his license revoked will not be eligible to apply for a new license until after five years from date of his license being revoked.

In case the licensee being juristic person, it is resulted in the revocation of license belonging to partner of partnership, director of a company, administrator of juristic person, and staff or employees of partnership or company or juristic person who have participated in wrongdoing leading to license revocation, all are deemed license violators. The mentioned persons cannot be partner of partnership, director of a company, administrator of juristic person of the licensee under this Act, until after five years from date of license being revoked.

Chapter 7

Supervision

Section 66 The minister is empowered to supervise the following : -

(1) To supervise proceeding of council of architects and performance of controlled architecture profession.

(2) To instruct the competent officers to investigate facts concerning performance of council of architects and controlled architecture profession.

(3) To instruct the committee in writing to describe facts concerning business of council of architects, and to request the sending of documents about the business or minutes of the meeting of the commission.

(4) To instruct the council of architects in writing to suspend or correct any actions apparently contradict to the objectives of council of architects' law, or regulations of council of architects.

Section 67 In response to order of the minister as per Section 66, the competent officers shall be empowered to issue order in writing asking concerned person to testify, sending documents or objects for the benefit of making judgement, and are authorized to audit documents or evidence in the office of council of architects or in the premises of controlled architecture profession during office hours or give explanation to the competent officer as requested. In this case the competent officers are officer as per the penal code.

For the operation of the competent officer as per paragraph one, the concerned persons must contribute the facility as appropriate.

Section 68 For the operation of the competent officer, his identity card must be shown to concerned parties.

The identity card must follow the form as prescribed by the minister by proclaiming in the Government Gazette.

Section 69 When it appears that the council of architects does not follow the minister's order as per Section 66 or having a behavior indicating that the commission, chairman of council of architects or any committee member acting on a severe deterioration to the council of architects, the minister is empowered by approval of the cabinet to instruct the commission, chairman of council of architects or the particular committee member to be out of duty.

In case the minister has an instruction as per paragraph 1, the minister shall appoint five ordinary members to proceed with the investigation to be finished as soon as possible and present the file of inquiry with opinion to the minister for further instruction.

The minister's decision is regarded as final.

Section 70 In case the minister issues the order as per Section 69 instructing the whole commission to be out of office, the minister shall appoint ordinary member from

council of architects with possible number as per Section 24 to act as temporary committee replacing the retired ones on the same day the order is issued for the former commission to be out of the office.

The temporary committee is empowered to perform the duty as necessary. Within thirty days from date of the minister's order to appoint temporary committee, a new election will be set forth for appointment under Section 24.

When the new committee takes the office, the temporary committee appointed by the minister will be out of the office.

Chapter 8

Penalty

Section 71 Any person who violates Section 45 or Section 63 shall be sentenced not exceeding three year imprisonment, or not exceeding sixty thousand baht in fine, or both.

Section 72 Any person who violates Section 47 shall be sentenced not exceeding one year imprisonment, or not exceeding twenty thousand baht in fine, or both.

Section 73 Any person who acts contradict to order by committee on ethics or by the sub-committee as per Section 59 or by the competent officer as per Section 67 shall be sentenced not exceeding one month imprisonment, or not exceeding one thousand baht in fine, or both.

Section 74 In case the offender as per this Act is juristic person, the partner of partnership, company director, representative of juristic person or anybody having part in the offence, all regarded as having offence as conspirator, as employer or as supporter in doing offence as may be the case, the sentence will be as fixed for that offence. In case of the juristic person the sentence will not be exceeding ten times of rate of fine for that offence.

**Transitory Provisions** 

Section 75 The commission on controlling architecture profession under Architecture Profession Act B.E.2508, is authorized to act for the time being until there will be a committee as per Section 24 and is empowered to issue regulations of council of architects as per Section 8 (6) as necessary for a temporary usage. Such regulations will be in force until there is a change of regulation, in this case, without bringing Section 43 and Section 44 to apply.

Office of Kor.Sor., under Architecture Profession Act B.E. 2508, will act the duty of council of architects as per Section 39, and Registrar of Kor.Sor. as per the Architecture

Profession Act B.E. 2508 will act the duty of Chief of council of architects will have own personnel to perform duty, in this case, within not more than one hundred eighty days since the day of taking office of the committee as per Section 25.

In the first stage, Section 27 (1) shall not be brought to enforce the architects of city planning branch, landscape branch and interior architecture and decorative art branch who have the qualification and work experience not less than ten years under stipulation as fixed by Kor.Sor. under Architecture Profession Act B.E. 2508.

Election and appointment of the committee as per Section 24 must be finished within one hundred eighty days from date of this Act being in force.

Section 76 The licensee who is practitioner of controlled architecture profession under categories of associate architect, common architect and qualified architect according to Architecture Profession Act of B.E. 2508 already on the day this Act being proclaimed in the Government Gazette, will be a common membership of council of architects as per this Act.

The licensee who already has special license performing the controlled architecture profession as per Architecture Profession Act of B.E. 2508 on the day of this Act being proclaimed in the Government Gazette shall be the extraordinary membership of council of architects as per this Act.

Beyond the time as fixed in the license, or beyond two years from date of this Act being in force4 depending on which period is longer, the membership as per paragraph 1 and 2 will therefore be expired, except that a new membership of council of architects is applied and granted as per this Act.

It is regarded a degree, diploma or certificate which the commission on controlled architecture profession as per Architecture Profession Act B.E. 2508 have certified, will be the degree, diploma or certificate which are certified by Council of architects as per Section 8 (3).

Section 77 It is regarded that the licensees for performing controlled architecture profession under categories of qualified architects, common architects, associate architects or special license as per Architecture Profession Act B.E. 2508, and still in valid on the day of this Act proclaimed in the Government Gazette, will be the licensees in controlled architecture profession practitioner, categories of qualified, common, associate or special associate architects as per this Act as the case may be.

For the benefit as per Section 27 (1), it is regarded the timeframe receiving the license for performing controlled architecture profession for common architect category, as per Architecture Profession Act B.E. 2508, is the timeframe acquiring license of common architect category, as per this Act.

Section 78 The license application submitted on the day before this Act being in force, can be proceeded further until completion, and regarded as the proceeding done as per this Act. In this regard, the proceeding must be done until completion within two hundred forty days from the day of this Act being in force. If the mentioned time has passed, the proceeding will be as stipulated in this Act.

It is regarded that the licensee as per above paragraph will be a common member, or extraordinary member of council of architects as per Section 76 mutatis mutandis.

Section 79 Before the issuance of ministerial regulations, rules or notification for action as per this Act, the introduction of ministerial regulations, regulations, rules or notification, all issued under Architecture Profession Act B.E. 2508, shall be in force mutatis mutandis.

(c) Level of associate architects 1,000 baht

(d) Level of special associate architects 1,000 baht

For person applying for extension after expiry date

Additional fee will be charged for 2,000 baht

Juristic person

(a) Extension for juristic person license before expiry date30,000 baht

(b) Extension for juristic person license after expiry date 50,000 baht

(3) Fee for certificate of knowledge and experience in performing

controlled architecture profession 10,000 baht

(4) Fee for license substitute or evidence certifying license acquisition :

Natural person	500 baht
Juristic person	5,000 baht

(5) Charge for test of knowledge in performing controlled architecture profession charge for each time 2,000 baht

Section 80 It is regarded that unethical behavior or any contradiction to regulations and conditions in performing controlled architecture profession under Architecture Profession Act B.E. 2508, which all have been performed before the day of this Act being in force and there's still no effective proceeding as per Architecture Profession Act B.E. 2508, all above unethical actions are considered being done under this Architecture Profession Act, and further proceedings will follow this Act.

In case action against unethical performer or any contradiction to regulations and conditions in performing controlled architecture profession has been done before the date of this Act being in force, it is regarded such actions being done as per this Act, and further proceedings will follow this Act.

Countersigned the Royal Command by

Chuan Leekpai

Prime Minister

Remarks : The reasons for the promulgation of this Act are as follows :

Since the architecture academic knowledge has been advancing quite a lot with more sophisticated details and objectives, now creating new architecture and environment for versatile benefit, usage, beauty and well-established to serve purposes in economy, culture and life quality, which require more control and supervision. The cooperation of architects in establishing professional body has been proceeded with good results. It is expedient for practitioner of controlled architecture profession to join force in establishing professional body to assist the government in supervising professional standard for closer control. Furthermore, in the near future Thailand has to open for free trade and services for international relations, it is appropriate that the public sector and private sector have to closely cooperate in promoting quality of profession to be competitive with overseas. Hence, architecture profession law should be improved. Therefore, it is necessary to promulgate this Act.

#### Charge of Fee rates

(1) License for being performers of controlled architecture profession

#### Natural person

- (a) Level of qualified architects 10,000 baht
- (b) Level of common architects 7,500 baht
- (c) Level of associate architects 5,000 baht
- (d) Level of special associate architects 5,000 baht

Juristic person

License for juristic person 100,000 baht

(2) Extension of license for performers of controlled architecture

Profession applied before the expiry date

Natural person

- (a) Level of qualified architects 3,000 baht
- (b) Level of common architects 2,000 baht

## A.6.2 Engineer Act

Engineer Act

B.E. 2542

#### BHUMIBOL ADULYADEJ, REX

Given on the 19<sup>th</sup> November B.E. 2542

Being the 54<sup>th</sup> Year of the Present Reign

His Majesty King Bhumibol Adulyadej has been graciously pleased to proclaim that :

Whereas it is expedient to revise law on engineering profession.

This Act has some provisions on personal right and freedom limitations in which the Constitution of Royal Thai Kingdom prescribes they can be done by virtue of legal provision of Section 29 combined with Section 39 and Section 50.

His Majesty the King is graciously pleased to have enacted an Act, by the advice and consent of Parliament as follows :

Section 1 This Act is called "Engineer Act B.E. 2542"

Section 2 This Act shall be enforced on the day after the date of its publication in the Government Gazette.

Section 3 The following shall be repealed :

(1) "Engineering Profession Act" B.E. 2505

(2) "Engineering Profession Act" (Edition no. 2) B.E. 2512

(3) "Engineering Profession Act" (Edition no. 3) B.E. 2520

Section 4 In this Act :

"Engineering profession" means engineering professions in civil engineering, mineral engineering, mechanical engineering, electrical engineering, industrial engineering and other fields of engineering as stipulated in the ministerial regulations.

"Controlled engineering profession" means engineering professions as stipulated in the ministerial regulations.

"License" means license for performing controlled engineering profession as per this Act.

"Practitioner of controlled engineering profession" means a person being licenced practitioner in controlled engineering profession by council of engineer.

"Member" means a member of council of engineer.

"Committee member" means committee member of council of engineer.

"Commission" means commission on council of engineer.

"Secretariat" means council of engineer's secretariat.

"Competent Official" means person appointed by the minister to act as per this Act.

"Minister" means minister acting under this Act.

Section 5 The Interior Minister shall perform under this Act. He is empowered to appoint competent official to promulgate ministerial regulations citing fees not exceeding rates as appeared at the end of this Act and to include issuance of ministerial regulation in line with this Act.

The ministerial regulation shall be enforced upon proclaiming in the Government Gazette.

Chapter 1

Council of Engineers

Section 6 Council of engineers shall be set up, with objectives and empowered duty as promulgated under this Act as a juristic person.

Section 7 The objectives of council of engineers are as follows :

(1) Promote education research and performing of engineering profession

(2) Promote unity and mediate a dispute among members.

(3) Promote welfare and maintaining reputation and esteem of members.

(4) Control of behavior and performance of controlled engineering profession practitioners to follow standard and code of ethics of engineering profession.

(5) Rendering assistance, suggestion, publicity, academic service to the public and other organizations concerning engineering education and technology.

(6) Giving consultation or suggestion to government concerning policy and problems of engineering and technology.

(7) Being representative of engineering profession practitioner of Thailand.

(8) Proceeding others as stipulated under ministerial regulations.

Section 8 Council of engineers has an authority and function as follows :

(1) Issuance of license to applicant for controlled engineering profession.

(2) Suspending and revoking license.

(3) Recognition of degree, certificate or qualified paper regarding controlled engineering profession.

(4) Approval of knowledge and experience in performing controlled engineering profession.

(5) Suggestion to minister regarding prescription and cancellation of fields of controlled engineering profession.

(6) Setting regulations of Council of engineers concerning :

(a) Stipulating prohibited qualification under Section 12 (6)

(b) Membership application, registration fee for membership, periodical charge and fees from member or outsiders.

(c) Selection and election of committee under Section 32.

(d) Issuance of license, license expiry, license revocation and certification of knowledge and expertise in performing controlled engineering profession.

(e) Qualification, tenure and retirement of inspector under Section 20 paragraph 2.

(f) Regulations and qualifications of each level of license applicants under Section 46.

(g) Qualifications and forbidden status of license applicants under Section 49.

(h) Ethics of engineering profession, and unscrupulous behavior which will bring indignity to the profession.

(i) Performance standard of controlled engineering profession.

(j) General meeting of council of engineers.

(k) Any practice as stipulated under this Act.

All the regulations of council of engineers must get approval from extra society of chairman, and shall be enforced upon proclaiming in the Government Gazette.

(7) Proceeding in accordance with the council of engineers' objectives.

Section 9 Council of engineers may have remuneration from the following sources :

(1) Membership registration, annual fee and dues under this Act.

(2) Subsidy from state budget.

(3) Benefit from asset management and business running of council of engineers.

(4) Money and assets given to council of engineers.

(5) Interest from money and assets under (1), (2), (3) and (4).

Section 10 The minister shall be chairman of extra council of council of engineers and is empowered with duty as stipulated under this Act.

Chapter 2

Membership

Section 11 Membership of council of engineers has three categories as follows:

(1) Ordinary membership

(2) Extraordinary membership

(3) Honorary membership

Section 12 The ordinary membership must have qualifications and no hindrances as follows:

(1) Not lower than eighteen years old.

(2) Thai nationality.

(3) Having knowledge of engineering profession with degree, certification or equivalent qualified degree in the field of engineering as certified by council of engineers.

(4) Not a person with unscrupulous behavior which will bring indignity to the profession as stipulated under regulations of council of engineers.

(5) Never sentenced with final court judgment to imprisonment in the case concerning unscrupulous behavior which will bring indignity to the profession as stipulated under regulations of council of engineers.

(6) Not a person of mental infirmity, of deformity or diseases as stipulated under regulations of council of engineers.

The ordinary membership have to perform the job relating to engineering profession, having qualification and no hindrances as stipulated under regulations of council of engineers.

The honorary membership is qualified person appointed by General meeting of council of engineers.

Section 13 The right and duties of ordinary membership are as follows :

(1) Expressing opinion in the general meeting of council of engineers.

(2) Casting votes in the general meeting of council of engineers.

(3) Expressing ideas and enquiry in writing concerning business of council of engineers to the commission for consideration. In case members joining together for more than 50 persons proposing to the commission concerning business of council of engineers, the commission has to consider and notify the result for their acknowledgement without delay.

(4) Elect, being elected or accept committee member appointment.

(5) Payment of membership registration, annual fee as stipulated under regulations of council of engineers.

(6) Upholding the dignity of profession and behave well under regulations of this Act.

The extraordinary membership or honorary membership shall have right and duty as same as ordinary membership, except right and duty under (2) and (4).

Section 14 The membership is terminated when :

(1) Deceased.

(2) Resign.

(3) Membership terminated as resolved by the commission for lack of qualification under Section 12 for ordinary and extraordinary memberships as the case may be.

(4) The general meeting of council of engineers resolves to terminate the honorary membership.

(5) Failure to pay membership registration fee or annual subscription fee without appropriate reason as stipulated under regulations of council of engineers.

(6) Council of engineers has resolved to terminate the license under Section 64.

Section 15 Membership meeting must be held annually as general ordinary meeting.

Any other general meeting is called general extraordinary meeting.

Section 16 The commission shall hold general meeting as necessary,

The ordinary members may request for general extraordinary meeting with rule and procedure as stipulated in the council of engineers' regulations. In this case, he commission must convene the general extraordinary meeting within thirty days from requested date.

Section 17 In the general meeting of the council of engineers, if the ordinary membership in the meeting does not reach up to two hundred members, and such general meeting is requested by the members it will be cancelled. If the general meeting is not by request of the members, the meeting will be postponed and chairman of the council of engineer will call again for the general meeting within forty five days.

Section 18 In the general meeting of council of engineers, the chairman of council of engineers will act as chairman of the meeting. In case the chairman is not in the meeting or being unable to perform duty, the deputy chairman will act in replacement under Section 34 as chairman of the meeting. In case the chairman and deputy chairman is not in the meeting or being unable to perform duty, the members in the meeting will choose one number among themselves as chairman.

Section 19 In the annual general meeting, the following business should be performed :

(1) Approving on annual proceeding plan of the commission.

(2) Considering and approving of annual balance sheet of council of engineers.

(3) Electing of auditor and specifying auditor's remuneration.

Section 20 There shall be one inspector or many as appointed by the general meeting of council of engineers from members or outsiders.

Qualification, tenure and retirement will be as stipulated under regulations of council of engineers.

The inspector is empowered to verify the procedures of the commission and presents a report to the general meeting of council of engineers.

Section 21 Inspecting the proceedings of the commission, the inspector is empowered to enter the working places of council of engineers during office hours. The concerned party has to grant facility assistance or give an explanation to the inspector as the case may be.

Section 22 The committee, sub-committee, officials of council of engineers, employees and representative of council of engineer are obliged to deliver evidence documents in charge or under power to the inspector, and give explanation concerning the proceeding in business of council of engineers, in this regard, as requested by the inspector.

Section 23 In case of finding that the commission did not proceed along with annual procedure plan, or proceeding causing possible damage or contradict to the objectives of council of engineers, the inspector shall notify the general meeting of council of engineers or of ordinary member's as deemed appropriate for further consideration.

Chapter 3

The Commission

Section 24 The commission of council of engineers comprises of :

(1) The committee member for ten in number elected from ordinary members who have no position as a lecturer of university education institute.

(2) The committee member for five in number elected from ordinary members who have a position as a lecturer of university education institute.

(3) Committee member for five in number, being appointed by the cabinet from ordinary members and proposed by the minister.

In the election and appointment of committee members as per paragraph one, judgement must be stressed on ordinary members from different sources of controlled engineering profession with suitable ration.

Section 25 Upon appointment of committee member and the election result having been known under Section 24, the special chairman council shall stipulate the schedule for the commission meeting within thirty days, and the meeting date is regarded as starting date of the tenure of the committeeship

Section 26 The commission shall choose committee members to fill the positions of chairman of council of engineers, the first deputy chairman of council of engineers and the second deputy chairman, each person for one position.

The chairman of council of engineers shall choose committee members to the position of secretariat, treasurer, each for one position, in this regard, with the consent of the committee.

The chairman of council of engineers is empowered to discharge secretariat, treasurer and other positions per paragraph 2, in this regard, with the consent of the commission.

The chairman of council of engineers, the first deputy chairman of council of engineers, the second deputy chairman of council of engineers shall be in office according to the term of elected committee members.

Whenever the chairman of council of engineers is out of the position, the secretariat, the treasurer and other positions per paragraph 2 are also out of their positions.

Section 27 The committee member must have qualification with no hindrances as follows :

(1) Being the licensee, ordinary engineer level, not less than ten years, or level of qualified engineer.

- (2) License never be suspended or revoked.
- (3) Being not a person of bankruptcy.

Section 28 The committee members are in the position for three years at a time. The elected committee member cannot be in position more than two terms in succession.

The out of duty committee member will remain in office for the time being until the election or appointment of new committee member will take place.

Section 29 Apart from being out of duty due to the expiration of office's term, the committee member is out of duty when :

- (1) Membership status is expired under Section 14.
- (2) Disqualification under Section 27.
- (3) Resign.

(4) Council of engineers resolves termination with vote not less than two-thirds of the members attending the meeting.

(5) The positions of elected committee member are left vacant over half of the elected committee members, and the time left for the remaining committee members is less than 90 days.

(6) The minister instructs to be out of duty under Section 69 by approval of the cabinet.

Section 30 Upon the elected committee member positions are left vacant before the end of the office's term, the committee shall select members with qualification under Section 27 and Section 24 (1) or (2) as the case may be, to substitute as the new committees within 30 days after the positions left vacant. If the remaining term of the committee member is less than 90 days, the replacement of the committees will be optional as considered by the committee.

In case the committee members under paragraph 1 are left vacant more than half of the total members and the remaining term of the committees is more than 90 days, the general meeting is to be held to elect the committee members to replace the vacant positions.

The selected or elected committee shall be on duty for the period remained for the committee whom he replaces.

Section 31 Upon the committee member positions appointed under Section 24 (3) are left vacant before the end of the office's term, the committee shall appoint the committees to replace as the new committees within 30 days after the date positions left vacant. If the remaining term of the committee member is less than 90 days, the replacement of the committees will be optional.

The replacing committee shall be on duty for the period remained for the committee whom he replaces.

Section 32 The election of the committee member under Section 24(1) and (2), selection of committee member to fill up positions under Section 26, and selection or election of committee member under Section 30 will be in accordance with regulations of council of engineers.

Section 33 The commission is empowered to do the following :

(1) Administrative and proceed along with the objectives and regulations of council of engineers.

(2) Taking care of and have legal proceeding against violator to this Act.

(3) Issuance of rules for the committee for any action as stipulated to be duty of the committee under this Act or as assigned by the general meeting of council of engineers.

(4) Fixing of operation plan and budget of council of engineers.

(5) Make judgment on an appeal by licensee against judgment by committee on code of ethics under Section 62.

Section 34 Chairman of council of engineers, the first vice chairman and second vice chairman, secretariat and treasure are empowered as follows :

(1) Chairman of council of engineers is empowered to :

(a) Represent council of engineers in the business relating to outsiders.

(b) Preside the commission meeting and general meeting of council of engineers.

(c) Proceed business of council of engineers along with the committee resolutions.

(2) The first vice chairman of council of engineers is authorized as assistant to the chairman of council of engineers as being assigned and perform duty in lieu of the chairman when he is absent or unable to perform his duty.

(3) The second vice chairman of council of engineers is authorized as assistant to the chairman of council of engineers as being assigned and representing the chairman and the first vice chairman when they are absent or unable to perform their duties.

(4) The secretariat is empowered to :

(a) Supervise each level of officials attached to engineers council.

(b) Acting as secretary to engineers committee meeting and to the general meeting of engineers council.

(c) Proceedings as assigned by the chairman of engineers council.

(5) The treasurer has the authority to control, look after, responsible for the accounting financial and budget of council of engineers.

The Chairman of council of engineers may authorize the deputy. Chairman, committee member, secretarial, treasurer, officer in charge of engineers council, to perform

any function in his place as stipulated under regulations of council of engineers.

Chapter 4

Procedures of Commission

Section 35 The commission's meeting must have at least not less than half of the total members to make a quorum.

The chairman of council of engineers is given to preside in the meeting. In case the chairman is not in the meeting or not available to perform his duty, the first vice chairman will act as a substitute chairman under Section 34. If the chairman and vice chairman of council of engineers are not in the meeting or not available to function, the committee in the meeting will select any member to preside the meeting.

The meeting resolutions will be in effect with majority vote, one member for one vote. If the vote result is equal, the chairman will have his vote for decision.

In case being out of membership under Section 14 (3), the meeting resolution is valid with no less than two-thirds of the members attending in the meeting.

Section 36 The Special Chairman council will participate the meeting, and express opinions in the committee meeting or sending written opinions to engineers council for any subject matter.

Section 37 About the procedures of the committee the committee is give to prepare operation plan and annual budget before the general meeting of council of engineers. With the approval of the meeting resolution, the operation shall then be on the move.

The Commission is give to prepare annual performance result of the preceding year, policy related explanation, together with balance sheet and profit and loss statement for the year certified by auditor subject to auditor's law The aforementioned practices shall be forwarded before the general meeting of Council of engineers within one hundred twenty days after the end of calendar year.

Section 38 The commission is eligible to appoint sub-committee to consider or perform action in place of the commission.

The meeting of sub-committee will be in line with rules of the commission.

Section 39 It is given to set up office of council of engineers performing administrative jobs for the commission and council of engineers.

Section 40 The Chairman of council of engineers shall appoint Chief of office of council of engineers, as resolved by commission, from a person with qualification and no hindrances as follows :

- (1) Thai nationality
- (2) Age not below thirty years

(3) Not in state of bankruptcy, unsound mind, incompetency or quasi-incompetency.

(4) Never be imprisoned by final court decision, except for the negligence or petty offence.

(5) Other qualifications as fixed by the commission.

Section 41 Position appointment, position outing, wage fixing and other conditions in working as Chief of Council of engineers' office will follow hire contract form as stipulated by the Council of engineers.

Section 42 Chief of council of engineers' office is empowered as follows : -

(1) Control and be responsible of general office jobs of the council of engineers.

(2) Taking care of registration records of membership, of licensees and the registrations under scope of the Council of engineers.

(3) Control and look after properties of council of engineers.

(4) Practice others as assigned by the commission secretariat.

Chapter 5

Regulations of Council of engineers

Section 43 Draft of council of engineers' regulations will be proposed only by the commission or the ordinary members.

Proposal of draft on Council of engineers' regulations will be effective only with a recognition by not less than one hundred ordinary members.

The commission shall convene a general meeting of Council of engineers to consider draft proposal on regulations as deemed appropriate. Consideration of draft proposal on regulations will not be an unusual agenda, but it must clearly appear in the usual agenda of the meeting appointment notice sent together with proposed draft, regulations of the council of engineers.

Section 44 Whenever the general meeting of Council of engineers has approved the draft proposal with not less than half of the vote by the attending ordinary members, the chairman of Council of engineers is given to reforward it to the Special Chairman council without delay. The Special Chairman council may desist that draft proposal by giving a clear reasoning. In case the desistance is not made within thirty days from date of receiving the draft proposal from the Chairman of engineers council, it is regarded the Special Chairman council gives a concurrent opinion to that draft proposal of the regulations.

If the Special Chairman council desists any of the draft proposal, the committee board is given to convene another meeting within thirty days from date of desistance received. In the latter meeting, if the vote still confirms the resolution with not less than two-thirds vote of the whole committee board, it is regarded the draft regulations receive a concurrent opinion of the Special Chairman council.

Chapter 6

Control of Performance on Engineering Profession

Section 45 A person is prohibited to perform controlled engineering profession or doing any mean to let people understand that he is ready to perform any branch of controlled engineering profession, unless that person has acquired a license issued by the Council of engineers.

Section 46 Practitioners of any branch of controlled engineering profession have four levels as follows : -

- (1) Qualified engineer
- (2) Common engineer
- (3) Associate engineer
- (4) Special Associate engineer

Criteria and qualification of practitioners of controlled engineering profession in each particular level are as stipulated in the regulations of council of engineers.

Section 47 A person is prohibited to make use of word or statement to allow other people to understand that he is knowledgeable and experienced in performing controlled engineering profession, including have other person employed, do a favor ordering on behalf, provided he is a person receiving a qualified card or approval letter showing being knowledgeable and experienced in that branch of engineering profession from Council of engineers or an institute certified by Council of engineers, or licensee with qualification stipulated under Council of engineers' regulations.

Section 48 Issuance, expiry, desistance and revocation of license, including certifying of knowledge and experience will be as stipulated under rules of council of engineers' regulation.

Section 49 License applicant must have qualification and no hindrance as ruled in the Council of engineers' regulation.

The license applicant being natural person must be a common membership or extraordinary membership of Council of engineers. If membership is expired it will result in the license termination.

The license applicant as a juristic person, no matter how much paid-up share capital held by aliens, that juristic person must at least have following qualifications : -

(1) Head office is located in the Kingdom

(2) A partner of partnership, company's director or members in administrative team of the juristic person not less than one-half or managing partner of partnership, directors, company's manager or sole administrator of the partnership, all being the license recipients under this Act.

Section 50 The licensee must behave himself according to code of ethics of engineering profession stipulated under council of engineers' regulation.

Section 51 A person being damaged or done against code of ethics of engineering profession by licensee, has the right to lodge an accusation to the Council of engineers.

The committee member or other person may accuse the licensee of unethical action by presenting the matter to the Council of engineers.

The right to accuse as per paragraph 1 or the right to impeach as per paragraph 2 will be ended after one year from date of damage received or from date of knowing such unethical behavior against controlled engineering profession, and knowing the one who behaves wrongly.

The withdrawal of accusing and impeaching which is already submitted, does not cause a suspension of proceeding as per this Act.

Section 52 When the Council of engineers receives the accusing or the blaming as per Section 51 the secretariat shall propose the matter before the committee on ethics without delay.

Section 53 It is given to set up a committee on ethics comprising one committee chairman on ethics and number of committee members as fixed but not less than three.

The commission shall appoint committee members on ethics as resolved by the general meeting of Council of engineers, with following qualifications : -

(1) Being practitioner of controlled engineering profession with the time not less than ten years.

(2) Never been punished with unethical behavior.

Section 54 Committee on ethics has an execution period of three years at a time, and may be reappointed, but will not be in office for two successive terms.

The committee on ethics ending the office's term will be in office for the time being until new committee on ethics is appointed.

Section 55 Apart from being out of office at term and, the committee on ethics is out of office when : -

(1) Resign

(2) Membership termination as per Section 14

(3) Lack of qualification as per Section 53 paragraph 2

(4) Being resolved by Council of engineers to resign with not less than two-thirds vote of attending members.

Section 56 When the ethics committee member is left vacant before the term ends, the committee shall proceed to fill in the vacancy, except that the term of the committee member on ethics has been left not more than ninety days, the appointment may or may not be proceeded.

The new appointed committee member will be in office for the remaining period of time.

Section 57 The commission on ethics is empowered to consider the judgment of a licensee who behave unethically per engineering profession.

The method of consideration of judgment must follow the rules of the commission.

Section 58 The committee board on ethics may appoint a sub-committee to work on their behalf.

The operation of sub-committee will follow the rules of the commission.

Section 59 For the proceeding of the commission on ethics and of the sub-committee, both parties are empowered to issue an order calling in writing to concerned persons to testify or to send documents or any objective for use of consideration, but in the case of summoning persons not being licensee, it must be approved by the Special Chairman council or by persons assigned by the Special Chairman council.

In performing duty as per this Act, the commission on ethics or the sub-committee are competent officers under penal code.

Section 60 The committee chairman on ethics will issue a letter to the licensee concerning accusation and blaming put on him within at least fifteen days before the start of consideration.

The person being accused or blamed has the right to make an explanation statement with any supporting evidence sent to the committee on ethics or the subcommittee within the time stipulated by the committee on ethics.

Section 61 The committee on ethics has the power to make following

judgment : -

- (1) Dismiss the accusation
- (2) Warning
- (3) Probation

(4) Suspending of license for an appropriate time but not exceeding five years.

#### License revocation

Section 62 The licensee being judged as per Section 61 (2) (3) (4) or (5) may lodge an appeal against decision to the commission within thirty days from date of receiving the decision.

The appeal is to follow rules and methods stipulated in regulations of the council of engineers.

The judgment decision will be made in the form of council of engineers' order with reason for judgment and it is regarded as final.

Section 63 During suspension of license usage, the licensee is prohibited to perform controlled engineering profession, or show any means making people understand he has the right or ready to perform controlled engineering profession from date of knowing of his license suspension.

Section 64 During suspension of license, the licensee who makes a violation per Section 63 will have his license revoked from date of final court judgment.

Section 65 The licensee who has his license revoked can not be eligible to apply for a new license until five years from date of his license being revoked.

In case the licensee being juristic person, it is resulted in the revocation of license belonging to partner of partnership, director of a company, administrator of juristic person, and officers or employees of partnership or company or juristic person who have participated in wrongdoing making license being revoked, all are deemed license violators. The mentioned persons cannot be partner of partnership, director of a company, administrator of juristic person of the licensee under this Act, until five years after date of license revocation.

Chapter 7

Supervision

Section 66 The minister is empowered to supervise the following : -

(1) To supervise proceeding of council of engineers and performance of controlled engineering profession.

(2) To instruct the competent officers to investigate facts concerning performance of council of engineers and engineering profession.

(3) To instruct the committee in writing to describe facts concerning business of council of engineers, and to request the sending of documents about the business or minutes of the meeting of the commission.

(4) To instruct the council of engineers in writing to suspend or correct any doings apparently contradict to the objectives of council of engineers' law, or regulations of council of engineers.

Section 67 In response to order of the minister per Section 66 the competent officers are empowered to issue order in writing asking concerned person to testify, sending documents or objects for the benefit of making judgment, and are authorized to audit documents or evidence in the office of council of engineers or in the premises of controlled engineering profession during office hours or give explanation to the competent officer as requested. In this case the competent officers are officer as per the penal code.

For the operation of the competent officer per paragraph 1, the concerned persons must contribute the facility as appropriate.

Section 68 For the operation of the competent officer, his identity card must be shown to concerned parties.

The identity card must follow the form as notified by the minister in the Government Gazette.

Section 69 When it appears that the council of engineers does not follow the minister's order per Section 66 or having a behavior showing that the commission, chairman of council of engineers or any committee acting on a severe deterioration to the council of engineers, the minister is empowered by approval of the cabinet to instruct the commission, chairman of council of engineers or a particular committee to be out of duty.

In case the minister has an instruction per paragraph 1, the minister shall appoint five ordinary members to proceed with the investigation to be finished as soon as possible and present the file of inquiry with opinion to the minister for further instruction.

The minister's decision is regarded as final.

Section 70 In case the minister issues the order per Section 69, the whole commission will be made out of office, and the minister will appoint a new commission with possible number per Section 24 to act as temporary

committees replacing the retired ones on the same day the order is issued for the former commission to be out of the office.

The temporary committee is empowered to perform the duty as necessary. Within thirty days from date of the minister's order to appoint temporary committees, a new election will be set forth for appointment under Section 24.

When the new permanent committee takes the office, the temporary committee appointed by the minister will be out of office.

Chapter 8

Penalty

Section 71 Any person who violates Section 45 or Section 63 shall be punished not exceeding three year imprisonment, or not exceeding sixty thousand baht in fine, or both.

Section 72 Any person who violates Section 47 shall be punished not exceeding one year imprisonment, or not exceeding twenty thousand baht in fine, or both.

Section 73 Any person who acts contradict to order by commission on ethics or by the sub-committee board per Section 59 or by the competent officer per Section 67 shall be punished not exceeding one month imprisonment one month imprisonment, or not exceeding one thousand baht in fine, or both.

Section 74 In case the offender as per this Act being juristic person, the partner of partnership, company director, representative of juristic person or anybody having part in the offence, all regarded as having offence as collaborator, as employer or as sponsor in doing offence as may be the case. The punishment will be as fixed for that offence and for the juristic person the punishment will not be exceeding ten times of rate of fine for that offence.

**Transitory Provisions** 

Section 75 The commission on controlling engineering profession as per Engineering Profession Act B.E. 2505, is authorized to act for the time being until there will be a committee per Section 24 and is empowered to issue regulations of Council of engineers per Section 8 (6) as necessary for a temporary usage. Such regulations will be in force until a change of regulation, in this case, without bringing Section 43 and Section 44 to apply.

Office of Kor Wor under the Engineering Profession Act B.E. 2505, will act the duty of council of engineers per Section 39, and Registrar of Kor Wor as per the Engineering Profession Act B.E. 2505 will act the duty of Chief of engineering office per Section 42 for the time being until the office of council of engineers will have own personnel to perform duty, in this case, within not more than one hundred eighty days since the day of taking office of the committee as per Section 25.

Election and appointment of the committee per Section 24 must be finished within one hundred eighty days from date of this Act being in force.

Section 76 It is given that the licensee as practitioner of controlled engineering profession under categories of associate engineer, common engineer and qualified engineer according to Act of engineering profession B.E. 2505 already on the day this Act being proclaimed in the Government Gazette, will be a common membership of council of engineers per this Act.

It is given that the licensee already with special license performing the controlled engineering profession as per Act of engineering profession B.E. 2505 on the day of this Act being proclaimed in the Government Gazette, will be the extraordinary membership of council of engineers as per this Act.

Beyond the time as fixed in the license or beyond two years from date of this Act being in force depending on which period is longer, the membership as per paragraph 1 and 2 will therefore be expired except a new membership is applied and granted as membership of council of engineers as per this Act.

It is regarded a diploma or certificate acquired from education curriculum and education institute which the commission on controlled engineering profession as per Engineering Profession Act B.E. 2505 have certified, will be the diploma and certificate which are certified by Council of engineers as per Section 8 (3).

Section 77 It is regarded that the licensees for performing controlled engineering profession under categories of qualified engineers, common engineers, associate engineers or special license as per Engineering Profession Act B.E. 2505, and still in valid on the day of this Act proclaimed in the Government Gazette, will be the licensees in controlled engineering profession practitioner, categories of qualified, common, associate or special associate engineers as per this Act as the case may be. For the benefit as per Section 27 (1), it is regarded the time receiving the license for performing controlled engineering profession, common engineer category, as per Engineering Profession Act B.E. 2505 is the time acquiring license of common engineer category, as per this Act.

Section 78 The license application submitted on the day before this Act being in force, can be proceeded further until completion, and regarded as the proceeding done as per this Act. In this case, the proceeding must be done until completion within two hundred forty days from the day of this Act being in force. If the mentioned time has passed, the proceeding will be as stipulated in this Act.

It is regarded that the licensee as per above paragraph will be a common member, or extraordinary member of council of engineers as per Section 7 mutatis mutandis.

Section 79 Before the issuance of ministerial regulations, rules or notification for action as per this act, it is given to introduce ministerial regulations, regulations, rules or notification, all issued under Engineering Profession Act B.E. 2505, to be in force mutatis mutandis.

Section 80 It is regarded that unethical behavior or any contradiction to regulations and conditions in performing controlled engineering profession under Engineering Profession Act B.E. 2505 which have been performed before the day of this Act being in force and there's still no effective proceeding as per Engineering Profession Act B.E. 2505, all above unethical actions are considered being done under this Engineering Profession Act and further proceedings will follow this Act.

In case action against unethical performer or any contradiction to regulations and conditions in performing controlled engineering profession has been done before the date of this Act being in force, it is regarded such actions being done as per this Act, and further proceedings will follow this Act.

Countersigned the Royal Command by

Chuan Leekpai

## Prime Minister

The reasons for the promulgation of this Remarks : Act are as follows : At present the engineer academic knowledge has been advancing quite a lot with more sophisticated details, no matter in the field of civil engineering, mineral engineering, mechanical engineering, electrical engineering,, industrial engineering and other. Performing these engineering professions may have an effect on life, physical and properties of the people. It is suitable to have a control of verification on knowledge, ability of the performers of the profession and a close follow-up of profession more than before. The engineering profession organization has long been strongly established. So it is appropriate that the engineering profession practitioners should be streamlined as an organization to assist the state in control with a better result. Further, in the near future Thailand has to open for free trade and services, it is appropriate that the public sector and private sector have to closely co-operate in promoting quality of profession to be competitive with overseas. Engineering profession law should be improved. Therefore, it is necessary to promulgate this Act.

#### Charge of Fee rates

(1) License for being performers of controlled engineering profession

Natural person

- (a) Level of qualified engineers 10,000 baht
- (b) Level of common engineers 7,500 baht
- (c) Level of associate engineers 5,000 baht
- (d) Level of special associate engineers 5,000 baht

Juristic person

#### License for juristic person 100,000 baht

(2) Extension of license for being performers of controlled engineering profession before the expiry date

#### Natural person

- (a) Level of qualified engineers 3,000 baht
- (b) Level of common engineers 2,000 baht
- (c) Level of associate engineers 1,000 baht
- (d) Level of special associate engineers 1,000 baht

For person asking for extension after expiry date

Additional fee will be charge for 2,000 baht

# Final Report-Volume IV: Appendix

Juristic person

(a) Extension for juristic person license before expiry date 30,000 baht

(b) Extension for juristic person license after expiry date 50,000 baht

(3) Fee for certificate of knowledge and experience in performing

controlled engineering profession 10,000 baht

(4) Substitute for license or evidence certifying license acquisition :

Natural person 500 baht

Juristic person 5,000 baht

- (5) Charge for test of knowledge in performing
- controlled engineering profession charge for each time 2,000 baht

# A.7 BMA BYE-LAW

BMA BYE-LAW

**RE: BUILDING CONSTRUCTION CONTROL** 

B.E. 2544

WHEREAS it is appropriate to amend the Bye-law of Bangkok Metropolis Administration relating to the building control.

By virtue of the provisions of Article No. 9 and No. 10 of the Building Control Act B.E. 2522 amended by the Building Control Act (No. 2) B.E. 2535 - the statute comprised of some provisions relating to the discrimination/restriction of the personal right and liberty coupled with the provisions of Article Nos. 29, 31, 35, 48, 49 and 50 of the Constitution of Kingdom of Thailand, it is enacted to be imposed only by virtue of the provision of law. Pursuant to the provision of Article No. 97 of the Public Administration of Bangkok Metropolis Authority B.E. 2528 coupled with the consent of the BMA Council, this Bye-laws is then enacted, as followings:

Clause 1 This Bye-law shall<sup>\*</sup> be known as the Bye-law of Bangkok Metropolis Administration<sup>\*\*</sup> relating to the Building Control B.E. 2544<sup>\*\*\*</sup>.

Clause 2 This Bye-law shall be effective from the date following the date of publication in the Government Gazette.

Clause 3 The followings shall be repealed:

(1) BMA Bye-law relating to the Building Construction Control B.E. 2522;

(2) BMA Bye-law relating to the Car Parking Building B.E. 2521.

For any other municipal laws, bye-laws, regulations, rules, announcements or otherwise instructions relating to any matter readily adopted and set forth in this Bye-law or being contrary to this Bye-law, the provisions of this Byelaw shall be governed or prevail.

Clause 4 BMA Governor is hereby authorized and directed to enforce all the provisions of this Bye-law and shall have the powers to adopt and enforce (supplemental) regulations, rules, announcements or instructions in order to implement the application of this Bye-law.

<sup>\*</sup>The word "shall" is deemed as a mandatory requirement or "a must" standard to be complied with.

\*\*Bangkok Metropolis Administration will be referred to herein as "BMA".

\*\*\* The Bye-law of Bangkok Metropolis Administration relating to the Building Control B.E. 2544 may be cited as such and will be referred to herein as "This Bye-Law".

CHAPTER ONE

DEFINITIIONS

Clause 5 In this Bye-law,

(1) "Gravel" means a natural-borne stone bigger than 3 mm.

(2) "Construction" means to erected or build up the whole new building; whether it is erected to replace the former one or not.

(3) "Drainage" means to make wastewater to flow or to drain away into the wastewater basin or drainage source.

(4) "Right of Way" means the total width of way between the landlines on both sides including the width of traffic surface, footpath, vacancy for planting, canal and others.

(5) "Warehouse" means a building or any component thereof used for merchandises or things storage for the commercial or industrial purpose or for carrying out the business of transportation but excluding the storage house.

(6) "Width of Stair or Stair Width" means a distance measured along the length of a stair tread or the normal line of travel of the stair.

(7) "Height of Building or Building Height" means the height of the building vertically measured from the road level up to the highest-pitched building component or to the top of building.

(8) "Concrete" means composite materials comprised of mixtures of cement, fine aggregates e.g. sand etc., coarse aggregates e.g. crushed stone or gravel etc. and water, and also means a strength concrete, high strength concrete and extra-high strength concrete.

(9) "Reinforced Concrete" means concrete containing metal bars, rods, wires, (or other slender members) embedded (under tension) in the concrete in such a manner that the metal and the concrete act together in more resisting force.

(10) "Prestressed Concrete" means the concrete composed of prestressed concrete wire embedded under tension in the concrete so that the internal stresses are introduced of such magnitude and distribution sufficiently to eliminate the tensile stresses resulting from the service loads counteracted.

(11) "Principal Structure" means building components being column, beam, joist, slab or steel structure comprised of a 15-or-more-meter span, which it shall, by its nature, be deemed as the essential members to the stability of the said building.

(12) "Ends of Slope" means a starting or ending point of any slope with an inclination less than 2 per cent.

(13) "Flight of Stair or Stair Flight" means a vertical distance of stair comprised of the whole continuous series of steps.

(14) "Basement" means any floor of building story below grade more than 1.20 m.

(15) "Slope of Bridge or Bridge Slope" means the level-changing bridge or public way; or the traffic way particularly adjoining to the level-changing bridge or public

way or any part thereof comprised of the inclination or grade of 2 or more per cent.

(16) "Renovation" means a repair or alteration in various building components to maintain the former conditions.

(17) "Foundation" means a building component serving to transmit the building load to the earth ground.

(18) "Modification" means an alteration, addition, enlargement, reduction or expansion in the characteristic, boundary, classification, shape, portion, load, space of building structure or various building components readily constructed to be different from the former conditions and not being the renovation or modification as stipulated in the Ministerial Regulation.

(19) "Terrace Roof" means a space of the highestpitched building component not covered by roof nor used by any person.

(20) "Soil" means nature substances constituting the earth crust e.g. rock, gravel, sand, clay etc.

(21) "Market" means a building or any component thereof used as a market as defined pursuant to the Public Health Law.

(22) "Row Houses" means two or more buildings constructed and joined to each other in the row and comprised of joint wall - dividing the buildings into a unit – mostly composed of fire proof materials.

(23) "Public Road" means a public way for vehicles to run/pass through.

(24) "Sand" means a fine small piece of rock not bigger than 3 mm.

(25) "Way" means a way or thoroughfare as defined pursuant to the Traffic Law on a ground level or underground or aboveground but excluding the railway.

(26) "Car Access/Exit" means a passageway provided as an access to, and egress from the car park from or to the mouth of the access and exit; or egress from the car park to the mouth of egress or access to the car park from the mouth of access.

(27) "Public Water Way" means a water channel which people are entitled to use as a communication route.

(28) "Common Intersection/Junction" means the location where 2 or more same-level or different-level ways – the width of 6 or more m. and the continuous length not less than 200 m. – joining another or crossing each other at the same-level location.

(29) "Public Drainage Channel" means a water-flow channel along the public way and public road where is determined for receiving the wastewater drained away from the building.

(30) "Private Way" means the private land where people may use as a communication route and shall be comprised of one or more of the following characteristics:

(a) being a communication route not exceeding 500 m. long;

(b) being a communication route where the owner expresses his entitlement for conservation and prohibition with or without making a signboard announcement or claiming for or receiving the remuneration for using it as a communication route or entering into the agreement with the user(s) but excluding the execution of agreement to allow BMA to develop for the utilization.

(31) "Public Way" means the land where people are entitled to use as the communication route - not the private way.

(32) "Car Reverse" means a space or constructions used for the car reverse in order to facilitate a car parking or car ingress/egress.

(33) "Car Park" means a space or constructions used as a location to park car for some specific categories or classifications of buildings and also means the space or constructions used as a car park for rental or car storage.

(34) "Garbage Tank" means an equipment or location used to store the garbage awaiting for the removal to the garbage collection tank.

(35) "Garbage Collection Tank" means an equipment or location used to store the garbage awaiting for the removal for disposal.

(36) "Vacancy" means a location without roof or covering constructions, which may be arranged for a well, swimming pool, sewage well, garbage collection tank or car park outside the building. It also means the space of constructions or building not higher than 1.20 m. above the grade with no roof or covering constructions above.

(37) "Public Place" means a location where is opened for or people are allowed to enter into or to use as a communication route, whether there shall be a claim for a remuneration or not.

(38) "Car Reverse Platform" means an equipment or machine to be installed inside or outside the building to facilitate a circulation of car or car reverse.

(39) "Engineer" means BMA official appointed by BMA Governor as an engineer.

(40) "Inspector" means BMA official appointed by BMA Governor as an inspector.

(41) "Waste Water" means water from the building, which flow through the sewage treatment system until it is qualified in accordance with the effluent quality standard or is qualified enough to drain away into the wastewater basin.

(42) "Sewage" means every kind of used liquid both with and without solid.

(43) "Dead Load" means the load of various building components including the load of various materials not the building structure but constructed or installed on the various building components forever.

(44) "Road Line" means a boundary of road and footpath as specified to be a public way.

(45) "Grease Trap/Interceptor" means an opening component of drainage channel fixed to be a fat trap.

(46) "Town Houses" means shop houses or row houses using for dwelling coupled with the front and rear vacancies between the fence or land lines and the building of each unit.

(47) "Duplex/Twin Houses" means buildings using for dwelling and constructed as two consecutive connected houses comprised of joint walls divining the building into a house. There shall be vacancies between the fence or land lines and the front, rear and lateral sides of building of each unit, and a specific entrance of each house separate from each other.

(48) "Drawing" means a diagram using for the building construction, modification, demolition, removal, utilization and change of building utilization and comprised of drawing showing particulars of essential parts, sizes, symbols, materials and various building utilization clearly enough for implementing the construction operation.

(49) "Crane" means a hoist machine comprised of various components e.g. mast/tower and tackle etc., whether or not there shall be a cantilever, used for lifting heavy things.

(50) "Mouth of Car Entrance/Exit" means a part of way for car entrance/exit adjoining to the public way.

(51) "Mouth of Car Exit" means the part of the way for car exit adjoining to the public way.

(52) "Mouth of Car Entrance" means the part of the way for car entrance adjoining to the public way.

(53) "Plan" means a drawing expressing the horizontal building elements.

(54) "Wall" means the vertical constructions to block the external sides or between building units to become a housing unit or separated unit.

(55) "Firewall" means an opaque wall made of fireproof materials with the qualification of well fire endurance not worse than a wall constructed with normal bricks coated both sides with cement not less than 18 cm. thick or 12 cm. thick in case of the reinforced concrete wall. There is no hole/gap for the passage of fire and smoke.

(56) "Supervisor" means a person responsible for management or supervision of building construction, modification, demolition or removal.

(57) "Operator" means a building owner or occupant himself carrying out a construction, modification, demolition or removal of building including a person accepting to do the same with or without remuneration thereof and a sub-contractor.

(58) "Designer" means a person responsible for the calculation, drawing and element stipulations used for a building construction, modification, demolition or removal.

(59) "Layout" means a diagram showing the site plan and boundaries of land and building to be constructed, modified, demolished, removed, utilized or to change the building utilization including the feature and boundaries of public place and building(s) in the adjoining land(s) in brief.

(60) "Partition" means the standing constructions to block and divide the internal building spaces into a room.

(61) "Floor" means a building slab where people can dwell or utilize within the boundary of beam or joist bearing the slap or within the said slab or within the boundary of building walls including veranda/porch or terrace.

(62) "Building Area" means the building area of every floor where people can dwell or utilize within the external edge of beam or within the said floor or within the external edges of building walls including veranda/porch or terrace.

(63) "Restaurant" means a building or any part thereof used for a food or beverage sale coupled with a servicing space inside or outside the building.

(64) "Article" means the Article pursuant to the Building Control Act B.E. 2522 and its amendment statute.

(65) "Garbage" means the garbage as defined pursuant to the Public Health Law.

(66) "Standpipe System" means the water pipe and accessories used for fire extinguishing.

(67) "Sewage Treatment System" means a process to make or develop the sewage to be qualified as wastewater including an outflow of wastewater draining away from the building.

(68) "Water Supply System" means a distribution system of water for utilizing and drinking.

(69) "Calculation Particulars" means the elements indicating the method of calculating the strength of materials, load bearing and resisting force of various building components.

(70) "Supplementary Calculation Particulars" means elements relating to the method of calculating engineering works in all fields.

(71) "Supplementary Drawing Particulars" means the detailed descriptions relating to the quality and categories of materials including the operating proceedings or procedures for the building construction, modification, demolition, removal, utilization or change of building utilization in order to be compliance with the drawing.

(72) "Demolition" means a destruction of buildingstructure components e.g. column, beam, joist or other structure elements as specified by the Ministerial Regulation.

(73) "Elevation" means a drawing showing the vertical elements of building exterior.

(74) "Section" means a drawing showing the vertical (as if it were cut) elements of building interior.

(75) "Impact Load" means the impetus exerted as a result of the collision of materials.

(76) "Wind Load" means the force exerted by wind on a structure.

(77) "Factory" means a building or any component thereof used as a factory pursuant to the Factory Law.

(78) "Theatre" means a building or any component thereof used as a location for the presentation of movies, drama, music or other entertaining shows and coupled with the objective of opening to the public audience on a regularbasic business whether there shall be a remuneration or not. (79) "Hotel" means a building or any component thereof used as a hotel pursuant to the Hotel Law.

(80) "Elevator" means an equipment or machine served to raise or lower passenger(s) or thing(s) between various building floors.

(81) "Fire Elevator" means a lift that the firefighter can control its utilization in case of fire.

(82) "Car Elevator" means a lift used for hoisting a vehicle to move to various building floors.

(83) "Riser" means a vertical distance of each stair step.

(84) "Tread" means a horizontal distance of each stair step.

(85) "Durable Materials" means materials in its normal condition not easily to be changed by water, fire or weather.

(86) "Fireproof Materials" means construction materials which are not fuel.

(87) "Entertainment Place" means a building or any component thereof used as the entertainment place pursuant to the Entertainment Law.

(88) "Acceptable Institute" means a government agent or juristic person with the objective of providing the engineering consultation where there is the Senior Engineer - pursuant to the Engineering Professional Law - who shall be a consultant and sign to certify a inspection result of engineering control work.

(89) "Building Components" means the building elements required to show the particulars relating to a calculation of load bearing and resisting force e.g. slab, beam, column and foundation etc.

(90) "Slope" means the vertical distance or rise comparing to the length dimension of base along the horizontal level or run.

(91) "Office" means a building or any component thereof used as a working place.

(92) "Pile" means a column driven into the soil or founded in the soil for bearing a building load and also means a concrete wall in various shapes founded in the soil for bearing the building load.

(93) "Stress" means the strength divided by the horizontal section area bearing the said load.

(94) "Roof" means a coverage on the top of building component for sunlight or rain protection and also means any structure or otherwise constructions built up to hold such coverage durably and stably.

(95) "Shop Houses" means 2 or more buildings constructed consecutively in the row and comprised of a joint wall to divide the buildings into a housing unit and mostly composed of non-fire-resistive materials.

(96) "Hall" means a building or any component thereof separated to be a specific space particularly for purpose of convention, assembly, party or various exhibitions, but excluding the space for common corridors inside the building e.g. lift hall/lobby, registration-counter lobby, guest lobby etc. (97) "Structural Steel/Nonsymmetric Shaped Steel" means steel manu-factured in a variety of shapes of sections for structural works.

(98) "Reinforced Steel" means the metal rods embedded in the concrete to increase its strength.

(99) "Wastewater Basin" means a public drainage pipeline, ditch/trench, canal, river, sea and public water resources.

(100) "Storehouse" means a building or any component thereof used for storing merchandises or things for the benefit of the building owner with a storage volume not exceeding 2,000 cu. m. For the height measurement to calculate the volume, it shall measure from the ground level of the said floor to the top of the wall.

(101) "Large Building" means a building constructed for using the building area or any component thereof used for dwell or carrying out the single or various activities with the total building in the same building area exceeding 2,000 sq. m. or exceeding 1,000 sq. m. for a building 15 or more ms in height. For the measurement of building height, it shall measure from the constructing grade to the floor of terrace roof. For a building with a gable roof or hip roof, it shall measure from the constructing grade to the highestpitched part of the wall of the top floor.

(102) "Extra-large Building" means a building constructed for using the building area or any component thereof used for dwell or carrying out the single or various activities with the total building area in the same building of 10,000 or more sq. m.

(103) "Car Park Building" means a building or any component thereof used for car parking of 10 or more parking lots or the 300-or-more-sqare-meter area for parking lots, travel/car route and car reserve space inside the building.

(104) "Car Park Building with Car-Removal Mechanism" means the constructions or framework or machinery built up or installed for using for car park or storage by the mechanism to park or to store a car including a platform or slab or structure constructed for parking one or more cars. Such platform or slab or structure including a car reverse platform may be non-removal or removable and may also be built up inside or adjoining to the car park building or installed outside the building independently.

(105) "Condominium" means the condominium pursuant to the Condominium Law.

(106) "Commercial Building" means the building used for a commercial or servicing or industrial purpose and using a machine with productive force commensurable not exceeding 5 horsepower.

(107) "Specific Building" means a building requiring an extra stability, durability and security standard for examples, as follows:

(a theatre, bleacher, convention hall, library, art gallery, national museum, or religious place;

(b) shipyard, dry dock or port for the vessel exceeding 100 gross tonnage;

(c) building or constructions exceeding 15 m. in height or bridge or building; or one span of roof structure exceeding 10 m. or the structural element which may be dangerous/harmful to the public;

(d) building storing combustible materials, explosives, poison/toxic-spread materials or radiation pursuant to the pertinent laws in such respect.

(108) "Departmental Store Building" means a building or any component thereof used for various merchandises display and sale with the 300-or-more-square-meter space by dividing the building components in accordance with the classification of merchandises or the space owner, whether the space division shall partition into a room or not. It also means the exhibition hall.

(109) "Public Building" means a building or any component thereof generally used for the assembly occupancy relating to the government activities, politics, education, social work, religion, entertainment, or commerce e.g. theatre, convention hall, hotel, hospital, educational institute, library, outdoor sport arena, indoor stadium, market, department store, shopping center, entertainment place, airport, tunnel, bridge, car park building, station, port, pier, graveyard, crematorium, religious place etc.

(110) "High Rise Building" means a building – for people to dwell or to use – 23 or more m. in height. For the measurement of building height, it shall measure from the constructing grade to the floor of terrace roof. For a building with gable roof or hip roof, it shall measure from the constructing ground level to the top of the wall of top floor.

(111) "Exhibition Hall" means a building or any component thereof being arranged for an exhibition or sale or promotion of merchandises including the temporary constructions for the aforesaid activities.

(112) "Dwelling Building" means a building where people normally dwell both in daytime and nighttime permanently or temporarily.

(113) "Co-dwelling Building" means a building or any component thereof used for many families' residences by dividing into a separate unit for each family and comprised of bathroom, toilet, passage/corridor, entrance/exit, and up and down passage or separate or joint elevator, and also means a dormitory.

(114) "Normal Brick" means a lump of earth with the thick-bar shape and well baked.

## CHAPTER 2

STANDARDS PROCEDURES AND CONDITIONS RELATING TO PERMIT GRANTING, NOTIFICATION PROCEEDINGS, CERTIFICATE AND REPLACEMENT CERTIFICATE ISSUANCES

Clause 6. Any person who will implement a construction, modification, demolition, removal, utilization or change of building utilization; modification or utilization of car par, car reserve and car entrance/exit for other purpose; or application for a extension of permit, a permit-replacement certificate, a replacement certificate or a permit transfer shall submit an application or a letter of notification to BMA Governor in accordance with the provisions in this Section.

The applicant or notifying person shall be a building owner or representative duly authorized by the building owner.

Clause 7 Any building owner who desires to apply for the following permits:

(1) For a construction, modification, or demolition, shall submit a permit application in accordance with the form stipulated in the Ministerial Regulation together with documents as specified in the said form;

(2) For a building removal, shall submit a permit application in accordance with the form stipulated in the Ministerial Regulation together with documents as specified in the said form.

The applicant shall submit documents relating to a layout, drawing, supplementary drawing particulars as specified in the form stipulated in the Ministerial Regulation in five sets with each application for a permit. For the permit application for construction, modification or removal of the building classified as a building with control of building utilization pursuant to the Building Control Law, BMA Governor may make an announcement to require the applicant to submit the submittal documents more than five sets but not exceeding seven sets.

For the permit application for a construction, modification or removal of public building or specific/special building or building mostly constructed of durable materials and fireproof materials, the calculation particulars and supplementary calculation particulars shall also be submitted in one set with the application in accordance with Sub-clause (1) and (2) above.

Clause 8 Any building owner who desires a building construction, modification, demolition, or removal without a submission of permit application shall proceed with a notification to BMA Governor, as follows:

(1) Notifying BMA Governor for his perusal in accordance with the form stipulated by BMA Governor and notifying the information as well as submitting the following documents:

(a) the name of a person who is responsible for building design and shall be a person acquiring the Senior Architecture Control Professional License pursuant to the Architecture Professional Law;

(b) the name of a person who is responsible for a building drawing and calculation and shall be a person acquiring the Senior Engineering Control Professional License pursuant to the Engineering Professional Law;

(c) the name of supervisor who shall be a person acquiring the architecture control professional license pursuant to the Architecture Professional Law and the engineering control professional license pursuant to the Engineering Professional Law;

(d) copies of licenses of persons specified in Items (a), (b) and (c);

(e) the letter of certification from each person specified in Item (a), (b) and (c) to certify that he is the designer of building, or a person responsible for the building drawing and calculation, or shall be a supervisor where the case may be in accordance with the form stipulated by BMA Governor together with the certification that the building construction, modification, demolition or removal shall be compliance with the provisions of the Building Control Law, the Ministerial Regulation and BMA Bye-Law issued under the provisions of the Building Control Law;

(f) the layout, drawing and its supplementary drawing particulars, calculation particulars and its supplementary calculation particulars of the building to be constructed, modified, demolished or removed, coupled with the certification of the person specified in Item (a) and (b) above that he is the designer and person responsible for the said building drawing and calculation;

(g) the commencing and complete dates of the operation so applied.

(2) If the notifying person has completely complied with Sub-clause (1) above together with the payment of fee for the inspection/review of drawing for the building construction or modification, BMA Governor shall then issue a receipt of letter of notification in accordance with the form stipulated by BMA Governor as an evidence of notification for the notifying person within the date of receiving the letter of notification. Then, the notifying person shall implement the building construction, modification, demolition or removal in accordance with the letter of notification from the date of having received the receipt of the letter of notification.

Clause 9 A static or dynamic penetration test for the building construction shall be implemented when BMA Governor has been notified and provided with the submittal documents, as follows:

(1) two sets of the layout indicating a location for the penetration test;

(2) two sets of the layout indicating the positions for the penetration test;

(3) the letter of certification from a engineer responsible for controlling the penetration test.

Clause 10 The layout, drawing, supplementary drawing particulars, calculation particulars and supplementary calculation particulars shall be made in a Thai language except only the number and symbol. The submittal documents shall be a printing materials, photocopies or ink writing or otherwise in accordance with BMA Notification and shall be compliance with the following standards and conditions:

(1) The scale, size, distance, load/weight and various calculating elements shall be in the metric system;

(2) The layout shall use a scale not less than 1 for 500 and indicate the feature of location and land lines and building lines applying for a permit for construction, modification, demolition, removal, change of building utilization, modification or utilization of a car park, car reverse and car entrance/exit for other purpose including the location or constructions to be used for a replacement of the former car park, car reverse and car entrance/exit, coupled with the following details:

(a) the expression of the external edge of the existing building (if any);

Final Report-Volume IV: Appendix

(b) the distances from the external edge of the building applying for a permit to the land line of every side;

(c) the distances between various existing buildings and building applying for a permit within the land line;

(d) the feature and boundary of public place and building(s) in the adjoining land(s) in brief with the compass/direction mark;

(e) the expression of the drainage pipeline from building to the public drainage channel or other drainage method together with an indication of the direction of water flow and slope in case of no public drainage channel for the application for the building construction, modification or removal;

(f) the expression of the level of the ground floor of the building and its relation to a level of the nearest way or public road and the ground level or grade;

(g) the layout for building removal indicating the layout of the existing building location and the layout of new location to where the building to be removed clearly.

The layout of building described in Article No. 4 except building, house, dwelling, shed, shop, raft, warehouse, office and other constructions where a person can dwell or use shall clarify the detailed elements in accordance with Items (a), (b), (c), (d), (e), (f) or (g) as may require for the building characteristic so applied.

(3) The drawing shall use a scale not less than 1 for 100 and indicate various features i.e. various floor plan, atleast-two-side elevations, crosswise and lengthwise sections, layout of joists supporting slabs of various floors and layout of foundation of the building applying for a permit for construction, modification, demolition, removal, change of building utilization or modification or utilization of car park, car reverse an car entrance/exit for other purpose, coupled with the following details:

(a) the drawing shall be provided with detailed features/elements of essential components, sizes, symbols, materials and various building utilization clearly enough for consideration in accordance with the Ministerial Regulation, BMA Bye-Law or Notification of Minister of Interior Ministry issued pursuant to the provisions of the Building Control Law;

(b) the drawing for building construction shall indicate various components of building to be constructed clearly;

(c) the drawing for building modification shall indicate existing building components and new modifying components thereof clearly;

(d) the drawing for building demolition shall indicate procedure, proceeding including safety thereof;

(e) the drawing for building removal shall indicate procedure, proceeding, stability and durability including safety thereof;

For the building comprised of the crosswise section or lengthwise section the width, length or height of which is exceeding 70 ms, the drawing may use a scale of smaller than 1 for 100 but not smaller than 1 for 250.

(f) a drawing for change of building utilization shall indicate the existing utilizing components and newchanging-utilization components clearly;

(g) a drawing for modification or utilization of car park, car reverse and car entrance/exit for other purpose shall indicate the existing building components and new replacement components clearly; or indicate various components of building to be constructed clearly in case of construction of building used for car park, car reverse and car entrance/exit to replace the former one.

The drawing of building described in Article No. 4 except building, house, dwelling, shed, shop, raft, warehouse, office and other constructions where a person can reside or use shall indicate detailed elements in accordance with Items (a), (b), (c), (d), (e), (f) or (g) as may require for the building characteristic so applied.

(4) The supplementary drawing particulars shall indicate details relating to quality and type of materials including operating procedures or proceedings for building construction, modification, demolition, removal, change of building utilization, or modification or utilization of car park, car reverse and car entrance/exit for other purpose;

(5) The calculation particulars shall be based on engineering element by calculating the material load and resisting force of various building components;

(6) The supplementary calculation particulars shall be based on various engineering elements by calculating the requirement of equipment and systems of building.

The person responsible for design or Clause 11 person responsible for design and calculation shall affix his signature together with a printed-letter handwriting on every page of layout, drawing, supplementary drawing particulars, calculation particulars and supplementary calculation particulars and shall specify the office or residence together with the stipulation of qualification of the said competent person in every set of layout, drawing, supplementary drawing particulars, calculation particulars and supplementary calculation particulars. Or, it may use a printing material and photocopies with the signatures and printed-letter-handwriting name(s) of the person responsible for design or the person responsible for design and calculation together with the stipulation of the aforesaid details instead.

In case of the person responsible for design or person responsible for design and calculation is the person acquiring a license to be either the architecture control professional or engineering control professional pursuant to the Architecture Professional Law or Engineering Professional Law respectively, the license number shall be specified.

Clause 12 When BMA Governor has received the application in accordance with Clause No. 7, the layout, drawing, supplementary drawing particulars, calculation particulars and supplementary calculation particulars (if any) shall be put into his consideration. When it is correctly compliance with the provisions of the Building Control Law, the Ministerial Regulations and BMA Bye-law issued pursuant to the Building Control Law, BMA Governor shall then issue a permit in accordance of the form stipulated in the Ministerial Regulation.

In case of an application for removing the building to the location where is in the jurisdiction of other local officer and BMA Governor has reviewed as described in the first paragraph and accepted the correctness, a permit shall be issued in accordance with the form stipulated in the Ministerial Regulation. The four sets of duplicate copies of documents reviewed and sealed together with one set of the calculation particulars and supplementary calculation particulars (if any) shall be sent to the local officer of the new location to where the building shall be relocated.

In case of BMA Governor having received documents granting the permit for building removal and duplicate copies including related submittal documents from the local officer, BMA Governor shall put into his consideration as described in the first paragraph and then accept the correctness, a permit shall be issued in accordance with the form stipulated in the Ministerial Regulation.

Clause 13 When a grantee of permit for construction, modification or removal of building – classified as a building with control of building utilization pursuant to the Building Control Law – or a notifying person in accordance with Clause No. 8 has completed the said building construction or modification or removal, the building owner or occupant shall submit a letter of request for a certificate to BMA Governor in accordance with the form stipulated by BMA Governor together with the documents specified in the said form.

When BMA Governor has received the letter as described in the first paragraph and reviewed that the building construction, modification or removal was correctly in compliance with the permit granted or the letter of notification received where the case may be, BMA Governor shall then issue a certificate in accordance with the form stipulated in the Ministerial Regulation.

Clause 14 If an owner or occupant of building not classified as a building with control of building utilization desires to utilize the building for business classified as being under control of building utilization or the owner or occupant of building classified as the building with the control of its utilization desires to change the building utilization to another business where the case may be, the building owner shall file an application with BMA Governor for changing the building utilization in accordance with the form stipulated in the Ministerial Regulation together with documents as specified in the said form or notify in writing to BMA Governor pursuant to the provision of Article No. 39 bis in accordance with the form stipulated by BMA Governor together with documents as specified in the said form where the case may be.

When BMA Governor has received the letter of request or letter of notification as described in the first paragraph and then reviewed and accepted the correctness, a permit shall be issued in accordance with the form stipulated in the Ministerial Regulation or a receipt of letter of notification is to be issued in accordance with the form stipulated by BMA Governor where the case may be.

Clause 15 For an application for a certificate of a partial use of building classified as a building with control of building utilization, it shall be complied with the followings:

Before the building completion, the building owner who desires to apply for a partial building utilization shall file BMA Governor with an application or notify his requirement in writing to BMA Governor and propose a plan of part-to-part building utilization together with the application or letter of notification according to the form stipulated by BMA Governor. Detailed clarification of partial utilization in accordance with the proposed plan shall be described clearly in the drawing and supplementary drawing particulars so applied. It shall be deemed as additional required details other than the details required to clarify in accordance with the objective of application submitted and be in the form stipulated in the Ministerial Regulation or the form stipulated by BMA Governor where the case may be. Each building component so applied itself shall properly be completed, especially various systems to be provided pursuant to the law e.g. fire prevention system, electricity system, water-supply system, drainage system, garbage and refuse disposal system, public utility system, sewage treatment system, car park, car reverse and car entrance/exit etc. In addition, it shall indicate security measure for the user(s) of each building component so applied for utilization too. When BMA Governor has accepted the correctness, a permit for the partial utilization so applied shall be issued in accordance with the form stipulated in the Ministerial Regulation or as notified pursuant to the provision of Article No. 39 bis in accordance with the form stipulated by BMA Governor.

For the building beforehand acquired a permit or notified pursuant to the provision of Article No. 39 bis, the building owner who desires the partial building utilization shall submit an application as described in the second paragraph.

When the construction of each building component has been competed, the permit grantee or notifying person shall file an application for a certificate with BMA Governor in accordance with the form stipulated by BMA Governor.

When BMA Governor has reviewed and accepted the correctness, a certificate of the partial utilization of the said building component shall be issued in accordance with the form stipulated in the Ministerial Regulation.

Clause 16 If the building owner or occupant being required to provide a space or constructions used as a car park, car reverse and car entrance/exit pursuant to the Building Control Law - desires to modify or utilize the said car park, car reverse and car entrance/exit for other purpose and to build up a space or constructions to be use as the car park, car reverse and car entrance/exit to replace the former one pursuant to the Building Control Law, the building owner or occupant shall file with BMA Governor a permit application in accordance with the form stipulated in the Ministerial Regulation together with documents specified in the said form.

The second and third paragraph of Clause No. 7 shall be applied to the permit granting described in the first paragraph particularly the submittal documents relating to the layout, drawing, supplementary drawing particulars, calculation particulars or supplementary calculation particulars mutatis mutandis.

When BMA Governor has received the application as described in the first paragraph, the proceedings shall be compliance with the first paragraph of Clause No.12. When BMA Governor has accepted the correctness, a permit is to be issued by BMA Governor according to a form stipulated in the Ministerial Regulation.

Clause 17 The determination of the limitation of a permit for building construction or modification or receipt of letter of notification pursuant to Article No. 39 bis shall be proportionate to the size of the building area for construction or modification, as follows:

(1) the building with the total area less than 10,000 sq. m., the limitation of permit shall be not exceeding one year;

(2) the building with the total area of 10,000 sq. m. but not more than 50,000 sq. m., the limitation of permit shall be not exceeding two years; and

(3) the building with the total area more than 50,000 sq. m., the limitation of permit shall be not exceeding three years.

In case of the building construction or modification not completed within the permit limitation, an extension of permit limitation shall be in line with the procedures specified in Clause No. 18.

Clause 18 Any person who desires to extend the limitation of permit or receipt of letter of notification pursuant to the provision of Article No. 39 bis shall, before the expiry of the permit or receipt of letter of notification, submit an application for the extension in accordance with the form stipulated in the Ministerial Regulation provided that the criteria and conditions for the extension shall be compliance with those stipulated by BMA.

Clause 19 In case of a loss or destroy or defect of permit or certificate in the important essence thereof, the permit or certificate grantee shall, within 15 days after having acknowledged receipt of the loss or destroy or defect, submit to BMA Governor an application for issuing a replacement permit or replacement certificate in accordance with the form stipulated in the Ministerial Regulation together with documents specified in the said form.

When BMA Governor has received the application described in the first paragraph and then reviewed and if accepted the correctness, BMA Governor shall issue a replacement permit or replacement certificate to the applicant.

The replacement permit or replacement certificate where the case may be, the red seal with the word of "Replacement Certificate" shall be affixed thereto coupled with the issuing date of the replacement and the affixation of BMA Governor's signature.

In case of a receipt of letter of notification pursuant to the provision of Article 39 bis, the proceedings shall be complied with the foregoing procedures.

Clause 20 Any permit grantee who desires to transfer the permit for building construction, modification, demolition, removal or change of building utilization or receipt of letter of notification pursuant to the provision of Article No. 39 bis to another person shall file with BMA Governor an application in accordance with the form stipulated in the Ministerial Regulation together with submittal documents, as follows:

(1) For the permit or receipt of letter of notification that the building construction, modification, demolition,

removal or change of building utilization not implemented, it requires for the attachment of the submittal documents as described in the form specified in the Ministerial Regulation;

(2) For the permit or receipt of letter of notification being under construction, the applicant shall submitted the attachment of the submittal documents as described in the form specified in the Ministerial Regulation and the documents relating to the property transfer of building components completed pursuant to the pertinent law. In case of the under-construction building comprised of components different from the layout, drawing and supplementary drawing particulars acquiring a permit or receipt of letter of notification including the procedures or conditions specified by BMA Governor in the permit or receipt of letter of notification, a letter of verification shall be issued by the transferee that the transferee agrees to be responsible for the alteration of wrongly constructed component(s) to be in line with the drawing and conditions specified in the permit or receipt of letter of notification.

When BMA Governor has reviewed and accepted the correctness, BMA Governor shall issue a notifying letter of approval of transfer of permit or letter of notification to the transferring applicant by affixing the red seal with the word of "Transferred" together with a stipulation of name of the transferee and transfer-approval date therein.

Clause 21 A permit application, permit or replacement certificate shall be in the form stipulated in the Ministerial Regulation issued under the Building Control Law.

A letter of notification and form for receipt of letter of notification shall be in the form stipulated by BMA Governor.

#### CHAPTER 3

## CLASSIFICATIIONS OF BUILDINGS

Clause 22 For a building not constructed mostly with durable materials or fireproof materials, a kitchen shall be separated as a specific component outside the building. If a kitchen is incorporated into the building, it shall require to have a floor and wall made of durable materials that are fireproof materials. If a partition or ceiling thereof is not made of durable materials that are fireproof materials, it shall require to be sheathed with fireproof materials.

Clause 23 A building mostly not constructed with durable materials or fireproof materials shall be constructed not exceeding 2 stories.

Clause 24 The principal structure, stairway and wall of building of 3 or more stories, theatre, convention hall, factory, hotel, hospital, library, department store, market, large building, entertainment place pursuant to the Entertainment Law, airport or tunnel shall be made of durable materials that are fireproof materials.

Clause 25 A fireplace for a commercial or industrial purpose shall be comprised of fireplace wall made of fireproof materials and installed inside the building where the slab, wall, roof structure, roofing materials/roof covering, ceiling and its accessories (if any) are made of fireproof materials. For the smoke occurred, it is required to provide a dirt, smell or toxic-gas disposal system before its exhaust ventilation to the atmosphere.

Clause 26 A duplex or twin houses shall provide the stairway, wall and principal structure composed of durable materials or fireproof materials mostly.

Clause 27 A residential dormitory shall provide a living room with a size of not less than 3 ms wide and space thereof not less than 12 sq. m. Its stairway, wall and principal structure shall be composed of durable materials or fireproof materials mostly.

Clause 28 The consecutively constructed shop houses or row houses or town houses shall provide the firewall for each interval of not more than 5 units and the firewall shall be constructed consecutively from the lowest floor level up to the terrace roof floor level. In case of a roof, it shall provide the firewall higher than the roof not less than 30 cm. along the inclination of roof.

Clause 29 Roofing materials or roof covering shall be made of fireproof materials except the building – located more than 20 ms far away from the other building or the public way – which it may use non-fire-resistive materials.

Clause 30 A elevator car or the elevator lobby shall be not less than 1.5 m. in width and be made of fireproof materials.

Clause 31 The town houses shall provide the fence in front and at the rare of the house and the dividing line between each unit of row houses.

Clause 32 The building under control of the law relating to the provision of facilities for handicap shall provide the facilities for the disabled people relating to the building access, ramp, door, stairway, elevator, bath room - toilet and car parking to be compliance with the pertinent law in such respect.

Clause 33 A bridge for vehicles shall have a runway not less than 3.5 m. in width and footpath on both sides not less than 0.5 m in width for each. The inclination thereof shall be not exceeding 10 per 100 and equipped with a stable and durable handrail along through the whole length of both sides of bridge.

Clause 34 A signboard or constructions for affixing or installing a signboard at the building shall be deemed as a building component thereof and shall not shield off the ventilation passage, windows, doors or fire escape route.

Clause 35 A signboard affixed to the wall of building adjoining to the public way can project outward but not encroach on the public place. The lowest part of signboard shall be not less than 3.25 m. from a footpath level and not higher than the building height.

Clause 36 The height of signboard directly installed into the earth ground shall not be exceeding a distance measured from the signboard installation location to the middle point of public road provided that it shall be not higher than 30 m. and not longer than 32 m. and not less than 4 m. far away from the land line of the other owner.

Clause 37 All things erected for fixing or installing the signboard shall be made of fireproof materials.

CHAPTER 4

## STAIRWAY AND FIRE STAIR

Clause 38 For a dwelling building, if it requires a stairway, it shall provide at least one stairway; a width of stair not less than 90 cm., each flight of stair not higher than 3 m.; a riser not higher than 20 cm., and a tread width – after the deduction of the overlapping part of stair step – not less than 22 cm. The width and length of the landing platform of the stairway shall be not less than the width of stair.

If a stairway is higher than 3 m., it shall provide one intermediate platform for every stair flight of 3 m. or lesser in height and its width and length shall be not less than the width of stairway. A vertical distance from a stair step or landing platform to the lowest building component higher above shall be not less than 1.90 m. in height.

Clause 39 For a theater, convention hall, factory, hotel, hospital, library, department store, market, entertainment place pursuant to the Entertainment Law, airport, mass-transportation station, constructions or modifying constructions of more than one story, it shall, in addition to a normal stairway, provide at least another one specific fire escape route and a corridor access to the said fire escape route without any obstruction thereof.

For a public building comprised of one or more basements, it shall, in addition to a normal stairway, provide at least another one specific fire escape route.

Clause 40 A building with at least two basements shall, in addition to a normal stairway, provide at least another one specific fire escape route.

Clause 41 The fire stair shall be made of fireproof materials and durable materials and its width shall be not less than 90 cm. but not more than 150 cm.; its riser not higher than 20 cm.; its tread not less than 22 cm. in width; the width of the intermediate platform not less than the width of the fire stair; and its handrail of 90 cm. in height. It is prohibited to construct the fire stair in a shape of spiral staircase.

The width of landing platform of fire stair shall be not less than the width of the fire stair and another side not less than 1.50 m. in width.

In case of using a ramp for fire escape route in stead of the fire stair, the inclination of the said fire-escape ramp shall be not exceeding 12 per cent.

Clause 42 The fire stair inside a building not a high rise building shall be not less than 90 cm. in width and surrounded with the opaque wall made of a fireproof materials and durable materials except a ventilation outlet and fire stair door. Each floor shall provide the ventilation outlet opening to the exterior of building with the total area of not less than 1.40 sq. m. provided that it shall provide a sufficient lighting both in a daytime and nighttime.

For the fire stair inside the extra-large building where cannot make an opening for the ventilation outlet as described in the first paragraph, it shall be equipped with the pressurization system inside the fire staircase. The pressurizing rate shall be not less than 38.6 Pascal Cubic upon the operation of pressurization system, which it shall automatically operate in case of fire. The fire stair down or up to the ground of such building shall be in a position easily to access to the exterior of such building. Clause 43 For the row houses or town houses of not more than 4 stories or not higher 15 m. from the road level, the fire escape stair may be in a vertical position but it shall provide the 60-cm-wide landing platform for each floor - and a distance of each stair step not more than 40 cm. Such fire escape stair shall be installed in the vacancy of walkway at the rear of the building provided that a last step thereof shall be not higher than 3.50 m. from the grade/ground level.

Clause 44 A position for installing the fire stair except the building described in Clause No. 43, shall provide a distance not exceeding 10 m. from the fire stair door to the door of the last room at the dead-end corridor.

A distance along the corridor to the fire stair door shall not be exceeding 60 m.

In case of the fire stair inside the building, it shall be installed from the top floor or roof terrace to the ground floor and to the second floor in case of the fire escape stair outside the building.

Clause 45 The fire stair door shall be made of fireproof materials - not less than 80 cm. in width and not less 1.90 m. in height - and have fire-door rating of not less than one hour and be opened by pushing out to the fire staircase only. For the fire stair door of the roof terrace, ground floor and evacuating floor for the fire escape to the exterior of building, it shall be opened by pushing out from the fire staircase and equipped with an automatic-door-closure mechanism. The fire door or evacuating route to the fire stair shall not be comprised of a doorstep or threshold or doorsill.

Clause 46 It shall provide the iridescent sign or lighting electric sign with emergency reservation system indicating the escape route to the fire stair to be installed at regular spans along the corridor in front of escape route to the fire stair and escape route from the fire stair to the exterior of the building or to the refuge floor comprised of the continuous fire escape route. Such sign shall indicate a statement of "Fire Exit" with a letter size not less than 15 cm. in height or lightening symbol meaning "Fire Exit" clearly.

## CHAPTER 5

#### BUILDING LINES AND VARIOUS DISTANCES

Clause 47 The town houses not adjoining to the side of public way shall have the front road not less than 6 m. in width for a common use .

Clause 48 The town houses comprised of one lateral side adjacent to the other person's land line shall have the vacancy not less than 2 m. in width from the sides of two houses to the other person's land line except the town houses constructed to replace the former building and comprised of the area not more the area of former building and not higher than 12 m.

Clause 49 The building height shall be not exceeding than twice of the horizontal distance by measuring from any point thereof perpendicular to the opposite side of public road nearest to the said building

In case of a building located adjoining to the side of or not more than 100 m. far away from the public road not less than 80 m. in width and comprised of the entrance/exit way from the building to the said public road, the building height

shall be calculated from the width of the widest public road as a basic.

Clause 50 For the construction or modification of building near the public road less than 6 m. in width, its building line shall be shorten at least 3 ms far away from the middle of the public road. There shall be with no building component thereof encroaching on the said shortening boundary line except the fence or dividing wall not higher than 2 m.

For the construction or modification – near the public road – of the building higher than 2 stories or 8 m., large building, row houses, shop houses, commercial building, factory, public building, warehouse, signboard or constructions for fixing or installing the signboard except the dwelling building not higher than 3 stories or 10 m. with its total area not exceeding 1 000 sq. ms, it shall provide the shorten distance, as follows:

(1) if the public road is not less than 10 m. in width, the building line shall be shorten at least 6 m. far away from the middle of the public road.

(2) if the public road is 10 m. in width but not more than 20 m., the building line shall be shorten at least 1/10 of the width of public road far away from the line of public road.

(3) if the public road is wider than 20 ms, the building line shall be shorten at least 2 m. far away from the line of public road.

Clause 51 For the land at the corner of public roads 3 or more m. in width but not more than 8 m. coupled with a cusp less than 135 degrees, the fence or boundary dividing wall - with a distance not less than 4m. - shall be sliced diagonally and its diagonal sliced line shall cause the equal angles with the lines of public roads.

It is prohibited to construct the fence, wall or other building component encroaching on the land particularly the diagonally sliced area.

Clause 52 Each building or unit shall provide the vacancy to be specified as follows:

(1) A dwelling building shall provide the vacancy not less than 30/100 of the land area;

(2) The row houses, shop houses, commercial building, factory, public building or otherwise buildings not used for dwelling provide the vacancy not less than 10/100 of the land area. However, if the said building is also used for dwelling, the vacancy specified in Sub-clause (1) shall also be provided;

(3) The row houses or shop houses not higher than 3 stories and not adjoining to the side of public way shall provide of the vacancy in front of the building not less than 6 m. in width or 12 m. in width if higher than 3 stories.

The aforesaid vacancy may jointly be used with the vacancy of other row houses or shop houses.

(4) The row houses or shop houses shall provide the rear vacancy not less than 3 m. in width in order to be connected with each other without any building component encroaching on the said space. In case of the back-to-back

buildings, the rear vacancy not less than 6 m, width shall be provided.

(5) The row houses or shop houses with their side lines near the other person's land line shall provide the lateral vacancy not less than 2 m. in width between the row houses or shop houses and the other person's land line except the row houses or shop houses constructed to replace the former building with the area not exceeding the area of the former one and not higher than 15 m.

(6) The commercial building, industrial factory, warehouse, public building, building higher than 2 stories or higher than 8 m. - except a dwelling building not higher than 3 stories and not adjoining to the side of public way – shall provide the front vacancy not less than 6 m. in width.

The building described in the first paragraph higher than 3 stories shall provide the vacancy not less than 12 m. in width.

The vacancies described in the first and second paragraphs shall have the length of the continuous connecting space not less than 1/6 of the length of parameter of external building line, which it may also include the lateral vacancy connecting to the front vacancy. The said vacancy shall be connected to the internal road not less than 6 m. in width using as an egress to the public way. If it is a road passing through under the building, the net height of the underpass shall be not less than 5 m.

The aforesaid vacancies may be used jointly with the vacancies of the other buildings.

(7) The commercial building, industrial factory and public building shall provide the vacancy without any covering thing to be the connected walkway at the rear of the building at least 2 m. in width by clarifying the said location evidently.

The vacancies described in the first paragraph shall not construct building, fence, wall or other constructions nor arrange for the well, swimming pool, garbage tank or garbage collection tank or other things to obstruct the common walkway.

Clause 53 A building adjoining to the side of public way not requiring to provide the vacancies as described in Sub-clause Nos 52 (3) and 52 (6) shall be comprised of the following characteristics:

The building line close to the line of public way shall be longer than 1/8 of the length of parameter of external building line provided that the aforesaid building line close to the public way shall be not more than 20 m. far away from the public way.

In case of row houses or shop houses, the front side of every building unit shall be close to the line of public road and its building line shall be not more than 20 m. far away from the public way.

Clause 54 For the building side close to the private land, its opening, door, window, ventilation outlet or the edge of terrace below the second floor or not higher than 9 m. shall be not less than 2 m. far away from the land line and not less than 3 m. for the third or upper floor or higher than 9 m.

Clause 55 The building not higher than 15 m. shall provide the vacancy around the building except for the dwelling house with the space not exceeding 300 sq. m.

The building higher than 15 m. shall provide at least two-meter vacancies around the building.

The vacancies described the first and second paragraphs cannot be used jointly with the vacancy of another building except that it shall be jointly used with the vacancy of the high rise building or extra-large building.

Clause 56 For a dwelling house with the space not exceeding 300 sq. m., its wall without any opening can be constructed less than one meter far away from the land line. However, if it is less than 0.50 meter, a letter of consent from the owner of the adjoining land at that side shall be obtained.

Clause 57 Between the lateral line of row houses or shop houses constructed for ten units or with the total length of 40 m. - measuring from the center point of the first column to the center point of the last column, it shall provide the vacancies between the lateral lines of the row houses or shop houses not less than 4 m. and be the passage through out the whole depth of the row houses or shop houses in order to be connected with the rear vacancy.

For the row houses or shop houses continuously constructed less than 10 units or with the total length of less than 40 m. - measuring from the center point of the first column to the center point of the last column - but comprised of the vacancies between the lateral lines of the row houses or shop houses less than 4 m. in width, it shall not be deemed as the vacancy between the lateral lines of the row houses or shop houses but it shall be assumed that the said row houses or shop houses are consecutively constructed in the same row.

The vacancies described in the first and second paragraphs cannot construct any building, fence, wall or otherwise constructions nor be arranged for the location of well, swimming pool, garbage tank or garbage collection tank or otherwise to become an obstruction against the common walkway.

Clause 58 The warehouse or storage house with the total building area of every floor of 100 sq. m. but not

exceeding 500 sq. m. shall provide the vacancies of at-leasttwo sides not less than 6 m. far away from the lines of the land used for constructing the building and its length shall be totally not less than a half of the building parameter. For the other sides, it shall be provided with the vacancies not less than 3 m. far away from the land lines and if the vacancies less than 5 m. far away from the lines of the land used for the building construction, the building wall to be constructed shall be a fire wall.

The warehouse or storage house with the total building area of every floor of 500 sq. m, shall provide the vacancies of at-least-two sides not less than 10 m. far away from the line of the land used for constructing the building and its length shall be totally not less than a half of the building parameter. For the other sides, it shall provide the vacancies not less than 5 m. far away from the other landlines.

Clause 59 The factory with the total operating area of every building floor of 100 sq. m. but not exceeding 500 sq. m. shall provide the vacancies of two sides not less than 3 m. far away from the lines of the land used for constructing the building. The walls of the said two sides shall be the opaque walls made of bricks or concrete except the fire door with the size of not exceeding 1.00 X 2.00 m. for every span of not less than 40 m. For the remaining sides, it shall provide the vacancies not less than 6 m.

The factory with the total operating area of every building floor of 500 sq. m. but not exceeding 1,000 sq. m. shall provide the vacancy of every side not less than 6 m. far away from the lines of the land used for constructing the building.

The factory with the total operating area of every building floor exceeding 1,000 sq. m. shall provide the vacancy of every side not less than 10 m. far away from the lines of the land used for constructing the building.

## CHAPTER 6

# TYPES AND NUMBERS OF BATHROOMS AND WATER CLOSET ROOMS

Clause 60 For a building where people can dwell or use, each building shall provide a minimum bathroom and water closet room as stipulated in the following table:

Types or Classifications of Buildings	Water Closet Room		Bathroom	Washbowl
	Toilet	Urinal		
1. For every unit of dwelling building shall provide	1	-	1	1
2. For a shop house or row house used for either commercial or dwelling purpose or town house,				
<ul><li>(a) the total space of each housing unit not exceeding 200 sq. m. shall provide</li></ul>	1	-	-	-
(b) the total space of each housing unit exceeding 200 sq. m. or more than three stories in height shall provide	2	1	1	-
3. For a factor, every 400 sq. m. operating space shall provide:				
(a) for men and	1	1	1	1

	Types or Classifications of Buildings	Water Closet Room		Bathroom	Washbowl
		Toilet	Urinal		
3.	For a factor, every 400 sq. m. operating space shall provide:				
(b)	for women	2	-	1	1
	For the factor space exceeding 1,200 sq. m., it shall be reduced to the half of number stipulated herein.				
4.	For each hotel guest room shall provide	1	-	1	1
5.	For each condominium unit shall provide	1	-	1	1
6.	For a dormitory, every 50 sq. m. building area shall provide	1	-	1	1
7.	For an assembly hall, theatre and hall, each of 200 sq. m. building area or every 100 people as stipulated for the building utilization, whichever bigger number shall be a determination basis, shall provide:				
(a)	for men and	1	2	-	1
(b)	for women	2	-	-	1
8.	For an educational institute except the kindergarten, every 300 sq. m. space of classroom or every 50 students shall provide:				
(a)	for masculine education institute	2	2	-	1
(b)	for feminine education institute	3	-	-	1
(c)	for unisex education institute				
	for masculine pupil or student	1	1	-	1
	for feminine pupil or student	1	-	-	1
9.	For an office, every 300 sq. m. working space shall provide:				
(a)	for men and	1	2	-	1
(b)	for women	2	-	-	1
	For the working space exceeding 1,200 sq. m., it shall be reduced to the half of number stipulated herein.				
10.	For a restaurant, every 200 sq. m. space for a dining table shall provide:				
(a)	for men and	1	2	-	1
(b)	for women	2	-	-	1
	For the dining-table space exceeding 900 sq. m., it shall be reduced to the half of number stipulated herein.				
11	For a commercial building, every 200 sq. m. building area shall provide				
(a)	for men and	1	2	-	1
(b)	for women	2	-	-	1

	Types or Classifications of Buildings	Water Closet Room		Bathroom	Washbowl
		Toilet	Urinal		
	For the building area exceeding 1,200 sq. m., it shall be reduced to the half of number stipulated herein.				
12.	For a warehouse, every 1,000 sq. m. area shall provide	1	1	-	1
	For the area exceeding 3,000 sq. m., the owner should provide as appropriate.				
13.	For a nursing home/hospital pursuant to the Hospital Law, every 100 sq. m. building area shall provide				
(a)	for men and	2	2	-	1
(b)	for women	2	-	-	1
	For the building area exceeding 300 sq. m., it shall be reduced to the half of number stipulated herein.				
14.	For an entertainment place pursuant to the Entertainment Law, every 200 sq. m. building area shall provide				
(a)	for men and	1	2	-	1
(b)	for women	2	-	-	1
	For the building area exceeding 400 sq. m., it shall be reduced to the half of number stipulated herein.				
15.	For a mass-transportation station, every 200 sq. m. building area shall provide:				
(a)	for men and	2	4	-	1
(b)	for women	5	-	-	1
16.	For a public car park building, every 1,000 sq. m. building area (or 50 cars) shall provide				
(a)	for men and	1	1	-	1
(b)	for women	1	-	-	1
	For the dining-table space exceeding 3,000 sq. m., it shall be reduced to the half of number stipulated herein.				
17.	For a stadium, every 200 sq. m. building area or every 100 people whichever bigger number shall be a determination basis shall provide:				
(a)	for men and	1	2	-	1
(b)	for women	2	-	-	1
18.	For a market, every 200 sq. m. building area shall provide:				
(a)	for men and	1	2	-	1
(b)	for women	2	-	-	1
19.	For a temporary building, every 200 sq. m. building area (or 50 people) shall provided	1	-	-	-

The water closet room and bathroom may be gathered into the same room. The number of water closet room and bathroom stipulated the above table shall be a minimum requirement to be provided even if the building area or number of people is less than as stipulated above.

If the building area or number of people is in excess of as stipulated above, it shall provide the additional water closet room and bathroom in accordance with the rate stipulated. If any exceeding amount is less than the half as stipulated above, it shall be ignored but if a half or more, it shall be regarded as a full amount.

For any type or classification of buildings not stipulated in this table, the characteristic of the building utilization shall be considered and compared by using the number of water closet room, bathroom and washbowl in the above table as a determination basis.

Clause 61 The separate water closet room and bathroom shall have the size of space of each room not less

than 0.9 sq. m. and not less than 0.9 m in width. If the water closet room and bathroom are gathered into the same room, the internal room space shall be not less than 1.50 sq. m.

The water closet room and bathroom shall provide a ventilation outlet not less than 10 per cent of the room area or sufficient ventilation fan. The vertical line from the ground level to the top of partition or lowest ceiling shall be not less than 2 m.

Clause 62 The water closet room shall be the toilet odorless and cleaning sewage by water.

## CHAPTER 7

LIGHTING, VENTILATION, DRAINAGE AND GARBAGE AND SEWAGE DISPOLSAL SYSTEMS

Clause 63 A lighting within various building components, a density of lighting shall be specified in the following table:

No.	LOCATION (TYPES OF UTILIZATION)	LIGHTING DENSITY UNIT (LUX)
1.	A car park and car park building	100
2.	A corridor within a common dwelling building	100
3.	A guest room in the hotel or common dwelling building	100
4.	A bathroom and water closet room of a common dwelling building, hotel, school and office.	100
5.	A theatre (surrounding area of audience seat when there is no show)	100
6.	A corridor within a hotel, office, hospital, school or factory	200
7.	A mass transportation station (passenger accommo-dation area)	200
8.	A factory	200
9.	A department store	200
10.	A market	200
11.	A bathroom or water closet room of a theatre, hospital, mass-transportation station, department store and market	200
12.	A library or classroom	300
13.	A conference room	300
14.	Velocity of working place of office building	300

The other place not stipulated in this table shall use the nearest lighting density by comparing the similar characteristic of the place and lighting density as specified in the table.

Clause 64 A ventilation inside the building shall be provided with a natural or mechanic ventilation.

The mechanic ventilation shall apply to any room in the building characteristic whatsoever by providing a mechanism - circulating air vent - to work at all time when the room is occupied/utilized in order to cause the ventilation rate as stipulated in the following table:

No.	LOCATION (TYPES OF UTILIZATION)	The ventilation rate not less than number of times of the volume of the room per one hour
1.	A bathroom or water closet room of the dwelling or office	2
2.	A bathroom or water closet room of the public building	4

No.	LOCATION (TYPES OF UTILIZATION)	The ventilation rate not less than number of times of the volume of the room per one hour
3.	A underground car park	4
4.	A factor	4
5.	A theatre, commercial building or department store	4
6.	A food and drink shop	7
7.	An office	7
8.	A guest room in a hotel or condominium	7
9.	A kitchen of dwelling	12
10.	A kitchen of food and drink shop	24
11.	A passenger lift or fire-fighter lift	30

For the kitchen of the food and drink shop, if the appropriate ventilation covering the source causing a favor, smoke or gas to be exhausted is provided, the ventilation rate of other component of the said kitchen may be less than the rate stipulated in the table provided that it shall not be less than 12 times of the volume of the room in one hour.

The other place not stipulated in this table shall use the ventilation rate by comparing the similar characteristic of the place as specified in the table.

Clause 65 The position of inlet vent shall be far away from the air-pollution resource or outlet vent not less than 5 m. and not less than 1.5 m in height from the grade.

Clause 66 A vent inlet and outlet by mechanism and air conditioning by machine shall not cause any annoyance or nuisance to the neighborhood.

Clause 67 The ventilation inside the building provided with an air-conditioning system shall be comprised of the following characteristics:

(1) The inlet vent into the air conditioning area or air exhausting through the outlet vent from the same shall not be less than the rate in accordance with the following table:

No.	LOCATION	Cu. m. / hrs / sq. m.
1.	A department store	2
2.	A factory	2
3.	An Office	2
4.	A massage place	2
5.	A business floor of bank	2
6.	A guest room of hotel or condominium	2
7.	An operation room	2
8.	A barber shop	3
9.	An indoor stadium	4
10.	A theatre (audience set area)	4
11.	A classroom	4
12.	A fitness center	5
13.	A beauty saloon	5
14.	An assembly room	6
15.	A bathroom and water closet room	10
16.	A food and drink shop (dining room)	10
17.	A night club or bar or dancing hall	10
18.	A kitchen	30

No.	LOCATION	Cu. m. / hrs / sq. m.
19.	A hospital	
	- ward	2
	- operation room or labor room (LR)	8
	- I.C.U., C.C.U., and emergency room (ER)	5

For the kitchen of the food and drink shop, if the appropriate ventilation covering the source causing a favor, smoke or gas to be exhausted is provided, the ventilation rate of other component of the said kitchen may be less than the rate stipulated in the table provided that it shall not be less than 15 cu. m. per sq. m. and per one hour.

The other place not stipulated in this table shall use the ventilation rate by comparing the similar characteristic of the place as specified in the table.

(2) The cooling medium bodily harmful or easily combustible is prohibited to use with the air-conditioning system using the cooling medium directly;

(3) For the air-conditioning system by water, it is prohibited to directly join the water pipe for the airconditioning system with the water distributing pipe;

(4) The air duct of the air-conditioning system shall be comprised of the following characteristics:

(a) The air duct, covering material and internal material shall be non-combustible and not be a component producing smoke in case of fire;

(b) Any component of the air duct installed through the firewall or fireproof building slab shall install a selfclosing sealed fire stop valve with the automatic operation system when the temperature is exceeding 74 Celsius degree and the fire stop valve shall contain the fire resistant rate not less than one and half hour;

(c) The common walkway, stairway, stairwell, elevator shaft of the building shall be prohibited to use as a component of air-flow pipe or air-return pipe except the vacant area between the ceiling and the upper slab or roof comprised of the ceiling with the fire resistant rate not less than 1 hour;

(5) The air circulation of air-conditioning system shall be comprised of the following characteristics:

(a) A manual switch of fan of air-circulation system shall be installed in a suitable place and reachable to turn off immediately in case of fire.

(b) For the air-conditioning system with an aircirculating at the rate of 50 or more cu. m. per minute, a smoke detector or fire detection system with an efficiency not less than the smoke detector, which it is able to force its switch to cease its operating system automatically

Clause 68 A high rise building and extra-large building comprised of vertical openings or series of openings of 2 or more floors and not surrounded by walls shall provide a smoke control system and smoke exhaust system operating automatically in case of fire. Clause 69 A building constructed or modified shall provide sufficient and appropriate rainwater drainage.

The rainwater drainage from the building may be discharged to the wastewater basin directly.

In case of providing a drain for the drainage to the wastewater basin, it shall be laid to a gradient not less than 1 per 200. If it is a sealed drain, its internal diameter shall not be less than 10 cm. and shall be comprised of a chamber for the drainage inspection placed at every junction (turning corner) and every interval not more 12 m. If the internal diameter of sealed drain is 60 or more cm., such inspection chamber shall be placed at every junction and every interval not more than 24 m. In case of other classifications of drain, its internal width of the uppermost-edge shall not be less than 10 cm. and shall be comprised of the wastewater inspection chamber located at the place where the official easily access for the inspection.

Clause 70 The following building classifications and characteristics shall provide a drainage and sewage treatment system efficiently and adequately for the treatment of sewage from the building to become a wastewater qualified in accordance with the standard stipulated in the Ministerial Regulation issued pursuant to the Building Control Act before draining away to the wastewater basin:

(1) The Class A building

(a) A condominium pursuant to the Condominium Act comprised of the total bedrooms of every floor in the same building or many buildings amounting to 500 or more bedrooms;

(b) A hotel pursuant to the Hotel Act comprised of the total guest rooms of every floor in the same building or many buildings amounting to 200 or more guest rooms;

(c) A governmental hospital or nursing home (hospital) pursuant to the Hospital Act comprised of the total beds for patients spending over night of every floor in the same building or many buildings amounting to 30 or more beds;

(d) An educational institute comprised of the total area of every floor in the same building or many buildings amounting to 25,000 or more sq. m.;

(e) An office building of the government, governmental enterprise international organization or private enterprise comprised of the total area of every floor in the same building or many buildings amounting to 55,000 or more sq. m.;

(f) A department store or shopping center comprised of the total area of every floor in the same building or many buildings amounting to 25,000 or more sq. m.;

(g) A market comprised of the total area of every floor in the same building or many buildings amounting to 2,500 or more sq. m.;

(h) A restaurant or food shop comprised of the total area of every floor in the same building or many buildings amounting to 2,500 or more sq. m.

(2) The Class B building

(a) A condominium pursuant to the Condominium Act comprised of the total bedrooms of every floor in the same building or many buildings amounting to 100 but less than 500 bedrooms;

(b) A hotel pursuant to the Hotel Act comprised of the total guest rooms of every floor in the same building or many buildings amounting to 60 but not less than 200 guest rooms;

(c) A dormitory pursuant to the Dormitory Act comprised of the total rooms of every floor in the same building or many buildings amounting to 250 or more guest rooms;

(d) An entertainment place pursuant to the Entertainment Act comprised of the total area of every floor in the same building or many buildings amounting to 5,000 sq. m.;

(e) A governmental hospital or nursing home (hospital) pursuant to the Hospital Act comprised of the total beds for patients spending over night of every floor in the same building or many buildings amounting to 10 but less than 30 beds;

(f) An educational institute comprised of the total area of every floor in the same building or many buildings amounting to 5,000 but less than 25,000 sq. m.;

(g) An office building of the government, governmental enterprise international organization or private enterprise comprised of the total area of every floor in the same building or many buildings amounting to 10,000 but less than 55,000 sq. m.;

(h) A department store or shopping center comprised of the total area of every floor in the same building or many buildings amounting to 5,000 but less than 25,000 sq. m.;

(i) A market comprised of the total area of every floor in the same building or many buildings amounting to 1,500 but less than 2,500 sq. m.;

(j) A restaurant or food shop comprised of the total area of every floor in the same building or many buildings amounting to 500 but less than 2,500 sq. m.;

(k) A co-dwelling building comprised of the total area of every floor in the same building or many buildings amounting to more than 10,000 sq. m.

(3) The Class C building

(a) A condominium pursuant to the Condominium Act comprised of the total bedrooms of every floor in the same building or many buildings amounting to less than 100 bedrooms;

(b) A hotel pursuant to the Hotel Act comprised of the total guest rooms of every floor in the same building or many buildings amounting to less than 60 guest rooms;

(c) A dormitory pursuant to the Dormitory Act comprised of the total rooms of every floor in the same building or many buildings amounting to 50 but less than 250 guest rooms;

(d) An entertainment place pursuant to the Entertainment Act comprised of the total area of every floor in the same building or many buildings amounting to 1,000 but less than 5,000 sq. m.;

(e) The premises constructed in the land of the person – permit grantee for land development pursuant to the Land Development Act – amounting to 10 but not more than 100 housing units;

(f) An office building of the government, governmental enterprise international organization or private enterprise comprised of the total area of every floor in the same building or many buildings amounting to 5,000 but less than 10,000 sq. m.;

(g) A department store or shopping center comprised of the total area of every floor in the same building or many buildings amounting to 1,000 but less than 5,000 sq. m.;

(h) A market comprised of the total area of every floor in the same building or many buildings amounting to 1,000 but less than 1,500 sq. m.;

(i) A restaurant or food shop comprised of the total area of every floor in the same building or many buildings amounting to 250 but less than 500 sq. m.;

(j) A co-dwelling building comprised of the total area of every floor in the same building or many buildings amounting to 2,000 but less than 10,000 sq. m.;

(4) The Class D building

(a) A dormitory pursuant to the Dormitory Act comprised of the total rooms of every floor in the same building or many buildings amounting to 10 but less than 50 guest rooms;

(b) An entertainment place pursuant to the Entertainment Law comprised of the total area of every floor in the same building or many buildings amounting to less than 1,000 sq. m.;

(c) A governmental hospital or nursing home (hospital) pursuant to the Hospital Act comprised of the total beds for patients spending over night of every floor in the same building or many buildings amounting to less than 10 beds;

(d) An educational institute comprised of the total area of every floor in the same building or many buildings amounting to less than 5,000 sq. m.;

(e) An office building of the government, governmental enterprise international organization or private enterprise comprised of the total area of every floor in the same building or many buildings amounting to less than 5,000 sq. m.;

(f) A department store or shopping center comprised of the total area of every floor in the same building or many buildings amounting to less than 1,000 sq. m.;

(g) A market comprised of the total area of every floor in the same building or many buildings amounting to 500 but not exceeding 1,000 sq. m.;

(h) A restaurant or food shop comprised of the total area of every floor in the same building or many buildings amounting to less than 250 sq. m.;

(i) A co-dwelling building comprised of the total area of every floor in the same building or many buildings amounting to less than 2,000 sq. m.

(j) A dwelling building classified a single house and comprised of the total area exceeding 1,000 sq. m.

Clause 71 For the construction or modification of the dwelling building classified as a single house not more than 1,000 sq. m., row houses, shop houses, town houses or duplex and temporary building, it shall provide a sewage treatment plan of each unit, which shall be comprised of the followings:

(1) A grease trap being qualified for trapping grease and being able to open for cleaning;

(2) A septic tank or sump pit being sealed and waterproof in order to separate solid from the liquid and to store for the sedimentation;

(3) A filter bed or connecting chamber being qualified to be a basin of sewage passed from the septic tank and then convey the sewage through the brick or stone or otherwise in order to become a wastewater.

The grease trap, septic tank and filter bed in accordance with the first paragraph shall have a proportional size suitable for the utilization of the dwellers in the said building in order to acquire the Effluent Quality Standards as stipulated for the Class D building.

In case of the aforesaid method not being used, the other method may be used as a sewage treatment in order to acquire the Effluent Quality Standards in accordance with the standard basic as stipulated for the Class D building in Clause No. 70 or may use the standard stipulated by BMA.

Clause 72 The building classified as market, hotel, restaurant, hospital or nursing home, co-dwelling building comprised of 20 or more rooms and the building with the total building area 2,000 or more sq. m. - not row houses or shop houses - shall provide the garbage and refuse collection tank comprised of the following characteristics:

(1) The wall shall made of durable materials and fireproof materials;

- (2) The internal surface shall be flat and waterproof;
- (3) There shall be a smell and rain protection;

(4) There shall be a dewatering system from the garbage and refuse. In case of the building comprised of the sewage treatment system, the dewatering system shall become a component of the sewage treatment system;

(5) The ventilation and the protection of water infiltration shall be provided;

(6) The capacity volume shall not be less than 3 time of the volume of daily garbage;

(7) The location to facilitating the removal shall be provided and far away from the cooking and food storage room not less than 4 m. However, if the capacity volume of the garbage and sewage collection tank is more than 3 cu. m., the distance therefrom shall not be less than 10 m.

Clause 73 The calculation of garbage volume from the building shall be based on the rate of the utilization, as follows:

(1) For the utilization for dwelling, the garbage volume shall not be less than 2.4 liters per person each day;

(2) For the utilization for commercial or other purposes, the garbage volume shall not be less than 0.4 liter per one sq. m. building area each day.

Clause 74 Unless BMA stipulated otherwise, the garbage chute shall be comprised of the following characteristics:

(1) It shall be made by the fireproof materials and its internal surface shall be smooth to facilitate the cleaning and not causing any garbage left in;

(2) The door or passage for the garbage chute shall be made of the fireproof materials and firmly shut in order to protect the reverse blow of the garbage and the garbage to be left in;

(3) The ventilation shall be provided in order to protect the smell;

(4) At the bottom end of the garbage chute, the sealed door shall be installed in order to protect the smell and be high enough to facilitate the collection of the garbage truck;

(5) Its location shall facilitate the garbage truck to enter for the collection of garbage.

#### CHAPTER 8

TYPES AND PROCEDURES RELALTING TO THE SYSTEM INSTALLATION OF WATER SUPPLY, ELECTRICITY, GAS AND FIRE PREVENTION

Clause 75 A large building except row houses, shop houses and town houses shall be arranged for a water-reserve tank sufficient for a number of dwellers or building consumption.

Clause 76 A high-rise or extra-large building shall be comprised of electricity supply system for lighting and power coupled with the wiring and installation of electrical appliances in accordance with the standard of Metropolis Electricity Authority (MEA).

For the electricity supply system, the main switch shall be installed in the specific compound separate from the compound utilized for other purposes. In case of the installation inside the building, it can be installed in a separate room. Otherwise, it can be installed in a separate specific building.

For the installation of electric transformer or electric generator, the second paragraph shall be applied whereby the main switch, transformer, or generator may be installed in the same compound.

When the electricity use reaches its maximum rating as stipulated in the electricity system plan, the electric voltage at the electric distribution panel shall differ from the electric

voltage distributing from the secondary side of the electrical transformer at the rate of not more than 5 per cent.

Clause 77 An installation of common gas utilization system in the building shall be compliance with the pertinent law in such respect.

Clause 78 The following buildings shall be arranged for the procedures relating to the specified fire prevention:

(1) Row-houses, shop-houses, town houses and duplex;

(2) A building for the public assembly occupancy e.g. theatre, convent hall, hotel, hospital, educational institute, library, indoor stadium, market, department store, shopping center, entertainment place, airport, car-park building, mass-transportation station, car park, port, restaurant, office, governmental office, religious place, factory and commercial building etc;

(3) A co-dwelling building with 4 or more units and dormitory;

(4) A building other than the buildings described in Sub-clause Nos (1), (2) and (3) above, with 3 or more stories.

Clause 79 The buildings described in Clause No. 78 shall be equipped with the fire extinguisher, as follows:

(1) Row-houses, shop houses, town houses and duplex not higher than 2 stories shall be equipped with one portable fire extinguisher of specified type and size for each unit;

(2) The buildings other than the buildings described in Sub-clause No. (1) shall be equipped with one portable fire extinguisher of type and size specified in the table attached hereunder to extinguish the fire caused by the type of materials stored in each floor. One fire extinguisher shall cover the building area not more than 1,000 sq. ms and shall be equipped for each span of not more than 45 ms provided that each floor shall be equipped with at least one fire extinguisher.

For the fire-extinguisher installation described in Subclause Nos (1) and (2) above, the top of the fire extinguisher shall be installed not higher than 1.50 m. from the building floor level. The fire-extinguisher shall be equipped at the position easily to look for, to be able to read the instruction for usage and to be reachable for use and shall be in the workable condition at all times. The types and sizes of fire extinguishers shall be in accordance with the following table:

BUILDING TYPES	EXTINGUISHER TYPES	MIN. CONTENTS
(1) A row house, shop house, town	(1) Chemical Foam;	10 litres
house and duplex of not more 2 stories.	(2) Carbon Dioxide;	3 kgs
	(3) Dried Chemical Powder;	3 kgs
	(4) Others comprised of equivalent Qualification.	
(2) The buildings other than the	(1) Chemical Foam;	10 litres
buildings described in Item (1).	(2) Carbon Dioxide;	4 kgs
	(3) Dried Chemical Powder;	4 kgs
	(4) Others comprised of equivalent Qualification.	

Clause 80 A large building except row-houses, town houses and shop-houses shall be arranged for standpipe system, delivery hose coupled with an inlet with a quick-connecting hose coupling of 65 mms (2 <sup>1</sup>/<sub>2</sub> inches) diameter for extinguishing fire from every building component.

Clause 81 A large building shall be arranged for fireproof materials to block the various pipe shafts between every building floor.

Clause 82 A building of 6 or more stories with the total building area exceeding 2,000 sq. ms or a high rise building or extra-large building shall provide the fire wall or fire door to block out the fire or smoke from the internal area of main building staircase of 2 or more consecutive stories. Such wall and door shall be qualified for fire endurance not less than one hour.

CHAPTER 9

# CAR PARK BUILDIG CAR PARK CAR REVERSE AND CAR ENTRANCE/EXIT

#### PART 1

# CAR PARK CAR REVERSE AND CAR ENTRANCE/EXIT

Clause 83 The following classification of buildings shall provide the car park, car reverse and car entrance/exit i.e.:

- (1) Theatre
- (2) Hotel

(3) Co-dwelling building or condominium comprised of the area of each unit of 60 or more sq. m.

(4) Restaurant comprised of the total area for dining table of 150 or more sq. m.

(5) Department store building comprised of the area of merchandisable room of 300 or more sq. m.

(6) Office comprised of the working room of 300 or more sq. m.

(7) Market comprised of the common use area of each unit of 300 or more sq. m.

(8) Factory comprised of the common use area of each unit of 300 or more sq. m.

(9) Warehouse comprised of the common use area of each unit or any component thereof of 300 or more sq. m.

(10) Storage house

(11) Row House

(12) Hospital or nursing home comprised of the utilizing area of each unit of 300 or more sq. m.

(13) Educational institute comprised of the utilizing area of each unit of 300 or more sq. m.

(14) Entertainment place pursuant to the Entertainment Act comprised of the total utilizing area of each unit of 300 or more sq. m.

(15) Exhibition Hall comprised of the total utilizing area of each unit of 300 or more sq. m.

(16) Extra-large Building except liquid or chemical or other similar materials storage tank, silo and reservoir.

(17) Hall of hotel as described in Item (2), restaurant in Item (4) extra-large building in Item (16).

(18) Commercial building comprised of the total utilizing area of the whole building or any component thereof for the commercial purpose of 300 or more sq. m.

Notwithstanding stipulated in this Clause, the calculation of the area in accordance with Item (4), (5), (6), (7), (8), (9), (10), (12), (13), (15), (17) and (18) shall be based on the total area of every room with the same utilization inside the building but not including area of bath room, toilet, elevator, strong room and document room where no person can utilize.

Clause 84 Any building or any component thereof of either single or many buildings classified as the building with the facilities of car park, car reverse and car entrance/exit in accordance with Clause 83 shall provide number of parking lots as stipulated for each classification of building for such respect, as follows:

(1) The theatre shall provide one parking lot for every-ten audience seats;

(2) The hotel with not exceeding 100 guestrooms shall provide at least 10 parking lots for first 30 guestrooms and for the excess of 30 guestrooms shall provide one additional parking lot for every-five additional guestroom.

The hotel with more than 100 guestrooms shall provide the parking lots at the rate stipulated in the first paragraph for first 100 guestrooms and for the excess of 100 guestrooms shall provide one additional parking lot for every-ten additional guestrooms.

(3) The co-dwelling building or condominium shall provide one parking lot for every-one dwelling unit.

(4) The restaurant shall provide ten parking lots for first 150 sq. m. area of dining table and the excess shall

provide one additional parking lot for every-20 sq. m. additional area.

(5) The department store shall provide one parking lot for every-20 sq. m. building area.

(6) The office shall provide one parking lot for every-60 sq. m. building area.

(7) The market shall provide one parking lot for every-120 sq. m. building area.

(8) The factory shall provide one parking lot for every-240 sq. m. building area.

(9) The warehouse shall provide one parking lot for every-240 sq. m. building area.

(10) The storage house shall provide one parking lot for every-120 sq. m. building area.

(11) The row house shall provide one parking lot for every one housing unit. If the area of one housing unit is exceeding 240 sq. m., it shall provide one parking lot for every 120 sq. m. building area.

(12) The hospital or nursing home shall provide one parking lot for every 120 sq. m. building area.

(13) The educational institute shall provide one parking lot for every-240 sq. m. building area.

(14) The entertainment place pursuant to the Entertainment Act shall provide one parking lot for every-60 sq. m. building area.

(15) The exhibition hall shall provide one parking lot for every-20 sq. m. building area.

(16) The extra-large building shall provide one parking lot for every-120 sq. m. building area or shall provide the number of parking lot as stipulated for the classification of building utilized to carry out the activities in the said building provided that the higher number shall be deemed as a mandatory standard except factory and warehouse.

(17) The hall shall provide one parking lot for every-10 sq. m. building area.

(18) The commercial building shall provide one parking lot for every-60 sq. m. building area.

Clause 85 A calculation of parking-lot number in accordance with Clause 84 shall be based on the classification of multi-use or classification of building provided that the higher number shall be deemed as a standard. If there is any fraction of parking-lot number of each classification of utilization, the said fraction shall be deemed one parking lot for each classification.

Clause 86 The parking lot shall be in a rectangle shape and comprised of the following characteristics:

(1) In case of the parking lot perpendicular to car route, its width shall not be less than 2.40 m and its length shall not be less than 5 m.

(2) In case of the parking lot parallel to the car route or forming an angle with the car route less than 30 degrees, its width shall not be less than 2.40 m. and its length shall not be less than 6 m.

(3) In case of the parking lot forming an angle of 30 or more degrees, its width shall not be less than 2.40 m. and its length shall not be less than 5.50 m.

The parking lot shall be marked to identify the characteristic and boundary of each parking lot on the said parking lot and shall be comprised the car route directly connecting to the car entrance/exit and car reverse.

Clause 87 If the car park outside the building is located on the different disconnected plots of lands, it shall provide an ingress/egress to or from there or the car park building to the entrance/exit of the said building. The horizontal distance in between shall not be more than 200 m.

Clause 88 The car entrance/exit shall be not less than 6 m. in width except the one-way route which shall not less than 3.50 m. in width.

In case of parking lots forming various angles with the path of car travel, the path of car travel shall not be less than the following standards:

(1) If case of the parking lots forming the angle less than 30 degree, the path of car travel shall not be less than 3.50 m. in width;

(2) If case of the parking lots forming the angle of 30 but not more than 60 degree, the path of car travel shall not be less than 5.50 m. in width;

(3) If case of the parking lots forming the angle more than 60 degree, the path of car travel shall not be less than 6.00 m. in width;

Clause 89 A centerline of the mouth of the car entrance/exit shall not be located at the velocity of the junction/intersection and it shall be far away from the beginning of curve or angled corner of the edge of intersection of public way not less than 20 m.

Clause 90 The car entrance/exit from the car park or car park building comprised of 15 or more parking lots shall be connected to the public way not less than 6 m. in width, which continuously leads to the wider public way

Clause 91 A centerline of the car entrance/exit shall be located at the velocity of the slope of bridge and it shall be not less than 50 m. far away from the ends of slope provided that the foregoing shall not apply to the following events:

(1) a bridge and slope of bridge with the inclination less than 2 per 100;

(2) a bridge with the way parallel to the bridge and the said parallel way is able to make a u-turn under the bridge or egress to other way whereby the car from the said car entrance/exit needs not to run up to the bridge;

(3) a bridge built up for the purpose of using as an access/exit to and from the private land.

#### PART 2

#### CAR PARK BUILDING

Clause 92 The car park building under the jurisdiction of this Bye-Law shall be the car park comprised of 10 or more parking lots or the total area for car park, travel and car reverse inside the building of 300 or more sq. m.

Clause 93 The whole principal structure of the car park building shall be made of fireproof materials.

Clause 94 The car park building below grade shall provide the ventilation system with the capacity of the total air change inside the said floor within 15 minutes.

Clause 95 The car park building above grade where may be utilized by any person shall provide any of the following ventilation systems:

(1) If the clear opening component is used for the ventilation, the area of the said clear opening component shall not be less than 20 per cent of the said floor area of the car park building. There shall be the vacancy not less than 3 m. far away from the adjoining land or other building whether or not the building shall belong to the same owner;

(2) If the ventilation machine is used for the ventilation, it shall provide the ventilation machine with the capacity of the total air change inside the said floor within 15 minutes.

The clear opening component shall provide a buffer railing with durability and stability enough to provide safety for vehicle and person.

Clause 96 The wall of car park building which is less than 3 m. far away from the other person's land line or other building shall be the fireproof wall and it is prohibited to make any hole in the said wall.

Clause 97 If the car park building is adjoined to the side of public way with 3 or more m. in width and has had a shorten distance far away from the public way in accordance with either this Bye-law or the Ministerial Regulation issued under the Building Control Act, it shall be deemed that the public way and/or the shorten distance shall be the vacancy pursuant to Clause No. 95 (1) and the wall adjoining to the side of public way shall be exempted from the compliance with the stipulation in Clause 96.

Clause 98 For the car park building including other type of utilization, a building component dividing the types of building utilization shall be a fireproof wall and shall provide an opening passage for only the door made of fireproof material with the fire endurance not less than the fire wall as well as shall be comprised of a door with a sealed closing mechanism to prevent the smoke and flame.

Clause 99 The up and down ramp between the floors shall be not more than 15 per cent of inclination

Each interval of ramp shall be not higher than 5 m. For the interval of ramp exceeding 5 m., it shall provide a landing space with the length not less 6 m.

The curve or spiral ramp shall be comprised of the internal curve radius not less than 6 m. and the ramp floor shall be not more than 12 per cent of inclination.

The up or down ramp of the car park building at the grade or ground level shall be not less than 6 m. far away from the mouth of car entrance/exit or the mouth of car entrance or car exit.

At least one stairway between floors not less than 90 cm. in width shall be provided for the every 2,000 sq. m. area of the parking floor. If any fractional area is more than 1,000 sq. m., an additional stairway shall be provided. If it

requires more than one stairway, each stairway shall be not less than 30 m. far away from each another.

Clause 100 The parking area shall be not more than 5 per cent of inclination.

Clause 101 The drainage system shall be installed in every parking floor and joint with the drainage system at the grade or under grade.

Clause 102 The fire line shall be provided in accordance with the standard stipulated by the Fire Department provided that there shall be at one nuzzle for every-100 parking lot and each nuzzle shall be not more than 65 m. far away from each another as well as at least one nuzzle shall be provided for every parking floor in order to be able to extinguish the fire from every building component.

Clause 103 The car park building with the carremoval mechanism shall provide a travel distance not less than 20 m. from the mouth of car entrance/exit or mouth of car entrance or mouth of car exit to the car park building except that for the car park building with not more than 20 parking lots, the said distance shall be not less than 6 m.

For the car park building with more than 200 parking lots, the said distance shall be not less than 60 m. or area for temporary stopping not less than 10 cars.

Clause 104 For the calculation of the height of car park building with car-removal mechanism, it shall measure from the grade/ground level up to the highest component of the car park building.

In case of the car park building with car-removal mechanism connecting with the other building, it shall measure from the grade/ground level up to the highest component of the car park building.

Clause 105 For the calculation of area of the car park building with car-removal mechanism, it shall measure the area for one parking lot and then combine every parking lot together including other area where the people can utilize. Clause 106 The car park building may use the elevator to carry the car up or down from various floors of the building which may or may not be comprised of the ramp. In case of no ramp, the number of parking lots shall not be exceeding 90 lots. In case of use the car elevator in stead of the ramp to carry the car to any floor, it shall provide at least one car elevator for 30 parking lots inside the building provided that each car park building shall provide at least two car elevators and such car elevator cannot be used as a passenger lift. For the calculation of the number of parking lots, any surplus less than a half of 30 lots or more – shall be regarded a full amount.

Clause 107 For the car park building higher than 10 stories from the grade/ground level and using the ramp running up and down every floor, it shall provide another car elevator to be able to carry the car up and down every floor.

## CHAPTER 10

## MATERIAL STRENGTH AND LOADING

Clause 108 The building and various building components shall be durable and stable enough to carry the total building weight and any potential or actual load including other impact load against various building components provided that there shall be not any building components carrying the strength more than those stipulated in the Ministerial Regulation issued under the Building Control Act except that there shall be a certificate to show the result of test of durability and stability of material issued by the acceptable institute.

Clause 109 For the calculation of building structure design, the wind load shall not be ignored. If it is necessary to calculate and there is no certificate from the acceptable institute, the unit of wind load described in the following table shall apply:

THE HEIGHT OF BUILDING OR BUILDING COMPONENTS	THE UNIT OF WIND LOAD AT LEAST KILO- PASCAL
	(KILOGRAM LOAD PER SQ.M.)
(1) The building component not higher than 10 m.	0.5 (50)
(2) The building component higher than 10 m. but not higher 20 m.	0.8 (80)
(3) The building component higher than 20 m. but not higher 40 m.	1.2 (120)
(4) The building component higher than 40 m. but not higher 80 m.	1.6 (160)
(5) The building component higher than 80 m.	2.0 (200)

However, it is permissible to use the loading caused by various building components including the resistance of soil under the foundation in excess of value as stipulated in this Bye-law at the rate of 33.33 per cent provided that the durability and stability of those various building component shall not be lessen if it is calculated on the normal basis without the calculation of wind load.

Clause 110 In the building component design for carrying the dead load and the said dead load being able to cause a vibration to various building components e.g. dead load of the machine, travel, crane etc., the result of the vibration and impact load shall be put into consideration by means of increasing the dead load as appropriate. In case of no certificate indicating the testing result or calculation from the acceptable institute, the increase of dead load described in the following table shall apply:

THE TYPES OF BUILDING COMPONENTS AND VARIOUS DEAD LOADS	THE INCREASE OF DEAD LOAD (PERCENTAGE)
The structure comprised of column and beam connected together as building structure for carrying the load of elevator or hoist. Foundation, pathway, pier for the elevator and hoist equipment/accessories. Light machine, various pipe or motor Light machine with piston-cycled engine and electric apparatus.	100 40 not less than 20 not less than 20

Clause 111 For the following building components:

(1) The building used for warehouse, theatre, hotel, condominium or nursing home or hospital;

(2) The building used for commercial, industrial, educational, public health purpose or office or working place with the height more than 3 or more stories and the total area

of every floor or any floor in the same building exceeding 1,000 sq. m.;

(3) High rise building, large building, extra-large building, or building or any building component thereof used as a assembly hall, it shall be constructed with the fireproof material comprised of the characteristics and qualification, as follows:

THE TYPES OF CONSTRUCTIONS AND PRINCIPAL STRUCTURES	THE MINIMUM THICKNESS OF CONCRETE COVERING REINFORCING BAR OR REINFORCED CONCRETE (MILLIMETRE)
(1) The reinforced concrete	
1.1 A quadrilateral column with the narrow side of 300 or more mm.	40
1.2 A round column or column with pentagon or polygon and shape almost round column alike which is comprised of diameter of 300 or more mm.	40
1.3 A beam or concrete structure of wreathed column with the width of 300 or more mm.	40
1.4 A slab with the thickness less than 115 mm.	20
(2) Prestressed concrete	75
2.1 A pretensioning beam	
2.2 A posttensioning beam	
(1) 200 mm. in width but with an unrestrained member	115
(2) 300 or more mm. in width but with an unrestrained member	65
(3) 00 mm. in width but with a restrained member	50
(4) 300 or more mm. in width but with a restrained member	45
2.3 A pretensioning slab with the thickness of 115 or more mm.	40
2.4 A posttensioning slab with the thickness of 115 or more mm.	
(1) edge with an unrestrained member	40
(2) edge with a restrained member	20
(3) Structural steel/Non-symmetric shaped steel	
3.1 Steel pile size 150 X 150 mm.	50
3.2 Steel pile size 200 X 200 mm.	40
3.3 Steel pile size 300 X 300 mm.	25
3.4 Steel beam	50

In case of the principal structure having a size in between as stipulated in the table, the minimum thickness of reinforced concrete or prestressed concrete shall be calculated on a prorate basis.

In case of the principal structure erected by reinforced concrete or prestressed concrete with the size or thickness of reinforced concrete or prestressed concrete less than those stipulated in the above table, it shall use other material to additionally cover or be protected by other means in order to enable the column or beam to be qualified for the fire resistance rating not less than 3 hours and joist or slab not less than 2 hours. However, it shall require a certificate relating to the fire resistance rating issued by the acceptable institute to be a submittal document.

In case of the principal structure particularly the column and beam erected by the structural steel without any concrete coverage shall be protected by other means in order to enable the column or beam to be qualified for the fire resistance rating not less than 3 hours except the roof structure - the principal structure – higher than 8 m. above the said floor level. It shall require a certificate relating to the fire resistance rating issued by the acceptable institute to be a submittal document.

The testing method of the fire-resistance rating in accordance with the second and third paragraph shall be compliance with the ASTM E 119 standard.

Clause 112 For the high rise building with building wall made of glass structure that holds the glass with the building including the glass itself, it shall be designed to provide the durability and stability enough to be against the wind load in accordance with Clause No. 119. The used glass shall be classified as a shatterproof glass and shall cause no harm to any person.

## CHAPTER 11

# CONSTRUCTION, MODIFICATION, DEMOLITION AND REMOVAL OF BUILDING

Clause 113 For the building construction, the permit grantee or operator shall provide the temporary opaque fence not less than 2 m. in height and block along the land line particularly the side adjoining to the public place or the land of other owner or occupant except that there shall have the original opaque fence or wall not less than 2 m. in height

During the construction of building higher than 10 m. above the grade/ground level particularly the side having the horizontal line less than a half of the building height by measuring from the external building line to the land line of the public place or the other owner or occupant, the operator shall provide the dust disposal, floor cleaning for every floor, or dust protection, and protection of fallen material being harmful to the personal health, life, body or property, the height of which shall be not less than the building so permitted and which shall be maintain in a good condition through out the construction period as well as the arrangement of the litter discard and construction-minutedust protection. The permit grantee or operator shall provide dust protection, fallen material protection and the arrangement of the litter discard in accordance with the criteria stipulated by BMA.

The litter discard, scaffold and canvas or material for the fallen material protection shall not encroach upon the adjoining land or land of other person except that the letter of consent from the owner or occupant of the adjoining land is obtained.

For the construction, it is prohibited to cause a noise louder than 75-decibel (a) at the 30-m. distance from the building constructing.

It is prohibited to construct or otherwise act in the construction site, which cause a noise or light disturbing the neighbouring dwellers during 22.00 hours to 06.00 hours except that there is the arrangement of the protection and BMA Governor's approval is obtained.

Clause 114 Upon the daily cessation of the operation of crane/derrick or service lift, the operator shall manage to prevent the crane/derrick or service lift to slide, collapse or rotate, which may be harmful/dangerous to the personal health, life, body or property. When the crane/derrick is operating or ceases to operate, the thing or material being lifted is prohibited to encroach upon the public boundary line or the land line of the other owner or occupant except that the letter of approval from the competence official of the said public place or the other owner or occupant of the said land where the case may be shall be obtained.

In case of the letter of approval from the other owner or occupant of the said land being unable to obtain, the operator shall apply to BMA Governor for his approval provided that the engineering control professional shall show the system or method to hold the other owner or occupant including the neighbouring dwellers harmless from any danger to life, body or property thereof. In consideration for the said approval, BMA Governor may stipulate other necessary proceeding or condition for the operator to comply with.

Clause 115 For the modification, demolition and removal of building, Clause No. 113 and No. 114 shall apply mutatis mutandis.

#### TRANSITORY PROVISIONS

Clause 116 The application for the building construction or modification filed before the validity of this Bye-law shall be exempted from the compliance with this Bye-law.

Clause 117 For the building obtaining the construction permit before the validity of this Bye-law, if there is a permit application for the modification, it shall be exempted from the compliance with this Bye-law, which is subject to the following conditions:

(1) it shall not be an increase of the building height;

(2) in case of the building from the large size up, it shall not be an increase of the total building area of every floor exceeding 2 per cent of the building area firstly permitted and in case of the building not large size, it shall not be an increase of the total building area of every floor exceeding 5 per cent of the building area firstly permitted;

(3) it shall not be an increase of area covering the earth ground;

(4) it shall not be against the Bye-law enforcing at the time when the first permit was obtained.

Announced the 31 day of July B.E. 2544 (2001)

(Illegible Signature)

(Mr. Samak Sunthornvetch)

BMA Governor