

APPENDIX 7

MATERIALS RELATED TO “CHAPTER 6 STATION AND STATION PLAZA DESIGN STANDARDS”

7.1 Facilities for Persons Having Difficulty in Moving

7.1.1 Classification of Persons Having Difficulty in Moving

Among passengers who make use of facilities of the station, they are roughly classified into the following groups.

- (1) Elderly Persons
- (2) Handicapped Persons Handicapped persons having visual disorder, handicapped persons having hearing impairment or speech disturbance, orthopedically handicapped persons
- (3) Foreigners, etc. Foreigners and persons having temporary difficulty in movement (pregnant women, persons with a large baggage, and so on)

Facilities in the station are intended to be used mainly by the above people, and designing of individual facilities should be reviewed also in consideration of the security of ordinary people.

7.1.2 Facilities for People Having Visual Disorder

- (1) Guidance and alarm block: Refer to Fig. 7.1.1 ~ 7.1.4.

To be provided on the platform and in the concourse for guidance and for safety purposes.

- (2) Tape in Braille

Tapes in Braille are put on such places as staircase handrails, ticket dispensers, and so on for informing track numbers, passages, etc.

- (3) Safety railing : Refer to the attached sheet

Safety railing provided on the edge of the platform.

7.1.3 Facilities for Persons with Hearing Disturbance

Facilities for those having hearing disturbance, as stationary information in addition to guidance signs in the station, LED display effective for conveying information of the occurrence of abnormal conditions and capable of providing variable information, and indicator of approaching trains.

7.1.4 Facilities for Users of Wheelchairs

- (1) Facilities related to toilet : Refer to Fig. 7.1.5.

In addition to ordinary toilets, special toilets for wheelchair users should be set as much as possible.

- (2) Elevators and escalators : Difference in level in the concourse should be minimized as much as possible, or the following facilities should be provided.

- Setting of slope : Refer to Fig. 7.1.6
- Setting of escalators (compatible with wheelchairs) and elevators : Refer to Fig. 7.1.7 and 7.1.8.

- (3) Sufficient width of passage : Passage necessary for the users of the wheelchairs should be ensured.

- Wicket : Refer to Fig. 7.1.9.
- Slope : Refer to Fig. 7.1.6.

- (4) Height of the sales counter, ticket dispenser, etc. : Concerning setting of the ticket dispenser and counter, for the users of wheelchairs, height and depth at the lower area (below knee), necessary dimensions should be ensured. Refer to Fig. 7.1.10.

7.1.5 Countermeasures for the Elderly and Children

- (1) Setting off railing, etc. : As countermeasures for the elderly and children, double railing should be set, particularly along the staircase, to help them ascend or descend the staircase safely.

○ Guidance and Warning Blocks

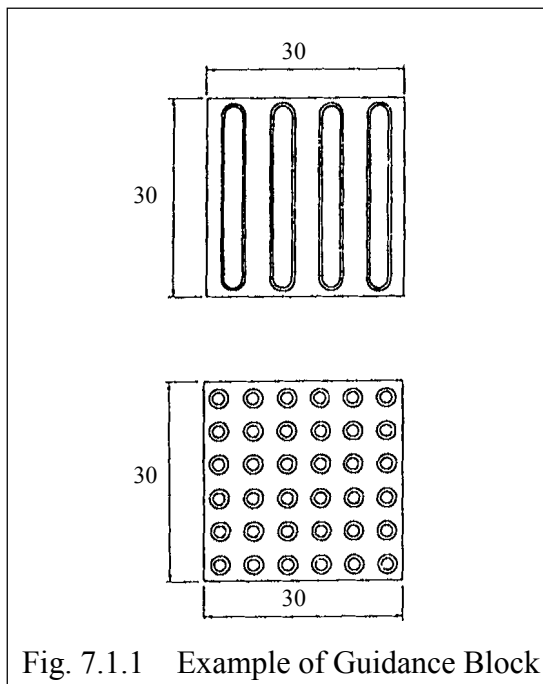


Fig. 7.1.1 Example of Guidance Block

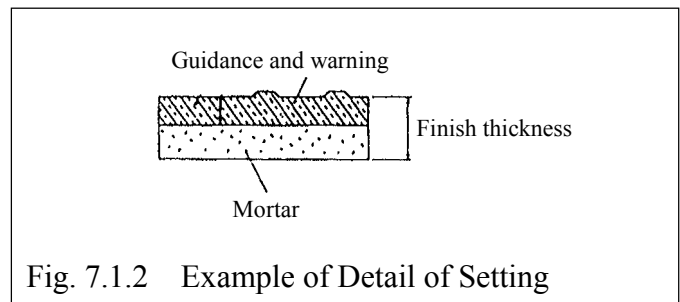


Fig. 7.1.2 Example of Detail of Setting

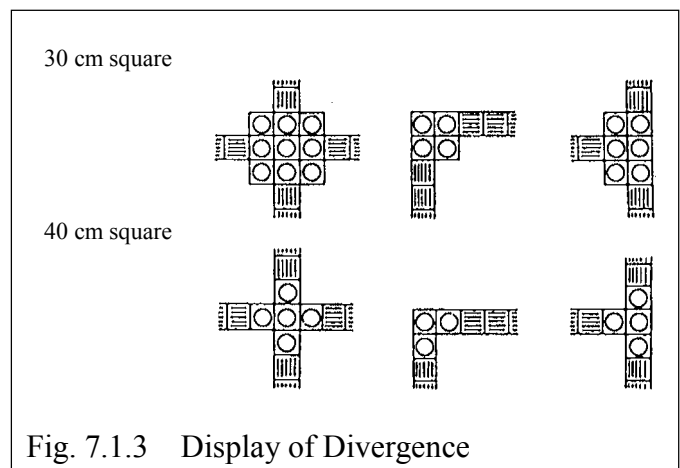


Fig. 7.1.3 Display of Divergence

The guidance block and alarm block should basically be in yellow. Refer to the following on how to set blocks (shown below is an example of setting 30 cm square blocks. 40 cm square blocks may be set in the similar way).

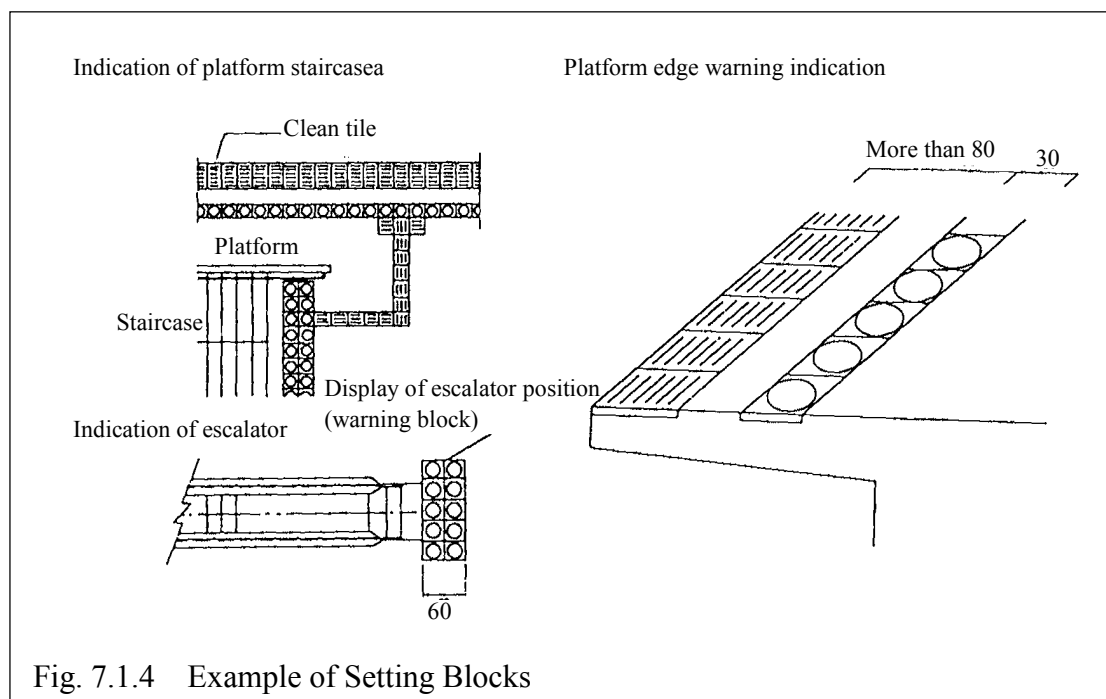


Fig. 7.1.4 Example of Setting Blocks

○ Lavatory for Physically Disable Persons

Sufficient space should be secured to ensure free turn of the wheelchair inside.

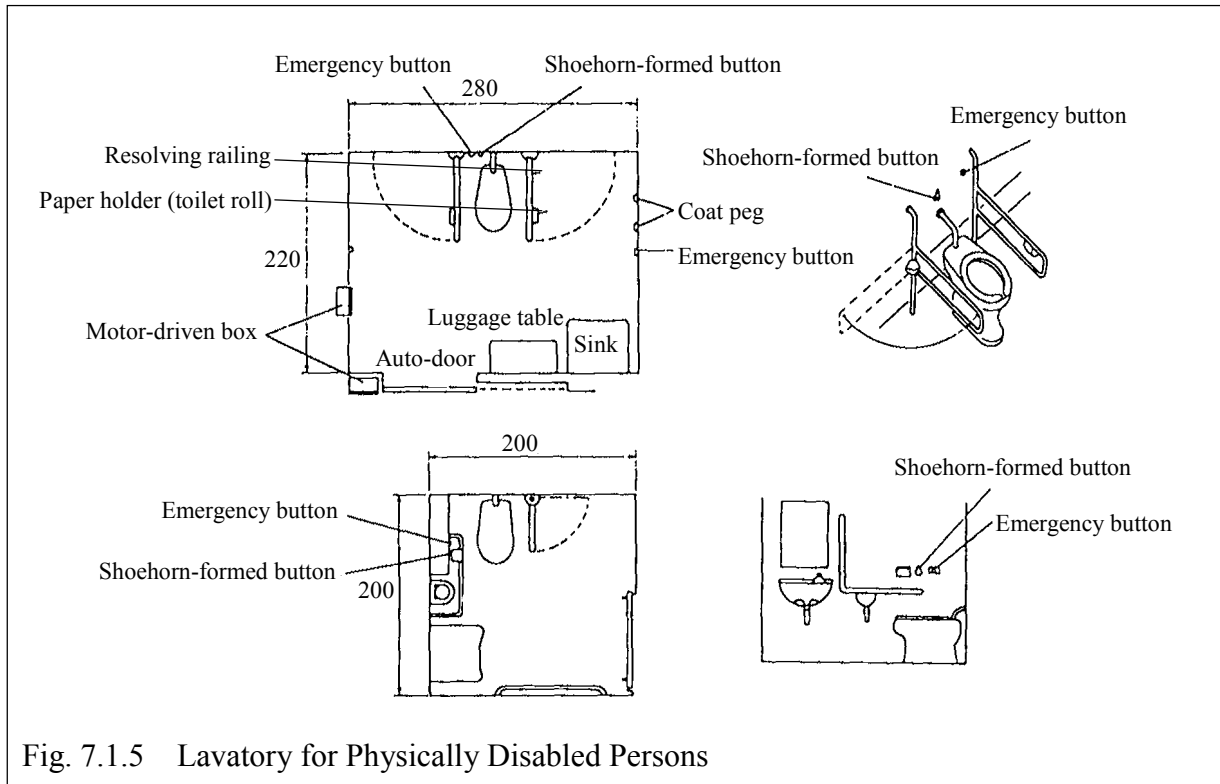


Fig. 7.1.5 Lavatory for Physically Disabled Persons

○ Slope

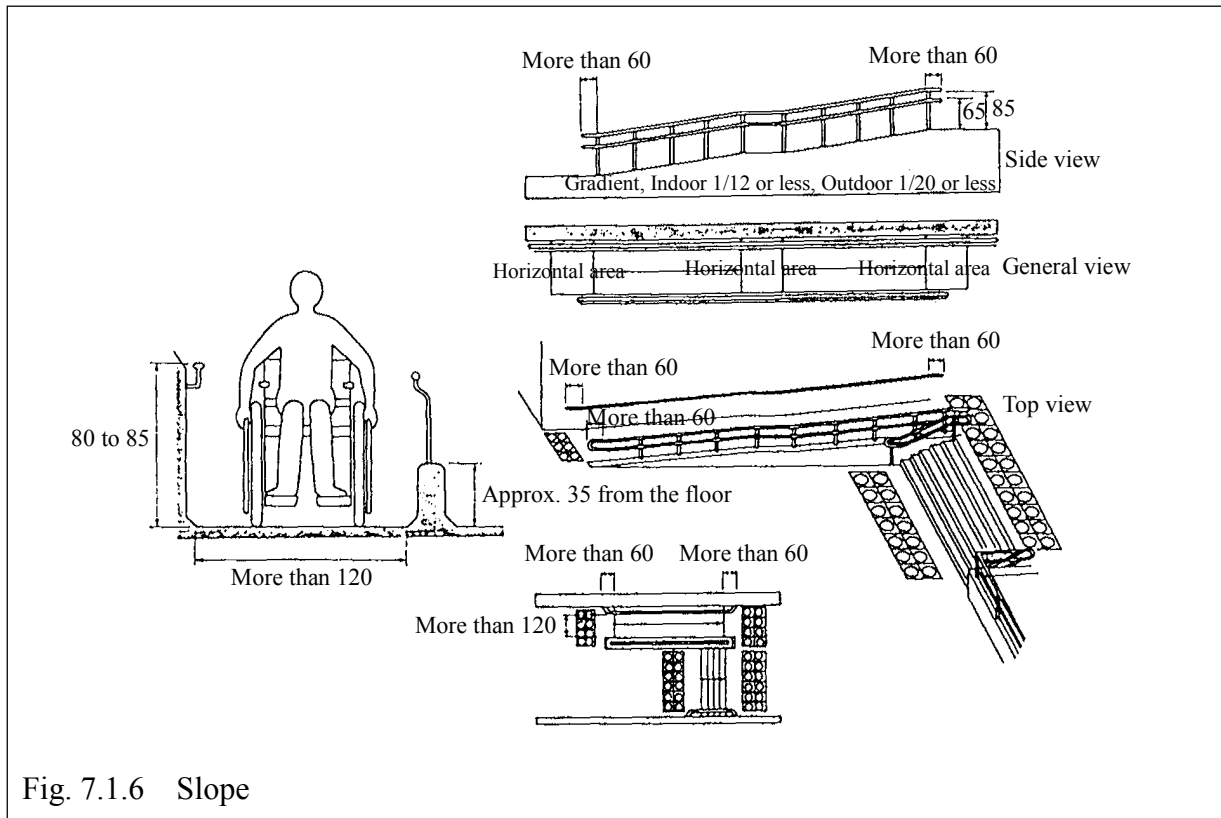


Fig. 7.1.6 Slope

○ Escalator

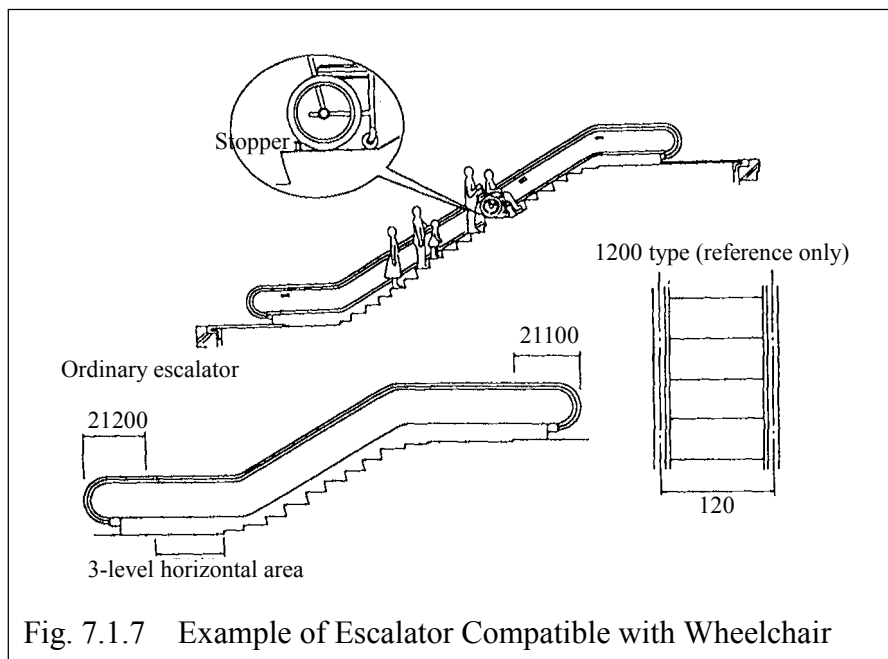


Fig. 7.1.7 Example of Escalator Compatible with Wheelchair

○ Elevator

Special button provided at an appropriate position (about 100 cm from the floor) at the entrance/exit of boarding berth of each floor. Indication in Braille.

Emergency call button, interphone, etc. within easy reach

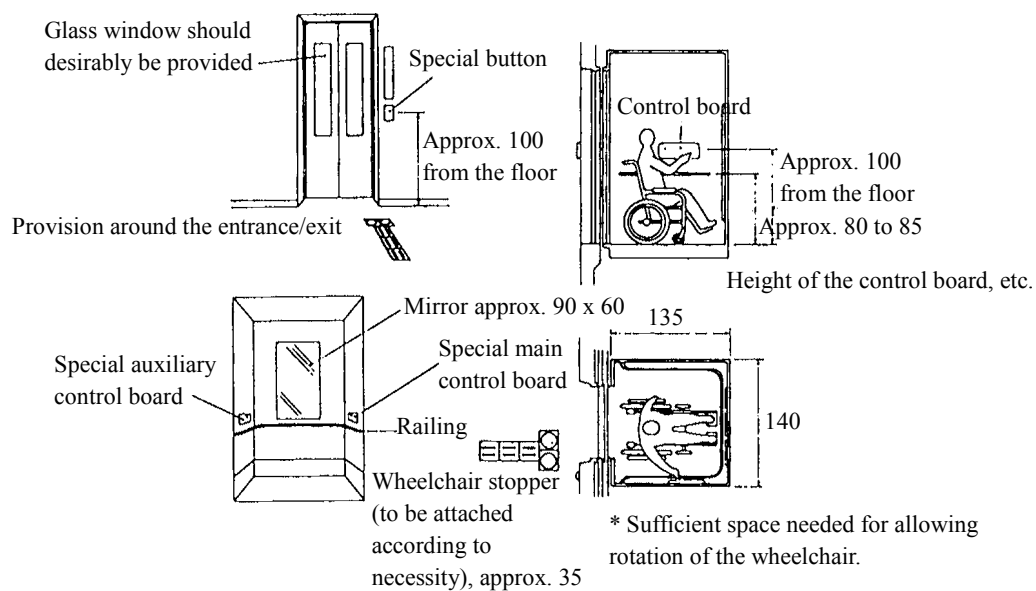
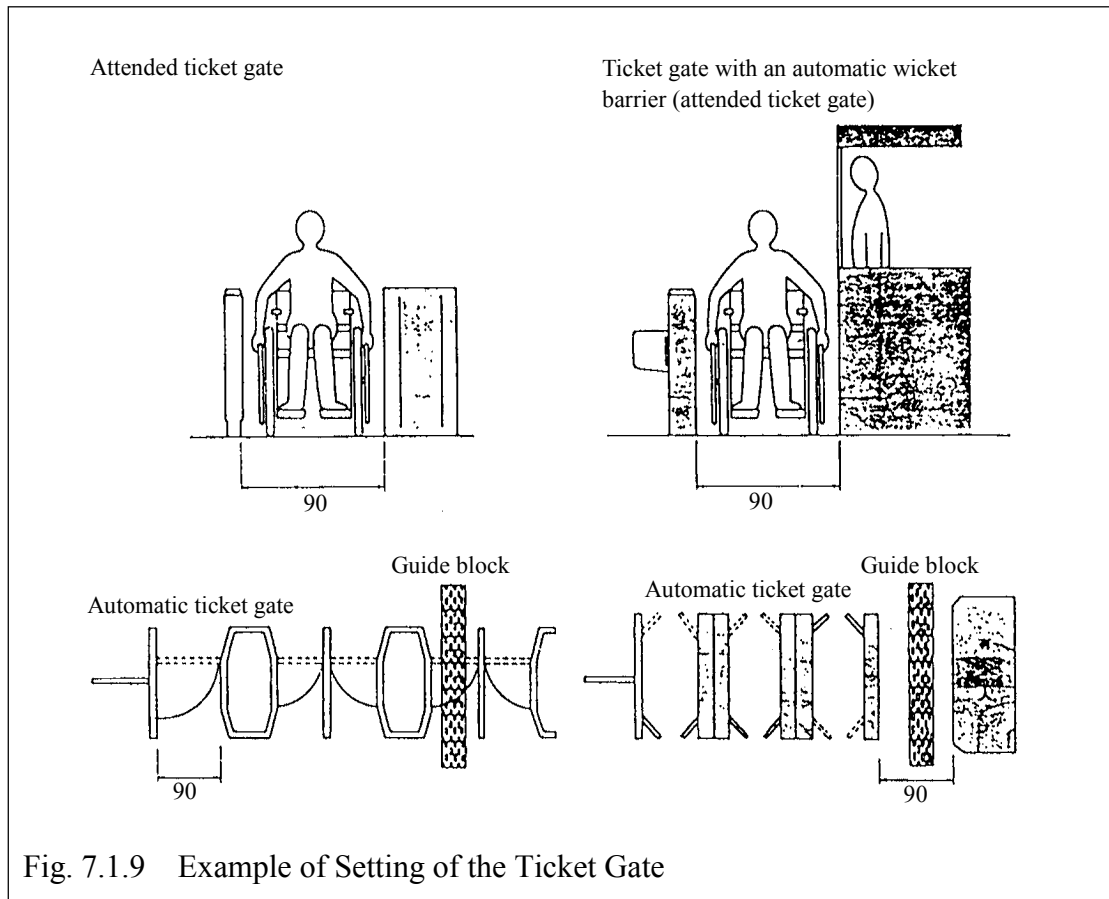


Fig. 7.1.8 Elevator

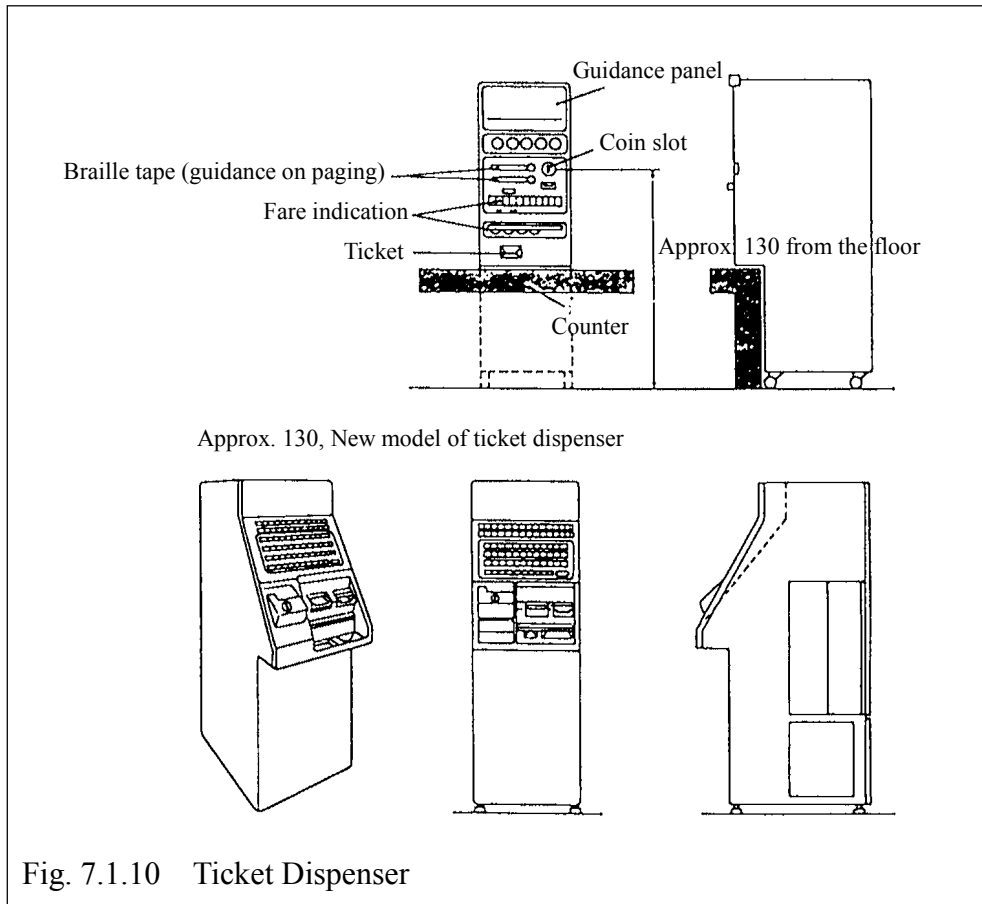
○ Ticket Gate Width

The effective width of the ticket gate should be more than 90 cm to allow the wheelchair to pass freely.



○ Ticket Dispenser

To facilitate easy purchase of tickets, the height of the coin slot should be about 130 cm, and a riser should be provided to help approach the ticket dispenser.



7.2 Separation of the Edge of the Platform and the Columns

Columns on the platform should be separated sufficiently from each other so that they would not stand in the way of passengers. Furthermore, in order to let wheelchair users to pass safely, columns should be set more than 2,000 mm away from the edge of the platform.

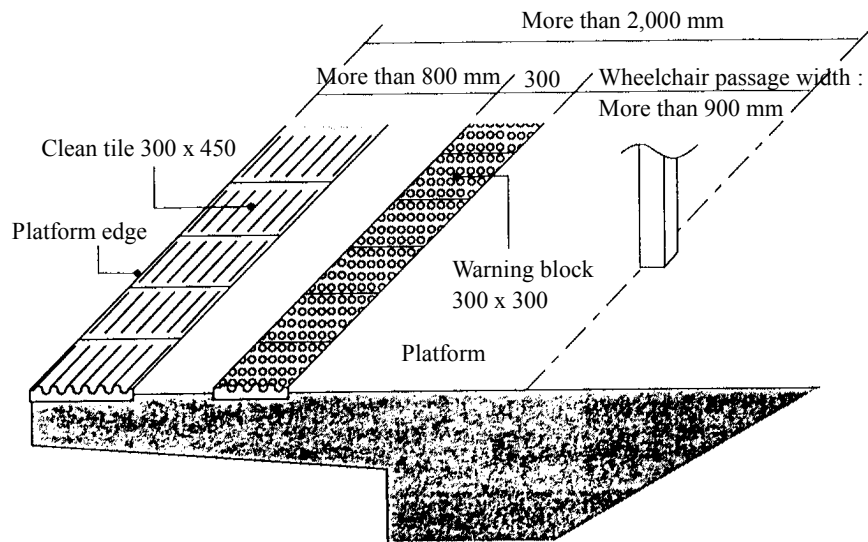


Fig. 7.2.1 Distance of the Columns form the Edge of the Platform in Consideration of Wheelchair Users

7.3 Example of Sign System

Flow of sign system

With each route of movement 'getting on' and 'getting off' as the axis of movement, this sign system comprises the construction for each area of 'within boundary' and 'outside boundary' as shown in the diagrams below.

'Getting on' signs

'Getting on' signs comprise the route to guide passengers from outside the boundary into the concourse inside the boundary via the ticket gate, then through the staircase to the platform, and to the train.

'Getting off' signs

'Getting off' signs comprises one route to guide the passengers getting off the train to the exit through the inside concourse and the other route to guide the 'getting off' passengers to change to other line

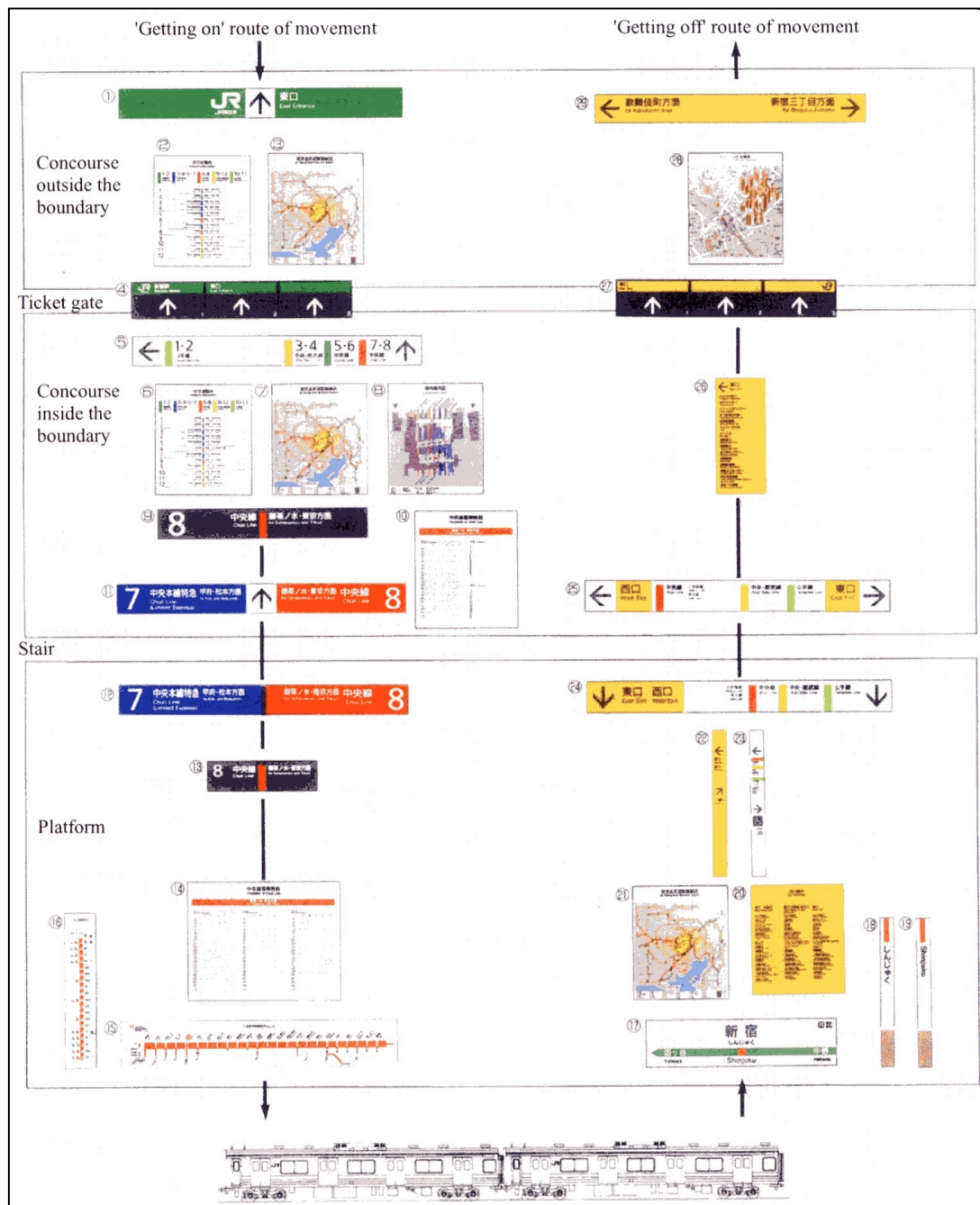


Fig. 7.3.1 Example of Sign System