4. ROOM LOAD SUMMARY
4-1. PAC-1 (NW-SYSTEM)

1) ROOM PEAK LOAD (1)

	The factor of the factor	, , worder als Marco oss							
		AREA	VOLUME	PEOPLE	PEAK R.S.H	LOAD R.T.H	TND/ATE	DEHUIM AIR	CUT AIR
ИО	ROOM NAME	(, W ₂)	(w ₃)		(KCA/H)	(KCAS/H)	A.D.P(%)		(M/H)
1 F	ENTRANCE &								
GOZ	ENTRANCE HALL	84.0	z4a63		4.967	5 2 8 5	17.5	1.660	460
	SUB TOTAL	34 <u>.</u>	z40,63		4967	5.285		1.660	460
		·							
2F		3.			-0.0		_		
FOZ.	SECRATARY ROOM	16.0	40.0	Z	1.593	1.736	12.3	530	50
FOZ	ASSISTANT SUPERINTENDENT RM.	42,25	126.75	4	6,610	6.895	12.6	2.210	loo
Fo 1.	SUPERINTENDENTRM	84.5	253.5	8	10716	11.285	12.5	3.580	200
Fol	SECRATARY ROOM	24.0	60.0	4	1.856	2142.	11.8	620	100
F07	TELEOMUNICATION ROOM	52, ²⁵	156.75	5	4,872	5.228	17.4	1.630	125
					14.403	16.360	11.9	4810	1.695
Fo4	CANTEEN	78.5	z5]. ¹⁸	15	14,400	16.700		4010	1.013
	SUB TOTAL	297.5	888 18	38	40.050	43.645		13.380	2270
			,			_			
3F					_		. 0		F-6
507	SECRATARY ROOM ASSISTANT	16.0	400	7	927	1070	11.8	310	50
507	SUPERINTENDENT RM.	42.25	160,55	4	5,306	5591	12.5	1770	(00
501.	SECRATARY ROOM	16.0	40.0	ح	1.130	1,273	17.0	380	50
50]	ASSISTANT SUPERINTENDENT RM	47,25	160,55	4_	4.z39	4523	12.5	1.420	(00)
503 C	JUNIOR ENGINEER ROOM	68.25	ZZ5,55	6	4.976	5402	12,3	1.660	(50
									150
503b	DITTO	68,25	725,55	6	5,196	5622	17.3	1.740	
5039	DITTO	62.25	760,55	6_	7.970	8397	12,2	2.660	150
	SUB TOTAL	315,75	1052.95	30	29.744	31.878		9.940	750
-									

1)	ROOM	PEAK	LOAD	(2)
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1.							-		
		AREA	UOLUME	PENDIE	PEAK R.S.H	LOAD	TAKY CO TET	DEHUIM AIR	OUT ALE
ИО	ROOM NAME	(m²)	(m³)		(Kal/H)	(KCAP/H)	A.D.P(°c)	6	(%/H)
4F To18	JUNIOR ENGINEER ROOM	68.75	275. ⁵⁵	6	9.579	10,005	15.19	3.200	150
Told	DITTO	68,25	725.55	6	8,116	8,542	17.6	7.710	150
DIC.	DITTO	68,25	275,55	6	7.979	8.405	17.6	2660	150
To1b	DITTO	68,75	225.55	6	8.125	8.551	12.6	z.710	150
To 1 4	DITTO	60,75	zo5 55	6	10916	11-343	12.6	3.640	150
	SUB TOTAL	333.Z5	1107.75	30	44.715	46.846		14.920	η50
PAC-1	TOTAL	1030	3289.31	98		127.854	12,5	39,900	4.730
					SHF	=0.94			
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									4

2).	PEAK	LOAD	TIME	(4)

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). YEAK LOAD	IIME	· · ·			and the second of the second o	
		3 :	00	5:	00	6:	00
No.	ROOM NAME	E.R.S.H (Kal/H)			E.R.T.H (Kal.A.)	E.R.S.H (KA)/H)	E.R.T.H (Ked/4)
1F.	ENTRANCE &	*	*				
GOZ	ENTRANCE HALL	4.967	5,785	4706	5.021	4.428	4.740
	SUB TOTAL	4.967	5.285	4706	5.021	4.458	4.740
z F Foz	SECRATARY ROOM	* 1,593	* 1.736	1.570		1.336	1.478
FoZ	ASSISTANT SUPERINTENDENT I	M. 6.184	6.468	* 6.610	* 6.895	6.417	6.700
Foi	SUPERINTENDENT RM.	9.598	10.169	10.716	11.285	10.417	10.985
Fol	SECRATARY ROOM	* 1.856	* z.142	1.723	Z.008	1.581	1.865
F07	TEL COMUNICATION ROOM	4.277	4.634	* 487Z	5.228	4843	5.198
F04	CANTEEN 4:00	14.152	16.133	13.964	15,921	12.738	14.395
:	SUB TOTAL	37.660	41.782	39.405	43.000	37.332	40.621
3F		*	A*	001	1020	01-	982
502	SECRATARY ROOM	927	1.070		1027	840	704
502	ASSISTANT SUPERINTENDENTR	M 4627	4.971	* 5306	* 5.591	5.304	5,587
100	JOH DISTINICIONAL V	*	у.				
501	SECRATARY ROOM			1.667	1,210		1
Cal	ASSISTANT	M SVPO	3.363	4.187	4.470	* 4.239	* 4.523
Sol	SUPERINTENDENT K JUNIOR	2012	5. 203	7.1.5	710	*	+
503C		3.823	4.251	4.9 28	5.355	4.976	5402
503b	DITTO	1.095	4.523		5.234	5.196	5.622
5039	DITTO	7.013	7441	7.970	8.397	7.559	7.985
	SUB TOTAL	Z4.753	76.89z	29.149	31.284	z9.117	31.246
					,		
							1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -

2). PEAK LOAD	TIME	(2)
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7). PEAK LOAD	TIME	(2)				
			06	5 `		6:	
No.	ROOM NAME		E.R.T.H (KCN/4)			E.R.S.H (Krd/h)	E.R.T.H (Kcal/H
4F 501e	JUNIOR ENGINEER ROOM		8511	9.541	9.968	4 9.579	r 10,005
TO 1 d	OTTIO	6.465	6.893	7.990	8.417		8.547
TOIC	DITTO	6.294	6.722	7.835	8.262	7.979	8.40
To 1 b	Οιττο	6.475	6.903	7.999	8.476	8.125	8.55
TO 1 9	DITTO	9.576	10.004	10.916	11.743	10.575	11,001
	SUB TOTAL	36,893	39.033	44.281	46.416	44.376	46.50
				¥	Ł		: 1
PAC-1	TOTAL	104.273	112.492	117.541	125.721	115.751	<u> 123.11</u>
							Nitigata
							· · · · · · · · · · · · · · · · · · ·
							· · · · · · · · · · · · · · · · · · ·
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4-2 PAC-Z (SE-SYSTEM) 1) ROOM PEAK LOAD

				بسراي سجناه ريخ			·	, <u> </u>	
,		AREA	VOLUME	PEOPLE	PEAK R.S.H	LOAD	INCICATED	DEHUIM AIR	OUT AIR
No	ROOM NAME	(m²)	(m3)		(Kal/H)	(KCAP/H)	A.D.P(2)		(m/H)
2F									
Fo3	CONFERENCE ROOM	84.5	253.5	16	9658	10.792	12.1	3,270	4.00
F09	CORRIDOR	87.25	z18. ¹³		6.523	6523	13.2	7180	_
	SUB TOTAL	17].75	471,63	16	16.181	17315		5400	400
						<u> </u>			
3F 505d	EXCUTIVE ENGINEER ROOM	ZI.13	80.29	7	1.926	2.069	12.3	640	50
505 C	DITTO	21.13	80.29	7	1,709	1.852	17.3	570	50
505 b	DITTO	21,13	80,29	2	1.709	1.852.	17.3	570	50
505 <u>q</u>	DITTO	21.13	80,29	Z	2010	2153	12.3	670	50
504	PRAY ROOM	42,25	160.55	12	5809	6.664	11.8	1940	300
506	CORRIDOR	101.5	253.75		5,102	5102	13.5	1700	
	SUB TOTAL	728,27	735,46	20	18.265	19.692		6090	500
4F	EXCUTIVE	. 12	80.29.						50
T034	ENGINEER ROOM	ZI.13	80.	2	z.770	2912	12.5	920	30
103c	DITTO	2113	80.29	Z	2503	2646	12.5	840	50
T036	PITTO	21!3	80,29	7	2503	2646	12.5	840	50
703a		ZI.13	80.29	Z	2873	3015	12,5	960	50
TO Z	LIBRARY & STRAGE ROOM	42.25	160,55	4	7009	7293	12.6	2340	100
To4	CORRIDOR	101.5	753. 95		7963	7963	13,2	2.660	
	SUB TOTAL	228,27	735.46	12	25621	26,475		8560	300
								:	
. 1							>		_
PAC-	-Z TOTAL	628.29	1942,55	48	60.067	63.487	SELCTED 17.5°C	20.050	1.200
	1.5				5	HF=0.95			- 1.

	and the second s		and the same
2)	PEAK	LOAD	TIME

		2 \$	00	3 1	00	410	20
2	ROOM NAME	E.R.S.H (KW/H)	E.R.T.H (KCN/h)	EIR.S.H (Kal/4)	E.R.T.H (KWA)	E.R.S.H.	E.R.T.H (Kcal/4)
ZF FO3	CONFERENCE ROOM	9.658	10.792	9.616	10,757	9047	10 180
Foq	CORRIDOR	6.378	6378	₹ 6523	4 6.573	6.378	6.318
	SUB TOTAL	16.036	17.170	16.139	17.775	15.425	16.558
ਤ ∓	EXCUTIVE (PEAK						
505 d	ENGINEER ROOM	1.614	1.942	1.791.	1.934	1.703	1.845
505 C	DITTO	1.673	1.815	1.517	1.660	1.438	1,580
 So5 b	(PEAK) 12:00)	1.673	1:815	1,517	1.660	1.438	1,580
505 a	DITTO	1.905	1,950	1.897	7.040	1808	1.950
 504	PRAY ROOM	5.652	6.502	* 5.809	* 6664	5.764	6.614
 506	CORRIDOR	4,969	4,969	* 5107	5 102	5.038	5038
	SUB TOTAL	17.486	18.793	17.633	19.060	17.189	18.607
4F T03d	EXCUTIVE ROOM	z.669.	7.8//	7.737	2880	ส 2170	7.912
ТоЗС	DITTO	2.40	2.543	2463	z.60 <i>6</i>	* 7.503	* 2646
ТоЗЬ	DITTO	z.401	2 5 4 3	2463	2606	2503	z 646
T03 9	PITTO	בירויב	2.914	z.843	7,986	2.878	* 3015
SoT	LIBRARY & STRAGE ROOM	5.447	5,731	6.886	7172	7009	7293
T04	CORRIDOR	7,378	7.378	7.806	7806	* 7.963	7963
	SUB TOTAL	Z3.068	23.920	25.198	26.056	25.626	26.475
							1,045 5
PAc-	Z TOTAL	36.590	60.083	\$8.970	* 67.391	58.740	61.640

NOUMMG NO				QUIRED	Вч			****	······································	DAT	E ORIGI	NAL	13
JO NAME				DDRESS						REV	ISION		
SPACE USED	FOT ENTRA			<u>HA</u>		<u> 407)</u>		4C-1 5YS	TEM	PER	SON IN	CHARG	E
SIZE	m×	m == {	34.0 m		×		m(H)¤	Z40.63	ω,				
	AREA OR	SUN GAN OR	FACTOR		Kee	i/h	<u> </u>	ESTMATE F	OB.	AM	PEAK L	OAD	AM
ITEM	QUANTITY	TEMP. DIFF.	1 401011			CORR	ECTION		and a	PM :			PM3
	SOLAR GAI	N GLAS	5	MAX	3:00	5:00	6:00	HOURS OF	OPER/	NOITA	Hour (: (
	m*×	بغر			Ī	1		OUTSIDE DE	SIGN CON	IDITIONS	CDB	'CWB	%R
	w,×	/×			1	1		CONDITIONS	DBC	WBC	%RH	DP C	g/kg
	m,×	×			J	 	<u> </u>	QUYSIDE	42.2		37		19.0
		$\frac{x}{x}$			}	 	<u> </u>	ROOM	24.0	17.1	50		94
	m'X			 -	 	 			18.2		×××	×××	96
	m'×	×			!		 	DEFERENCE			UTSIDE, IN		
SOLAR	A TRANS G	AIN-WALLS	& ROOF			1		BLIND	12.25	541, .	化二苯二甲酚 化二氯二	T 2 1	
WALL	m'×	<u> </u>		ļ	1	ļ		GLASS			ABSORBE	.NI. 7	' ponsi
	m*×	/ ×			<u> </u>	 		COLOR	ILIGHT. M				
	m²×	×						WEIGHT		kg/m*(F	LOOR)		n³(WAL
	m*×	/ ×			1	ļ	l	INTERNAL HEAT	<u> </u>	W/m²		m*/PE	OPLE
ROOF-SUN	m×/	×			i			11	NFILTRA	MOITA			
ROOF - SHA		×		·	<u> </u>			SWINGING		B15			. :
	GAIN-EXC		& ROOF		:	1	i :	REVOLVING	Doons	PEOPLEX	CMH/PER		
	and the second s			[1501	486	123	OPEN DOOR			MH/DOOR	 	
GLASS	js5 m²×	9,1 ×	3,8	 	536				,			<u>†</u>	
CEILING	1 P' p m, X	9,1 ×	14	<u> </u>	204	1——		EXHAUST A	1 11		CMH/m	 	-
Feory Deor	6.8 m*×	18.2 ×	1,6		198	180		CRACK	nn ×				
PARTITION(I)	21.6 m'×	18. ×	1,8	<u> </u>	708	64-2	572	INFILTRA		СМ	H M	 	
(Z)	32 * x	760 X	1.8	L	150	150	150	<u> </u>	/ENTIL/	ATION		ļ	- 1
(3)	30.0 " ×	al x	2,5		683	619	552	PEOPLI	EΧ	CN	MH/PER.		<u> </u>
INFILTRATION	CMI	X des	× 0.29		ĺ .		1) m'×		C	4H/m*		·
INFILIRATION		AL HEAT		1	1	1	<u> </u>	VENTIL	ATION	СМ	н 📰	46	0
	114.1 (2.14.4)	and the second second				1			SENSIE	LE HE	AT FAC	TOR	
PEOPLE		PEOPLEX				 	 	1	491				
Kw	<u>Kw×</u>	×	860	ļ	<u> </u>	-015		E.S.H.F=-	5Z		ERSH)	0.94	(12.50
LIGHTS	<u>84°</u>	Zo W×	1.08		815	1812	<u> (815</u>				FIED A		
APPLIANCES	ETC.			<u> </u>	<u> </u>				Di	HUMIDI	FIED A	rk .	
				J				APPARATUS	DEWPOR	NT :	/z.5	<u> </u>	_℃
						T-11				1		i, e i i e	
CREDIT FO	OR ODAGE	m³×	oeg×	()	Ī	(-i-)	1	120 RM-125	1967		ERSH)	1660	СМН
IHERMAL	STORAGE		SUB TOTAL		ſ		4	120 RM-125	ADP)(I	- BF)?	KO.29 -		
		·	%	1	1			NOTES					
SAFETY FAC					794	4.00	3847	₩Ĺ.	CION			•	1
Ro	OM SENSIBLE				-17	146TT	70-71	L'ARII	(1)	1000	7.5 - 1.7 x	7.0 = 21.	
SUPPLY DUC	T SUPPLY	y Duct F	AN	· .	122								
HEAT GAIN			HP =10%	<u></u>	430	408		_			5-09×2	°=3,2	
BYPASS OUT	SIDE AIR 460	CMHY (8,2005)	D. B.F - 0.29		243	Z2	196	<i>}</i>	(3)	12. × Z.	5 - 30.0	:	
	CTIVE ROOM			14	967	4706	44 Z 8	GLAS	S Cours	1237	E - 184	=	÷
		TENT HEAT		l .	İ			1 4 1 1 1	•				1
LANCE TO AMOUNT	CMHX		c 0.72		ļ	l		·DOOR	(10);	1. ' X Z.	0 x Z = 6	Φ.	
INFLITRATION	- CMITA					1	i	CEILIA	JG : 40	44.0 L	6.0 = 22	ъ	
PEOPLE		I PEOPLEX	EÀA	 	<u> </u>	 		1					
STEAM	<u> </u>	kg/h×	540	[1		_			
APPLIANCES	ETC.			ļ	<u> </u>			- + 5 R :	12.026.	5 + Z.0 ×	3.0 = 8	40	
	·			L	<u> </u>	 		j		Taranta and	4.0		
VAPOR TRAN	s.						3,44	·VR ·			(85×6.5.	+ ζ.*×3.°	>,5× €
			SUB TOTAL]	<u> </u>	<u> </u>] =	- 740.6	.3			•
	***		×]		1		}				er er g	
SAFETY F.O			TAI	<u> </u>		T***		1		,1			1
SAFETY FAC		HEAT CON TA		L	i i	├- -		1	5	11.	1.7%		2
R	OOM LATENT			i			·						
R Supply Duc	OOM LATENT I	oss	%		2.0	21-	217	į		10 × 10 1	11		
R SUPPLY DUC BYPASS OUT	DOM LATENT I T LEAKAGE L.C SIDE AK ^{ABO} CMI	oss 4× 9,6 g/kg×0.	% BF×0.72		318	315	312				13	1.	
SUPPLY DUC BYPASS OUT EFFE	DOM LATENT T LEAKAGE LO SIDE ARTOCMI	oss 4× 9,6 g/kg×o. M LATENT	% BF×0.72 HEAT ■		318						Ta Ta		
SUPPLY DUC BYPASS OUT EFFE	DOM LATENT I T LEAKAGE L.C SIDE AK ^{ABO} CMI	oss 4× 9,6 g/kg×o. M LATENT	% BF×0.72 HEAT ■		318 285	315 5021						1.5	
SUPPLY DUC BYPASS OUT EFFE	OOM LATENT IT LEAKAGE LOSIDE ARTICE ROOKETIVE ROOKETIVE ROOKETIVE ROOKETIVE	oss Hx 9,6 g/kgxo, M LATENT M TOTAL H	% BF×0.72 HEAT ■		318						9 eys.	1 A 1 A 2	
R SUPPLY DUC BYPASS OUT EFFE EFFE	T LEAKAGE LOSIDE AND CONTENTS OF THE PROPERTY	oss Hx 9,6 g/kgxo, M LATENT M TOTAL H AIR HEAT	% BF×0.72 HEAT MEAT EAT EAT		318 285			A COLUMN CONTRACTOR OF THE COLUMN COL					
R SUPPLY DUC BYPASS OUT EFFE EFFE SENSIBLE:	T LEAKAGE LO T LEAKAGE LO SIDE ANTOCHIC CTIVE ROO OUTSIDE CMH X	DSS IX 9.6 g/kg x0. M LATENT M TOTAL H AIR HEAT deg x (1 - 8	% BF×0.72 HEAT EAT BF)×0.29		318 285								
R SUPPLY DUC BYPASS OUT EFFE EPFE SENSIBLE: LATENT:	T LEAKAGE LOSIDE ANTOCHIC CTIVE ROO OUTSIDE CMH X CMH X	DSS IX 96 g/kg 20. M LATENT M TOTAL H AIR HEAT deg x (1 - 8 g/kg x (1 - 8	#EAT #EBF)×0.29		318 285								
R SUPPLY DUC BYPASS OUT EFFE EFFE SENSIBLE: LATENT: G	T LEAKAGE LO T LEAKAGE LO SIDE AMMOCMI COTIVE ROO OUTSIDE CMH X CMH X RAND TOTAL	DSS IX 96 g/kg x0, M LATENT M TOTAL H AIR HEAT deg x (1 - E g/kg x (1 - E HEAT Sub Tot.	#EAT #EBF)×0.29		318 285			The state of the s					
R SUPPLY DUC BYPASS OUT EFFE EFFE SENSIBLE: LATENT: G	T LEAKAGE LOSIDE ANTOCHIC CTIVE ROO OUTSIDE CMH X CMH X	DSS IX 96 g/kg x0, M LATENT M TOTAL H AIR HEAT deg x (1 - E g/kg x (1 - E HEAT Sub Tot.	## ## ## ## ## ## ## ## ## ## ## ## ##		318 285			and the state of t					
R SUPPLY DUC BYPASS OUT EFFE EFFE SENSIBLE: LATENT: G	T LEAKAGE LO T LEAKAGE LO SIDE AMMOCMI COTIVE ROO OUTSIDE CMH X CMH X RAND TOTAL	AX 96 g/kg x0. M LATENT M TOTAL H AIR HEAT deg x(1 - E g/kg x(1 - E HEAT SUB TOT. DUCT PUMP	#EAT #EBF)×0.29		318 285			And the state of t					

NOUMNG NO.		IOUIRED			 .			DAT	E ORIGI	NAL	
Job Name		DDRESS		-				REV	ISION		
SPACE USED FOR SECRATARY	ROOM (FO	2)	·		PAC	C - 1 SYS	TEM	PER	SON IN	CHARGE	-
Size 40 m× 40 m×			×	7.5	n(H)=	40	W ₃				
AREA OR SUN G	AN OR	T	Kei	il/h		C	1	AM	Deau I		MA
TEM QUANTITY TEMP	FACTOR			CORRI	CTION	ESTMATE F	OR.	PM	PEAK L	.OAU	PM 3
SOLAR GAIN C		MAX	Z:00	5:00		HOURS OF	OPERA	TION	Houn (~	
m _t X		TERS.	T,,,,,,	3.00	6.00	OUTSIDE DE				CWB	%F
	/ <u>`</u>	 				CONDITIONS			%RH	DPC	E/kg
m'×		 	 	-		 			37		19.*
m'× X	<u> </u>		<u>'</u>			OUTSIDE	47.2	Z8,6	4		9.4
m³×	×		 	ļi		Room	74.0	17.1	50	1	9.
m _z ×	X	<u> </u>	1	ļ	· ·	DIFFERENCE			×××	× × ×	
SOLAR & TRANS GAIN-W	ALLS & ROOF	1	1			BLIND	1.0		OUTSIDE, IN		
WALL mºX	<i>></i>	<u> </u>]			GLASS	ORDINAR	Y. THICK	ABSORBE	NT. X	. DOUB
m [‡] X	/×		<u> </u>		·	COLOR	LIGHT, M	EDIUM. D.	ARK.	<u> </u>	
m²×	×					WEIGHT	101	kg/m²(F	LOOR)	kg/m	(WAI
m²× X	×			l		INTERNAL HEAT		W/m²	5.	m³/PEC	PLE
ROOF-SUN M2X	×			t	11	11	IFILTRA	TION			
	×	 				SWNGNG					
ROOF - SHADED m'X			•	 -	<u> </u>	REVOLVING	SOURE.	PEOPLEX	CMH/PER		
TRANS. GAIN-EXCEPT WA	the state of the s	1	1	1		<u> </u>			MH/DOOR		
GLASS m*X	<u>×</u>	 				OPEN DOOR		0.00	CHITTIPO OT		
CEILING m ² X	×	ļ				EXHAUST A				 	
FLOOR 16.0 m'X 13.2	× 2,5		5 z 8	508				<u> </u>	CMH/m	 	
PARTITION (I) 10. m2× q.1	× 1.8	1 2	167	152	135	INFILTR	TION	СМ	<u>н</u>		
(2) 12.0 m x q.1	x 7.5		273	Z48	ZZ])	ENTILA	TION			
2.5	x 1.6		27	24	27	Z PEOPLI	× 7	25 C	MH/PER.	50	
	deg× 0.29)' m¹×	V	C	MH/m³	1	
INTERNAL HEA		 				VENTIL	TION	CM	H 3	50	
and the control of th			87	58	82		SENSIP	LE HE	AT FAC	TOR	
PEOPLE Z PEOPL			٥٢	100	<u></u>	1			A 1914		
Kw Kw×	× 860	-	1	<u> </u>		ES.H.F=-			ERTH)	0.92((7.5
LIGHTS 16.5 X 70 V	W× 1.08		346	346	346		173				
APPLIANCES ETC.			ļ				DE	CHIMOTH	IFIED AI		
a Talang <u>a yanda ayaa da</u>		<u> </u>		L		APPARATUS	DEWPOR	ντ _	17,		ב
	<u> </u>					124 RM-12.5	22	. ,	ED C W 1		
CREDIT FOR THERMAL STORAGE m'X	deg×	()	1	(-)		J	1.573		40.00	530	CMI
ers sitti gerin tisker i tila og skriving i	Sub TOTAL	1				124 RM-12.5	ADPICE	O'BE !	X O. 29		
SAFETY FACTOR	%					NOTES					
ROOM SENSIBLE HEAT SE	71. 1 3 15. 3	1	423	1.360	1194	PARTI				**	
			7 6 9 7	1.50				40.30	-1.8 = 1	0.2	
SUPPLY DUCT SUPPLY DUCT				177	175		(2);				
HEAT GAIN LEAK LOSS	+HP = 10%		14.3	136		7	ζ-7 .	x 2.	· -16.		1.5
BYPASS OUTSIDE AR 50 CMHV 18				24			> 4	Losao	-110		
EFFECTIVE ROOM SENS	BLE HEAT	1_1	593	1.520	1326	}	• •		- 16		
ROOM LATENT H	EAT			1 ' '		· Dool	2	9xz.c	=1.8		
INFILTRATION CMHX	g/kgx 0.72			ļ]	1		*	٠,٠	
	PLEX 49		98	98	98		11 14				
	kg/hX 540					1					
C===	ABOUT COME	 Annual Control 	•.				1 1 1 To 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			-	
		1	1								
Appliances etc.		-								*	
				0.0	00						
APPLIANCES EYC.	SUB TOTAL		98	98	98						:
APPLIANCES EYC.	SUB TOTAL		98	98	98						:
APPLIANCES EYC. VAPOR TRANS.	, % .		98	98	98						: '
APPLIANCES ETC. VAPOR TRANS. SAFETY FACTOR ROOM LATENT HEAT SU	, % .		98	98	98						
APPLIANCES ETC. VAPOR TRANS. SAFETY FACTOR ROOM LATENT HEAT SU SUPPLY DUCT LEAKAGE LOSS	D TOTAL										
APPLIANCES ETC. VAPOR TRANS. SAFETY FACTOR ROOM LATENT HEAT SU SUPPLY DUCT LEAKAGE LOSS BYPASS OUTSIDE AREOCMH X 9,6 g	b Total 10 %		10	10 75	10 34						
APPLIANCES ETC. VAPOR TRANS. SAFETY FACTOR ROOM LATENT HEAT SU SUPPLY DUCT LEAKAGE LOSS BYPASS OUTSIDE AREOCMH × 9.6 g EFFECTIVE ROOM LATE	b Total 10 % /kg×0.lBF×0.72 ENT HEAT		10	10	10						
APPLIANCES ETC. VAPOR TRANS. SAFETY FACTOR ROOM LATENT HEAT SU SUPPLY DUCT LEAKAGE LOSS BYPASS OUTSIDE AREOCMH × 9.6 g EFFECTIVE ROOM LATI EFFECTIVE ROOM TOT.	b Total 10 % //kg xo .lBF x 0.72 ENT HEAT AL HEAT		10 35 143 736	10 75	10 34						
APPLIANCES ETC. VAPOR TRANS. SAFETY FACTOR ROOM LATENT HEAT SU SUPPLY DUCT LEAKAGE LOSS BYPASS OUTSIDE AREOCMH × 9.6 g EFFECTIVE ROOM LATI EFFECTIVE ROOM TOT. OUTSIDE AIR H	IO % I/kg x o .lBF x o .72 ENT HEAT AL HEAT E EAT		10	10 75	10 34						
APPLIANCES ETC. VAPOR TRANS. SAFETY FACTOR ROOM LATENT HEAT SU SUPPLY DUCT LEAKAGE LOSS BYPASS OUTSIDE AREOCMH × 9.6 g EFFECTIVE ROOM LATI EFFECTIVE ROOM TOT. OUTSIDE AIR H SENSIBLE: CMHX degx(//kg×0.lBF×0.72 ENT HEAT AL HEAT E EAT 1- BF)×0.29		10 35 143 736	10 75	10 34						
APPLIANCES ETC. VAPOR TRANS. SAFETY FACTOR ROOM LATENT HEAT SU SUPPLY DUCT LEAKAGE LOSS BYPASS OUTSIDE AREOCMH × 9.6 g EFFECTIVE ROOM LATI EFFECTIVE ROOM TOT. OUTSIDE AIR H SENSIBLE: CMHX degx(IO % I/kg x o .lBF x o .72 ENT HEAT AL HEAT E EAT		10 35 143 736	10 75	10 34						
APPLIANCES ETC. VAPOR TRANS. SAFETY FACTOR ROOM LATENT HEAT SU SUPPLY DUCT LEAKAGE LOSS BYPASS OUTSIDE AREOCMH × 9.6 g EFFECTIVE ROOM LATI EFFECTIVE ROOM TOT. OUTSIDE AIR H SENSIBLE: CMH × deg × (LATENT: CMH × g/kg × (b Total 10 % /kg×0.lBF×0.72 ENT HEAT AL HEAT EAT 1- BF)×0.29 1- BF)×0.72		10 35 143 736	10 75	10 34						
APPLIANCES ETC. VAPOR TRANS. SAFETY FACTOR ROOM LATENT HEAT SU SUPPLY DUCT LEAKAGE LOSS BYPASS OUTSIDE AREOCMH × 9.6 g EFFECTIVE ROOM LATI EFFECTIVE ROOM TOT. OUTSIDE AIR H SENSIBLE: CMHX degx(LATENT: CMHX g/kgx(GRAND TOTAL HEAT SU	b Total 10 % //kgxo.lBfxo.72 ENT HEAT AL HEAT EAT 1 - Bf)x0.29 1 - Bf)x0.72 b Total		10 35 143 736	10 75	10 34						
APPLIANCES ETC. VAPOR TRANS. SAFETY FACTOR ROOM LATENT HEAT SU SUPPLY DUCT LEAKAGE LOSS BYPASS OUTSIDE AREOCMH × 9.6 g EFFECTIVE ROOM LATI EFFECTIVE ROOM TOT. OUTSIDE AIR H SENSIBLE: CMH × deg × (LATENT: CMH × g/kg × (GRAND TOTAL HEAT SU RETURN DUCT F	b Total 10 % //kgxo.lBfxo.72 ENT HEAT AL HEAT EAT 1 - Bf)x0.29 1 - Bf)x0.72 b Total		10 35 143 736	10 75	10 34						

Inquiring No.	QUIRED E	3.				SHEET NO.	14
	DORESS					DATE ORIGINAL	* <i>i</i> *
SPACE USED FOR ASSISTANT SUPERINTEDENT	-	PH /	FOZ)	PΔ	C- 4 SYSTEM	REVISION	
Size 6.5 mx 6.5 m= 42.25 m	×			n(H)≈	124,75 m	PERSON IN CHARGE	
AREA OR SUN GAIN OR	T	Kce			gira da la servicio de la seguina de la segu	M	AM
TEM QUANTITY TEMP. DIFF.			CORRE	CTION	ESTMATE FOR.	PEAK LOAD	PM5
SOLAR GAIN - GLASS	MAX	5:00	3.00		HOURS OF OPERAT	ION Hour (-	
a movement is Notice Quitalt		236	791		OUTSIDE DESIGN CONDI		%RH
WALLEY STATE OF THE STATE OF THE	+	924	483	923	CONDITIONS DB C		g/kg
W/X X X X X X X X X X X X X X X X X X X	 	J 5-7	402	,		28. ² 39	18.9
m²×: ×	-					17.1 50	9.4
m²× ×	1				DIFFERENCE 16,5		9.5
SOLAR & TRANS GAIN-WALLS & ROOF	 				BLIND NON-EXIST	ENCELOUTSIDE, INSIDE) L. M	. D
WALL (NE) 19.1 mt 13.0 × Z.1	ļ l,	572	478	442	GLASS ORDINARY.	THICK, ABSORBENT. %.	DOUBLE
(NH) 706 m'× 19.5 × 7.1	 	844		1004	 		
mix ×	<u> </u>	<u> </u>	72			g/m³(FLOOR) kg/m³	(WALL)
m³× ×					INTERNAL HEAT V	V'm² m³/PEC	PLE
ROOF-SUN M'X X	1				INFILTRAT	ION	
ROOF -SHADED MIX X	1				SWINGING		
TRANS. GAIN-EXCEPT WALLS & ROOF	1	-			REVOLVING DOORS PE	EOPLEX CMH/PER	11.
		035	1.142	923	OPEN DOORS DOOL	SX CMH/DOOR	
GLASS (2,5 m ² × /6,5 × 5,1 CEILING m ² × ×	1	- 29	-3		EXHAUST AIR		
FLOOR 47.25 m'X 11.5 X 2.5	115	z 15	1395	1025	CRACK m×	CMH/m	
PARTITION 7,5 m'× 8,75 × 1,8		112	123		INFILTRATION	СМН ■	
TARITION NO TO THE TARITION NOT THE TARITION NO THE TARITION NO THE TARITION NOT THE TARITI	t'		1.5		VENTILAT	ION	
	1				A PEOPLEX Z	5 CMH/PER. 16	D
INFILTRATION CMHX degX 0.29	1				J* m²×	CMH/m²	<u> </u>
INTERNAL HEAT					VENTILATION	CMH II I	0
PEOPLE 4 PEOPLEX 41		164	164	164	SENSIBL	E HEAT FACTOR	
Kw KwX X 860					6610	(ERSH) 0.96(1	(رژه)
LIGHTS 41,25 x 20 WX 1.08		913	913	913	ES.H.F= 6895	(ERTH)	
APPLIANCES ETC.	T	<u> </u>		1154	DEH	IUMIDIFIED AIR	
APPDANCES LITE					APPARATUS DEWPOINT	12.5	C
	1						
CREDIT FOR	()	1 : -	(-)		6.610	(ERSH) 2210	СМН
THERMAL STORAGE "A Sub Total	1				(24 RM- 12. ADP)(1 -	(ERSH) (BF)×0.29 ZZIO	
SAFETY FACTOR %					NOTES		
ROOM SENSIBLE HEAT SUB TOTAL	59	165	55731	5794	. GLASS (NE)	15×1.8+1.5×2.8=6	9
SUPPLY DUCT SUPPLY DUCT FAN					Z.1.		
HEAT GAIN +LEAK LOSS +HP = 0%	1	597		580		1.5 × 1.8 × 2 = 5.4	
BYPASS OUTSIDE AIR 100 CMHVILS 6. B.F. C.28		48	53	43	. WALL (NE):	6.5 x 4.0 - 6.9 = 19.1	
EFFECTIVE ROOM SENSIBLE HEAT	66	5/0				65×40-54=20.6	
ROOM LATENT HEAT	j						
INFILTRATION CMHX E/kgX 0.72	1]		PARTITION:	25 = 3.0 = 7.5	
PEOPLE 4 PEOPLEX 49		196	1961	196	1	- ·	
STEAM kg/hX 540	1				-FLOOR : SR		
Appliances etc.					· .		
					100		. 77
VAPOR TRANS.					**************************************	÷	
Sub Total						And the second s	
SAFETY FACTOR X							
ROOM LATENT HEAT SUB TOTAL							
SUPPLY DUCT LEAKAGE LOSS 10 %		20	ZO	70			
BYPASS OUTSIDE AIRPOCMH × 9,5 g/kg×6,1BF×0.72		69	70	68			
EFFECTIVE ROOM LATENT HEAT		285	284	z83			
EFFECTIVE ROOM TOTAL HEAT	68	395	8303	6700			
OUTSIDE AIR HEAT	ľ	164)					
SENSIBLE: CMHX degx(1- BF)×0.29	[<u> </u>		ant en la general de la companya de La companya de la companya de	
LATENT: CMHX g/kg×(1- BF)×0.72							
GRAND TOTAL HEAT SUB TOTAL	T			:			
Personal Duran Personal Duran Pipe			Ī				-
HEAT GAIN LEAK GAIN H.P GAIN							
(U.S.R.T) GRAND TOTAL HEAT	T						4
C.C. C.					The contract of production	FORM	E-20E

INDURING NO.	NOUNED	By :	٠,			· .		t No. E ORIGI		15
JOB NAME A	DDRESS								NAL	
SPACE USED FOR SUPERINTENDENT ROOM (FO	7		· • • • • • • • • • • • • • • • • • • •	PAC -	1 SYST	EM		SION		
Size 13.0 mx 6.5 m= 84.5 m'	L.Z	×		W(H !=		m,	PERS	SON IN	CHARG	E
AREA OR SUN GAN OR	1	Kea	i/h			A	М			AM
TEM QUANTITY TEMP. DIFF.	-		-	ECTION	ESTMATE FO)R	M	PEAK L	DAD	PM 5
SOLAR GAIN - GLASS	MAX	5:00	3:00		HOURS OF			Hour (
2 - 2 21/ 5/0EV ADA 11/15		104		-	OUTSIDE DES			CDB	CWB	
	ے ــــــــــــــــــــــــــــــــــــ	1104	1101	12010	CONDITIONS				DPC	
m ^a × alimi	↓	<u> </u>	ļ		 			%RH	DP C	g/kg
m³× ×		!	}	-	OUTSIDE !	405		39		18.9
m ^t X	<u> </u>	<u> </u>			Rooм	24.0		50_	ļ	9.4
		<u> </u>				16,5 1 >			×××	1 9.5
SOLAR & TRANS GAIN-WALLS & ROOF					BLIND I	NON-EXIST	NCEIO	UTSIDE, IN	SIDE) L	M. D
WALL (NW) 39,7 m1× 195 × 2,1	11	1626	1126	1935	GLASS	ORDINARY.	THICK.	ABSORBE	NT. X	, DOU
m ^y X		1	1		COLOR	LIGHT: MED	UM. DA	RK.		1. 1
m°× ×	-		[WEIGHT	kı	z/m*(F1	LOOR)	kg/n	n² (WA
m²× × × ×	1	Ī	1		INTERNAL HEAT	W	/m²		m²/PE	OPLE
Roof-Sun m'X X	 	i			IN	FILTRAT	ION			
ROOF -SHADED M'X X	 				SWINGING		1.			
TRANS. GAIN-EXCEPT WALLS & ROOF	 	:	-		REVOLVING D	ooes Pe	OPLEX	CMH/PER		
		i		923	OPEN DOORS			MH/DOOR		· · ·
		053	1142	12	{					7 7
CEILING m2X X		<u> </u>	-50		EXHAUST A			~	 -	
FLOOR 84.5 m2× 11.5 × 2.5			2789		CRACK	m×		CMH/m	 -	
PARTITION 17.7 m2x 8.25 x 1.8		263	20	2.35	INFILTRAT		CM	₹	! -	
DODR 1.8 4 x 8.25 x 1.6		24	27	22		ENTILAT		*** *** ***		
	<u> </u>	<u> </u>		1	8 PEOPLE	× 25	CM	H/PER.	7.	00
INFILTRATION CMHX degX 0.29		1	·	1	j m²×		CM	1H/m²	1	
INTERNAL HEAT					VENTRA	rion :	CMI	H : 📕	7	00
PEOPLE 8 PEOPLEX 41		328	328	328		SENSIBL	E HE	AT FAC	TOR	
Kw X X 860	 	! "		i	1	10716	, (E	ERSH)	0.95(12	C*C 3
	1	826	1971	1826		11285	> (E	RTH)	0.75 (12	.5 67
	 	028	ISCS	≀0 <i>∞</i> ì		DEH	UMIDI	FIED AL	R	
APPLIANCES ETC.	├				. .		4.47	No. of the Control of		
	┼				APPARATUS	DEWPONT		12.5	<u> </u>	_ c
CREDIT FOR	+				10	716	(E	RSH)		
CREDIT FOR m'X degX THERMAL STORAGE m'X degX	 	<u> </u>	()		(Z4 RM-12.54	ADP)(1-	BEX	0.29	<u> 3.580</u>) CMI
Sub Total	4	[
SAFETY FACTOR %					NOTES			D 1	15-7	8
ROOM SENSIBLE HEAT SUB TOTAL	<u> </u>	654	8624	9391	GLASS	(WW)	1.5 x	1,8 X 3 1	11: 26:	= 12
SUPPLY DUCT SUPPLY DUCT FAN		İ				 [41](43.3.3.4.			2 00	
HEAT GAIN +LEAK LOSS +HP =10%]-s <u>14</u>	966	- 8≼3	940	· WALL	CM NY 2	19.74	4.0_ Z.	== >7.	•
BYPASS OUTSIDE AIR 700 CMH 165 6.1 8.F. 0.29		96	106	86	PARTITIO	ON : 6	5×3.	0 -1.8	= 17.7	
EFFECTIVE ROOM SENSIBLE HEAT	10	716	4598	10417	fi .		1.			
ROOM LATENT HEAT	-				- Poor	: 0.	$Y \times Z$	0 = 1. 4		
ranga kalangan dalam dalam kalangan dalam dalam dalam dalam dalam dalam dalam dalam dalam dalam dalam dalam da	.]			ļ	· FLOOR	SR	: · *.			
0 = 40	 	392	 	<u> </u>	{	200				
PEOPLE 8 PEOPLE 49	 	27 6			{					
STEAM kg/h× 540	[<u> </u>		1					
APPLIANCES ETC.	1			:	{					
								2.3		
VAPOR TRANS.	ļ				1					-
Sub Total					1					
SAFETY FACTOR X					Į.					
ROOM LATENT HEAT SUB TOTAL		397	392	392]					٠.
SUPPLY DUCT LEAKAGE LOSS 10%		10	40	40	1					
BYPASS OUTSIDE ARZOCMH × 95 E/kg×0.1BF×0.72	T	137	139	136	1		. 1			15 m
EFFECTIVE ROOM LATENT HEAT	15-11	569	571	568	1					÷ .
EFFECTIVE ROOM TOTAL HEAT E	1 1	785	10169	10985	1		5.4	-		
	 	(134)			1	100				
OUTSIDE AIR HEAT		, ,,,,	1 €	,	1.	Market 17	\$			
SENSIBLE: CMHX degx(1- BF)×0.29	 	1 1	4 (44)	-	.	*				
LATENT: CMHX g/kg×(1- BF)×0.72	} '				la de la composición de la composición de la composición de la composición de la composición de la composición	115		1.00		
	1 / 1	1		!	1			P. 15 1 13 1		·
GRAND TOTAL HEAT SUB TOTAL				1	2 .	and the second second			4 7	
RETURN DUCT RETURN DUCT PUMP PIPE = %										
Paris Ducz Berney Ducz Pina Per										

COOLING AND DEHUMIDIFYING ESTIMATE (METRIC) SHEET NO. INQUIRED BY INDUMING NO. DATE ORIGINAL JOB NAME REVISION SYSTEM ROOM PAC-1 SPACE USED FOR SECRATARY (Fol) PERSON IN CHARGE m×ί m()-()-= 24.0 60 SIZE Kcal/h SUN GAM OR AREA OR ESTMATE FOR. PEAK LOAD FACTOR PM PM 3 QUANTITY TEMP. DIFF. CORRECTION 5:00 6:00 HOURS OF OPERATION HOUR SOLAR GAIN -- GLASS MAX. CDB OUTSIDE DESIGN CONDITIONS m²× CONDITIONS DBC WBC KRH DPC E/kE × m² X 42.2 28.6 39 19.0 × m*X 9,4 240 17.1 60 m² × DIFFERENCE 18.2 XXX XXX XXX <u>1.</u>T m^t X [NON-EXISTENCE (OUTSIDE, INSIDE) L M. D SOLAR & TRANS GAIN-WALLS & ROOF ORDINARY, THICK ABSORBENT. GLASS m" X × HIGHT, MEDIUM, DARK, COLOR m*X ke/m*(FLOOR) kg/m²(WALL) WEIGHT m1/PEOPLE INTERNAL HEAT W/m² × INFILTRATION ROOF-SUN m² X m² X ROOF -- SHADED REVOLVING DOORS PEOPLEX CMH PER TRANS. GAIN-EXCEPT WALLS & ROOF OFEN DOORS DOORSX CMH/DOOR $m_z \times$ EXHAUST AIR CELING CRACK MX CMH/m 690 582 74,0 m2× 13,2 × 792 FLOOR CMH 149 | 133 INFILTRATION 7.8 PARTITION . (0.0 m2X 9.1 VENTILATION 4 PEOPLEX 25 CMH/PER 100 m²× , CMH/m 0.29 CMHX INFLITATION CMH VENTILATION INTERNAL HEAT SENSIBLE HEAT FACTOR 164 164 <u> 16</u>4 4 PEOPLEX 41 PEOFLE 1.856 (ERSH) = 0.87(118°C) 860 Kw× (ERTH) 519 2142 1.08 240 x 20 LIGHTS DEHUMIDIFIED AIR APPLIANCES ETC. 12.5 APPARATUS DEWPOINT_ 1856 (ERSH) CREDIT FOR THERMAL STORAGE dee× 620 CMH (24RM-12, ADP)(1-, BF)×0.29 Sub TOTA NOTES 15121 13981 SR: 65×4.0 - 7.0 = 24.0 ROOM SENSBLE HEAT SUB TOTAL .PARTITION : 4.0 x 7.5 = 10.0 FAN SUPPLY DUCT SUPPLY DUCT 153 140 =|b% +LEAK LOSS · FLOOR : SR. 48 43 BYPASS OUTSIDE AIR 180 CMH 18, C. .. C. B.F. 1029 53 856 [723 [58] EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT 0.72 CMHX e/ke× 196 PEOPLEX 49 PEOPLE 540 STEAM APPLIANCES ETC VAPOR_TRANS. SAFETY FACTOR 196! 196 196 ROOM LATENT HEAT SUB TOTAL 20 20 20 SUPPLY DUCT LEAKAGE LOSS 69 | 68 BYPASS OUTSIDE AMOOCMHX 9,6 g/kg xol BF X 0.72 70 285 284 EFFECTIVE ROOM LATENT HEAT **286** 2008 1865 2 14.7 EFFECTIVE ROOM TOTAL HEAT (89) OUTSIDE AIR HEAT deg x (1 - BF) x 0.29 CMH× SENSIBLE:

CMH \times g/kg \times (1- BF) \times 0.72

U.S.R.T) GRAND TOTAL HEAT

H.P GAN

GRAND TOTAL HEAT SUB TOTAL

LEAK GAN

RETURN DUCT _ RETURN DUCT _ PUMP

E-20E

FORM

inger i de la companya di seria e e e e e e e e e e e e e e e e e e e			l s	QUIRED	EL v					SHEE	T No.		17_	
INQUIRMS NO	>.	<u> </u>			DORES					····	DAT	E ORIGI	NAL	·
Job NAME							- 1	Pa A		TEM	REV	ISION		
SPACE USED			CATION	R	MOS	(Fo				TEM.	PER	SON IN	CHARG	E
SIZE '	m×	m =	57,25 m'			×		w(1-(1=	156,75	ω,				
ITEM	AREA OR	1 .	FACT	OR .		Ke	ul/h	<u> </u>	ESTMATE F	OR.	AM	PEAK L	OAD	AM
	QUANTITY				 		Conn	ECTION	<u> </u>		РМ			PM5
	SOLAR GA		er e e		MAX	5:00	3:00	6:00	HOURS O	F OPER	ATION	Hous (
LNW I	5,4 m'×3	66 x0.65/08	5× 0.94 xc	2.65	 	975	484	910	OUTSIDE DI			CDB	CWE	·
	m ² X		×			<u> </u>		;	CONDITIONS			%RH	DP C	g/kg
	m²×		×		<u> </u>	1	<u></u>		OUTSIDE	40,5	28.7	39		189
	m³×	i e e e e e	×			ì	1		Room	24.0	17.	50		14
-	m²×		×		1	1			DIFFERENCE	16.5	×××	XXX	XXX	9.5
SOLAR	& TRANS	GAIN-WA	LLS & RO	OF	1	ī	1		BLIND	NON-EXI	STENCEIC	UT SIDE. IN	SIDE) L	M. D
WALL (NW)	and the second of the second	195	× z,l	20	1 5	844	584	1004	GLASS	ORDINA	Y. THICK.	ABSORBE	ENT.	. DOUBLE
- WEE CLAMY	m³×		×			1	1		COLOR	LIGHT. N	EDIUM. D	ARK.		-
	m²×		×			 			WEIGHT	Ť	kg/m*(f	~~~~	kg/	m³(WALL
			×		 	j	 		INTERNAL HEA	 Y!	W m'		m²/PE	OPLE
· <u>Fire our Francisco</u>	m _s ×				 		 			NELTR				
Roor-Sun	m₂×		X		 	!	 		*		411011	10 Tely 1	l est e	
ROOF -SHA			× -	<u>۔۔۔۔۔</u>	 	<u>!</u>	ļ		SWNGNG	D-1	0	CHURT		- :
TRANS.	GAIN-EXC	EPT WAL		F					REVOLVING					
GLASS	m³×		×		1	1	 		OPEN DOOR		DRSX (WH'DOOR	1	
CEILING	m²×		×		L	<u> </u>	 		EXHAUST /	A IR				
FLOOR	4,5 m2X	11.5	× 2.5			1561	644	473	CRACK	mΧ		CMH/m		
PARTITION	45 4 m'X	8.25	× 1,8		}	675	744	601	INFATR	HONTA	CM	H 📜	1	
DOOR	76 m x	852	x 16			35	38	3		VENTIL.	ATION .			
						į	1		5 PEOPL	EΧ	25 CI	AH/PER.	12	25
INFILTRATION	СМ	H×	deg×	0.29		1		1) mt	Χ.	Ct	M/m²	<u> </u>	
INFILIRATION		IAL HEAT			 	1	 	i	VENTE	ATION	СМ	н 🛎	12	5
					1	Z05	205	205		SENSI	SLE HE	AT FAC	TOR	
PEOPLE		5 PEOPLE				203	1 23	2	{	4.8				
Kw	Kwx			860	 -	i 0		1129	E.S.H.F≔-	5 2	28	ERTH)	0.73 (174°C)
LIGHTS	52,25	x 50 W	<u>×</u>	1.08		129	1129	1151	<u> </u>			FIED A		
APPLIANCES	ETC.			<u> </u>	ļ	1	 	<u> </u>	-		ELIOMID.		2.79	
		<u></u>	<u> </u>	<u> </u>	ļ	<u> </u>	ļ	1	APPARATUS	DEWPO	NT	12.5	<u> </u>	_c
					ļ	ļ	.	<u> </u>	4	400	z (ERSH)		
CREDIT FO	STORAGE	m*×	deg×	<u> </u>	()	1.	(-)	<u> </u>	(24 RM-12	4.01	- BE)	(0.29	1,630	CMH
<u> </u>	<u> </u>		Sub	TOTAL			<u> </u>	<u> </u>	124 100-12	, ADF. IV	0.1		100	
SAFETY FAC	TOR			%		1			NOTES					
Ro	OM SENSIBLE	HEAT SUB	TOTAL	: 	4	374	3828	4353	SR:10	5.5 × 6.	5 - 4.°,	4.0=5	7.75	
SUPPLY DUC	T SUPP	LY DUCT	FAN		ነ	!		١	1			e de la Carte	in the	
HEAT GAIN	+LE	AK LOSS	SwHP ≥ :	10%		438	383	436	GLASS	NW)	5×1.8	x 7=5	. 4	
	SIDE AIR 12			0.29	1.45	60	66	54	WALL	Alm Y	15×4	D_ = 4.	= Zo.6	
	CTIVE ROC			. 🖬	4	1872	1277	4843						
	ROOM L				-		 	1	PARTIT	HON:	16.5 x =	3.0 - Z.6	=45,4	
2.2.4.74			1.0	0.72]			·FLOOR	: 30	x 6. 5 '=	19.5		
INFILTRATION	√) С₩Н		/kg×		-	245	7/1	245	3	1,1				
PEOPLE		5 PEOP		E 40	 	1 C++2	1 (4.3	<u> </u>	DOOR	1,3×	z <i>o =</i> 2.	•		
STEAM		kg	/hx	540	 	}	}		1					
APPLIANCES					 	<u> </u>	<u> </u>		1					
	<u> 45 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 </u>		<u> </u>			 		N N	1					
VAPOR TRAN	is.	<u> </u>				<u> </u>		 	}					1.
			Sub T		<u> </u>	 	 _	ļ	-					
SAFETY FAC	TOR			*			<u> </u>		1					,
F	OOM LATENT	HEAT SUD	TOTAL	. 4 77	}	1	1		<u> </u>	e es e e	1.			
	T LEAKAGE L			0 %		25	25	25	J					
	SIDE AIRESC!					86	87	85]		1.1		11.	F
	ECTIVE RO			-		356	357]	=" .		1		
-					T - E		4634		1			1 11 1	11: 1	
EFFE	CTIVE RO				1 2	177.17	1 4	<u> </u>	1	5	11.0	- 1,		
		E AIR HE				(101)	']			150				
SENSIBLE:	CMH×				}				1			1		
LATENT:	CMH×	g/kg×(1	BF)×0.7	<u>'2</u>		1	 -	1				11.4		1
	RAND TOTAL	HEAT SUB	TOTAL		<u> </u>	1		<u> </u>	<u>.</u>					
RETURN DU	CT RETURN	Duct Pu	MP PIPE	= %		1	1	1						
HEAT GAIN		AIN H.		70 	L	<u> </u>]	2.5		1		*
	U.S.R.T) G						1							
		A CONTRACTOR OF THE PARTY OF TH										and the second second		

NOURING NO. IN	OUIRED	Вч			SHEET NO. DATE ORIGIN	
Job Name A	DORESS				REVISION	
PACE USED FOT CANTEEN (FO4)		1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1		PA	C- SYSTEM PERSON IN C	HARGE
51χε m×' m= 78.5 m'		× 3.8	7.5			
AREA OR SUN GAN OR		Kea	il/h		ESTIMATE FOR. AM PEAK L	AM AM
TEM QUANTITY TEMP DIE		, j. i	CORR	ECTION	PM PM	Рм 4-
SOLAR GAIN - GLASS	MA	4100	3:00	5:00	HOURS OF OPERATION Hour (r na s apasa ny
(NW) 5.4 m2×366 x 0,52/185× 0,94 x 0,65		739	484	925	OUTSIDE DESIGN CONDITIONS COB	CWB %RI
(5W) 12.3 m2×252×664/285× 0.94×665		426	1560	1115	CONDITIONS DBC WBC SRH	DP C g/kg
m ² X X	<u> </u>	1	1.2.5		OUTSIDE 41.7 28.4 38	18.8
m¹× ×		T	1	(1910)	ROOM 24.º 17.1 50	1 9.4
m³× ×	 	1			DEFERENCE 17.7 XXX XXX	$\times \times \times q.4$
SOLAR & TRANS GAIN-WALLS & ROOF		1			BLIND INON-EXISTENCE OUTSIDE, MS	IDE) L M.D
WALL (NW) ZO,6 MX 15,4 × Z.1		667	584	844	GLASS ORDINARY THICK ABSORBER	NT. % DOUBL
(SW) 39.7 m'× 18.6 × 2.1			1.3 18		COLOR LIGHT, MEDIUM, DARK.	
m'× ×	 	7-	11.7.18	19.	WEIGHT KE/ml(FLOOR)	kg/m² (WALL
m³ × × ×		 	 	1004	INTERNAL HEAT W/m²	m*/PEOPLE
	 	 	 	1626	INFILTRATION	
NOOF SUR III	 			1600	Swinging	
13007 011202		:	 	71377	REVOLVING DOORS PEOPLEX CHHIPER	
TRANS. GAIN-EXCEPT WALLS & ROOF	١.,	-00	' دمررا		OPEN DOORS DOORSX CMH/DOOR	
GLASS 17.7 m2× 17.7 × 5.	 -J	212	11642			
CEITING W ₂ X X	 				EXHAUST AIR CRACK MX CMH/m	
FLOOR 78.5 m'× 12.7 × 2.5	<u>Z</u>	493	<u> 2591</u>		CRACK	
PARTITION (1) 26.6 m2× 8.85 × 1.8		474	436	395		
(2) 24.7 m2 x 17.7 x 2.5	├	093	1124	1019		*
	<u> </u>	!	<u> </u>	1 325	15 PEOPLEX 25 CMH/PER.	
INFILTRATION CMHX deg X 0.29	ļ <u> </u>	! <u>!</u> .		1 908	j m²× CMH/m²	
INTERNAL HEAT	ŀ			١. ـ	VENTILATION CMH	1695
PEOPLE 5 PEOPLEX 4		615	615	615	SENSIBLE HEAT FAC	
Kw Kw× × 860	<u> </u>	İ		<u> </u>	ESHF= 14403 (ERSH) = 6	788(114.c)
LIGHTS 78,5 × 20 W× 1.08		696	1676	1676	16.360 (ERTH)_	
Appliances Etc.			<u></u>		DEHUMIDIFIED AIF	₹
				<u> </u>	APPARATUS DEWPOINT 12.	5 <u> </u>
]	<u> </u>	1	
CREDIT FOR THERMAL STORAGE MIX deg X	(—1	1	(<u>)</u>		14.403 (ERSH) 24 RM- (Z, SADP)(1- BF) × 0.29 -	4810 CMH
Sub Total				1 1 -		
SAFETY FACTOR %	Ī.	1		(10972.	NOTES	
ROOM SENSIBLE HEAT SUD TOTAL	12	302				
SUPPLY DUCT SUPPLY DUCT FAN		1				/ 8. 5
		ī	ŧ	(1093)		
HEAT GAM +1 SAK LOSS -HP =10%	1	231	1206		. CI ASS (NW) : 1,5 x 1,8 x 7	× 5,4
TIEAT GAN		870		1198	. CI ASS (NW) : 1,5 x 1,8 x 7	× 5,4
BYPASS OUTSIDE AR 1.695 CMHY17, 00Ex 6.1 BFx029		870	875	1198	. GLASS (NW) : 1.5 x 1.8 x 7	× 5,4
EFFECTIVE ROOM SENSIBLE HEAT.			895 14152	1196 811 13964	. GLASS (NW) : 1.5 x 1.8 x 7	2= 5,4 + 1,5 x 2,8 = 12,3
EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT		870	895 14152	1198	·GLASS (NW): 1.5 x 1.8 x 7 (SW): 1.5 x 1.8 x 3 ·WALL (NW): 1.5 x 4.0 - 5.4	= 5,4 + 1,5 × 2,8 = 12,3 4 = 20,6
EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT INFILTRATION CMHX g/kgx 0.72		870 403	895 14152	1196 811 13964	. GLASS (NW) : 1.5 x 1.8 x 7	2 = 5,4 + 1,5 × 2,8 = 12,3 4 = 20,6
EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT INFILTRATION CMH × g/kg × 0.72 PEOPLE 15 PEOPLE 49	14	870	895 14152	1196 811 13964	· GLASS (NW) : 1,5 x 1,8 x 7 (SW) : 1,5 x 1,8 x 3 · WALL (NW) : L5 x 4.º - 5,6 (SW) : 13.º x 4.º - 17	= 5,4 + 1,5 × 2,8 = 12,3 4 = 20,6
EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT INFILTRATION CMHX g/kgx 0.72	14	870 403	895 14152	1196 811 13964	· GLASS (NW) : 1,5 x 1,8 x 7 (SW) : 1,5 x 1,8 x 3 · WALL (NW) : L5 x 4.2 - 5.5 (SW) : 13.9 x 4.2 - 17	2 = 5,4 + 1,5 × 2,8 = 12,3 4 = 20,6 3 = 39,7
EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT INFILTRATION CMH × g/kg × 0.72 PEOPLE 15 PEOPLE 49	14	870 403	895 14152	1196 811 13964	• GLASS (NW): 1.5 x 1.8 x 7 (SW): 1.5 x 1.8 x 3 • WALL (NW): 1.5 x 4.0 - 5.6 (SW): 13.0 x 4.0 - 17 • PARTITION (1): 7.0 x 3.8 = 26	2 = 5,4 + 1,5 × 28 = 17,3 4 = 20,6 ,3 = 39,7
EXPASS OUTSIDE AIR 1.695 CMHY17.7 0-12-0.1 BF-1028 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT INFILTRATION CMHX g/kgX 0.72 PEOPLE 15 PEOPLEX 49 STEAM kg/hX 540 APPLIANCES ETC.	14	870 403	895 14152	1196 811 13964	· GLASS (NW) : 1,5 x 1,8 x 7 (SW) : 1,5 x 1,8 x 3 · WALL (NW) : L5 x 4.2 - 5.5 (SW) : 13.9 x 4.2 - 17	2 = 5,4 + 1,5 × 2,8 = 12,3 4 = 20,6 ,3 = 39,7
EXPASS OUTSIDE AIR 1.65 CMHY17.7 00E A. 6.1 BF NO 28 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT INFILTRATION CMHX g/kgX 0.72 PEOPLE 15 PEOPLEX 49 STEAM kg/hX 540 APPLIANCES ETC.	14	870 403	895 14152	1196 811 13964	• GLASS (NW): 1.5 x 1.8 x 7 (SW): 1.5 x 1.8 x 3 • WALL (NW): L5 x 4.º - 5.º (SW): 13.º x 4.º - 12 • PARTITION (1): 7.º x 3.8 = 26 (2): 6.5 x 3.8 = 24	2 = 5,4 + 1,5 × 2,8 = 12,3 4 = 20,6 ,3 = 39,7
EXPASS OUTSIDE AIR 1.65 CMHY17.7 0081 6.1 BF 1028 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT INFILTRATION CMHX g/kgX 0.72 PEOPLE 15 PEOPLEX 49 STEAM kg/hX 540 APPLIANCES ETC. VAPOR TRANS. SUB TOTAL	14	870 403	895 14152	1196 811 13964	• GLASS (NW): 1.5 x 1.8 x 7 (SW): 1.5 x 1.8 x 3 • WALL (NW): 1.5 x 4.0 - 5.6 (SW): 13.0 x 4.0 - 17 • PARTITION (1): 7.0 x 3.8 = 26	2 = 5,4 + 1,5 × 2,8 = 12,3 4 = 20,6 ,3 = 39,7
BYPASS OUTSIDE AR 1.695 CMHY17,7 00EX 6.1 BFN028 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT INFILTRATION CMHX g/kgX 0.72 PEOPLE 15 PEOPLEX 49 STEAM kg/hX 540 APPLIANCES ETC. VAPOR TRANS. SUB TOTAL SAFETY FACTOR	14	870 403 735	895 14152	1198 811 13934 (12738)	· GLASS (NW): 1.5 x 1.8 x 7 (SW): 1.5 x 1.8 x 3 · WALL (NW): L5 x 4.9 - 5.6 (SW): 13.9 x 4.9 - 17 · PARTITION (1): 7.9 x 3.8 = 24 (2): 6.5 x 3.8 = 24	= 5,4 +1,5×2,8=12,3 4 = 20.6 ,3 = 39,7
BYPASS OUTSIDE AR 1.695 CMHY17.7 ONE A O.1 BENOZE EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT INFILTRATION CMHX g/kgX 0.72 PEOPLE 15 PEOPLEX 49 STEAM kg/hX 540 APPLIANCES ETC. VAPOR TRANS. SUB TOTAL SAFETY FACTOR #	14	735 735	895 14152 735	1198 811 13934 (12738)	• GLASS (NW): 1.5 x 1.8 x 7 (SW): 1.5 x 1.8 x 3 • WALL (NW): L5 x 4.º - 5.º (SW): 13.º x 4.º - 12 • PARTITION (1): 7.º x 3.8 = 26 (2): 6.5 x 3.8 = 24	= 5,4 +1,5×2,8=12,3 4 = 20,6 ,3 = 39,7
BYPASS OUTSIDE AIR 1.695 CMHY 17,7 0 0 6 1 6 1 BF 10 2 8 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT INFILTRATION CMHX g/kgX 0.72 PEOPLE 15 PEOPLEX 49 STEAM kg/hX 540 APPLIANCES ETC. VAPOR TRANS. SUB TOTAL SAFETY FACTOR % ROOM LATENT HEAT SUB TOTAL SUPPLY DUCT LEAKAGE LOSS 10 %	14	735 735	935 14152 735 74	1196 811 13914 (12738)	·GLASS (NW): 1.5 x 1.8 x 7 (SW): 1.5 x 1.8 x 3 ·WALL (NW): L5 x 4.º - 5.º (SW): 13.º x 4.º - 12 ·PARTITION (1): 7.º x 3.8 = 24 (2): 6.5 x 3.8 = 24 ·FLOOR: SR VR = 65 x 6.5 x 3.8 + (65 x 6.5)	= 5,4 +1,5×2,8=12,3 4 = 20.6 ,3 = 39,7
BYPASS OUTSIDE AR 1.695 CMHY17.7 ONE A ALL BENOZE EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT INFILTRATION CMHX g/kgX 0.72 PEOPLE 15 PEOPLEX 49 STEAM kg/hX 540 APPLIANCES ETC. VAPOR TRANS. SUB TOTAL SAFETY FACTOR # ROOM LATENT HEAT SUB TOTAL SUPPLY DUCT LEAKAGE LOSS 10 % BYPASS OUTSIDE AR CMHX9.4 g/kgXo.1 BFX0.72	14	735 735	935 14152 735 74 1172	1198 811 13914 (2738) 1735 174 11148	· GLASS (NW): 1.5 x 1.8 x 7 (SW): 1.5 x 1.8 x 3 · WALL (NW): L5 x 4.9 - 5.6 (SW): 13.9 x 4.9 - 17 · PARTITION (1): 7.9 x 3.8 = 24 (2): 6.5 x 3.8 = 24	= 5,4 +1,5×2,8=12,3 4 = 20,6 ,3 = 39,7
EXPASS OUTSIDE AR 1.65 CMHY17.7 POEL 6.1 BF NO 28 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT INFILTRATION CMHX g/kgX 0.72 PEOPLE 15 PEOPLEX 49 STEAM kg/hX 540 APPLIANCES ETC. VAPOR TRANS. SUB TOTAL SAFETY FACTOR N ROOM LATENT HEAT SUB TOTAL SUPPLY DUCT LEAKAGE LOSS 10 %	14	735 735 74 148	935 14152 735 74 1172 1981	1198 811 13914 (12738) 1735 174 1148 1957	·GLASS (NW): 1.5 x 1.8 x 7 (SW): 1.5 x 1.8 x 34 ·WALL (NW): L5 x 4.º - 5.º (SW): 13.º x 4.º - 12 ·PARTITION (1): 7.º x 3.8 = 26 (2): 6.5 x 3.8 = 24 ·FLOOP: SR VR= 65 x 6.5 x 3.8 + (65 x 6.5) = 251.18	= 5,4 +1,5×2,8=12,3 4 = 20,6 ,3 = 39,7
BYPASS OUTSIDE AR 1.635 CMHY17.7 ONE A 6.1 BF NO 28 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT INFILTRATION CMHX g/kgX 0.72 PEOPLE 15 PEOPLEX 49 STEAM kg/hX 540 APPLIANCES ETC. VAPOR TRANS. SUB TOTAL SAFETY FACTOR # ROOM LATENT HEAT SUB TOTAL SUPPLY DUCT LEAKAGE LOSS 10 % BYPASS OUTSIDE AR CMHX9.4 g/kgXo.1 BF X 0.72	14	735 735 74 148	935 14152 735 74 1172 1981	1198 811 13914 (2738) 1735 174 11148	·GLASS (NW): 1.5 x 1.8 x 7 (SW): 1.5 x 1.8 x 3 ·WALL (NW): L5 x 4.º - 5.º (SW): 13.º x 4.º - 12 ·PARTITION (1): 7.º x 3.8 = 26 (2): 6.5 x 3.8 = 24 ·FLOOP: SR VR= 65 x 6.5 x 3.8 + (65 x 1.5) = 251.18	= 5,4 +1,5×2,8=12,3 4 = 20,6 ,3 = 39,7
EXPASS OUTSIDE AR 1.65 CMHY17.7 **** 6.1 BF*** 0.28 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT INFILTRATION CMHX g/kgX 0.72 PEOPLE 15 PEOPLEX 49 STEAM kg/hX 540 APPLIANCES ETC. VAPOR TRANS. SUB TOTAL SAFETY FACTOR ** ROOM LATENT HEAT SUB TOTAL SUPPLY DUCT LEAKAGE LOSS 10 % BYPASS OUTSIDE AM CMHX9.4 g/kgxe, BF X 0.72 EFFECTIVE ROOM LATENT HEAT	14	735 735 74 148	935 14152 735 74 1172 1981	1198 811 13914 (12738) 1735 174 1148 1957	·GLASS (NW): 1.5 x 1.8 x 7 (SW): 1.5 x 1.8 x 34 ·WALL (NW): L5 x 4.º - 5.º (SW): 13.º x 4.º - 12 ·PARTITION (1): 7.º x 3.8 = 26 (2): 6.5 x 3.8 = 24 ·FLOOP: SR VR= 65 x 6.5 x 3.8 + (65 x 6.5) = 251.18	= 5,4 +1,5×2,8=12,3 4 = 20,6 ,3 = 39,7
BYPASS OUTSIDE AIR 1.695 CMHY17.7 ONE A.1 BF A029 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT INFILTRATION CMHX g/kgx 0.72 PEOPLE 15 PEOPLEX 49 STEAM kg/hx 540 APPLIANCES ETC. VAPOR TRANS. SUB TOTAL SUPPLY DUCT LEAKAGE LOSS 10 % BYPASS OUTSIDE AIR CMHX9.7 g/kgxo.1 BF X0.72 EFFECTIVE ROOM LATENT HEAT OUTSIDE AIR HEAT OUTSIDE AIR HEAT	14	735 74 148 957	935 14152 735 74 1172 1981	1198 811 13914 (12738) 1735 174 1148 1957	·GLASS (NW): 1.5 x 1.8 x 7 (SW): 1.5 x 1.8 x 34 ·WALL (NW): L5 x 4.º - 5.º (SW): 13.º x 4.º - 12 ·PARTITION (1): 7.º x 3.8 = 26 (2): 6.5 x 3.8 = 24 ·FLOOP: SR VR= 65 x 6.5 x 3.8 + (65 x 6.5) = 251.18	= 5,4 +1,5×2,8=12,3 4 = 20,6 ,3 = 39,7
EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT INFILTRATION CMHX g/kgx 0.72 PEOPLE 15 PEOPLEX 49 STEAM kg/hx 540 APPLIANCES ETC. VAPOR TRANS. SUB TOTAL SUPPLY DUCT LEAKAGE LOSS 10 % BYPASS OUTSIDE ALL CMHX 9 F g/kgxa, BF x 0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT SENSIBLE: CMHX degx(1-BF)x0.29 SENSIBLE: CMHX degx(1-BF)x0.29	14	735 74 148 957	935 14152 735 74 1172 1981	1198 811 13914 (12738) 1735 174 1148 1957	·GLASS (NW): 1.5 x 1.8 x 7 (SW): 1.5 x 1.8 x 34 ·WALL (NW): L5 x 4.º - 5.º (SW): 13.º x 4.º - 12 ·PARTITION (1): 7.º x 3.8 = 26 (2): 6.5 x 3.8 = 24 ·FLOOP: SR VR= 65 x 6.5 x 3.8 + (65 x 6.5) = 251.18	= 5,4 +1,5×2,8=12,3 4 = 20,6 ,3 = 39,7
EYPASS OUTSIDE AR 1.63 CMHY17.7 ONE O.1 BF NO 28 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT INFILTRATION CMHX g/kgX 0.72 PEOPLE 15 PEOPLEX 49 STEAM kg/hX 540 APPLIANCES ETC. VAPOR TRANS. SUB TOTAL SUPPLY DUCT LEAKAGE LOSS 10 % BYPASS OUTSIDE AM CMHX 9.4 g/kgXo. BF X 0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM LATENT HEAT OUTSIDE AIR HEAT SENSIBLE: CMHX dogx(1- BF)X0.29 LATENT: CMHX g/kgX(1- BF)X0.72	14	735 74 148 957	935 14152 735 74 1172 1981	1198 811 13914 (12738) 1735 174 1148 1957	·GLASS (NW): 1.5 x 1.8 x 7 (SW): 1.5 x 1.8 x 34 ·WALL (NW): L5 x 4.º - 5.º (SW): 13.º x 4.º - 12 ·PARTITION (1): 7.º x 3.8 = 26 (2): 6.5 x 3.8 = 24 ·FLOOP: SR VR= 65 x 6.5 x 3.8 + (65 x 6.5) = 251.18	2 = 5,4 +1,5 × 28 = 12,3 4 = 20,6 ,3 = 39,7
EYPASS OUTSIDE AR 1.63 CMHY17.7 **** 6.1 BF*** 0.28 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT INFETRATION CMHX g/kgX 0.72 PEOPLE 15 PEOPLEX 49 STEAM kg/hX 540 APPLIANCES ETC. VAPOR TRANS. SUB TOTAL SUPPLY DUCT LEAKAGE LOSS 10 % BYPASS OUTSIDE AR 15 CMHX 9 F g/kg x 6.1 BF x 0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT SENSIBLE: CMHX degx(1- BF)X0.29 LATENT: CMHX g/kgX(1- BF)X0.72 GRAND TOTAL HEAT SUB TOTAL	14	735 74 148 957	935 14152 735 74 1172 1981	1198 811 13914 (12738) 1735 174 1148 1957	·GLASS (NW): 1.5 x 1.8 x 7 (SW): 1.5 x 1.8 x 34 ·WALL (NW): L5 x 4.º - 5.º (SW): 13.º x 4.º - 12 ·PARTITION (1): 7.º x 3.8 = 26 (2): 6.5 x 3.8 = 24 ·FLOOP: SR VR= 65 x 6.5 x 3.8 + (65 x 6.5) = 251.18	= 5,4 +1,5×2,8=12,3 4 = 20,6 ,3 = 39,7
BYPASS OUTSIDE AR 1.695 CMHY17.7 ONE O. 6.1 BF NO 28 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT INFILTRATION CMHX g/kgX 0.72 PEOPLE 15 PEOPLEX 49 STEAM kg/hX 540 APPLIANCES ETC. VAPOR TRANS. SUB TOTAL SUPPLY DUCT LEAKAGE LOSS 10 % BYPASS OUTSIDE AM CMHX 9.4 g/kgXo. BF X 0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM LATENT HEAT OUTSIDE AIR HEAT SENSIBLE: CMHX dogx(1- BF)X0.29 LATENT: CMHX g/kgX(1- BF)X0.72	14	735 74 148 957	935 14152 735 74 1172 1981	1198 811 13914 (12738) 1735 174 1148 1957	·GLASS (NW): 1.5 x 1.8 x 7 (SW): 1.5 x 1.8 x 34 ·WALL (NW): L5 x 4.º - 5.º (SW): 13.º x 4.º - 12 ·PARTITION (1): 7.º x 3.8 = 26 (2): 6.5 x 3.8 = 24 ·FLOOP: SR VR= 65 x 6.5 x 3.8 + (65 x 6.5) = 251.18	= 5,4 +1,5×2,8=12,3 4 = 20,6 ,3 = 39,7

COOLING AND DEHUMIDIFYING ESTIMATE (METRIC) 19 INQUIRED BY INQUIRING No. DATE ORIGINAL ADDRESS JOO NAME REVISION PAC - 1 SYSTEM SMCE USED FOR SECRATARY ROOM (SOZ) PERSON IN CHARGE 40 m' 4.0 m= Size 1 4.0 AREA OR SUN GAN OR Kcal/h AM FACTOR ESTMATE FOR. PEAK LOAD ITEM QUANTITY TEMP. DIFF. PM CORRECTION PM 3 HOURS OF OPERATION MAX 3:00 SOLAR GAIN --- GLASS Hous (5:00 6:00 COB %RH m X OUTSIDE DESIGN CONDITIONS CONDITIONS DBC WBC KRH DPC g/kg 47.7 78.6 37 m*X × OUTSIDE 24.9 17.1 50 ××× ××× ××× 9.4 Room m² X DIFFERENCE m³ X BLIND NON-EXISTENCE(OUTSIDE, MSIDE) L. M. D. GAIN-WALLS & ROOF SOLAR & TRANS GLASS ORDINARY, THICK, ABSORBENT. %, DOUBLE m'X × COLOR LIGHT, MEDIUM, DARK. m'X WEIGHT kg/m'(FLOOR) kg/m³(WALL) m³/PEOPLE INTERNAL HEAT Wint m² X INFILTRATION ∵ **×** ROOF - SHADED w.× REVOLVING DOORS PEOPLEX CMH/PER TRANS. GAIN-EXCEPT WALLS & ROOF DOORSX CMH/DOOR OPEN DOORS $m^{t} \times$ GLASS EXHAUST AIR CELING CRACK ≟ m'× mХ FLOOR СМН ■ PARTITION (1) 8,2 mix INFLITRATION Po1 551 × 135 * , 9.1 z,5 207 184 VENTILATION 228 (2) (0. Z PEOPLEX 25 CMH/PER 1,6 27 9. i* m²× CMH/m² INFILTRATION CMHX deg× 0.29 смн 🔳 VENTILATION : INTERNAL HEAT SENSIBLE HEAT FACTOR Z PEOPLEX 41 82 82 82 (ERSH) 0.87 (11.8°C) 927 860 KwX 1070 16.0 x 20 WX 346 346 346 LIGHTS DEHUMIDIFIED AIR APPLIANCES ETC. 12.5 APPARATUS DEWPONT_ (ERSH) 927 CREDIT FOR THERMAL STORAGE (-)deg X 310 CMH (24 RM-125ADP)(1-, BF)×0.29 SUB TOTAL NOTES SAFETY FACTOR 781 7431 . PARTITION 818 ROOM SENSIBLE HEAT SUB TOTAL SUPPLY DUCT SUPPLY DUCT FAN HEAT GAIN +LEAK LOSS +HP (1) 4.0xz.5 - 1.8 = 8.2 79 75 82 +LEAK LOSS =10% (2), 4, × 2.5 = 10.0 HEAT GAIN BYPASS OUTSIDE AIR 50 CHHY 187 0,1 B.F. 0.29 27 z4 22 EFFECTIVE ROOM SENSIBLE HEAT 927 · POOR : 0.9 x 7.0 = 1.8 8841 840 ROOM LATENT HEAT 0.72 Z PEOPLE × 49 98 PEOPLE 540 APPLIANCES ETC. VAPOR TRANS. SUB TOTAL 98 95 98 ROOM LATENT HEAT SUB TOTAL 10 10 10 SUPPLY DUCT LEAKAGE LOSS BYPASS OUTSIDE AIR SOCMH X 9,6 g/kg Xe, 18F X 0.72 35 35 34. 143 | 142 143 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT 10271982 070 OUTSIDE AIR HEAT (67) Sensible: CMHX degx(1- BF)x0.29

LATENT: CMHX g/kgx(1- BF)x0.72

FORM E-20E

BF)×0.72

H.P GAN

GRAND TOTAL HEAT SUB TOTAL RETURN DUCT RETURN DUCT PUMP PIPE

U.S.R.T) GRAND TOTAL HEAT

LEAK GAIN

HEAT GAN

INQUIRING No.	QUIRED	Ðν	37	.2.5	SHEET NO. ZO
the state of the s	DORES 6				DATE ORIGINAL
			/	21	PAG I SYSTEM REVISION
SPACE USED FOR ASSISTANT SUPERINTER		× T'''R6	<u> </u>	705	160,55 m' PERSON IN CHARGE
Size 6.5 mx 6.5 m= 47.5 m.		Ke			AM AM
TEM QUANTITY TEMP DIFF.	ļ			ECTION	ESTIMATE FOR. PEAR LOAD
SOLAR GAIN GLASS	NAN	5:00	3:00		HOURS OF OPERATION HOUR (~)
A Samuel Advantage Of the LE	MAZ	236	291		OUTSIDE DESIGN CONDITIONS COB CWB SRH
"A 1924 157 19 104 15		925	484		CONDITIONS DBC WBC SEH DPC g/kg
(NW) 5.4 m'×366 x065/035× 054×0.65	 	1 25	416**	710	OUTSIDE 40.5 282 39 19.0
m,× ×	 	` 			ROOM 24,0 17,1 50 9,4
m'× ×	 				DIFFERENCE 16,5 XXX XXX XXX 9,6
SOLAR & TRANS GAIN-WALLS & ROOF		-			BLIND NON-EXISTENCE (OUTSIDE, WSIDE) L M. D
		522	4110	512	GLASS ORDINARY, THICK ABSORBENT, %, DOUBLE
		844		1004	
- NW. 2017		244	204	1004	WEIGHT kg/m³(FLOOR) kg/m²(WALL)
	 	i -			INTERNAL HEAT; W. m. m. /PEOPLE
	 	 			INFILTRATION
1,007	 	!	ļ		SWINGING
ROOF -SHADED M'X X	 	<u></u>			REVOLVING DOORS PEOPLEX CMH/PER
TRANS. GAIN-EXCEPT WALLS & ROOF	١.		11.00	472	OPEN DOORS DOORSX CMH/DOOR
GLASS 17.3 m'X 16.5 X 5.1	 	035	1195	16.0	EXHAUST AIR
CEULING m²X X		 		<u> </u>	CRACK MX CMH/m
LOOR	-	1 7 2 1	11-1	126	INFILTRATION CMH III
PARTITION 9.5 m²× 8.25 × 1.8	 	141	156	160	VENTILATION
	1	i			4 PEOPLEX 25 CMH/PER. 100
0.20	 				/ m²X CMH/m²
INFILTRATION CMHX degX 0.29	 	!			VENTILATION CMH /00
INTERNAL HEAT		164	1110	164	SENSIBLE HEAT FACTOR
PEOPLE 4 PEOPLEX 41	 	1104	194	10.	FSHE 5306 (ERSH) = 0.96 (12.5°C)
NW TOWN	1	0.13	012	१।३	5.59 (ERTH)
LIGHTS 42,25 X 20 WX 1.08	 	913	713	113	DEHUMIDIFIED AIR
APPLIANCES ETC.	 			; 	1 125
	 	 	-		AFFARATUS DEWFORT
CREDIT FOR	()		(-)		5306 (ERSH) (24RM-12,5ADP)(1-0,BF)×0.29 (770 CMH
CREDIT FOR THERMAL STORAGE M'X deg X					(24 RM-12,5 ADP)(1-0,BF) ×0.29
Sub Total	 	!		<u>. </u>	NOTES
OAFEIT / ACTOR		. 78º	1717	4187	GLASS (NE) : 1.5 x 1.8 + 1.5 x 2.8 = 6.9
ROOM SENSIBLE HEAT SUB TOTAL SUPPLY DUCT FAN	1 -	<u>. 1654</u>			
		478	422	479	$(NW): 1.5 \times 1.8 \times Z = 5.4$
HEAT GAIN +LEAK LOSS -HP = 10% BYPASS OUTSIDE AIR (OO CMHX 16,5 are > 0,1 BF > 0.29					
	 	3 h/	1187	L304	WALL (NE) : 6.5 x 40- 6.9 = 19.1
CITEOTITE ROOM DETUNE	3	308	001		(NW): 6.5 × 4.0 -5.4 = 20.6
ROOM LATENT HEAT INFRIENCE CMHX 8/88X 0.72	ì	1) '] :	
	 	196	<u> </u>		. PARTITION : 2.5 x 3.8 = 9.5
PEOPLE 49 STEAM kg/hx 540	 	<u> </u>			1
TIEAR	t	!	l		1
APPLIANCES ETC.	 	!			1
V. and and an analysis of the state of the s	 				i logo a companie de la companie de
VAPOR TRANS. Sub TOTAL		 -	ļ		
	<u> </u>	1			
SAFETY PACTOR	 	196	196	196	
ROOM LATENT HEAT SUD TOTAL	 	20	20		
COPPET COCT ELEMENCE COLD	 	69	70		
BYPASS OUTSIDE AR COMMY 95 g/kg x0, BF X 0.72	 	285	284	783	
EFFECTIVE ROOM LATENT HEAT	-	591	4971	5587	
ELECTIVE WOOM TO THE		(133)	-1111		The state of the s
OUTSIDE AIR HEAT	l '	1337		- : :	
SENSIBLE: CMHX deg X (1 - BF) X 0.29	<u> </u>	!			
LATENT: CMHX g/kg×(1 - BF)×0.72	 -	1		<u> </u>	
GRAND TOTAL HEAT SUB TOTAL		<u>-</u>			
RETURN DUCT RETURN DUCT PUMP PIPE = %		į · · i	. !		
HEAT GAIN LEAK GAIN H.P GAIN					
(U.S.R.T) GRAND TOTAL HEAT	<u>.</u>	J -		نـــــا	FORM E-20E

INOUIRING No.	سروس وزين بسيسي		QUIRED		, 1,1 		····		DAT	E ORIGIN	VAL	21
JOB NAME			DDRESS		<u> </u>				REV	ISION		
SPACE USED FOR SECRATOR							- 1 SYS			SON IN	HARG	SE.
Size 4.0 m× 4.0 m	16.0	IO3		<u>×</u>	2.5	m(H)=	40	w,				
	GAN OR	FACTOR	ļ	Kei	il/h		ESTMATE F	OR.	AM	PEAR L	DAD	AM
TEM QUANTITY TE	up. DIFF				CORRI	ECTION			PM			РМЭ
SOLAR GAIN -	GLASS	-1. 1.	MAX	3100	5:0	6:00	HOURS OF	OPER	ATION	Hour (
m²×		<u> </u>		<u> </u>	ļ		OUTSIDE DE	SIGN CO	NOITMNS	COB	CME	
m [*] X	/ ×		L	<u> </u>			CONDITIONS			%RH	DPC	g/kg
m³× /	×			1	L	<u> </u>	OUTSIDE	42.2	188	37		19.0
m²×	×						Room	24.*	17.1	50		4.4
m³×	×			[DIFFERENCE	18.2	İxxx	x x x	$\times \times \times$	1.9.6
SOLAR & TRANS GAIN-	WALLS &	ROOF		1			BLIND	NON-EX	ISTENCEIC	UTSIDE, INS	IDE) L	. M. D
WALL m'×	×]	} . ⊹			GLASS	ORDINA	RY. THICK.	ABSORBE	NT.	% . DOUBL
m*×	/ ×		1	1			COLOR	İLIGHT. I	MEDIUM. DA	ARK.		
m [†] × ✓	/×			Ī.			WEIGHT		kg/m*(F	LOOR)	kg/	m¹(WALL
m²×	×			 			INTERNAL HEAT	1	W/m²		m³/PE	EOPLE
Roof-Sun m'x	×			·				NFILTR	ATION			
ROOF -SHADED MEX	×) ·		!			SWMGMG					1.72
TRANS GAIN-EXCEPT		POOE	 	1		 	REVOLVING	Doors	PEOPLEX	CMH/PER		
	X	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,]				OPEN DOOR			MH/DOOR		
			<u> </u>	-			EXHAUST A					
CEILING m²X	×		ļ	1-40	سا ورس	700	CRACK	m >		CMH/m	·	
FLOOR 16.0 m2 9.1		1.7		248			INFILTRA		СМ			
PARTITION 8,7 m2× q,	<u> </u>	1.8	<u> </u>	299	27							· · · · · · · · · · · · · · · · · · ·
DOOR 1.8 2 9.	<u>'</u> ×	1.6	<u> </u>	<u> 27</u>	Z4	27	Į.	PENTIL		ALL IOPO		
				! 			Z PEOPLI			MH/PER	<u> </u>	50
INFLYRATION CMHX	deg×	0.29	<u> </u>				j m³×			MH/m'		
INTERNAL HI	EAT			İ	ا نا		VENTIL			H. 🗰		50
PEOPLE Z PEC	PLEX 4			82	32	82				AT FAC		
Kw Kw×	×·	860	<u>L.</u>				E.S.H.F≕	1,1	30 (ERSH)	89(1	7.0)
LIGHTS 16.0 X ZO	W×	1.08		346	346	346		1.2	.73 1	ERTH)		
APPLIANCES ETC.				!]]	D	EHUMID	FIED AI	7	
			171	T .	[]	·	APPARATUS	DEWPO	INT	12.5	11.	σ
									-			
CREDIT FOR THERMAL STORAGE m'X	de	g×	:)	ī	()		124RM- 17.5	<u>1130</u>		ERSH	38	CMH
THERMAL STOMASE		Sub Total		1			124RM-12.	ADP)(1-(,BF)	×0.29 -		
SAFETY FACTOR		%					NOTES					•
ROOM SENSIBLE HEAT	SUD TOTAL	1.1		002	948	891	PARTI	TIAN		75 18	i R	τ .
SUPPLY DUCT SUPPLY DUC			 	,			[[AK	11010	. O. x	61.	10	•
		=10%	1	101	95	90	DOOR	: 0	9 x Z. 0	= 1.8		
HEAT GAIN +LEAK LOS	*			ריב	24		FLOOI	Z : 51	ર			
EFFECTIVE ROOM SEI			 	130		1003	ĺ		•			
		A A		170	1001	1003				7	200	
ROOM LATENT			}				£				•	
INFILTRATION CMHX	g/kg×	0.72	ļ	0.00		····	:					
PEOPLE ZP	EOPLEX 4		ļ	98			!					
STEAM	kg/h×	540	ļ	 	ļ —		}	2.1	-			
APPLIANCES ETC.	·	<u> </u>			.		{					• .
	· · · · · · · · · · · · · · · · · · ·		ļ		ļ	بـــــا	ł					
VAPOR TRANS.			<u> </u>			<u> </u>	∤ ∵ `				+ 1 +	
	s	Ub TOTAL					Į.					
SAFETY FACTOR	<u>, , , , , , , , , , , , , , , , , , , </u>	%	<u> </u>	:			Į				artija i	
ROOM LATENT HEAT	SUD TOTAL			98	98	98	ł					
SUPPLY DUCT LEAKAGE LOSS		10 %		10	10	10						
BYPASS OUTSIDE ARSPCMHXQL	g/kg×e BF	× 0.72		35	35	34) (14) (14)					
EFFECTIVE ROOM LA				143	143	142	Į.	1 3 2 3				
EFFECTIVE ROOM TO			J	273	1210	1145)					
OUTSIDE AIR				(80)				2.5		a gran		
		XD 29		اذبحا					5			
SENSIBLE: CMHX deg			 				Ì		*			
LATENT: CMHX g/kg>		AU./2			 		i	100		+ 1/2		1.71
GRAND TOTAL HEAT								18.25		11 1		
RETURN DUCT RETURN DUCT				7-			ŧ.	4 (4.4)	3	the North Control	* . * * *	
HEAT GAIN LEAK GAIN	H.P G		جندك	!	 				L 10			
(U.S.R.T) GRAND								1000				_

примяна Но.		in	DUIRED	Ðγ			SHEET NO. 72
IO NAME			DRESS				DATE ORIGINAL
	For declare			0 4	15.	, P	AC SYSTEM REVISION
	For ASSISTANT			X X	7 8	m(H)=	160,55 m1 PERSON IN CHARGE
IZE 6		كالمستد والكناء بمستر بأنانا جسدات		Kei			AM AM
ITEM .	AREA OR SUN GA	FACTOR		1,41			ESTMATE FOR. PM PEAR LOAD PM 6
					CORRI		HOURS OF OPERATION Hour (-)
	SOLAR GAIN G	and the second s	MAX				
(NW) 6		85 × 0.94 × 0.65		162	618	1190	CONDITIONS DE T WE'T KRH DP T E/kg
	m³X	×			ļ		100000000000000000000000000000000000000
	w,×	×		!	 		201
	w _s x	×		ļ	ļ		
	m ² X	<u>×</u>		l .			ion, encourage of the control of the
	R TRANS GAIN-W		ľ	١	أ مر. أ	202	
WALL (NW)		× 2.1		931	750	183	GLASS ORDINARY, THICK, ABSORBENT, %, DOUBLE COLOR LIGHT, MEDIUM, DARK.
	m ₃ X	×		!			
	m² X	×		 	 		The same of the sa
	m*X	×			ļ		THE DOLLAR TO THE TAXABLE PARTY OF THE PARTY
Roof-Sun	m² X	×		<u> </u>			INFILTRATION
ROOF - SHAD	DED m'X	×		!	<u></u>		SWINGING
TRANS.	GAIN-EXCEPT WA		} .	1	\ .'	أحصا	REVOLVING DOORS PEOPLEX CMH/PER
GLASS	6.1 m'x 14.7	× 5,1		5 8	64 .	581	OPEN DOORS DOORSX CMH/DOOR
CEILHIG	m³×	×	· ·	<u> </u>	ļ	<u> </u>	EXHAUST AIR
LOOR	m²×	×			ļ		CRACK MX CMH/m
PARTITION	95 m'× 7,35	× 1,8	 	126	156	141	INFILTRATION CMH
		<u>, e in la r</u>			<u> </u>		VENTILATION
				<u> </u>	<u> </u>		4 PEOPLEX 25 CMH/PER. 100
NELTRATION	CMH×	deg× 0.29		1	<u> </u>	<u> </u>	, wix CWH/wi
	INTERNAL HEA	\T			1	ì	VENTILATION CMH 100
PEOPLE	4 PEOPL	LEX 41	l	164	164	164	SENSIBLE HEAT FACTOR
Kw	Kw×	× 860		i :	l	<u> </u>	ESH.F= 4239 (ERSH) 0,94(17.5°C)
LIGHTS	4225 ×20 1	W× 1.08	Ĭ	913	913	913	4 5 2 3 (ERTH)
APPLIANCES	N]	<u> </u>	DEHUMIDIFIED AIR
	· 1 1			Γ		<u> </u>	APPARATUS DEWPOINT 17.5
				1		1	
CREDIT FO	OR m'X	deg×	()		(-)	<u> </u>	4.234 TERSH 14 70 CMH
THERMAL.		SUD TOTAL		;		<u> </u>	4.239 (ERSH)
SAFETY FAC	TOR	%		!			NOTES
	OOM SENSIBLE HEAT S	Ub TOTAL	3	814	2750	3762	GLASS (NW): 1.5×1.8+1.5×2.8 = 6.9
SUPPLY DUC		FAN		İ		1	5-40-19-19-1
HEAT GAIN	+LEAK LOSS	+HP = 6%		382	275	377	·WALL (NW): 6.5 x 4.0 - 6.9 = 19.1
	SIDE AIR JOB CMH . 4			43	53	48	. PARTITION : 2.5 x 3.8 = 9.5
FEEE/	CTIVE ROOM SENS	SIBLE HEAT	1				
LFFE	C 114 C 110 Cir. Call.			: / SH	13078	4187	PARMINION
				234	<i>30</i> 78	4187	PARMINION
	ROOM LATENT H	TAT		234	3078	4187	PARMINIO
	ROOM LATENT F	IEAT g/kg× 0.72			30.78	4187	YAR
PEOPLE	ROOM LATENT H CMHX - 4 Pec	1EAT g/kg× 0.72 DM.Ex 49		196	3078	4187	YAR
STEAM	CMH×	IEAT g/kg× 0.72			30.78	4187	
PEOPLE	CMH×	1EAT g/kg× 0.72 DM.Ex 49			30.78	4187	
DEOPLE STEAM APPLIANCES 1	ROOM LATENT H CMH × 4 Pec	1EAT g/kg× 0.72 DM.Ex 49			3078	4187	
DEOPLE STEAM APPLIANCES 1	ROOM LATENT H CMH × 4 Pec	HEAT g/kg × 0.72 DPLE × 4.9 kg/h × 540			3078	4187	
PEOPLE STEAM APPLIANCES (ROOM LATENT H CMH× 4 Pec	#EAT g/kg × 0.72 bple × 4.9 kg/h × 540 Sub Total			30.78	4187	
PEOPLE STEAM APPLIANCES I APOR TRANS	ROOM LATENT H CMH x 4 Psc etc. 5	#EAT g/kg × 0.72 DPLE × 4.9 kg/h × 540 Sub Total				4 87	
PEOPLE STEAM APPLIANCES I APOR TRANS SAFETY FACTOR	FOOM LATENT HEAT SE	#EAT g/kg × 0.72 pmle × 4.9 kg/h × 540 Sub Total %			196	448T 	
PEOPLE STEAM APPLIANCES I APOR TRANS SAFETY FACTOR R SUPPLY DUCTOR	ROOM LATENT HEAT SL	#EAT g/kg × 0.72 DPLE × 49 kg/h × 540 Sub Total % #D Total		196	196	4 87 	
PEOPLE STEAM APPLIANCES I APOR TRANS SAFETY FACT R SUPPLY DUCTOR SYPASS OUT	TOR LATENT HEAT SI T LEAKAGE LOSS SIDE AM TO CMH X 948	#EAT g/kg × 0.72 pme × 4.9 kg/h × 540 Sub Total % b Total 10 % //kg × 0, 18F × 0.72		196	196	4481 	
PEOPLE STEAM APPLIANCES (APOR TRANS SAFETY FACTOR R. SUPPLY DUCTOR SYPASS OUT EFFE	ROOM LATENT HEAT SETC. TOR TOM LATENT HEAT SET LEAKAGE LOSS SIDE AM OCHHIX 94 E	#EAT g/kg × 0.72 priex 4-9 kg/hx 540 Sub Total # #b Total [0 % /kg × 0, BF × 0.72 ENT HEAT ■		196	196	4 87 	
PEOPLE STEAM APPLIANCES (VAPOR TRANS SAFETY FACTOR R. SUPPLY DUCTOR SYPASS OUT EFFE	FOOM LATENT HEAT SI	#EAT g/kg × 0.72 priex 4-9 kg/hx 540 Sub Total # #b Total [0 % /kg × 0, BF × 0.72 ENT HEAT ■	4	196 196 20 68 284 523	196	4481 	
PEOPLE STEAM APPLIANCES (VAPOR TRANS SAFETY FACTOR R. SUPPLY DUCTOR BYPASS OUT	ROOM LATENT HEAT SETC. TOR TOM LATENT HEAT SET LEAKAGE LOSS SIDE AM OCHHIX 94 E	Sub Total //kgxo, BFx0.72 ENT HEAT # # # # # # # # # # # # #	4	196	196	4481 	
PEOPLE STEAM APPLIANCES I VAPOR TRANS SAFETY FAC R SUPPLY DUC BYPASS OUT: EFFE	ROOM LATENT H CMHX 4 PEC ETC. 5. TOR COOM LATENT HEAT SL T LEAKAGE LOSS SIDE AM CMHX 94 E CTIVE ROOM LATI CTIVE ROOM TOT	Sub Total //kg x 0.72 Sub Total // //kg x 0.18 Sub Total // // // // // // // // // // // // //	4	196 196 20 68 284 523	196	4481 	
PEOPLE STEAM APPLIANCES I VAPOR TRANS SAFETY FAC R SUPPLY DUC BYPASS OUT EFFE EFFE SENSIBLE:	ETC. TOR COM LATENT HEAT SE TOR COM LATENT HEAT SE T LEAKAGE LOSS SIDE AM CMHX 94 E CTIVE ROOM LATI CTIVE ROOM TOT. OUTSIDE AIR H CMHX degx(Sub Total //kg x 0.72 Sub Total // //kg x 0.18 Sub Total // // // // // // // // // // // // //	4	196 196 20 68 284 523	196	4481 	
SUPPLY DUC BYPASS OUT EFFE EFFE SENSIBLE:	ETC. TOR COM LATENT HEAT SE TOR COM LATENT HEAT SE T LEAKAGE LOSS SIDE AM CMHX 94 E CTIVE ROOM LATI CTIVE ROOM TOT. OUTSIDE AIR H CMHX degx(Sub Total 10 %	4	196 196 20 68 284 523	196	4481 	
PEOPLE STEAM APPLIANCES II VAPOR TRANS SAFETY FAC SUPPLY DUC SYPASS OUT EFFE EFFE SENSIBLE: -ATENT: GI	ETC. TOR COM LATENT HEAT SU T LEAKAGE LOSS SIDE AM CMHX 94 E CTIVE ROOM LATI CTIVE ROOM TOT. OUTSIDE AIR H CMHX degx(CMHX g/kgx(GRAND TOTAL HEAT SU	Sub Total Sub Total	4	196 196 20 68 284 523	196	4481 	
PEOPLE STEAM APPLIANCES II VAPOR TRANS SAFETY FAC GUPPLY DUC SYPASS OUT EFFE EFFE SENSIBLE: -ATENT: GI	ETC. S. TOR COM LATENT HEAT SU TELEAKAGE LOSS SIDE AM DEMHX 94 E CTIVE ROOM LATI CTIVE ROOM TOT. OUTSIDE AIR H CMHX degx(CMHX g/kgx(GRAND TOTAL HEAT SU T RETURN DUCT P	Sub Total Sub Total	4.	196 196 20 68 284 523	196	4481 	

	LODRESS	7			DATE ORIGINAL
		n 7 c	1	AC)	C- SYSTEM REVISION
SPACE USED FOR JUNIOR ENGINEER RESIDENT 10.5 mx 6.5 mx 68.25 m'	<u>×01~ (⊃</u>	200	8		ZZ5,55 m' PERSON IN CHARGE
	T	Koal			
TEM AREA OR SUN GAN OR FACTOR	ļ	/CAI			JESTHATE FOR PEAK LOAD
QUANTITY I TEMP, DIFF. I	 			ECTION	PM PM
SOLAR GAIN - GLASS	MAX 6				HOURS OF OPERATION HOUR
(NW) 6.9 mx 366 x0,64/6,85x 0,94 x0,65	110	6Z	618	IIRO	OUTSIDE DESIGN CONDITIONS COB CWB %
w,X X					CONDITIONS DE C WE'C ARH DE C &/k
m'× × ×				<u> </u>	OUTSIDE 38.7 27.6 43 18
m [®] X		L		1	ROOM 240 17.1 50 9.
m'× ×					DIFFERENCE 147 XXX XXX XXX 9
SOLAR & TRANS GAIN-WALLS & ROOF					BLIND NON-EXISTENCE (OUTSIDE, INSIDE) L M.D
WALL (NW) 19,1 m'x 232 x 21	19	31	258	783	GLASS ORDINARY, THICK, ABSORBENT %. DOU
m ^z × ×					COLOR (LIGHT, MEDIUM, DARK,
<i>m</i> ,× ×	1				WEIGHT kg/m²(FLOOR) kg/m²(WA
m¹× ×	1		***	i	INTERNAL HEAT! W/m² m²/PEOPLE
					INFILTRATION
					4
ROOF - SHADED M'X X	 				SWINGING
TRANS. GAIN-EXCEPT WALLS & ROOF	1 1				REVOLVING DOORS PEOPLEX CMH/PER
GLASS 6.9 m'x 14,7 × 5,1	<u>_</u>	18	641	58]	OPEN DOORS DOORSX CHH/DOOR
CER.WG m'X X	 				EXHAUST AIR
FLOOR m ⁸ X X	- <u> </u>	1	·		CRACK MX CMH/m
PARTITION 10.0 m'X 7.35 X 1.8]	33	164	149	INFILTRATION CMH III
	1	$\neg \neg$			VENTILATION
					6 PEOPLEX Z5 CMH/PER. 150
INFELTRATION CMHX degX 0.29	i				; m'x CMH/m'
INTERNAL HEAT	1			,	VENTILATION CMH = 150
	2	46	z46	744	SENSIBLE HEAT FACTOR
		- ≃+	240		FSHE 4,976 (ERSH) 0,92 (123°C
		71	Link	IADI-	ES.H.F= 4.1 10 (ERTH)
LIGHTS 68.75 × 70 W× 1.08	1 12	75	14.15	1475	DEHUMIDIFIED AIR
APPLIANCES ETC.	 		·		
<u> </u>	 			<u> </u>	APPARATUS DEWPOINT 12.5 C
	 		···		A ADD (ERSH)
CREDIT FOR THERMAL STORAGE MIX deg X	(1 1		<u>—)</u>	11.77	1.660 CM
Sub TOTA					(24RM-12,SADP)(1-0,BF)×0.29 1.660 CM
SAFETY FACTOR %	1				NOTES
ROOM SENSIBLE HEAT SUB TOTAL	44	65	340.Z	4414	VR = 6.5x6,5 x 3.8 + 6.5x4.0x z.5
SUPPLY DUCT SUPPLY DUCT FAN		` . T		l	= 225,55
HEAT GAIN + LEAK LOSS +HP =10%	44	47	34	44Z	
BYPASS OUTSIDE AIR 150 CMH2 4.7 0. BF 10.29		34	80	772	GLASS (NW): 15 118 +1,5 x2.8 =6.9
EFFECTIVE ROOM SENSIBLE HEAT			3873	4928	GLAZ (MM): 13 x 112 x 113 x 11
ROOM LATENT HEAT	+		ريور	1120	
	,				. WALL (NW): 65x40-6.9=19.1
INFETRATION CMHX g/kgX 0.72		40			- PARTITION : 40 x 2.5 = 10.0
PEOPLE & PEOPLEX 49	T .	94		<u> </u>	- CARTITION . At XA. T.
STEAM kg/hX 540	 }				
APPLIANCES ETC.	 -				
VAPOR TRANS.	4-4				
SUD TOTAL					
SAFETY FACTOR %			11 12		Programme of the second of the
ROOM LATENT HEAT SUB TOTAL	12	94	z94	294	I the entering of the second of the Control
	1	30	30	30	
SUPPLY DUCT LEAKAGE LOSS 10%		OZ	104	103	
	4.0		428		
BYPASS OUTSIDE AIR IS EMH × 9.4 g/kg ×6 J BF × 0.72	1/	-	4251		
BYPASS OUTSIDE AIR 15 MH × 9.4g/kg × 6.1 BF × 0.72 EFFECTIVE ROOM LATENT HEAT			754	2/22	
BYPASS OUTSIDE AIR IS EMHX 9.4 g/kg x6.1 BF x 0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT		ا جو			
BYPASS OUTSIDE AIR IS EMHX 9.4 g/kg x6.1 BF x 0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT		اعو	737 V V V V ()		
BYPASS OUTSIDE AIR IS MHX 9.4 g/kg x6 J BF x 0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT SENSIBLE: CMHX deg x (1 - BF) x 0.29		٥٤			
BYPASS OUTSIDE AIR IS MHX 9.4 g/kg x6 J BF x 0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT SENSIBLE: CMH x deg x (1 - BF) x 0.29		<u>, , , , , , , , , , , , , , , , , , , </u>			
BYPASS OUTSIDE AIR IS MHX 9.4 g/kg x6.1 BF x 0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT SENSIBLE: CMHX deg x (1 - BF) x 0.29					
BYPASS OUTSIDE AR IS MHX 9.4 g/kg x6.1 BF x 0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT SENSIBLE: CMHX deg x (1 - BF) x 0.29 LATENT: CMHX g/kg x (1 - BF) x 0.72 GRAND TOTAL HEAT SUB TOTAL	540				
BYPASS OUTSIDE AIR ISEMHX 9.4 g/kg x6 J BF x 0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT SENSIBLE: CMHX deg x (1 - BF) x 0.29 LATENT: CMHX g/kg x (1 - BF) x 0.72 GRAND TOTAL HEAT SUB TOTAL	540				

Inquiring No	- کیا	ع اساد	Αı		OURED				ESTIMA 	 (SHEE	ET No.		24_
JOB NAME			<u>.</u>		DDRESS		<u> </u>					E ORIGI	NAL	
	7/11/14	D = 116-4	.16-6	· · · · · · · · · · · · · · · · · · ·		03 6	<u> </u>	- DA	C-1 SYS	TEM		ISION		
SPACE USED FO	wy ,	w = 1	NEEL	52 W					225.55	m ₃	PER	SON IN	CHARG	E
512 g				3 10	T		1/1		T		АМ			AM
ITEM .	AREA OR	SUN GAN		FACTOR	}		Conn		ESYMATE F	OR.	РМ	PEAK L	OAP	PM 6
					 	/		5:00	HOURS OF	OPER		Hour (· · · · · · · · · · · · · · · · · · ·
7.4		IN GL		01 15	MAX	6:00	3100	_				CDB	CWB	%RF
(NW) 69		b x064/2		14 X 9 82	1	195	618	1180	CONDITIONS			%RH	DPC	E/kg
	m ^t X				_	<u> </u>	ļ					+	31.0	188
~- <u></u>	w,×		.×		↓	 			OUTSIDE	38.	27.6	43		9.4
	m²×		×		 _	<u> </u>			ROOM	24.0	17.1	50		9.4
	m ^t X	·	×			<u> </u>			DIFFERENCE	14.7	XXX	IXXX	l x × ×	
SOLAR &	TRANS	GAIN-WA	LLS	& ROOF		1	l		BLIND			OUTSIDE. IN		
WALL (WW) 19	, l m'×	23.2	× -	7.1		931	258	783	GLASS	ORDINA	RY. THICK	ABSORBE	NT 5	, DOUBL
	m·×		×		1	i			COLOR	LIGHT.	IEDIUM. D.	ARK.		·
	m,×		×		1	T			WEIGHT		kg/m²(F	LOOR)	kg/1	m'(WALL
	m*X		×	7	1	 			INTERNAL HEAT	1	W/m²		m ⁷ /PE	OPLE
	m³×		'x'		 -	 	 		The second second second	NFILTR.	ATION			
Roor-Sun							╁┷┷		SWINGING					
ROOF - SHADE			<u></u>		 		 		REVOLVING	Νοορε	PEOPLE	CMH/PER		
TRANS. G	SAIN-EXC	EPT WAL		the property of the second		_	أما	241				CMH/DOOR	1	
GLASS 69	<u></u> w,×	14.7	×	<u> 5.1</u>	↓	518	641	246	OPEN DOOR		JURSA 1	CHISTOGON	 	
CELNG	m²×		×		<u> </u>	<u> </u>	نيسن إ		EXHAUST A				 	
FLOOR I	6.0 m2×	7.35	×	1.77	1	1200	248		CRACK	m×		CMH/m	-	
PARTITION II	o m,×	7.35	×	1,8]	133	164	149	NFILTA/	TION	- СМ	H : 🗯	1	
			-			1)	VENTIL	ATION			
						1		1	6 PEOPL	EX.	25 C	MH/PER.	15	<u> 50 </u>
To an included	CM	U V	deg×	0.29	1	į			j m²×		C	MH/m²	<u> </u>	
INFILTRATION		IAL HEAT			 	 	 	i	VENTIL	ATION	CM	H 🔳	1	50
•				1	}	746	716	246		SENSI	BLE HE	AT FAC	TOR	
PEOPLE		6 PEOPLE			+	240	1240		1.	6 1			0.92 (1	> 3°C)
Kw	Kwx		× -	B60		•	ł	1 4 DI	E.S.H.F=-	56		ERTH)	0.7 - ((4 47
LIGHTS	68,25	× SO W	×	1.08	4	475	14.12	1.475				IFIED A	sis	***********
APPLIANCES ET	TC				<u> </u>	<u>!</u>			ł					12.
	<u> </u>			<u> </u>	<u> </u>	1	 	<u> </u>	APPARATUS			12		_'c
		44. <u></u>			<u> </u>	<u>!</u>	Į		(Z4RM-12.5	~ LO A		FRSH)		
CREDIT FOR	TORAGE	m²×		deg×	<u> </u>	i	(-)	[{ 	5190	- BE)	×0.29 -	1.74	O CMH
				Sub Tota	.d	1			(CARM-12.	ADPIL	, pr/	~ U.E.S		
SAFETY FACTO	PR			%		1 :]		NOTES			. 75 2	ه د	
		HEAT SUD	Tota	NL .	4	665	3.650	4304	NOTES	5,5 X6,5	5 x 3, 15	+ 8 2 X4	× 2>	
		LY DUCT	FA		1	1			-	225,55				
SUPPLY DUCT			±-1 -±-1	_		467	365	431	La company		196 ± 31			, 9
HEAT GAIN		K Loss			 	64	80	77	- GLASS	(ww)	1.5 X	1'D + 1'2	x 2,0 = 0	5.1
BYPASS OUTSIC					+			4807		Carin S	154	10-69	= 19.1	
		M SENSIE				196	20 17	14001						100
E	ROOM LA	TENT HE	AT		}	1	1		· PARTI	TION	: 4 ×	Z,5 - 10	.0	
INFILTRATION	CMH	K g	/kg×	0.72	<u> </u>		ļ	<u> </u>				1 to 1	100	1.00
PEOPLE		6 PEOM	LEX 4	9		<u> 794</u>		ļ	j · Flooi	R : 4	1.0 × 4.0	=-16.0		
STEAM		kg	/h×	540	<u> </u>	!								
APPLIANCES ET									J					1
						Ī		7	}		,			
VAPOR TRANS.					1	Ī]		<u>:</u>		•		1,11
TAPON INAMS.				SUB TOTAL	1	1			1		**	•		+ 4 +
				500 TOTAL	1	1	1		1					
SAFETY FACTO						294	294	794	1					
		HEAT SUD	10 t		1				1	+ + f	11			4
SUPPLY DUCT !				10 %		30	30		1					d Mil
BYPASS OUTSID					1-	201		103	{			organición.	$x^{-2} \cdot x^{2} \cdot z^{2}$	·
EFFEC	TIVE RO	OM LATEN	NT H	EAT 🚆	1	426	428	42	[4,1024	1 2 3	1.1	
		DATOT MC			5	62Z	4573	5234	!	in says		1. 5.75		
		AIR HEA			1		1		[1200	$ \varphi(x) = 2$	Market Book		
	CMHX	deg x (1 -		F)×0.29			1]	+ 1		140	g - 10	vit. 1.45
C-vers	CMHX	g/kg×(1-		F)×0.72	1	!			1					
	. m = x			11. 4.16	+		 		1				- 10 To	
LATENT:					i		1							
LATENT: GRA	ND TOTAL	HEAT Sub	TOTAL		{	!	 	<u> </u>	1				•	ί.
LATENT:	ND TOTAL	HEAT SUB	TOTAL	Pipē = %	-				_			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	nte di s	j
LATENT: GRA RETURN DUCT HEAT GAIN	RETURN LEAK GA	HEAT SUB	TOTAL	Pipe = % Gain	ļ								nte di s Nederla Santa	1

	DDRESS				DATE ORIGINAL
				PΛ	C- 4 SYSTEM REVISION
PRACE USED FOR TUNIOR ENGINEER ROOM		<u>ч)</u> х 3 8,	, C		PERSON IN CHARGE
					
AREA OR SUN GAN OR FACTOR	1 2 2 2	N.C.	l/h		ESTMATE FOR. AM PEAK LOAD
QUANTITY TEMP. DEF.	 			ECTION	
SOLAR GAIN — GLASS	1		3:00		T
(NN) 69 m2×366×065/685×0.94×0.65	├	1180	618		Outside Design Conditions CDB CWB
(< w) 8 . m2x752x850/685 x 0 94 x 0 65	 	734	1028	382	CONDITIONS DB WB WB WRH DPC
m ² X	ļ	!			OUTSIDE 40.5 28.2 39 1
m³× ×					ROOM Z4,0 17.1 50
m²×	1	1			DIFFERENCE 165 XXX XXX XXX
SOLAR & TRANS GAIN-WALLS & ROOF			_		BLIND NON-EXISTENCE(OUTSIDE, INSIDE) L. M. D
WALL (NW) 19, 1 m1x 195 x Z.1		783	258	931	GLASS ORDINARY, THICK ABSORBENT. %. DO
(SW) 33,9 m2× 19,2 × 2.1		367	1125	1389	COLOR LIGHT, MEDUM, DARK.
m²× ×					WEIGHT kg/m³(FLOOR) kg/m³(V
m'×					INTERNAL HEAT W'm1 m1/PEOPL
Roof-Sun m'X X					INFILTRATION
ROOF - SHADED MEX X			7		SWINGING
TRANS. GAIN-EXCEPT WALLS & ROOF	1			 	REVOLVING DOORS PEOPLEX CMH/PER
그는 사람들은 사람들이 가장 바람이 가는 것 같아. 그는 사람들은 사람들이 없다.	,	263	1202	1125	OPEN DOORS DOORSX CMH/DOOR
	 	دوی	1213.	1150	EXHAUST AIR
	+	1		 	CRACK MX CMH/m
<u> </u>	├	-		222	
PARTITION 17,6 m°× 825 × 1,8	-	262	Z89	233	
	 	<u> </u>			VENTILATION
	<u> </u>	<u> </u>			6 PEOPLEX Z5 CMH/PER. 150
NEILTRATION CMHX deg X 0.29		<u>!</u>	<u> </u>		/ m²x CMH/m²
INTERNAL HEAT			1		VENTILATION CMH 150
PEOPLE 6 PEOPLEX 4		246	246	246	SENSIBLE HEAT FACTOR
√w Kw× × 860		1			E.S.H.F= 7970 (ERSH) 0.95 (12.5°
	+	345	1245	1345	(E.S.H.F= 8397 (ERTH) =0./3 (12.3
Appliances Etc.	 	!	11515	,,,, <u> </u>	DEHUMIDIFIED AIR
APPLIANCES ETC.	 	 			APPARATUS DEWPONT 12.5 C
	l	i	-		APPARATUS DEWPONT 12.5 C
CREDIT FOR m'Y deg X	 		()	}	7.976 (ERSH) 2440 C
THERMAL STORAGE WA	 -	<u> </u>			(4RM-12,5ADP)(1-BF)×0.29 2.660 C
Sub TOTAL	 -	!	ļ		
SAFETY FACTOR %					NOTES SR=65x10,5-15x4=62,25
ROOM SENSIBLE HEAT SUD TOTAL	<u> </u>	180	630Z	6813	
SUPPLY DUCT SUPPLY DUCT FAN	1			.0.7	VR=65x65x3.8+40x40x2.5=200
HEAT GAIN +LEAK LOSS +HP =10%		118	631	68 Z	1 0, 28, 22
SYPASS OUTSIDE AIR 150 CMH 1 10 See 0,1 BF x 0.29		7Z	80	64	GLASS
EFFECTIVE ROOM SENSIBLE HEAT	17	970	7013	17559	(NW) = 1.5x/8+1.5 x2.8 = 69
ROOM LATENT HEAT	1	<u> </u>			
			l :		(SW)=1.5x1.8x3=8.1
	 	701			
PEOPLE & PEOPLEX A9	 	794			·WALL
STEAM kg/h× 540	 		 -		(NW): 65x40 - 6.9 = 19.1
	Į	[(5W): 10.5×4.0-8. = 33.9
APPUANCES ETC.		i :			
APPLIANCES ETC.					Marian Caranta and Article and Article and Article and Article and Article and Article and Article and Article
APPLIANCES ETC.					PARTITION : 40x 2.5 + 2.0x 3.8 =17
					Marian Caranta and Article and Article and Article and Article and Article and Article and Article and Article
VAPOR TRANS. Sub Total					Marian Caranta and Article and Article and Article and Article and Article and Article and Article and Article
VAPOR TRANS. Sub Total		294	794	294	Marian Caranta and Article and Article and Article and Article and Article and Article and Article and Article
Sub Total SAFETY FACTOR ROOM LATENT HEAT SUB TOTAL		294	794 30	294	Marian Caranta and Article and Article and Article and Article and Article and Article and Article and Article
Sub TOTAL SAFETY FACTOR ROOM LATENT HEAT SUB TOTAL SUPPLY DUCT LEAKAGE LOSS 10 %		30	30	30	Marian Caranta and Article and Article and Article and Article and Article and Article and Article and Article
Supply Duct Learage Loss Sypass Outside An SOCMHX 95 g/kgxx.18FX0.72		30 103	30 104	30	Marian Caranta and Article and Article and Article and Article and Article and Article and Article and Article
Sub Total SAFETY FACTOR ROOM LATENT HEAT SUB TOTAL SUPPLY DUCT LEARAGE LOSS 10 % SYPASS OUTSIDE AN SOCMHX 95 g/kgx*.1BF × 0.72 EFFECTIVE ROOM LATENT HEAT	0	30 103 127	30 104 428	30 102 426	Marian Caranta and Article and Article and Article and Article and Article and Article and Article and Article
Sub Total SAFETY FACTOR ROOM LATENT HEAT SUB TOTAL SUPPLY DUCT LEAKAGE LOSS BYPASS OUTSIDE AN OCMHX 9.5 g/kgx.1BFX0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT	8	30 103 127 397	30 104 428	30	Marian Caranta and Article and Article and Article and Article and Article and Article and Article and Article
Sub Total SAFETY FACTOR ROOM LATENT HEAT SUB TOTAL SUPPLY DUCT LEAKAGE LOSS BYPASS OUTSIDE AM SOMMX 9,5 g/kgx.1BF x 0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT	8	30 103 127	30 104 428	30 102 426	Marian Caranta and Article and Article and Article and Article and Article and Article and Article and Article
Sub Total SAFETY FACTOR ROOM LAYENT HEAT SUB TOTAL SUPPLY DUCT LEAKAGE LOSS SYPASS OUTSIDE AIR OCMHX 9.5 g/kgxo.1BFX0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT	8	30 103 127 397	30 104 428	30 102 426	Marian Caranta and Article and Article and Article and Article and Article and Article and Article and Article
SUB TOTAL SAFETY FACTOR ROOM LATENT HEAT SUB TOTAL SUPPLY DUCT LEAKAGE LOSS STPASS OUTSIDE AIR SCMHX 9.5 g/kgx*1BFX0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT SENSIBLE: CMHX degx(1- BF)X0.29	8	30 103 127 397	30 104 428	30 102 426	Marian Caranta and Article and Article and Article and Article and Article and Article and Article and Article
Sub Total SAFETY FACTOR ROOM LATENT HEAT SUB TOTAL SUPPLY DUCT LEAKAGE LOSS SUPPLY DUCT LOSS SUPPLY DUCT LEAKAGE LOSS SUPPLY DUCT LEAKAGE LOSS SUPPLY DUCT LEAKAGE LOSS SUPPLY DUCT LEAKAGE LOSS SUPPLY DUCT LEAKAGE LOSS SUPPLY DUCT LEAKAGE LOSS SUPPLY DUCT LEAKAGE LOSS SUPPLY DUCT LEAKAGE LOSS SUPPLY DUCT LEAKAGE LOSS SUPPLY DUCT LEAKAGE LOSS SUPPLY DUCT LEAKAGE LOSS SUPPLY DUCT LEAKAGE LOSS SUPPLY DUCT LEAKAGE LOSS SUPPLY DUCT LEAKAGE LOSS SUPPLY DUCT LEAKAGE LOSS SUPPLY DUCT LEAKAGE LOSS SUPPLY DUCT LEAKAGE LOSS SUPPLY DUCT LEAKAGE LOSS SUPPLY DUCT LEAKAGE LOSS SUPPLY DUCT LOSS SUPPLY DUCT LOSS SUPPLY DUCT LOSS SUPPLY DUCT LOSS SUPPLY	8	30 103 127 397	30 104 428	30 102 426	Marian Caranta and Article and Article and Article and Article and Article and Article and Article and Article
SUPPLY FACTOR ROOM LATENT HEAT SUB TOTAL SUPPLY DUCT LEARAGE LOSS 10 % BYPASS OUTSIDE AN OCMHX 9.5 g/kgxs.1BFX0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT SENSIBLE: CMHX degx(1- BF)X0.29 LATENT: CMHX g/kgx(1- BF)X0.72 GRAND TOTAL HEAT SUB TOTAL	8.	30 103 127 397	30 104 428	30 102 426	Marian Caranta and Article and Article and Article and Article and Article and Article and Article and Article
Sub Total SAFETY FACTOR ROOM LATENT HEAT SUB TOTAL SUPPLY DUCT LEAKAGE LOSS SUPPLY DUCT LEAKAGE LOSS FOR THE SUPPLY PROOF LATENT HEAT EFFECTIVE ROOM LATENT HEAT OUTSIDE AIR HEAT OUTSIDE AIR HEAT SENSIBLE: CMHX degx(1- BF)X0.29 LATENT: CMMX g/kgx(1- BF)X0.72 GRAND TOTAL HEAT SUB TOTAL	8.	30 103 127 397	30 104 428	30 102 426	Marian Caranta and Article and Article and Article and Article and Article and Article and Article and Article

COOLING AND DE	LEĀLIE.		-VIK	1 <i>0</i> ~ t	TOTIMATE (METRIC)
COOLING AND DE	וואוטר	۱۳	. A 11/	10 E	ESTIMATE (METRIC) SHEET NO. 26
	DURED B	l Y			DATE ORIGINAL
	DRESS		<u></u>	 .	REVISION
SPACE USED FOR JUNIOR ENGINEER ROOM (T		2,5,	2 g		2.25,55 m PERSON IN CHARGE
SIZE 10,5 mx 6,5 m= 68,25 m1		Kca			AM AM
TEM QUANTITY TEMP DIFF.			Corre	CTION	ESTMATE FOR. PM PEAK LOAD PM 6
SOLAR GAIN GLASS	MAX 6	00	***************************************		HOURS OF OPERATION Hour (-)
(NE) 54 m'x 366 x 0.11/25 x 0.94 x 0.65		57	228	185	
(NW) 6.9 m'x366 1.64/685 × 0.94 x 6.65	11	62	618	1180	CONDITIONS DBC WBC KRH DPC E/KE
m²× ×					OUTSIDE 38.7 27.6 43 18.8
m¹× ×					ROOM 24.0 17.1 50 4.4
m*X X					BLIND (NON EXISTENCE OUTSIDE, MSIDE) L. M. D.
SOLAR & TRANS GAIN-WALLS & ROOF WALL (NE) 206 m'X 135 X Z.	'n	584	515	563	GLASS ORDINARY, THICK, ABSORBENT. % DOUBLE
WALL (NE) $20.6 \text{ m}^{1} \times 13.5 \times 7.1$ (NW) $19.1 \text{ m}^{1} \times 23.2 \times 2.1$		131	258		
m*X X		L-2-L-	-9-		WEIGHT kg/m³(FLOOR) kg/m³(WALL
m²× ×				:	INTERNAL HEAT WIM! m1/PEOPLE
Roof-Sun 47,25 m'x 28,5 x 1,7	20	47	1724		INFILTRATION
ROOF - STREET ZE mix Z8.5 × 1.	2	316	687	ग्१५	SWINGING
TRANS. GAIN-EXCEPT WALLS & ROOF]],	,	[, , ,]	الجما	REVOLVING DOORS PEOPLEX CMH/PER
GLASS 12.3 m3× 14.7 × 5.1		1 <u>23</u>	1142	1035	OPEN DOORS DOORSX CMH/DOUR
CELING m²X X FLOOR 10.º m²X 7,35 X 1.7			155	141	CRACK MX CMH/m
		125 184	228		INFILTRATION CMH
РАКТИЮМ (0.5 m ³ × П.35 × 7.5		TOT.	20	201	VENTILATION
	1				6 PEOPLEX Z5 CMH/PER. 150
INFELTRATION CMHX degX 0.29	1				/ m²X CMH/m²
INTERNAL HEAT					VENTILATION CMH 150
PEOPLE & PEOPLEX 41		z46	246	246	SENSIBLE HEAT FACTOR
Kw Kw× × 860					ES.H.F = 9579 (ERSH) 0.96 (12.6°C)
LIGHTS 68.75 x 70 W× 1.08	1.4	175	1475	14.12	DEHUMIDIFIED AIR
APPLIANCES ETC.					
CREDIT FOR THERMAL STORAGE MIX deg X	<u></u>		(-)		9579 (ERSH) 3.200 CMH
Sub Total	1.				(24RM-(25ADP)(1-,18F)×0.29 3.200 CMH
SAFETY FACTOR %	1				NOTES
ROOM SENSIBLE HEAT SUB TOTAL	86	,50	7275	8608	GLASS (NE) : 1.5 x 1.8 x 7= 6.4
SUPPLY DUCT SUPPLY DUCT FAN	. !		728	0/1	(NM): 12×1.8+1.5×2.8=6.9
HEAT GAIN +LEAK LOSS +HP =10%		365		72	dagan dari dari dari dari dari dari dari dari
BYPASS OUTSIDE AIR 50 CMHY 47 ** 1 BF ** 0.29	0.5	64. 79	80 8083		WALL (NE): 65×4.0-5.4- 20.6
EFFECTIVE ROOM SENSIBLE HEAT B	4.5	2/7	2002	1341	(NW): 6.5 x4.0 - 6.9 = 19.1
INFILTRATION CMHX g/kg× 0.72					
PEOPLE 6 PEOPLEX 49	7	294			PARTITION: 40x 7.5 = 10.0
STEAM kg/hX 540					FLOOR: 40×7.5=10.0
APPLIANCES ETC.				·	ROOF U):40×6.5=26.0
	-				(2):65×65 =42.25
VAPOR TRANS.			1.1		VR: 65×4.0×2.5+65×45×3.8= 275 5
Sub Total	 				₹
SAFETY FACTOR		94	294	294	
ROOM LATENT HEAT SUB TOTAL		30	30	30	
SUPPLY DUCT LEAKAGE LOSS 10 % Bypass Outside Air SOCMH × 9.4 g/kg × 6.1 BF × 0.72	1	02	104		📑 a a company a
EFFECTIVE ROOM LATENT HEAT	4	126	428		
EFFECTIVE ROOM TOTAL HEAT	100	05	8511	9968	
OUTSIDE AIR HEAT		47)			
SENSIBLE: CMHX degx(1- BF)×0.29	ļ <u></u>				
LATENT: CMHX g/kgX(1- BF)X0.72	 		<u> </u>		
GRAND TOTAL HEAT SUB TOTAL	<u> </u>			<u> </u>	$m{\psi}_{i}$
RETURN DUCT RETURN DUCT PUMP PIPE = %		-			
HEAT GAIN LEAK GAIN H.P GAIN					🕯 and the state of the state o
(U.S.R.T) GRAND TOTAL HEAT					1

	OURED !	BY				DATE ORIG	INAL 27
140	DORESS		<u> </u>			REVISION	
SPACE USED FOR JUNIOR ENGINEER ROOM				PAC	SYSTEM	PERSON IN	CHARGE
Size 10.5 m× 6.5 m= 68.25 m	<u> </u>			-	225,55 m'	4.1.4	
THEM AREA ON SUN GAN OR FACTOR	 	1/ 01	I/h		ESTMATE FOR.	AM PEAK L	-0A0 AM
QUANTITY TEMP. DEF.				ECTION	HOURS OF OPER	PM ATION Hour (РМ
(NW) 69 mx366 x014/25x 094x065	HAX	162	3.00	500	OUTSIDE DESIGN CO		CWB %
(NW) 6.9 m'×366 x 0 1/2 35 x 0.94 x 0.65	╁┈┸	ΙQζ	610	HOS.	CONDITIONS DB C		
m'× × × × × × × × × × × × × × × × × × ×	1 : 1					127.6 43	189
m*X X					ROOM ZAO	17.1 50	9,4
m²× ×	1				<u> </u>	xxx xxx	××× q.
SOLAR & TRANS GAIN-WALLS & ROOF		-			BLIND NON-EX	ISTENCE(OUTSIDE.IN	ISIDE) L. M. D
WALL (NW) 19,1 m'x 23,2 x 7,1		931	258	783	GLASS ORDINA	RY. THICK. ABSORBI	ENT. %, DOUB
m²× ×						HEDIUM, DARK,	
m ^a × ×					WEIGHT	kg/m*(FLOOR)	kg/m³(WA)
m'× ×					INTERNAL HEAT	W/m²	m³/PEOPLE
ROOF-SUN 4225 m'X 785 X 1.7	Z.	047	1724	1997	INFILTR	ATION	Γ
Roof - SHALED 76 m'X 28.5 X 1.1		816	687	795	SWINGING		
TRANS. GAIN-EXCEPT WALLS & ROOF	1				REVOLVING DOORS	PEOPLEX CMH/PER	1
GLASS 6.9 M'X 147 X 5.1	14	718	4	581	OPEN DOORS D	DORSX CMH/DOOR	<u> </u>
CEILING m2X X					EXHAUST AIR		1
FLOOR 10.0 m2 7.35 × 1.7	_	152	<u>15</u> 5	141	CRACK m>		
PARTITION m ³ X				<u> </u>	INFILTRATION	CMH .	<u> </u>
	<u> </u>			27.5	VENTIL	الوكوبية كالسابك المعتب المترب المال	
	 			-	6 PEOPLEX	Z5 CMH/PER.	150
INFILTRATION CMHX degX 0.29) j m2X VENTILATION	CMH/m³	15-0
INTERNAL HEAT		_ , , ;	z46	24 6		BLE HEAT FAC	150 TOR
PEOPLE 6 PEOPLEX 4		745	240	240	1		
Kw Kwx X 860		4 111 /	MIL	1475	ESHF= 811	Z (ERTH)	0.95 (12.60)
LIGHTS (8.25 × 20 W× 1.08	- "	475	14.12	14.12		EHUMIDIFIED A	IR
APPLIANCES ETC.	1						2,5
	 			11 1	APPARATUS DEWPO	INT I	<u>, </u>
CREDIT FOR THERMAL STORAGE m2X deg X			{}		8116	(ERSH)	i Stipen
THERMAL STORAGE "Sub TOTAL				<u> </u>	8.116 (24RM-12.5ADP)(1-0.BF)×0.29	2110 CMF
SAFETY FACTOR %					NOTES		
ROOM SENSIBLE HEAT SUB TOTAL	7	3 Z.O	5804	19198	GLASS (NW)	: 1.5 x 1.8 +15	42.8 = 6.9
SUPPLY DUCT SUPPLY DUCT - FAN			1.3.		l .		
HEAT GAIN +LEAK LOSS -HP . =10%	-	73Z	581	720	· WALL (NW)	: 65×4°- 63 =	-14.1
BYPASS OUTSIDE AIR 150 CMHY 14.7 deg 2 0.1 8.5 10.29		64	80	72	FLOOR	: 40x 7.5 = 10	, o
EFFECTIVE ROOM SENSIBLE HEAT	8	116.	6465	าเรือ	ROOF (I)	4.0 × 6.5 = ZL.	
ROOM LATENT HEAT						6.5 × 6.5 = 42.7	
INFILTRATION CMHX g/kgX 0.72		<i>i</i>			[-,-		
PEOPLE & PEOPLE 49		294	294	z94			•
STEAM kg/hx 540	<u> </u>						
APPLIANCES ETC.							•
			<u> </u>			the second	
VAPOR TRANS.			- 5 '		kan kan di dika		
Sub TOTAL				بنينا			
SAFETY FACTOR X	 		272	704	Na v		
ROOM LATENT HEAT SUB TOTAL	1	294	294	294	and the second	and the second	
SUPPLY DUCY LEAKAGE LOSS 10 %	[30	36	30			e e e e e e e e e e e e e e e e e e e
BYPASS OUTSIDE AIR SEMHX 9,4 8/kg xx BF X 0.72	1	102.	104			10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	at a second
EFFECTIVE ROOM LATENT HEAT		420	428	901			• • • • • •
EFFECTIVE ROOM TOTAL HEAT	تلقيا	24.6	6013	SH.			*
OUTSIDE AIR HEAT		7					
SENSIBLE: CMHX deg x (1 - BF) x 0.29	 					A STATE OF STATE	-
						and the second	
LATENT: CMHX g/kg×(1- BF)×0.72							
GRAND TOTAL HEAT SUB TOTAL	-		-				

COOLING AND DE				المنتر ويتما تنهم مثارين
COOLING AND DE	HUMIDII	- YING I	SIMALEU	SHEET NO. 28
INOURING No.	HOURED BY		·	DATE ORIGINAL
	PORESS	C4.4		REVISION
	(TOIC)	PAC		PERSON IN CHARGE
S12 E 015 m× 45 m= 68,75 m	т × г.	m\H}# il/h	225,55 m'	AM AM
TEM OUANTITY TEMP. DEF. FACTOR	, Ke	CORRECTION		PM PEAK LOAD PM 6
SOLAR GAIN - GLASS	MAX 6:00	3:00 5:00	HOURS OF OPERA	
(NW) 6.9 m'x 366 x0 64/6 85x 0.94 x0.65	11162	618 1180	OUTSIDE DESIGN CON	
w,× ×		ļ	CONDITIONS DB C	79.6 43 DP 0 E/KE
m [†] X X	 		Outside 38.7	_
m³× ×		 	Room 24°	17.6 50 9.2 ××× 9.4
m*X X	<u> </u>			TENCE(OUTSIDE, INSIDE) L. M. D
SOLAR & TRANS GAIN-WALLS & ROOF	931	Z58 783	[Y. THICK, ABSORBENT. %, DOUBLE
WALL (NW) 19,1 m'X 23,2 X 2,1	121	350 103		DIJM. DARK.
m*× × × ×	 			kg/m1(FLOOR) kg/m1(WALL)
m³× ×	 	 	INTERNAL HEAT	Wimt m'/PEOPLE
ROOF-SUN 47.25 mtx 28.5 × 1.7	2 047	1.724 1997	INFILTRA	TION
Roof - Shapeo26.0m²× 28.5 × 1.1	816	687 795	SWINGING	
TRANS. GAIN-EXCEPT WALLS & ROOF			REVOLVING DOORS	PEOPLEX CMH/PER
GLASS 6.9 m'x 14.7 x 5	518	641 581	OPEN DOORS DOO	DRSX CMH/DOOR
. CEILING m'X X			EXHAUST AR	
FLOOR m'X X			CRACK MX	CMH/m,
PARTITION mEX X			INFILTRATION	CMH 📕
	<u> </u>	-	VENTILA	1
		 	[CMH/PER 150
INFETRATION CMHX degX 0.29		<u> </u>	M ² X VENTILATION	CMH ■ 150
INTERNAL HEAT		246 246	[LE HEAT FACTOR
PEOPLE 6 PEOPLEX 4	246	246 246	<u></u>	9 . (ERSH) = 0.95 (17.6°C)
Kw Kw× × 86		1.475 1475	ESHF= 240	5 (ERTH)
LIGHTS 68,25 × 20 W× 1.00	1412	1.4/5/14/3	DE	HUMIDIFIED AIR
Appliances Etc.			Drupou	ינע.5
	1		APPARATUS DEHICON	era da esta de la Companya de la Companya de la Companya de la Companya de la Companya de la Companya de la Co
CREDIT FOR THERMAL STORAGE M'X degX	 	()		(ERSH) = 7.670 CMH
THERMAL STORAGE Sub Tota			(24 RM-12,5ADP)(1	-6,1BF)×0.29 7.670 CMH
SAFETY FACTOR			NOTES	
ROOM SENSIBLE HEAT SUB TOTAL	7'195	5649 705	VR = 40x65>	175+65×65×38
SUPPLY DUCT SUPPLY DUCT FAN	Ī		= 225,55	
HEAT GAIN +LEAK LOSS +HP = 70%		565 706		일하는 말했다고 살아왔다.
BYPASS OUTSIDE AIR 6 CMH 14. Total 6 1 B.F x 0.28	64	80172	GLASS (NW)	: 1.5 x 1.8 + 1.5 x 2.8 = 6.9
EFFECTIVE ROOM SENSIBLE HEAT	7979	6294 1835	WALL (NW)	165240-69=19.1
ROOM LATENT HEAT			1	
Inflitration CMHX g/kgX 0.73		 	Roof (1):	
PEOPLE & PEOPLE 49	1-04	 	(2):6	5 × 6,5 = 42.25
STEAM kg/h× 540	294	 		
APPLIANCES ETC.	 	 		
VADOR TRANS	1-1-	<u> </u>		
VAPOR TRANS. Sub Total	1			
SAFETY FACTOR	1		e e e	
ROOM LATENT HEAT SUB TOTAL	294	294 294		
Supply Duct Leakage Loss 10 %		30 30		
BYPASS OUTSIDE AIR COMH × 9.4 g/kg xo, BF × 0.72	102	104 103		the first transfer of Albert 1997 and
	10-	10-41 1-3	ŧ	
EFFECTIVE ROOM LATENT HEAT		428 427		

(124)

OUTSIDE AIR HEAT

GRAND TOTAL HEAT SUB TOTAL

RETURN DUCT RETURN DUCT PUMP PIPÉ
HEAT GAIN LEAK GAIN H.P GAIN
(U.S.R.T) GRAND TOTAL HEAT

смн×

смнх

SENSIBLE:

LATENT:

deg x (1 - BF) x 0.29

g/kg×(1- BF)×0.72

= %

FORM E-20E

and the contract of the contra

INQUIRING NO	COOLING AND DE	NOUIRED		1.1		SHEET NO. 10
JOB NAME	The state of the s	DORESS				REVISION
SPACE USED	FOI JUNIOR ENGINEER RO	M (T	01 1)		PA	A I SYSTEM
Size 10.5	m× 6,5 m= 68,75 m'		×_2,5	3.8	m(H)=	7.25.55 m PERSON IN CHARGE
	AREA OR ISUN GAN OR	1		⊪l/h .		ÄM AM
ÎYEH	QUANTITY TEMP. DIFE.			CORR	ECTION	ESTMATE FOR PM PEAK LOAD PM 6
	SOLAR GAIN - GLASS	MAX	6110	3:00		HOURS OF OPERATION HOUR (-
	9 mix 366 x n.64/85 x 0.94 x 0.65		162			OUTSIDE DESIGN CONDITIONS COB CWB %R
(NM) 6	m'X X	4	ì	1	1100	CONDITIONS DB C WB C %RH DP C g/kg
	m²X X		ī	1		OUTSIDE 38.7 27.6 43 18.8
	m²×		ī	 	ì——	ROOM 24.0 17.1 50 9.4
	- wise im³× in the contract of the contract o	-				DIFFERENCE 147 XXX XXX XXX 4.4
COLAB	TRANS GAIN-WALLS & ROOF		<u>'</u>	 		BLIND INON-EXISTENCE (OUTSIDE, INSIDE) L. M. D.
			931	z58	1003	GLASS ORDINARY, THICK ABSORBENT, %. DOUBL
WALL (NW)		 	i je l	450	100	COLOR LIGHT, MEDIUM, DARK,
	m²× ×	~ }	 	}	}	WEIGHT kg/m*(FLOOR) kg/m*(WALL
			 	ļ	<u> </u>	INTERNAL HEAT W.m. m./PEOPLE
			1 4	1004	1007	INFILTRATION
ROOF-SUN				1724		學 사람들은 사람들이 가지 않는 것이 없었다.
Roor - Sust		4	816	687	195	Swinging Barrier Church
	GAIN-EXCEPT WALLS & ROOF	.	l	١.,	0.1	REVOLVING DOORS PEOPLEX CMM/PER
	5.9 m ³ × 14.7 × 5.1		5/8	141	581	
CELLING	m²X X		!	-	 	Exhaust Air
FLOOR	m² × × ×		<u> </u>	-	1	CRACK MX CMH/m
PARTITION	16.0 m'× 7.35 × 1.8	 	<u>! 133</u>	164	149	
	<u></u>	 	<u> </u>		<u> </u>	VENTILATION
			<u> </u>	ļ	!	6 PEOPLEX Z5 CMH/PER 150
INFILTRATION	CMHX degX 0.29	· 	<u> </u>	ļ		/* m²X CMH/m²
	INTERNAL HEAT					VENTILATION CMH 150
PEOPLE	6 PEOPLEX 41		246	246	246	SENSIBLE HEAT FACTOR
Kw	Kw× × 86	2	<u> </u>	<u> </u>	<u> </u>	ESH.F= 8125 (ERSH) 0.95 (17.6°C
LIGHTS	68,75 x Zo W× 1.01	3 }	475	1475	1475	855' (ERTH)
APPLIANCES	Етс.		<u>!</u>		<u> </u>	DEHUMIDIFIED AIR
7 7	<u> Partition partition to provide a construction of the constructio</u>		1	<u> </u>		APPARATUS DEWPONT 17.5 C
	and the second second second		<u>l</u> .			P ·
CREDIT FO	STORAGE m [‡] X degX	()	i.	()	<u> </u>	8175 (ERSH) (Z4RM: IZ, SADP) (1-0, BF) × 0.29 Z.710 CMH
	Sub TOTA	.4	1		1	(24RM- (8.SADP)(1-6,BF) X0.29
SAFETY FACT	TOR %	<u> </u>	<u> </u>	L	1	NOTES
Ro	OM SENSIBLE HEAT SUB TOTAL	7	378	5813	7206	GLASS (NW): 1,5 x 1,8 + 1,5 x 2,8 = 6.9
SUPPLY DUCT	T SUPPLY DUCT FAN	}	1			WALL (NW): 65x4.0_ 6.9 = 19.1
	+LEAK LOSS +HP =0 %		733	582	721	
BYPASS OUTS	SIDE AIR 150 CMHY 47 012 0 BF 1029		64	80	72	
EFFEC	TIVE ROOM SENSIBLE HEAT	. 8	125	6475	7999	(2) ; $65 \times 6.5 = 42.75$
	ROOM LATENT HEAT					
INFILTRATION	CMHX g/kgX 0.7	<u> </u> {	!	1	1	· PARTITION: 4.0 x Z.5 = 10.0
PEOPLE	b PEOPLEX 49	1	Z94		ĺ	TAKITION . 40x 2.3 5 tot
STEAM	kg/h× 540	5	1			VR=40x65 x7.5 +6.5x6.5x3.8=225.55
			i	t	1	1 AK = 4' X010 VEL 18' X0' X 210 - 201
APPLIANCES	C F Green Comment of the Comment of	 			1	1
Vanco Taris			 	<u> </u>	<u> </u>	
VAPOR TRANS	Sub TOTAL	1	 -			
	SUB LOTAL		 			†
<u> </u>	*			-04	z94-	🜓 a sa sa sa sa sa sa sa sa sa sa sa sa s
SAFETY FACT	TOR	3.30	1708			•
R	OOM LATENT HEAT SUB TOTAL		294			All a contact the School of the
R. Supriy Duci	TOR OOM LATENT HEAT SUB TOTAL T LEAKAGE LOSS (0 %		30	36	30	
ROSUPPLY DUCT	OOM LATENT HEAT SUB TOTAL T LEAKAGE LOSS (0 % SIDE AIR SOMH × 9.4 g/kg × 0, BF × 0.72		30 102	3a 104	30	
SUPPLY DUCT BYPASS OUTS EFFE	TOR LATENT HEAT SUB TOTAL T LEAKAGE LOSS (0 % SIDE AN SOMMENT HEAT ME CTIVE ROOM LATENT HEAT		30 102 426	30 104 428	30 103 427	
SUPPLY DUCT BYPASS OUTS EFFE	TOR LATENT HEAT SUB TOTAL T LEAKAGE LOSS (0 % SIDE AN SOMMENT HEAT COM LATENT HEAT COM COM LATENT HEAT		30 102 426 551	3a 104	30 103 427	
SUPPLY DUCT BYPASS OUTS EFFE	TOP COM LATENT HEAT SUB TOTAL T LEAKAGE LOSS (0 % SIDE AN SOMMENT AFTEN THEAT CTIVE ROOM LATENT HEAT OUTSIDE AIR HEAT		30 102 426	30 104 428	30 103 427	
SUPPLY DUCT BYPASS OUTS EFFE	TOR OOM LATENT HEAT SUB TOTAL T LEAKAGE LOSS (D % SIDE AN SOMMENT AF SUBSTITUTE ROOM LATENT HEAT CTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT CMHX degx(1- BF)x0.29		30 102 426 551	30 104 428	30 103 427	
SUPPLY DUCT BYPASS OUTS EFFE EFFE	TOP COM LATENT HEAT SUB TOTAL T LEAKAGE LOSS (0 % SIDE AN SOMMENT AFTEN THEAT CTIVE ROOM LATENT HEAT OUTSIDE AIR HEAT		30 102 426 551	30 104 428	30 103 427	
R. SUPPLY DUCT BYPASS OUT: EFFE EFFE SENSIBLE: LATENT:	TOR OOM LATENT HEAT SUB TOTAL T LEAKAGE LOSS (D % SIDE AN SOMMENT AF SUBSTITUTE ROOM LATENT HEAT CTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT CMHX degx(1- BF)x0.29		30 102 426 551	30 104 428	30 103 427	
R. SUPPLY DUCT BYPASS OUT: EFFE EFFE SENSIBLE: LATENT: G	TOR OOM LATENT HEAT SUB TOTAL T LEAKAGE LOSS (D % SIDE AIR SOCMH X 9.4 g/kg x 0.1 BF X 0.72 CTIVE ROOM LATENT HEAT CTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT CMH X deg X (1 - BF) X 0.29 CMH X g/kg X (1 - BF) X 0.72	3	30 102 426 551	30 104 428	30 103 427	
R. SUPPLY DUCT BYPASS OUT: EFFE EFFE SENSIBLE: LATENT: G	TOM OOM LATENT HEAT SUB TOTAL T LEAKAGE LOSS (0 % SIDE AND SOCIETY OF A CONTROL CTIVE ROOM LATENT HEAT CTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT CMHX degx(1-BF)x0.29 CMHX g/kgx(1-BF)x0.72 RAND TOTAL HEAT SUB TOTAL	3	30 102 426 551	30 104 428	30 103 427	

Lincolnouse No.	A1115 N -	. .			SHEET NO. 30
The state of the s	OUIRED DDRESS	₩	·		DATE ORIGINAL
		~		7AC-	SYSTEM REVISION
SPACE USED FOR JUNIOR ENGINEER ROOM	(To t				ZO5,55 m' PERSON IN CHARGE
Size ' m× , m≈ 60,25 m²		2.5		m(H/~	
TEM AREA OR SUN GAN OR FACTOR	}	Kei			ESTMATE FOR. PEAK LOAD
QUANTITY TEMP. DIFF.			Conn	ECTION	I
SOLAR GAIN GLASS	MAX		27:00		THOUSE OF CLUTTON
(NW). 6.9 mx366 x 0,65%, 85 x 0,94 x 0.65		180	6.8	1162	OUTSIDE DESIGN CONDITIONS COB CWB %RI
(5W) 8.1 m'x252 x0.5/0.85 x 0.94 x1.65		734	1028	38 Z	CONDITIONS DE WEE SRH DPC E/KE
m³× ×	•		İ		OUTSIDE 405 28.2 39 18.9
m¹× ×					ROOM 24.0 17.1 50 9.4
m³× ×					DIFFERENCE 165 XXX XXX XXX 9,5
SOLAR & TRANS GAIN-WALLS & ROOF	T				BLIND (NON-EXISTENCE OUTSIDE, INSIDE) L. M. D.
WALL (NW) 19,1 m'x 19,5 x 2,1	1	783	258	931	GLASS ORDINARY, THICK ASSORBENT. %. DOUBL
			1.125		COLOR (LIGHT, MEDIUM, DARK,
(5W) 33.9 m'× 19.2 × 2.1	 	761	10.63	1	WEIGHT kg/m'(FLOOR) kg/m'(WAL
	 		 	i	INTERNAL HEAT W'm' m'/PEOPLE
***************************************	 	0.00	<u> </u>	7.407	INFILTRATION
Roof-Sun 42,25 m1× 29.8 × 1.7		997	1724	204 1	
ROOF - SHEDDED B.Om'X Zn. 8 X [1]	ļ <u> </u>	<u>551</u>	4/16	565	SWINGING
TRANS. GAIN-EXCEPT WALLS & ROOF	1 1				REVOLVING DOORS PEOPLEX CMH/PER
GLASS 150 M'X 16.5 X 5.1	1 !	263	1.393	1125	OPEN DOORS DOORSX CMH/DOOR
CERLING m ² X X			<u> </u>	<u> </u>	EXHAUST AIR
FLOOR m*X X	1		<u> </u>		CRACK MX CMH/m
PARTITION 17,6 m1× 8,25 × 1,8	1	267	289	Z33	INFILTRATION CMH
			1		VENTILATION
	i			Ì	& PEOPLEX 25 CMH/PER. 150
INSTRUCTION CMHX degX 0.29			 	1) m'x CMH/m²
			 	<u> </u>	VENTILATION CMH = 150
INTERNAL HEAT	1	- 41		246	SENSIBLE HEAT FACTOR
PEOPLE 6 PEOPLEX 41		246	1246	246	4
Kw Kwx X 860					ESHF= 10916; (ERSH)=0.96 (17.6°C)
LIGHTS 60.25 X ZD WX 1.08	غلنسا	475	1475	1475	(1 343 (ERTH)
Appliances ETC.	1 1				ALC:
APPLIANCES ETC.			<u> </u> _		DEHUMIDIFIED AIR
Appliances Etc.				<u>. </u>	and the second s
APPLANCES ETC.					APPARATUS DEMPONT 12.5 C
CREDIT FOR	;		()		APPARATUS DEMPONT 12.5 C
	[;		()		in the second second second second second second second second second second second second second second second
CREDIT FOR THERMAL STORAGE m'X deg X Sub Total	(;		(-)		APPARATUS DEMPOINT 12.5 C
CREDIT FOR THERMAL STORAGE m'X deg X Sub Total Safety Factor %		858			10916 (ERSH) (24RM-14-3ADP)(1-0, BF)×0.29 3.640 CMH
CREDIT FOR THERMAL STORAGE m'X deg X Sub Total SAFETY FACTOR % ROOM SENSIBLE HEAT Sub TOTAL		858	(-) 863Z		10916 (ERSH) (24RM-14-3ADP)(1-, BF)×0.29 3.640 CMH NOTES SR=105×65-20×4.0=60.25
CREDIT FOR THERMAL STORAGE m'X deg X Sub Total SAFETY FACTOR ROOM SENSIBLE HEAT Sub TOTAL SUPPLY DUCT SUPPLY DUCT FAN	9	:	8632	9555	10916 (ERSH) 124 RM-16-ADP)(1-0, PF)×0.29 3.640 CMH NOTES SR=105 ×6.5 - Z0×4.0 = 60.25 GLASS (NW): 15×18+15×2.8=6.9
CREDIT FOR THERMAL STORAGE M'X deg X Sub Total SAFETY FACTOR % ROOM SENSIBLE HEAT SUB TOTAL SUPPLY DUCT SUPPLY DUCT FAN HEAT GAIN +LEAK LOSS +HP =16%	9	986	8632 864	9555	10916 (ERSH) 124RM-16-ADP)(1-0,BF)×0.29 3.640 CMH NOTES SR=105×65-20×4.0=60.25 GLASS (NW): 15×1,8+15×2.8=6.9 (SW): 1.5×1,8×3=8.1
CREDIT FOR THERMAL STORAGE m'X deg X Sub Total SAFETY FACTOR ROOM SENSIBLE HEAT Sub TOTAL SUPPLY DUCT SUPPLY DUCT FAN HEAT GAIN +LEAK LOSS +HP = 6% BYPASS OUTSIDE AIR 150 CMH/16,5000 0,1 BFA029	9	986	8632 864	9555	10916 (ERSH) 124RM-16-ADP)(1-0,BF)×0.29 3.640 CMH NOTES \$\text{RP} = 10.5 \times 6.5 \times 2.8 \times 60.25 \$\text{GLASS} (NW): 1.5 \times 1.8 \times 2.8 \times 6.9 (SW): 1.5 \times 1.8 \times 3 \times 8.1
CREDIT FOR THERMAL STORAGE M'X deg X Sub Total SAFETY FACTOR % ROOM SENSIBLE HEAT SUB TOTAL SUPPLY DUCT SUPPLY DUCT FAN HEAT GAIN +LEAK LOSS +HP =16%	9	986	8632 864	9555	10916 (ERSH) 10916 (ERSH) (24RM-16-ADP)(1-, BF)×0.29 3.640 CMH NOTES SR=105×6.5 Z0×4.0 = 60.25 GLASS (NW): 1.5×1.8+1.5×2.8=6.9 (SW): 1.5×1.8×3=8.1 WALL (NW): 6.5×4.0 - 6.9 = 19.1
CREDIT FOR THERMAL STORAGE m'X deg X Sub Total SAFETY FACTOR ROOM SENSIBLE HEAT Sub TOTAL SUPPLY DUCT SUPPLY DUCT FAN HEAT GAIN +LEAK LOSS +HP = 6% BYPASS OUTSIDE AIR 150 CMH/16,5000 0,1 BFA029	9	986	8632 864	9555	10916 (ERSH) 124RM-16-ADP)(1-0,BF)×0.29 3.640 CMH NOTES \$\text{RP} = 10.5 \times 6.5 \times 2.8 \times 60.25 \$\text{GLASS} (NW): 1.5 \times 1.8 \times 2.8 \times 6.9 (SW): 1.5 \times 1.8 \times 3 \times 8.1
CREDIT FOR THERMAL STORAGE m'X deg X Sub Total SAFETY FACTOR ROOM SENSIBLE HEAT Sub TOTAL SUPPLY DUCT SUPPLY DUCT FAN HEAT GAIN +LEAK LOSS +HP = 6% BYPASS OUTSIDE AIR 150 CMH/16,5000 0,1 BFA029 EFFECTIVE ROOM SENSIBLE HEAT	9	986	8632 864	9555	10916 (ERSH) 124RM-16-ADP)(1-0,BF)×0.29 3.640 CMH 124RM-16-ADP)(1-0,BF)×0.29 3.640 CMH NOTES SR=105×6.5 20×4.0 = 60.25 GLASS (NW): 1.5×1.8+1.5×2.8=6.9 (SW): 1.5×1.8×3=8.1 WALL (NW): 6.5×4.0 - 6.9 = 19.1 (SW): 10.5×4.0 - 8.1 = 33.9
CREDIT FOR THERMAL STORAGE m'X deg X Sub Total SAFETY FACTOR ROOM SENSIBLE HEAT SUB TOTAL SUPPLY DUCT SUPPLY DUCT FAN HEAT GAIN +LEAK LOSS +HP = 16% BYPASS OUTSIDE AIR 160 CMHY16,5000000000000000000000000000000000000	9	986	8632 864	9555	10916 (ERSH) 10916 (ERSH) 124RM-16-ADP)(1-, BF)×0.29 3.640 CMH NOTES SR=105×6.5 - Z.0×4.0 = 60.25 GLASS (NW): 1.5×1.8+1.5×2.8=6.9 (SW): 1.5×1.8×3=8.1 WALL (NW): 6.5×4.0 - 6.9=19.1 (SW): 10.5×4.0 - 6.9=19.1 (SW): 10.5×4.0 - 8.1=33.9 ROOF(1): 4.0×4.5=18.0
CREDIT FOR THERMAL STORAGE m'X degx Sub Total SAFETY FACTOR ROOM SENSIBLE HEAT SUB TOTAL SUPPLY DUCT FAN HEAT GAIN +LEAK LOSS +HP = 6% BYPASS OUTSIDE AIR 150 CMH×16,5000 A. BFA029 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT INFILTRATION CMHX g/kgX 0.72 PEOPLE 6 PEOPLEX 49	9	986 72 916	8632 864	9555	10916 (ERSH) 124RM-16-ADP)(1-, BF)×0.29 3.640 CMH 124RM-16-ADP)(1-, BF)×0.29 3.640 CMH NOTES SR=105×6.5 - Z.0×4.0 = 60.25 GLASS (NW): 1.5×1.8+1.5×2.8=6.9 (SW): 1.5×1.8×3=8.1 WALL (NW): 6.5×4.0 - 6.9 = 19.1 (SW): 10.5×4.0 - 6.1 = 33.9 ROOF(1): 4.0×4.5 = 18.0
CREDIT FOR THERMAL STORAGE m'X degx Sub Total SAFETY FACTOR ROOM SENSIBLE HEAT SUB TOTAL SUPPLY DUCT FAN HEAT GAIN +LEAK LOSS +HP = 6% BYPASS OUTSIDE AIR 150 CMH×16,5000000000000000000000000000000000000	9	986 72 916	8632 864	9555	10916 (ERSH) 10916 (ERSH) 124RM-16-ADP)(1-0, BF)×0.29 3.640 CMH NOTES SR=105×6.5 - Z0×4.0 = 60.25 GLASS (NW): 1.5×1.8+1.5×2.8=6.9 (SW): 1.5×1.8×3=8.1 WALL (NW): 6.5×40-6.9=19.1 (SW): 10.5×4.0-8.1=33.9 ROOF(1): 4.0×4.5=18.0 (2): 65×6.5=42.25 PARTITION: 40×2.5+2.0×3.8=17.6
CREDIT FOR THERMAL STORAGE m'X degx Sub Total SAFETY FACTOR ROOM SENSIBLE HEAT SUB TOTAL SUPPLY DUCT FAN HEAT GAIN +LEAK LOSS +HP = 6% BYPASS OUTSIDE AIR 150 CMH×16,5000 A. BFA029 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT INFILTRATION CMHX g/kgX 0.72 PEOPLE 6 PEOPLEX 49	9	986 72 916	8632 864	9555	10916 (ERSH) 10916 (ERSH) 124RM-16-ADP)(1-0, PF)×0.29 3.640 CMH NOTES 4R=105×6.5 - Z0×4.0 = 60.25 GLASS (NW): 1.5×1.8+1.5×2.8=6.9 (SW): 1.5×1.8×3=8.1 WALL (NW): 6.5×40-6.9=19.1 (SW): 10.5×4.0-8.1=33.9 ROOF(1): 4.0×4.5=18.0 (2): 65×6.5=42.25 PARTITION: 40×2.5+2.0×3.8=17.6
CREDIT FOR THERMAL STORAGE m'X degx Sub Total SAFETY FACTOR ROOM SENSIBLE HEAT SUB TOTAL SUPPLY DUCT FAN HEAT GAIN +LEAK LOSS +HP = 6% BYPASS OUTSIDE AIR 160 CMH×16,5000000000000000000000000000000000000	9	986 72 916	8632 864	9555	10916 (ERSH) 10916 (ERSH) 124RM-16-ADP)11-0, PF) × 0.29 3.640 CMH NOTES SR=105 × 6.5 - Z0× 4.0 = 60.25 GLASS (NW): 1.5× 1.8+ 1.5× 2.8 = 6.9 (SW): 1.5× 1.8× 3 = 8.1 WALL (NW): 6.5× 4.0 - 6.9 = 19.1 (SW): 10.5× 4.0 - 8.1 = 33.9 ROOF(1): 4.0× 4.5 = 18.0 (2): 65× 6.5 = 42.25 PARTITION: 40× 2.5 + 20× 3.8 = 17.6 VR: 4.0× 4.5× 2.5 + 6.6× 6.5× 3.8
CREDIT FOR THERMAL STORAGE m'X degx Sub Total SAFETY FACTOR ROOM SENSIBLE HEAT SUB TOTAL SUPPLY DUCT FAN HEAT GAIN + LEAK LOSS + HP = 6% BYPASS OUTSIDE AIR 150 CMH×16,5000 0, 1 BF1029 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT INFILTRATION CMHX g/kgX 0.72 PEOPLE 6 PEOPLEX 49 STEAM kg/hX 540 APPLIANCES ETC.	9	986 72 916	8632 864	9555	10916 (ERSH) 10916 (ERSH) 124RM-16-ADP)(1-0, BF)×0.29 3.640 CMH NOTES SR=105×6.5 - Z0×4.0 = 60.25 GLASS (NW): 1.5×1.8+1.5×2.8=6.9 (SW): 1.5×1.8×3=8.1 WALL (NW): 6.5×40-6.9=19.1 (SW): 10.5×4.0-8.1=33.9 ROOF(1): 4.0×4.5=18.0 (2): 65×6.5=42.25 PARTITION: 40×2.5+2.0×3.8=17.6
CREDIT FOR THERMAL STORAGE m'X degx Sub Total SAFETY FACTOR ROOM SENSIBLE HEAT SUB TOTAL SUPPLY DUCT SUPPLY DUCT FAN HEAT GAIN +LEAK LOSS +HP = 6% BYPASS OUTSIDE AIR 160 CMH×16, o.e. o. 1 BFA029 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT INFILTRATION CMHX g/kgX 0.72 PEOPLE 6 PEOPLEX 49 STEAM kg/hX 540 APPLIANCES ETC.	9	986 72 916	8632 864	9555	10916 (ERSH) 10916 (ERSH) 124RM-16-ADP)11-0, PF) × 0.29 3.640 CMH NOTES SR=105 × 6.5 - Z0× 4.0 = 60.25 GLASS (NW): 1.5× 1.8+ 1.5× 2.8 = 6.9 (SW): 1.5× 1.8× 3 = 8.1 WALL (NW): 6.5× 4.0 - 6.9 = 19.1 (SW): 10.5× 4.0 - 8.1 = 33.9 ROOF(1): 4.0× 4.5 = 18.0 (2): 65× 6.5 = 42.25 PARTITION: 40× 2.5 + 20× 3.8 = 17.6 VR: 4.0× 4.5× 2.5 + 6.6× 6.5× 3.8
CREDIT FOR THERMAL STORAGE m'X degx Sub Total SAFETY FACTOR ROOM SENSIBLE HEAT SUB TOTAL SUPPLY DUCT FAN HEAT GAIN + LEAK LOSS + HP = 6% BYPASS OUTSIDE AIR 150 CMH×16,50000 0, 1 BF10.29 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT NOFILTRATION CMHX g/kgX 0.72 PEOPLE 5 PEOPLEX 49 STEAM kg/hX 540 APPLIANCES ETC. VAPOR TRANS. SUB TOTAL SAFETY FACTOR	10	986 72 916 294	8632 864 80 9576	9555 956 64 16575	10916 (ERSH) 10916 (ERSH) 124RM-16-ADP)11-0, PF) × 0.29 3.640 CMH NOTES SR=105 × 6.5 - Z0× 4.0 = 60.25 GLASS (NW): 1.5× 1.8+ 1.5× 2.8 = 6.9 (SW): 1.5× 1.8× 3 = 8.1 WALL (NW): 6.5× 4.0 - 6.9 = 19.1 (SW): 10.5× 4.0 - 8.1 = 33.9 ROOF(1): 4.0× 4.5 = 18.0 (2): 65× 6.5 = 42.25 PARTITION: 40× 2.5 + 20× 3.8 = 17.6 VR: 4.0× 4.5× 2.5 + 6.6× 6.5× 3.8
CREDIT FOR THERMAL STORAGE m'X degx Sub Total Safety Factor % ROOM SENSIBLE HEAT SUB TOTAL SUPPLY DUCT SUPPLY DUCT FAN HEAT GAIN + LEAK LOSS + HP = 6% BYPASS OUTSIDE AIR 150 CMHY16, 000; 0.1 BFA029 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT INFILTRATION CMHX g/kgX 0.72 PEOPLE 6 PEOPLEX 49 STEAM kg/hX 540 APPLIANCES ETC. VAPOR TRANS. SUB TOTAL SAFETY FACTOR % ROOM LATENT HEAT SUB TOTAL	10	986 72 916 294 294	8632 864 80 9576	9555 956 64 16575	10916 (ERSH) 10916 (ERSH) 124RM-16-ADP)11-0, PF) × 0.29 3.640 CMH NOTES SR=105 × 6.5 - Z0× 4.0 = 60.25 GLASS (NW): 1.5× 1.8+ 1.5× 2.8 = 6.9 (SW): 1.5× 1.8× 3 = 8.1 WALL (NW): 6.5× 4.0 - 6.9 = 19.1 (SW): 10.5× 4.0 - 8.1 = 33.9 ROOF(1): 4.0× 4.5 = 18.0 (2): 65× 6.5 = 42.25 PARTITION: 40× 2.5 + 20× 3.8 = 17.6 VR: 4.0× 4.5× 2.5 + 6.6× 6.5× 3.8
CREDIT FOR THERMAL STORAGE m'X degx Sub Total SAFETY FACTOR ROOM SENSIBLE HEAT SUB TOTAL SUPPLY DUCT SUPPLY DUCT FAN HEAT GAIN + LEAK LOSS + HP = 6% BYPASS OUTSIDE AIR 150 CMH×16,5000000000000000000000000000000000000	10	986 72 916 294	8632 864 80 9576	9555 956 64 16575	10916 (ERSH) 10916 (ERSH) 124RM-16-ADP)11-0, PF) × 0.29 3.640 CMH NOTES SR=105 × 6.5 - Z0× 4.0 = 60.25 GLASS (NW): 1.5× 1.8+ 1.5× 2.8 = 6.9 (SW): 1.5× 1.8× 3 = 8.1 WALL (NW): 6.5× 4.0 - 6.9 = 19.1 (SW): 10.5× 4.0 - 8.1 = 33.9 ROOF(1): 4.0× 4.5 = 18.0 (2): 65× 6.5 = 42.25 PARTITION: 40× 2.5 + 20× 3.8 = 17.6 VR: 4.0× 4.5× 2.5 + 6.6× 6.5× 3.8
CREDIT FOR THERMAL STORAGE m'X degx Sub Total SAFETY FACTOR ROOM SENSIBLE HEAT SUB TOTAL SUPPLY DUCT SUPPLY DUCT FAN HEAT GAIN +LEAK LOSS +HP = 6% BYPASS OUTSIDE AIR 150 CMH×16,50000 0, 1 BF10.29 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT INFILTRATION CMHX g/kgX 0.72 PEOPLE 5 PEOPLEX 49 STEAM kg/hX 540 APPLIANCES ETC. VAPOR TRANS. SUB TOTAL SAFETY FACTOR ROOM LATENT HEAT SUB TOTAL SUPPLY DUCT LEAKAGE LOSS 10 %	10	986 72 916 294 294	8632 864 80 9576	9555 956 64 16575 294 30	10916. (ERSH) 10916. (ERSH) 124RM-16-ADP)11-0, PF) × 0.29 3.640 CMH NOTES SR=105×6.5-20×4.0=60.25 GLASS (NW): 1.5×1.8+15×2.8=6.9 (SW): 1.5×1.8×3=8.1 WALL (NW): 6.5×40-6.9=19.1 (SW): 10.5×40-8.1=33.9 ROOF(1): 4.0×4.5=18.0 (2): 65×6.5=42.25 PARTITION: 40×2.5+2.0×3.8=17.6 VR: 4.0×4.5×2.5+6.6×6.5×3.8 = 205.155
CREDIT FOR THERMAL STORAGE m'X degx Sub Total SAFETY FACTOR ROOM SENSIBLE HEAT SUB TOTAL SUPPLY DUCT FAN HEAT GAIN + LEAK LOSS + HP = 6% BYPASS OUTSIDE AIR 150 CMH × 16,50000 C, 0,1 BF 10,200 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT INFILTRATION CMHX g/kgX 0.72 PEOPLE 6 PEOPLEX 49 STEAM kg/hX 540 APPLIANCES ETC. VAPOR TRANS. SUB TOTAL SUPPLY DUCT LEAKAGE LOSS 10% BYPASS OUTSIDE AIR SCHM × 9,50 kg × 0,1 BF × 0.72 BYPASS OUTSIDE AIR SCHM × 9,50 kg × 0,1 BF × 0.72	10	986 72 916 294 294 30	8632 864 80 9576 294 30	9555 956 64 16575 294 30	10916. (ERSH) 10916. (ERSH) 124RM-16-ADP)11-0, PF) × 0.29 3.640 CMH NOTES SR=105×6.5-20×4.0=60.25 GLASS (NW): 1.5×1.8+15×2.8=6.9 (SW): 1.5×1.8×3=8.1 WALL (NW): 6.5×40-6.9=19.1 (SW): 10.5×40-8.1=33.9 ROOF(1): 4.0×4.5=18.0 (2): 65×6.5=42.25 PARTITION: 40×2.5+2.0×3.8=17.6 VR: 4.0×4.5×2.5+6.6×6.5×3.8 = 205.155
CREDIT FOR THERMAL STORAGE m'X degx Sub Total SAFETY FACTOR ROOM SENSIBLE HEAT SUB TOTAL SUPPLY DUCT SUPPLY DUCT FAN HEAT GAIN +LEAK LOSS +HP = 6% BYPASS OUTSIDE AIR 150 CMH×16,5000000000000000000000000000000000000	10	986 72 916 294 294 30 (03	8632 864 80 9576 294 30 104	9555 956 64 16575 294 30 102 426	10916. (ERSH) 10916. (ERSH) 124RM-16-ADP)(1-0,PF)×0.29 3.640 CMH NOTES SR=105×6.5 - Z0×4.0 = 60.25 GLASS (NW): 1.5×1.8+15×2.8=6.9 (SW): 1.5×1.8×3=8.1 WALL (NW): 6.5×40-6.9=19.1 (SW): 10.5×40-8.1=33.9 ROOF(1): 4.0×4.5=18.0 (Z): 65×6.5=42.25 PARTITION: 40×2.5+2.0×3.8=17.6 VR: 4.0×4.5×2.5+6.6×6.5×3.8 = 205.155
CREDIT FOR THERMAL STORAGE m'X degx Sub Total SAFETY FACTOR % ROOM SENSIBLE HEAT SUB TOTAL SUPPLY DUCT SUPPLY DUCT FAN HEAT GAIN +LEAK LOSS +HP = 6% BYPASS OUTSIDE AIR 16D CMH×16, o. 1 BFA0.29 EFFECTIVE ROOM SENSIBLE HEAT NOFILTRATION CMHX g/kgX 0.72 PEOPLE 6 PEOPLEX 49 STEAM kg/hX 540 APPLIANCES ETC. VAPOR TRANS. SUB TOTAL SUPPLY DUCT LEAKAGE LOSS 10% BYPASS OUTSIDE AIR 15C CMH x 9, 5g/kg x 0, 1BF x 0.72 EFFECTIVE ROOM LATENT HEAT ME EFFECTIVE ROOM LATENT HEAT ME EFFECTIVE ROOM LATENT HEAT ME	10	986 72 916 294 30 (03 421 343	294 30 104 428	9555 956 64 16575 294 30 102 426	10916. (ERSH) 10916. (ERSH) 124RM-16-ADP)11-0, PF) × 0.29 3.640 CMH NOTES SR=105×6.5-20×4.0=60.25 GLASS (NW): 1.5×1.8+15×2.8=6.9 (SW): 1.5×1.8×3=8.1 WALL (NW): 6.5×40-6.9=19.1 (SW): 10.5×40-8.1=33.9 ROOF(1): 4.0×4.5=18.0 (2): 65×6.5=42.25 PARTITION: 40×2.5+2.0×3.8=17.6 VR: 4.0×4.5×2.5+6.6×6.5×3.8 = 205.155
CREDIT FOR THERMAL STORAGE M'X GegX Sub Total SAFETY FACTOR ROOM SENSIBLE HEAT SUB TOTAL SUPPLY DUCT SUPPLY DUCT FAN HEAT GAIN +LEAK LOSS +HP = 6% BYPASS OUTSIDE AIR 160 CMH×16,5000 A, 18 FAD.29 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT NOFILTRATION CMHX g/kgX 0.72 PEOPLE 6 PEOPLEX 49 STEAM kg/hX 540 APPLIANCES ETC. VAPOR TRANS. SUB TOTAL SUPPLY DUCT LEAKAGE LOSS 10 % BYPASS OUTSIDE AIR SCMH X 9, 52/kg X 0, 18 F X 0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT EFFECTIVE ROOM TOTAL HEAT	10	986 72 916 294 294 30 (03 421	294 30 104 428	9555 956 64 16575 294 30 102 426	10916. (ERSH) 10916. (ERSH) 124RM-16-ADP)11-0, PF) × 0.29 3.640 CMH NOTES SR=105×6.5-20×4.0=60.25 GLASS (NW): 1.5×1.8+15×2.8=6.9 (SW): 1.5×1.8×3=8.1 WALL (NW): 6.5×40-6.9=19.1 (SW): 10.5×40-8.1=33.9 ROOF(1): 4.0×4.5=18.0 (2): 65×6.5=42.25 PARTITION: 40×2.5+2.0×3.8=17.6 VR: 4.0×4.5×2.5+6.6×6.5×3.8 = 205.155
CREDIT FOR THERMAL STORAGE m'X degX Sub Total SAFETY FACTOR ROOM SENSIBLE HEAT SUB TOTAL SUPPLY DUCT SUPPLY DUCT FAN HEAT GAIN + LEAK LOSS + HP = 6% BYPASS OUTSIDE AIR 160 CMH×16,5000 0,1 BFA029 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT NOFILTRATION CMHX g/kgX 0.72 PEOPLE 6 PEOPLEX 49 STEAM kg/hX 540 APPLIANCES ETC. VAPOR TRANS. SUB TOTAL SUPPLY DUCT LEAKAGE LOSS 10 % BYPASS OUTSIDE AIR SCMH X 9,5 g/kg X 0,1 BF X 0.72 EFFECTIVE ROOM LATENT HEAT 6 CHECK CMHX 6 CMHX	10	986 72 916 294 30 (03 421 343	294 30 104 428	9555 956 64 16575 294 30 102 426	10916. (ERSH) 10916. (ERSH) 124RM-16-ADP)(1-0,PF)×0.29 3.640 CMH NOTES SR=105×6.5 - Z0×4.0 = 60.25 GLASS (NW): 1.5×1.8+15×2.8=6.9 (SW): 1.5×1.8×3=8.1 WALL (NW): 6.5×40-6.9=19.1 (SW): 10.5×40-8.1=33.9 ROOF(1): 4.0×4.5=18.0 (Z): 65×6.5=42.25 PARTITION: 40×2.5+2.0×3.8=17.6 VR: 4.0×4.5×2.5+6.6×6.5×3.8 = 205.155
CREDIT FOR THERMAL STORAGE M'X degX Sub Total SAFETY FACTOR ROOM SENSIBLE HEAT SUB TOTAL SUPPLY DUCT SUPPLY DUCT SUPPLY DUCT SUPPLY DUCT FAN HEAT GAIN + LEAK LOSS + HP = 6% BYPASS OUTSIDE AIR 150 CMH×16,5000 A, 18FA029 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT NOFILTRATION CMHX g/KgX 0.72 PEOPLE 6 PEOPLEX 49 STEAM kg/hX 540 APPLIANCES ETC. VAPOR TRANS. SUB TOTAL SUPPLY DUCT LEAKAGE LOSS 10% BYPASS OUTSIDE AIR SCMH X 9,500/kg X 0,18F X 0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT SENSIBLE: CMHX degX(1 - BF) X 0.29 LATENT: CMHX g/kgX(1 - BF) X 0.72	10	986 72 916 294 30 (03 421 343	294 30 104 428	9555 956 64 16575 294 30 102 426	10916. (ERSH) 10916. (ERSH) 124RM-16-ADP)11-0, PF) × 0.29 NOTES SR=105 × 6.5 - Z 0 × 4.0 = 60.25 GLASS (NW): 1.5 × 1.8 + 1.5 × 2.8 = 6.9 (SW): 1.5 × 1.8 × 3 = 8.1 WALL (NW): 6.5 × 40 - 6.9 = 19.1 (SW): 10.5 × 4.0 - 8.1 = 33.9 ROOF(1): 4.0 × 4.5 = 18.0 (Z): 65 × 6.5 = 42.25 PARTITION: 40 × 2.5 + Z.0 × 3.8 = 17.6 VR: 4.0 × 4.5 × 2.5 + 6.6 × 6.5 × 3.8 = 205.155
CREDIT FOR THERMAL STORAGE M'X degX Sub Total SAFETY FACTOR ROOM SENSIBLE HEAT SUB TOTAL SUPPLY DUCT SUPPLY DUCT SUPPLY DUCT SUPPLY DUCT FAN HEAT GAIN + LEAK LOSS + HP = 6% BYPASS OUTSIDE AIR 150 CMH×16,5000 A, BFA029 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT NOFILTRATION CMHX g/KgX 0.72 PEOPLE & PEOPLEX 49 STEAM kg/hX 540 APPLIANCES ETC. VAPOR TRANS. SUB TOTAL SUPPLY DUCT LEAKAGE LOSS 10% BYPASS OUTSIDE AIR SCMH X 9, 50/kg X 0, 1BF X 0.72 EFFECTIVE ROOM LATENT HEAT 600 COUTSIDE AIR HEAT SENSIBLE: CMHX degX(1 - BF) X 0.29 LATENT: CMHX g/kgX(1 - BF) X 0.72 GRAND TOTAL HEAT SUB TOTAL	10	986 72 916 294 30 (03 421 343	294 30 104 428	9555 956 64 16575 294 30 102 426	10916. (ERSH) 10916. (ERSH) 124RM-16-ADP)11-0, PF) × 0.29 NOTES SR=105 × 6.5 - Z 0 × 4.0 = 60.25 GLASS (NW): 1.5 × 1.8 + 1.5 × 2.8 = 6.9 (SW): 1.5 × 1.8 × 3 = 8.1 WALL (NW): 6.5 × 40 - 6.9 = 19.1 (SW): 10.5 × 4.0 - 8.1 = 33.9 ROOF(1): 4.0 × 4.5 = 18.0 (Z): 65 × 6.5 = 42.25 PARTITION: 40 × 2.5 + Z.0 × 3.8 = 17.6 VR: 4.0 × 4.5 × 2.5 + 6.6 × 6.5 × 3.8 = 205.155
CREDIT FOR THERMAL STORAGE M'X degX Sub Total SAFETY FACTOR ROOM SENSIBLE HEAT SUB TOTAL SUPPLY DUCT SUPPLY DUCT SUPPLY DUCT SUPPLY DUCT FAN HEAT GAIN + LEAK LOSS + HP = 6% BYPASS OUTSIDE AIR 150 CMH×16,5000 A, BFA029 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT NOFILTRATION CMHX g/KgX 0.72 PEOPLE & PEOPLEX 49 STEAM kg/hX 540 APPLIANCES ETC. VAPOR TRANS. SUB TOTAL SUPPLY DUCT LEAKAGE LOSS 10% BYPASS OUTSIDE AIR SCMH X 9, 50/kg X 0, 1BF X 0.72 EFFECTIVE ROOM LATENT HEAT 600 COUTSIDE AIR HEAT SENSIBLE: CMHX degX(1 - BF) X 0.29 LATENT: CMHX g/kgX(1 - BF) X 0.72 GRAND TOTAL HEAT SUB TOTAL	10	986 72 916 294 30 (03 421 343	294 30 104 428	9555 956 64 16575 294 30 102 426	10916. (ERSH) 10916. (ERSH) 124RM-16-ADP)11-0, PF) × 0.29 NOTES SR=105 × 6.5 - Z 0 × 4.0 = 60.25 GLASS (NW): 1.5 × 1.8 + 1.5 × 2.8 = 6.9 (SW): 1.5 × 1.8 × 3 = 8.1 WALL (NW): 6.5 × 40 - 6.9 = 19.1 (SW): 10.5 × 4.0 - 8.1 = 33.9 ROOF(1): 4.0 × 4.5 = 18.0 (Z): 65 × 6.5 = 42.25 PARTITION: 40 × 2.5 + Z.0 × 3.8 = 17.6 VR: 4.0 × 4.5 × 2.5 + 6.6 × 6.5 × 3.8 = 205.155
CREDIT FOR THERMAL STORAGE M'X degX Sub Total SAFETY FACTOR ROOM SENSIBLE HEAT SUB TOTAL SUPPLY DUCT SUPPLY DUCT FAN HEAT GAIN + LEAK LOSS + HP = 6% BYPASS OUTSIDE AIR 160 CMH×16,5000 A, BFA029 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT NOFILTRATION CMHX g/kgX 0.72 PEOPLE & PEOPLEX 49 STEAM kg/hX 540 APPLIANCES ETC. VAPOR TRANS. SUB TOTAL SUPPLY DUCT LEAKAGE LOSS 10 % BYPASS OUTSIDE AIR SOMM X9,500 kg x0,18F x 0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM LATENT HEAT OUTSIDE AIR HEAT SENSIBLE: CMHX degx(1 - BF) x 0.29 LATENT: CMHX g/kgX(1 - BF) x 0.72 GRAND TOTAL HEAT SUB TOTAL	10	986 72 916 294 30 (03 421 343	294 30 104 428	9555 956 64 16575 294 30 102 426	10916. (ERSH) 10916. (ERSH) 124RM-16-ADP)(1-0,PF)×0.29 3.640 CMH NOTES SR=105×6.5 - Z0×4.0 = 60.25 GLASS (NW): 1.5×1.8+15×2.8=6.9 (SW): 1.5×1.8×3=8.1 WALL (NW): 6.5×40-6.9=19.1 (SW): 10.5×40-8.1=33.9 ROOF(1): 4.0×4.5=18.0 (Z): 65×6.5=42.25 PARTITION: 40×2.5+2.0×3.8=17.6 VR: 4.0×4.5×2.5+6.6×6.5×3.8 = 205.155

OD NAME	DDRESS		**************		DATE ORIGINAL
	03)			14	AC-Z SYSTEM REVISION
IZE 13.0 mx 6.5 m= 84.5 m!		×	3.0		PERSON IN CHARGE
AREA OR SUN GAN OR	Τ		al/h	:	AM AN
STEM QUANTITY TEMP. DIF.				ECTION	HESTMATE FOR. PEAK LOAD
SOLAR GAIN - GLASS	MAX	7:00	3:00		HOURS OF OPERATION HOUR (-
(SE) 12.3 m'x252 x 0,79 /etx 0,94 x 0,65		647	635	41.8	
(2E) 15:- " EPEX 01-1/19:2 A" 1/4/-	 	D-4-1	1.523	_ 	CONDITIONS DBC WBC %RH DPC
m ¹ × ×	 	<u>'</u>	 		OUTSIDE 41.7 28.4 38 18
m'x ×	 		 -	-	ROOM 24.0 17.1 50 9
m²× ×		·		-	DIFFERENCE 177 XXX XXX XXX
SOLAR & TRANS GAIN-WALLS & ROOF	 	i			BLIND (NON-EXISTENCE (OUTSIDE, INSIDE) L M.D.
VALL (SE) 39.17 m'X 13.9 × 7.1		159	1076	กกก	GLASS ORDHARY, THICK, ABSORBENT. %. DO
	 	131	10 76	111	COLOR JUGHT, MEDIUM, DARK.
	├──-		 -		
w _i × ×			 		
m [‡] X	 	<u> </u>			
OOF-SUN MIX X			 -		INFILTRATION
OOF - SHADED M'X X	 		<u> </u>		SWINGING
TRANS. GAIN-EXCEPT WALLS & ROOF			l :		REVOLVING DOORS PEOPLEX CMH/PER
LASS 17.78 m'X 17.7 X 5,1		154	1187	1154	OPEN DOORS DOORSX CMH/DOOR
ELING m2X X	 		L		EXHAUST AIR
LOOR 84,5 m'X (2,7 × 2,5	<u> Z</u>	683	z,789	z483	CRACK MX CMH/m
ARTITION(1) 12.6 m2 285 x 1.8		201	207	201	INFILTRATION CMH
(2) 17.0 * x 8.85 x 2.5] :	266	273	266	
		1			16 PEOPLEX 25 CMH/PER 400
NEILTRATION CMH X dog X 0.29		:) m²X CMH/m²
INTERNAL HEAT	i	j			VENTILATION CMH 400
EOPLE 16 PEOPLEX 41] ;	656	656	656	SENSIBLE HEAT FACTOR
w Kw× × 860	1			:	1 0/E& (FRSH)
		826	1826	1.826	ESHF 10792 (ERTH) -0.91 (17.1
		0.0	1000	1.0~0	DEHUMIDIFIED AIR
APPLIANCES ETC.	 	\vdash		1.1	1
	 		-	1 1	APPARATUS DEWPOINT 17.5 C
REDIT FOR MY def X	 		(_)		9,58 (ERSH)
HERMAL STORAGE	<u> </u>	أحسست	<u> </u>		124 RM-12,5ADP)(1 0,1BF) X0.29 3,770 C
SUB TOTAL			-	,	
AFETY FACTOR %	\ <u>~\</u>		G 5-44	0.31	NOTES
ROOM SENSIBLE HEAT SUB TOTAL	<u> </u>	592	8549	8031	GLASS (SE): 1.5x1.8x3 +1.5x2.8=12.
UPPLY DUCT SUPPLY DUCT FAN		~			
	1 1			20	
LEAT GAIN + LEAK LOSS +HP = 10%	ļ	860		804	
YPASS OUTSIDE AIR 400 CMHY 17 det 0, BF 1029	 	204	>17	717-	The state of the second
	 	204	>17	717-	The state of the second
YPASS OUTSIDE AIR 400 CMHY 17 det 0, BF 1029	 	204	>17	717-	WALL (SE): 13.0×4.0-12.3 = 39.7
YPASS OUTSIDE AR 400 CMHY 17.7 det 0.1 B.F. 229 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT	9	204	>17	717-	WALL (SE): 13.0×4.0-12.3 = 39.7
PRASS OUTSIDE AR 400 CMHY 17.7 deg to 1 B.F. 229 EFFECTIVE ROOM SENSIBLE HEAT # ROOM LATENT HEAT PERTRATION CMHX g/kg× 0.72	q!	204	217 9616	212 904	PARTITION (1): 42×3,0=12.6
PASS OUTSIDE AR 400 CMHY 17.7 deg to 1 B.F. 229 EFFECTIVE ROOM SENSIBLE HEAT # ROOM LATENT HEAT FRITRATION CMHX g/kgX 0.72 EOPLE 18 PEOPLEX 49	9	206 658	217 9616	212 904	WALL (SE): 13.0×4.0-12.3 = 39.7
PRASS OUTSIDE AIR 400 CMHY 17.7 deg to 1 B.F x 0.29 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT FRITRATION CMHX g/kgX 0.72 EOPLE 16 PEOPLE 49 TEAM kg/hX 540	9	206 658	217 9616	212 904	PARTITION (1): 42×3,0=12.6
PRASS OUTSIDE AIR 400 CMHY 17,1 deet 0,1 B.F. 225 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT FELTRATION CMHX g/kgX 0.72 EOPLE 16 PEOPLEX 49 TEAM kg/hX 540	9	206 658	217 9616	212 904	PARTITION (1): 42×3,0=12.6
PPLIANCES ETC.	9	206 658	217 9616	212 904	WALL (SE): 13.0 × 4.0 - 12.3 = 39.7 PARTITION (1): 4.2 × 3.0 = 12.6 (2): 4.0 × 3.0 = 12.0
PASS OUTSIDE AIR 400 CMHY 17,1 deet 0,1 B.F. 10.25 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT FELTRATION CMHX g/kgX 0.72 EOPLE 16 PEOPLE 49 TEAM kg/hX 540 PPLIANCES ETC.	9	206 658	217 9616	212 904	WALL (SE): 13.0 × 4.0 - 12.3 = 39.7 PARTITION (1): 4.2 × 3.0 = 12.6 (2): 4.0 × 3.0 = 12.0
FRASS OUTSIDE AIR AOD CMHY 17,1 eet 0,1 B.F. 229 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT FRITATION CMHX g/kgx 0.72 EOPLE 16 PEOPLEX 49 TEAM kg/hX 540 PPLIANCES ETC. APOR TRANS. Sub Total	9	206 658	217 9616	212 904	WALL (SE): 13.0 × 4.0 - 12.3 = 39.7 PARTITION (1): 4.2 × 3.0 = 12.6 (2): 4.0 × 3.0 = 12.0
PRASS OUTSIDE AIR 400 CMHY 17,1 deet 0,1 B.F. 229 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT FRITRATION CMHX g/kgx 0.72 EOPLE 16 PEOPLEX 49 TEAM kg/hx 540 PPLIANCES ETC. APON TRANS. SUB TOTAL AFETY FACTOR	q !	206 458 784	212 9616 784	212 9041 784	WALL (SE): 13.0 × 4.0 - 12.3 = 39.7 PARTITION (1): 4.2 × 3.0 = 12.6 (2): 4.0 × 3.0 = 12.0
FRASS OUTSIDE AIR AOD CMHY 17,1 ever 0,1 B.F. 229 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT FRITRATION CMHX g/kgx 0.72 EOPLE 16 PEOPLEX 49 TEAM kg/hX 540 PPLIANCES ETC. APOR TRANS. Sub Total AFETY FACTOR % ROOM LATENT HEAT Sub TOTAL	9	784 784	217 9616 784 780	784	WALL (SE): 13.0 × 4.0 - 12.3 = 39.7 PARTITION (1): 4.2 × 3.0 = 12.6 (2): 4.0 × 3.0 = 12.0
FRASS OUTSIDE AIR 400 CMHX 17,1 deet 0,1 B.F. 225 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT FRITATION CMHX g/kgX 0.72 EOPLE 16 PEOPLEX 49 TEAM kg/hX 540 PPLIANCES ETC. APOR TRANS. SUB TOTAL AFETY FACTOR ROOM LATENT HEAT SUB TOTAL UPPLY DUCT LEAKAGE LOSS 10 %	9	784 784	784 786 786	784	WALL (SE): 13.0 × 4.0 - 12.3 = 39.7 PARTITION (1): 4.2 × 3.0 = 12.6 (2): 4.0 × 3.0 = 12.0
PRASS OUTSIDE AIR 400 CMHY 17,1 deet 0,1 B.F. 229 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT FRITRATION CMHX g/kgx 0.72 EOPLE 16 PEOPLEX 49 TEAM kg/hX 540 PPLIANCES ETC. APOR TRANS. SUB TOTAL AFETY FACTOR % ROOM LATENT HEAT SUB TOTAL UPPLY DUCT LEAKAGE LOSS [0 % YPASS OUTSIDE AM CMH X 9,4 g/kg x 0, 1BF X 0.72	9	784 79 71	784 784 780 780 780 79 217	212 9047 784	WALL (SE): 13.0 × 4.0 - 12.3 = 39.7 PARTITION (1): 4.2 × 3.0 = 12.6 (2): 4.0 × 3.0 = 12.0
PRASS OUTSIDE AIR 400 CMHY 17,1 ever 0,1 B.F. 229 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT FRITRATION CMHX g/kgx 0.72 EOPLE 16 PEOPLEX 49 TEAM kg/hX 540 PPLIANCES ETC. APOR TRANS. SUB TOTAL AFETY FACTOR % ROOM LATENT HEAT SUB TOTAL UPPLY DUCT LEAKAGE LOSS [0 % YPASS OUTSIDE AIR CMH X 9,4 g/kg x 0, 1BF X 0.72 EFFECTIVE ROOM LATENT HEAT #	9	784 791 734	784 784 780 780 79 217	212 9047 784 274 1133	WALL (SE): 13.0 × 4.0 - 12.3 = 39.7 PARTITION (1): 4.2 × 3.0 = 12.6 (2): 4.0 × 3.0 = 12.0
PPASS OUTSIDE AIR 400 CMHY 17. 1 det 0. 1 B.F. 10.29 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT IFILTRATION CMHX g/kgx 0.72 EOPLE 16 PEOPLEX 49 TEAM kg/hx 540 PPLIANCES ETC. APON TRANS. Sub TOTAL AFETY FACTOR % ROOM LATENT HEAT Sub TOTAL UPPLY DUCT LEAKAGE LOSS 10 % YPASS OUTSIDE AM 400 CMH x 9.4 g/kg x 6. 1BF x 0.72	9	784 79 79 71 79 79 79 792	784 784 780 780 79 217	212 9047 784	WALL (SE): 13.0 × 4.0 - 12.3 = 39.7 PARTITION (1): 4.2 × 3.0 = 12.6 (2): 4.0 × 3.0 = 12.0
PRASS OUTSIDE AIR 400 CMHY 17. 1 det 0.1 B.F. 10.29 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT BELTRATION CMHX g/kgx 0.72 EOPLE 16 PEOPLEX 49 TEAM kg/hx 540 PPLIANCES ETC. APOR TRANS. SUB TOTAL AFETY FACTOR % ROOM LATENT HEAT SUB TOTAL UPPLY DUCT LEAKAGE LOSS 10 % LYPASS OUTSIDE AIR 200 CMHX 9.4 g/kg xo. 1BF x 0.72 EFFECTIVE ROOM LATENT HEAT	9	784 791 734	784 784 780 780 79 217	212 9047 784 274 1133	WALL (SE): 13.0 × 4.0 - 12.3 = 39.7 PARTITION (1): 4.2 × 3.0 = 12.6 (2): 4.0 × 3.0 = 12.0
PPLIANCES ETC. APON LATENT HEAT SUB TOTAL FOR ROOM LATENT HEAT SUB TOTAL APPLIANCES ETC. APON LATENT HEAT SUB TOTAL FUPPLY DUCT LEAKAGE LOSS LYPASS OUTSIDE AR OO MATENT HEAT EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM LATENT HEAT OUTSIDE AIR HEAT EFFECTIVE ROOM TOTAL HEAT EFFECTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT OUTSIDE AIR HEAT EFFECTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT	9	784 79 79 71 79 79 79 792	784 784 780 780 79 217	212 9047 784 274 1133	WALL (SE): 13.0 × 4.0 - 12.3 = 39.7 PARTITION (1): 4.2 × 3.0 = 12.6 (2): 4.0 × 3.0 = 12.0
PPASS OUTSIDE AIR 400 CMHY 17.1 det 0.1 BFX0.29 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT SELTRATION CMHX g/kgX 0.72 EOPLE 16 PEOPLEX 49 TEAM kg/hX 540 PPLIANCES ETC. APOR TRANS. SUB TOTAL AFETY FACTOR ROOM LATENT HEAT SUB TOTAL SUPPLY DUCT LEAKAGE LOSS 10 % PYPASS OUTSIDE AIR OCMHX 9.4 g/kg x0. BFX 0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT ENSIBLE: CMHX deg x(1 - BF) x 0.29	9	784 79 79 71 79 79 79 792	784 784 780 780 79 217	212 9047 784 274 1133	WALL (SE): 13.0 × 4.0 - 12.3 = 39.7 PARTITION (1): 4.2 × 3.0 = 12.6 (2): 4.0 × 3.0 = 12.0
PPASS OUTSIDE AIR ADD CMHY 17. 1 det 20. 1 BF 20.25 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT SERTRATION CMHX g/kgX 0.72 EOPLE 16 PEOPLEX AQ TEAM kg/hX 540 PPLIANCES ETC. APOR TRANS. SUB TOTAL SUPPLY DUCT LEAKAGE LOSS 10 % EYPASS OUTSIDE AIR O'CMHX 1.4 g/kg x0. 1BF X 0.72 EFFECTIVE ROOM LATENT HEAT OUTSIDE AIR HEAT OUTSIDE AIR HEAT ENSIBLE: CMHX deg X (1 - BF) X 0.72 ATENT: CMHX g/kg X (1 - BF) X 0.72	9	784 79 79 71 79 79 79 792	784 784 780 780 79 217	212 9047 784 274 1133	WALL (SE): 13.0 × 4.0 - 12.3 = 39.7 PARTITION (1): 4.2 × 3.0 = 12.6 (2): 4.0 × 3.0 = 12.0
PASS OUTSIDE AR 400 CMHY 17. 1 det 20. 1 BF 10.25 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT REPLIANTON CMHX g/kgX 0.72 PEOPLE 18 PEOPLEX 49 TEAM kg/hX 540 APPLIANCES ETC. APPRIANCES ETC. APPRIANCES ETC. SUB TOTAL SUPPLY DUCT LEAKAGE LOSS 10 % RYPASS OUTSIDE AR 600 CMHX 1.4 g/kg x0. 1BF X 0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT SUB TOTAL SUPPLY DUCT LEAKAGE LOSS 10 % BYPASS OUTSIDE AR 600 CMHX 1.4 g/kg x0. 1BF X 0.72 EFFECTIVE ROOM TOTAL HEAT ENSIBLE: CMHX deg x(1 - BF) x 0.29 GRAND TOTAL HEAT SUB TOTAL GRAND TOTAL HEAT SUB TOTAL GRAND TOTAL HEAT SUB TOTAL GRAND TOTAL HEAT SUB TOTAL GRAND TOTAL HEAT SUB TOTAL GRAND TOTAL HEAT SUB TOTAL ENTRY CMHX g/kg x(1 - BF) x 0.72	9	784 79 79 71 79 79 79 792	784 784 780 780 79 217	212 9047 784 274 1133	WALL (SE): 13.0 × 4.0 - 12.3 = 39.7 PARTITION (1): 4.2 × 3.0 = 12.6 (2): 4.0 × 3.0 = 12.0
PPASS OUTSIDE AR 400 CMHY 17. 1 det 20. 1 BF 20.25 EFFECTIVE ROOM SENSIBLE HEAT ROOM LATENT HEAT SETTEMATION CMHX g/kgX 0.72 EOPLE 16 PEOPLEX 49 TEAM kg/hX 540 APPLIANCES ETC. APON TRANS. SUB TOTAL SUPPLY DUCT LEAKAGE LOSS 10 % EXPRASS OUTSIDE AR 60 CMHX 9.4 g/kg x0. 1 BF X O.72 EFFECTIVE ROOM LATENT HEAT OUTSIDE AR HEAT SENSIBLE: CMHX deg X (1 - BF) X O.25 GRAND TOTAL HEAT SUB TOTAL GRAND TOTAL HEAT SUB TOTAL EFFECTIVE ROOM LATENT HEAT OUTSIDE AR HEAT GENSIBLE: CMHX deg X (1 - BF) X O.25 GRAND TOTAL HEAT SUB TOTAL	9	784 79 79 71 79 79 79 792	784 784 780 780 79 217	212 9047 784 274 1133	WALL (SE): 13.0 × 4.0 - 12.3 = 39.7 PARTITION (1): 4.2 × 3.0 = 12.6 (2): 4.0 × 3.0 = 12.0

COOLING	AND	DEHUMIDIFYING	ESTIMATE(METRIC)
				SHEET NO.
		INQUIRED BY		DATE ORIGIN

COOLING AND DE	HUMIDI	TYING I	ESTIMATE	SHEET NO. 37
NOUIRING NO.	OURED BY			DATE ORIGINAL
JOD NAME	DDRESS			REVISION
PACE USED FOT CORRIDAR (FOT)		PAC -	Z SYSTEM	PERSON IN CHARGE
Size m×! m= 87.25 m	×	Z.5 m(H)≈	218 is m3	
AREA OR SUN GAN OR	Kei	al/h		AM PEAK LOAD AM
TYEM , QUANTITY TEMP DIFF.		CORRECTION	ESTMATE FOR	PM PM 3
SOLAR GAIN - GLASS	NAX 3:00	Z:00 4:00	HOURS OF OPER	RATION Hour (-)
m*× 💉	1112	1	OUTSIDE DESIGN CO	
m'x x			CONDITIONS DB C	WBC SRH DPC E/kg
m¹X X X		1	OUTSIDE 42.2	28,6 37 19.0
m²X X	1	11	ROOM 24.0	17.1 50 9.4
m*X X	 	 	DIFFERENCE 18.2	
SOLAR & TRANS GAIN-WALLS & ROOF	 	 		(ISTENCE(OUTSIDE, INSIDE) L M. D
and the contract of the contra		1. 1		ARY, THICK, ABSORBENT. S. DOUBL
WALL MTX X	 	 		MEDIUM, DARK.
	 	 	WEIGHT	kg/m³(FLOOR) kg/m³(WALL
	 	 	INTERNAL HEAT	W/m³ m³/PEOPLE
^	 	 	INFILTE	
ROOF-SUN mªX/ X	 	 	₹ :	
ROOF-SHADED MTX X		<u> </u>	SWINGING	Bank FV CMH/DED
TRANS. GAIN-EXCEPT WALLS & ROOF				PEOPLEX CMH/PERI
GLASS m2× ×	 			OORSX CMH/DOOR
CEILING INTX X		 _ _ 	EXHAUST AIR	
FLOOR 56,25 m'X 13,2 X 2,5	1857	1786	CRACK M	
PARTITION (1)81 $65 \text{ m}^2 \times 9.1 \times 1.8$	1336	1.299	INFILTRATION	CMH #
(z)30,15 ^{m2} × 9.1 × 7.5	686	667	VENTIL	그런 그는 그는 그들이 살아내는 무슨 사람들이 되었다.
DOOR 11.344 × 9.1 x 1.6	166	161	PEOPLEX	CMH/PER.
INFILTRATION CMHX degX 0.29	1	<u> </u>	j m³×	CMH/m²
INTERNAL HEAT	1	l :	VENTEATION .	CMH ■
PEOPLE PEOPLEX	l l		SENS	IBLE HEAT FACTOR
Kw Kw× × 860		! .	E.S.H.F= 65	23 (ERSH) = 1.0 (13.2°C)
LIGHTS 87.25 x 70 WX 1.08	1:885	1885	66	23 (ERTH)
APPLIANCES ETC.	1]		EHUMIDIFIED AIR
Pri comercia di co		Ī	Approxime DEWRO	TAIL TAIL
			1	
CREDIT FOR	;) i	(-)	652	3 (ERSH) 1-BF)×0.29 2180 CMH
THERMAL STORAGE MTX GERX Sub Total	1		(24 RM-17.5ADP)	1-BF)×0.29
	1	 	NOTES	
DAFETT T ACTOR	5930	5798		-2.0x2.0+ 65 xz.5+7.0
ROOM SENSIBLE HEAT SUB TOTAL SUPPLY DUCT FAN	3/30	7/19		C. 7 C. 7 B. 7 C. 3 E.
	593	580	= 87.25	
HEAT GAIN +LEAK LOSS +HP =10%	312	200	PARTITION	
BYPASS OUTSIDE AIR CMRY 441> BF>0.29	/ 5 7 2	1 290 127 9		55x25-09x2: X4=81.65
EFFECTIVE ROOM SENSIBLE HEAT	6743	6.378 6378	•	3.5 × 7.5 _0.9 × 7.° × 2 = 30.15
ROOM LATENT HEAT			(-) [3,5 x 7,5 _0.1 x 6. x 6 = 50.10
INFILTRATION CMHX g/kgX 0.72		 		
PEOPLE PEOPLEX	<u> </u>	 	DOPR: 09x	-0×L=108
STEAM kg/hX 540	ļ	ļ	DOPE	C
Appliances etc.	 	ļ	T. as B. s E	x 27.5 = 56.25
	 		PLODE ZIP	x 20- 2 301
VAPOR TRANS.				The second of the second
Sub Total		 		
SAFETY FACTOR *		<u> </u>		
ROOM LATENT HEAT SUD TOTAL				
SUPPLY DUCT LEAKAGE LOSS %			·	
BYPASS OUTSIDE AIR CMHX g/kgx BFX0.72				
EFFECTIVE ROOM LATENT HEAT	F 18 1 3			
EFFECTIVE ROOM TOTAL HEAT	6 523	6378 6378	Section 1995	
. OUTSIDE AIR HEAT	ı			
#(I DELVO 72		 		
	-			
GRAND TOTAL HEAT SUB TOTAL	ļ			and the state of t
RETURN DUCT RETURN DUCT PUMP PRE = % HEAT GAIN LEAK GAIN H.P GAN	[]			in the second of the second of the second
HEAT GAIN LEAK GAIN H.P. GAN (U.S.R.T) GRAND TOTAL HEAT E				

Inquiring No.		ING AND DE	OUIRED		1 11	VG 1		\ I & \	SHEE	T No.	~~	23
			ODRESS		···-·				DAT	E ORIGI	NAL	
JOB NAME					~~~	ΤΛ	- Z SYST	-EM	REV	ISION		
				05 d		m(H)=		W ₃	PER	SON IN	CHARG	E
SIZE 3,75	m× 6,5	m= 21/13 m²				m(13.7=	1 00,-1	111	4.1.4			A b b
ITEM		SUN GAIN OR FACTOR		Kcı	·		ESTMATE FO	PR.	AM	PEAR L	OAD .	SIMA
1		TEMP DIFF			1	ECTION			PM			РМ
	OLAR GAIN		MAX:		3:00		HOURS OF	<u> </u>		Hour ()
(SE) 4		1,57/6,85 × 0,94 × 0,65		434	183	160	OUYSIDE DES			COB	CWB	
	m³×	×				<u> </u>	CONDITIONS			%RH	DP C	g/kg
	m³ X	×		1		(22)		38.4	27.5	43_	ļ	18.9
	m₃X	×				<u> </u>	Room	24.0	17.1	50		1 94
	m³X	* * * * * * * * * * * * * * * * * * *				l	DIFFERENCE	14.4.	×××	l x x x	×××	9.5
SOLAR &	TRANS GA	IN-WALLS & ROOF	Ì	1		İ		and the second second	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	UTSIDE.IN		M. D
WALL (SE) 8	8 m'X	13.4 × Z.1	· · ·	757	239	230	GLASS	ORDINAR	Y. THICK	ABSORBE	NT. %	. DOUBL
	m*X	×				i	COLOR	LIGHT. M	EDIUM. D	ARK.		
	m³× ·	×				(257)	WEIGHT		kg/m*(F	LOOR)	kg/r	n'(WALL
	m³×	×		1	ļ	<u> </u>	INTERNAL HEAT		₩/m³		m [‡] /PE	OPLE
Roof-SUN		× ×	·			_	lN IN	FILTRA	TION		Ī	
ROOF -SHADE		×	-	 		-	SWINGING					·
		T WALLS & ROOF	 			<u> </u>	REVOLVING D	OORS	PEOPLEX	CMH/PER	1 1 1 1	
	1.0			2-4	393	21-1	OPEN DOORS			MH/DOOR	1	
GLASS 4,		14 × 5,1		309	1775				<u> </u>			
CELING	m ₃ ×	<u> </u>	<u> </u>	 		(354)				CMH/m	i	
FLOOR	m²X	X		1			CRACK	ın X	CM		 	
PARTITION 15	' w,× .	7,2 × 1,8	}	197	749	243	INFILTRAT		СМ	H X	!	
		Section 2 Control of	L	<u>i </u>	ļ	(243)		ENTILA				
	The second second		<u> </u>	i	<u> </u>		Z PEOPLE	×	22 CI	MH/PER	5	<u> </u>
INFILTRATION	CMH×	deg × 0.29		<u> </u>	<u> </u>	<u> </u>)' m²×		CI	AH/m²	<u> </u>	
	INTERNAL	. HEAT					VENTILAT		СМ		5	
PEOPLE	7	PEOPLEX 4		82	82	82		SENSIB	LE. HE	AT. FAC	TOR	
Kw	Kw×	× 860])		1.97	26(ERSH)	093/10	23"01
LIGHTS		80.1 ×W 05	Jan 1	457	157	457	E.S.H.F=	7.06	69. (ERTH)	-1-(1	
APPLIANCES ET			-	-1 2.1		19.4		DE	HUMID	FIED A	R	
Att LLAnces L		·	<u> </u>	Ì	 		l			1 2.5	ani ing panggarang panggarang panggarang panggarang panggarang panggarang panggarang panggarang panggarang pan	C
				 	-		APPARATUS					_
CREDIT FOR	e e garaan	m³X deg×	()	 	()) (926	(ERSH)	1124	
THERMAL S	TORAGE	Sub TOTAL	1		-	1	(24RM-17.5)	ADP)(1	- BF)	(0.29 ~	BCU	СМН
<u> </u>				<u>'</u>	-	144	NOTES		V-11			
SAFETY FACTO		%		5 5 1		1014	INDIES	'er\ •	. 5	7824	12	
		EAT SUD TOTAL		731	1003	11526	GLASS (JEJ ·	11.70			
SUPPLY DUCT	Supply 1		ĺ			(162)	· WALL C	SE)	3 25×	4. 4.2	≥8,8	
HEAT GAIN	LEAK L			174	. 161	[53	PARTIT	IAN:		G 11	ጌ.	
BYPASS OUTSID	DE AIR 50 C	MH7/4 4000 0. 1 B.Fx0.29	1.3	اح	27				-t, x ;	.0 # 17	•	
EFFECT	IVE ROOM	SENSIBLE HEAT	$\perp \perp$	1926	1.791	1703						
, , , , , , , , , , , , , , , , , , ,	ROOM LATE	NT HEAT				(1800)					
INFILTRATION	СМНХ			<u> </u> _	<u> </u>]					
PEOPLE		Z PEOPLEX 49		98			}					
STEAM		kg/hX 540		!			t					-
APPLIANCES ET			1 ;	i								
THE MINUTES EL												
VAPOR TRANS.			-				1.1.1					
TAFOR IRANS.		Sub Total	<u> </u>	 		i						
		SUD 1 OTAL	 	h		13-14	1					
SAFETY FACTO			 	98	98	98						
		EAT SUB TOTAL								,		
SUPPLY DUCT				10	10	10					•	
		× 9,5 e/ke > 1 BF × 0.72		35	35	34		. 1	1. j		2	er e
		LATENT HEAT		143	143	142	12	047	ga safi		6 July 2007	
EFFEC*	TIVE ROOM	TOTAL HEAT		069	1934.	1845	(2:00)	1446				
- 1 to 1	OUTSIDE A	UR HEAT	100	(98)	•		1		o en el como de la como de la como de la como de la como de la como de la como de la como de la como de la como La como de la como de la como de la como de la como de la como de la como de la como de la como de la como de l			
SENSIBLE:	CMHX	deg x (1 - BF) x 0.29				'.	1 10 10 10 10			4.		
	CMH× E	/kg×(1- BF)×0.72						- 1 . - 2 .				
		AT SUD TOTAL		1	1)	1		1.1			•
		CT PUMP PIPE = %							()	1 1 4		
HEAT GAIN	LEAK GAIN	H.P GAN		j					. " -		11. 11.	
		ND TOTAL HEAT	<u> </u>				Ì			*	100	
	S.K.I./ GRAI	TO TOTAL INCIDENCE					The second second				FOR	M. E-20

()

COOLING AND DEHUMIDIFYING ESTIMATE (METRIC) SHEET NO INQUIRED BY DATE ORIGINAL ADDRESS JOD NAME . REVISION SPACE USED FOR EXECUTIVE ENGINEER ROOM (5056, 5056) PAC - 2 SYSTEM
SIZE 6.5 mx1 9.25 m= 21.18 m1 x 3.8 m1H1= 80.29 m1 PERSON IN CHARGE AREA OR SUN GAN OR Keal/h AM PEAK LOAD ESTMATE FOR ITEM QUANTITY TEMP. DEF. PM. CORRECTION 3100 4100 HOURS OF OPERATION SOLAR GAIN -- GLASS MAX 17:00 Hour L m'×252 x05%85 x 0.94 x0,65 COB CWB %RH 434 183 160 OUTSIDE DESKIN CONDITIONS CONDITIONS DE DE WEE SEN DE (271) OUTSIDE 384 27,6 189 43 m^tX 94 74.0 17.1 50 ROOM m^t X DIFFERENCE 144 XXX XXX XXX m^t X BLIND INON-EXISTENCE(OUTSIDE, INSIDE) L. M. D. SOLAR & TRANS GAIN-WALLS & ROOF 239 230 GLASS IORDINARY, THICK, ABSORBENT. %. DOUBLE WALL (SE) 8,8 m'X 13.6 × COLOR ILIGHT, MEDIUM, DARK. m³ X X kg/m³(FLOOR) kg/m³(WALL) WEIGHT m. X × m²/PEOPLE W₁m³ INTERNAL HEAT m' X INFILTRATION m³× Roof-Sun ROOF -SHADED REVOLVING DOORS PEOPLEX CMH/PER TRANS. GAIN-EXCEPT WALLS & ROOF 309 393 354 OPEN DOORS DOORS CHH/DOOR 4.2 m'× GLASS 4.4 EXHAUST AIR m³X CELING /354) CRACK m× FLOOR CMH . PARTITION VENTILATION Z PEOPLEX 25 CMH/PER. m² X CMH/m² 0.29 CMHX INFILTRATION oeg× CMH E VENTILATION INTERNAL HEAT SENSIBLE HEAT FACTOR 2 PEOPLEX 41 82 PEOPLE (ERSH) = 0.92 (12.3°C) 1.709 ____x 860 Kwx Kw . E.S.H.F=--1.852 457 457 1.08 wx 21,13 × 20 LIGHTS DEHUMIDIFIED AIR APPLIANCES ETC. APPARATUS DEWPOINT 12.5 1.709 (ERSH) CREDIT FOR THERMAL STORAGE deg X (Z4.RM-12.5ADP)(1-,BF)×0.29 Sub TOTAL (1371) NOTES SAFETY FACTOR 1354 1283 GLASS (SE): 4.7 ROOM SENSIBLE HEAT SUB TOTAL 1 534 (178) WALL (SE) : 8:8 SUPPLY DUCT FAN SUPPLY DUCT 154 136 129 +LEAK LOSS +HP HEAT GAIN 271 26 BYPASS OUTSIDE AIR 50 CMH 14.4 ... 0.1 B.F. 029 21 1517 1438 EFFECTIVE ROOM SENSIBLE HEAT 1:709 ROOM LATENT HEAT 0.72 CMHX 7 PEOPLEX 4 98 PEOPLE kg/h× APPUANCES ETC. VAPOR TRANS. SUD TOTAL 98 98 | 98 ROOM LATENT HEAT SUB TOTAL 10 1 SUPPLY DUCT LEAKAGE LOSS 34 BYPASS OUTSIDE AIRSOCMH X 7,5 g/kg xo, BF x 0.72 35 35 143 142 EFFECTIVE ROOM LATENT. HEAT 143 1660 1580 (2:00) 1815 EFFECTIVE ROOM TOTAL HEAT 852 188 OUTSIDE AIR HEAT
 SENSIBLE:
 CMHX
 deg × (1 - BF) × 0.29

 LATENT:
 CMHX
 g/kg×(1 - BF) × 0.72
 GRAND TOTAL HEAT SUB TOTAL RETURN DUCT REYURN DUCT PUMP PIPE HEAT GAIN LEAK GAIN H.P GAIN

(U.S.R.T) GRAND TOTAL HEAT

INOURING NO.	<u> </u>		INOUIRED	э Ву						T No.	NAL	35
JOD NAME			ADDRES	5						ISION		
SPACE USED FO	EXCUTIVE	ENGINER	200M (505 a		PAC-				SON IN	CHAR	3E
SIZE 5,25	m× 6.5 m=	21,13 m		×	3.8	m(H)=	80.29	m¹				
İYEM	AREA OR SUN G	AN OR FACTOR		Kei	l/h		ESTMATE F	OR.	AM	PEAK L	OAD	AM ,
	QUANTITY TEMP	Der.			CORR	ECTION			PM			PM '
	LAR GAIN		MAX	17:00	3:00	4:04	HOURS OF	OPERA	ATION	Houn (
(SE) 4:	z m'×252 x057/6;	$85 \times 0.94 \times 0.65$	5	434	183	160	OUTSIDE DE			COB	CW	9 %F
	w _z ×	×		1			CONDITIONS		MB C	%RH	DPC	E/KE
	w,X	×		1		(271)	OUTSIDE !		27.6	43		18.1
	m²×	×			 _		ROOM	24.0	17.1	50		1 94
	m²X	×		1			DIFFERENCE	14.4	×××	×××	×××	! 9.5
SOLAR &	TRANS GAIN-W	ALLS & ROOF		1		1	BLIND	NON-EXI	STENCE (C	UTSIDE IN	SIDE). L	M, D
WALL (SE) 8.	5 mx 13,6	× 2.1		252	239	230	GLASS	ORDINAR	Y. THICK	ABSORBE	NT.	%. DOUB
	m*X	X				<u>i </u>	COLOR	LIGHT. M	EDUM, D	IRK.	·	
	mªX	×				(257)	WEIGHT		kg/m³{F	LOOR)	kg.	m³(WAL
	m²×	×		į]	INTERNAL HEAT	Ì	W/m²	<u>:</u>	m²/P	EOPLE
Roor-Sun	m²×	×					11	VEILTRA	TION			
ROOF - SHADEE	m,×	×		1		1	SWINGING	esyllening.	1.7			
	AIN-EXCEPT W	ALLS & ROOF		1			REVOLVING (DOORS	PEOPLEX	CMH/PER.		
	m'× 14.4	x 5,1		309	393	354	OPEN DOORS	5 Do	ORSX (MH/DOOR	L	
CEILING	m³X	×		1			EXHAUST A	IR		100	j .	W. T. 1
FLOOR	m³×	×		1		1	CRACK	m×	744,54	CMH/m		
	2 m'× 17.2	× 2,5		274	346	337	INFRTRA	TION	СМ	H I II		
ARTHUR (S	<u> </u>				1	(337)	V	ENTIL	TION	1	1	
				· ·		2717	Z PEOPLE	×	25 C	MH/PER-	50	-
Name and a market	CMH×	deg X 0.2		1		 	i, w _i ×			AH/m²	1	
INFILTRATION	INTERNAL HEA		-	-	-	i	VENTILA		CM		50	
D	and the second of the second of the	LE× 4	6 6 5	87	82	82				AT FAC		
PEOPLE			50 50	100	-00		[70				
Kw					.FI	457	E.S.H.F≔—	215	3 (ERSH) ERTH)	2.73(/	C3 C)
Lights		W× 1.0	~	457	457	40				FIED All	₹	
APPLIANCES ET	<u>C.</u>		- -	 							5 - Fig. 12	
				+			APPARATUS	DEMBOIL	4T		-	_ <i>c</i>
CREDIT FOR	12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<u></u>		<u>!</u>	1 —)	<u> </u>		. Z01	0 - (1	ERSH.)		
THERMAL ST	ORAGE M'X	deg×	λ - 7/ 			.	(24 RM- /2.5					СМН
		Sub Tot		+		11.17.0%	NOTES		<u> </u>			
SAFETY FACTOR	77.77		70					(SE)	1.5 x	7.8 = 4	z	
	SENSIBLE HEAT S			808	1.100	1670 (171)	GLTV2-	.(>E)	~ 25	4	. a	8
SUPPLY DUCT		FAN	<u>.</u>	101	ιΠα	11.7	WALL	(SE)	3.2. ×	4 4.	- 31	•
	-LEAK LOSS	+HP =lo		181		-/	PARTI	TIAN	. 40 x	3.8 = 15	7.	
	E AIR ' 50 CMH> 4			21	27	26	i (AKI)	LIUN		<i>),</i> –	•	
EFFECT	VE ROOM SENS	SIBLE HEAT	7	010	1.847							
F	OOM LATENT I	HEAT			} .	(1905				Astronomic		
INFILTRATION	смнх	g/kg× 0.	72	<u> </u>			1.1					
PEOPLE	Z PEC	SPLEX 49		98				1 1	-			
STEAM		kg/h× 54	40	<u> </u>								
APPLIANCES ETC												200
VAPOR TRANS.				1								
		Sub Tota						***				
SAFETY FACTOR	₹		*									
Roo	M LATENT HEAT SE	D TOTAL		198							- 5	•
	EAKAGE LOSS		%	10								
	E AIR CMH×95			35	35	34	la base i ja					
	IVE ROOM LAT			143	143	142						
	IVE ROOM TOT		2	153	2040	1950	(2:00)	2047				•
	OUTSIDE AIR H		1						riji ka y		vi ini	
		1- BF)×0.29		[: . i		[' '		4.1				
	CMH× g/kg×(†								
				1				* * *				
	NO TOTAL HEAT SU			1		. (1.7	de la deserva		
	RETURN DUCT _ f		%		· * .	100			A 10 - 11		1000	4 - 41
HEAT GAIN		H.P GAM OTAL HEAT		1 .				**************************************	20 x 1			
(0.9						1 1						

	بال ا	A DAILA	IND DE			- Y IIV	40 I		AIEA		T No.		36
INQUIRING NO.				OUIRED	Вγ	<u> </u>	<u> </u>			DAT	E ORIGIN	VAL	
JOD NAME				DDRESS						REV	SION		
SPACE USED FO			04)				PAC	-7 SYS		PER	SON IN C	CHAR	SE.
SIZE 6,5	m×' (,5 m≈ 4	7.25 m'		×	3.8	m(H)=	160,55	w,				
ITEM	AREA OR	SUN GAIN OR	FACTOR		Kei	il/h		ESTMATE F	OR.	AM	PEAK L	OAD	AM.
1,1	QUANTITY	TEMP. DIFF.				CORR	ECTION			PM			PM3
		IN GLAS		MAX	3100	7:01	4.00	HOURS OF			HOUR (
(SE) 6.		x024/85 × 0		ļ	300	363	263	OUTSIDE DE			CDB	'CW	
(SW) 5.	4 m*×252	x07/85×	194 × 165		685	646	627	CONDITIONS			% RH	DP C	E/kg
	m³×	×			<u> </u>	ļ		OUTSIDE	42.7		37		119.0
1 2 2 2	m²×	×				<u> </u>		Rooм	24.0	17.	50		<u>i 9.4</u>
	m³×	, x	· .					DIFFERENCE			×××		
		AIN-WALLS	& ROOF					BLIND	1		UTSIDE, IN		. M.D
WALL (SE) 1	գ I m∗×	12.9 ×	2.1	<u>: </u>	518	558	498	GLASS	ORDINARY	THICK.	ABSORBE	NT.	% DOUBLE
(Sw) 2		158 ×	2,1		684	524	805	COLOR	LIGHT, ME	DIUM. DA	IRK.		<u> </u>
	m*×	×						WEIGHT		kg/m*(F	LOOR)	kg	/m² (WALL
	m*×	×				1	1	HINTERNAL HEAT	<u> </u>	W/m³		m¹/P	EOPLE
Roof-Sun	m²×	×						11	VEILTRA	TION			
ROOF -SHADE	p m³×	×		i	<u> </u>			SWINGING	4]	e de la composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della composition della comp
		EPT WALLS	& ROOF	 	1	<u> </u>		REVOLVING	Doors P	POPLEX	CMH/PER		
		18's ×	5.		641.	623	623	OPEN DOOR			MH/DOOR		
	. m² X	× ×	311	 	<u></u>		i	EXHAUST A					
CEILING		9,1 ×	1,7	<u> </u>	654	636	636	CRACK			CMH/m		
PARTITION 15	·	9.1 ×	1.8		249	243	243	INFILTRA	TION	СМІ	H #		
PARTITION 5	- m-X	4.1		 	241	243	1		/ENTILA	TION			100
	11 11 11 11 11			 	!		<u></u>	12 PEOPLI			AH/PER	=	300
					<u> </u>	 	<u></u>	j" m³X			AH/m²	1	
INFILTRATION	CMI		2× 0.29	 	: :		!	VENTIL		СМ		3	00
		AL HEAT	-1	!	492	407	492	VENTIL			AT FAC		
PEOPLE	12	PEOPLEX 4		├	412	476	1476		580		A CONTRACTOR OF THE		o • . \
Kw	Kw×	×	860	<u> </u>		 _	0.15	€.S.H.F=-	6.66		ERTH)	287	(11.8%)
LIGHTS	47.25	x Zo WX	1.08		913	913	913	}			FIED All		
APPLIANCES E	TC.			ļ	 	ļ	ļ 						
	<u> </u>			ļ	<u> </u>			APPARATUS	DEMPON	Ť	12.	5	c
					1	ļ	 _	[5 809		ERSH)		
CREDIT FOR	TORAGE	m³×	deg×	()	1	(-)		124 RM- 12.5	<u>۱ ۱۵۰ ج.</u> - ۱۱(۹۵ م.	- BF)	(0.29 = -	1949	CMH
		41.1.2	Sub TOTAL		!		1	124 1111 121	,,,,,,,	PIT			
SAFETY FACTO	OR .		%	5	136	4998	12100	NOTES			A 1.15.0	- 2 _	, 9
Roo	M SENSIBLE	HEAT SUB TO	TAL	<u> </u>			1	GLASS	(SE):	(25×1)	אכוד ט	- Z - =	5
SUPPLY DUCT	SUPPL	Y DUCT F	AN	1	1			WALL	SE):	65x4	10-6.9	=19.	1
HEAT GAIN	÷LEA	k Loss _⁴	HP =10%		514		510						
BYPASS OUTSI	DE AIR 7300	CMH > 18,5 4+5 >	0,1 B.F x 0.29		159	154			100:4	(18=12	Σ.	
		M SENSIBLE		5	809	5653	1764	GLASS					‡
		TENT HEAT						トロレバンシ	CSM)	11-2-	1,0 % C.		1
INFILTRATION	смнх		× 0.72	ļ				WALL	<w):< td=""><td>612 × 4</td><td>10-54</td><td>+= 20</td><td>, . .</td></w):<>	612 × 4	10-54	+= 20	, . .
PEOPLE		12 PEOPLEX			588			}				* :	4
STEAM		kg/h×			!	1							1100
	·			<u> </u>	-		1						
APPLIANCES ET	<u>. </u>		· · · · · · · · · · · · · · · · · · ·	\vdash	i] .	•		-		
V. pcp =====				 	1	T		1					
VAPOR TRANS.			SUD TOTAL	1	 		-	[·		. • •		. 7	
			SUB TOTAL		i			\		:			
SAFETY FACTO				 	588	588	588						
		HEAT SUB TO			200		59	1			1.0		
SUPPLY DUCT			10 %	ļ	<u>, 57</u> ,	59		1		100	A HEALT	1	11.75
BYPASS OUTSIL					208	203		{		1			
		M LATENT			ŏ55	850	850	}					
EFFEC		M TOTAL H	EAT E	6	664	650Z	66 KA	{	1 1	2 °	1.5		
<u> </u>	OUTSIDE	AIR HEAT]							
SENSIBLE:	СМНХ	deg×(1 - 1	BF)×0.29		<u> </u>						at a second		
LATENT:	СМНХ	g/kg×(1-	BF)×0.72		L					ų.	****		and a second of the second of
	ND TOTAL	HEAT SUB TOT	AL		<u> </u>			Į.					
RETURN DUCT			PiPE = %					Ì			and the		1.3
HEAT GAIN	LEAK GAI		GAIN = %						1.	ar			
		AND TOTAL	HEAT E									<u> </u>	
								5 - X	4		1.000 3.	FO	RM E-20

INDUIRING N	б.			OURED						DAT	E ORIG	INAL.	37
JOB NAME				DDRESS						REV	ISION		
SPACE USED	For CORF						<u>A</u>	6-2 SYS		PER	SON IN	CHAR	SE.
SIZE	m×	m= 101.5	m¹	يسيستنجي	× č	7.5	m(H)=	253,75	w,				
9.5	AREA OR	SUN GAN OR	FACTOR		Kei	N/h		ESTMATE F	0 B	AM	PEAK I	0.0	AM
İTEM	QUANTITY	TEMP DIFF.	ACION			CORR	ECTION		OR.	РМ	EAR	-020	PM 3
	SOLAR GAL	N GLASS		MAX	3100	Z.00	4:00	HOURS OF	OPERA	ATION	Hour (
(SW)	4.7 m*×257	x017/85×094	* OLK		533	603	487	OUTSIDE DE	SKIN CON	ADIT IONS	COB	ćw	B %f
	m'X	×			1		<u>-</u> -	CONDITIONS	DBC	WBC	%RH	DPC	g/kg
	m²X	×		 	1	<u> </u>		OUTSIDE	42.2		37	1	19.0
		×		 			 	ROOM		17.1	50	 	94
	m,×			 		 -					4	×××	
	m³X	×		ļ		ļ	!	DIFFERENCE		XXX		·	
- ;	& TRANS G		ROOF	ļ				BLIND	1 1 1 1 1 1 1 1	点,机铁铁 人。	UTSIDE. IN		
WALL (SW)	5,8 m'x	15.8 × 7	<u>, </u>	ļ	193	148	127	GLASS	T		ABSORB	ENI.	%, DOUB
	m³X	<u> </u>		<u> </u>	<u> </u>		<u> </u>	COLOR	ILIGHT, M	EDIUM. D	ARK.	<u> </u>	
e esercial and	m²×	×	eta era	<u> </u>]]	WEIGHT	<u>}</u>	kg/m*(F	LOOR)	. kg	(AW) 'm
a e Taleste e	m*X	×			<u> </u>	:	L	INTERNAL HEAT	<u> </u>	₩ m²	25 2.3	· m [‡] /P	EOPLE
ROOF SUN	, m³×		11-11-1					H	VEILTRA	TION		1	
ROOF -SHA	DED M'X	×			!			SWINGING		1		1	
		EPT WALLS & I	ROOF	1	1		1	REVOLVING	DOORS	PEOPLEX	CMH/PER	ıl .	
2 10 10 10 10 10	4.7 m'×	18,7 × 5		1	390	380	380	ļ			MH/DOOF		
GLASS	#*X	(0, ^ 5, ×	<u> </u>	 	10	1 -00	705	EXHAUST A			- ;	1	
CELING		<u>^_</u>		 	<u> </u>	-	1 1 1 1 1 1	CRACK	n×		CMH/m	 	
FLOOR	,m²×		0	 					NOIT				·
PARTITION (1) 30 15 m'x	911 × 11		 -	494	481	481					-	
{z	33.2 # x	9.1 x z.	5		756	735	735	4	/ENTIL/				
DOOR	54 M X	9.1 x 1.	6		79	77	77	PEOPLE	: X		AH/PER		
NFILTRATION	, СМН	X deg X	0.29	1	i	<u> </u>	1 .	/ m³×	<u> </u>	CI	4H/m²	<u> </u>	
V1.	INTERN/	L HEAT						VENTIL	TION	CM	н 🗷	<u> </u>	
PEOPLE	To provide the second	PEOPLEX			į		1				AT FAC		-
<w.< td=""><td>Kw×</td><td>× ·</td><td>860</td><td>1</td><td>:</td><td>l</td><td></td><td>1</td><td>S.I</td><td>07 (</td><td>ERSH)</td><td></td><td></td></w.<>	Kw×	× ·	860	1	:	l		1	S.I	07 (ERSH)		
	101		1.08		193	2193	2193	E.S.H.F=-	51	07 (ERTH)	1.0 (1	3.57
-KHT5			1.00		1 1.2	1.71.13	215	<u> </u>			FIED A	R	
APPLIANCES	ETC.			 		-					1000	. 1	
				 	1	}	<u> </u>	APPARATUS					
	~~		<u></u>	ļ			 	24 RM-12,5	- 67	(ERSH)		
THERMAL	OR STORAGE	m'× del	g.X	<u>}!</u>		(<u>_</u>)		(24 (24) 12 5	7 DB)(1	- BEI	×0.29	168	D CMI
		S	UB TOTAL		!			24 Km 15.	Wei Ci	1,			-
SAFETY FAC	TOR		%		11.00			NOTES	2.	100			
R	DOM SENSIBLE	HEAT SUD TOTAL		4	638	457	4580	SR=3	ひがメび	5 + 2.0	(Z.0 + 6	5	5 = 101.
Supery Duc	Sugget	Duct FAN				11.27	2.0	[4			
HEAT GAIN			=10%		464	457	458	GLASS	(SW)	: 1,5 ×	7.8 = 4	1.5	
YPASS OUT		CMHY Set		Γ	F 121 F 1			WALL	i .				
		A SENSIBLE HE		<u>_</u>	107	4949	5038			×	4. - 4.	- = 5.E	
EFFE		ENT HEAT		 - 2	<u>, , , , , , , , , , , , , , , , , , , </u>	7121	<u> </u>	PARTIT	LON.	-	- 5	6 = 2 4	15*
			A 770	()					(1)	13.5 x	7.5 - 3.		.
NFILTRATION	<u>CMHX</u>	g/kg×	0.72	1	·				(Z)	14.9 ×	7,5-1,	= 35.	2
EOPLE		PEOPLEX									200		
STEAM		kg/h×	540	 				000 R	. 0,9×	2.0 × 3	= 5.4	-	
APPLIANCES	ETC.				<u> </u>		<u> </u>	} · · · · ·					
			17.7	1	i			1		100			
APOR TRAN	/S.		7.2		<u> </u>			Į					
		Sı	JATOTAL										
AFETY FAC			*										
		HEAT SUB TOTAL	- 						2				
			%	 							•		
	T LEAKAGE LO				 	 							
	TSIDE AIR CMI		×0.72	 	<u>ک</u> نیا					1.2			
		M LATENT HEA		 		1010			er in de la companya di salah	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		13	
EFFE	ECTIVE ROOF	M TOTAL HEAT		5_	JOZ.	4969	<i>5</i> 038	(* * * *				
100	OUTSIDE	AIR HEAT						1		* 12			
SENSIBLE:	смн×	deg × (1 - BF)>	(0.29							7			
	смн×		(0.72		100			l					.*
ATENY		HEAT SUB TOTAL	1 1		7 - 7 - 1			Į.					
ATENT:		TALOUGH TOTAL		 				1				,	
				1			1.75	ſ					
C RETURN DU	CT RETURN D	DUCT PUMP PH	• = %									·	
	CT RETURN D	DUCT PUMP PH	= %										

								is a second material and in the first of the
	COC	LING	AND DE	НЦИ	MIDII	ニイト	JG I	ESTIMATE(METRIC)
	F 57.					• • • •		SHEET NO. 38
INOURING No.		<u> </u>		OURED			 	DATE ORIGINAL
JOB NAME				DORESS		- 1		-2 SYSTEM REVISION
SPACE USED FO				M00		3d) 3,8	PAC m(H)=	TUDON IN CITATION
S12 8 3.25	m× 6,		····				ur er im	AM AM
- LYEM	AREA OR	SUN GAIN	FACTOR		1, 6,	∎I/b		ESTMATE FOR PM PEAK LOAD PM4
	YTTYAUD	TEMP. DIF		1100	4:00	1	3100	
	OLAR GA			HAV		7.00	183	
<u>(SE). 4</u> .7	m,x		< 0.94 x 0.65	 	1160	221.	103	CONDITIONS DEC WEE SEH DEC E/HE
			Υ					OUTSIDE 41.7 284 38 18.8
	m X		`				·	ROOM 24.0 17.1 TO 9.4
	m²× m²×			 	-			DEFERENCE 177 XXX XXX XXX 44
201400			S & ROOF	 	'	 		BLIND NON EXISTENCE (OUTSIDE, INSIDE) L. M. D
			and the second second		230	っとロ	239	
WALL (SE) 8			<u> </u>	 	<u> 200 </u>	- c 3 1	: <u>52.J.</u>	COLOR LIGHT, MEDIUM, DARK
	m ¹ ×		<u> </u>			-		WEIGHT kg/m*(FLOOR) kg/m*(WALL)
			<u> </u>		 	 		INTERNAL HEAT; W/m² m¹/PEOPLE
				 	194.2	762	863	INFILTRATION
ROOF-SUN Z		58.2	<u> </u>	 	1746	78.0	283	SWINGING
ROOF -SHADE				 			<u>'</u>	REVOLVING DOORS PEOPLEX CMH/PER
	1000	EPT WALL	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		380	280	390	OPEN DOORS DOORSX CMH/DOOR
	,Z m2X		< <u>5,1</u>		1500	300		EXHAUST AIR
CEILING	w.×		<u><</u>	 	 		ł	CRACK MX CMH/m
FLOOR	m'X		<u> </u>	 	743		249	INFILTRATION CMH M
PARTITION 15	2 m,×	8.50	1,0	 	:245	Z43	547	VENTILATION 1 140 140
							-	7 PEOPLEX 25 CMH/PER 50
			deg× 0.29	 -	 	 		r m'x CMH/m'
NELTRATION	СМ		deg × 0.29	 				VENTILATION CMH = 50
		AL MEAT	٠		82	87	82	SENSIBLE HEAT FACTOR
PEOPLE		Z PEOPLEX X			<u>, ac</u>			
Kw	Kw×	× 20 W×	1.08	 -	457	457	457	1E.S.H.F = - 0.73 (7.0
L.IGHTS		X 20 W ^	1.00		- c-2 T	401	42.	DEHUMIDIFIED AIR
APPLIANCES E	1 C.							APPARATUS DEWPOINT 12.5
				 	1			APPARATUS DEWPOINT
CREDIT FOR	· · · · · · · · · · · · · · · · · · ·	m'×	deg×	()	 	()	i	7.770 (ERSH) 970 CMH
THERMAL S	TORAGE	m- ^	Sub Total	 	1			124RM-12,5ADP)(1-BF) X0.29
			%	╄	1		1	NOTES
SAFETY FACTO		Line Con 7			494	2407	2463	4 - 4 - 42
		HEAT SUB T			. T.I.T.	C.1	<u> </u>	WALL (SE): 3.75 × 4.0 - 4.2 = 8.8
SUPPLY DUCT	-T- 1.	7.	FAN +HP = 0%		250	74.1	747	
HEAT GAIN		K Loss		<u> </u>	26	- 26	27	PARTITION : 4.0 x 3,8 = 15,2
		M SENSIBL		3	770	Z669	بلب	ROOF ISR
		TENT HEA				1		
•	CMH×		gx 0.72		1	\		∯er in the state of the state
INFILTRATION	C 19111 A	7 PEOPLE			98			1
PEOPLE		kg/h		 	1			
STEAM					1			
APPLIANCES ET				 	T			
Vance Tease								1
VAPOR TRANS.	 		SUB TOTAL	 	1			1
				 	1	1.	<u> </u>	1

98!

10

34.1

142 | 143 2811185

34

142

2912

(138')

10%

10

35

SAFETY FACTOR

ROOM LATENT HEAT SUB TOTAL

SUPPLY DUCT LEAKAGE LOSS 10 9
BYPASS OUTSIDE AIR DOM LATENT HEAT

EFFECTIVE ROOM TOTAL HEAT

OUTSIDE AIR HEAT

GRAND TOTAL HEAT SUB TOTAL

RETURN DUCT RETURN DUCT PUMP PIPE HEAT GAIN LEAK GAIN H.P GAN-(U.S.R.T) GRAND TOTAL HEAT

CMH× deg×(1- BF)×0.29 CMH× g/kg×(1- BF)×0.72

	OURED				DATE ORIGINAL
	DDRESS				REVISION
SPACE USED FOR EXCUTIVE ENGINEER ROOM		× 70		<u> </u>	80.29 m' PERSON IN CHARGE
	1		I/h		AM AM
TEM AREA OR SUN GAN OR FACTOR	 		·	ECTION	ESTEMATE FOR. PM PEAK LOAD PM
QUANTITY TEMP. DIFF.	MAX	4	2:00		
SOLAN SAMA	MAX				
	 	160	221	103	
m²X X	┦	•	ļ	 	
m ¹ × ×	 	<u> </u>			OUTSIDE 41.7 28.4 38 18.9
lu₃× ×	 	ļ			ROOM 24,0 17.1 50 9,4
m²×.	<u> </u>	<u> </u>		<u> </u>	DIFFERENCE 17.7 XXX XXX XXX 9.4
SOLAR & TRANS GAIN-WALLS & ROOF			l		BLIND (NON EXISTENCE OUTSIDE, INSIDE) L. M. D
MALL (SE) 8,8 m'× 12,4 × 2.1	 -	230	257	239	GLASS ORDINARY, THICK, ABSORBENT, %, DOUB
m'x X	<u> </u>	<u> </u>	<u> </u>		COLOR LIGHT, MEDIUM, DARK.
w ₃ × ×		<u> </u>		<u> </u>	WEIGHT kg/m²(FLOOR) kg/m²(WA
w, X	<u> </u>	<u> </u>		<u> </u>	INTERNAL HEAT! W/m² m²/PEOPLE
ROOF-SUN Z 13 m'X 26,2 X 1.7	<u> </u>	1942	762	863	INFILTRATION
ROOF -SHADED mTX X		1			SWINGING
TRANS. GAIN-EXCEPT WALLS & ROOF					REVOLVING DOORS PEOPLEX CMH/PER
SLASS 4.2 m'x 17.7 x 5]	380	380	390	OPEN DOORS DOORSX CMH/DOOR
EILING m2X X	1				EXHAUST AIR
LOOR M²X X		1	1		CRACK MX CMH/m
PARTITION m²X X	1	1		<u> </u>	INFETRATION CMH
AATTOO .					VENTILATION
	 			i	Z PEOPLEX Z5 CMH/PER. 50
	 	<u>:</u>			J' m²× CMH/m²
NFILTRATION CMH × Gag× 0.29 INTERNAL HEAT	 				VENTILATION CMH 150
		0.00	82	82	SENSIBLE HEAT FACTOR
	 	82	100		4
\w\	 	<u> </u>	450	100	ES.H.F = 7.503 (ERSH) = 0.95 (12.6°C
IGHTS 2/3 x Zo WX 1.08	ļ	457	457	457	
APPLIANCES ETC.	}	ļ			DEHUMIDIFIED AIR
	ļ	L			APPARATUS DEWPOINT 17.5
		!	ļ		7.503 (ERSH)
REDIT FOR THERMAL STORAGE MIX deg X	(-)	1	(-)		7.503 (ERSH) 24 RM: 17.5ADP)(1- BF)×0.29 830 CMI
SUB TOTAL		<u> </u>	4.7	<u> </u>	Ed Min (Cont.)
SAFETY FACTOR %					NOTES
ROOM SENSIBLE HEAT SUB TOTAL	<u> </u>	751	2154	ZZ14	GLASS (SE): 1.5 x 2.8 = 4.2
SUPPLY DUCT SUPPLY DUCT FAN	1: - 1				WALL(SE): 3.25 x 4.0 - 4.2 = 88
HEAT GAIN +LEAK LOSS +HP =11%		226		222	Dant SP
YPASS OUTSIDE AIR 50 CMH 17.7 045 0.1 B.F. 0.28		26	26	7.7	Kool . 3K
EFFECTIVE ROOM SENSIBLE HEAT	Z	503	740	Z463	
ROOM LATENT HEAT					
NEILTRATION CMHX E/KEX 0.72	Į.	[
		98			
EOPLE Z PEOPLEX 49		98			
TEAM RE/hX 540		98			
TEAM RE/hX 540		98			
EOPLE Z PEOPLEX 49 TEAM kg/hX 540 APPLIANCES ETC.		98			
EOPLE Z PEOPLEX 49 STEAM kg/hX 540 APPLIANCES ETC.		98			
PEOPLE Z PEOPLEX 49 TEAM kg/hX 540 APPLIANCES ETC. APOR TRANS. Sub Total		98			
PEOPLE Z PEOPLEX 49 TEAM kg/hX 540 APPLIANCES ETC. APOR TRANS. Sub Total Safety Factor %		98		20	
EOPLE Z PEOPLEX 49 TEAM kg/hX 540 APPLIANCES ETC. APOR TRANS. Sub TOTAL TAFETY FACTOR % ROOM LATENT HEAT Sub TOTAL		98	98	98	
PEOPLE Z PEOPLEX 49 ITEAM kg/hX 540 APPLIANCES ETC. APPOR TRANS. Sub TOTAL AFETY FACTOR % ROOM LATENT HEAT Sub TOTAL SUPPLY DUCT LEAKAGE LOSS 10 %		98	10	78	
PEOPLE Z PEOPLEX 49 TEAM kg/hX 540 APPLIANCES ETC. APOR TRANS. Sub TOTAL SAFETY FACTOR % ROOM LATENT HEAT SUB TOTAL SUPPLY DUCT LEAKAGE LOSS 10 % BYPASS OUTSIDE AIR\$0CMH X 9,4 E/kg × 6,1BF × 0.72		98 10 34	34	35	
PEOPLE Z PEOPLEX 49 TEAM kg/hX 540 APPLIANCES ETC. APPOR TRANS. Sub TOTAL SAFETY FACTOR % ROOM LATENT HEAT Sub TOTAL SUPPLY DUCT LEAKAGE LOSS 10 % BYPASS OUTSIDE AIR\$0CMH X 9 \$ 6/kg × 6/BF × 0.72 EFFECTIVE ROOM LATENT HEAT		98 10 34 143	10 34 /47		
PEOPLE Z PEOPLEX 49 STEAM kg/hX 540 APPLIANCES ETC. VAPOR TRANS. Sub TOTAL SAFETY FACTOR % ROOM LATENT HEAT SUB TOTAL SUPPLY DUCT LEAKAGE LOSS 10 % BYPASS OUTSIDE AIR\$0CMH X 9.4 E/kg x 6.1BF x 0.72		98 10 34	34	35	
PEOPLE Z PEOPLEX 49 STEAM RE/NX 540 APPLIANCES ETC. SUPPLIANCES		98 10 34 143	10 34 /47	35	
PEOPLE Z PEOPLEX 49 STEAM RE/hX 540 APPLIANCES ETC. SAPETY FACTOR SUB TOTAL SAFETY FACTOR SUPPLY DUCT LEAKAGE LOSS 10 % BYPASS OUTSIDE AIR FOCMHX 9,4 g/kgx0,1BF x 0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT		98 10 34 143	10 34 /47	35	
PEOPLE Z PEOPLEX 49 STEAM kg/hx 540 APPLIANCES ETC. VAPOR TRANS. Sub Total SAFETY FACTOR ROOM LATENT HEAT Sub TOTAL SUPPLY DUCT LEARAGE LOSS BYPASS OUTSIDE AIRSOCMH × 9.4 g/kg × 0.1BF × 0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT SENSIBLE: CMH × deg × (1 - BF) × 0.29		98 10 34 143	10 34 /47	35	
PEOPLE Z PEOPLEX 49 STEAM kg/hx 540 APPLIANCES ETC. VAPOR TRANS. Sub Total SAFETY FACTOR * ROOM LATENT HEAT Sub TOTAL SUPPLY DUCT LEAKAGE LOSS 10 % BYPASS OUTSIDE ARTOCMHX 9,4 g/kgx0,1BF x 0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT OUTSIDE AIR HEAT SENSIBLE: CMHX degx(1- BF)x0.29 LATENT: CMHX g/kgx(1- BF)x0.72		98 10 34 143	10 34 /47	35	
PEOPLE Z PEOPLEX 49 STEAM Kg/hX 540 APPLIANCES ETC. VAPOR TRANS. Sub Total SAFETY FACTOR X ROOM LATENT HEAT Sub TOTAL SUPPLY DUCT LEAKAGE LOSS 10 % BYPASS OUTSIDE AIR \$50CMH X 9 \$ \frac{1}{2} \frac{1}{2		98 10 34 143	10 34 /47	35	
PEOPLE Z PEOPLEX 49 STEAM RE/HX 540 APPLIANCES ETC. SAPETY FACTOR SUB TOTAL SAPETY FACTOR SUPPLY DUCT LEAKAGE LOSS 10 % BYPASS OUTSIDE AIR FOCMHX 9,4 g/kg x 0,1BF x 0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT SENSIBLE: CMHX deg x (1 - BF) x 0.29 LATENT: CMHX g/kg x (1 - BF) x 0.72		98 10 34 143	10 34 /47	35	

INDURING No.	OURED BY			SHEET NO. 40
Job NAME A	DDRESS		· · · · · · · · · · · · · · · · · · ·	REVISION
SPACE USED FOR EXEUTIVE ENGINEER ROOF	(TOBA)	P	C-Z SYSTEM	PERSON IN CHARGE
SIZE 3.25 mx 6.5 m= 21.13 m		3,8 m(H	in 80,29 m'	PERSON III CHARGE
AREA OR SUN GAN OR	Ke	al/h		AM AM
TEMP. DEF.		CORRECTE	ESTMATE FOR.	PM PEAK LOAD PM 4
SOLAR GAIN GLASS	MAX 4.0	Z:60 3:0	HOURS OF OPER	RATION Hour (~)
(SE) 42 m'×252 yo. 1/0.85 × 0.94 x 0.65	160	221 18	3 OUTSIDE DESIGN CO	ONDITIONS COB CWB %RH
w _s × ×			CONDITIONS DE T	
m ^t × ×	!		OUTSIDE 41.7	28.4 38 18.8
m²× ×			ROOM 24.0	17.1 50 9.0
m⁵X X			DIFFERENCE 17.7	Txxx xxx xxx! 9.4
SOLAR & TRANS GAIN-WALLS & ROOF	1 7			KISTENCEIOUTSIDE, INSIDE) L. M. D.
WALL(SE) 88 mix 12.4 × 2.1	230	257 23	9 GLASS ORDINA	ARY, THICK, ABSORBENT. %, DOUBLE
m³X X	1			MEDIUM. DARK:
m³× ×	1		WEIGHT	kg/m*(FLOOR) kg/m*(WALL)
m³× ×		1	INTERNAL HEAT	W/m³ m³/PEOPLE
Roof-Sun 21,13 m'x 76,2 x 1,7	1942	762 86	3 INFILTE	RATION
ROOF - SHADED M'X X	1 3 3 4 5	10010	SWINGING	
TRANS. GAIN-EXCEPT WALLS & ROOF	1	 		PEOPLEX CMH/PER
المساور والمساور والمساور والمساور	380	380 39		DOORSX CMH/DOOR
	1-1-00	720	EXHAUST AIR	
OLILIO	 	 	CRACK M	× CMH/m
- COOK		337 3		CMH #
Рантиюм 15,7 m'x 8,85 x 2,5	337	1 23 1 -		ATION
	 	 		25 CMH/PER. 50
0.20	 	 	i m'X	CMH/m²
INFILTRATION CMHX degX 0.29	 	 	VENTILATION	CMH # 50
INTERNAL HEAT	07	87 8		BLE HEAT FACTOR
PEOPLE Z PEOPLEX . 41	82	00 2	7.0	
7.W	f	457 45		
LIGHTS 21.13x20 WX 1.08	457	457 45	3 1	EHUMIDIFIED AIR
APPLIANCES ETC.	 	 	 -{	and the second second
	 		APPARATUS DEWPO	
CDEDIT SOR	<u> </u>	 	7873	(1- BF) ×0.29 960 CMH
CREDIT FOR THERMAL STORAGE MEX degX	(-i i	 (-) -	(Z4RM-17.5ADP)	(1- BF)×0.29 460 CMH
Sub Total	 	 	NOTES	51)
SAFETY FACTOR %	2 1 9 9	340h 35	GLASS(SE):	1577 B = 43
ROOM SENSIBLE HEAT SUB TOTAL	2,500	2443. 23		
SUPPLY DUCT SUPPLY DUCT FAN	259	750 2	WALL(SE):	3.25×4.0 -47=8.8
HEAT GAIN +LEAK LOSS +HP =10%			7 PARTITION :	4.0×3.8×16.7
EYPASS DUTSIDE AIR 50 CMH-17.7004-0. B.F. 10.29	26		<u>-1-</u> }·	
EFFECTIVE ROOM SENSIBLE HEAT	2:873	2772 28	43 ROOF: SR	
ROOM LATENT HEAT		1		
INFILTRATION CMHX g/kgX 0.72				
PEOPLE Z PEOPLE × 49	98	 		
STEAM kg/hX 540	 	 	~	
APPLIANCES ETC.		 		
	 	 		
VAPOR TRANS.	 	 -	- 	
Sub TOTAL	 		'	
SAFETY FACTOR %	 	 	,	
ROOM LATENT HEAT SUB TOTAL	98		81	
SUPPLY DUCT LEAKAGE LOSS 10 %	10		<u> </u>	
BYPASS OUTSIDE AIR CMH x 9,4 g/kg x0.1BF x 0.72	34		5	
EFFECTIVE ROOM LATENT HEAT	142	142 14	 :	
EFFECTIVE ROOM TOTAL HEAT	3015	2914 29	25	
OUTSIDE AIR HEAT	(143)			
SENSIBLE: CMHX degx(1- BF)X0.29				en de la companya de la companya de la companya de la companya de la companya de la companya de la companya de La companya de la companya de la companya de la companya de la companya de la companya de la companya de la co
LATENT: CMHX g/kg×(1- BF)×0.72				
GRAND TOTAL HEAT SUB TOTAL	i	<u> </u>	_	
Proven Duck Print Pipe				
HEAT GAIN LEAK GAIN H.P GAIN				ng nganggan kanalagan di Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabup Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn Kabupatèn
(U.S.R.T) GRAND TOTAL HEAT				
				FORM E-20E

J	NOUMING NO.	A	DDRESS	- L 1,11			DATE ORIGINAL REVISION
_		RAGE (ROOS	(TO	2)	PAC	C 7 SYSTEM
•••	SIZE 4.5 m× 6.4 m= 42.				8		160,55 m' PERSON IN CHARGE
=	AREA ON SUN GAN OR		T		M/h		AM AM
	TEM QUANTITY TEMP. DEF.	FACTOR	-		~~~~	ECTION	ESYMATE FOR. PM PEAK LOAD PM
	SOLAR GAIN GLASS		MAX	4:00			HOURS OF OPERATION HOUR (-
		er and the second of the second of the second	Terror.	627	646		OUTSIDE DESIGN CONDITIONS COB CWB %
			 	263	363	300	
		14 × 4 4 3	╁	203	203	1 300	Outside 41.7 28.4 38 18.
_	m²X		╁╴╶╌		 	 	
. –	m²X X			<u> </u>			1
	m³X X		 	1		 	
	SOLAR & TRANS GAIN-WALLS	& ROOF	}			. 1940	BLIND NON-EXISTENCE(OUTSIDE, INSIDE) L. M. D.
-	WALL (SW) ZI,6 mix 18,6 x	2.1	 	805		684	
<u> </u>	(SE) 19,1 m1x 12,4 x	Z,	_	498	558	1518	COLOR LIGHT, MEDIUM, DARK
	m²X X	<u> </u>	ļ			<u> </u>	WEIGHT kg/m1(FLOOR) kg/m2(WA
_	m·× ×		1	<u> </u>			INTERNAL HEAT W'm' m'/PEOPLE
_F	ROOF-SUN 3675 mix Z6,2 X	1.7		625	1307	1479	INFILTRATION
	ROOF-SHADED MIX X			laru.			SWNGNG
-	TRANS. GAIN-EXCEPT WALLS	& ROOF					REVOLVING DOORS PEOPLEX CMH/PER
(GLASS 17,3 m'× 17,7 ×	5,1	1 1	111	1111	1142	OPEN DOORS DOORSX CMH/DOOR
	CEILING 6,0 m2× 8,85 ×	1.4	1	175	75	. 77	EXHAUST AIR
	LOOR m'X X.		1			1	CRACK MX CMH/m
. ~	PARTITION 15.2 m2× 885 ×	1.8		243	243	249	INFILTRATION CMH
÷	Active 19.	- 117	1		2-0		VENTILATION
			 -		7	 	4 PEOPLEX 25 CMH/PER. 100
		× 0.29		 			m²× CMH/m² ···
	NEILTRATION CMHX deg	0.29	 	 	}-`- -	 	VENTILATION CMH 100
٠.	INTERNAL HEAT			1	124	11/	SENSIBLE HEAT FACTOR
_F	PEOPLE 4 PEOPLEX	41	}	164	164	164	→
_ <u>}</u>	(w Kw× ×	860	 	<u> </u>		013	ESHF 7009 (ERSH) 696 (12.6"
L	KHTS 42.25 x 20 WX	1.08	ļ	913	913	913	
	APPUANCES ETC.	<u> </u>	 _			<u> </u>	DEHUMIDIFIED AIR
		<u></u>	<u> </u>	<u> </u>	ļ	<u> </u>	APPARATUS DEWPOINT 17.5 0
		end of the	<u> </u>	!	<u> </u>		(EDGH)
-	THERMAL STORAGE MIX	deg×	()	i	()	1	7009 (ERSH) 2.340 CM
. –		Sub TOTAL		!		1 - 1 - 1 -	7009 (ERSH) 124 RM-17.5ADP)(1- BF)×0.29 Z.340 CM
- 5	AFETY FACTOR	%		<u> </u>		İ	INOTES
_	ROOM SENSIBLE HEAT SUD TOT.	AL	6	324	4904	6711	GLASS (5W): 1.5 × 1.8 x 2=5.4
_ 5	SUPPLY DUCT FA	N					
	HEAT GAIN +LEAK LOSS +1	4P. =10%	Į	633	491	622	(SE): 1.5 x 1.8 + 1.5 x 2.8 = 6.9
	SYPASS OUTSIDE AIR LOD CHHYTTI	6, BF.0.29		52	57	53	WALL (SW): 65 x 4.0 5 4 = 20.6
_	FFFFCTIVE ROOM SENSIBLE		17	009		6886	4
	ROOM LATENT HEAT			1			(SE): 65×40-6.9=19.1
	NELTRATION CMHX E/kgX]: ``		1	
		49	 	196		<u> </u>	PARTITION; 40x38 = 15.2
. —		540	-	1.10		<u> </u>	
-	STEAM kg/hX	540	-	!			ROOF: SR-60=36.25
	APPLIANCES ETC.		 			 	PARTITION: 40×38=15.2 ROOF: SR-6.0=36.25 CEILING: 3.0×7.0=6.0
_			}		<u> </u>		A MEIER VISION OF THE SECOND O
	APOR TRANS		 				4
		SUD TOTAL	 	 			
	SAFETY FACTOR	*	 	1.0	<u> </u>	100	
-	ROOM LATENT HEAT SUB TOTA		 	1196	196		🜓 is the second of the second
-	SUPPLY DUCT LEAKAGE LOSS	10 %		20	20	20	
E	BYPASS OUTSIDE AHOOCMH X 9,4 E/kg Xol			68	68	70	<mark>∤</mark> \$\$ Some of the state of t
	EFFECTIVE ROOM LATENT H	EAT E	1	284	z84	286	■大学 (1985年) 1985年 - 1
	EFFECTIVE ROOM TOTAL HE		1 7	293	5731	7172	
	OUTSIDE AIR HEAT] [] ((173)		1	
•	SENSIBLE: CMHX deg X (1- B	F)×0.29					
	ATENT: CMHX g/kgx(1- B						🛊 gungka sa sa sa sa sa sa sa sa sa sa sa sa sa
	GRAND TOTAL HEAT SUB TOTAL			Ţ		1	
	RETURN DUCT _ RETURN DUCT _ PUMP	P.DE				[
	HEAT GAIN LEAK GAIN H.P	GAN					
_:	(U.S.R.T) GRAND TOTAL		f	j ·			
	COSH.I) GRAND TOTAL		·	<u></u>			FORM E
)		ilik islama	2000 - 1 III	* \$ 900 T	nga sakar Sakar	1 - 1	
1.0		V. 1			1		
4.45							the control of the co
					•		

COOLING AND DEHUMIDIFYING ESTIMATE (METRIC)

	UIRED	By	·		SHEET NO. 47 DATE ORIGINAL
Job NAME AC	DRESS			حبيني <u>ن</u>	REVISION
SPACE USED FOI CORRIDOR (TO4)				<u> PA C-</u>	
512.6 WX Was 10/12 W.		Χ	2,5	v(H)=	253.75° m'
AREA OR SUN GAIN OR FACTOR		Kc₄	l/h		ESTIMATE FOR PEAK LOAD
OUANTITY TEMP. DEF.	MAX	4:00	CORRE	CTION	PM4
SOLAR GAIN - GLASS			2:00	3:00	HOURS OF OPERATION Hour (-)
(SIV) 4.2 m1×253x0.14/0.85 × 0.94 x 0.65		487	503	533	OUTSIDE DESIGN CONDITIONS COB CWB %R
m*× ×	1				CONDITIONS DBC WBC %RH DPC E/KE
m³X X					OUTSIDE 41.7 28.6 38 18.8
m'X X					ROOM 240 17.1 50 9.4
m ^t X			7.7		DIFFERENCE 17.7 XXXX XXX XXX Q.4
SOLAR & TRANS GAIN-WALLS & ROOF					BLIND (NON-EXISTENCEIOUTSIDE, MSIDE) L. M. D.
		ZZ7	148	193	GLASS ORDINARY, THICK, ABSORBENT, %, DOUBL
				112.	COLOR LIGHT, MEDIUM, DARK.
				-	WEIGHT kg/m*(FLOOR) kg/m*(WALL
					INTERNAL HEAT WITH MIPEOPLE
m ^x X X		4	100	-21H	INFILTRATION
ROOF-SUN 85.25 m2 Z6,2 X 1.1	<u>Z</u>	457	1988	2257	- The state of th
ROOF-SHADED M'X X					SWINGING
TRANS. GAIN-EXCEPT WALLS & ROOF	1.1			-0-	REVOLVING DOORS PEOPLEX CMH/PER
GLASS 4,2 m'x 17,7 × 5,1		<u> 380</u>	380		0.2
CELING 16,25 m1× 885 × 14		202	202	207	EXMAUST AIR
FLOOR M'X X					CRACK MX CMH/m
PARTITION (1) 30, 15 m'× 8,35 × 1,8		48]	481	494	INFILTRATION CMH B
(2) 37.2 M × 8.85 × 7.5		735	735	756	VENTILATION
DOOR 5.4 " x 8,85 x 1.6	1	77	77	79	PEOPLEX CMH/PER.
INFILTRATION CMHX degX 0.29					m'X CMH/m³
INTERNAL HEAT					VENTILATION CMH
)		<u> </u>	}	SENSIBLE HEAT FACTOR
					7966 (ERSH)
	2	193	2193	7193	
LISHTS 1015 X ZO WX 1.08		(13	213	2.1.	DEHUMIDIFIED AIR
APPLIANCES ETC.					APPARATUS DEWPOINT 17.5
					APPARATUS DEWPOINT 17.5
					7966 (ERSH)
CREDIT FOR THERMAL STORAGE M'X deg X	(-)		()		(24 RM-(2,5ADP)(1-BF)×0.29 CMH
Sub TOTAL					
SAFETY FACTOR %		1.5		2.01	NOTES
ROOM SENSIBLE HEAT SUB TOTAL		2.39	6707	7096	SR=7.5 x 32.5 +7.0x2.0+6.5 x2.5=101.5
SUPPLY DUCT SUPPLY DUCT FAN					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
HEAT GAM +LEAK LOSS +HP ={0%		724	671	ा।	
BYPASS OUTSIDE AR CMHY det B.F. 10.29					WALL (SW) : 2.5 x 4.0-4,2=5,8
EFFECTIVE ROOM SENSIBLE HEAT	П	963	7378	9800	PARTITION
ROOM LATENT HEAT					(1): 13,5 × 2,5 = 3,6 = 30,15
0.72					
THEIRANDA					(2) : $14.0 \times 7.5 - 1.8 = 33.2$
	<u> </u>				
- La/LY 540)	1				0.09 = 7 = -4
STEAM kg/h× 540	<u> </u>				DOOR : 0.9 × 7.0 × 3 = 5.4
STEAM kg/h× 540 APPLIANCES ETC.					
APPLIANCES ETC.					ROOF: SR - 25x6,5=85,25
Appliances etc. Vapor trans.					
APPLIANCES ETC. VAPOR TRANS. Sub Total					ROOF: SR - 25x6,5=85,25
APPLIANCES ETC. VAPOR TRANS. Sub Total Safety Factor					ROOF: SR - 25x6,5=85,25
APPLIANCES ETC. VAPOR TRANS. Sub Total SAFETY FACTOR ROOM LATENT HEAT Sub TOTAL					ROOF: SR - 25x6,5=85,25
APPLIANCES ETC. VAPOR TRANS. Sub Total SAFETY FACTOR ROOM LATENT HEAT Sub TOTAL SUPPLY DUCT LEAKAGE LOSS %					ROOF: SR - 25x6,5=85,25
APPLIANCES ETC. VAPOR TRANS. Sub Total SAFETY FACTOR ROOM LATENT HEAT Sub TOTAL SUPPLY DUCT LEAKAGE LOSS %					ROOF: SR - 25x6,5=85,25
APPLIANCES ETC. VAPOR TRANS. Sub Total SAFETY FACTOR ROOM LATENT HEAT Sub TOTAL SUPPLY DUCT LEAKAGE LOSS BYPASS OUTSIDE AIR CMHX g/kgX BFXO.72					ROOF: 5R - 25x6,5=85,25 CEILING: 2,5x6,5=16,25
APPLIANCES ETC. VAPOR TRANS. Sub Total SAFETY FACTOR ROOM LATENT HEAT Sub TOTAL SUPPLY DUCT LEAKAGE LOSS BYPASS OUTSIDE AIR CMHX g/kgx BFX0.72 EFFECTIVE ROOM LATENT HEAT	η	963	7378	7806	ROOF: 5R - 25x6,5=85,25 CEILING: 2,5x6,5=16,25
APPLIANCES ETC. VAPOR TRANS. Sub Total SAFETY FACTOR ROOM LATENT HEAT Sub TOTAL SUPPLY DUCT LEAKAGE LOSS BYPASS OUTSIDE AR CMHX g/kgx BFX0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	963		7806	ROOF: 5R - 25x6,5=85,25 CEILING: 2,5x6,5=16,25
APPLIANCES ETC. VAPOR TRANS. Sub Total Safety Factor ROOM LATENT HEAT Sub TOTAL SUPPLY DUCT LEAKAGE LOSS BYPASS OUTSIDE AIR CMHX g/kgx BFX0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	963		7806	ROOF: 5R - 25x6,5=85,25 CEILING: 2,5x6,5=16,25
APPLIANCES ETC. VAPOR TRANS. Sub TOTAL SAFETY FACTOR ROOM LATENT HEAT Sub TOTAL SUPPLY DUCT LEAKAGE LOSS BYPASS OUTSIDE AIR CMHX g/kgx BFX0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT SENSIBLE: CMHX degx(1-BF)x0.29	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	963		7806	ROOF: 5R - 25x6,5=85,25 CEILING: 2,5x6,5=16,25
APPLIANCES ETC. VAPOR TRANS. Sub Total SAFETY FACTOR ROOM LATENT HEAT Sub TOTAL SUPPLY DUCT LEAKAGE LOSS BYPASS OUTSIDE AIR CMHX g/kgX BFX0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT SENSIBLE: CMHX degx(1- BF)x0.29 LATENT: CMHX g/kgX(1- BF)x0.72	η	963		7806	ROOF: 5R - 25x6,5=85,25 CEILING: 2,5x6,5=16,25
APPLIANCES ETC. VAPOR TRANS. Sub Total SAFETY FACTOR ROOM LATENT HEAT Sub TOTAL SUPPLY DUCT LEAKAGE LOSS BYPASS OUTSIDE AIR CMHX g/kgX BFX0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT SENSIBLE: CMHX degx(1- BF)x0.29 LATENT: CMHX g/kgX(1- BF)x0.72 GRAND TOTAL HEAT SUB TOTAL	7	963		7306	ROOF: 5R - 25x6,5=85,25 CEILING: 2,5x6,5=16,25
APPLIANCES ETC. VAPOR TRANS. Sub Total SAFETY FACTOR ROOM LATENT HEAT Sub TOTAL SUPPLY DUCT LEAKAGE LOSS BYPASS OUTSIDE AIR CMHX g/kgx BFX0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT SENSIBLE: CMHX degx(1-BF)x0.29 LATENT: CMHX g/kgx(1-BF)x0.72 GRAND TOTAL HEAT Sub TOTAL RETURN DUCT RETURN DUCT PUMP PRÉ = %	7	963		7806	ROOF: 5R - 25x6,5=85,25 CEILING: 2,5x6,5=16,25
APPLIANCES ETC. VAPOR TRANS. Sub Total SAFETY FACTOR ROOM LATENT HEAT Sub TOTAL SUPPLY DUCT LEAKAGE LOSS BYPASS OUTSIDE AIR CMHX g/kgX BFX0.72 EFFECTIVE ROOM LATENT HEAT EFFECTIVE ROOM TOTAL HEAT OUTSIDE AIR HEAT SENSIBLE: CMHX degx(1- BF)x0.29 LATENT: CMHX g/kgX(1- BF)x0.72 GRAND TOTAL HEAT SUB TOTAL	7	9 63		7806	ROOF: 5R - 25x6,5=85,25 CEILING: 2,5x6,5=16,25

8.5 設備負荷

5. EQUIPMENT LOAD

5 - 1 PAC - 1

(1) CONDITIONS

D.B

W.B ENTHALPY

ROOM

: 24.0°C 17.1°C. 11.5 Kal/k8

OUTSIDE : 42,2°C 28,6°C 22,0 KCd/kg

R S. H : 119.476 Kcal/H

SHF

0.94

DEHUMIDIFIED AIR : 39.900 M/H

OUT AIR

4.730 m3/H

RETURN AIR

35670

(2) REQUIRED COOLING CAPACITY

MIX POINT = 4230 mile x 72.0 + 3.5670 mile 11.5 Kcal/kg

= 17.6 Kcal/kg

: [39.900 m3/4 x 1.2 kg/mx (12.6 - 8.5) x (1-0.1) x 1.05

= 185.000 Kal/H.

@ PEAK LOAD (PM. 5:00)

E.R. T. H : 125.72 | Walf 10

OUT SIDE AIR HEAT : 4.230 x 165 x (1-0.1) x 0.29 = 18.217 Kml/H-0

4.230 x 9,5 x (1 - 0.1) XO.72 = 26040 XW/+0

TOTAL D+@ +3 = (125.721 + 18217 + 26040) × 1.05 = 179.000 Kala

5 - 2 PAC - 2

(1) CONDITIONS

D.B W.B ENTHALPY

ROOM: 24.0°C 17.1°C. 11.5 Kal/k8

OUTSIDE : 47.2°C 28.6°C 22.0 Kcal/K8

R S. H : 60.067 Kal/H

S. H.F : 0.95

DEHUMIDIFIED AIR : 20.050 m2/H

OUT AIR : 1.700 1/4

RETURN AIR : 18,850 m3/H

(2) REQUIRED COOLING CAPACITY

MIX POINT = 1200 x 27.0 + 18.850 m3/4 11.5 x cal/kg

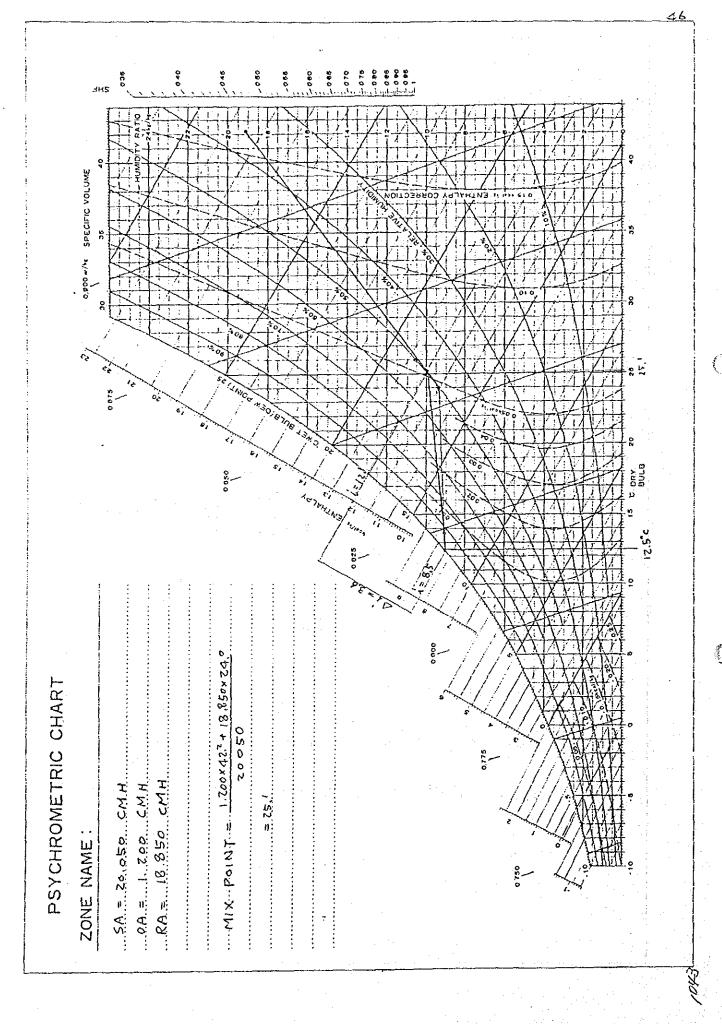
= 12.1 Kal/Kg

: [20050 = x1.Z kg/m x (12.! - 8.5) x (1-0.!) x 1.05 = 82.000 Kal/A

O PEAK LOAD CPM

E.R.T.H: 62.39 | Kal/A . D OUT SIDE AIR HEAT: 1200 x 9.6x (1-0.1) x 0.29 = 5.701 x 0/A . D : 1200 x 9.6x (1-0.1) x 0.7z = 7.465 Kal/A . D

TOTAL = 0+0+0 = (67391+5701+7465) x 1.05 = 80.000 Kal/4



6. SELECTION OF COOING EQUIPMENT

6-1EQUIPMENT PAC-4 x 109

AIR-COOLED PACKAGED AIR CONDITIONER

AIR FLOW RATE : 39.900 m3/H(665 m3/min)

COOLING LOAD (THR) :179,000

KCAL/H

(SHC) : 119.476

EXTERNAL STATIC PRES.: To AMAS

AIR INLET

: 75,9°C DB , 18,4°C WB , 12.6 Kcal/Kg

OUTLET

13.8°C DB , 13.2°C WB , 8.9 Kcal/Kg

CONDENSING TEMPERATURE : 50° DB

TEMPERATURE DIFFERENCE : 15°C

TYPE

FLOOR (DUCT TY, PE)

AIR FLOW RATE : 39,900 m2/4

COMPRESSOR (304): 835 KW (INPUT)

FAN MOTOR : 185 KW (IN), 0.75 × 3 × 3 (OUT)

POWER

: Ø3-380 ,50Hz

TAPPING SIZE : (1-3/8"+ 7/8") x 3 ... DRAIN 40 A

DIMENSION (INDOOR): 3.700 x 1.600 x 2130 H (mm) (OUTDOOR) 2.922 x 1.204 x 1126 H x3 WEIGHT : (IN) 7.660 Kg (OUT) 410 Kg x3

MODEL INDOOR UNIT : 50 BM 100 x 189 (CARRIER)

OUT DOOR UNIT : 09 DC 024 x 3 e 9

SHC=151.000 + 665 x 17.4 x (1-0!7) x (24-27) = 127.000 kal/H

XIEA 6-2EQUIPMENT PAC-Z AIR-COOLED PACKAGED AIR CONDITIONER

AIR FLOW RATE : zoo50 m3/H(345 m3/min)

COOLING LOAD (T.H.R): 80.000 KCAL/H

(5H.C): 60,067 Kcd/H

EXTERNAL STATIC PRES.: 65 mm Ag

: Z5,1°C DB , 18,1°C WB , 12,1 Kcal/Kg AIR INLET

. 13.8 °C DB , 13.2 °C WB , 8.9 Kcal/Kg OUTLET

CONDENSING TEMPERATURE : 50° DB TEMPERATURE DIFFERENCE : 15°C.

FLOOR (DUCT TYPE) TYPE

20.050 m3/H AIR FLOW RATE

COMPRESSOR (200): 45, KW (INPUT)

7,5 KW (IN), 0,3x2 XZ (00T) FAN MOTOR

Ø3-380 V,50Hz POWER

(1-1/8"+1-3/8")x Z . DRAIN 40 A TAPPING SIZE :

): 2 600 X 1.600 X 1.900 (mm).
1.900 X 1.118 X 1.28 H X 2.
1. (IN) 1.550 Kg (out) 180 Kg x 2. DIMENSION (INDOOR):

WEIGHT

INDOOR UNIT : 50BM 054 x 184 (CARRIER) MODEL

OUTPOOR UNIT : 09 DEOIZ XZEA.

SHC' = 79.000 + 345 × 17.4 × (1-0.2) × (24-27) = 64.600 KCal/H

7. VENTILATION SYSTEM 7-1ESTIMATE OF VENTILATION AIR VOLUME

FLOOR	ROOM NAME	AREA	VOL.	AIR	AIR FLOW	EXHAUST	SUPPLY	
		(m ²)	(m ³)	CHANGE (T/Hr)	(m ³ /Hr)	AIR (m³/Hr)	AIR (m³/Hr)	
GROUND	(404)							0F-1×4
	MACHINE SHOP	310.	1.488	10	14.880	15,000	15.000	(I) PF-1×4
	(G05)						reserve to the second	oF - 3
	WELDING ROOM	22.8	109.4	5	547	550	550	(I) PF-5
\ \	(GOS). TOOL U SPARE PARTS STORAGE ROOM	35.0	168.	5	840	840	DG: 840	(II) pf-4
	(CTO) AIR CONDITIONING MACHINE ROOM	845	405.	5	Z028	Z100	2100	0F-2 (I) PF-2
	(GOB) ELECTRIC ROOM	۶۱, ^۱	101,	76	2026	z 100	z 100	0F-Z (I) PF-Z
i 14. j. – 1 14. j. – 1	(409) LAVATORY	18.4	46	16	460	* 460	<u></u>	(III)VF-4
	SUB TOTAL.		<u> </u>			21.050	20590	SA: 1660 RA: 1200 0A: 460
PRST FLOOR	(F15) LAVATORY (MALE)	ر 2η.٥	67.5	10	615	* 680	7670	(II) VF-2
	(FIB) LAVATORY (FEMALE)	9,0	27,5	16	775			(IL) VF-6
	(FIB b) LAVATORY	6.8	17.0	10	170	170*-		(74) VF-9-
	(F4b)					· · · · · · · · · · · · · · · · · · ·		
	SHOWER BOOTH	3.2	8	10	80	80		(II) VF - 11
	(FI44)	3,0	7,5		75	80.		(U)v=11.
	SHOWER BOOTH		- 117	10	10			(->/V F-11.
	DRESSING RM.	ηo	17,5		175	*- 180	_	(TL) VF-8
	(F189)				• • •	·		
	LAVATORY	3,0	η.5	10	75	80	_	MI) VF-II
	(F13)		•					
i	KITCHENETTE	6.0	is o	16	150	150		(11) UF-10
	(F17)			_		*-	+	
	LAVATORY.	7.0	17,5	LO.	175	180		(亚)VF-8
	(F06)					*.	-	
	PANTRY	9,0	27.5	10	255	250	<u> </u>	(III) PF-6
	(FOB) . BATTERY ROOM	16.0	8.09	[0	608	610	610	(I) _{VF} -3
	(F05)						<u></u>	
	KITCHEN	33,3	83,75	10	833	900	700	
								(13 20
4. 0			-				<u> </u>	C13380154
	SUB TOTAL				. 1	3.590		PA: 16.110

ESTIMATE OF VENTILATION AIR VOLUME

FLOOR ROOM NAME AREA (m²) (m³) (m³) (m²) (ADMI	JIST RATION	BUIL	DING (z)				50
SECOND CSO C				1 2	CHANGE		AIR	AIR	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
HOOR LAVATORY (HALE) 27.0 67.5 10 67.5 68.0			(m)	(m)	(TEHE)	(m /HL)	(1117)	(111 / 111 /	
CSID CAMPORY	SECOND	(509)		٠,	** * * * *			7250	
LAYATORY 10 170 170 -	FLOOR		27,0	67,5	10	675	680		(TL) VF - Z
(SIL) LAVATORY L8 170 10 170 170 - (II) VF-9 (SIZE) SHOWER BOTH 3.2 8 10 80 80 - (III) VF-9 (SIZE) SHOWER BOTH 3.2 8 10 80 80 - (III) VF-9 (SIZE) SHOWER BOTH 3.2 8 10 80 80 - (III) VF-9 (SIZE) SHOWER BOTH 3.2 8 10 80 80 - (III) VF-9 SUB TOTAL 1.410 - (8.2.1750 1.410 - (8.2.1750 1.410 - (8.2.1750 1.410 - (8.2.1750 1.410 - (8.2.1750 1.410 - (8.2.1750 1.410 - (8.2.1750 1.410 - (8.2.1750 1.410 - (8.2.1750 1.410 - (8.2.1750 1.410 - (8.2.1750 1.410 - (8.2.1750 1.410 - (8.2.1750 - (8.2.1750 1.410 - (8.2.1750 - (LIAVATORY . I	9.0	22.5	10	275			(m) yF-6
SIZE SHOWER BOOTH 3,2 8 10 8 0 80 (II) VF-11 CSIR SHOWER BOOTH 3,2 8 10 170 170 (III) VF-9 CSIR SHOWER BOOTH 3,2 8 10 80 80 (III) VF-9 SHOWER BOOTH 3,2 8 10 80 80 (III) VF-11 SOB TOTAL				,	**	5 1 mg/mg/8/8/A7 m74			
SHOWER BOTH 3.7 8 10 80 80 - (II) YF-11 (S1(4)) LAVATORY 6.8 17.0 (0 170 170 - (III) YF-9 (G12A) SHOWER BOTH 3.2 8 10 80 80 - (III) YF-11 SUB TOTAL SUB TOTAL LAVATORY (MALE) 27.0 67.5 10 67.5 > 75.0 LAVATORY (MALE) 4.0 27.5 10 22.5 > 30.0 * - (III) YF-1 SUB TOTAL SUB TOTAL LAVATORY (MALE) 4.0 27.5 10 22.5 > 30.0 * - (III) YF-1 SUB TOTAL SUB TOTAL LOSO SA-16.00	· · · · · •	LAVATORY	8,8	17.0	. 1.0	170	170		(m) VF-9
CSIR CANATORY G.8 17.0 10 170 170 170 110 170 110 170 110	.	! }	3. ²	Ø	10	80	80		(II) VF - 11
SHOWER BOTH 3.2 8 10 80 80 - (III VF-		CSILA)					*-		
SHOWER BOTH 3.2 8 10 80 80 - (TIT VF-1)		l ,	٤,8.	17.0	10	170		. 	(II) VF-9
SHOWER BOTH 3.2 8 10 80 80 - (III) VF-11 SUB TOTAL SUB TOTAL 1.410 - SA = 16.280 RA =				,					
SUB TOTAL 1.410 - SA = 16.830 RA = 14.780 OA = 1.750 THIRD (TOT) FLOR IAVATORY (MALE) 27.0 67.5 10 67.5 7.750 - [II] VF-1 CTO9) LAVATORY CTEMALE) 9.0 ZZ.5 10 ZZ.5 300 *- [III] VF-5 SA = 23.480 RA = 24.30 RA = 24.30 OA = 10.50 The Sale of the		ŧ i	3,2	8	10	80	80	<u> </u>	(UI) VF-11
SUB TOTAL 1.410		7,100	. i .					:	
SUB TOTAL 1.410									SA = 16.030
THIRD (TOT) FLOOR IAVATORY (MALE) 27.0 67.5 10 67.5 \$750 (TO 8) LAVATORY (FEMALE) 9.0 22.5 10 22.5 \$300 SUB TOTAL (CO 1) FLEVATOR MAGNINE ROOM 27.7 85.9 20 1.718 1800 (T) PF-3 (G. TOTAL.		SUB TOTAL					1.410		
FLOR IAVATORY (MALE) 27.0 67.5 10 67.5 \$750									
FLOR IAVATORY (MAIE) 27.0 67.5 10 67.5 750	THIPD	(T07)					*	1050	en Ber
(CTOB) (LAVATORY (FEMALE) (PARTICIPAL (FEMALE) (PARTICIPAL (PARTIC	ì	[200	675	10	675	1 1	_	(II) VF-1
LANATORY 9.0 72.5 10 72.5 300	FLOOR		21	0 1,0		<u> </u>			
SUB TOTAL 1050 RA= 22430		LAVATORY (FEMALE)	$q_{,o}$	ZZ.5	(0	77.5	300 *-	- -	III) VF-5
SUB TOTAL 1050 RA.: 22430 Ar.: 1050			-			• •			
SUB TOTAL 1050 04= 1050 154-510 154-520 154-									SA : 23.480
SOB 1970	,	LID TOTAL					1050		RA= 2050
ROOF PLEVATOR MACHINE ROOM 27.7 85,9 20 1.718 1800 (11) PF-3		20R INTHE						{	TSA: 59950
G. TOTAL.		(5.1)							164/64 (34/2
G. ToTAL.	Roof	ELEVATOR MACHINE ROOM	z7.7	85,9	20	1.718	1800		(II) PF-3
G. TOTAL.					·				
G. TOTAL.	 	·							
		G. TOTAL.			·				
	*			ļ					
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						- A	(1)		
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								· · · · · · · · · · · · · · · · · · ·	

7-2. SERECTION OF VENTILATION EQUIPMENT V - 1 MACHINE SHOP (GROUND FLOOR)

MACHINE NO PF-1 (= 0F-1 x 4 2 a)

TYPE OF VENTILATOR : PROPELLER x 4 ea

AIR FLOW RATE : 3750 m³/Hr \$500 x 577A8

FAN MOTOR : 0.4 KW or w

POWER : $\frac{16-220 \text{ v}}{36380} \text{ v} (50/60 \text{ Hz})$

SIZE : 620 X 620 X 337 (mm)

ACCESSORY : SUS WEATHER COVER, SHUTTER

V - Z ELECTRIC ROOM (GROUND FLOOR)

MACHINE NO PF-2 (=0F-2 x 1ea)

TYPE OF VENTILATOR : PROPELLER x 1 ea

AIR FLOW RATE : Z.100 m3/Hr \$4.00 x 5 mm/8

FAN MOTOR : O. I KW OF W

POWER : 10 220v / 30 380 v (50/60 Hz)

SIZE : 520 x 520 x 768 (mm)

ACCESSORY : SUS. WEATHER COVER, SHUTTER

V -3 AIR CONDITONING MACHINE ROOM (GROUND FLOOR)

MACHINE NO PF-Z, (=0F-Zx/ea)

TYPE OF VENTILATOR : PROPELLER x / ea

AIR FLOW RATE : 7:100 m3/Hr 400x 5 mm/18

FAN MOTOR : O. KW OF W

POWER : $\frac{14-220v}{30} / 30 \times (50/60 \text{ Hz})$

SIZE : 520 x 520 x 768 (mm)

ACCESSORY : SUS WEATHER COVER, SHUTTER

V-4 WELDING ROOM (GROUND FLOOR)

MACHINE NO PF-5 (=0F-3 × 1ea) V

TYPE OF VENTILATOR : PROPELLER

: 550 m3/Hr 250 x 5 mm/8 AIR FLOW RATE

FAN MOTOR 0.025 KW or

: 10-320+ / 30 380 v (50/60 Hz) POWER

: 370 x 370 x z14 (mm) SIZE

: SUS WEATHER COVER, SHUTTER ACCESSORY

V - 5. TOOL & SPARE PARTS STORAGE ROOM (GROUND FLOOR)

MACHINE NO PE-4

x / ea

TYPE OF VENTILATOR : PROPELLER x / ea

AIR FLOW RATE : 840 m³/Hr 3∞ 4 x 5 mm² 8

0.050 KW or w FAN MOTOR

: $-\frac{4\sqrt{-220}v}{3} / 3\sqrt{380} v (50/60 Hz)$ POWER

: 420 x 470 x 247 (mm) SIZE

: SUS WEATHER COVER, SHUTTER ACCESSORY

- 6. LAVATORY (GROUND FLOOR)

MACHINE NO VF - 4

: CEILING x / ea TYPE OF VENTILATOR

: 460 m3/Hr ×6 mmA8 AIR FLOW RATE

₩ or 62 w FAN MOTOR

: $1\phi \ 220v \ / \ 3\phi \ 460v \ (50/60 \ Hz)$ POWER

345 X 345 X 2434 (mm) SIZE

: 150+ VENT CAP ACCESSORY

LAVATORY (MALE) (FIRST, SECOND FLOOR)

MACHINE NO VF - Z

TYPE OF VENTILATOR : AXIAL FAN x Z ea

680 m³/Hr x 8 mm AB AIR FLOW RATE

XX or 40 W FAN MOTOR

: $1\phi 220v / 3\phi 460v (50/60 Hz)$ POWER

: 375 x (274) x 320 (mm) SIZE

ACCESSORY

8 LAVATORY (MALE). (THIRD FLOOR)

MACHINE NO VF - 1

: AXIAL FAN X 1 ea TYPE OF VENTILATOR

AIR FLOW RATE : 750 m³/Hr ×8^{mmA8}

₩ or 40 w FAN MOTOR

: 1¢ 220v / 3¢ 460v (50/60 Hz) POWER

: 375 x (224) x 320 (mm)

ACCESSORY

9 BATTERY ROOM (FIRST FLOOR)

MACHINE NO VF-3 (oF-4 x 1ea)

TYPE OF VENTILATOR : AXIAL FAU x 1 ea

: . 610 m3/Hr × 8mm3 AIR FLOW RATE

KW or 40 W FAN MOTOR

: $1 \phi \ 220 \text{ V} / 3 \phi \ 460 \text{ V} \ (50/60 \text{ Hz})$

: 375 x (274)x 320 (mm) SIZE

ACCESSORY

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LAVATORY (FEMALE) (FIRST, SECOND FLOOR)
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MACHINE NO VF-6

: CEILING x Z ea TYPE OF VENTILATOR

230 m3/Hr ×7~~^8 AIR FLOW RATE

-1(1) or 35 w FAN MOTOR

: 1¢ 220v / 3¢ 460v (50/60 Hz) POWER

: 308 x 308 x 243 H (mm) SIZE

ACCESSORY : 156 VENT CAP

V - 11 LAVATORY (FEMALE) (THERD FLOOR)

TYPE OF VENTILATOR

MACHINE NO VF-5 : CEILING X / ea

300 m³/Hr x 2 mm A} AIR FLOW RATE

FAN MOTOR

: 1¢ 220v / 3¢ 460v (50/60 Hz) POWER

: 345 x 345 x 243 H (mm) SIZE

: 150 VENT CAP ACCESSORY

LAVATORY (FIRST, SECOND FLOOR) (F186> . <5116,9>

MACHINE NO VF-9

TYPE OF VENTILATOR : CEILING x 3 ea

: 170 m3/Hr × 8 mm A8 AIR FLOW RATE

: ## or 35 w FAN MOTOR

: $1 \phi 220 \text{ v} / \frac{3\phi - 450 \text{ v}}{100} (50 / \frac{60}{100} \text{ Hz})$ POWER

: 308 x 308 x 243 H (mm) SIZE

: 150 VENT CAP ACCESSORY

SHOWER BOOTH (FIRST, SECOND FLOOR) (F14a, b, S124, b)

MACHINE NO VF - 11

TYPE OF VENTILATOR

: CEILING x 4 ea : 80 m³/Hr x 8 mm h 8 AIR FLOW RATE

13 w FAN MOTOR

: $1\phi 220v / 3\phi 460v (50/60 Hz)$ POWER

303 X 303 X 204^H (mm) SIZE

ACCESSORY : 100 VENT CAP

PRESSING ROOM (FIRST FLOOR)

MACHINE NO VF -8

: CEILING x / ea TYPE OF VENTILATOR

180 m3/Hr × 8 mm/8 AIR FLOW RATE

or 35 ₩ FAN MOTOR

: $1\phi 220v / \frac{3\phi - 160v}{50 - 160}$ (50/60 Hz) POWER

SIZE 308 X 308 X 243H (mm)

ACCESSORY : 150 VENT CAP

v - 15.

LAVATORY (FIRST FLOOR) (FIRA)

MACHINE NO YF -11

: CEILING x / ea TYPE OF VENTILATOR

: 80 m3/Hr x8 mr 18 AIR FLOW RATE

: KW or 13 w FAN MOTOR

: 1¢ 220v / 3¢ 460v (50/60 Hz) POWER

SIZE : 303 X 303 X Z04H (mm)

ACCESSORY · 100 · VENT CAP

KITCHENETE

MACHINE NO VF- 10

TYPE OF VENTILATOR

: CEILING x 1 ea

AIR FLOW RATE

150 m³/Hr × 6 mm/8

FAN MOTOR

₩ or 25 w

POWER

: 16 220v / 34 460v (50/60 Hz) 303 X 303 X Z04H (MM)

SIZE

ACCESSORY

: 100 VENT CAP

V = 17

LAVATORY (FIRST FLOOR) <F 17>

MACHINE NO VF - 8

TYPE OF VENTILATOR

: (EILING x / ea

AIR FLOW RATE

: 180 m3/Hr x 5 mm/89

FAN MOTOR

-X₩ or 35 W

POWER

: $1\phi 220v / 3\phi 460v (50/60 Hz)$

SIZE

308 X 308 X 2434 (mm)

ACCESSORY

: 150 VENT CAP

18

PANTRY (FIRST FLOOR)

MACHINE NO PF-6

TYPE OF VENTILATOR

: PROPELLER x | ea.

AIR FLOW RATE

FAN MOTOR

750 m³/Hr 700 + *# or 18 w

POWER

: 1¢ 220v / 3d 460v (50/60 Hz)

SIZE

280 × 280 × 152 D (mm)

ACCESSORY

: SUS WEATHER COVER, SHUTTER

V - 19

KITCHEN

MACHINE NO RF-1

TYPE OF VENTILATOR : RANGE HOOD FAN x 1 ea

700 m³/Hr ×3^{mm}A8 AIR FLOW RATE

FAN MOTOR

 $10^{\circ} \cdot 10^{\circ} \cdot 220 \text{ v} / \frac{3\phi - 460 \text{ v}}{3\phi - 460 \text{ v}} \cdot (50 / \frac{60}{60} \text{ Hz})$ POWER

: 600 x x 580^H (mm) SIZE

ACCESSORY : SUS WEATHER COVER

KITCHEN

MACHINE NO VF-7

: CEILING x 1 ea TYPE OF VENTILATOR

: 200 m³/Hr ×8^{mm}/₈ AIR FLOW RATE

: XX or 35 w FAN MOTOR

: $16\ 220v\ /\ \frac{3\phi\ 460v}{60}\ (50/60\ Hz)$ POWER

: 308 x 308 x 243 H (mm) SIZE

ACCESSORY : 150 VENT CAP

ELEVATOR MACHINE ROOM

MACHINE NO PF-3

TYPE OF VENTILATOR : PROPELLER x 1 ea

: 1800 m³/Hr ⁴400×5mmh 8 : 0.1 KW or W AIR FLOW RATE

FAN MOTOR

: 16 220v / 3¢ 380 v (50/60 Hz) POWER

: 570 x 520 x 268. (mm) SIZE

ACCESSORY : SUS WEATHER COVER, SHOTTER

v = 27

RETURN FAN (G. FLOOR AIR CONDITIONING MACHINE RM.)

MACHINE NO RAF - 1 55# 7

TYPE OF VENTILATOR : MULTI-BANE x / ea

AIR FLOW RATE : 54.520 m³/Hr x 25 m⁻/⁸

FAN MOTOR : 15 KW or w

POWER : 16 220v / 36 380 v (50/60 Hz)

SIZE : 2500 × 900 × 2070 (mm)

ACCESSORY :

٧ -

MACHINE NO

TYPE OF VENTILATOR : x

AIR FLOW RATE : m³/Hr
FAN MOTOR : KW or w

POWER : 1¢ 220v / 3¢ v (50/60 Hz)

SIZE : X X (mm)

ACCESSORY :

٠٧ -

MACHINE NO

TYPE OF VENTILATOR : x

AIR FLOW RATE : m³/Hr
FAN MOTOR : KW Or w

POWER : $1\phi 220v / 3\phi v (50/60 Hz)$

SIZE x x (mm)

SIZE

ACCESSORY :