

Aircon heat load calculation sheet

Project Name: CREMESE

Address: Rua Boquim, 589 – Centro, Aracaju – SE

16/April/2019
DANILO MIRANDA

Heat load sum up table

Room name	Fl	Sys -tem	Qty. of rooms	Cooling				Heating				Floor area	Heat load per area	
				Indoor SH	Total	Selected	Time	Total	Selected	Humid.	Time		Cooling	Heating
				[W]			[Hr]	[W]		[kg/h]	[Hr]	[m2]	[W/m2]	
PLENARIO	1	1	1	8675	29819	31310	14					112.0	279.6	
RECEPCAO	1	1	1	3899	8967	9415	14					55.0	171.2	
SERVICO GERAL	1	1	1	7766	21167	22225	13					80.0	277.8	
ARQUIVO	1	1	1	3677	4511	4737	14					54.0	87.7	
SALA 1	1	1	1	1422	3243	3405	13					15.0	227.0	
BIBLIOTECA	1	1	1	2710	5494	5769	13					29.6	194.9	
SECRETARIA GERAL	1	1	1	1802	3160	3318	14					11.9	278.8	
FOYER	1	1	1	4029	10394	10914	15					37.0	295.0	
SALA 2	1	1	1	1803	4474	4698	14					17.6	266.9	
SALA 3	1	1	1	1833	4508	4733	14					18.2	260.1	
AREA DE DESCANSO	1	1	1	3089	5276	5540	15					24.5	226.1	
SALA DE SOM	1	1	1	1538	1981	2080	15					5.8	358.6	
CIRCULAÇÃO	1	1	1	4272	10666	11199	15					42.4	264.1	
AUDITÓRIO	1	1	1	27567	104974	110223	14					205.0	537.7	
SALA AUTORIDADE	1	1	1	2939	4247	4459	15					13.7	325.5	
RESERVA	2	1	1	5210	8674	9108	15					35.0	260.2	
CPD	2	1	1	8312	10062	10565	15					21.0	503.1	
HACKER	2	1	1	1825	2690	2825	15					8.6	328.4	
SETOR PROCESSOS	2	1	1	10926	17854	18747	15					70.0	267.8	
CORREGEDORIA	2	1	1	1367	2671	2805	14					7.0	400.7	
SETOR JURIDICO	2	1	1	1784	3500	3675	15					14.3	257.0	
PRESIDENCIA	2	1	1	3886	6995	7345	14					28.8	255.0	
SECRETARIA	2	1	1	2645	6139	6446	14					21.5	299.8	
SALA DE REUNIOES	2	1	1	3535	7869	8262	14					20.5	403.0	
1 SECRETARIO	2	1	1	2166	3889	4083	15					15.7	260.1	
GERENCIA	2	1	1	3257	5841	6133	15					23.6	259.9	
RECEPCAO SP	2	1	1	1097	1540	1617	15					6.3	256.7	
AUDIENCIA 2	2	1	1	1364	3097	3252	14					8.0	406.5	
AUDIENCIA 1	2	1	1	1267	2998	3148	14					7.6	414.2	
EMC	2	1	1	1324	2635	2767	14					8.2	337.4	
TESOURARIA	2	1	1	2541	5492	5767	15					14.8	389.6	
FINANCEIRO	2	1	1	5890	11833	12425	15					37.8	328.7	
SETOR PESSOAL	2	1	1	2201	3094	3249	15					14.3	227.2	
MECANOGRAFIA	2	1	1	5093	9002	9452	14					20.0	472.6	
GUARITA	1	1	1	1776	2642	2774	14					3.7	749.8	
Peak load of building			35	142369	340460	357483	14					1108.4	322.5	

SH : Sensible heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
PLENARIO	1	1	1	Office	112.0	3.8	48	Summer1296.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	392	0	0	295	0	107	623	2688	3648	2598	700	0	6780	4271	11114	22165
9	29.2	74.1	530	0	0	295	0	146	688	2688	3648	2598	700	0	6957	4336	12696	23989
10	30.5	71.9	761	0	0	295	0	183	752	2688	3648	2598	700	0	7225	4400	14223	25848
11	31.7	69.8	1083	0	0	295	0	216	809	2688	3648	2598	700	0	7580	4457	15611	27648
12	32.5	68.5	1429	0	0	295	0	239	849	2688	3648	2598	700	0	7949	4497	16568	29014
13	32.8	67.7	1790	0	0	295	0	247	857	2688	3648	2598	700	0	8318	4505	16816	29639
*14	32.6	68.2	2152	0	0	295	0	242	852	2688	3648	2598	700	0	8675	4500	16644	29819
15	32.1	69.1	2460	0	0	295	0	228	828	2688	3648	2598	700	0	8969	4476	16073	29518
16	31.3	70.4	2699	0	0	295	0	205	788	2688	3648	2598	700	0	9185	4436	15116	28737
17	30.3	72.4	2785	0	0	295	0	177	745	2688	3648	2598	700	0	9243	4393	14040	27676
18	29.2	74.1	2740	0	0	295	0	146	688	2688	3648	2598	700	0	9167	4336	12696	26199

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
RECEPCAO	1	1	1	Office	55.0	3.8	11	Summer 297.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	139	0	0	145	0	52	306	616	836	1276	1000	0	3228	1142	2547	6917
9	29.2	74.1	188	0	0	145	0	72	338	616	836	1276	1000	0	3297	1174	2910	7381
10	30.5	71.9	269	0	0	145	0	90	369	616	836	1276	1000	0	3396	1205	3259	7860
11	31.7	69.8	384	0	0	145	0	106	397	616	836	1276	1000	0	3527	1233	3578	8338
12	32.5	68.5	506	0	0	145	0	117	417	616	836	1276	1000	0	3660	1253	3797	8710
13	32.8	67.7	629	0	0	145	0	121	421	616	836	1276	1000	0	3787	1257	3853	8897
*14	32.6	68.2	743	0	0	145	0	119	418	616	836	1276	1000	0	3899	1254	3814	8967
15	32.1	69.1	817	0	0	145	0	112	407	616	836	1276	1000	0	3966	1243	3684	8893
16	31.3	70.4	857	0	0	145	0	101	387	616	836	1276	1000	0	3995	1223	3464	8682
17	30.3	72.4	841	0	0	145	0	87	366	616	836	1276	1000	0	3965	1202	3217	8384
18	29.2	74.1	792	0	0	145	0	72	338	616	836	1276	1000	0	3901	1174	2910	7985

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
SERVICO GERAL	1	1	1	Office	80.0	3.8	30	Summer 810.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	303	0	0	211	0	76	445	1680	2280	1856	2600	0	6726	2725	6947	16398
9	29.2	74.1	459	0	0	211	0	104	491	1680	2280	1856	2600	0	6910	2771	7935	17616
10	30.5	71.9	656	0	0	211	0	130	537	1680	2280	1856	2600	0	7133	2817	8889	18839
11	31.7	69.8	873	0	0	211	0	154	578	1680	2280	1856	2600	0	7374	2858	9757	19989
12	32.5	68.5	1070	0	0	211	0	171	607	1680	2280	1856	2600	0	7588	2887	10355	20830
*13	32.8	67.7	1242	0	0	211	0	177	612	1680	2280	1856	2600	0	7766	2892	10509	21167
14	32.6	68.2	1352	0	0	211	0	173	608	1680	2280	1856	2600	0	7872	2888	10403	21163
15	32.1	69.1	1404	0	0	211	0	163	592	1680	2280	1856	2600	0	7914	2872	10046	20832
16	31.3	70.4	1408	0	0	211	0	146	563	1680	2280	1856	2600	0	7901	2843	9447	20191
17	30.3	72.4	1343	0	0	211	0	126	532	1680	2280	1856	2600	0	7816	2812	8775	19403
18	29.2	74.1	1236	0	0	211	0	104	491	1680	2280	1856	2600	0	7687	2771	7935	18393

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
ARQUIVO	1	1	1	Office	54.0	3.8	1	Summer 27.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	466	0	45	142	0	51	300	56	76	1253	0	0	2013	376	232	2621
9	29.2	74.1	748	0	62	142	0	70	332	56	76	1253	0	0	2331	408	264	3003
10	30.5	71.9	1076	0	78	142	0	88	362	56	76	1253	0	0	2693	438	296	3427
11	31.7	69.8	1396	0	92	142	0	104	390	56	76	1253	0	0	3043	466	326	3835
12	32.5	68.5	1677	0	102	142	0	115	410	56	76	1253	0	0	3345	486	345	4176
13	32.8	67.7	1903	0	105	142	0	119	413	56	76	1253	0	0	3578	489	350	4417
*14	32.6	68.2	2007	0	103	142	0	116	411	56	76	1253	0	0	3677	487	347	4511
15	32.1	69.1	2043	0	97	142	0	110	399	56	76	1253	0	0	3701	475	335	4511
16	31.3	70.4	2018	0	87	142	0	99	380	56	76	1253	0	0	3655	456	315	4426
17	30.3	72.4	1918	0	75	142	0	85	359	56	76	1253	0	0	3529	435	292	4256
18	29.2	74.1	1757	0	62	142	0	70	332	56	76	1253	0	0	3340	408	264	4012

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
SALA 1	1	1	1	Office	15.0	3.8	4	Summer 108.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	0	0	120	40	0	14	83	224	304	348	500	0	1246	387	926	2559
9	29.2	74.1	0	0	163	40	0	20	92	224	304	348	500	0	1295	396	1058	2749
10	30.5	71.9	0	0	204	40	0	24	101	224	304	348	500	0	1340	405	1186	2931
11	31.7	69.8	0	0	242	40	0	29	108	224	304	348	500	0	1383	412	1300	3095
12	32.5	68.5	0	0	268	40	0	32	114	224	304	348	500	0	1412	418	1381	3211
*13	32.8	67.7	0	0	277	40	0	33	115	224	304	348	500	0	1422	419	1402	3243
14	32.6	68.2	0	0	271	40	0	32	114	224	304	348	500	0	1415	418	1387	3220
15	32.1	69.1	0	0	254	40	0	30	111	224	304	348	500	0	1396	415	1340	3151
16	31.3	70.4	0	0	230	40	0	27	106	224	304	348	500	0	1369	410	1260	3039
17	30.3	72.4	0	0	198	40	0	24	100	224	304	348	500	0	1334	404	1171	2909
18	29.2	74.1	0	0	163	40	0	20	92	224	304	348	500	0	1295	396	1058	2749

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
BIBLIOTECA	1	1	1	Office	29.6	3.8	6	Summer 162.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	0	0	234	78	0	28	165	336	456	687	1000	0	2363	621	1389	4373
9	29.2	74.1	0	0	321	78	0	39	182	336	456	687	1000	0	2461	638	1587	4686
10	30.5	71.9	0	0	401	78	0	48	199	336	456	687	1000	0	2550	655	1777	4982
11	31.7	69.8	0	0	476	78	0	57	214	336	456	687	1000	0	2634	670	1952	5256
12	32.5	68.5	0	0	525	78	0	63	224	336	456	687	1000	0	2689	680	2071	5440
*13	32.8	67.7	0	0	544	78	0	65	227	336	456	687	1000	0	2710	683	2101	5494
14	32.6	68.2	0	0	530	78	0	64	225	336	456	687	1000	0	2695	681	2081	5457
15	32.1	69.1	0	0	499	78	0	60	219	336	456	687	1000	0	2660	675	2009	5344
16	31.3	70.4	0	0	450	78	0	54	208	336	456	687	1000	0	2605	664	1889	5158
17	30.3	72.4	0	0	389	78	0	47	197	336	456	687	1000	0	2537	653	1755	4945
18	29.2	74.1	0	0	321	78	0	39	182	336	456	687	1000	0	2461	638	1587	4686

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
SECRETARIA GERAL	1	1	1	Office	11.9	3.8	3	Summer 81.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	185	0	0	31	0	11	66	168	228	276	500	0	1171	294	695	2160
9	29.2	74.1	284	0	0	31	0	16	73	168	228	276	500	0	1275	301	793	2369
10	30.5	71.9	406	0	0	31	0	19	80	168	228	276	500	0	1400	308	889	2597
11	31.7	69.8	535	0	0	31	0	23	86	168	228	276	500	0	1533	314	976	2823
12	32.5	68.5	650	0	0	31	0	25	90	168	228	276	500	0	1650	318	1035	3003
13	32.8	67.7	746	0	0	31	0	26	91	168	228	276	500	0	1747	319	1051	3117
*14	32.6	68.2	801	0	0	31	0	26	90	168	228	276	500	0	1802	318	1040	3160
15	32.1	69.1	822	0	0	31	0	24	88	168	228	276	500	0	1821	316	1005	3142
16	31.3	70.4	818	0	0	31	0	22	84	168	228	276	500	0	1815	312	945	3072
17	30.3	72.4	776	0	0	31	0	19	79	168	228	276	500	0	1770	307	877	2954
18	29.2	74.1	711	0	0	31	0	16	73	168	228	276	500	0	1702	301	793	2796

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
FOYER	1	1	1	Office	37.0	2.8	15	Summer 405.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	65	167	52	98	0	26	152	840	1140	858	0	0	2106	1292	3473	6871
9	29.2	74.1	88	255	72	98	0	36	167	840	1140	858	0	0	2247	1307	3967	7521
10	30.5	71.9	126	404	90	98	0	44	183	840	1140	858	0	0	2460	1323	4445	8228
11	31.7	69.8	179	624	106	98	0	53	197	840	1140	858	0	0	2758	1337	4878	8973
12	32.5	68.5	236	888	117	98	0	58	207	840	1140	858	0	0	3095	1347	5178	9620
13	32.8	67.7	301	1169	121	98	0	60	209	840	1140	858	0	0	3447	1349	5255	10051
14	32.6	68.2	373	1424	119	98	0	59	207	840	1140	858	0	0	3771	1347	5201	10319
*15	32.1	69.1	457	1609	112	98	0	55	202	840	1140	858	0	0	4029	1342	5023	10394
16	31.3	70.4	537	1688	101	98	0	50	192	840	1140	858	0	0	4172	1332	4724	10228
17	30.3	72.4	594	1653	87	98	0	43	181	840	1140	858	0	0	4173	1321	4388	9882
18	29.2	74.1	617	1512	72	98	0	36	167	840	1140	858	0	0	4033	1307	3967	9307

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
SALA 2	1	1	1	Office	17.6	3.8	6	Summer 162.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	61	0	53	46	0	17	98	336	456	408	500	0	1421	554	1389	3364
9	29.2	74.1	83	0	72	46	0	23	108	336	456	408	500	0	1468	564	1587	3619
10	30.5	71.9	119	0	91	46	0	29	118	336	456	408	500	0	1529	574	1777	3880
11	31.7	69.8	170	0	107	46	0	34	127	336	456	408	500	0	1601	583	1952	4136
12	32.5	68.5	224	0	118	46	0	38	133	336	456	408	500	0	1670	589	2071	4330
13	32.8	67.7	286	0	123	46	0	39	135	336	456	408	500	0	1738	591	2101	4430
*14	32.6	68.2	355	0	120	46	0	38	134	336	456	408	500	0	1803	590	2081	4474
15	32.1	69.1	434	0	113	46	0	36	130	336	456	408	500	0	1873	586	2009	4468
16	31.3	70.4	510	0	102	46	0	32	124	336	456	408	500	0	1934	580	1889	4403
17	30.3	72.4	564	0	88	46	0	28	117	336	456	408	500	0	1970	573	1755	4298
18	29.2	74.1	586	0	72	46	0	23	108	336	456	408	500	0	1971	564	1587	4122

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
SALA 3	1	1	1	Office	18.2	3.8	6	Summer 162.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	63	0	54	48	0	17	101	336	456	422	500	0	1440	557	1389	3386
9	29.2	74.1	86	0	75	48	0	24	112	336	456	422	500	0	1491	568	1587	3646
10	30.5	71.9	123	0	93	48	0	30	122	336	456	422	500	0	1552	578	1777	3907
11	31.7	69.8	175	0	110	48	0	35	131	336	456	422	500	0	1626	587	1952	4165
12	32.5	68.5	231	0	122	48	0	39	138	336	456	422	500	0	1698	594	2071	4363
13	32.8	67.7	294	0	126	48	0	40	139	336	456	422	500	0	1766	595	2101	4462
*14	32.6	68.2	365	0	123	48	0	39	138	336	456	422	500	0	1833	594	2081	4508
15	32.1	69.1	447	0	116	48	0	37	135	336	456	422	500	0	1906	591	2009	4506
16	31.3	70.4	525	0	105	48	0	33	128	336	456	422	500	0	1969	584	1889	4442
17	30.3	72.4	580	0	90	48	0	29	121	336	456	422	500	0	2005	577	1755	4337
18	29.2	74.1	603	0	75	48	0	24	112	336	456	422	500	0	2008	568	1587	4163

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
AREA DE DESCANSO	1	1	1	Office	24.5	2.8	5	Summer 135.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	40	111	184	65	111	17	100	280	380	568	0	0	1376	480	1157	3013
9	29.2	74.1	54	169	253	65	148	24	111	280	380	568	0	0	1561	491	1323	3375
10	30.5	71.9	77	268	317	65	174	29	121	280	380	568	0	0	1778	501	1482	3761
11	31.7	69.8	110	413	375	65	193	35	130	280	380	568	0	0	2039	510	1626	4175
12	32.5	68.5	145	588	414	65	217	38	137	280	380	568	0	0	2315	517	1726	4558
13	32.8	67.7	184	774	429	65	317	40	138	280	380	568	0	0	2657	518	1752	4927
14	32.6	68.2	229	943	419	65	392	39	137	280	380	568	0	0	2935	517	1734	5186
*15	32.1	69.1	280	1065	394	65	400	37	133	280	380	568	0	0	3089	513	1674	5276
16	31.3	70.4	329	1118	355	65	358	33	127	280	380	568	0	0	3106	507	1574	5187
17	30.3	72.4	364	1094	307	65	281	29	120	280	380	568	0	0	2988	500	1463	4951
18	29.2	74.1	378	1001	253	65	39	24	111	280	380	568	0	0	2608	491	1323	4422

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
SALA DE SOM	1	1	1	Office	5.8	2.8	1	Summer 27.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	0	26	33	15	0	4	24	56	76	135	1000	0	1269	100	232	1601
9	29.2	74.1	0	40	46	15	0	6	26	56	76	135	1000	0	1298	102	264	1664
10	30.5	71.9	0	63	57	15	0	7	29	56	76	135	1000	0	1333	105	296	1734
11	31.7	69.8	0	98	68	15	0	8	31	56	76	135	1000	0	1380	107	326	1813
12	32.5	68.5	0	139	75	15	0	9	32	56	76	135	1000	0	1429	108	345	1882
13	32.8	67.7	0	183	77	15	0	9	33	56	76	135	1000	0	1475	109	350	1934
14	32.6	68.2	0	223	76	15	0	9	32	56	76	135	1000	0	1514	108	347	1969
*15	32.1	69.1	0	252	71	15	0	9	32	56	76	135	1000	0	1538	108	335	1981
16	31.3	70.4	0	265	64	15	0	8	30	56	76	135	1000	0	1543	106	315	1964
17	30.3	72.4	0	259	55	15	0	7	28	56	76	135	1000	0	1527	104	292	1923
18	29.2	74.1	0	237	46	15	0	6	26	56	76	135	1000	0	1495	102	264	1861

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
CIRCULAÇÃO	1	1	1	Office	42.4	2.8	15	Summer 405.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	54	191	112	112	0	30	174	840	1140	984	0	0	2323	1314	3473	7110
9	29.2	74.1	88	292	153	112	0	41	192	840	1140	984	0	0	2510	1332	3967	7809
10	30.5	71.9	126	463	191	112	0	51	210	840	1140	984	0	0	2767	1350	4445	8562
11	31.7	69.8	159	715	226	112	0	60	226	840	1140	984	0	0	3096	1366	4878	9340
12	32.5	68.5	184	1017	249	112	0	67	237	840	1140	984	0	0	3453	1377	5178	10008
13	32.8	67.7	200	1340	258	112	0	69	239	840	1140	984	0	0	3803	1379	5255	10437
14	32.6	68.2	198	1632	252	112	0	67	238	840	1140	984	0	0	4085	1378	5201	10664
*15	32.1	69.1	191	1844	238	112	0	63	231	840	1140	984	0	0	4272	1371	5023	10666
16	31.3	70.4	179	1934	214	112	0	57	220	840	1140	984	0	0	4320	1360	4724	10404
17	30.3	72.4	164	1894	185	112	0	49	208	840	1140	984	0	0	4228	1348	4388	9964
18	29.2	74.1	145	1733	153	112	0	41	192	840	1140	984	0	0	4008	1332	3967	9307

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
AUDITÓRIO	1	1	1	Office	205.0	3.2	180	Summer4860.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	605	925	157	541	0	165	961	10080	13680	4756	1000	0	18229	14641	41679	74549
9	29.2	74.1	975	1413	214	541	0	225	1060	10080	13680	4756	1000	0	19204	14740	47609	81553
10	30.5	71.9	1401	2241	268	541	0	281	1158	10080	13680	4756	1000	0	20568	14838	53338	88744
11	31.7	69.8	1813	3458	318	541	0	333	1247	10080	13680	4756	1000	0	22299	14927	58541	95767
12	32.5	68.5	2169	4920	351	541	0	368	1309	10080	13680	4756	1000	0	24185	14989	62132	101306
13	32.8	67.7	2452	6478	363	541	0	381	1321	10080	13680	4756	1000	0	26051	15001	63058	104110
*14	32.6	68.2	2572	7891	355	541	0	372	1313	10080	13680	4756	1000	0	27567	14993	62414	104974
15	32.1	69.1	2605	8914	334	541	0	351	1277	10080	13680	4756	1000	0	28581	14957	60276	103814
16	31.3	70.4	2564	9352	301	541	0	316	1214	10080	13680	4756	1000	0	28910	14894	56686	100490
17	30.3	72.4	2429	9157	260	541	0	273	1149	10080	13680	4756	1000	0	28496	14829	52652	95977
18	29.2	74.1	2220	8378	214	541	0	225	1060	10080	13680	4756	1000	0	27414	14740	47609	89763

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
SALA AUTORIDADE	1	1	1	Office	13.7	2.8	3	Summer 81.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	239	62	0	36	120	10	56	168	228	318	500	0	1453	284	695	2432
9	29.2	74.1	370	94	0	36	139	13	62	168	228	318	500	0	1638	290	793	2721
10	30.5	71.9	531	150	0	36	156	16	68	168	228	318	500	0	1875	296	889	3060
11	31.7	69.8	704	231	0	36	168	19	73	168	228	318	500	0	2144	301	976	3421
12	32.5	68.5	861	329	0	36	171	22	77	168	228	318	500	0	2405	305	1035	3745
13	32.8	67.7	1002	433	0	36	170	22	77	168	228	318	500	0	2649	305	1051	4005
14	32.6	68.2	1096	527	0	36	157	22	77	168	228	318	500	0	2824	305	1040	4169
*15	32.1	69.1	1159	596	0	36	141	21	75	168	228	318	500	0	2939	303	1005	4247
16	31.3	70.4	1190	625	0	36	116	18	71	168	228	318	500	0	2971	299	945	4215
17	30.3	72.4	1170	612	0	36	84	16	67	168	228	318	500	0	2904	295	877	4076
18	29.2	74.1	1106	560	0	36	26	13	62	168	228	318	500	0	2727	290	793	3810

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
RESERVA	2	1	1	Office	35.0	2.6	8	Summer 216.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	131	158	0	0	298	23	133	448	608	812	900	0	2770	741	1853	5364
9	29.2	74.1	176	241	0	0	393	31	147	448	608	812	900	0	3001	755	2116	5872
10	30.5	71.9	254	383	0	0	465	39	161	448	608	812	900	0	3301	769	2370	6440
11	31.7	69.8	361	590	0	0	515	46	173	448	608	812	900	0	3672	781	2602	7055
12	32.5	68.5	476	840	0	0	551	51	182	448	608	812	900	0	4078	790	2762	7630
13	32.8	67.7	597	1106	0	0	644	53	183	448	608	812	900	0	4560	791	2802	8153
14	32.6	68.2	718	1347	0	0	692	52	182	448	608	812	900	0	4969	790	2774	8533
*15	32.1	69.1	823	1522	0	0	656	49	177	448	608	812	900	0	5210	785	2679	8674
16	31.3	70.4	905	1597	0	0	555	44	168	448	608	812	900	0	5261	776	2519	8556
17	30.3	72.4	937	1563	0	0	409	38	159	448	608	812	900	0	5107	767	2340	8214
18	29.2	74.1	924	1430	0	0	103	31	147	448	608	812	900	0	4648	755	2116	7519

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
CPD	2	1	1	Office	21.0	2.6	4	Summer 108.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	73	95	0	0	179	14	80	224	304	487	6000	0	7072	384	926	8382
9	29.2	74.1	99	145	0	0	236	19	88	224	304	487	6000	0	7210	392	1058	8660
10	30.5	71.9	142	230	0	0	279	23	96	224	304	487	6000	0	7385	400	1186	8971
11	31.7	69.8	202	354	0	0	309	28	104	224	304	487	6000	0	7604	408	1300	9312
12	32.5	68.5	266	504	0	0	318	31	109	224	304	487	6000	0	7830	413	1381	9624
13	32.8	67.7	331	664	0	0	306	32	110	224	304	487	6000	0	8044	414	1402	9860
14	32.6	68.2	391	808	0	0	274	31	109	224	304	487	6000	0	8215	413	1387	10015
*15	32.1	69.1	430	913	0	0	229	29	106	224	304	487	6000	0	8312	410	1340	10062
16	31.3	70.4	451	958	0	0	172	26	101	224	304	487	6000	0	8318	405	1260	9983
17	30.3	72.4	443	938	0	0	109	23	96	224	304	487	6000	0	8224	400	1171	9795
18	29.2	74.1	417	858	0	0	62	19	88	224	304	487	6000	0	8067	392	1058	9517

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
HACKER	2	1	1	Office	8.6	2.6	2	Summer 54.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	22	39	0	0	0	6	33	112	152	200	1000	0	1379	185	463	2027
9	29.2	74.1	29	59	0	0	0	8	36	112	152	200	1000	0	1408	188	529	2125
10	30.5	71.9	42	94	0	0	0	10	39	112	152	200	1000	0	1458	191	593	2242
11	31.7	69.8	60	145	0	0	0	11	43	112	152	200	1000	0	1528	195	650	2373
12	32.5	68.5	79	206	0	0	0	13	45	112	152	200	1000	0	1610	197	690	2497
13	32.8	67.7	98	272	0	0	0	13	45	112	152	200	1000	0	1695	197	701	2593
14	32.6	68.2	116	331	0	0	0	13	45	112	152	200	1000	0	1772	197	693	2662
*15	32.1	69.1	127	374	0	0	0	12	44	112	152	200	1000	0	1825	196	669	2690
16	31.3	70.4	134	392	0	0	0	11	41	112	152	200	1000	0	1849	193	630	2672
17	30.3	72.4	131	384	0	0	0	9	39	112	152	200	1000	0	1836	191	585	2612
18	29.2	74.1	123	351	0	0	0	8	36	112	152	200	1000	0	1794	188	529	2511

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
SETOR PROCESSOS	2	1	1	Office	70.0	2.6	16	Summer 432.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	121	316	139	0	358	46	267	896	1216	1624	3800	0	7300	1483	3705	12488
9	29.2	74.1	164	482	191	0	472	62	294	896	1216	1624	3800	0	7691	1510	4232	13433
10	30.5	71.9	235	765	239	0	557	78	321	896	1216	1624	3800	0	8194	1537	4741	14472
11	31.7	69.8	334	1181	284	0	618	92	346	896	1216	1624	3800	0	8829	1562	5204	15595
12	32.5	68.5	441	1680	312	0	637	102	363	896	1216	1624	3800	0	9492	1579	5523	16594
13	32.8	67.7	547	2212	324	0	612	106	367	896	1216	1624	3800	0	10121	1583	5606	17310
14	32.6	68.2	647	2694	316	0	547	103	364	896	1216	1624	3800	0	10627	1580	5548	17755
*15	32.1	69.1	711	3044	297	0	457	97	354	896	1216	1624	3800	0	10926	1570	5358	17854
16	31.3	70.4	747	3193	269	0	343	88	337	896	1216	1624	3800	0	10960	1553	5039	17552
17	30.3	72.4	732	3127	232	0	219	76	319	896	1216	1624	3800	0	10706	1535	4680	16921
18	29.2	74.1	690	2861	191	0	124	62	294	896	1216	1624	3800	0	10248	1510	4232	15990

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
CORREGEDORIA	2	1	1	Office	7.0	2.6	3	Summer 81.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	31	32	0	0	60	5	27	168	228	162	500	0	958	255	695	1908
9	29.2	74.1	42	48	0	0	79	6	29	168	228	162	500	0	1005	257	793	2055
10	30.5	71.9	60	77	0	0	93	8	32	168	228	162	500	0	1068	260	889	2217
11	31.7	69.8	86	118	0	0	103	9	35	168	228	162	500	0	1146	263	976	2385
12	32.5	68.5	114	168	0	0	106	10	36	168	228	162	500	0	1228	264	1035	2527
13	32.8	67.7	141	221	0	0	102	11	37	168	228	162	500	0	1305	265	1051	2621
*14	32.6	68.2	167	269	0	0	91	10	36	168	228	162	500	0	1367	264	1040	2671
15	32.1	69.1	183	304	0	0	76	10	35	168	228	162	500	0	1403	263	1005	2671
16	31.3	70.4	192	319	0	0	57	9	34	168	228	162	500	0	1407	262	945	2614
17	30.3	72.4	189	313	0	0	36	8	32	168	228	162	500	0	1376	260	877	2513
18	29.2	74.1	178	286	0	0	21	6	29	168	228	162	500	0	1321	257	793	2371

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
SETOR JURIDICO	2	1	1	Office	14.3	2.6	4	Summer 108.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	0	65	40	0	0	9	54	224	304	332	500	0	1170	358	926	2454
9	29.2	74.1	0	99	55	0	0	13	60	224	304	332	500	0	1223	364	1058	2645
10	30.5	71.9	0	156	69	0	0	16	66	224	304	332	500	0	1297	370	1186	2853
11	31.7	69.8	0	241	82	0	0	19	71	224	304	332	500	0	1398	375	1300	3073
12	32.5	68.5	0	343	90	0	0	21	74	224	304	332	500	0	1510	378	1381	3269
13	32.8	67.7	0	452	94	0	0	22	75	224	304	332	500	0	1624	379	1402	3405
14	32.6	68.2	0	550	91	0	0	21	74	224	304	332	500	0	1718	378	1387	3483
*15	32.1	69.1	0	622	86	0	0	20	72	224	304	332	500	0	1784	376	1340	3500
16	31.3	70.4	0	652	78	0	0	18	69	224	304	332	500	0	1804	373	1260	3437
17	30.3	72.4	0	639	67	0	0	15	65	224	304	332	500	0	1777	369	1171	3317
18	29.2	74.1	0	584	55	0	0	13	60	224	304	332	500	0	1708	364	1058	3130

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
PRESIDENCIA	2	1	1	Office	28.8	2.6	7	Summer 189.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	168	130	46	0	511	19	110	392	532	668	500	0	2434	642	1621	4697
9	29.2	74.1	260	198	62	0	544	26	121	392	532	668	500	0	2650	653	1851	5154
10	30.5	71.9	372	315	78	0	499	32	132	392	532	668	500	0	2856	664	2074	5594
11	31.7	69.8	487	486	92	0	429	38	142	392	532	668	500	0	3092	674	2276	6042
12	32.5	68.5	586	691	102	0	426	42	149	392	532	668	500	0	3407	681	2416	6504
13	32.8	67.7	667	910	106	0	408	43	151	392	532	668	500	0	3694	683	2452	6829
*14	32.6	68.2	707	1109	103	0	364	43	150	392	532	668	500	0	3886	682	2427	6995
15	32.1	69.1	719	1252	97	0	304	40	146	392	532	668	500	0	3972	678	2344	6994
16	31.3	70.4	710	1314	88	0	228	36	139	392	532	668	500	0	3936	671	2204	6811
17	30.3	72.4	669	1286	75	0	146	31	131	392	532	668	500	0	3767	663	2048	6478
18	29.2	74.1	611	1177	62	0	82	26	121	392	532	668	500	0	3518	653	1851	6022

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
SECRETARIA	2	1	1	Office	21.5	2.6	8	Summer 216.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	78	97	21	0	0	14	82	448	608	499	500	0	1657	690	1853	4200
9	29.2	74.1	129	148	28	0	0	19	90	448	608	499	500	0	1771	698	2116	4585
10	30.5	71.9	185	235	35	0	0	24	99	448	608	499	500	0	1926	707	2370	5003
11	31.7	69.8	233	363	42	0	0	28	106	448	608	499	500	0	2113	714	2602	5429
12	32.5	68.5	269	516	46	0	0	31	112	448	608	499	500	0	2309	720	2762	5791
13	32.8	67.7	293	679	48	0	0	32	113	448	608	499	500	0	2499	721	2802	6022
*14	32.6	68.2	291	828	47	0	0	32	112	448	608	499	500	0	2645	720	2774	6139
15	32.1	69.1	280	935	44	0	0	30	109	448	608	499	500	0	2736	717	2679	6132
16	31.3	70.4	263	981	40	0	0	27	103	448	608	499	500	0	2758	711	2519	5988
17	30.3	72.4	240	960	34	0	0	23	98	448	608	499	500	0	2704	706	2340	5750
18	29.2	74.1	212	879	28	0	0	19	90	448	608	499	500	0	2585	698	2116	5399

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
SALA DE REUNIOES	2	1	1	Office	20.5	2.6	10	Summer 270.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	177	93	0	0	583	13	78	560	760	476	500	0	2402	838	2316	5556
9	29.2	74.1	287	141	0	0	609	18	86	560	760	476	500	0	2591	846	2645	6082
10	30.5	71.9	411	224	0	0	563	23	94	560	760	476	500	0	2757	854	2963	6574
11	31.7	69.8	532	346	0	0	492	27	101	560	760	476	500	0	2933	861	3252	7046
12	32.5	68.5	635	492	0	0	487	30	106	560	760	476	500	0	3180	866	3451	7497
13	32.8	67.7	715	648	0	0	476	31	107	560	760	476	500	0	3406	867	3503	7776
*14	32.6	68.2	748	789	0	0	432	30	107	560	760	476	500	0	3535	867	3467	7869
15	32.1	69.1	756	891	0	0	377	28	104	560	760	476	500	0	3588	864	3349	7801
16	31.3	70.4	742	935	0	0	299	26	99	560	760	476	500	0	3538	859	3149	7546
17	30.3	72.4	701	916	0	0	208	22	93	560	760	476	500	0	3383	853	2925	7161
18	29.2	74.1	640	838	0	0	82	18	86	560	760	476	500	0	3114	846	2645	6605

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
1 SECRETARIO	2	1	1	Office	15.7	2.6	4	Summer 108.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	46	71	0	0	95	10	60	224	304	364	500	0	1310	364	926	2600
9	29.2	74.1	70	108	0	0	111	14	66	224	304	364	500	0	1391	370	1058	2819
10	30.5	71.9	103	172	0	0	125	18	72	224	304	364	500	0	1506	376	1186	3068
11	31.7	69.8	139	265	0	0	135	21	78	224	304	364	500	0	1648	382	1300	3330
12	32.5	68.5	177	377	0	0	137	23	81	224	304	364	500	0	1802	385	1381	3568
13	32.8	67.7	213	496	0	0	136	24	82	224	304	364	500	0	1957	386	1402	3745
14	32.6	68.2	242	604	0	0	125	23	82	224	304	364	500	0	2082	386	1387	3855
*15	32.1	69.1	261	683	0	0	112	22	79	224	304	364	500	0	2166	383	1340	3889
16	31.3	70.4	270	716	0	0	93	20	76	224	304	364	500	0	2187	380	1260	3827
17	30.3	72.4	267	701	0	0	68	17	71	224	304	364	500	0	2141	375	1171	3687
18	29.2	74.1	251	642	0	0	21	14	66	224	304	364	500	0	2016	370	1058	3444

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
GERENCIA	2	1	1	Office	23.6	2.6	6	Summer 162.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	68	107	95	0	191	15	90	336	456	548	500	0	1860	546	1389	3795
9	29.2	74.1	104	163	131	0	222	21	99	336	456	548	500	0	2025	555	1587	4167
10	30.5	71.9	152	258	163	0	250	26	108	336	456	548	500	0	2233	564	1777	4574
11	31.7	69.8	206	398	193	0	269	31	117	336	456	548	500	0	2481	573	1952	5006
12	32.5	68.5	262	566	213	0	274	34	122	336	456	548	500	0	2733	578	2071	5382
13	32.8	67.7	316	746	221	0	272	36	124	336	456	548	500	0	2975	580	2101	5656
14	32.6	68.2	358	908	216	0	250	35	123	336	456	548	500	0	3151	579	2081	5811
*15	32.1	69.1	386	1026	203	0	225	33	119	336	456	548	500	0	3257	575	2009	5841
16	31.3	70.4	400	1077	183	0	185	30	114	336	456	548	500	0	3259	570	1889	5718
17	30.3	72.4	395	1054	158	0	135	26	107	336	456	548	500	0	3152	563	1755	5470
18	29.2	74.1	372	964	131	0	41	21	99	336	456	548	500	0	2913	555	1587	5055

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
RECEPCAO SP	2	1	1	Office	6.3	2.6	1	Summer 27.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	0	28	53	0	0	4	24	56	76	146	500	0	787	100	232	1119
9	29.2	74.1	0	43	72	0	0	6	26	56	76	146	500	0	823	102	264	1189
10	30.5	71.9	0	69	90	0	0	7	29	56	76	146	500	0	868	105	296	1269
11	31.7	69.8	0	106	107	0	0	8	31	56	76	146	500	0	923	107	326	1356
12	32.5	68.5	0	151	118	0	0	9	33	56	76	146	500	0	980	109	345	1434
13	32.8	67.7	0	199	122	0	0	10	33	56	76	146	500	0	1033	109	350	1492
14	32.6	68.2	0	242	120	0	0	9	33	56	76	146	500	0	1073	109	347	1529
*15	32.1	69.1	0	274	112	0	0	9	32	56	76	146	500	0	1097	108	335	1540
16	31.3	70.4	0	287	102	0	0	8	30	56	76	146	500	0	1099	106	315	1520
17	30.3	72.4	0	281	88	0	0	7	29	56	76	146	500	0	1078	105	292	1475
18	29.2	74.1	0	257	72	0	0	6	26	56	76	146	500	0	1037	102	264	1403

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
AUDIENCIA 2	2	1	1	Office	8.0	2.6	4	Summer 108.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	0	36	59	0	0	5	30	224	304	186	500	0	1010	334	926	2270
9	29.2	74.1	0	55	81	0	0	7	34	224	304	186	500	0	1053	338	1058	2449
10	30.5	71.9	0	87	101	0	0	9	37	224	304	186	500	0	1107	341	1186	2634
11	31.7	69.8	0	135	120	0	0	11	40	224	304	186	500	0	1176	344	1300	2820
12	32.5	68.5	0	192	132	0	0	12	42	224	304	186	500	0	1246	346	1381	2973
13	32.8	67.7	0	253	137	0	0	12	42	224	304	186	500	0	1312	346	1402	3060
*14	32.6	68.2	0	308	134	0	0	12	42	224	304	186	500	0	1364	346	1387	3097
15	32.1	69.1	0	348	126	0	0	11	40	224	304	186	500	0	1395	344	1340	3079
16	31.3	70.4	0	365	114	0	0	10	38	224	304	186	500	0	1399	342	1260	3001
17	30.3	72.4	0	357	98	0	0	9	36	224	304	186	500	0	1374	340	1171	2885
18	29.2	74.1	0	327	81	0	0	7	34	224	304	186	500	0	1325	338	1058	2721

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
AUDIENCIA 1	2	1	1	Office	7.6	2.6	4	Summer 108.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	0	34	28	0	0	5	29	224	304	176	500	0	967	333	926	2226
9	29.2	74.1	0	52	38	0	0	7	32	224	304	176	500	0	997	336	1058	2391
10	30.5	71.9	0	83	48	0	0	8	35	224	304	176	500	0	1039	339	1186	2564
11	31.7	69.8	0	128	57	0	0	10	38	224	304	176	500	0	1095	342	1300	2737
12	32.5	68.5	0	182	63	0	0	11	39	224	304	176	500	0	1156	343	1381	2880
13	32.8	67.7	0	240	65	0	0	11	40	224	304	176	500	0	1216	344	1402	2962
*14	32.6	68.2	0	293	63	0	0	11	40	224	304	176	500	0	1267	344	1387	2998
15	32.1	69.1	0	330	60	0	0	11	38	224	304	176	500	0	1301	342	1340	2983
16	31.3	70.4	0	347	54	0	0	10	37	224	304	176	500	0	1311	341	1260	2912
17	30.3	72.4	0	339	46	0	0	8	35	224	304	176	500	0	1293	339	1171	2803
18	29.2	74.1	0	311	38	0	0	7	32	224	304	176	500	0	1256	336	1058	2650

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
EMC	2	1	1	Office	8.2	2.6	3	Summer 81.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	0	37	61	0	0	5	31	168	228	190	500	0	961	259	695	1915
9	29.2	74.1	0	57	84	0	0	7	34	168	228	190	500	0	1006	262	793	2061
10	30.5	71.9	0	90	104	0	0	9	38	168	228	190	500	0	1061	266	889	2216
11	31.7	69.8	0	138	124	0	0	11	41	168	228	190	500	0	1131	269	976	2376
12	32.5	68.5	0	197	136	0	0	12	43	168	228	190	500	0	1203	271	1035	2509
13	32.8	67.7	0	259	142	0	0	12	43	168	228	190	500	0	1271	271	1051	2593
*14	32.6	68.2	0	316	138	0	0	12	43	168	228	190	500	0	1324	271	1040	2635
15	32.1	69.1	0	357	130	0	0	11	41	168	228	190	500	0	1356	269	1005	2630
16	31.3	70.4	0	374	118	0	0	10	39	168	228	190	500	0	1360	267	945	2572
17	30.3	72.4	0	366	101	0	0	9	37	168	228	190	500	0	1334	265	877	2476
18	29.2	74.1	0	335	84	0	0	7	34	168	228	190	500	0	1284	262	793	2339

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
TESOURARIA	2	1	1	Office	14.8	2.6	7	Summer 189.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	32	67	0	0	60	10	56	392	532	343	700	0	1604	588	1621	3813
9	29.2	74.1	44	102	0	0	79	13	62	392	532	343	700	0	1673	594	1851	4118
10	30.5	71.9	63	162	0	0	93	17	68	392	532	343	700	0	1770	600	2074	4444
11	31.7	69.8	89	250	0	0	103	20	73	392	532	343	700	0	1897	605	2276	4778
12	32.5	68.5	118	355	0	0	116	22	77	392	532	343	700	0	2046	609	2416	5071
13	32.8	67.7	150	468	0	0	169	22	78	392	532	343	700	0	2244	610	2452	5306
14	32.6	68.2	187	570	0	0	209	22	77	392	532	343	700	0	2423	609	2427	5459
*15	32.1	69.1	228	644	0	0	213	21	75	392	532	343	700	0	2541	607	2344	5492
16	31.3	70.4	268	675	0	0	191	19	71	392	532	343	700	0	2588	603	2204	5395
17	30.3	72.4	297	661	0	0	150	16	67	392	532	343	700	0	2559	599	2048	5206
18	29.2	74.1	308	605	0	0	21	13	62	392	532	343	700	0	2382	594	1851	4827

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
FINANCEIRO	2	1	1	Office	37.8	2.6	14	Summer 378.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	151	171	0	0	370	25	144	784	1064	877	700	0	3078	1208	3242	7528
9	29.2	74.1	219	260	0	0	458	34	159	784	1064	877	700	0	3332	1223	3703	8258
10	30.5	71.9	316	413	0	0	529	42	174	784	1064	877	700	0	3661	1238	4149	9048
11	31.7	69.8	438	638	0	0	578	50	187	784	1064	877	700	0	4065	1251	4553	9869
12	32.5	68.5	568	907	0	0	622	55	196	784	1064	877	700	0	4513	1260	4832	10605
13	32.8	67.7	703	1195	0	0	779	57	198	784	1064	877	700	0	5095	1262	4905	11262
14	32.6	68.2	836	1455	0	0	877	56	197	784	1064	877	700	0	5585	1261	4855	11701
*15	32.1	69.1	966	1644	0	0	866	53	191	784	1064	877	700	0	5890	1255	4688	11833
16	31.3	70.4	1076	1724	0	0	759	47	182	784	1064	877	700	0	5967	1246	4409	11622
17	30.3	72.4	1138	1688	0	0	585	41	172	784	1064	877	700	0	5813	1236	4095	11144
18	29.2	74.1	1140	1545	0	0	103	34	159	784	1064	877	700	0	5183	1223	3703	10109

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
SETOR PESSOAL	2	1	1	Office	14.3	2.6	2	Summer 54.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	42	65	29	0	95	9	54	112	152	332	700	0	1384	206	463	2053
9	29.2	74.1	65	99	40	0	111	13	60	112	152	332	700	0	1472	212	529	2213
10	30.5	71.9	95	156	50	0	125	16	66	112	152	332	700	0	1586	218	593	2397
11	31.7	69.8	129	241	59	0	135	19	71	112	152	332	700	0	1727	223	650	2600
12	32.5	68.5	164	343	65	0	137	21	74	112	152	332	700	0	1874	226	690	2790
13	32.8	67.7	197	452	67	0	136	22	75	112	152	332	700	0	2018	227	701	2946
14	32.6	68.2	224	550	66	0	125	21	74	112	152	332	700	0	2130	226	693	3049
*15	32.1	69.1	241	622	62	0	112	20	72	112	152	332	700	0	2201	224	669	3094
16	31.3	70.4	250	652	56	0	93	18	69	112	152	332	700	0	2213	221	630	3064
17	30.3	72.4	247	639	48	0	68	15	65	112	152	332	700	0	2161	217	585	2963
18	29.2	74.1	233	584	40	0	21	13	60	112	152	332	700	0	2035	212	529	2776

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
MECANOGRAFIA	2	1	1	Office	20.0	2.6	9	Summer 243.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	54	90	39	0	191	13	76	504	684	464	2700	0	4055	760	2084	6899
9	29.2	74.1	83	138	54	0	222	18	84	504	684	464	2700	0	4183	768	2380	7331
10	30.5	71.9	122	219	67	0	250	22	92	504	684	464	2700	0	4348	776	2667	7791
11	31.7	69.8	164	337	80	0	269	26	99	504	684	464	2700	0	4544	783	2927	8254
12	32.5	68.5	209	480	88	0	274	29	104	504	684	464	2700	0	4748	788	3107	8643
13	32.8	67.7	252	632	91	0	272	30	105	504	684	464	2700	0	4945	789	3153	8887
*14	32.6	68.2	286	770	89	0	250	30	104	504	684	464	2700	0	5093	788	3121	9002
15	32.1	69.1	309	870	84	0	225	28	101	504	684	464	2700	0	5184	785	3014	8983
16	31.3	70.4	320	912	76	0	185	25	96	504	684	464	2700	0	5186	780	2834	8800
17	30.3	72.4	315	893	65	0	135	22	91	504	684	464	2700	0	5098	775	2632	8505
18	29.2	74.1	297	817	54	0	41	18	84	504	684	464	2700	0	4895	768	2380	8043

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat

Table of room heat load

Room name	Floor	System	Rooms	Usage	Fl area(m2)	Height(m)	No of person	F/A volume(m3/h)
GUARITA	1	1	1	Office	3.7	2.8	2	Summer 54.0/Winter ----

[Cooling load] Condition of indoor design temprature & humidity: 24.0(CDB) 50.0(%RH)

[W]

Time	F/A cond.		Outer Wall	Roof & Ceiling	Inner Wall	Floor	Window	Infiltration		Human body		Light -ing	Equipments		Indoor heat		Fresh air	Total Heat Load
	CDB	%RH						SH	LH	SH	LH		SH	LH	SH	LH		
8	27.8	76.6	126	15	0	0	394	3	15	112	152	86	500	0	1236	167	463	1866
9	29.2	74.1	190	23	0	0	439	4	17	112	152	86	500	0	1354	169	529	2052
10	30.5	71.9	273	37	0	0	428	4	18	112	152	86	500	0	1440	170	593	2203
11	31.7	69.8	367	57	0	0	397	5	20	112	152	86	500	0	1524	172	650	2346
12	32.5	68.5	456	81	0	0	397	6	21	112	152	86	500	0	1638	173	690	2501
13	32.8	67.7	539	106	0	0	383	6	21	112	152	86	500	0	1732	173	701	2606
*14	32.6	68.2	602	129	0	0	341	6	21	112	152	86	500	0	1776	173	693	2642
15	32.1	69.1	655	146	0	0	286	6	20	112	152	86	500	0	1791	172	669	2632
16	31.3	70.4	689	153	0	0	215	5	19	112	152	86	500	0	1760	171	630	2561
17	30.3	72.4	693	150	0	0	137	4	18	112	152	86	500	0	1682	170	585	2437
18	29.2	74.1	668	137	0	0	78	4	17	112	152	86	500	0	1585	169	529	2283

F/A : Fresh air
 SH : Sensible heat
 LH : Latent heat