

HEATING VENTILATING AIR CONDITIONING GUIDE 1938

TABLE 2. SOLAR RADIATION IMPINGING AGAINST WALLS HAVING SEVERAL ORIENTATIONS, AND A HORIZONTAL SURFACE, AND THE RADIATION TRANSMITTED THROUGH GLASS FOR THE SAME ORIENTATIONS

For 30 Deg Latitude on the twenty-first of July, in Btu per sq ft per hour

SUN TIME	NORTHEAST		EAST		SOUTHEAST		SOUTH		SOUTHWEST		WEST		NORTHWEST		HORIZONTAL SURFACE	
	I	I _G	I	I _G	I	I _G	I	I _G	I	I _G	I	I _G	I	I _G	I	I _G
4:59	0	0	0	0	0	0									0	0
5:00	1	0.9	1	0.9	0.3	0.2									0.01	0.005
6:00	47	41	51	44	24	17									9	5
7:00	136	106	160	140	90	68									68	47
8:00	151	122	205	177	136	105									147	116
9:00	127	91	189	156	140	104	8	1							214	182
10:00	79	47	141	103	122	85	31	12							265	231
11:00	21	6	78	45	85	52	45	21							296	261
12:00					36	15	50	24	36	15					305	269
1:00							45	21	85	52	78	45	21	6	296	261
2:00							31	12	122	85	141	103	79	47	265	231
3:00							8	1	140	104	189	156	127	91	214	182
4:00									136	105	205	177	151	122	147	116
5:00									90	68	160	140	136	106	68	47
6:00									24	17	51	44	47	41	9	5
7:00									0.3	0.2	1	0.9	1	0.9	0.01	0.005
7:01									0	0	0	0	0	0	0	0

TABLE 3. SOLAR RADIATION IMPINGING AGAINST WALLS HAVING SEVERAL ORIENTATIONS, AND A HORIZONTAL SURFACE, AND THE RADIATION TRANSMITTED THROUGH GLASS FOR THE SAME ORIENTATIONS

For 35 Deg Latitude on the twenty-first of July, in Btu per sq ft per hour.

SUN TIME	NORTHEAST		EAST		SOUTHEAST		SOUTH		SOUTHWEST		WEST		NORTHWEST		HORIZONTAL SURFACE	
	I	I _G	I	I _G	I	I _G	I	I _G	I	I _G	I	I _G	I	I _G	I	I _G
4:46	0	0	0	0	0	0									0	0
5:00	9	8	9	8	3	2									0.01	0.007
6:00	67	58	72	63	35	26									15	8
7:00	142	120	174	152	103	78									77	53
8:00	150	120	209	181	145	114									151	120
9:00	118	83	191	157	154	118	26	8							214	181
10:00	60	32	143	104	139	101	55	27							264	230
11:00	2	0.1	75	43	103	67	72	41							291	256
12:00					55	28	78	46	55	28					300	265
1:00							72	41	103	67	75	43	2	0.1	291	256
2:00							55	27	139	101	143	104	60	32	264	230
3:00							26	8	154	118	191	157	118	83	214	181
4:00									145	114	209	181	150	120	151	120
5:00									103	78	174	152	142	120	77	53
6:00									35	26	72	63	67	58	15	8
7:00									3	2	9	8	9	8	0.01	0.007
7:14									0	0	0	0	0	0	0	0

CHAPTER 8. COOLING LOAD

TABLE 4. SOLAR RADIATION IMPINGING AGAINST WALLS HAVING SEVERAL ORIENTATIONS, AND A HORIZONTAL SURFACE, AND THE RADIATION TRANSMITTED THROUGH GLASS FOR THE SAME ORIENTATIONS

For 40 Deg Latitude on the twenty-first of July, in Btu per sq ft per hour.

SUN TIME	NORTHEAST		EAST		SOUTHEAST		SOUTH		SOUTHWEST		WEST		NORTHWEST		HORIZONTAL SURFACE	
	I	I _G	I	I _G	I	I _G	I	I _G	I	I _G	I	I _G	I	I _G	I	I _G
4:31	0	0	0	0	0	0									0	0
5:00	14	12	14	12	5	3									1	0.2
6:00	72	63	80	70	40	29									19	11
7:00	143	120	180	158	112	87									82	57
8:00	143	111	211	182	155	124	8	2							152	121
9:00	104	69	192	158	168	133	46	22							213	178
10:00	46	22	143	104	156	117	77	45							258	225
11:00			75	43	121	83	95	60	15	4					284	249
12:00					73	42	103	67	73	42					293	258
1:00					15	4	95	60	121	83	75	43			284	249
2:00							77	45	156	117	143	104	46	22	258	225
3:00							46	22	168	133	192	158	104	69	213	178
4:00							8	2	155	124	211	182	143	111	152	121
5:00									112	87	180	158	143	120	82	57
6:00									40	29	80	70	72	63	19	11
7:00									5	3	14	12	14	12	1	0.2
7:29									0	0	0	0	0	0	0	0

TABLE 5. SOLAR RADIATION IMPINGING AGAINST WALLS HAVING SEVERAL ORIENTATIONS, AND A HORIZONTAL SURFACE, AND THE RADIATION TRANSMITTED THROUGH GLASS FOR THE SAME ORIENTATIONS

For 45 Deg Latitude on the twenty-first of July, in Btu per sq ft per hour.

SUN TIME	NORTHEAST		EAST		SOUTHEAST		SOUTH		SOUTHWEST		WEST		NORTHWEST		HORIZONTAL SURFACE	
	I	I _G	I	I _G	I	I _G	I	I _G	I	I _G	I	I _G	I	I _G	I	I _G
4:26	0	0	0	0	0	0									0	0
5:00	25	22	24	21	9	6									2	0.7
6:00	89	77	99	88	52	39									26	15
7:00	149	125	194	170	125	99									90	63
8:00	140	109	219	189	171	139	22	8							156	123
9:00	92	58	194	160	183	148	65	36							210	177
10:00	33	13	144	106	171	134	98	63							251	217
11:00			75	43	139	101	121	83	32	13					274	240
12:00					91	67	128	90	91	67					282	247
1:00					32	13	121	83	139	101	75	43			274	240
2:00							98	63	171	134	144	106	33	13	251	217
3:00							65	36	183	148	194	160	92	58	210	177
4:00							22	8	171	139	219	189	140	109	156	123
5:00									125	99	194	170	144	125	90	63
6:00									52	39	99	88	89	77	26	15
7:00									9	6	24	21	25	22	2	0.7