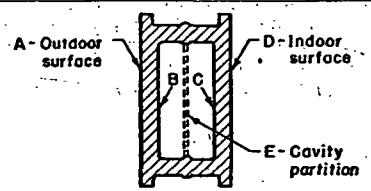
TABLE 22. DESCRIPTION OF GLASS BLOCK PATTERNS



Elevation Section of Hollow Glass Block to Indicate Location of Surface Patterns

Type I —Smooth Face
- A, D: Smooth
- B: Wide vertical ribs or flutes
- C: Wide horizontal ribs or flutes
- E: None

Type II —Semi-Light Diffusing
- A, D: Narrow vertical ribs or flutes
- B, C: Etched or stippled
- E: None

Type III—Light Diffusing
- A, D: Narrow vertical ribs or flutes
- B, C: Etched or stippled
- E: Glass fiber screen

Type IV—Light Diffusing
- A, D: Close pitch deep horizontal corrugations
- B, C: Vertical light diffusing prisms
- E: None

Type IVA—Light Diffusing
- Same as IV except corrugations vertical

Type V —Light Directing
- A, D: Close pitch deep vertical corrugations
- B, C: Horizontal light directing prisms
- E: None

TABLE 23. INSTANTANEOUS RATE OF HEAT GAIN DUE TO TRANSMITTED DIRECT AND DIFFUSE SOLAR RADIATION BY UNSHADED WALLS OF 8-IN. HOLLOW GLASS BLOCK OF TYPE I PATTERN

For Clear Atmospheres and 18 Deg Declination, North (August 1)

Note: For total instantaneous heat gain add these values to Table 24 values

Latitude	Sun Time AM→ ↓		Instantaneous Heat Gain in Btu per (hr) (sq ft) N	NE	E	SE	S	SW	W	NW
30 Deg North	6 a.m.	6 p.m.	4	45	55	12	2	2	2	2
	7	5	5	59	94	29	4	3	3	3
	8	4	5	42	94	38	5	4	4	4
	9	3	5	25	59	34	6	5	5	5
	10	2	6	12	27	24	9	6	6	6
	11	1	6	8	12	13	10	7	6	6
	12		6	6	7	8	9	8	7	6
40 Deg North	5 a.m.	7 p.m.	1	3	3	0	0	0	0	0
	6	6	5	50	67	17	2	2	2	2
	7	5	4	54	98	36	4	4	4	4
	8	4	5	34	90	47	5	4	4	4
	9	3	5	18	59	47	10	5	5	5
	10	2	6	8	29	35	15	5	6	6
	11	1	6	6	13	22	18	7	6	6
	12		6	6	6	13	17	13	6	6
50 Deg North	5 a.m.	7 p.m.	4	28	27	4	1	1	1	1
	6	6	5	53	77	22	3	2	2	2
	7	5	4	44	101	44	4	4	4	4
	8	4	4	26	86	57	7	4	4	4
	9	3	5	12	57	60	16	5	5	5
	10	2	5	6	29	54	25	6	5	5
	11	1	6	6	14	34	32	10	6	6
	12		6	6	6	20	34	20	6	6
		PM→	N	NW	W	SW	S	SE	E	NE

TABLE 24. INSTANTANEOUS RATES OF HEAT GAIN BY CONVECTION AND RADIATION FROM UNSHADED WALLS OF 8-IN. HOLLOW GLASS BLOCK OF PATTERNS TYPE I, II, III, IV, IVA AND V[a]

For Clear Atmospheres and 18 Deg Declination, North (August 1)

For 75 F Indoor Temperature

Note: For total instantaneous heat gain add these values to values in Table 21, or Table 23 adjusted by Table 25 factors.

Sun Time	Dry-Bulb Fahr.		Instantaneous Heat Gain in Btu per (hr) (sq ft) N	NE	E	SE	S	SW	W	NW
5 a.m.	74		−1	−1	−1	−1	−1	−1	−1	−1
6	74		2	5	6[a]	5	0	0	0	0
7	75		3	17	19[a]	15	1	1	1	1
8	77		2	23	28[a]	23	3	2	2	2
9	80		2	22	35	29	7	3	4	3
10	83		4	14	38	34	14	5	5	5
11	87		6	8	31	34	21	7	8	7
12	90	40	8	10	18	28	25	11	10	9
1 p.m.	93	Degrees	10	12	16	16	28	27	14	11
2	94	North	11	12	17	13	27	39	30	13
3	95	Latitude	13	13	18	13	23	46	43	19
4	94		13	13	17	13	18	47	46	32
5	93		13	12	15	12	15	45	44[a]	37
6	91		15	11	13	11	13	37	37[a]	31
7	87		13	9	10	9	10	21	23[a]	17
8	85		9	6	6	6	6	9	9	6
9	83		6	5	4	5	4	5	6	5

Sun Time	Dry-Bulb	Latitude	SE	S	SW	Latitude	SE	S	SW
5 a.m.	74		−1	−1	−1		−1	−1	−1
6	74		3	0	0		7	0	0
7	75		13	1	1		15	1	1
8	77		22	2	2		23	2	2
9	80		28	3	4		29	8	3
10	83		31	6	6		34	17	4
11	87		28	10	7		37	24	6
12	90	30[b]	20	14	9	50[b]	35	30	19
1 p.m.	93	Degrees	12	17	18	Degrees	25	33	33
2	94	North	13	18	32	North	14	34	41
3	95	Latitude	14	16	41	Latitude	13	30	45
4	94		14	15	45		13	22	46
5	93		13	13	43		12	14	45
6	91		12	11	34		11	12	38
7	87		8	8	17		9	9	25
8	85		6	6	8		6	6	12
9	83		5	5	5		5	5	5

[a] For types III, IV, IVA and V patterns and 30, 40 and 50 deg latitudes, multiply east wall values for 6, 7 and 8 a.m. by 1.40, and west wall values for 5, 6 and 7 p.m. by 1.25.

[b] For N, NE, E, W and NW use 40 deg North Latitude values.

and diffuse solar radiation, while Table 24 gives values of instantaneous rates of heat gain by convection and radiation from the wall. The latter values are for an indoor temperature of 75 F and a 95 F maximum dry-bulb temperature, as indicated in the table, and are based upon experimentally-determined values of solar energy absorption and temperature difference between the two faces. Because the exact dependence of the latter on weather conditions has not been determined, the values of convection and radiation gain cannot be regarded as exact for the assumed design conditions. Indoor and outdoor convection and radiation heat transfer data are the same as those used for common window glass. Table 26 gives corrections to be applied for other design temperatures.

To obtain transmitted direct and diffuse solar radiation for other types of 8-in. block, the Table 23 values are multiplied by the approximate per-