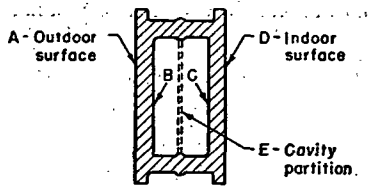
TABLE 19. DESCRIPTION OF GLASS BLOCK PATTERNS



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 20. 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 21 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 21. 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 80 F Indoor Temperature

Note: For total instantaneous heat gain add these values to values in Table 18, or Table 20 adjusted by Table 22 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		−3	−3	−3	−3	−3	−3	−3	−3
6	74		0	3	4[a]	3	−2	−2	−2	−2
7	75		1	15	17[a]	13	−1	−1	−1	−1
8	77		0	21	26[a]	21	1	0	0	0
9	80		0	20	33	27	5	1	2	1
10	83		2	12	36	32	12	3	3	3
11	87		4	6	29	32	19	5	6	5
12	90	40	6	8	16	26	23	9	8	7
1 p.m.	93	Degrees	8	10	14	14	26	25	12	9
2	94	North	9	10	15	11	25	37	28	11
3	95	Latitude	11	11	16	11	21	44	41	17
4	94		11	11	15	11	16	45	44	30
5	93		11	10	13	10	13	43	42[a]	35
6	91		13	9	11	9	11	35	35[a]	29
7	87		11	7	8	7	8	19	21[a]	15
8	85		7	4	4	4	4	7	7	4
9	83		4	3	2	3	2	3	4	3

Sun Time	Dry-Bulb	Latitude	SE	S	SW	Latitude	SE	S	SW
5 a.m.	74		−3	−3	−3		−3	−3	−3
6	74		−1	−2	−2		5	−2	−2
7	75		11	−1	−1		13	−1	−1
8	77		20	0	0		21	0	0
9	80		26	1	2		27	6	1
10	83		29	4	4		32	15	2
11	87		26	8	5		35	22	4
12	90	30[b]	18	12	7	50[b]	33	28	17
1 p.m.	93	Degrees	10	15	16	Degrees	23	31	31
2	94	North	11	16	30	North	12	32	39
3	95	Latitude	12	14	39	Latitude	11	28	43
4	94		12	13	43		11	20	44
5	93		11	11	41		10	12	43
6	91		10	9	32		9	10	36
7	87		6	6	15		7	7	23
8	85		4	4	6		4	4	10
9	83		3	3	3		3	3	3

[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.

Design Tables for Rolled Figured Glass

Tables 17 and 18 give design values of instantaneous rates of heat gain for a number of common patterns of single vertical sheets of rolled figured glass. The tables are for a solar declination of 18 deg, which corresponds to a nominal August 1 day, and are based upon the solar intensity values for a clear atmosphere as given in Table 4. The values are given in terms of corrections to apply to Tables 13 and 14. The heat gain due to transmitted solar radiation is found by multiplying the Table 13 values by the approximate percentages given in Table 18. To obtain instantaneous rates of heat gain by convection and radiation, Table 16 values are multiplied by the appropriate value of Y from Table 17 and then added to