TABLE 15. APPLICATION FACTORS TO APPLY TO TABLES 13, 14 and 16 TO OBTAIN INSTANTANEOUS RATES OF HEAT GAIN FOR VARIOUS TYPES OF SINGLE FLAT GLASS AND COMBINATIONS OF TWO SHEETS OF FLAT GLASS SPACED AT ¼ IN.

GLASS[a]	NORMAL INCIDENCE TRANSMITTANCE	FACTOR TO APPLY TO TABLE 13	FACTOR TO APPLY TO TABLE 14
Single Common Window	0.87	1.00	$1.0(X)^c + 0.0(Y)^d$
Single Regular Plate	0.77	0.87	$1.0(X) + 0.25(Y)$
Single Heat Absorbing Plate	0.41	0.46[b]	$1.0(X) + 1.00(Y)$
Double Common Window	0.76	0.85	$0.6(X) + 0.10(Y)$
Double Regular Plate	0.60	0.66[b]	$0.6(X) + 0.55(Y)$
Heat Absorbing Plate Outdoors, Regular Plate Indoors	0.35	0.37[b]	$0.6(X) + 0.75(Y)$

[a] Common window glass ⅛ in. thick. Plate glass ¼ in. thick.
[b] For better precision, increase factors 10 percent when glass is in the shade.
[c] X values are Table 14 values. [d] Y values are Table 16 values.

TABLE 16. HEAT ABSORBED IN GLASS. VALUES OF Y TO BE USED WITH FACTORS IN TABLE 15 AND TABLE 17 IN THE DETERMINATION OF INSTANTANEOUS RATES OF HEAT GAIN DUE TO CONVECTION AND RADIATION FOR VARIOUS TYPES OF SINGLE GLASS AND COMBINATIONS OF TWO SHEETS OF GLASS SPACED AT ¼ IN.

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

SUN TIME		VALUES OF Y IN BTU PER (HR) (SQ FT)[a]								
		N	NE	E	SE	S	SW	W	NW	HORIZ.
5 a.m.		0	0	1	0	0	0	0	0	0
6		4	16	18	9	1	1	1	1	3
7		2	24	30	20	2	2	2	2	11
8		2	22	33	25	2	2	2	2	21
9		2	16	30	29	8	3	3	3	32
10		3	5	25	27	14	3	3	3	37
11	40 DEGREES NORTH LATITUDE	3	3	12	21	18	3	3	3	42
12		3	3	3	15	19	12	3	3	45
1 p.m.		3	3	3	3	19	22	10	3	44
2		3	3	3	3	16	27	24	4	41
3		3	3	3	3	10	30	31	15	35
4		3	3	3	3	4	29	36	23	26
5		2	2	2	2	2	23	34	27	17
6		4	1	1	1	1	14	24	21	6
7		0	0	0	0	0	2	3	3	1

SUN TIME	LATITUDE	SE	S	SW	SUN TIME	LATITUDE	SE	S	SW
5 a.m.		0	0	0	5 a.m.		2	0	0
6		7	1	1	6		13	1	1
7		18	2	2	7		22	2	2
8		22	2	2	8		28	3	2
9		24	3	3	9		30	13	3
10		22	5	3	10		31	20	3
11	30[b] DEGREES NORTH LATITUDE	16	7	3	11	50[b] DEGREES NORTH LATITUDE	27	25	5
12		6	9	4	12		20	27	17
1 p.m.		3	9	14	1 p.m.		9	25	26
2		3	6	21	2		3	22	32
3		3	5	27	3		3	16	33
4		3	3	26	4		2	7	31
5		2	2	21	5		2	2	26
6		1	1	11	6		1	1	17
7		0	0	0	7		0	0	7

[a] Values of Y for 8 and 9 p.m. are zero.
[b] For N, NE, E, W, NW and horizontal use 40 deg North Latitude values.

TABLE 17. APPLICATION FACTORS TO APPLY TO TABLES 14 AND 16 TO OBTAIN INSTANTANEOUS RATES OF HEAT GAIN FOR VERTICAL SINGLE SHEETS OF ROLLED FIGURED GLASS HAVING NORMAL INCIDENCE TRANSMITTANCES AND LISTED THICKNESSES

(SMOOTH SIDE INDOORS, FIGURED SIDE OUTDOORS)

(See Table 18 for Factors to Apply to Table 13 Values)

GLASS PATTERN	NORMAL INCIDENCE TRANSMITTANCE	THICKNESS, INCHES	FACTOR TO APPLY TO TABLE 14
Hammered	0.75	7/32	$1.0(X)^a + 0.50(Y)^{b,c}$
Hammered, etched both sides	0.67	7/32	$1.0(X) + 0.65(Y)^d$
Deep ribs on ½ in. centers	0.77 approx.	7/32	$1.0(X) + 0.50(Y)^e$
Hammered heat absorbing	0.21	¼	$1.0(X) + 1.15(Y)^f$
Hammered heat absorbing, etched both sides	0.14	¼	$1.0(X) + 1.40(Y)$

[a] X values are Table 14 values
[b] Y values are Table 16 values
[c] Use $0.40(Y)$ for east and west glass
[d] Use $0.60(Y)$ for east and west glass
[e] Use $0.35(Y)$ for east and west glass
[f] Use $0.95(Y)$ for south glass

TABLE 18. INSTANTANEOUS RATES OF HEAT GAIN DUE TO TRANSMITTED DIRECT AND DIFFUSE SOLAR RADIATION BY UNSHADED ROLLED FIGURED GLASS

Multiply the Table 13 Values by These Percentage Factors

For Clear Atmospheres and 18 Degrees Declination, North (August 1) For 30, 40, and 50 Degrees North Latitude

Note: To obtain total instantaneous heat gain add adjusted Table 18 values to adjusted Table 14 values

INSTANTANEOUS HEAT GAIN DUE TO TRANSMITTED SOLAR RADIATION AS A PERCENTAGE OF SINGLE SHEET OF COMMON WINDOW GLASS

SUN TIME		HAMMERED					HAMMERED AND ETCHED				
AM → ↓		N, NW W, SW	NE	E	SE	S	N, NW W, SW	NE	E	SE	S
5 a.m.	7 p.m.	80	80	85	70	80	60	65	75	55	60
6	6	80	85	85	75	80	60	65	75	50	60
7	5	80	80	85	80	80	60	60	70	55	60
8	4	80	75	85	80	75	60	55	65	55	60
9	3	80	60	80	80	60	60	50	55	55	50
10	2	80	65	75	75	65	60	55	50	55	50
11	1	80	80	60	70	65[a]	60	60	50	50	50
12		80	80	80	60	65[a]	60	60	60	50	50

SUN TIME		RIBS ON ½ IN. CENTERS					HAMMERED HEAT ABSORBING				
5 a.m.	7 p.m.	60	75	85	25	60	25	20	25	20	25
6	6	60	80	85	30	60	25	20	25	20	25
7	5	60	65	85	40	60	25	20	25	20	25
8	4	60	40	80	50	55	25	20	20	20	25
9	3	60	30	70	55	35	25	20	20	20	20
10	2	60	40	40	55	35	25	20	20	20	20
11	1	60	60	35	40	35[b]	25	25	20	20	20
12		60	60	60	35	45[b]	25	25	25	20	20
	↑ PM →	N, NE E, SE	NW	W	SW	S	N, NE E, SE	NW	W	SW	S

SUN TIME		HAMMERED AND ETCHED HEAT ABSORBING				
AM → ↓		N, NW W, SW	NE	E	SE	S
5 a.m.	7 p.m.	20	15	15	10	20
6	6	20	15	15	10	20
7	5	20	10	15	10	20
8	4	20	10	15	10	20
9	3	20	10	10	10	10
10	2	20	15	10	10	10
11	1	20	20	10	10	10
12		20	20	20	10	10
	↑ PM →	N, NE E, SE	NW	W	SW	S

[a] Decrease values 10 percent for 30 deg latitude; increase 15 percent for 50 deg latitude

[b] Increase values 30 percent for 50 deg latitude