

TABLE 6. SOLAR RADIATION TRANSMITTED BY SINGLE UNSHADED GLASS FOR VARIOUSLY ORIENTED VERTICAL SURFACES AND A HORIZONTAL SURFACE

For 35 Deg North Latitude on August 1a, b, c

SUN TIME	SOLAR ALTITUDE	SOLAR RADIATION TRANSMITTED, BTU PER (HOUR) (SQUARE FOOT)							
		North-east	East	South-east	South	South-west	West	North-west	Horizontal
6 A.M.	10.0	98	109	54	4	4	4	4	31
7	22.5	143	179	110	11	11	11	11	100
8	34.5	133	194	140	39	14	14	14	167
9	46.5	93	173	144	31	15	15	15	225
10	58.5	41	128	131	50	16	16	16	270
11	68.5	16	59	94	62	45	16	16	299
12	73.0	16	16	45	68	45	16	16	309
1 P.M.	68.5	16	16	45	62	94	59	16	299
2	58.5	16	16	16	50	131	128	41	270
3	46.5	15	15	15	31	144	173	93	225
4	34.5	14	14	14	39	140	194	133	167
5	22.5	11	11	11	11	110	179	143	100
6	10.0	4	4	4	4	54	109	98	31

*The values of solar radiation are for a relatively clear atmosphere. In heavily industrialized and hazy atmosphere it may be necessary to reduce values as much as 10 per cent.

^bValues are for sea level. Approximate correction for altitude can be made by increasing the values 1 per cent per thousand feet of altitude.

^cValues in the tables may be used approximately for times of the year other than August 1 by choosing a table for a latitude differing from the geographical latitude by the difference of declination of the sun at the desired date and at August 1 (17.5 deg).

TABLE 7. SOLAR RADIATION TRANSMITTED BY SINGLE UNSHADED GLASS FOR VARIOUSLY ORIENTED VERTICAL SURFACES AND A HORIZONTAL SURFACE

For 40 Deg North Latitude on August 1a, b, c

SUN TIME	SOLAR ALTITUDE	SOLAR RADIATION TRANSMITTED, BTU PER (HOUR) (SQUARE FOOT)							
		North-east	East	South-east	South	South-west	West	North-west	Horizontal
5 A.M.	1.5	18	17	6	1	1	1	1	7
6	11.5	106	121	62	5	5	5	5	38
7	23.0	141	181	118	11	11	11	11	102
8	34.5	122	194	147	19	14	14	14	167
9	45.5	76	170	156	42	15	15	15	220
10	56.0	30	125	144	66	16	16	16	262
11	64.5	16	53	110	87	25	16	16	290
12	68.0	16	16	59	94	59	16	16	298
1 P.M.	64.5	16	16	25	87	110	53	16	290
2	56.0	16	16	16	66	144	125	30	262
3	45.5	15	15	15	42	156	170	76	220
4	34.5	14	14	14	18	147	193	122	167
5	23.0	11	11	11	11	118	181	141	102
6	11.5	5	5	5	5	62	121	106	38
7	1.5	1	1	1	1	6	17	18	7

*The values of solar radiation are for a relatively clear atmosphere. In heavily industrialized and hazy atmosphere it may be necessary to reduce values as much as 10 per cent.

^bValues are for sea level. Approximate correction for altitude can be made by increasing the values 1 per cent per thousand feet of altitude.

^cValues in the tables may be used approximately for times of the year other than August 1 by choosing a table for a latitude differing from the geographical latitude by the difference of declination of the sun at the desired date and at August 1 (17.5 deg).

TABLE 8. SOLAR RADIATION TRANSMITTED BY SINGLE UNSHADED GLASS FOR VARIOUSLY ORIENTED VERTICAL SURFACES AND A HORIZONTAL SURFACE

For 45 Deg North Latitude on August 1a, b, c

SUN TIME	SOLAR ALTITUDE	SOLAR RADIATION TRANSMITTED, BTU PER (HOUR) (SQUARE FOOT)							
		North-east	East	South-east	South	South-west	West	North-west	Horizontal
5 A.M.	2.0	23	23	17	1	1	1	1	11
6	12.5	111	129	68	6	6	6	6	44
7	23.0	135	182	144	11	11	11	11	103
8	33.5	115	190	151	24	14	14	14	163
9	44.0	63	168	163	55	15	15	15	214
10	53.0	24	123	154	88	16	16	16	251
11	60.0	16	56	127	113	30	16	16	277
12	63.0	16	16	76	119	76	16	16	285
1 P.M.	60.0	16	16	30	113	127	56	16	277
2	53.0	16	16	16	88	154	123	24	251
3	44.0	15	15	15	55	163	168	63	214
4	33.5	14	14	14	24	151	190	115	163
5	23.0	11	11	11	11	144	182	135	103
6	12.5	6	6	6	6	68	129	111	44
7	2.0	1	1	1	1	17	23	23	11

*The values of solar radiation are for a relatively clear atmosphere. In heavily industrialized and hazy atmosphere it may be necessary to reduce values as much as 10 per cent.

^bValues are for sea level. Approximate correction for altitude can be made by increasing the values 1 per cent per thousand feet of altitude.

^cValues in the tables may be used approximately for times of the year other than August 1 by choosing a table for a latitude differing from the geographical latitude by the difference of declination of the sun at the desired date and at August 1 (17.5 deg).

TABLE 9. SOLAR RADIATION TRANSMITTED BY SINGLE UNSHADED GLASS FOR VARIOUSLY ORIENTED VERTICAL SURFACES AND A HORIZONTAL SURFACE

For 50 Deg North Latitude on August 1a, b, c

SUN TIME	SOLAR ALTITUDE	SOLAR RADIATION TRANSMITTED, BTU PER (HOUR) (SQUARE FOOT)							
		North-east	East	South-east	South	South-west	West	North-west	Horizontal
5 A.M.	4.5	48	48	18	2	2	2	2	8
6	13.5	119	139	78	6	6	6	6	49
7	23.5	131	183	127	11	11	11	11	104
8	33.0	105	190	161	32	13	13	13	159
9	42.0	52	168	173	71	14	14	14	204
10	50.0	19	125	166	109	16	16	16	240
11	56.0	16	58	144	136	41	16	16	261
12	58	16	16	92	140	92	16	16	269
1 P.M.	56	16	16	41	136	144	58	16	261
2	50	16	16	16	109	166	125	19	240
3	42	14	14	14	71	173	168	52	204
4	33	13	13	13	32	161	190	105	159
5	23.5	11	11	11	11	127	183	131	104
6	13.5	6	6	6	6	78	139	119	49
7	4.5	2	2	2	2	18	48	48	8

*The values of solar radiation are for a relatively clear atmosphere. In heavily industrialized and hazy atmosphere it may be necessary to reduce values as much as 10 per cent.

^bValues are for sea level. Approximate correction for altitude can be made by increasing the values 1 per cent per thousand feet of altitude.

^cValues in the tables may be used approximately for times of the year other than August 1 by choosing a table for a latitude differing from the geographical latitude by the difference of declination of the sun at the desired date and at August 1 (17.5 deg).