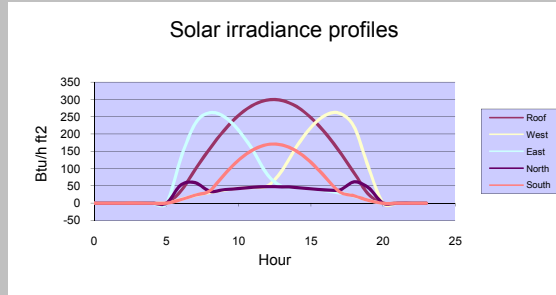


DESIGN CLIMATE CONDITIONS

City Toronto

Standard Meridian	75	degree
Latitude	43.7	degree
Longitude	79.63	degree
Design winter temperature	-2.9	°F
Design winter humidity ratio	3.3	grain/lb
Design summer dry-bulb temperature	87.0	°F
Coincident wet-bulb temperature	71.4	°F
Design summer humidity ratio	93.0	grain/lb
Mean daily temperature range	19.1	°F
Mean ground temperature	40.1	°F
Ground surface temperature amplitude	27	°F
Sky clearness	1.0	
Ground reflectivity	0.2	
Daylight savings time	No	



Design daily temperature and solar irradiance profiles

*LST	ΔT%	T _o , °F	Solar temperature, °F					Solar irradiance, Btu/h ft ²				
			Roof	West	East	North	South	Roof	West	East	North	South
0	82%	71.3	64.3	71.3	71.3	71.3	71.3	0	0	0	0	0
1	87%	70.4	63.4	70.4	70.4	70.4	70.4	0	0	0	0	0
2	92%	69.4	62.4	69.4	69.4	69.4	69.4	0	0	0	0	0
3	96%	68.7	61.7	68.7	68.7	68.7	68.7	0	0	0	0	0
4	99%	68.1	61.1	68.1	68.1	68.1	68.1	0	0	0	0	0
5	100%	67.9	60.9	67.9	67.9	67.9	67.9	0	0	0	0	0
6	98%	68.3	68.4	70.2	91.3	77.5	70.2	36	11	131	53	11
7	93%	69.2	81.9	73.2	109.8	79.5	73.4	98	22	232	59	24
8	84%	71.0	95.6	76.4	116.7	76.9	77.2	158	31	261	34	36
9	71%	73.4	108.7	80.0	117.2	80.2	88.0	211	37	250	39	83
10	56%	76.3	120.1	83.7	113.1	83.7	98.1	254	42	210	42	125
11	39%	79.6	129.3	87.6	106.1	87.6	106.6	284	46	151	46	155
12	23%	82.6	135.3	91.3	96.9	90.9	112.3	298	50	82	47	170
13	11%	84.9	137.3	101.4	93.5	93.2	114.3	297	94	49	47	168
14	3%	86.4	135.3	114.9	94.4	94.4	112.7	279	163	45	45	150
15	0%	87.0	129.5	125.3	94.3	94.3	107.7	247	219	42	42	118
16	3%	86.4	119.9	130.9	92.8	93.1	99.6	203	254	36	38	75
17	10%	85.1	107.7	130.5	90.3	91.7	90.8	148	260	30	38	32
18	21%	83.0	93.4	121.5	86.6	93.7	86.7	87	220	21	61	21
19	34%	80.5	78.6	98.4	81.9	88.2	81.9	25	102	8	44	8
20	47%	78.0	71.0	78.0	78.0	78.0	78.0	0	0	0	0	0
21	58%	75.9	68.9	75.9	75.9	75.9	75.9	0	0	0	0	0
22	68%	74.0	67.0	74.0	74.0	74.0	74.0	0	0	0	0	0
23	76%	72.5	65.5	72.5	72.5	72.5	72.5	0	0	0	0	0

*LST - local standard time