

# Cooling Sizing Report

## Project Details

TBD File: Training - Design Sizing.tbd  
Building Name: Training  
Date: Friday, 20 August, 2021

## Weather Data

Hour	Global Radiation (W/m <sup>2</sup> )	Diffuse Radiation (W/m <sup>2</sup> )	Cloud Cover (0-1)	Dry Bulb Temperature (°C)	Relative Humidity (%)	Wind Speed (m/s)	Wind Direction (°)
1	0	0	0.13	20.5	29	0.2	21
2	0	0	0.13	18.2	89	0.4	3
3	0	0	0.13	15.6	91	0.2	11
4	0	0	0.13	15	92	1	30
5	0	0	0.13	14.7	93	0.5	3
6	21	12	0.18	16.3	92	0.6	15
7	99	79	0.63	20	81	0.3	48
8	373	100	0	22.8	70	0.4	81
9	523	134	0	25.3	60	0.9	169
10	630	139	0	28.1	46	1.6	167
11	665	144	0	29.3	38	2.4	179
12	712	160	0	30.4	36	2.4	185
13	686	206	0	31.3	32	2.7	189
14	606	204	0	31.8	32	2.9	227
15	590	201	0	32	31	3.3	223
16	567	199	0	31.9	30	3.2	248
17	451	169	0	31.7	29	3.3	221
18	129	74	0.23	30.2	32	2.9	224
19	99	74	0.54	28.8	34	2.3	343
20	49	42	0.74	27.3	31	1.1	13
21	0	0	0.15	25.8	16	0.8	338
22	0	0	0.15	24.3	47	0.7	269
23	0	0	0.15	22.8	47	0.7	269
24	0	0	0.15	21.5	53	0.7	323
Peaks:	712	206	0.74	32	93	3.3	N/A

# Cooling Sizing Report

## Zone Breakdown for Zone: B1\_Office 1

Area (m<sup>2</sup>): 36.90  
 Volume (m<sup>3</sup>): 107.02

### Internal Condition Summary

Hour	Infiltration (ach)	Ventilation (ach)	Lighting Gain (W/m <sup>2</sup> )	Sensible Occupancy Gain (W/m <sup>2</sup> )	Latent Occupancy Gain (W/m <sup>2</sup> )	Sensible Equipment Gain (W/m <sup>2</sup> )	Latent Equipment Gain (W/m <sup>2</sup> )	Cooling Setpoint (°C)
1	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
2	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
3	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
4	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
5	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
6	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
7	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
8	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
9	0.15	0	0	0.00	0.00	0.00	0.00	24
10	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
11	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
12	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
13	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
14	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
15	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
16	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
17	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
18	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
19	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
20	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
21	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
22	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
23	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
24	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling

Lighting Function: plcl,0,0.82,65.00,0.00,400.00,0.00,0.30,1,0.00,0.80,1

Ventilation Function: N/A

# Cooling Sizing Report

## Sensible Energy Breakdown

Hour	Solar Gain (W)	Lighting Gain (W)	Infiltration and Ventilation Gain (W)	Air Movement Gain (W)	Building Heat Transfer Gain (W)	External Conduction (W)	Sensible Occupancy and Equipment Gains (W)	Required Sensible Cooling Load (W)
1	0.00	0.00	-19.13	1.15	103.96	-85.98	0.00	0.00
2	0.00	0.00	-30.26	2.72	116.41	-88.89	0.00	0.00
3	0.00	0.00	-42.91	4.00	132.85	-93.94	0.00	0.00
4	0.00	0.00	-45.18	4.60	140.11	-99.54	0.00	0.00
5	0.00	0.00	-46.06	5.50	146.86	-106.26	0.00	0.00
6	6.06	0.00	-37.29	5.22	140.86	-114.86	0.00	0.00
7	46.99	0.00	-18.27	1.69	106.90	-137.28	0.00	0.00
8	68.84	0.00	-4.49	0.34	80.62	-145.32	0.00	0.00
9	92.43	0.00	7.25	-0.99	50.81	-149.53	0.00	0.00
10	97.88	169.54	179.14	0.00	10.29	-195.02	498.18	760.02
11	103.54	165.03	231.56	0.00	1.33	-164.34	498.18	835.26
12	121.47	150.78	279.60	0.00	-11.72	-141.71	498.18	896.62
13	167.22	111.19	318.92	0.00	-27.83	-130.44	498.18	937.22
14	222.04	113.55	340.76	0.00	-49.07	-130.04	498.18	995.45
15	298.04	116.20	349.49	0.00	-73.90	-140.07	498.18	1047.93
16	369.47	117.99	345.13	0.00	-94.87	-148.31	498.18	1087.61
17	378.34	143.59	336.39	0.00	-100.88	-136.36	498.18	1119.28
18	122.23	223.36	270.87	0.00	-45.11	-29.48	498.18	1040.07
19	85.16	0.00	20.63	-20.57	-52.27	-32.98	0.00	0.00
20	32.38	0.00	11.67	-16.26	-1.68	-26.12	0.00	0.00
21	0.00	0.00	4.27	-7.42	35.78	-32.63	0.00	0.00
22	0.00	0.00	-2.78	-2.97	54.15	-48.42	0.00	0.00
23	0.00	0.00	-9.58	0.04	72.60	-63.05	0.00	0.00
24	0.00	0.00	-15.24	1.06	88.03	-73.79	0.00	0.00

Peak Hourly Sensible Cooling Load (W): 1119.28

Size Factor: 1.00

Sensible Cooling Load, Including Size Fractions, (W): 1119.28

Sensible Cooling Load Per Unit Area, Including Size Fractions, (W/m<sup>2</sup>): 30.33

Sensible Cooling Load Per Unit Volume, Including Size Fractions, (W/m<sup>3</sup>): 10.46

# Cooling Sizing Report

## Zone Breakdown for Zone: B1\_Office 2

Area (m<sup>2</sup>): 38.73  
 Volume (m<sup>3</sup>): 112.30

### Internal Condition Summary

Hour	Infiltration (ach)	Ventilation (ach)	Lighting Gain (W/m <sup>2</sup> )	Sensible Occupancy Gain (W/m <sup>2</sup> )	Latent Occupancy Gain (W/m <sup>2</sup> )	Sensible Equipment Gain (W/m <sup>2</sup> )	Latent Equipment Gain (W/m <sup>2</sup> )	Cooling Setpoint (°C)
1	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
2	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
3	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
4	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
5	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
6	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
7	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
8	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
9	0.15	0	0	0.00	0.00	0.00	0.00	24
10	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
11	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
12	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
13	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
14	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
15	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
16	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
17	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
18	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
19	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
20	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
21	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
22	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
23	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
24	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling

Lighting Function: plcl,0,0.82,65.00,0.00,400.00,0.00,0.30,1,0.00,0.80,1

Ventilation Function: N/A

# Cooling Sizing Report

## Sensible Energy Breakdown

Hour	Solar Gain (W)	Lighting Gain (W)	Infiltration and Ventilation Gain (W)	Air Movement Gain (W)	Building Heat Transfer Gain (W)	External Conduction (W)	Sensible Occupancy and Equipment Gains (W)	Required Sensible Cooling Load (W)
1	0.00	0.00	-19.99	6.30	111.58	-97.80	0.00	0.00
2	0.00	0.00	-31.64	9.32	118.21	-95.86	0.00	0.00
3	0.00	0.00	-44.94	8.65	129.02	-92.69	0.00	0.00
4	0.00	0.00	-47.36	7.15	130.66	-90.45	0.00	0.00
5	0.00	0.00	-48.33	6.09	132.01	-89.78	0.00	0.00
6	3.22	0.00	-39.12	5.69	122.17	-91.95	0.00	0.00
7	26.27	0.00	-19.09	6.81	89.88	-103.87	0.00	0.00
8	42.46	0.00	-4.61	8.03	65.65	-111.47	0.00	0.00
9	57.86	0.00	7.71	7.12	43.71	-116.40	0.00	0.00
10	58.82	241.91	187.99	0.00	-18.85	-174.16	522.80	818.52
11	57.52	239.60	243.00	0.00	-10.51	-162.04	522.80	890.33
12	61.98	232.29	293.42	0.00	-7.77	-153.11	522.80	949.58
13	78.68	211.99	334.68	0.00	-9.04	-148.20	522.80	990.92
14	84.48	213.20	357.60	0.00	-8.07	-143.54	522.80	1026.46
15	91.71	214.56	366.76	0.00	-6.41	-141.69	522.80	1047.73
16	100.01	215.47	362.18	0.00	-4.45	-142.06	522.80	1053.95
17	89.99	228.60	353.01	0.00	2.46	-138.11	522.80	1058.73
18	40.66	269.51	284.25	0.00	13.63	-121.70	522.80	1009.12
19	50.82	0.00	21.99	20.15	9.55	-102.48	0.00	0.00
20	15.55	0.00	12.57	21.93	46.01	-96.01	0.00	0.00
21	0.00	0.00	4.73	18.18	70.93	-93.82	0.00	0.00
22	0.00	0.00	-2.72	13.44	83.88	-94.59	0.00	0.00
23	0.00	0.00	-9.91	9.88	95.58	-95.52	0.00	0.00
24	0.00	0.00	-15.86	8.84	102.90	-95.85	0.00	0.00

Peak Hourly Sensible Cooling Load (W): 1058.73

Size Factor: 1.00

Sensible Cooling Load, Including Size Fractions, (W): 1058.73

Sensible Cooling Load Per Unit Area, Including Size Fractions, (W/m<sup>2</sup>): 27.34

Sensible Cooling Load Per Unit Volume, Including Size Fractions, (W/m<sup>3</sup>): 9.43

# Cooling Sizing Report

## Zone Breakdown for Zone: B1\_Office 3

Area (m<sup>2</sup>): 15.93

Volume (m<sup>3</sup>): 46.19

### Internal Condition Summary

Hour	Infiltration (ach)	Ventilation (ach)	Lighting Gain (W/m <sup>2</sup> )	Sensible Occupancy Gain (W/m <sup>2</sup> )	Latent Occupancy Gain (W/m <sup>2</sup> )	Sensible Equipment Gain (W/m <sup>2</sup> )	Latent Equipment Gain (W/m <sup>2</sup> )	Cooling Setpoint (°C)
1	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
2	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
3	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
4	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
5	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
6	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
7	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
8	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
9	0.15	0	0	0.00	0.00	0.00	0.00	24
10	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
11	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
12	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
13	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
14	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
15	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
16	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
17	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
18	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
19	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
20	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
21	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
22	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
23	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
24	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling

Lighting Function: plcl,0,0.82,65.00,0.00,400.00,0.00,0.30,1,0.00,0.80,1

Ventilation Function: N/A

# Cooling Sizing Report

## Sensible Energy Breakdown

Hour	Solar Gain (W)	Lighting Gain (W)	Infiltration and Ventilation Gain (W)	Air Movement Gain (W)	Building Heat Transfer Gain (W)	External Conduction (W)	Sensible Occupancy and Equipment Gains (W)	Required Sensible Cooling Load (W)
1	0.00	0.00	-8.30	-0.05	43.67	-35.36	0.00	0.00
2	0.00	0.00	-13.11	0.08	46.50	-33.50	0.00	0.00
3	0.00	0.00	-18.57	0.76	52.32	-34.53	0.00	0.00
4	0.00	0.00	-19.55	0.42	53.19	-34.08	0.00	0.00
5	0.00	0.00	-19.94	0.16	54.32	-34.52	0.00	0.00
6	1.82	0.00	-16.15	-0.92	49.90	-34.70	0.00	0.00
7	18.28	0.00	-7.95	-3.46	32.50	-39.43	0.00	0.00
8	25.80	0.00	-2.01	-3.21	24.50	-45.15	0.00	0.00
9	36.46	0.00	3.09	-3.73	14.86	-50.71	0.00	0.00
10	41.52	76.86	77.31	0.00	-5.10	-70.32	215.00	335.27
11	47.41	75.16	99.93	0.00	-6.49	-65.26	215.00	365.74
12	59.40	69.78	120.67	0.00	-12.12	-61.14	215.00	391.65
13	81.44	54.83	137.64	0.00	-19.99	-58.98	215.00	409.97
14	118.21	55.72	147.06	0.00	-34.70	-64.42	215.00	436.93
15	178.99	56.72	150.83	0.00	-57.27	-79.15	215.00	465.16
16	254.99	57.39	148.95	0.00	-84.58	-98.90	215.00	492.91
17	273.01	67.06	145.18	0.00	-92.34	-99.90	215.00	508.05
18	68.12	97.19	116.90	0.00	-25.86	-29.84	215.00	441.57
19	35.26	0.00	8.87	-6.53	-14.23	-23.38	0.00	0.00
20	15.00	0.00	4.99	-6.02	8.59	-22.59	0.00	0.00
21	0.00	0.00	1.80	-2.30	26.01	-25.59	0.00	0.00
22	0.00	0.00	-1.24	-1.16	30.00	-27.68	0.00	0.00
23	0.00	0.00	-4.17	-0.27	34.94	-30.57	0.00	0.00
24	0.00	0.00	-6.61	0.08	38.76	-32.30	0.00	0.00

Peak Hourly Sensible Cooling Load (W): 508.05

Size Factor: 1.00

Sensible Cooling Load, Including Size Fractions, (W): 508.05

Sensible Cooling Load Per Unit Area, Including Size Fractions, (W/m<sup>2</sup>): 31.90

Sensible Cooling Load Per Unit Volume, Including Size Fractions, (W/m<sup>3</sup>): 11.00

# Cooling Sizing Report

## Zone Breakdown for Zone: B1\_Office 4

Area (m<sup>2</sup>): 16.71

Volume (m<sup>3</sup>): 48.47

### Internal Condition Summary

Hour	Infiltration (ach)	Ventilation (ach)	Lighting Gain (W/m <sup>2</sup> )	Sensible Occupancy Gain (W/m <sup>2</sup> )	Latent Occupancy Gain (W/m <sup>2</sup> )	Sensible Equipment Gain (W/m <sup>2</sup> )	Latent Equipment Gain (W/m <sup>2</sup> )	Cooling Setpoint (°C)
1	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
2	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
3	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
4	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
5	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
6	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
7	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
8	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
9	0.15	0	0	0.00	0.00	0.00	0.00	24
10	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
11	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
12	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
13	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
14	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
15	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
16	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
17	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
18	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
19	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
20	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
21	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
22	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
23	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
24	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling

Lighting Function: plcl,0,0.82,65.00,0.00,400.00,0.00,0.30,1,0.00,0.80,1

Ventilation Function: N/A



# Cooling Sizing Report

## Sensible Energy Breakdown

Hour	Solar Gain (W)	Lighting Gain (W)	Infiltration and Ventilation Gain (W)	Air Movement Gain (W)	Building Heat Transfer Gain (W)	External Conduction (W)	Sensible Occupancy and Equipment Gains (W)	Required Sensible Cooling Load (W)
1	0.00	0.00	-8.67	0.93	43.24	-35.47	0.00	0.00
2	0.00	0.00	-13.70	2.31	43.36	-31.97	0.00	0.00
3	0.00	0.00	-19.45	1.49	44.59	-26.54	0.00	0.00
4	0.00	0.00	-20.50	0.30	42.61	-22.40	0.00	0.00
5	0.00	0.00	-20.92	-0.89	40.91	-19.07	0.00	0.00
6	0.00	0.00	-16.94	-1.29	36.70	-18.43	0.00	0.00
7	4.73	0.00	-8.30	0.25	27.43	-24.06	0.00	0.00
8	8.68	0.00	-2.05	1.84	22.17	-30.61	0.00	0.00
9	13.55	0.00	3.28	1.77	19.42	-37.95	0.00	0.00
10	15.87	128.14	81.13	0.00	-15.53	-64.92	225.63	370.24
11	17.09	128.14	104.87	0.00	-7.98	-68.39	225.63	399.32
12	20.16	128.14	126.63	0.00	-4.16	-71.55	225.63	424.78
13	22.69	128.14	144.44	0.00	-1.77	-73.58	225.63	445.45
14	21.97	128.14	154.33	0.00	2.10	-74.62	225.63	457.46
15	23.57	128.14	158.29	0.00	4.37	-76.28	225.63	463.69
16	24.90	128.14	156.31	0.00	6.75	-77.80	225.63	463.88
17	22.37	128.14	152.35	0.00	10.21	-77.63	225.63	461.02
18	5.85	128.14	122.68	0.00	16.50	-70.68	225.63	428.10
19	11.56	0.00	9.46	12.65	25.50	-59.14	0.00	0.00
20	14.50	0.00	5.37	9.58	27.85	-57.24	0.00	0.00
21	0.00	0.00	1.99	6.94	41.05	-49.97	0.00	0.00
22	0.00	0.00	-1.22	4.72	42.82	-46.30	0.00	0.00
23	0.00	0.00	-4.31	3.34	43.52	-42.50	0.00	0.00
24	0.00	0.00	-6.88	2.60	43.33	-38.98	0.00	0.00

Peak Hourly Sensible Cooling Load (W): 463.88

Size Factor: 1.00

Sensible Cooling Load, Including Size Fractions, (W): 463.88

Sensible Cooling Load Per Unit Area, Including Size Fractions, (W/m<sup>2</sup>): 27.76

Sensible Cooling Load Per Unit Volume, Including Size Fractions, (W/m<sup>3</sup>): 9.57

# Cooling Sizing Report

## Zone Breakdown for Zone: B1\_Office 5

Area (m<sup>2</sup>): 36.36  
 Volume (m<sup>3</sup>): 105.45

### Internal Condition Summary

Hour	Infiltration (ach)	Ventilation (ach)	Lighting Gain (W/m <sup>2</sup> )	Sensible Occupancy Gain (W/m <sup>2</sup> )	Latent Occupancy Gain (W/m <sup>2</sup> )	Sensible Equipment Gain (W/m <sup>2</sup> )	Latent Equipment Gain (W/m <sup>2</sup> )	Cooling Setpoint (°C)
1	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
2	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
3	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
4	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
5	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
6	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
7	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
8	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
9	0.15	0	0	0.00	0.00	0.00	0.00	24
10	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
11	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
12	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
13	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
14	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
15	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
16	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
17	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
18	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
19	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
20	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
21	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
22	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
23	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
24	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling

Lighting Function: plcl,0,0.82,65.00,0.00,400.00,0.00,0.30,1,0.00,0.80,1

Ventilation Function: N/A

# Cooling Sizing Report

## Sensible Energy Breakdown

Hour	Solar Gain (W)	Lighting Gain (W)	Infiltration and Ventilation Gain (W)	Air Movement Gain (W)	Building Heat Transfer Gain (W)	External Conduction (W)	Sensible Occupancy and Equipment Gains (W)	Required Sensible Cooling Load (W)
1	0.00	0.00	-19.06	-7.56	102.82	-76.13	0.00	0.00
2	0.00	0.00	-30.04	-7.66	115.58	-77.85	0.00	0.00
3	0.00	0.00	-42.53	-6.89	132.01	-82.58	0.00	0.00
4	0.00	0.00	-44.77	-6.12	139.23	-88.29	0.00	0.00
5	0.00	0.00	-45.65	-5.01	145.80	-95.11	0.00	0.00
6	5.98	0.00	-36.99	-4.76	139.77	-103.98	0.00	0.00
7	46.88	0.00	-18.25	-7.40	105.68	-126.90	0.00	0.00
8	87.23	0.00	-4.74	-12.21	70.82	-141.13	0.00	0.00
9	158.76	0.00	7.00	-1.19	23.67	-158.01	0.00	30.20
10	218.27	165.82	176.52	0.00	-33.74	-202.91	490.90	814.90
11	254.34	161.33	228.17	0.00	-55.37	-170.75	490.90	908.57
12	286.69	147.13	275.52	0.00	-74.52	-141.97	490.90	983.70
13	294.66	107.66	314.26	0.00	-79.89	-108.91	490.90	1018.65
14	295.58	110.01	335.78	0.00	-83.27	-87.73	490.90	1061.26
15	331.65	112.66	344.39	0.00	-92.93	-89.24	490.90	1097.36
16	377.53	114.44	340.08	0.00	-102.21	-99.08	490.90	1121.59
17	376.40	139.96	331.47	0.00	-101.23	-95.25	490.90	1142.22
18	133.34	219.46	266.91	0.00	-46.30	-7.10	490.90	1057.16
19	110.64	0.00	20.09	-29.46	-62.43	-38.83	0.00	0.00
20	47.76	0.00	11.22	-24.57	-6.06	-28.29	0.00	0.00
21	0.00	0.00	3.98	-15.07	35.08	-24.01	0.00	0.00
22	0.00	0.00	-2.93	-9.99	53.49	-40.56	0.00	0.00
23	0.00	0.00	-9.61	-7.12	71.85	-55.09	0.00	0.00
24	0.00	0.00	-15.17	-5.82	86.80	-65.76	0.00	0.00

Peak Hourly Sensible Cooling Load (W): 1142.22

Size Factor: 1.00

Sensible Cooling Load, Including Size Fractions, (W): 1142.22

Sensible Cooling Load Per Unit Area, Including Size Fractions, (W/m<sup>2</sup>): 31.41

Sensible Cooling Load Per Unit Volume, Including Size Fractions, (W/m<sup>3</sup>): 10.83

# Cooling Sizing Report

## Zone Breakdown for Zone: B1\_Office 6

Area (m<sup>2</sup>): 38.16  
 Volume (m<sup>3</sup>): 110.66

### Internal Condition Summary

Hour	Infiltration (ach)	Ventilation (ach)	Lighting Gain (W/m <sup>2</sup> )	Sensible Occupancy Gain (W/m <sup>2</sup> )	Latent Occupancy Gain (W/m <sup>2</sup> )	Sensible Equipment Gain (W/m <sup>2</sup> )	Latent Equipment Gain (W/m <sup>2</sup> )	Cooling Setpoint (°C)
1	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
2	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
3	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
4	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
5	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
6	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
7	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
8	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
9	0.15	0	0	0.00	0.00	0.00	0.00	24
10	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
11	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
12	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
13	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
14	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
15	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
16	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
17	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
18	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
19	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
20	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
21	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
22	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
23	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
24	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling

Lighting Function: plcl,0,0.82,65.00,0.00,400.00,0.00,0.30,1,0.00,0.80,1

Ventilation Function: N/A

# Cooling Sizing Report

## Sensible Energy Breakdown

Hour	Solar Gain (W)	Lighting Gain (W)	Infiltration and Ventilation Gain (W)	Air Movement Gain (W)	Building Heat Transfer Gain (W)	External Conduction (W)	Sensible Occupancy and Equipment Gains (W)	Required Sensible Cooling Load (W)
1	0.00	0.00	-19.89	0.97	106.58	-87.61	0.00	0.00
2	0.00	0.00	-31.40	0.90	114.36	-83.81	0.00	0.00
3	0.00	0.00	-44.53	-1.11	125.75	-80.04	0.00	0.00
4	0.00	0.00	-46.92	-2.68	127.63	-77.94	0.00	0.00
5	0.00	0.00	-47.87	-3.68	129.05	-77.44	0.00	0.00
6	3.15	0.00	-38.80	-3.59	119.19	-79.94	0.00	0.00
7	26.20	0.00	-19.06	-1.31	86.76	-92.56	0.00	0.00
8	59.32	0.00	-4.84	-2.42	51.72	-103.70	0.00	0.00
9	125.02	0.00	7.35	-5.30	3.33	-122.08	0.00	8.27
10	180.41	237.80	185.24	0.00	-76.15	-175.62	515.16	866.81
11	209.74	235.50	239.44	0.00	-82.95	-160.66	515.16	956.18
12	228.85	228.22	289.13	0.00	-87.10	-145.82	515.16	1028.36
13	208.73	207.98	329.78	0.00	-74.33	-123.38	515.16	1063.88
14	165.89	209.18	352.37	0.00	-53.64	-104.36	515.16	1084.52
15	134.59	210.54	361.40	0.00	-34.95	-96.54	515.16	1090.18
16	109.60	211.45	356.89	0.00	-17.18	-95.55	515.16	1080.34
17	88.20	224.54	347.85	0.00	-1.99	-98.92	515.16	1074.83
18	30.15	265.31	280.10	0.00	16.57	-90.32	515.16	1016.96
19	42.26	0.00	21.44	13.83	9.90	-87.38	0.00	0.00
20	50.77	0.00	12.08	8.38	30.15	-101.31	0.00	0.00
21	0.00	0.00	4.41	6.50	69.81	-80.69	0.00	0.00
22	0.00	0.00	-2.89	4.53	81.17	-82.72	0.00	0.00
23	0.00	0.00	-9.92	4.16	90.69	-84.86	0.00	0.00
24	0.00	0.00	-15.78	3.20	98.14	-85.50	0.00	0.00

Peak Hourly Sensible Cooling Load (W): 1090.18

Size Factor: 1.00

Sensible Cooling Load, Including Size Fractions, (W): 1090.18

Sensible Cooling Load Per Unit Area, Including Size Fractions, (W/m<sup>2</sup>): 28.57

Sensible Cooling Load Per Unit Volume, Including Size Fractions, (W/m<sup>3</sup>): 9.85

# Cooling Sizing Report

## Zone Breakdown for Zone: B1\_Office 7

Area (m<sup>2</sup>): 90.65  
 Volume (m<sup>3</sup>): 262.88

### Internal Condition Summary

Hour	Infiltration (ach)	Ventilation (ach)	Lighting Gain (W/m <sup>2</sup> )	Sensible Occupancy Gain (W/m <sup>2</sup> )	Latent Occupancy Gain (W/m <sup>2</sup> )	Sensible Equipment Gain (W/m <sup>2</sup> )	Latent Equipment Gain (W/m <sup>2</sup> )	Cooling Setpoint (°C)
1	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
2	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
3	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
4	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
5	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
6	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
7	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
8	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
9	0.15	0	0	0.00	0.00	0.00	0.00	24
10	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
11	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
12	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
13	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
14	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
15	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
16	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
17	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
18	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
19	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
20	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
21	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
22	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
23	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
24	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling

Lighting Function: plcl,0,0.82,65.00,0.00,400.00,0.00,0.30,1,0.00,0.80,1

Ventilation Function: N/A

# Cooling Sizing Report

## Sensible Energy Breakdown

Hour	Solar Gain (W)	Lighting Gain (W)	Infiltration and Ventilation Gain (W)	Air Movement Gain (W)	Building Heat Transfer Gain (W)	External Conduction (W)	Sensible Occupancy and Equipment Gains (W)	Required Sensible Cooling Load (W)
1	0.00	0.00	-45.63	0.00	285.21	-239.59	0.00	0.00
2	0.00	0.00	-73.20	0.00	313.13	-239.94	0.00	0.00
3	0.00	0.00	-104.72	0.00	346.13	-241.41	0.00	0.00
4	0.00	0.00	-110.66	0.00	355.97	-245.32	0.00	0.00
5	0.00	0.00	-113.11	0.00	365.17	-252.06	0.00	0.00
6	15.55	0.00	-91.68	0.00	341.72	-265.60	0.00	0.00
7	78.67	0.00	-44.77	0.00	262.90	-296.81	0.00	0.00
8	130.21	0.00	-10.77	0.00	198.70	-318.14	0.00	0.00
9	164.24	0.00	18.14	0.00	142.81	-325.19	0.00	0.00
10	161.09	514.11	440.03	0.00	16.26	-442.43	1223.73	1912.80
11	149.84	505.94	568.79	0.00	43.93	-396.97	1223.73	2095.25
12	153.73	480.16	686.82	0.00	53.28	-358.11	1223.73	2239.61
13	200.88	408.50	783.39	0.00	45.89	-332.56	1223.73	2329.84
14	212.72	412.77	837.03	0.00	40.55	-306.78	1223.73	2420.03
15	227.04	417.57	858.49	0.00	30.90	-287.16	1223.73	2470.60
16	239.00	420.80	847.76	0.00	23.49	-273.60	1223.73	2481.19
17	209.55	467.14	826.31	0.00	26.51	-256.77	1223.73	2496.47
18	104.61	611.52	665.36	0.00	43.18	-236.37	1223.73	2412.03
19	74.69	0.00	53.54	0.00	53.29	-181.52	0.00	0.00
20	41.25	0.00	32.27	0.00	116.92	-190.44	0.00	0.00
21	0.00	0.00	13.96	0.00	178.34	-192.31	0.00	0.00
22	0.00	0.00	-3.72	0.00	206.54	-202.82	0.00	0.00
23	0.00	0.00	-20.77	0.00	236.10	-215.32	0.00	0.00
24	0.00	0.00	-35.21	0.00	259.77	-224.57	0.00	0.00

Peak Hourly Sensible Cooling Load (W): 2496.47

Size Factor: 1.00

Sensible Cooling Load, Including Size Fractions, (W): 2496.47

Sensible Cooling Load Per Unit Area, Including Size Fractions, (W/m<sup>2</sup>): 27.54

Sensible Cooling Load Per Unit Volume, Including Size Fractions, (W/m<sup>3</sup>): 9.50

# Cooling Sizing Report

## Zone Breakdown for Zone: B1\_Office 8

Area (m<sup>2</sup>): 52.22  
 Volume (m<sup>3</sup>): 151.44

### Internal Condition Summary

Hour	Infiltration (ach)	Ventilation (ach)	Lighting Gain (W/m <sup>2</sup> )	Sensible Occupancy Gain (W/m <sup>2</sup> )	Latent Occupancy Gain (W/m <sup>2</sup> )	Sensible Equipment Gain (W/m <sup>2</sup> )	Latent Equipment Gain (W/m <sup>2</sup> )	Cooling Setpoint (°C)
1	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
2	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
3	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
4	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
5	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
6	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
7	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
8	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
9	0.15	0	0	0.00	0.00	0.00	0.00	24
10	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
11	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
12	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
13	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
14	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
15	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
16	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
17	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
18	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
19	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
20	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
21	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
22	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
23	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
24	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling

Lighting Function: plcl,0,0.82,65.00,0.00,400.00,0.00,0.30,1,0.00,0.80,1

Ventilation Function: N/A



# Cooling Sizing Report

## Sensible Energy Breakdown

Hour	Solar Gain (W)	Lighting Gain (W)	Infiltration and Ventilation Gain (W)	Air Movement Gain (W)	Building Heat Transfer Gain (W)	External Conduction (W)	Sensible Occupancy and Equipment Gains (W)	Required Sensible Cooling Load (W)
1	0.00	0.00	-29.75	0.00	162.37	-132.63	0.00	0.00
2	0.00	0.00	-45.79	0.00	174.05	-128.26	0.00	0.00
3	0.00	0.00	-64.02	0.00	190.91	-126.89	0.00	0.00
4	0.00	0.00	-67.45	0.00	192.32	-124.87	0.00	0.00
5	0.00	0.00	-68.86	0.00	194.10	-125.24	0.00	0.00
6	8.41	0.00	-56.52	0.00	177.87	-129.76	0.00	0.00
7	52.44	0.00	-29.72	0.00	129.14	-151.87	0.00	0.00
8	123.99	0.00	-10.96	0.00	71.23	-184.27	0.00	0.00
9	254.48	0.00	10.05	0.00	78.98	-182.28	0.00	161.23
10	370.51	294.78	253.50	0.00	-42.94	-249.03	705.00	1331.83
11	430.30	289.60	327.68	0.00	-28.84	-239.97	705.00	1483.77
12	465.61	273.25	395.68	0.00	-18.27	-221.49	705.00	1599.77
13	415.91	227.81	451.31	0.00	20.72	-183.21	705.00	1637.53
14	319.93	230.51	482.22	0.00	60.14	-144.68	705.00	1653.12
15	245.66	233.56	494.58	0.00	86.25	-121.00	705.00	1644.05
16	178.67	235.60	488.40	0.00	106.50	-105.15	705.00	1609.02
17	135.53	264.99	476.04	0.00	111.64	-103.16	705.00	1590.03
18	51.37	356.54	383.32	0.00	114.17	-96.87	705.00	1513.53
19	48.57	0.00	28.45	0.00	44.71	-121.73	0.00	0.00
20	27.03	0.00	15.32	0.00	87.29	-129.64	0.00	0.00
21	0.00	0.00	4.63	0.00	122.40	-127.04	0.00	0.00
22	0.00	0.00	-5.46	0.00	130.70	-125.24	0.00	0.00
23	0.00	0.00	-15.29	0.00	142.18	-126.89	0.00	0.00
24	0.00	0.00	-23.67	0.00	151.37	-127.70	0.00	0.00

Peak Hourly Sensible Cooling Load (W): 1653.12

Size Factor: 1.00

Sensible Cooling Load, Including Size Fractions, (W): 1653.12

Sensible Cooling Load Per Unit Area, Including Size Fractions, (W/m<sup>2</sup>): 31.66

Sensible Cooling Load Per Unit Volume, Including Size Fractions, (W/m<sup>3</sup>): 10.92

# Cooling Sizing Report

## Zone Breakdown for Zone: B1\_Office 9

Area (m<sup>2</sup>): 36.90  
 Volume (m<sup>3</sup>): 107.02

### Internal Condition Summary

Hour	Infiltration (ach)	Ventilation (ach)	Lighting Gain (W/m <sup>2</sup> )	Sensible Occupancy Gain (W/m <sup>2</sup> )	Latent Occupancy Gain (W/m <sup>2</sup> )	Sensible Equipment Gain (W/m <sup>2</sup> )	Latent Equipment Gain (W/m <sup>2</sup> )	Cooling Setpoint (°C)
1	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
2	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
3	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
4	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
5	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
6	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
7	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
8	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
9	0.15	0	0	0.00	0.00	0.00	0.00	24
10	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
11	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
12	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
13	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
14	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
15	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
16	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
17	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
18	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
19	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
20	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
21	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
22	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
23	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
24	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling

Lighting Function: plclc,0,0.82,65.00,0.00,400.00,0.00,0.30,1,0.00,0.80,1

Ventilation Function: N/A

# Cooling Sizing Report

## Sensible Energy Breakdown

Hour	Solar Gain (W)	Lighting Gain (W)	Infiltration and Ventilation Gain (W)	Air Movement Gain (W)	Building Heat Transfer Gain (W)	External Conduction (W)	Sensible Occupancy and Equipment Gains (W)	Required Sensible Cooling Load (W)
1	0.00	0.00	-25.92	2.74	-3.23	26.40	0.00	0.00
2	0.00	0.00	-37.23	5.02	10.47	21.71	0.00	0.00
3	0.00	0.00	-49.94	7.19	28.72	14.03	0.00	0.00
4	0.00	0.00	-52.18	9.36	36.69	6.11	0.00	0.00
5	0.00	0.00	-53.00	11.36	44.14	-2.54	0.00	0.00
6	6.55	0.00	-44.11	11.18	37.87	-11.50	0.00	0.00
7	46.64	0.00	-24.90	6.90	2.19	-30.88	0.00	0.00
8	68.50	0.00	-10.97	5.33	-21.00	-41.87	0.00	0.00
9	91.94	0.00	7.10	0.00	40.00	18.49	0.00	157.58
10	97.37	169.54	179.14	0.00	-31.17	-30.23	498.18	882.88
11	103.02	165.03	231.56	0.00	-34.61	-5.19	498.18	957.98
12	120.97	150.78	279.60	0.00	-41.98	12.98	498.18	1020.54
13	166.56	111.19	318.92	0.00	-58.40	27.54	498.18	1063.96
14	221.48	113.55	340.76	0.00	-83.83	37.27	498.18	1127.43
15	297.65	116.20	349.49	0.00	-112.98	38.02	498.18	1186.59
16	369.20	117.99	345.13	0.00	-135.74	39.23	498.18	1233.98
17	378.18	143.59	336.39	0.00	-139.65	56.42	498.18	1273.18
18	122.05	223.36	270.87	0.00	-55.49	137.31	498.18	1196.30
19	84.90	0.00	17.04	-22.84	-165.80	86.68	0.00	0.00
20	32.12	0.00	6.76	-14.42	-100.26	75.78	0.00	0.00
21	0.00	0.00	-1.36	-4.69	-64.20	70.23	0.00	0.00
22	0.00	0.00	-8.77	-1.45	-47.90	58.10	0.00	0.00
23	0.00	0.00	-15.76	1.16	-31.92	46.52	0.00	0.00
24	0.00	0.00	-21.66	1.90	-17.82	37.58	0.00	0.00

Peak Hourly Sensible Cooling Load (W): 1273.18

Size Factor: 1.00

Sensible Cooling Load, Including Size Fractions, (W): 1273.18

Sensible Cooling Load Per Unit Area, Including Size Fractions, (W/m<sup>2</sup>): 34.50

Sensible Cooling Load Per Unit Volume, Including Size Fractions, (W/m<sup>3</sup>): 11.90

# Cooling Sizing Report

## Zone Breakdown for Zone: B1\_Office 10

Area (m<sup>2</sup>): 38.73  
 Volume (m<sup>3</sup>): 112.30

### Internal Condition Summary

Hour	Infiltration (ach)	Ventilation (ach)	Lighting Gain (W/m <sup>2</sup> )	Sensible Occupancy Gain (W/m <sup>2</sup> )	Latent Occupancy Gain (W/m <sup>2</sup> )	Sensible Equipment Gain (W/m <sup>2</sup> )	Latent Equipment Gain (W/m <sup>2</sup> )	Cooling Setpoint (°C)
1	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
2	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
3	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
4	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
5	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
6	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
7	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
8	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
9	0.15	0	0	0.00	0.00	0.00	0.00	24
10	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
11	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
12	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
13	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
14	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
15	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
16	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
17	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
18	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
19	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
20	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
21	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
22	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
23	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
24	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling

Lighting Function: plcl,0,0.82,65.00,0.00,400.00,0.00,0.30,1,0.00,0.80,1

Ventilation Function: N/A

# Cooling Sizing Report

## Sensible Energy Breakdown

Hour	Solar Gain (W)	Lighting Gain (W)	Infiltration and Ventilation Gain (W)	Air Movement Gain (W)	Building Heat Transfer Gain (W)	External Conduction (W)	Sensible Occupancy and Equipment Gains (W)	Required Sensible Cooling Load (W)
1	0.00	0.00	-27.14	6.75	-10.70	31.13	0.00	0.00
2	0.00	0.00	-39.05	6.22	0.97	31.92	0.00	0.00
3	0.00	0.00	-52.47	4.49	16.71	31.30	0.00	0.00
4	0.00	0.00	-54.87	2.55	22.51	29.84	0.00	0.00
5	0.00	0.00	-55.77	0.84	27.57	27.36	0.00	0.00
6	3.77	0.00	-46.44	-0.11	19.46	23.34	0.00	0.00
7	26.35	0.00	-26.23	1.29	-13.10	11.75	0.00	0.00
8	42.57	0.00	-11.56	3.81	-35.50	0.75	0.00	0.00
9	58.03	0.00	7.45	0.00	50.00	40.67	0.00	156.10
10	58.94	241.89	187.99	0.00	-45.28	-12.80	522.80	953.49
11	57.57	239.57	243.00	0.00	-39.52	1.54	522.80	1024.88
12	61.96	232.26	293.42	0.00	-38.38	12.31	522.80	1084.38
13	78.72	211.95	334.68	0.00	-41.32	20.00	522.80	1126.75
14	84.56	213.16	357.60	0.00	-40.54	26.65	522.80	1164.15
15	91.76	214.52	366.76	0.00	-38.74	30.66	522.80	1187.70
16	100.02	215.44	362.18	0.00	-36.28	32.58	522.80	1196.67
17	89.98	228.57	353.01	0.00	-29.59	39.40	522.80	1204.12
18	40.69	269.49	284.25	0.00	-22.67	61.15	522.80	1155.68
19	51.51	0.00	18.27	25.31	-141.24	46.19	0.00	0.00
20	15.57	0.00	7.37	12.88	-76.33	40.52	0.00	0.00
21	0.00	0.00	-1.25	11.35	-49.78	39.73	0.00	0.00
22	0.00	0.00	-9.06	9.21	-38.35	38.20	0.00	0.00
23	0.00	0.00	-16.42	8.58	-27.88	35.72	0.00	0.00
24	0.00	0.00	-22.62	8.89	-20.27	34.05	0.00	0.00

Peak Hourly Sensible Cooling Load (W): 1204.12

Size Factor: 1.00

Sensible Cooling Load, Including Size Fractions, (W): 1204.12

Sensible Cooling Load Per Unit Area, Including Size Fractions, (W/m<sup>2</sup>): 31.09

Sensible Cooling Load Per Unit Volume, Including Size Fractions, (W/m<sup>3</sup>): 10.72

# Cooling Sizing Report

## Zone Breakdown for Zone: B1\_Office 11

Area (m<sup>2</sup>): 15.93

Volume (m<sup>3</sup>): 46.19

### Internal Condition Summary

Hour	Infiltration (ach)	Ventilation (ach)	Lighting Gain (W/m <sup>2</sup> )	Sensible Occupancy Gain (W/m <sup>2</sup> )	Latent Occupancy Gain (W/m <sup>2</sup> )	Sensible Equipment Gain (W/m <sup>2</sup> )	Latent Equipment Gain (W/m <sup>2</sup> )	Cooling Setpoint (°C)
1	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
2	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
3	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
4	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
5	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
6	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
7	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
8	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
9	0.15	0	0	0.00	0.00	0.00	0.00	24
10	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
11	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
12	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
13	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
14	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
15	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
16	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
17	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
18	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
19	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
20	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
21	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
22	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
23	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
24	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling

Lighting Function: plcl,0,0.82,65.00,0.00,400.00,0.00,0.30,1,0.00,0.80,1

Ventilation Function: N/A

# Cooling Sizing Report

## Sensible Energy Breakdown

Hour	Solar Gain (W)	Lighting Gain (W)	Infiltration and Ventilation Gain (W)	Air Movement Gain (W)	Building Heat Transfer Gain (W)	External Conduction (W)	Sensible Occupancy and Equipment Gains (W)	Required Sensible Cooling Load (W)
1	0.00	0.00	-11.24	0.06	-2.51	13.62	0.00	0.00
2	0.00	0.00	-16.12	0.60	1.44	14.03	0.00	0.00
3	0.00	0.00	-21.60	1.65	8.49	11.44	0.00	0.00
4	0.00	0.00	-22.57	2.01	10.09	10.44	0.00	0.00
5	0.00	0.00	-22.93	2.26	11.71	8.86	0.00	0.00
6	1.81	0.00	-19.09	1.44	7.58	8.21	0.00	0.00
7	18.43	0.00	-10.80	-1.29	-10.41	4.06	0.00	0.00
8	25.89	0.00	-4.80	-1.20	-18.04	-1.86	0.00	0.00
9	36.58	0.00	3.07	0.00	13.68	13.89	0.00	67.26
10	41.61	76.86	77.31	0.00	-21.12	-8.85	215.00	380.91
11	47.51	75.16	99.93	0.00	-20.56	-4.93	215.00	412.17
12	59.53	69.78	120.67	0.00	-23.79	-2.15	215.00	439.10
13	81.68	54.83	137.64	0.00	-33.02	2.92	215.00	459.10
14	118.47	55.72	147.06	0.00	-54.10	6.35	215.00	488.60
15	179.24	56.72	150.83	0.00	-85.90	4.38	215.00	520.30
16	255.24	57.39	148.95	0.00	-124.84	0.77	215.00	552.53
17	273.24	67.06	145.18	0.00	-132.83	4.98	215.00	572.73
18	68.23	97.19	116.90	0.00	-30.27	40.10	215.00	507.22
19	35.38	0.00	7.31	-8.89	-66.03	32.17	0.00	0.00
20	15.07	0.00	2.88	-5.60	-39.18	26.82	0.00	0.00
21	0.00	0.00	-0.63	-1.54	-21.02	23.14	0.00	0.00
22	0.00	0.00	-3.82	-0.57	-16.89	21.17	0.00	0.00
23	0.00	0.00	-6.84	-0.09	-11.74	18.58	0.00	0.00
24	0.00	0.00	-9.39	-0.18	-7.46	16.95	0.00	0.00

Peak Hourly Sensible Cooling Load (W): 572.73

Size Factor: 1.00

Sensible Cooling Load, Including Size Fractions, (W): 572.73

Sensible Cooling Load Per Unit Area, Including Size Fractions, (W/m<sup>2</sup>): 35.96

Sensible Cooling Load Per Unit Volume, Including Size Fractions, (W/m<sup>3</sup>): 12.40

# Cooling Sizing Report

## Zone Breakdown for Zone: B1\_Office 12

Area (m<sup>2</sup>): 16.71

Volume (m<sup>3</sup>): 48.47

### Internal Condition Summary

Hour	Infiltration (ach)	Ventilation (ach)	Lighting Gain (W/m <sup>2</sup> )	Sensible Occupancy Gain (W/m <sup>2</sup> )	Latent Occupancy Gain (W/m <sup>2</sup> )	Sensible Equipment Gain (W/m <sup>2</sup> )	Latent Equipment Gain (W/m <sup>2</sup> )	Cooling Setpoint (°C)
1	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
2	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
3	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
4	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
5	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
6	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
7	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
8	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
9	0.15	0	0	0.00	0.00	0.00	0.00	24
10	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
11	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
12	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
13	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
14	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
15	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
16	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
17	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
18	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
19	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
20	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
21	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
22	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
23	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
24	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling

Lighting Function: plclc,0,0.82,65.00,0.00,400.00,0.00,0.30,1,0.00,0.80,1

Ventilation Function: N/A



# Cooling Sizing Report

## Sensible Energy Breakdown

Hour	Solar Gain (W)	Lighting Gain (W)	Infiltration and Ventilation Gain (W)	Air Movement Gain (W)	Building Heat Transfer Gain (W)	External Conduction (W)	Sensible Occupancy and Equipment Gains (W)	Required Sensible Cooling Load (W)
1	0.00	0.00	-11.77	-0.53	-12.87	25.18	0.00	0.00
2	0.00	0.00	-16.91	-1.01	-9.86	27.78	0.00	0.00
3	0.00	0.00	-22.71	-2.50	-5.99	31.21	0.00	0.00
4	0.00	0.00	-23.74	-4.01	-5.74	33.47	0.00	0.00
5	0.00	0.00	-24.13	-5.54	-5.47	35.15	0.00	0.00
6	0.00	0.00	-20.11	-6.02	-8.48	34.64	0.00	0.00
7	4.83	0.00	-11.38	-4.25	-17.47	28.28	0.00	0.00
8	8.75	0.00	-5.06	-2.04	-22.42	20.79	0.00	0.00
9	13.67	0.00	3.22	0.00	22.95	25.07	0.00	64.92
10	15.96	128.14	81.13	0.00	-26.56	-1.36	225.63	422.92
11	17.17	128.14	104.87	0.00	-20.53	-2.53	225.63	452.73
12	20.25	128.14	126.63	0.00	-17.62	-4.06	225.63	478.95
13	22.88	128.14	144.44	0.00	-16.38	-4.29	225.63	500.35
14	22.17	128.14	154.33	0.00	-13.93	-3.37	225.63	512.95
15	23.74	128.14	158.29	0.00	-12.73	-3.29	225.63	519.82
16	25.05	128.14	156.31	0.00	-11.13	-3.18	225.63	520.81
17	22.48	128.14	152.35	0.00	-8.59	-1.28	225.63	518.69
18	5.92	128.14	122.68	0.00	-4.87	8.24	225.63	485.69
19	11.68	0.00	7.85	15.21	-47.87	13.09	0.00	0.00
20	14.52	0.00	3.13	5.19	-33.57	10.71	0.00	0.00
21	0.00	0.00	-0.59	3.03	-17.80	15.36	0.00	0.00
22	0.00	0.00	-3.95	2.45	-16.05	17.53	0.00	0.00
23	0.00	0.00	-7.13	1.79	-14.74	20.12	0.00	0.00
24	0.00	0.00	-9.81	1.41	-14.10	22.51	0.00	0.00

Peak Hourly Sensible Cooling Load (W): 520.81

Size Factor: 1.00

Sensible Cooling Load, Including Size Fractions, (W): 520.81

Sensible Cooling Load Per Unit Area, Including Size Fractions, (W/m<sup>2</sup>): 31.16

Sensible Cooling Load Per Unit Volume, Including Size Fractions, (W/m<sup>3</sup>): 10.75

# Cooling Sizing Report

## Zone Breakdown for Zone: B1\_Office 13

Area (m<sup>2</sup>): 36.36  
 Volume (m<sup>3</sup>): 105.45

### Internal Condition Summary

Hour	Infiltration (ach)	Ventilation (ach)	Lighting Gain (W/m <sup>2</sup> )	Sensible Occupancy Gain (W/m <sup>2</sup> )	Latent Occupancy Gain (W/m <sup>2</sup> )	Sensible Equipment Gain (W/m <sup>2</sup> )	Latent Equipment Gain (W/m <sup>2</sup> )	Cooling Setpoint (°C)
1	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
2	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
3	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
4	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
5	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
6	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
7	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
8	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
9	0.15	0	0	0.00	0.00	0.00	0.00	24
10	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
11	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
12	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
13	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
14	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
15	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
16	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
17	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
18	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
19	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
20	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
21	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
22	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
23	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
24	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling

Lighting Function: plcl,0,0.82,65.00,0.00,400.00,0.00,0.30,1,0.00,0.80,1

Ventilation Function: N/A

# Cooling Sizing Report

## Sensible Energy Breakdown

Hour	Solar Gain (W)	Lighting Gain (W)	Infiltration and Ventilation Gain (W)	Air Movement Gain (W)	Building Heat Transfer Gain (W)	External Conduction (W)	Sensible Occupancy and Equipment Gains (W)	Required Sensible Cooling Load (W)
1	0.00	0.00	-25.78	-5.95	-0.65	32.47	0.00	0.00
2	0.00	0.00	-36.91	-4.16	13.03	28.05	0.00	0.00
3	0.00	0.00	-49.44	-2.18	31.33	20.41	0.00	0.00
4	0.00	0.00	-51.65	0.16	39.15	12.40	0.00	0.00
5	0.00	0.00	-52.45	2.41	46.44	3.65	0.00	0.00
6	5.90	0.00	-43.68	3.07	40.31	-5.56	0.00	0.00
7	46.54	0.00	-24.76	-0.23	4.31	-25.79	0.00	0.00
8	86.95	0.00	-11.10	-5.26	-29.21	-41.35	0.00	0.00
9	158.48	0.00	7.00	0.00	16.19	21.20	0.00	202.81
10	218.13	165.82	176.52	0.00	-77.69	-29.96	490.90	943.66
11	254.32	161.33	228.17	0.00	-91.48	-3.37	490.90	1039.84
12	286.78	147.13	275.52	0.00	-102.60	19.85	490.90	1117.51
13	294.49	107.66	314.26	0.00	-101.88	50.29	490.90	1155.68
14	295.32	110.01	335.78	0.00	-105.49	74.76	490.90	1201.25
15	331.41	112.66	344.39	0.00	-119.28	80.78	490.90	1240.80
16	377.31	114.44	340.08	0.00	-133.71	80.83	490.90	1269.77
17	376.23	139.96	331.47	0.00	-133.38	90.80	490.90	1295.90
18	133.18	219.46	266.91	0.00	-55.14	157.59	490.90	1212.87
19	110.43	0.00	16.50	-36.97	-177.50	87.62	0.00	0.00
20	47.50	0.00	6.41	-23.09	-100.36	69.60	0.00	0.00
21	0.00	0.00	-1.55	-11.96	-61.94	75.48	0.00	0.00
22	0.00	0.00	-8.81	-8.02	-46.10	63.02	0.00	0.00
23	0.00	0.00	-15.72	-7.43	-28.98	52.15	0.00	0.00
24	0.00	0.00	-21.56	-7.12	-14.93	43.65	0.00	0.00

Peak Hourly Sensible Cooling Load (W): 1295.90

Size Factor: 1.00

Sensible Cooling Load, Including Size Fractions, (W): 1295.90

Sensible Cooling Load Per Unit Area, Including Size Fractions, (W/m<sup>2</sup>): 35.64

Sensible Cooling Load Per Unit Volume, Including Size Fractions, (W/m<sup>3</sup>): 12.29

# Cooling Sizing Report

## Zone Breakdown for Zone: B1\_Office 14

Area (m<sup>2</sup>): 38.16  
 Volume (m<sup>3</sup>): 110.66

### Internal Condition Summary

Hour	Infiltration (ach)	Ventilation (ach)	Lighting Gain (W/m <sup>2</sup> )	Sensible Occupancy Gain (W/m <sup>2</sup> )	Latent Occupancy Gain (W/m <sup>2</sup> )	Sensible Equipment Gain (W/m <sup>2</sup> )	Latent Equipment Gain (W/m <sup>2</sup> )	Cooling Setpoint (°C)
1	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
2	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
3	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
4	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
5	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
6	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
7	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
8	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
9	0.15	0	0	0.00	0.00	0.00	0.00	24
10	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
11	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
12	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
13	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
14	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
15	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
16	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
17	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
18	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
19	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
20	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
21	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
22	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
23	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
24	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling

Lighting Function: plcl,0,0.82,65.00,0.00,400.00,0.00,0.30,1,0.00,0.80,1

Ventilation Function: N/A

# Cooling Sizing Report

## Sensible Energy Breakdown

Hour	Solar Gain (W)	Lighting Gain (W)	Infiltration and Ventilation Gain (W)	Air Movement Gain (W)	Building Heat Transfer Gain (W)	External Conduction (W)	Sensible Occupancy and Equipment Gains (W)	Required Sensible Cooling Load (W)
1	0.00	0.00	-26.98	-1.86	-9.56	38.52	0.00	0.00
2	0.00	0.00	-38.71	-3.07	2.50	39.33	0.00	0.00
3	0.00	0.00	-51.95	-4.96	18.36	38.64	0.00	0.00
4	0.00	0.00	-54.31	-6.73	24.14	36.98	0.00	0.00
5	0.00	0.00	-55.19	-8.23	29.17	34.31	0.00	0.00
6	3.13	0.00	-45.99	-8.42	21.44	29.91	0.00	0.00
7	26.27	0.00	-26.08	-6.13	-11.65	17.66	0.00	0.00
8	59.45	0.00	-11.69	-6.77	-45.54	4.62	0.00	0.00
9	125.24	0.00	7.35	0.00	20.79	47.70	0.00	201.05
10	180.64	237.78	185.24	0.00	-100.28	-4.93	515.16	1013.51
11	209.95	235.47	239.44	0.00	-106.04	12.09	515.16	1105.97
12	229.00	228.19	289.13	0.00	-108.65	27.59	515.16	1180.32
13	208.92	207.95	329.78	0.00	-92.17	47.57	515.16	1217.17
14	166.06	209.15	352.37	0.00	-68.93	63.82	515.16	1237.54
15	134.70	210.51	361.40	0.00	-50.12	70.48	515.16	1242.07
16	109.62	211.42	356.89	0.00	-33.26	71.62	515.16	1231.33
17	88.17	224.51	347.85	0.00	-22.09	71.91	515.16	1225.47
18	30.16	265.30	280.10	0.00	-9.30	85.32	515.16	1166.69
19	42.30	0.00	17.74	19.43	-136.92	57.51	0.00	0.00
20	50.81	0.00	6.98	5.23	-96.83	33.89	0.00	0.00
21	0.00	0.00	-1.45	4.09	-49.59	47.03	0.00	0.00
22	0.00	0.00	-9.09	3.72	-39.40	44.84	0.00	0.00
23	0.00	0.00	-16.36	3.15	-29.31	42.65	0.00	0.00
24	0.00	0.00	-22.50	1.15	-19.92	41.37	0.00	0.00

Peak Hourly Sensible Cooling Load (W): 1242.07

Size Factor: 1.00

Sensible Cooling Load, Including Size Fractions, (W): 1242.07

Sensible Cooling Load Per Unit Area, Including Size Fractions, (W/m<sup>2</sup>): 32.55

Sensible Cooling Load Per Unit Volume, Including Size Fractions, (W/m<sup>3</sup>): 11.22

# Cooling Sizing Report

## Zone Breakdown for Zone: B1\_Office 15

Area (m<sup>2</sup>): 37.04  
 Volume (m<sup>3</sup>): 107.41

### Internal Condition Summary

Hour	Infiltration (ach)	Ventilation (ach)	Lighting Gain (W/m <sup>2</sup> )	Sensible Occupancy Gain (W/m <sup>2</sup> )	Latent Occupancy Gain (W/m <sup>2</sup> )	Sensible Equipment Gain (W/m <sup>2</sup> )	Latent Equipment Gain (W/m <sup>2</sup> )	Cooling Setpoint (°C)
1	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
2	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
3	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
4	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
5	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
6	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
7	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
8	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
9	0.15	0	0	0.00	0.00	0.00	0.00	24
10	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
11	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
12	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
13	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
14	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
15	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
16	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
17	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
18	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
19	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
20	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
21	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
22	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
23	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
24	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling

Lighting Function: plcl,0,0.82,65.00,0.00,400.00,0.00,0.30,1,0.00,0.80,1

Ventilation Function: N/A

# Cooling Sizing Report

## Sensible Energy Breakdown

Hour	Solar Gain (W)	Lighting Gain (W)	Infiltration and Ventilation Gain (W)	Air Movement Gain (W)	Building Heat Transfer Gain (W)	External Conduction (W)	Sensible Occupancy and Equipment Gains (W)	Required Sensible Cooling Load (W)
1	0.00	0.00	-28.57	0.00	23.29	5.29	0.00	0.00
2	0.00	0.00	-40.21	0.00	34.56	5.66	0.00	0.00
3	0.00	0.00	-53.25	0.00	53.11	0.14	0.00	0.00
4	0.00	0.00	-55.68	0.00	57.71	-2.03	0.00	0.00
5	0.00	0.00	-56.61	0.00	61.63	-5.01	0.00	0.00
6	8.40	0.00	-47.71	0.00	46.18	-6.87	0.00	0.00
7	52.40	0.00	-28.40	0.00	-10.71	-13.29	0.00	0.00
8	123.89	0.00	-14.70	0.00	-74.58	-34.62	0.00	0.00
9	254.29	0.00	7.13	0.00	90.97	37.49	0.00	389.88
10	370.24	183.10	179.79	0.00	-88.05	-0.52	500.01	1144.58
11	429.96	178.12	232.40	0.00	-97.76	7.80	500.01	1250.54
12	465.24	162.39	280.63	0.00	-97.82	22.05	500.01	1332.50
13	417.36	118.69	320.08	0.00	-59.67	49.37	500.01	1345.85
14	319.86	121.29	342.01	0.00	-14.20	76.90	500.01	1345.87
15	247.25	124.22	350.77	0.00	14.80	93.54	500.01	1330.59
16	180.59	126.19	346.39	0.00	40.13	105.47	500.01	1298.78
17	135.42	154.45	337.62	0.00	51.40	110.42	500.01	1289.32
18	51.33	242.51	271.86	0.00	74.00	114.79	500.01	1254.49
19	48.53	0.00	16.57	0.00	-123.18	58.07	0.00	0.00
20	27.01	0.00	6.09	0.00	-67.95	34.86	0.00	0.00
21	0.00	0.00	-2.23	0.00	-22.84	25.07	0.00	0.00
22	0.00	0.00	-10.01	0.00	-11.33	21.34	0.00	0.00
23	0.00	0.00	-17.54	0.00	1.42	16.11	0.00	0.00
24	0.00	0.00	-23.93	0.00	11.46	12.47	0.00	0.00

Peak Hourly Sensible Cooling Load (W): 1345.87

Size Factor: 1.00

Sensible Cooling Load, Including Size Fractions, (W): 1345.87

Sensible Cooling Load Per Unit Area, Including Size Fractions, (W/m<sup>2</sup>): 36.34

Sensible Cooling Load Per Unit Volume, Including Size Fractions, (W/m<sup>3</sup>): 12.53

# Cooling Sizing Report

## Zone Breakdown for Zone: B1\_Office 16

Area (m<sup>2</sup>): 52.22  
 Volume (m<sup>3</sup>): 151.44

### Internal Condition Summary

Hour	Infiltration (ach)	Ventilation (ach)	Lighting Gain (W/m <sup>2</sup> )	Sensible Occupancy Gain (W/m <sup>2</sup> )	Latent Occupancy Gain (W/m <sup>2</sup> )	Sensible Equipment Gain (W/m <sup>2</sup> )	Latent Equipment Gain (W/m <sup>2</sup> )	Cooling Setpoint (°C)
1	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
2	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
3	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
4	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
5	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
6	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
7	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
8	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
9	0.15	0	0	0.00	0.00	0.00	0.00	24
10	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
11	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
12	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
13	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
14	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
15	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
16	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
17	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
18	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
19	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
20	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
21	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
22	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
23	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
24	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling

Lighting Function: plcl,0,0.82,65.00,0.00,400.00,0.00,0.30,1,0.00,0.80,1

Ventilation Function: N/A



# Cooling Sizing Report

## Sensible Energy Breakdown

Hour	Solar Gain (W)	Lighting Gain (W)	Infiltration and Ventilation Gain (W)	Air Movement Gain (W)	Building Heat Transfer Gain (W)	External Conduction (W)	Sensible Occupancy and Equipment Gains (W)	Required Sensible Cooling Load (W)
1	0.00	0.00	-37.67	0.00	0.67	37.00	0.00	0.00
2	0.00	0.00	-54.02	0.00	17.08	36.95	0.00	0.00
3	0.00	0.00	-72.40	0.00	40.26	32.14	0.00	0.00
4	0.00	0.00	-75.84	0.00	47.02	28.83	0.00	0.00
5	0.00	0.00	-77.18	0.00	53.00	24.18	0.00	0.00
6	8.41	0.00	-64.67	0.00	37.74	18.51	0.00	0.00
7	52.44	0.00	-37.43	0.00	-19.40	4.40	0.00	0.00
8	123.99	0.00	-18.03	0.00	-82.15	-23.80	0.00	0.00
9	254.48	0.00	10.05	0.00	78.26	52.45	0.00	395.24
10	370.52	294.33	253.50	0.00	-116.54	-9.67	705.00	1497.15
11	430.31	289.13	327.68	0.00	-112.66	4.93	705.00	1644.38
12	465.62	272.73	395.68	0.00	-104.93	25.00	705.00	1759.08
13	417.70	227.14	451.31	0.00	-65.85	60.43	705.00	1795.72
14	320.11	229.86	482.22	0.00	-24.56	95.49	705.00	1808.11
15	247.44	232.91	494.58	0.00	-0.62	116.94	705.00	1796.25
16	180.73	234.96	488.40	0.00	18.58	132.36	705.00	1760.03
17	135.53	264.45	476.04	0.00	22.14	139.40	705.00	1742.55
18	51.37	356.30	383.32	0.00	31.81	146.74	705.00	1674.53
19	48.57	0.00	25.07	0.00	-168.80	95.16	0.00	0.00
20	27.03	0.00	10.52	0.00	-105.01	67.46	0.00	0.00
21	0.00	0.00	-1.15	0.00	-57.38	58.53	0.00	0.00
22	0.00	0.00	-11.90	0.00	-42.33	54.24	0.00	0.00
23	0.00	0.00	-22.27	0.00	-26.58	48.85	0.00	0.00
24	0.00	0.00	-31.15	0.00	-13.60	44.74	0.00	0.00

Peak Hourly Sensible Cooling Load (W): 1808.11

Size Factor: 1.00

Sensible Cooling Load, Including Size Fractions, (W): 1808.11

Sensible Cooling Load Per Unit Area, Including Size Fractions, (W/m<sup>2</sup>): 34.62

Sensible Cooling Load Per Unit Volume, Including Size Fractions, (W/m<sup>3</sup>): 11.94

# Cooling Sizing Report

## Zone Breakdown for Zone: B1\_Office 17

Area (m<sup>2</sup>): 91.05  
 Volume (m<sup>3</sup>): 264.04

### Internal Condition Summary

Hour	Infiltration (ach)	Ventilation (ach)	Lighting Gain (W/m <sup>2</sup> )	Sensible Occupancy Gain (W/m <sup>2</sup> )	Latent Occupancy Gain (W/m <sup>2</sup> )	Sensible Equipment Gain (W/m <sup>2</sup> )	Latent Equipment Gain (W/m <sup>2</sup> )	Cooling Setpoint (°C)
1	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
2	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
3	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
4	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
5	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
6	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
7	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
8	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
9	0.15	0	0	0.00	0.00	0.00	0.00	24
10	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
11	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
12	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
13	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
14	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
15	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
16	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
17	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
18	0.15	1.05	Function	6.50	3.50	7.00	0.00	24
19	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
20	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
21	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
22	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
23	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
24	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling

Lighting Function: plcl,0,0.82,65.00,0.00,400.00,0.00,0.30,1,0.00,0.80,1

Ventilation Function: N/A

# Cooling Sizing Report

## Sensible Energy Breakdown

Hour	Solar Gain (W)	Lighting Gain (W)	Infiltration and Ventilation Gain (W)	Air Movement Gain (W)	Building Heat Transfer Gain (W)	External Conduction (W)	Sensible Occupancy and Equipment Gains (W)	Required Sensible Cooling Load (W)
1	0.00	0.00	-61.15	0.00	-9.05	70.20	0.00	0.00
2	0.00	0.00	-89.61	0.00	20.39	69.23	0.00	0.00
3	0.00	0.00	-121.63	0.00	59.99	61.63	0.00	0.00
4	0.00	0.00	-127.67	0.00	72.73	54.95	0.00	0.00
5	0.00	0.00	-130.09	0.00	83.94	46.15	0.00	0.00
6	17.28	0.00	-108.40	0.00	56.84	34.28	0.00	0.00
7	78.67	0.00	-60.89	0.00	-29.99	12.22	0.00	0.00
8	130.21	0.00	-26.31	0.00	-81.74	-22.17	0.00	0.00
9	164.24	0.00	17.53	0.00	151.13	64.31	0.00	397.19
10	161.09	515.00	441.99	0.00	-51.40	-38.73	1229.17	2257.13
11	149.84	506.74	571.32	0.00	-14.84	-5.75	1229.17	2436.48
12	153.74	480.69	689.87	0.00	4.27	22.94	1229.17	2580.69
13	200.89	408.29	786.87	0.00	-2.59	46.01	1229.17	2668.63
14	212.72	412.60	840.76	0.00	-13.46	70.82	1229.17	2752.60
15	227.04	417.45	862.31	0.00	-31.47	92.91	1229.17	2797.42
16	239.00	420.71	851.53	0.00	-51.11	112.81	1229.17	2802.12
17	209.55	467.53	829.98	0.00	-54.49	135.03	1229.17	2816.77
18	104.40	613.42	668.32	0.00	-42.49	161.78	1229.17	2734.60
19	78.94	0.00	46.72	0.00	-271.02	145.36	0.00	0.00
20	41.25	0.00	21.81	0.00	-178.90	115.86	0.00	0.00
21	0.00	0.00	1.65	0.00	-107.66	106.01	0.00	0.00
22	0.00	0.00	-16.88	0.00	-81.97	98.85	0.00	0.00
23	0.00	0.00	-34.67	0.00	-55.34	90.02	0.00	0.00
24	0.00	0.00	-49.90	0.00	-33.06	82.96	0.00	0.00

Peak Hourly Sensible Cooling Load (W): 2816.77

Size Factor: 1.00

Sensible Cooling Load, Including Size Fractions, (W): 2816.77

Sensible Cooling Load Per Unit Area, Including Size Fractions, (W/m<sup>2</sup>): 30.94

Sensible Cooling Load Per Unit Volume, Including Size Fractions, (W/m<sup>3</sup>): 10.67

# Cooling Sizing Report

## Zone Breakdown for Zone: B1\_Reception 1

Area (m<sup>2</sup>): 36.64  
 Volume (m<sup>3</sup>): 106.26

### Internal Condition Summary

Hour	Infiltration (ach)	Ventilation (ach)	Lighting Gain (W/m <sup>2</sup> )	Sensible Occupancy Gain (W/m <sup>2</sup> )	Latent Occupancy Gain (W/m <sup>2</sup> )	Sensible Equipment Gain (W/m <sup>2</sup> )	Latent Equipment Gain (W/m <sup>2</sup> )	Cooling Setpoint (°C)
1	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
2	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
3	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
4	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
5	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
6	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
7	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
8	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
9	0.15	0	0	0.00	0.00	0.00	0.00	24
10	0.15	Function	15	6.50	3.50	6.19	0.00	24
11	0.15	Function	15	6.50	3.50	6.19	0.00	24
12	0.15	Function	15	6.50	3.50	6.19	0.00	24
13	0.15	Function	15	6.50	3.50	6.19	0.00	24
14	0.15	Function	15	6.50	3.50	6.19	0.00	24
15	0.15	Function	15	6.50	3.50	6.19	0.00	24
16	0.15	Function	15	6.50	3.50	6.19	0.00	24
17	0.15	Function	15	6.50	3.50	6.19	0.00	24
18	0.15	Function	15	6.50	3.50	6.19	0.00	24
19	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
20	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
21	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
22	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
23	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling
24	0.15	0	0	0.00	0.00	0.00	0.00	No Cooling

Lighting Function: N/A  
 Ventilation Function: tmmvc,0,21.00,22.00,0.830,0.000

# Cooling Sizing Report

## Sensible Energy Breakdown

Hour	Solar Gain (W)	Lighting Gain (W)	Infiltration and Ventilation Gain (W)	Air Movement Gain (W)	Building Heat Transfer Gain (W)	External Conduction (W)	Sensible Occupancy and Equipment Gains (W)	Required Sensible Cooling Load (W)
1	0.00	0.00	-20.58	0.00	105.86	-85.27	0.00	0.00
2	0.00	0.00	-31.59	0.00	99.69	-68.10	0.00	0.00
3	0.00	0.00	-43.37	0.00	118.18	-74.80	0.00	0.00
4	0.00	0.00	-45.29	0.00	110.06	-64.77	0.00	0.00
5	0.00	0.00	-45.99	0.00	107.86	-61.87	0.00	0.00
6	49.10	0.00	-38.25	0.00	56.22	-67.06	0.00	0.00
7	316.33	0.00	-23.23	0.00	-150.53	-142.57	0.00	0.00
8	543.42	0.00	-13.82	0.00	-268.28	-261.31	0.00	0.00
9	787.42	0.00	7.05	0.00	-93.63	-211.89	0.00	488.96
10	907.46	549.61	174.95	0.00	-257.30	-264.61	464.97	1575.07
11	983.53	549.61	226.15	0.00	-256.26	-261.01	464.97	1706.98
12	1136.87	549.61	273.07	0.00	-294.80	-266.65	464.97	1863.06
13	1301.30	549.61	311.47	0.00	-329.53	-281.60	464.97	2016.20
14	1292.02	549.61	332.80	0.00	-291.81	-272.63	464.97	2074.96
15	1281.72	549.61	341.33	0.00	-278.10	-263.17	464.97	2096.35
16	1129.30	549.61	337.06	0.00	-228.15	-221.07	464.97	2031.72
17	848.83	549.61	328.53	0.00	-133.51	-161.69	464.97	1896.73
18	325.04	549.61	264.54	0.00	50.50	-71.05	464.97	1583.60
19	305.97	0.00	14.21	0.00	-159.31	-160.88	0.00	0.00
20	169.42	0.00	4.93	0.00	-38.03	-136.32	0.00	0.00
21	0.00	0.00	0.00	0.00	100.04	-100.04	0.00	0.00
22	0.00	0.00	-5.84	0.00	87.55	-81.70	0.00	0.00
23	0.00	0.00	-11.78	0.00	92.07	-80.28	0.00	0.00
24	0.00	0.00	-17.11	0.00	92.90	-75.79	0.00	0.00

Peak Hourly Sensible Cooling Load (W): 2096.35

Size Factor: 1.00

Sensible Cooling Load, Including Size Fractions, (W): 2096.35

Sensible Cooling Load Per Unit Area, Including Size Fractions, (W/m<sup>2</sup>): 57.21

Sensible Cooling Load Per Unit Volume, Including Size Fractions, (W/m<sup>3</sup>): 19.73

# Cooling Sizing Report

## Building Summary

Reported Zones Building Area (m<sup>2</sup>): 725.40  
 Reported Zones Building Volume (m<sup>3</sup>): 2103.66

### Sensible Energy Breakdown

Hour	Solar Gain (W)	Lighting Gain (W)	Infiltration and Ventilation Gain (W)	Air Movement Gain (W)	Building Heat Transfer Gain (W)	External Conduction (W)	Sensible Occupancy and Equipment Gains (W)	Required Sensible Cooling Load (W)
1	0.00	0.00	-447.23	2.94	1040.68	-596.04	0.00	0.00
2	0.00	0.00	-669.49	11.27	1231.87	-573.51	0.00	0.00
3	0.00	0.00	-920.43	10.57	1522.75	-612.48	0.00	0.00
4	0.00	0.00	-966.21	7.01	1596.08	-636.68	0.00	0.00
5	0.00	0.00	-984.08	5.26	1668.21	-689.22	0.00	0.00
6	148.53	0.00	-811.92	1.48	1443.36	-781.31	0.00	0.00
7	969.36	0.00	-439.51	-7.14	584.42	-1106.93	0.00	0.00
8	1760.13	0.00	-172.50	-13.76	-93.05	-1480.60	0.00	0.00
9	2847.15	0.00	140.81	-2.33	767.95	-1032.78	0.00	2720.70
10	3566.34	4391.05	3518.43	0.00	-981.14	-1976.05	9763.20	18281.68
11	3952.96	4328.59	4547.96	0.00	-941.13	-1684.82	9763.20	19966.35
12	4397.84	4131.43	5491.69	0.00	-988.67	-1425.03	9763.20	21370.18
13	4660.71	3583.55	6263.84	0.00	-947.05	-1141.01	9763.20	22182.87
14	4493.61	3616.16	6692.82	0.00	-836.79	-880.11	9763.20	22848.69
15	4593.19	3652.88	6864.40	0.00	-859.09	-769.87	9763.20	23244.57
16	4620.23	3677.56	6778.61	0.00	-862.07	-689.01	9763.20	23288.23
17	4131.00	4031.88	6607.02	0.00	-726.22	-520.73	9763.20	23286.08
18	1488.69	5135.79	5320.11	0.00	22.88	159.62	9763.20	21890.22
19	1277.19	0.00	371.77	-18.67	-1443.63	-186.47	0.00	0.00
20	684.54	0.00	182.35	-26.77	-527.36	-312.46	0.00	0.00
21	0.00	0.00	31.24	7.13	227.22	-265.49	0.00	0.00
22	0.00	0.00	-111.09	13.91	429.99	-332.73	0.00	0.00
23	0.00	0.00	-248.05	17.20	654.45	-423.38	0.00	0.00
24	0.00	0.00	-364.05	16.01	832.30	-483.96	0.00	0.00

Sum of Peak Zone Sensible Cooling Loads, Including Size Fractions, (W): 23707.83  
 Sum of Peak Zone Sensible Cooling Loads Per Unit Area, Including Size Fractions, (W/m<sup>2</sup>): 32.68  
 Sum of Peak Zone Sensible Cooling Loads Per Unit Volume, Including Size Fractions, (W/m<sup>3</sup>): 11.27

# Cooling Sizing Report

## Zone by Zone Breakdown Table

Zone Name	Area (m <sup>2</sup> )	Volume (m <sup>3</sup> )	Size Factor	Sensible Cooling Load, Including Size Fractions, (W)	Sensible Cooling Load Per Unit Area, Including Size Fractions, (W/m <sup>2</sup> )	Sensible Cooling Load Per Unit Volume, Including Size Fractions, (W/m <sup>3</sup> )
B1_Office 1	36.90	107.02	1.00	1119.28	30.33	10.46
B1_Office 2	38.73	112.30	1.00	1058.73	27.34	9.43
B1_Office 3	15.93	46.19	1.00	508.05	31.90	11.00
B1_Office 4	16.71	48.47	1.00	463.88	27.76	9.57
B1_Office 5	36.36	105.45	1.00	1142.22	31.41	10.83
B1_Office 6	38.16	110.66	1.00	1090.18	28.57	9.85
B1_Office 7	90.65	262.88	1.00	2496.47	27.54	9.50
B1_Office 8	52.22	151.44	1.00	1653.12	31.66	10.92
B1_Office 9	36.90	107.02	1.00	1273.18	34.50	11.90
B1_Office 10	38.73	112.30	1.00	1204.12	31.09	10.72
B1_Office 11	15.93	46.19	1.00	572.73	35.96	12.40
B1_Office 12	16.71	48.47	1.00	520.81	31.16	10.75
B1_Office 13	36.36	105.45	1.00	1295.90	35.64	12.29
B1_Office 14	38.16	110.66	1.00	1242.07	32.55	11.22
B1_Office 15	37.04	107.41	1.00	1345.87	36.34	12.53
B1_Office 16	52.22	151.44	1.00	1808.11	34.62	11.94
B1_Office 17	91.05	264.04	1.00	2816.77	30.94	10.67
B1_Reception 1	36.64	106.26	1.00	2096.35	57.21	19.73