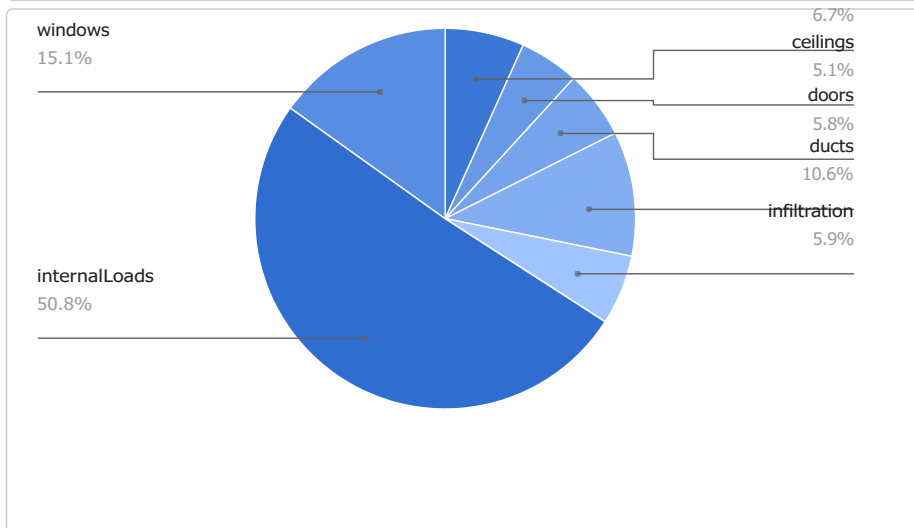


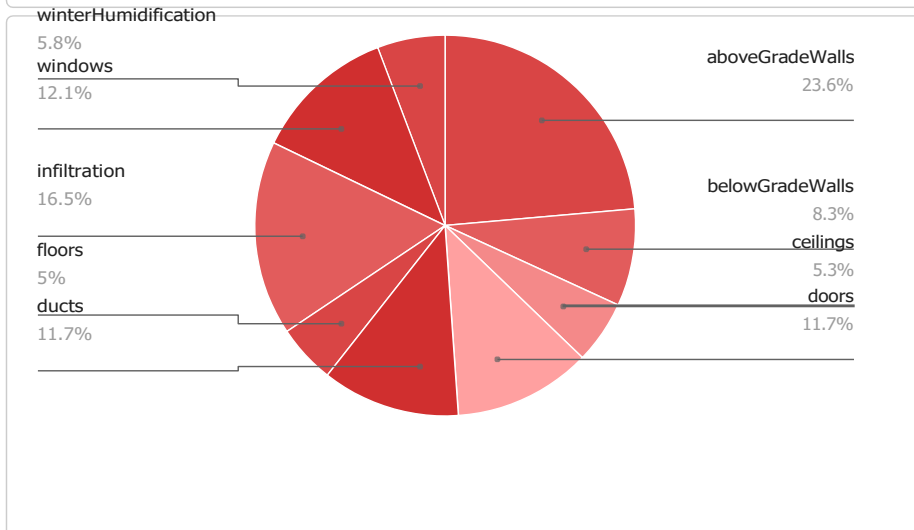
Summer Outdoor F:	88	Summer Indoor F:	75	Design Grains:	40	Daily Range:	Medium
Winter Outdoor F:	-4	Winter Indoor F:	70	Cooling RH:	50%	Elevation (Ft):	912

LOAD CALCULATION TOTALS

Heating BTU:	Cooling BTU:	SHR:	CFM:
		aboveGradeWalls	

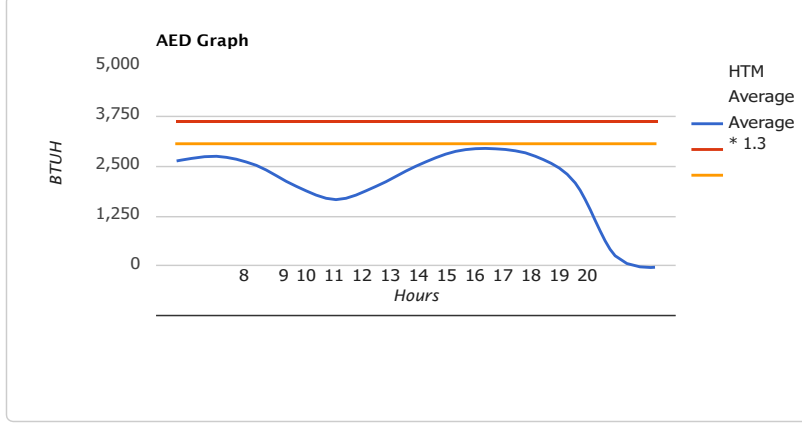


Name	Area	Sensible	Latent
AEDExcursion	0.00	0.00	0.00
aboveGradeWalls	1374.80	1473.13	0.00
belowGradeWalls	822.00	0.00	0.00
blowerMotor	0.00	0.00	0.00
ceilings	1240.00	1116.00	0.00
doors	125.30	1270.54	0.00
ducts	0.00	1225.30	1097.48
floors	1100.00	0.00	0.00
infiltration	0.00	449.19	854.41
internalLoads	0.00	8650.60	2486.50
skylights	0.00	0.00	0.00
ventilation	0.00	0.00	0.00
windows	186.90	3320.52	0.00
winterHumidification	0.00	0.00	0.00
Totals	-	17505.28	4438.39



Name	Area	Heat Loss
AEDExcursion	0.00	0.00
aboveGradeWalls	1374.80	7298.05
belowGradeWalls	822.00	2554.78
blowerMotor	0.00	0.00
ceilings	1240.00	1651.68
doors	125.30	3616.16
ducts	0.00	3629.99
floors	1100.00	1546.60
infiltration	0.00	5113.90
internalLoads	0.00	0.00
skylights	0.00	0.00
ventilation	0.00	0.00
windows	186.90	3734.26
winterHumidification	0.00	1785.96
Totals	-	30931.37

AED Graph



Approved ACCA MJ8 Calculations

Calculations are based on the ACCA Manual J 8th Edition and are approved by ACCA. All computed calculations are estimates on building use, weather data, and inputted values such as R-Values, window types, duct loss, etc. Equipment selections should meet both the latent and sensible gain as well as building heat loss. See Cool Calc Manual S Report for equipment sizing verification.

## COMPONENT LOADS

### Above Grade Walls

Construction Nr.	Exposure	Area	Heating HTM	Cooling HTM	Heating BTU	Sensible BTU	Latent BTU
15A13-8ocw-x	N	15.30	4.00	0.57	61.14	8.76	0.00
15A13-8ocw-x	E	30.00	4.00	0.57	119.88	17.17	0.00
15A13-8ocw-x	S	74.00	4.00	0.57	295.70	42.36	0.00
15A13-8ocw-x	W	27.00	4.00	0.57	107.89	15.45	0.00
15A13-8ocw-x	N	41.40	4.00	0.57	165.43	23.70	0.00
15A13-8ocw-x	W	26.00	4.00	0.57	103.90	14.88	0.00
12C-3s w	S	103.20	5.55	1.30	572.76	134.68	0.00
12C-3s w	W	88.00	5.55	1.30	488.40	114.84	0.00
12C-3s w	N	131.60	5.55	1.30	730.38	171.74	0.00
12C-3s w	E	212.70	5.55	1.30	1180.48	277.57	0.00
12C-3s w	S	261.00	5.55	0.67	1448.55	176.17	0.00
12C-3s w	W	54.00	5.55	1.30	299.70	70.47	0.00
12C-3s w	N	186.60	5.55	1.30	1035.63	243.51	0.00
12C-3s w	W	124.00	5.55	1.30	688.20	161.82	0.00

### Below Grade Walls

Construction Nr.	Area	Heating HTM	Heating BTU	Sensible BTU	Latent BTU
15A13-8ocw-x	60.00	3.11	186.48	0.00	0.00
15A13-8ocw-x	168.00	3.11	522.14	0.00	0.00
15A13-8ocw-x	222.00	3.11	689.98	0.00	0.00
15A13-8ocw-x	114.00	3.11	354.31	0.00	0.00
15A13-8ocw-x	180.00	3.11	559.44	0.00	0.00
15A13-8ocw-x	78.00	3.11	242.42	0.00	0.00

### Blower Motor

(none)

### Ceilings

Construction Nr.	Area	Heating HTM	Cooling HTM	Heating BTU	Sensible BTU	Latent BTU
16B-56 ad	180.00	1.33	0.90	239.76	162.00	0.00
16B-56 ad	750.00	1.33	0.90	999.00	675.00	0.00
16B-56 ad	310.00	1.33	0.90	412.92	279.00	0.00

### Doors

Construction Nr.	Exposure	Area	Heating HTM	Cooling HTM	Heating BTU	Sensible BTU	Latent BTU
11	S	24.00	28.86	10.14	692.64	243.36	0.00
11	E	53.30	28.86	10.14	1538.24	540.46	0.00
11	N	24.00	28.86	10.14	692.64	243.36	0.00
11	N	24.00	28.86	10.14	692.64	243.36	0.00

### Ducts

EHLF	ESGF	ELG	Heating BTU	Sensible BTU	Latent BTU
0.13	0.08	1097.48	0.00	0.00	0.00

### Floors

Construction Nr.	Area	Heating HTM	Heating BTU	Sensible BTU	Latent BTU
21B	700.00	1.41	984.20	0.00	0.00
21B	400.00	1.41	562.40	0.00	0.00

### Infiltration

NCFM Heating	NCFM Cooling	Heating BTU	Sensible BTU	Latent BTU
64.64	32.32	5113.90	449.19	854.41

### Internal Loads

Heating BTU	Sensible BTU	Latent BTU
0.00	230.00	200.00
0.00	0.00	40.00
0.00	1024.00	358.25
0.00	700.00	0.00
0.00	230.00	200.00

Heating BTU	Sensible BTU	Latent BTU
0.00	230.00	200.00
0.00	690.00	600.00
0.00	0.00	30.00
0.00	0.00	50.00
0.00	0.00	40.00
0.00	683.00	0.00
0.00	537.60	0.00
0.00	1023.00	0.00
0.00	1024.00	358.25
0.00	51.25	0.00
0.00	1000.00	0.00
0.00	426.75	0.00
0.00	0.00	0.00
0.00	460.00	400.00
0.00	0.00	10.00
0.00	341.00	0.00

### Ventilation

(none)

### Windows

Construction Nr.	Exposure	Area	Heating HTM	Heating BTU	Sensible BTU Avg.	Sensible BTU Peak	Latent BTU
4C	E	26.00	19.98	519.48	636.34	1399.21	0.00
4C	N	4.70	19.98	93.91	50.71	61.60	0.00
4C	W	11.00	19.98	219.78	295.83	611.69	0.00
4C	N	9.40	19.98	187.81	82.63	104.41	0.00
4C	N	9.20	19.98	183.82	80.87	102.19	0.00
IG	S	7.80	19.98	155.84	163.14	280.37	0.00
IG	W	20.00	19.98	399.60	470.06	959.80	0.00
IG	E	40.00	19.98	799.20	746.31	1578.71	0.00
IG	N	24.40	19.98	487.51	231.15	280.57	0.00
IG	N	14.40	19.98	287.71	136.42	165.58	0.00
IG	W	20.00	19.98	399.60	427.05	867.82	0.00

### Winter Humidification

Heating BTU	Sensible BTU	Latent BTU
1785.96	0.00	0.00

Project Name: Humboldt room by room  
Address: 1756 Humboldt Avenue, Saint Paul, MN  
FormType: HVAC System  
HVAC System Name: Main



### ROOM LOADS

Room Name	Heating	Sensible	Latent	Cooling	CFM
Basement Living Room and Closets	5471.17	3568.75	710.89	4279.65	162.00
BR, Bath Utility room	2621.25	493.73	251.53	745.26	20.00
Guest Room	3875.23	1994.53	345.60	2340.12	100.00
Living Room	11456.77	9873.03	1401.80	11274.83	498.00
Master	5483.53	2878.74	631.09	3509.83	130.00