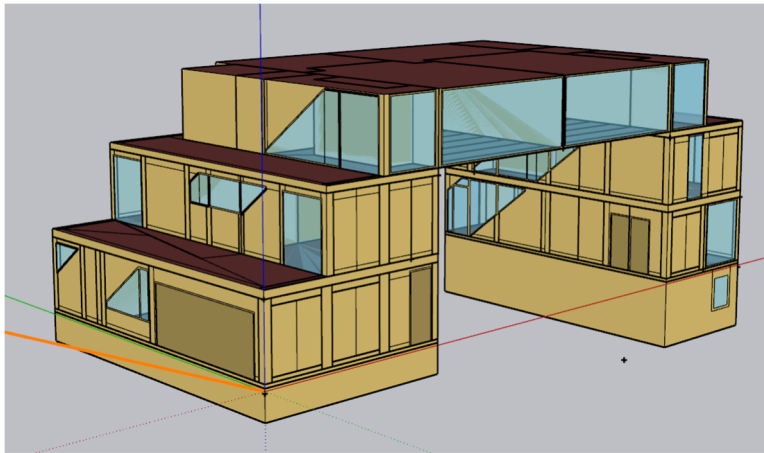

BUILDING HVAC LOAD CALCULATION

3508 96th Ave SE
MERCER ISLAND, WASHINGTON 98040

PROJECT: HEP-24-04



FOR:

SAM ADAMS
2622 123rd Ave SE, Bellevue, WA 98005

SUBMITTED BY:
HELIX ENERGY PARTNERS LLC

JUNE 26th, 2024
v002



RENEWAL DATE DEC. 31, 2024

OpenStudio Results

Model Summary

Building Summary

Data	Value
Building Name	3508 96th Ave SE
Total Site Energy	136,732 kBtu
Total Building Area	6,504 ft ²
Total Site EUI	21.02 kBtu/ft ²
OpenStudio Standards Building Type	n/a

Weather Summary

	Value
Weather File	Seattle Seattle Tacoma Intl A WA USA TMY3 WMO#=727930
Latitude	47.47
Longitude	-122.3
Elevation	400 ft
Time Zone	-8.0
North Axis Angle	12.50
ASHRAE Climate Zone	

Sizing Period Design Days

	Maximum Dry Bulb (F)	Daily Temperature Range (R)	Humidity Value	Humidity Type	Wind Speed (mph)	Wind Direction
SEATTLE SEATTLE TACOMA INTL A ANN CLG .4% CONDNS DB=>MWB	84.92	18.72	18.3	Wetbulb [F]	9.4	350.0
SEATTLE SEATTLE TACOMA INTL A ANN CLG .4% CONDNS DP=>MDB	69.44	18.72	15.9	Dewpoint [F]	9.4	350.0
SEATTLE SEATTLE TACOMA INTL A ANN CLG .4% CONDNS ENTH=>MDB	82.76	18.72	54700.0	Enthalpy [Btu/lb]	9.4	350.0
SEATTLE SEATTLE TACOMA INTL A ANN CLG .4% CONDNS WB=>MDB	82.22	18.72	19.2	Wetbulb [F]	9.4	350.0
SEATTLE SEATTLE TACOMA INTL A ANN HTG 99.6% CONDNS DB	24.44	0.0	-4.2	Wetbulb [F]	9.62	20.0
SEATTLE SEATTLE TACOMA INTL A ANN HTG WIND 99.6% CONDNS WS=>MCD B	42.08	0.0	5.6	Wetbulb [F]	27.07	20.0
SEATTLE SEATTLE TACOMA INTL A ANN HUM_N 99.6% CONDNS DP=>MCD B	31.28	0.0	-13.0	Dewpoint [F]	9.62	20.0

Unmet Hours Summary

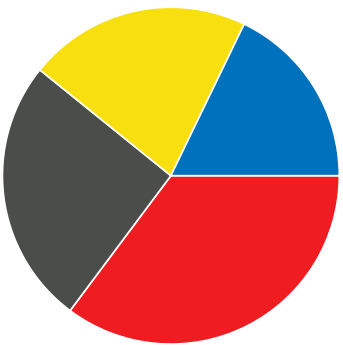
Time Setpoint Not Met	Time (hr)
During Heating	0.0
During Cooling	0.0
During Occupied Heating	0.0
During Occupied Cooling	0.0

[Unmet Hours Tolerance](#)

Tolerance for Time Setpoint Not Met	Temperature (F)
Heating	0.36
Cooling	0.36

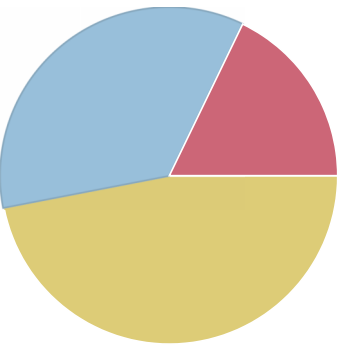
Annual Overview

[End Use - view table](#)



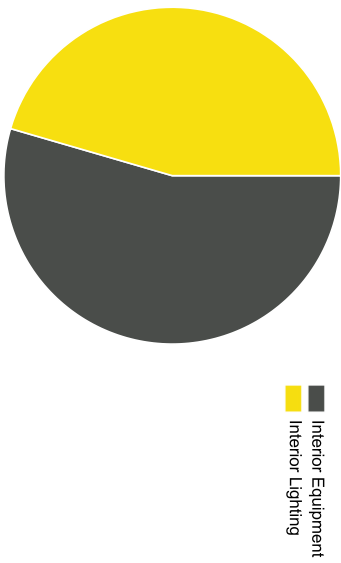
- Heating
- Interior Equipment
- Interior Lighting
- Cooling

[Energy Use - view table](#)



- Electricity
- District Heating Water
- District Cooling

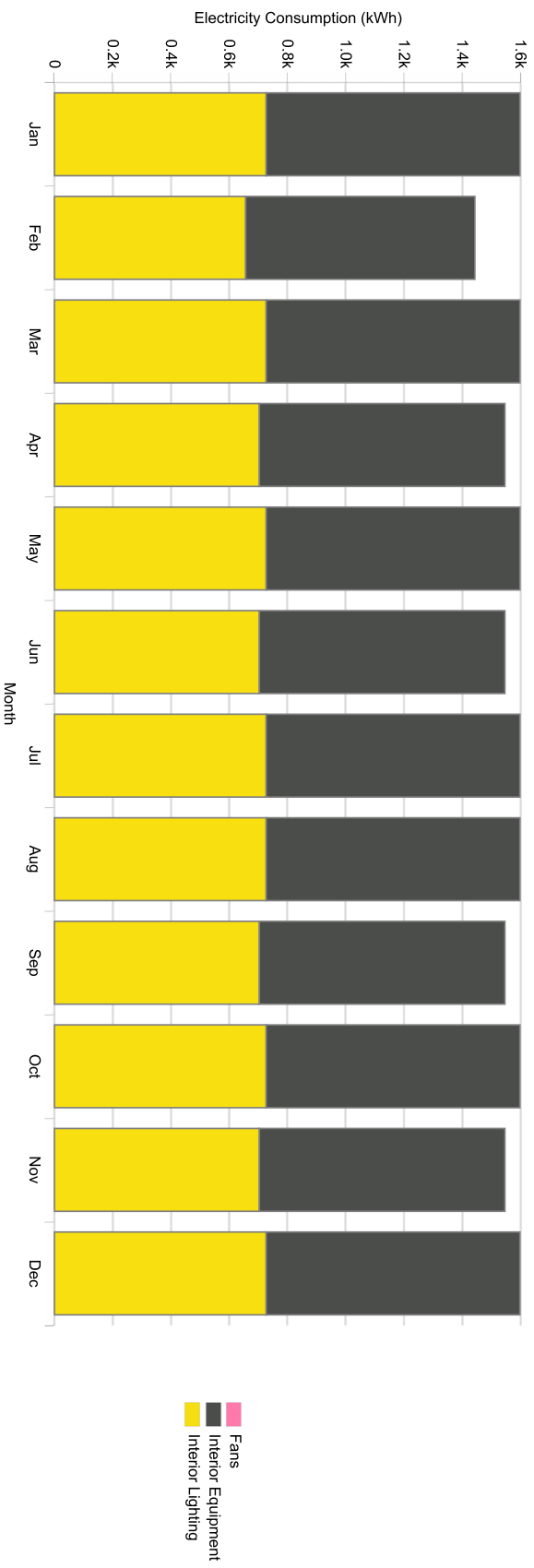
[EUI - Electricity - view table](#)



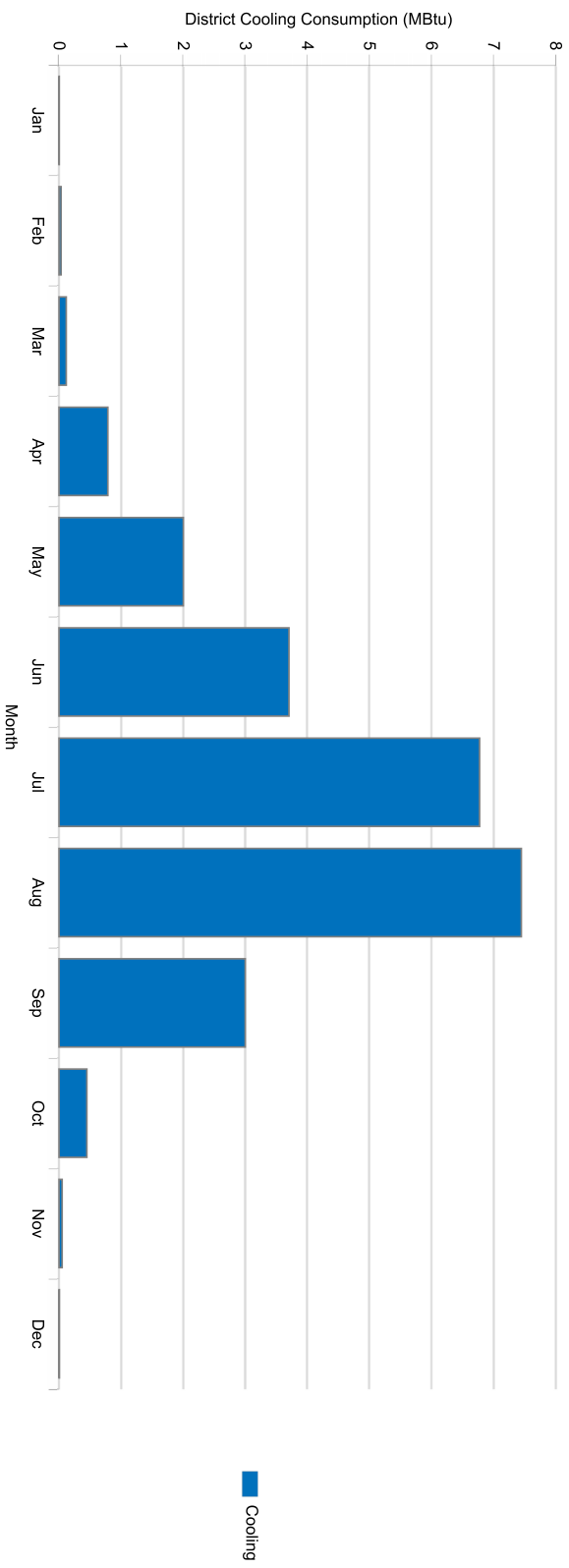
[EUI - Gas - view table](#)

Monthly Overview

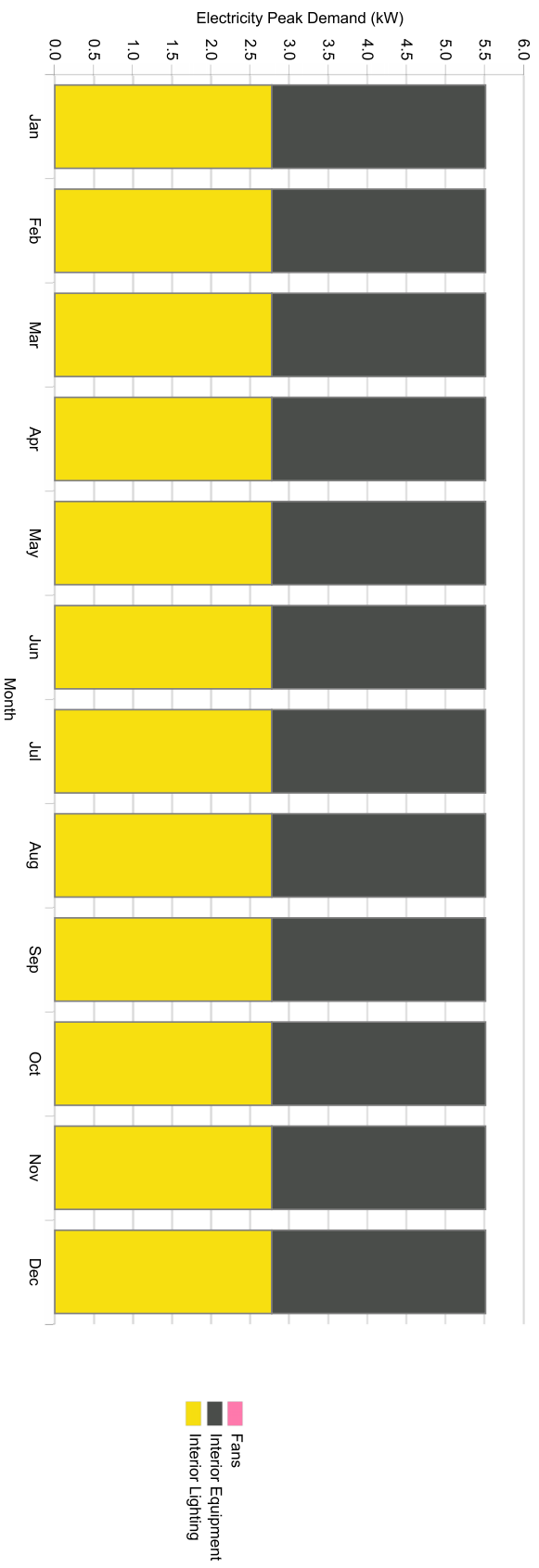
[Electricity Consumption \(kWh\) - view table](#)



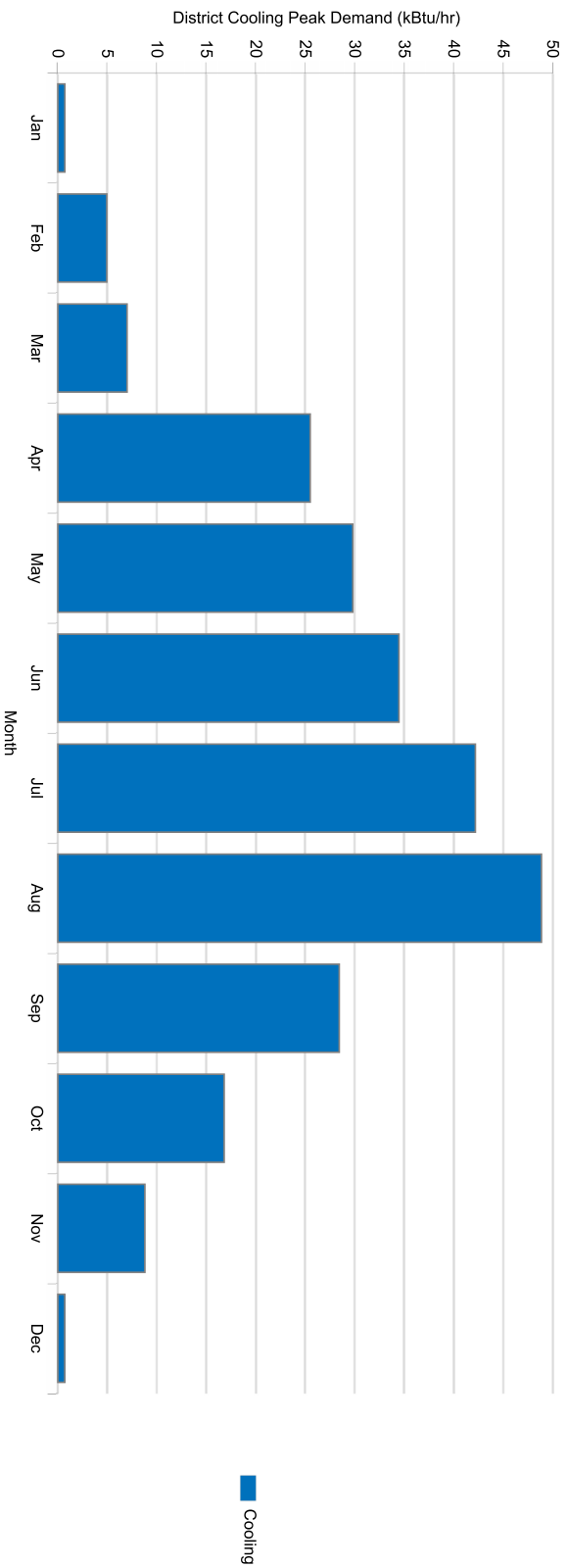
[District Cooling Consumption \(MBtu\) - view table](#)



[Electricity Peak Demand \(kW\) - view table](#)



[District Cooling Peak Demand \(kBtu/hr\) - view table](#)



Utility Bills/Rates

No Data to Show for Utility Bills/Rates

Envelope Summary

Base Surface Constructions

Construction	Net Area (ft^2)	Surface Count	R Value (ft^2*h*R/Btu)
CONSTR-DET1.0	2,291	92	29.86
CONSTR-DET1.1	97	10	11.22
CONSTR-DET1.2	375	71	12.74
CONSTR-DET12	3	2	32.62
CONSTR-DET13.1	2,915	1	16.92

CONSTR-DET2.1	114	50	13.02
CONSTR-DET3.1	231	49	1.62
CONSTR-DET4.1	642	40	15.12
CONSTR-DET4.1A	35	7	0.40
CONSTR-DET5.0	811	6	28.79
CONSTR-DET8.1A	578	8	79.45
CONSTR-DET8.1B	1,599	4	21.88
CONSTR-WSEC_A103.3.6.1(1)MTL160.C.R-12CIR-19CAV	270	2	21.28
D3-STEEL CONTAINER DOOR	114	5	0.00
ExtRoof-1	24	1	28.79

Sub Surface Constructions

Construction	Net Area (ft^2)	Surface Count	U-factor (Btu/ft^2*h*R)	SHGC	VLT
D1-DUAL PANE LOW E	752	15	0.28	0.18	0.40
D2-STEEL DOOR BLACK	84	4		n/a	n/a
Typical Overhead Door R-0.86 91	114	1		n/a	n/a
W1-DUAL PANE LOW E	1,199	47	0.28	0.18	0.40

Sub Surface Construction Details (Material Layers)

Material Name
<i>(Material Layers in Construction 'D1-DUAL PANE LOW E:')</i>
DUAL PANE LOW E
<i>(Material Layers in Construction 'D2-STEEL DOOR BLACK:')</i>

STEEL DOOR

(Material Layers in Construction Typical Overhead Door R-0.86 91';)

Typical Insulation R-0.01 91

(Material Layers in Construction W1-DUAL PANE LOW E;)

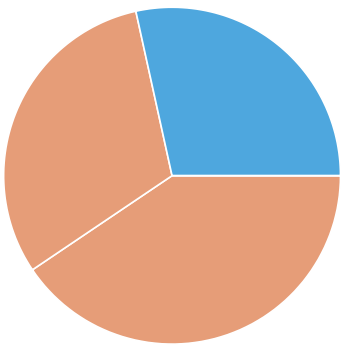
DUAL PANE LOW E

Window-to-Wall and Skylight-to-Roof area Ratios

Description	Total (%)	North (%)	East (%)	South (%)	West (%)
Gross Window-Wall Ratio	25.83	26.91	25.52	36.12	19.38
Gross Window-Wall Ratio (Conditioned)	34.13	33.21	35.29	44.84	26.81
Skylight-Roof Ratio	0.0				

Space Type Breakdown

[Space Type Breakdown - view table](#)



Space Type Summary

Attic Spacetype

(6 spaces and 4 thermal zones)

Definition	Value	Unit	Inst. Multiplier
Building Infiltration-3 1	0.1700	cfm/ floor area ft^2	

Bedroom

(17 spaces and 17 thermal zones)

Definition	Value	Unit	Inst. Multiplier
Internal Mass Definition 1	8	ft^2/floor area ft^2	1.0
Bedroom People Definition	300	ft^2/person	1.0
Bedroom Electric Equipment Definition	0.6000	W/ft^2	1.0
Bedroom Lights Definition	0.5000	W/ft^2	1.0
Building Infiltration-1	0.1700	cfm/ floor area ft^2	
WSECR M1505.4.3(1) 3000-35000 3Bdr (outdoor air method Sum)	0.0140	cfm/ floor area ft^2	
WSECR M1505.4.3(1) 3000-35000 3Bdr (outdoor air method Sum)	0.0140	cfm	

Common

(17 spaces and 17 thermal zones)

Definition	Value	Unit	Inst. Multiplier
Internal Mass Definition 1	8	ft^2/floor area ft^2	1.0
Common People Definition	720	ft^2/person	1.0

Common Electric Equipment Definition		0.8000	W/ft ²	1.0
Common Lights Definition		0.7800	W/ft ²	1.0
Building Infiltration-2		0.1700	cfm/ floor area ft ²	
WSECR M1505.4.3(1) 3000-35000 3Bdr (outdoor air method Sum)		0.0140	cfm/ floor area ft ²	
WSECR M1505.4.3(1) 3000-35000 3Bdr (outdoor air method Sum)		0.0140	cfm	

Storage
(3 spaces and 2 thermal zones)

Definition	Value	Unit	Inst. Multiplier
Internal Mass Definition 1	8	ft ² /floor area ft ²	1.0
Building Infiltration-3	0.1700	cfm/ floor area ft ²	

Interior Lighting Summary

Zone Lighting

Lights	Zone	Lighting Power Density (W/ft ²)	Total Power (W)	Schedule Name	Scheduled Hours/Week (hr)	Actual Load Hours/Week (hr)	Return Air Fraction	Annual Consumption (kWh)
2-BEDROOM 6 BEDROOM LIGHTS		0.5	89.97	LIGHTING-BEDROOM	44.35	44.34	0.0000	208.33
1-BATHROOM 2 BEDROOM LIGHTS		0.5	24.6	LIGHTING-BEDROOM	44.35	44.34	0.0000	55.56
1-BEDROOM 1 BEDROOM LIGHTS		0.5	83.35	LIGHTING-BEDROOM	44.35	44.34	0.0000	191.67
3-BEDROOM 6 BEDROOM LIGHTS		0.5	185.1	LIGHTING-BEDROOM	44.35	44.34	0.0000	427.78
2-BEDROOM 2 BEDROOM LIGHTS		0.5	81.93	LIGHTING-BEDROOM	44.35	44.34	0.0000	188.89

2-CLOSET 2 BEDROOM LIGHTS	0.5	31.34	LIGHTING-BEDROOM	44.35	44.34	0.0000	72.22
2-CLOSET 4 BEDROOM LIGHTS	0.5	28.2	LIGHTING-BEDROOM	44.35	44.34	0.0000	63.89
2-BEDROOM 4 BEDROOM LIGHTS	0.5	77.58	LIGHTING-BEDROOM	44.35	44.34	0.0000	180.56
2-BATHROOM 6 BEDROOM LIGHTS	0.5	25.13	LIGHTING-BEDROOM	44.35	44.34	0.0000	58.33
2-BATHROOM 5 BEDROOM LIGHTS	0.5	33.58	LIGHTING-BEDROOM	44.35	44.34	0.0000	77.78
2-BATHROOM 4 BEDROOM LIGHTS	0.5	36.5	LIGHTING-BEDROOM	44.35	44.34	0.0000	83.33
3-BATHROOM 7 BEDROOM LIGHTS	0.5	20.51	LIGHTING-BEDROOM	44.35	44.34	0.0000	47.22
2-CLOSET 3 BEDROOM LIGHTS	0.5	38.74	LIGHTING-BEDROOM	44.35	44.34	0.0000	88.89
3-BATHROOM 8 BEDROOM LIGHTS	0.5	52.79	LIGHTING-BEDROOM	44.35	44.34	0.0000	122.22
2-BEDROOM 5 BEDROOM LIGHTS	0.5	85.59	LIGHTING-BEDROOM	44.35	44.34	0.0000	197.22
2-CLOSET 5 BEDROOM LIGHTS	0.5	11.22	LIGHTING-BEDROOM	44.35	44.34	0.0000	25.0
1-BATHROOM 3 BEDROOM LIGHTS	0.5	19.04	LIGHTING-BEDROOM	44.35	44.34	0.0000	44.44
2-HALL COMMON LIGHTS	0.78	71.13	LIGHTING-COMMON	59.85	59.85	0.0000	222.22
1-SAUNA COMMON LIGHTS	0.78	36.37	LIGHTING-COMMON	59.85	59.85	0.0000	113.89
1-LIVING COMMON LIGHTS	0.78	224.24	LIGHTING-COMMON	59.85	59.85	0.0000	700.0
1-DINING BOOTH COMMON LIGHTS	0.78	36.32	LIGHTING-COMMON	59.85	59.85	0.0000	113.89
3-LIVING COMMON LIGHTS	0.78	393.36	LIGHTING-COMMON	59.85	59.85	0.0000	1227.78

1-MUD ROOM COMMON LIGHTS	0.78	114.0	LIGHTING-COMMON	59.85	59.85	0.0000	355.56
1-KITCHEN COMMON LIGHTS	0.78	113.72	LIGHTING-COMMON	59.85	59.85	0.0000	355.56
3-DINING COMMON LIGHTS	0.78	370.73	LIGHTING-COMMON	59.85	59.85	0.0000	1158.33
1-HALL 1 COMMON LIGHTS	0.78	120.43	LIGHTING-COMMON	59.85	59.85	0.0000	375.0
3-OFFICE 2 COMMON LIGHTS	0.78	46.59	LIGHTING-COMMON	59.85	59.85	0.0000	144.44
2-HALL 2 COMMON LIGHTS	0.78	46.9	LIGHTING-COMMON	59.85	59.85	0.0000	147.22
3-HALL 1 COMMON LIGHTS	0.78	84.16	LIGHTING-COMMON	59.85	59.85	0.0000	263.89
3-HALL 2 COMMON LIGHTS	0.78	69.26	LIGHTING-COMMON	59.85	59.85	0.0000	216.67
3-STAIR 1 COMMON LIGHTS	0.78	36.71	LIGHTING-COMMON	59.85	59.85	0.0000	113.89
3-STAIR 2 COMMON LIGHTS	0.78	34.48	LIGHTING-COMMON	59.85	59.85	0.0000	108.33
3-TV ROOM COMMON LIGHTS	0.78	194.08	LIGHTING-COMMON	59.85	59.85	0.0000	605.56
3-OFFICE 1 COMMON LIGHTS	0.78	64.99	LIGHTING-COMMON	59.85	59.85	0.0000	202.78

Space Lighting Details

Load Name	Definition Name	Load Type	Load (units)	Multiplier	Total Load (W)
<i>(Space Name: 'WALL-011-001'; Area: 467 ft^2, Total LPD: 0.0 W/ft^2)</i>					
-	-	-	-	-	-

(Space Name: '2-3 Plenum East', Area: 614 ft ² , Total LPD: 0.0 W/ft ²)									
-	-	-	-	-	-	-	-	-	-
(Space Name: '2-Hall', Area: 91 ft ² , Total LPD: 0.78 W/ft ²)									
Common Lights	Common Lights Definition	SpaceType	0.78 (W/ft ²)	1	71				
(Space Name: '1-Sauna', Area: 47 ft ² , Total LPD: 0.78 W/ft ²)									
Common Lights	Common Lights Definition	SpaceType	0.78 (W/ft ²)	1	36				
(Space Name: '2-Bedroom 6', Area: 180 ft ² , Total LPD: 0.5 W/ft ²)									
Bedroom Lights	Bedroom Lights Definition	SpaceType	0.5 (W/ft ²)	1	90				
(Space Name: '1-Living', Area: 287 ft ² , Total LPD: 0.78 W/ft ²)									
Common Lights	Common Lights Definition	SpaceType	0.78 (W/ft ²)	1	224				
(Space Name: '2-3 Plenum West', Area: 617 ft ² , Total LPD: 0.0 W/ft ²)									
-	-	-	-	-	-	-	-	-	-
(Space Name: '1-Dining Booth', Area: 47 ft ² , Total LPD: 0.78 W/ft ²)									
Common Lights	Common Lights Definition	SpaceType	0.78 (W/ft ²)	1	36				
(Space Name: '3-Living', Area: 504 ft ² , Total LPD: 0.78 W/ft ²)									
Common Lights	Common Lights Definition	SpaceType	0.78 (W/ft ²)	1	393				
(Space Name: '1-Bathroom 2', Area: 49 ft ² , Total LPD: 0.5 W/ft ²)									
Bedroom Lights	Bedroom Lights Definition	SpaceType	0.5 (W/ft ²)	1	25				
(Space Name: '1-Mud Room', Area: 146 ft ² , Total LPD: 0.78 W/ft ²)									
Common Lights	Common Lights Definition	SpaceType	0.78 (W/ft ²)	1	114				
(Space Name: '1-Kitchen', Area: 146 ft ² , Total LPD: 0.78 W/ft ²)									
Common Lights	Common Lights Definition	SpaceType	0.78 (W/ft ²)	1	114				

(Space Name: '3-Dining', Area: 475 ft², Total LPD: 0.78 W/ft²)								
Common Lights	Common Lights Definition	SpaceType	0.78 (W/ft ²)	1	371			
(Space Name: '1-Hall 1', Area: 154 ft², Total LPD: 0.78 W/ft²)								
Common Lights	Common Lights Definition	SpaceType	0.78 (W/ft ²)	1	120			
(Space Name: '1-Bedroom 1', Area: 167 ft², Total LPD: 0.5 W/ft²)								
Bedroom Lights	Bedroom Lights Definition	SpaceType	0.5 (W/ft ²)	1	83			
(Space Name: '3-Bedroom 6', Area: 370 ft², Total LPD: 0.5 W/ft²)								
Bedroom Lights	Bedroom Lights Definition	SpaceType	0.5 (W/ft ²)	1	185			
(Space Name: '2-Bedroom 2', Area: 164 ft², Total LPD: 0.5 W/ft²)								
Bedroom Lights	Bedroom Lights Definition	SpaceType	0.5 (W/ft ²)	1	82			
(Space Name: '2-Closet 2', Area: 63 ft², Total LPD: 0.5 W/ft²)								
Bedroom Lights	Bedroom Lights Definition	SpaceType	0.5 (W/ft ²)	1	31			
(Space Name: '2-Closet 4', Area: 56 ft², Total LPD: 0.5 W/ft²)								
Bedroom Lights	Bedroom Lights Definition	SpaceType	0.5 (W/ft ²)	1	28			
(Space Name: '2-Bedroom 4', Area: 155 ft², Total LPD: 0.5 W/ft²)								
Bedroom Lights	Bedroom Lights Definition	SpaceType	0.5 (W/ft ²)	1	78			
(Space Name: '2-Bathroom 6', Area: 50 ft², Total LPD: 0.5 W/ft²)								
Bedroom Lights	Bedroom Lights Definition	SpaceType	0.5 (W/ft ²)	1	25			
(Space Name: '2-Bathroom 5', Area: 67 ft², Total LPD: 0.5 W/ft²)								
Bedroom Lights	Bedroom Lights Definition	SpaceType	0.5 (W/ft ²)	1	34			
(Space Name: '3-Office 2', Area: 60 ft², Total LPD: 0.78 W/ft²)								
Common Lights	Common Lights Definition	SpaceType	0.78 (W/ft ²)	1	47			

(Space Name: '2-Bathroom 4', Area: 73 ft², Total LPD: 0.5 W/ft²)									
Bedroom Lights	Bedroom Lights Definition	SpaceType	0.5 (W/ft ²)	1	37				
(Space Name: '1-2 Plenum West 1', Area: 0 ft², Total LPD: 0.0 W/ft²)									
-	-	-	-	-	-				
(Space Name: '2-Hall 2', Area: 60 ft², Total LPD: 0.78 W/ft²)									
Common Lights	Common Lights Definition	SpaceType	0.78 (W/ft ²)	1	47				
(Space Name: '3-Bathroom 7', Area: 41 ft², Total LPD: 0.5 W/ft²)									
Bedroom Lights	Bedroom Lights Definition	SpaceType	0.5 (W/ft ²)	1	21				
(Space Name: '2-Closet 3', Area: 77 ft², Total LPD: 0.5 W/ft²)									
Bedroom Lights	Bedroom Lights Definition	SpaceType	0.5 (W/ft ²)	1	39				
(Space Name: '3-Bathroom 8', Area: 106 ft², Total LPD: 0.5 W/ft²)									
Bedroom Lights	Bedroom Lights Definition	SpaceType	0.5 (W/ft ²)	1	53				
(Space Name: '2-Bedroom 5', Area: 171 ft², Total LPD: 0.5 W/ft²)									
Bedroom Lights	Bedroom Lights Definition	SpaceType	0.5 (W/ft ²)	1	86				
(Space Name: '2-Closet 5', Area: 22 ft², Total LPD: 0.5 W/ft²)									
Bedroom Lights	Bedroom Lights Definition	SpaceType	0.5 (W/ft ²)	1	11				
(Space Name: '3-Hall 1', Area: 108 ft², Total LPD: 0.78 W/ft²)									
Common Lights	Common Lights Definition	SpaceType	0.78 (W/ft ²)	1	84				
(Space Name: '3-Hall 2', Area: 89 ft², Total LPD: 0.78 W/ft²)									
Common Lights	Common Lights Definition	SpaceType	0.78 (W/ft ²)	1	69				
(Space Name: '3-Stair 1', Area: 47 ft², Total LPD: 0.78 W/ft²)									
Common Lights	Common Lights Definition	SpaceType	0.78 (W/ft ²)	1	37				

(Space Name: '3-Stair 2', Area: 44 ft^2, Total LPD: 0.78 W/ft^2)									
Common Lights	Common Lights Definition	SpaceType	0.78 (W/ft^2)	1	34				
(Space Name: '1-2 Plenum East 1', Area: 0 ft^2, Total LPD: 0.0 W/ft^2)									
-	-	-	-	-	-				
(Space Name: '3-TV Room', Area: 249 ft^2, Total LPD: 0.78 W/ft^2)									
Common Lights	Common Lights Definition	SpaceType	0.78 (W/ft^2)	1	194				
(Space Name: '3-Office 1', Area: 83 ft^2, Total LPD: 0.78 W/ft^2)									
Common Lights	Common Lights Definition	SpaceType	0.78 (W/ft^2)	1	65				
(Space Name: 'B-Basement', Area: 935 ft^2, Total LPD: 0.0 W/ft^2)									
-	-	-	-	-	-				
(Space Name: '1-Bathroom 3', Area: 38 ft^2, Total LPD: 0.5 W/ft^2)									
Bedroom Lights	Bedroom Lights Definition	SpaceType	0.5 (W/ft^2)	1	19				
(Space Name: '1-2 Plenum West', Area: 935 ft^2, Total LPD: 0.0 W/ft^2)									
-	-	-	-	-	-				
(Space Name: '1-2 Plenum East', Area: 614 ft^2, Total LPD: 0.0 W/ft^2)									
-	-	-	-	-	-				
(Space Name: 'B-Basement 1', Area: 614 ft^2, Total LPD: 0.0 W/ft^2)									
-	-	-	-	-	-				

Lighting Controls Details

Space Name

Control Name

Zone Controlled (type, fraction)

Illuminance Setpoint (fc)

Plug Loads Summary

Electric Plug Load Consumption

	Electricity Annual Value (kWh)
InteriorEquipment:Electricity:Zone:TZ:2-BEDROOM 3	300.0
General:InteriorEquipment:Electricity:Zone:TZ:2-BEDROOM 3	300.0
InteriorEquipment:Electricity:Zone:TZ:1-BATHROOM 2	83.33
General:InteriorEquipment:Electricity:Zone:TZ:1-BATHROOM 2	83.33
InteriorEquipment:Electricity:Zone:TZ:1-BEDROOM 1	277.78
General:InteriorEquipment:Electricity:Zone:TZ:1-BEDROOM 1	277.78
InteriorEquipment:Electricity:Zone:TZ:3-BEDROOM 6	616.67
General:InteriorEquipment:Electricity:Zone:TZ:3-BEDROOM 6	616.67
InteriorEquipment:Electricity:Zone:TZ:2-BEDROOM 2	272.22
General:InteriorEquipment:Electricity:Zone:TZ:2-BEDROOM 2	272.22
InteriorEquipment:Electricity:Zone:TZ:2-CLOSET 2	105.56
General:InteriorEquipment:Electricity:Zone:TZ:2-CLOSET 2	105.56
InteriorEquipment:Electricity:Zone:TZ:2-CLOSET 4	94.44
General:InteriorEquipment:Electricity:Zone:TZ:2-CLOSET 4	94.44
InteriorEquipment:Electricity:Zone:TZ:2-BEDROOM 4	258.33
General:InteriorEquipment:Electricity:Zone:TZ:2-BEDROOM 4	258.33
InteriorEquipment:Electricity:Zone:TZ:2-BATHROOM 6	83.33
General:InteriorEquipment:Electricity:Zone:TZ:2-BATHROOM 6	83.33
InteriorEquipment:Electricity:Zone:TZ:2-BATHROOM 5	111.11

General:InteriorEquipment:Electricity:Zone:TZ:2-BATHROOM 5	111.11
InteriorEquipment:Electricity:Zone:TZ:2-BATHROOM 4	122.22
General:InteriorEquipment:Electricity:Zone:TZ:2-BATHROOM 4	122.22
InteriorEquipment:Electricity:Zone:TZ:3-BATHROOM 7	69.44
General:InteriorEquipment:Electricity:Zone:TZ:3-BATHROOM 7	69.44
InteriorEquipment:Electricity:Zone:TZ:2-CLOSET 3	130.56
General:InteriorEquipment:Electricity:Zone:TZ:2-CLOSET 3	130.56
InteriorEquipment:Electricity:Zone:TZ:3-BATHROOM 8	175.0
General:InteriorEquipment:Electricity:Zone:TZ:3-BATHROOM 8	175.0
InteriorEquipment:Electricity:Zone:TZ:2-BEDROOM 5	286.11
General:InteriorEquipment:Electricity:Zone:TZ:2-BEDROOM 5	286.11
InteriorEquipment:Electricity:Zone:TZ:2-CLOSET 5	36.11
General:InteriorEquipment:Electricity:Zone:TZ:2-CLOSET 5	36.11
InteriorEquipment:Electricity:Zone:TZ:1-BATHROOM 3	63.89
General:InteriorEquipment:Electricity:Zone:TZ:1-BATHROOM 3	63.89
InteriorEquipment:Electricity:Zone:TZ:2-HALL	258.33
General:InteriorEquipment:Electricity:Zone:TZ:2-HALL	258.33
InteriorEquipment:Electricity:Zone:TZ:1-SAUNA	133.33
General:InteriorEquipment:Electricity:Zone:TZ:1-SAUNA	133.33
InteriorEquipment:Electricity:Zone:TZ:1-LIVING	816.67
General:InteriorEquipment:Electricity:Zone:TZ:1-LIVING	816.67
InteriorEquipment:Electricity:Zone:TZ:1-DINING BOOTH	133.33
General:InteriorEquipment:Electricity:Zone:TZ:1-DINING BOOTH	133.33
InteriorEquipment:Electricity:Zone:TZ:3-LIVING	1430.56
General:InteriorEquipment:Electricity:Zone:TZ:3-LIVING	1430.56
InteriorEquipment:Electricity:Zone:TZ:1-MUD ROOM	413.89
General:InteriorEquipment:Electricity:Zone:TZ:1-MUD ROOM	413.89
InteriorEquipment:Electricity:Zone:TZ:1-KITCHEN	413.89

General:InteriorEquipment:Electricity:Zone:TZ:1-KITCHEN		413.89			
InteriorEquipment:Electricity:Zone:TZ:3-DINING		1347.22			
General:InteriorEquipment:Electricity:Zone:TZ:3-DINING		1347.22			
InteriorEquipment:Electricity:Zone:TZ:1-HALL 1		438.89			
General:InteriorEquipment:Electricity:Zone:TZ:1-HALL 1		438.89			
InteriorEquipment:Electricity:Zone:TZ:3-OFFICE 2		169.44			
General:InteriorEquipment:Electricity:Zone:TZ:3-OFFICE 2		169.44			
InteriorEquipment:Electricity:Zone:TZ:2-HALL 2		169.44			
General:InteriorEquipment:Electricity:Zone:TZ:2-HALL 2		169.44			
InteriorEquipment:Electricity:Zone:TZ:3-HALL 1		305.56			
General:InteriorEquipment:Electricity:Zone:TZ:3-HALL 1		305.56			
InteriorEquipment:Electricity:Zone:TZ:3-HALL 2		252.78			
General:InteriorEquipment:Electricity:Zone:TZ:3-HALL 2		252.78			
InteriorEquipment:Electricity:Zone:TZ:3-STAIR 1		133.33			
General:InteriorEquipment:Electricity:Zone:TZ:3-STAIR 1		133.33			
InteriorEquipment:Electricity:Zone:TZ:3-STAIR 2		125.0			
General:InteriorEquipment:Electricity:Zone:TZ:3-STAIR 2		125.0			
InteriorEquipment:Electricity:Zone:TZ:3-TV ROOM		705.56			
General:InteriorEquipment:Electricity:Zone:TZ:3-TV ROOM		705.56			
InteriorEquipment:Electricity:Zone:TZ:3-OFFICE 1		236.11			
General:InteriorEquipment:Electricity:Zone:TZ:3-OFFICE 1		236.11			

Space-level Electric Plug Loads

Equipment Name	Definition	Load (units)	Inheritance Level	Multiplier	Total Load (W)
<i>(Space Name: 1-Bathroom 2, Area: 49 ft^2)</i>					
Bedroom Electric Equipment	Bedroom Electric Equipment Definition	0.6 (W/ft^2)	spacetype	1.0	30

(Space Name: 1-Bathroom 3, Area: 38 ft^2)	Bedroom Electric Equipment Definition	0.6 (W/ft^2)	spacetype	1.0	23
(Space Name: 1-Bedroom 1, Area: 167 ft^2)	Bedroom Electric Equipment Definition	0.6 (W/ft^2)	spacetype	1.0	100
(Space Name: 1-Dining Booth, Area: 47 ft^2)	Common Electric Equipment Definition	0.8 (W/ft^2)	spacetype	1.0	37
(Space Name: 1-Hall 1, Area: 154 ft^2)	Common Electric Equipment Definition	0.8 (W/ft^2)	spacetype	1.0	124
(Space Name: 1-Kitchen, Area: 146 ft^2)	Common Electric Equipment Definition	0.8 (W/ft^2)	spacetype	1.0	117
(Space Name: 1-Living, Area: 287 ft^2)	Common Electric Equipment Definition	0.8 (W/ft^2)	spacetype	1.0	230
(Space Name: 1-Mud Room, Area: 146 ft^2)	Common Electric Equipment Definition	0.8 (W/ft^2)	spacetype	1.0	117
(Space Name: 1-Sauna, Area: 47 ft^2)	Common Electric Equipment Definition	0.8 (W/ft^2)	spacetype	1.0	37
(Space Name: 2-Bathroom 4, Area: 73 ft^2)	Bedroom Electric Equipment Definition	0.6 (W/ft^2)	spacetype	1.0	44
(Space Name: 2-Bathroom 5, Area: 67 ft^2)	Bedroom Electric Equipment Definition	0.6 (W/ft^2)	spacetype	1.0	40
(Space Name: 2-Bathroom 6, Area: 50 ft^2)	Bedroom Electric Equipment Definition	0.6 (W/ft^2)	spacetype	1.0	30

(Space Name: 2-Bedroom 2, Area: 164 ft²)	Bedroom Electric Equipment Definition	0.6 (W/ft ²)	spacetype	1.0	98
(Space Name: 2-Bedroom 4, Area: 155 ft²)	Bedroom Electric Equipment Definition	0.6 (W/ft ²)	spacetype	1.0	93
(Space Name: 2-Bedroom 5, Area: 171 ft²)	Bedroom Electric Equipment Definition	0.6 (W/ft ²)	spacetype	1.0	103
(Space Name: 2-Bedroom 6, Area: 180 ft²)	Bedroom Electric Equipment Definition	0.6 (W/ft ²)	spacetype	1.0	108
(Space Name: 2-Closet 2, Area: 63 ft²)	Bedroom Electric Equipment Definition	0.6 (W/ft ²)	spacetype	1.0	38
(Space Name: 2-Closet 3, Area: 77 ft²)	Bedroom Electric Equipment Definition	0.6 (W/ft ²)	spacetype	1.0	46
(Space Name: 2-Closet 4, Area: 56 ft²)	Bedroom Electric Equipment Definition	0.6 (W/ft ²)	spacetype	1.0	34
(Space Name: 2-Closet 5, Area: 22 ft²)	Bedroom Electric Equipment Definition	0.6 (W/ft ²)	spacetype	1.0	13
(Space Name: 2-Hall, Area: 91 ft²)	Common Electric Equipment Definition	0.8 (W/ft ²)	spacetype	1.0	73
(Space Name: 2-Hall 2, Area: 60 ft²)	Common Electric Equipment Definition	0.8 (W/ft ²)	spacetype	1.0	48
(Space Name: 3-Bathroom 7, Area: 41 ft²)	Bedroom Electric Equipment Definition	0.6 (W/ft ²)	spacetype	1.0	25

(Space Name: 3-Bathroom 8, Area: 106 ft²)								
Bedroom Electric Equipment	Bedroom Electric Equipment Definition	0.6 (W/ft ²)	spacetype	1.0	63			
(Space Name: 3-Bedroom 6, Area: 370 ft²)								
Bedroom Electric Equipment	Bedroom Electric Equipment Definition	0.6 (W/ft ²)	spacetype	1.0	222			
(Space Name: 3-Dining, Area: 475 ft²)								
Common Electric Equipment	Common Electric Equipment Definition	0.8 (W/ft ²)	spacetype	1.0	380			
(Space Name: 3-Hall 1, Area: 108 ft²)								
Common Electric Equipment	Common Electric Equipment Definition	0.8 (W/ft ²)	spacetype	1.0	86			
(Space Name: 3-Hall 2, Area: 89 ft²)								
Common Electric Equipment	Common Electric Equipment Definition	0.8 (W/ft ²)	spacetype	1.0	71			
(Space Name: 3-Living, Area: 504 ft²)								
Common Electric Equipment	Common Electric Equipment Definition	0.8 (W/ft ²)	spacetype	1.0	403			
(Space Name: 3-Office 1, Area: 83 ft²)								
Common Electric Equipment	Common Electric Equipment Definition	0.8 (W/ft ²)	spacetype	1.0	67			
(Space Name: 3-Office 2, Area: 60 ft²)								
Common Electric Equipment	Common Electric Equipment Definition	0.8 (W/ft ²)	spacetype	1.0	48			
(Space Name: 3-Stair 1, Area: 47 ft²)								
Common Electric Equipment	Common Electric Equipment Definition	0.8 (W/ft ²)	spacetype	1.0	38			
(Space Name: 3-Stair 2, Area: 44 ft²)								
Common Electric Equipment	Common Electric Equipment Definition	0.8 (W/ft ²)	spacetype	1.0	35			
(Space Name: 3-TV Room, Area: 249 ft²)								
Common Electric Equipment	Common Electric Equipment Definition	0.8 (W/ft ²)	spacetype	1.0	199			

Exterior Lighting

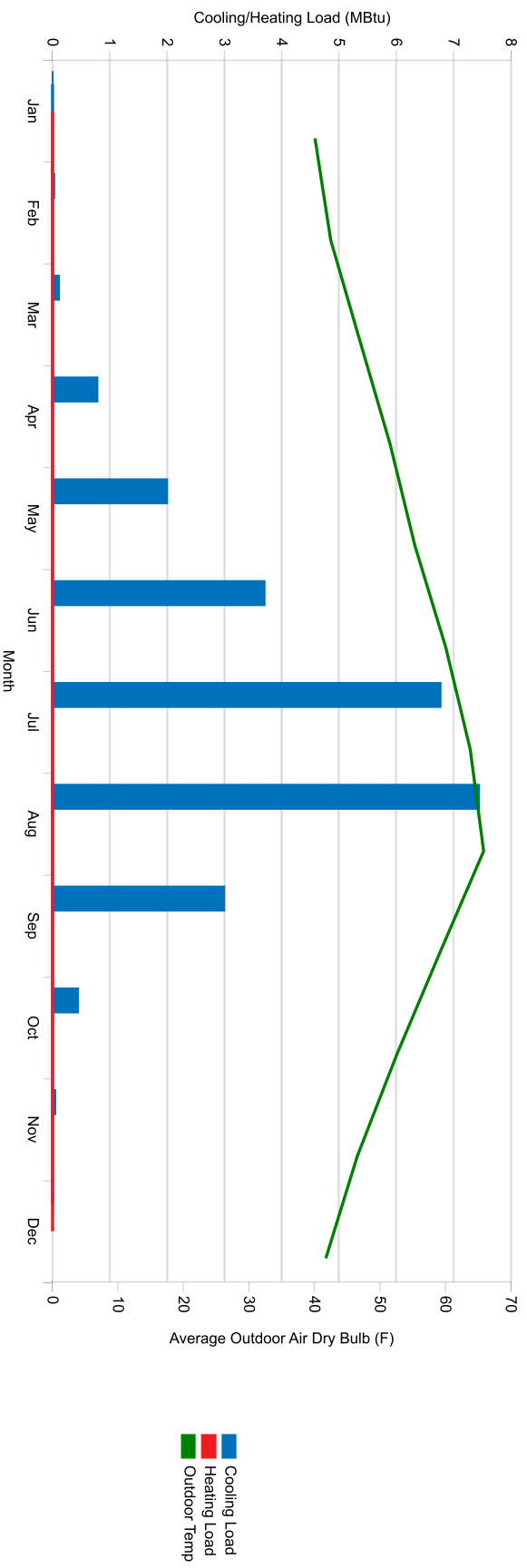
No Data to Show for Exterior Lighting

Water Use Equipment

No Data to Show for Water Use Equipment

HVAC Load Profiles

[Monthly Load Profiles - view table](#)



Zone Conditions

Temperature (Table values represent hours spent in each temperature range)

Zone	Unmet Htg (hr)	Unmet Htg - Occ (hr)	< 56 (F)	56-61 (F)	61-66 (F)	66-68 (F)	68-70 (F)	70-72 (F)	72-74 (F)	74-76 (F)	76-78 (F)	78-83 (F)	83-88 (F)	>= 88 (F)	Unmet Cig (hr)	Unmet Cig - Occ (hr)	Mean Temp (F)
TZ-1-2 PLENUM EAST	0	0	3167	2126	1345	1261	397	247	115	77	25	0	0	0	0	0	58.8 (F)
TZ-1-2 PLENUM WEST	0	0	3553	2002	1277	1102	363	238	113	75	37	0	0	0	0	0	57.9 (F)
TZ-1-BATHROOM 2	0	0	0	0	0	1648	3360	655	707	1744	646	0	0	0	0	0	70.2 (F)
TZ-1-BATHROOM 3	0	0	0	0	0	1413	3230	664	660	1941	852	0	0	0	0	0	70.7 (F)
TZ-1-BEDROOM 1	0	0	0	0	0	1818	3544	505	496	1520	877	0	0	0	0	0	70.0 (F)
TZ-1-DINING BOOTH	0	0	0	0	0	1920	2232	861	946	803	1998	0	0	0	0	0	70.9 (F)
TZ-1-GARAGE	0	0	2991	1422	754	872	432	440	397	315	494	299	199	145	0	0	61.9 (F)
TZ-1-HALL 1	0	0	0	0	0	2090	2942	614	742	797	1575	0	0	0	0	0	70.2 (F)
TZ-1-KITCHEN	0	0	0	0	0	1601	2471	636	796	1256	2000	0	0	0	0	0	71.2 (F)
TZ-1-LIVING	0	0	0	0	0	1797	2694	703	814	923	1829	0	0	0	0	0	70.7 (F)
TZ-1-MUD ROOM	0	0	0	0	0	1901	3384	532	603	1293	1047	0	0	0	0	0	70.1 (F)
TZ-1-SAUNA	0	0	0	0	0	1882	3191	756	982	1092	857	0	0	0	0	0	70.0 (F)
TZ-2-3 PLENUM EAST	0	0	4417	1632	1060	722	235	213	174	123	118	48	18	0	0	0	55.8 (F)
TZ-2-3 PLENUM WEST	0	0	4474	1609	1062	714	246	217	161	108	114	44	11	0	0	0	55.6 (F)
TZ-2-BATHROOM 4	0	0	0	0	0	1773	3310	510	453	1589	1125	0	0	0	0	0	70.3 (F)
TZ-2-BATHROOM 5	0	0	0	0	0	1693	3177	545	498	1409	1438	0	0	0	0	0	70.7 (F)
TZ-2-BATHROOM 6	0	0	0	0	0	1788	3250	518	467	1355	1382	0	0	0	0	0	70.5 (F)

TZ-2-BEDROOM 2	0	0	0	0	1778	3304	516	472	1609	1081	0	0	0	0	0	0	0	0	0	70.3 (F)
TZ-2-BEDROOM 3	0	0	0	0	1889	3401	485	486	1488	1011	0	0	0	0	0	0	0	0	0	70.1 (F)
TZ-2-BEDROOM 4	0	0	0	0	1772	2901	667	548	1289	1583	0	0	0	0	0	0	0	0	0	70.7 (F)
TZ-2-BEDROOM 5	0	0	0	0	1854	3378	524	450	1345	1209	0	0	0	0	0	0	0	0	0	70.2 (F)
TZ-2-CLOSET 2	0	0	0	0	1866	3422	505	460	1384	1123	0	0	0	0	0	0	0	0	0	70.2 (F)
TZ-2-CLOSET 3	0	0	0	0	2186	3048	578	684	863	1401	0	0	0	0	0	0	0	0	0	70.0 (F)
TZ-2-CLOSET 4	0	0	0	0	1707	3425	585	549	1756	738	0	0	0	0	0	0	0	0	0	70.2 (F)
TZ-2-CLOSET 5	0	0	0	0	2329	3492	566	776	901	696	0	0	0	0	0	0	0	0	0	69.4 (F)
TZ-2-HALL	0	0	0	0	1937	2990	558	809	1061	1405	0	0	0	0	0	0	0	0	0	70.3 (F)
TZ-2-HALL 2	0	0	0	0	1726	3045	609	498	1243	1639	0	0	0	0	0	0	0	0	0	70.7 (F)
TZ-3-BATHROOM 7	0	0	0	0	1278	3252	725	710	1983	812	0	0	0	0	0	0	0	0	0	70.8 (F)
TZ-3-BATHROOM 8	0	0	0	0	1837	3515	568	575	1502	763	0	0	0	0	0	0	0	0	0	70.0 (F)
TZ-3-BEDROOM 6	0	0	0	0	1551	3238	748	597	1706	920	0	0	0	0	0	0	0	0	0	70.5 (F)
TZ-3-DINING	0	0	0	0	1049	1949	760	959	1911	2132	0	0	0	0	0	0	0	0	0	72.2 (F)
TZ-3-HALL 1	0	0	0	0	1833	2449	796	950	917	1815	0	0	0	0	0	0	0	0	0	70.8 (F)
TZ-3-HALL 2	0	0	0	0	1643	2107	733	950	1036	2291	0	0	0	0	0	0	0	0	0	71.4 (F)
TZ-3-LIVING	0	0	0	0	1043	1985	759	948	1924	2101	0	0	0	0	0	0	0	0	0	72.1 (F)
TZ-3-OFFICE 1	0	0	0	0	1945	3244	575	781	1102	1113	0	0	0	0	0	0	0	0	0	70.0 (F)
TZ-3-OFFICE 2	0	0	0	0	1581	2433	665	784	1267	2030	0	0	0	0	0	0	0	0	0	71.2 (F)
TZ-3-STAIR 1	0	0	0	0	862	2515	780	715	2186	1702	0	0	0	0	0	0	0	0	0	71.9 (F)
TZ-3-STAIR 2	0	0	0	0	787	2313	848	711	2077	2024	0	0	0	0	0	0	0	0	0	72.2 (F)
TZ-3-TV ROOM	0	0	0	0	1568	2902	678	739	1491	1382	0	0	0	0	0	0	0	0	0	70.8 (F)
TZ-B-BASEMENT	0	0	695	3616	1820	1880	724	25	0	0	0	0	0	0	0	0	0	0	0	61.4 (F)

Humidity (Table values represent hours spent in each Humidity range)

Zone	< 30 (%)	30-35 (%)	35-40 (%)	40-45 (%)	45-50 (%)	50-55 (%)	55-60 (%)	60-65 (%)	65-70 (%)	70-75 (%)	75-80 (%)	>= 80 (%)	Mean Relative Humidity (%)
TZ:1-2 PLENUM EAST	113	151	248	489	872	1433	1748	1678	1092	583	268	85	57.5 (%)
TZ:1-2 PLENUM WEST	86	114	218	406	722	1186	1599	1757	1321	774	375	202	59.4 (%)
TZ:1-BATHROOM 2	1360	1359	1738	2121	1372	599	186	25	0	0	0	0	39.1 (%)
TZ:1-BATHROOM 3	1413	1504	1724	2319	1139	497	144	20	0	0	0	0	38.4 (%)
TZ:1-BEDROOM 1	1295	1331	1793	2203	1300	583	206	43	6	0	0	0	39.2 (%)
TZ:1-DINING BOOTH	1374	1225	2322	1609	1262	656	224	73	15	0	0	0	39.2 (%)
TZ:1-GARAGE	329	471	807	1033	1065	1102	1038	934	919	708	261	93	53.2 (%)
TZ:1-HALL 1	1122	1240	2228	1828	1337	599	294	98	14	0	0	0	39.9 (%)
TZ:1-KITCHEN	1287	1352	2464	2032	1024	407	156	32	6	0	0	0	38.5 (%)
TZ:1-LIVING	1210	1290	2425	1831	1199	526	209	61	9	0	0	0	39.1 (%)
TZ:1-MUD ROOM	1069	1124	1884	2085	1625	639	271	57	6	0	0	0	40.2 (%)
TZ:1-SAUNA	1125	1146	1898	1854	1619	722	324	64	8	0	0	0	40.3 (%)
TZ:2-3 PLENUM EAST	70	84	226	378	511	700	899	1131	1360	1489	1090	822	64.6 (%)
TZ:2-3 PLENUM WEST	66	78	206	363	491	684	902	1132	1327	1516	1104	891	65.0 (%)
TZ:2-BATHROOM 4	1371	1375	1941	2130	1218	503	202	20	0	0	0	0	38.8 (%)
TZ:2-BATHROOM 5	1415	1457	1980	2310	956	467	158	17	0	0	0	0	38.3 (%)
TZ:2-BATHROOM 6	1376	1451	2004	2208	1035	471	195	20	0	0	0	0	38.5 (%)
TZ:2-BEDROOM 2	1370	1372	1927	2113	1241	518	199	20	0	0	0	0	38.8 (%)
TZ:2-BEDROOM 3	1336	1346	1876	2029	1342	544	233	54	0	0	0	0	39.1 (%)
TZ:2-BEDROOM 4	1466	1454	2185	1926	1081	458	161	27	2	0	0	0	38.2 (%)

TZ-2-BEDROOM 5	1302	1433	1854	2177	1234	494	223	43	0	0	0	0	0	38.9 (%)
TZ-2-CLOSET 2	1300	1424	1831	2171	1240	526	235	33	0	0	0	0	0	39.0 (%)
TZ-2-CLOSET 3	1403	1390	2128	1559	1312	588	268	96	16	0	0	0	0	39.1 (%)
TZ-2-CLOSET 4	1350	1356	1776	2161	1320	569	196	32	0	0	0	0	0	39.0 (%)
TZ-2-CLOSET 5	1237	1282	1766	1610	1585	796	335	129	20	0	0	0	0	40.3 (%)
TZ-2-HALL	1147	1211	2230	1816	1440	585	248	71	12	0	0	0	0	39.7 (%)
TZ-2-HALL 2	1144	1303	2187	2298	1110	455	228	31	4	0	0	0	0	39.1 (%)
TZ-3-BATHROOM 7	1420	1524	1743	2384	1096	465	112	16	0	0	0	0	0	38.3 (%)
TZ-3-BATHROOM 8	1263	1347	1727	2070	1523	569	230	31	0	0	0	0	0	39.4 (%)
TZ-3-BEDROOM 6	1330	1444	1802	2219	1278	513	158	16	0	0	0	0	0	38.7 (%)
TZ-3-DINING	1492	1441	2413	2271	846	245	46	6	0	0	0	0	0	37.4 (%)
TZ-3-HALL 1	1250	1276	2400	1724	1305	550	200	47	8	0	0	0	0	39.1 (%)
TZ-3-HALL 2	1370	1352	2563	1759	1087	436	144	42	7	0	0	0	0	38.3 (%)
TZ-3-LIVING	1477	1454	2415	2283	836	245	44	6	0	0	0	0	0	37.4 (%)
TZ-3-OFFICE 1	1059	1131	1894	2062	1646	628	272	61	7	0	0	0	0	40.2 (%)
TZ-3-OFFICE 2	1285	1358	2520	2023	997	407	144	22	4	0	0	0	0	38.4 (%)
TZ-3-STAIR 1	1452	1449	2122	2416	900	350	63	8	0	0	0	0	0	37.7 (%)
TZ-3-STAIR 2	1522	1482	2158	2469	789	276	58	6	0	0	0	0	0	37.3 (%)
TZ-3-TV ROOM	1135	1284	2062	2367	1266	482	153	11	0	0	0	0	0	39.1 (%)
TZ-B-BASEMENT	198	182	496	1010	1403	1739	1677	1141	512	280	86	36	52.8 (%)	

Zone Overview

Zone Summary

	Area (ft ²)	Conditioned (Y/N)	Part of Total Floor Area (Y/N)	Volume (ft ³)	Multiplier	Above Ground Gross Wall Area (ft ²)	Underground Gross Wall Area (ft ²)	Window Glass Area (ft ²)	Lighting (W/ft ²)	People (ft ² /person)	Plug and Process (W/ft ²)
TZ:1-2 PLENUM EAST	613.76	No	No	834.49	1.00	149.73	0.0	0.0	0.0	0.0	0.0
TZ:1-2 PLENUM WEST	934.52	No	No	1270.27	1.00	171.79	0.0	0.0	0.0	0.0	0.0
TZ:1-BATHROOM 2	49.19	Yes	Yes	418.13	1.00	72.01	0.0	0.0	0.5	299.99	0.6
TZ:1-BATHROOM 3	38.1	Yes	Yes	323.84	1.00	55.65	0.0	0.0	0.5	299.99	0.6
TZ:1-BEDROOM 1	166.73	Yes	Yes	1416.82	1.00	89.56	0.0	27.56	0.5	299.99	0.6
TZ:1-DINING BOOTH	46.61	Yes	Yes	395.88	1.00	117.0	0.0	50.48	0.78	720.0	0.8
TZ:1-GARAGE	467.26	Yes	Yes	3971.49	1.00	537.01	0.0	0.0	0.0	0.0	0.0
TZ:1-HALL 1	154.35	Yes	Yes	1312.29	1.00	234.44	0.0	133.36	0.78	720.0	0.8
TZ:1-KITCHEN	145.85	Yes	Yes	1239.19	1.00	127.66	0.0	97.74	0.78	720.0	0.8
TZ:1-LIVING	287.5	Yes	Yes	2443.77	1.00	446.81	0.0	231.85	0.78	720.0	0.8
TZ:1-MUD ROOM	146.17	Yes	Yes	1242.37	1.00	213.02	0.0	31.43	0.78	720.0	0.8
TZ:1-SAUNA	46.61	Yes	Yes	396.23	1.00	117.0	0.0	0.0	0.78	720.0	0.8
TZ:2-3 PLENUM EAST	613.76	No	No	476.39	1.00	85.47	0.0	0.0	0.0	0.0	0.0
TZ:2-3 PLENUM WEST	617.1	No	No	478.87	1.00	85.57	0.0	0.0	0.0	0.0	0.0
TZ:2-BATHROOM 4	72.98	Yes	Yes	620.48	1.00	79.87	0.0	27.13	0.5	299.99	0.6

TZ-2-BATHROOM 5	67.17	Yes	Yes	571.04	1.00	71.58	0.0	14.96	0.5	299.99	0.6
TZ-2-BATHROOM 6	50.27	Yes	Yes	427.31	1.00	53.5	0.0	15.07	0.5	299.99	0.6
TZ-2-BEDROOM 2	163.83	Yes	Yes	1392.81	1.00	218.62	0.0	53.39	0.5	299.99	0.6
TZ-2-BEDROOM 3	179.97	Yes	Yes	1529.48	1.00	262.75	0.0	66.74	0.5	299.99	0.6
TZ-2-BEDROOM 4	155.11	Yes	Yes	1318.65	1.00	195.58	0.0	77.07	0.5	299.99	0.6
TZ-2-BEDROOM 5	171.15	Yes	Yes	1454.96	1.00	238.64	0.0	54.36	0.5	299.99	0.6
TZ-2-CLOSET 2	62.65	Yes	Yes	532.9	1.00	167.92	0.0	12.16	0.5	299.99	0.6
TZ-2-CLOSET 3	77.5	Yes	Yes	658.62	1.00	228.09	0.0	79.55	0.5	299.99	0.6
TZ-2-CLOSET 4	56.4	Yes	Yes	479.57	1.00	156.18	0.0	3.12	0.5	299.99	0.6
TZ-2-CLOSET 5	22.39	Yes	Yes	190.7	1.00	108.18	0.0	22.5	0.5	299.99	0.6
TZ-2-HALL	91.17	Yes	Yes	775.16	1.00	164.26	0.0	89.02	0.78	720.0	0.8
TZ-2-HALL 2	60.17	Yes	Yes	511.0	1.00	34.01	0.0	21.85	0.78	720.0	0.8
TZ-3-BATHROOM 7	41.01	Yes	Yes	348.56	1.00	44.45	0.0	0.0	0.5	299.99	0.6
TZ-3-BATHROOM 8	105.59	Yes	Yes	897.35	1.00	183.09	0.0	14.75	0.5	299.99	0.6
TZ-3-BEDROOM 6	370.17	Yes	Yes	3146.54	1.00	266.51	0.0	63.83	0.5	299.99	0.6
TZ-3-DINING	475.33	Yes	Yes	4040.0	1.00	171.79	0.0	153.49	0.78	720.0	0.8
TZ-3-HALL 1	107.85	Yes	Yes	917.12	1.00	234.65	0.0	158.01	0.78	720.0	0.8
TZ-3-HALL 2	88.8	Yes	Yes	754.67	1.00	213.99	0.0	97.63	0.78	720.0	0.8
TZ-3-LIVING	504.29	Yes	Yes	4286.49	1.00	171.79	0.0	154.03	0.78	720.0	0.8
TZ-3-OFFICE 1	83.31	Yes	Yes	708.41	1.00	156.94	0.0	53.28	0.78	720.0	0.8
TZ-3-OFFICE 2	59.74	Yes	Yes	507.82	1.00	67.27	0.0	47.79	0.78	720.0	0.8
TZ-3-STAIR 1	47.04	Yes	Yes	400.12	1.00	0.0	0.0	0.0	0.78	720.0	0.8

TZ-3-STAIR 2	44.24	Yes	Yes	375.75	1.00	0.0	0.0	0.0	0.0	0.78	720.0	0.8
TZ-3-TV ROOM	248.86	Yes	Yes	2115.0	1.00	180.51	0.0	0.0	86.65	0.78	720.0	0.8
TZ-B-BASEMENT	1548.28	No	Yes	8487.88	1.00	22.17	1356.15	11.95	0.0	0.0	0.0	0.0
Total	6503.66			50608.04		5702.61	1356.15	1950.53	0.46	0.6	661.55	0.5
Conditioned Total	4955.38			42120.51		5680.44	0.0	1938.58	0.6	0.6	504.07	0.65
Unconditioned Total	1548.28			8487.88		22.17	1356.15	11.95	0.0	0.0	0.0	0.0
Not Part of Total	2779.13			3060.02		492.56	0.0	0.0	0.0	0.0	0.0	0.0

Zone Sensible Cooling and Heating Sensible Sizing

	Heating/Cooling	Calculated Design Load	Design Load With Sizing Factor	Calculated Design Air Flow (ft ³ /min)	Design Air Flow With Sizing Factor (ft ³ /min)	Date/Time Of Peak	Outdoor Temperature at Peak Load (F)	Outdoor Humidity Ratio at Peak Load (lbWater/lbAir)
TZ-1-BATHROOM 2	Cooling	0.04 (ton)	0.05 (ton)	27.55	31.78	8/21 18:10:00	79.95	0.01
TZ-1-BATHROOM 2	Heating	0.89 (kBtu/h)	1.11 (kBtu/h)	23.31	27.55	12/21 24:00:00	24.44	0.0
TZ-1-BATHROOM 3	Cooling	0.02 (ton)	0.03 (ton)	14.83	16.95	8/21 18:10:00	79.95	0.01
TZ-1-BATHROOM 3	Heating	0.57 (kBtu/h)	0.71 (kBtu/h)	14.83	19.07	12/21 24:00:00	24.44	0.0
TZ-1-BEDROOM 1	Cooling	0.18 (ton)	0.21 (ton)	112.3	129.25	8/21 18:10:00	79.95	0.01
TZ-1-BEDROOM 1	Heating	3.04 (kBtu/h)	3.81 (kBtu/h)	78.4	97.47	12/21 24:00:00	24.44	0.0
TZ-1-DINING BOOTH	Cooling	0.17 (ton)	0.2 (ton)	108.06	125.01	8/21 14:30:00	84.92	0.01
TZ-1-DINING BOOTH	Heating	1.36 (kBtu/h)	1.71 (kBtu/h)	36.02	44.5	12/21 24:00:00	24.44	0.0

TZ-1-HALL 1	Cooling	0.32 (ton)	0.37 (ton)	201.29	230.96	8/21 10:20:00	78.75	0.01
TZ-1-HALL 1	Heating	3.96 (kBtu/h)	4.95 (kBtu/h)	101.71	127.13	12/21 24:00:00	24.44	0.0
TZ-1-KITCHEN	Cooling	0.34 (ton)	0.39 (ton)	209.77	239.43	8/21 10:10:00	78.28	0.01
TZ-1-KITCHEN	Heating	2.87 (kBtu/h)	3.59 (kBtu/h)	74.16	91.11	12/21 24:00:00	24.44	0.0
TZ-1-LIVING	Cooling	0.48 (ton)	0.55 (ton)	298.76	343.26	8/21 10:40:00	79.68	0.01
TZ-1-LIVING	Heating	6.51 (kBtu/h)	8.14 (kBtu/h)	167.39	209.77	12/21 24:00:00	24.44	0.0
TZ-1-MUD ROOM	Cooling	0.13 (ton)	0.15 (ton)	78.4	91.11	8/21 17:10:00	81.99	0.01
TZ-1-MUD ROOM	Heating	2.8 (kBtu/h)	3.5 (kBtu/h)	72.04	88.99	12/21 24:00:00	24.44	0.0
TZ-1-SAUNA	Cooling	0.07 (ton)	0.08 (ton)	42.38	48.73	8/21 17:40:00	81.05	0.01
TZ-1-SAUNA	Heating	1.13 (kBtu/h)	1.42 (kBtu/h)	29.66	36.02	12/21 24:00:00	24.44	0.0
TZ-2-BATHROOM 4	Cooling	0.12 (ton)	0.13 (ton)	72.04	82.64	8/21 17:50:00	80.74	0.01
TZ-2-BATHROOM 4	Heating	1.32 (kBtu/h)	1.65 (kBtu/h)	33.9	42.38	12/21 24:00:00	24.44	0.0
TZ-2-BATHROOM 5	Cooling	0.07 (ton)	0.08 (ton)	42.38	48.73	8/21 10:40:00	79.68	0.01
TZ-2-BATHROOM 5	Heating	1.09 (kBtu/h)	1.36 (kBtu/h)	27.55	33.9	12/21 24:00:00	24.44	0.0
TZ-2-BATHROOM 6	Cooling	0.06 (ton)	0.07 (ton)	38.14	44.5	8/21 10:30:00	79.21	0.01
TZ-2-BATHROOM 6	Heating	0.86 (kBtu/h)	1.07 (kBtu/h)	21.19	27.55	12/21 24:00:00	24.44	0.0
TZ-2-BEDROOM 2	Cooling	0.24 (ton)	0.28 (ton)	150.44	173.75	8/21 17:50:00	80.74	0.01

TZ-2-BEDROOM 2	Heating	2.87 (kBtu/h)	3.59 (kBtu/h)	74.16	91.11	12/21 24:00:00	24.44	0.0
TZ-2-BEDROOM 3	Cooling	0.23 (ton)	0.26 (ton)	139.85	161.03	8/21 17:50:00	80.74	0.01
TZ-2-BEDROOM 3	Heating	3.31 (kBtu/h)	4.14 (kBtu/h)	84.76	105.94	12/21 24:00:00	24.44	0.0
TZ-2-BEDROOM 4	Cooling	0.22 (ton)	0.26 (ton)	139.85	161.03	8/21 11:00:00	80.62	0.01
TZ-2-BEDROOM 4	Heating	2.94 (kBtu/h)	3.68 (kBtu/h)	76.28	95.35	12/21 24:00:00	24.44	0.0
TZ-2-BEDROOM 5	Cooling	0.16 (ton)	0.18 (ton)	97.47	112.3	8/21 11:00:00	80.62	0.01
TZ-2-BEDROOM 5	Heating	3.01 (kBtu/h)	3.76 (kBtu/h)	76.28	95.35	12/21 24:00:00	24.44	0.0
TZ-2-CLOSET 2	Cooling	0.06 (ton)	0.07 (ton)	38.14	44.5	8/21 11:00:00	80.62	0.01
TZ-2-CLOSET 2	Heating	1.19 (kBtu/h)	1.49 (kBtu/h)	29.66	38.14	12/21 24:00:00	24.44	0.0
TZ-2-CLOSET 3	Cooling	0.2 (ton)	0.22 (ton)	120.78	139.85	8/21 10:10:00	78.28	0.01
TZ-2-CLOSET 3	Heating	2.11 (kBtu/h)	2.64 (kBtu/h)	55.09	67.8	12/21 24:00:00	24.44	0.0
TZ-2-CLOSET 4	Cooling	0.05 (ton)	0.06 (ton)	29.66	36.02	8/21 18:20:00	79.48	0.01
TZ-2-CLOSET 4	Heating	0.99 (kBtu/h)	1.24 (kBtu/h)	25.43	31.78	12/21 24:00:00	24.44	0.0
TZ-2-CLOSET 5	Cooling	0.03 (ton)	0.03 (ton)	16.95	19.07	8/21 16:20:00	83.3	0.01
TZ-2-CLOSET 5	Heating	0.7 (kBtu/h)	0.88 (kBtu/h)	19.07	23.31	12/21 24:00:00	24.44	0.0
TZ-2-HALL	Cooling	0.31 (ton)	0.36 (ton)	194.94	224.6	8/21 17:50:00	80.74	0.01
TZ-2-HALL	Heating	2.29 (kBtu/h)	2.86 (kBtu/h)	59.33	74.16	12/21 24:00:00	24.44	0.0

TZ-2-HALL 2	Cooling	0.09 (ton)	0.1 (ton)	52.97	61.45	8/21 10:20:00	78.75	0.01
TZ-2-HALL 2	Heating	1.06 (kBtu/h)	1.33 (kBtu/h)	27.55	33.9	12/21 24:00:00	24.44	0.0
TZ-3-BATHROOM 7	Cooling	0.03 (ton)	0.03 (ton)	16.95	19.07	8/21 18:50:00	78.08	0.01
TZ-3-BATHROOM 7	Heating	0.58 (kBtu/h)	0.73 (kBtu/h)	14.83	19.07	12/21 24:00:00	24.44	0.0
TZ-3-BATHROOM 8	Cooling	0.07 (ton)	0.08 (ton)	44.5	50.85	8/21 15:20:00	84.54	0.01
TZ-3-BATHROOM 8	Heating	1.84 (kBtu/h)	2.3 (kBtu/h)	46.62	59.33	12/21 24:00:00	24.44	0.0
TZ-3-BEDROOM 6	Cooling	0.24 (ton)	0.28 (ton)	150.44	171.63	8/21 16:20:00	83.3	0.01
TZ-3-BEDROOM 6	Heating	5.68 (kBtu/h)	7.1 (kBtu/h)	146.2	182.22	12/21 24:00:00	24.44	0.0
TZ-3-DINING	Cooling	0.68 (ton)	0.79 (ton)	425.89	489.46	8/21 15:00:00	84.92	0.01
TZ-3-DINING	Heating	7.43 (kBtu/h)	9.29 (kBtu/h)	190.7	237.31	12/21 24:00:00	24.44	0.0
TZ-3-HALL 1	Cooling	0.45 (ton)	0.52 (ton)	279.69	319.95	8/21 17:10:00	81.99	0.01
TZ-3-HALL 1	Heating	3.17 (kBtu/h)	3.96 (kBtu/h)	80.52	101.71	12/21 24:00:00	24.44	0.0
TZ-3-HALL 2	Cooling	0.23 (ton)	0.27 (ton)	144.08	167.39	8/21 11:50:00	82.17	0.01
TZ-3-HALL 2	Heating	2.3 (kBtu/h)	2.88 (kBtu/h)	59.33	74.16	12/21 24:00:00	24.44	0.0
TZ-3-LIVING	Cooling	0.7 (ton)	0.8 (ton)	434.37	500.06	8/21 15:10:00	84.74	0.01
TZ-3-LIVING	Heating	7.79 (kBtu/h)	9.74 (kBtu/h)	199.17	250.03	12/21 24:00:00	24.44	0.0
TZ-3-OFFICE 1	Cooling	0.08 (ton)	0.09 (ton)	48.73	55.09	8/21 15:30:00	84.36	0.01

TZ-3-OFFICE 1	Heating	1.83 (kBtu/h)	2.29 (kBtu/h)	46.62	59.33	12/21 24:00:00	24.44	0.0
TZ-3-OFFICE 2	Cooling	0.16 (ton)	0.18 (ton)	97.47	112.3	8/21 10:00:00	77.81	0.01
TZ-3-OFFICE 2	Heating	1.28 (kBtu/h)	1.6 (kBtu/h)	31.78	40.26	12/21 24:00:00	24.44	0.0
TZ-3-STAIR 1	Cooling	0.04 (ton)	0.04 (ton)	23.31	27.55	8/21 18:50:00	78.08	0.01
TZ-3-STAIR 1	Heating	0.62 (kBtu/h)	0.78 (kBtu/h)	16.95	19.07	12/21 24:00:00	24.44	0.0
TZ-3-STAIR 2	Cooling	0.04 (ton)	0.04 (ton)	21.19	25.43	8/21 16:20:00	83.3	0.01
TZ-3-STAIR 2	Heating	0.57 (kBtu/h)	0.72 (kBtu/h)	14.83	19.07	12/21 24:00:00	24.44	0.0
TZ-3-TV ROOM	Cooling	0.23 (ton)	0.26 (ton)	141.96	163.15	8/21 18:00:00	80.42	0.01
TZ-3-TV ROOM	Heating	4.28 (kBtu/h)	5.35 (kBtu/h)	110.18	137.73	12/21 24:00:00	24.44	0.0
TZ-1-GARAGE	Cooling	0.0 (ton)	0.0 (ton)	0.0	0.0	N/A	32.0	0.0
TZ-1-GARAGE	Heating	5.48 (kBtu/h)	6.85 (kBtu/h)	84.76	108.06	12/21 24:00:00	24.44	0.0

Zone Equipment Detail

No Data to Show for Zone Equipment Detail

Air Loops Detail

No Data to Show for Air Loops Detail

Plant Loops Detail

No Data to Show for Plant Loops Detail

Outdoor Air

Average and Minimum Outdoor Air During Occupied Hours

	Average Number of Occupants	Nominal Number of Occupants	Zone Volume (ft ³)	Avg. Mechanical Ventilation (ach)	Min. Mechanical Ventilation (ach)	Avg. Infiltration (ach)	Min. Infiltration (ach)	Avg. Simple Ventilation (ach)	Min. Simple Ventilation (ach)
TZ:1-BATHROOM 2	0.15	0.16	418	0.0	0.0	0.045	0.001	0.105	0.003
TZ:1-BATHROOM 3	0.12	0.13	324	0.0	0.0	0.045	0.001	0.106	0.003
TZ:1-BEDROOM 1	0.52	0.56	1417	0.0	0.0	0.045	0.001	0.103	0.003
TZ:1-DINING BOOTH	0.06	0.06	396	0.0	0.0	0.125	0.001	0.104	0.003
TZ:1-HALL 1	0.19	0.21	1312	0.0	0.0	0.125	0.001	0.103	0.003
TZ:1-KITCHEN	0.18	0.2	1239	0.0	0.0	0.125	0.001	0.103	0.003
TZ:1-LIVING	0.35	0.4	2444	0.0	0.0	0.125	0.001	0.103	0.003
TZ:1-MUD ROOM	0.18	0.2	1242	0.0	0.0	0.124	0.001	0.103	0.003
TZ:1-SAUNA	0.06	0.06	396	0.0	0.0	0.124	0.001	0.104	0.003
TZ:2-BATHROOM 4	0.23	0.24	620	0.0	0.0	0.045	0.001	0.104	0.003
TZ:2-BATHROOM 5	0.21	0.22	571	0.0	0.0	0.045	0.001	0.104	0.003
TZ:2-BATHROOM 6	0.16	0.17	427	0.0	0.0	0.045	0.001	0.105	0.003
TZ:2-BEDROOM 2	0.52	0.55	1393	0.0	0.0	0.045	0.001	0.103	0.003
TZ:2-BEDROOM 3	0.57	0.6	1529	0.0	0.0	0.045	0.001	0.103	0.003

TZ-2-BEDROOM 4	0.49	0.52	1319	0.0	0.0	0.045	0.001	0.103	0.003
TZ-2-BEDROOM 5	0.54	0.57	1455	0.0	0.0	0.045	0.001	0.103	0.003
TZ-2-CLOSET 2	0.2	0.21	533	0.0	0.0	0.045	0.001	0.104	0.003
TZ-2-CLOSET 3	0.24	0.26	659	0.0	0.0	0.045	0.001	0.104	0.003
TZ-2-CLOSET 4	0.18	0.19	480	0.0	0.0	0.045	0.001	0.105	0.003
TZ-2-CLOSET 5	0.07	0.07	191	0.0	0.0	0.045	0.001	0.107	0.003
TZ-2-HALL	0.11	0.13	775	0.0	0.0	0.125	0.001	0.103	0.003
TZ-2-HALL 2	0.07	0.08	511	0.0	0.0	0.125	0.001	0.104	0.003
TZ-3-BATHROOM 7	0.13	0.14	349	0.0	0.0	0.045	0.001	0.106	0.003
TZ-3-BATHROOM 8	0.33	0.35	897	0.0	0.0	0.045	0.001	0.104	0.003
TZ-3-BEDROOM 6	1.17	1.23	3147	0.0	0.0	0.045	0.001	0.103	0.003
TZ-3-DINING	0.59	0.66	4040	0.0	0.0	0.125	0.001	0.103	0.003
TZ-3-HALL 1	0.13	0.15	917	0.0	0.0	0.125	0.001	0.103	0.003
TZ-3-HALL 2	0.11	0.12	755	0.0	0.0	0.125	0.001	0.104	0.003
TZ-3-LIVING	0.62	0.7	4286	0.0	0.0	0.125	0.001	0.103	0.003
TZ-3-OFFICE 1	0.1	0.12	708	0.0	0.0	0.124	0.001	0.103	0.003
TZ-3-OFFICE 2	0.07	0.08	508	0.0	0.0	0.125	0.001	0.104	0.003
TZ-3-STAIR 1	0.06	0.07	400	0.0	0.0	0.125	0.001	0.104	0.003
TZ-3-STAIR 2	0.05	0.06	376	0.0	0.0	0.125	0.001	0.105	0.003
TZ-3-TV ROOM	0.31	0.35	2115	0.0	0.0	0.125	0.001	0.103	0.003

TZ:1-GARAGE	0.0	0.0	3971	0.0	0.0	0.0	0.0	0.0
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Cash Flow

No Data to Show for Cash Flow

Site and Source Summary

Site and Source Energy

	Total Energy (kBtu)	Energy Per Total Building Area (kBtu/ft ²)	Energy Per Conditioned Building Area (kBtu/ft ²)
Total Site Energy	136732.1	21.0	27.6
Net Site Energy	136732.1	21.0	27.6
Total Source Energy	403068.7	62.0	81.3
Net Source Energy	403068.7	62.0	81.3

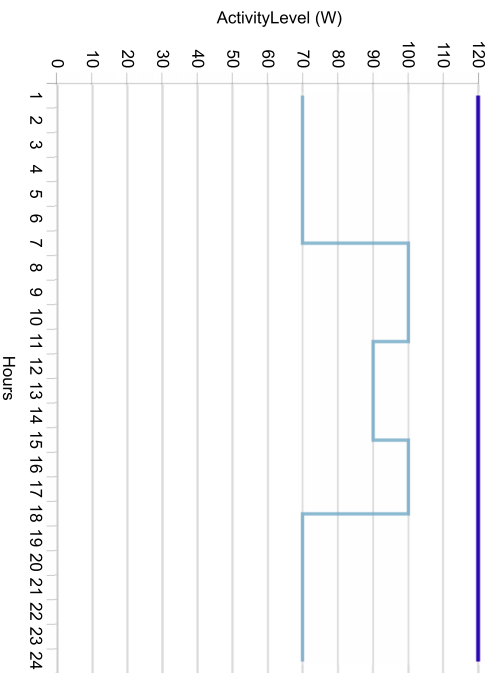
Site to Source Energy Conversion Factors

	Site=>Source Conversion Factor
Electricity	3.167
Natural Gas	1.084
District Cooling	1.056
District Heating	0.0

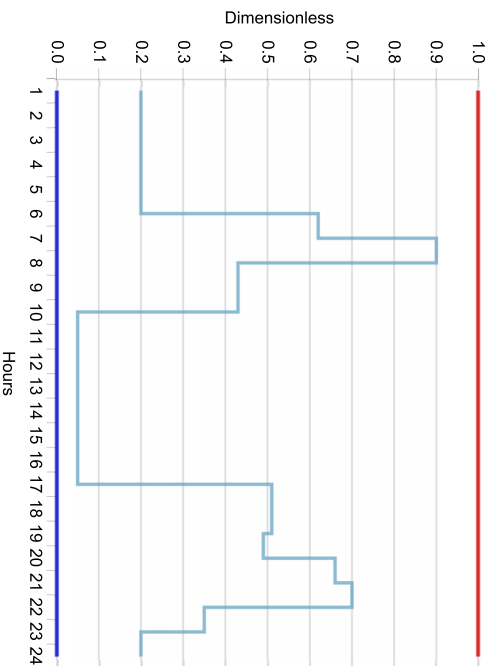
Schedule Overview

[Schedule Overview - view table](#)

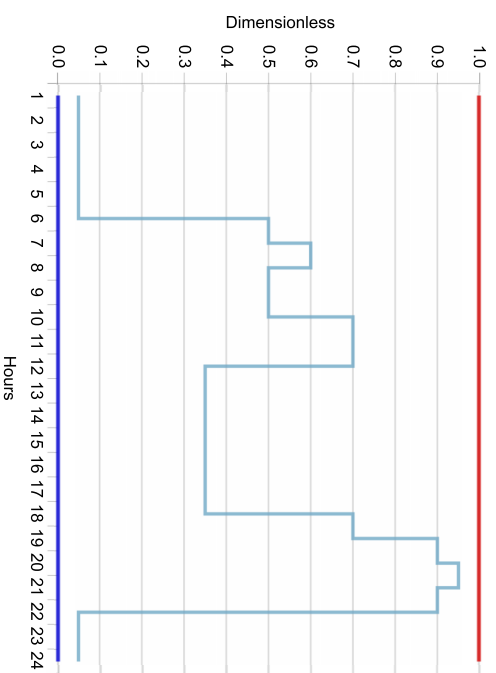
Activity Main
■ summer design day
■ winter design day
■ default profile



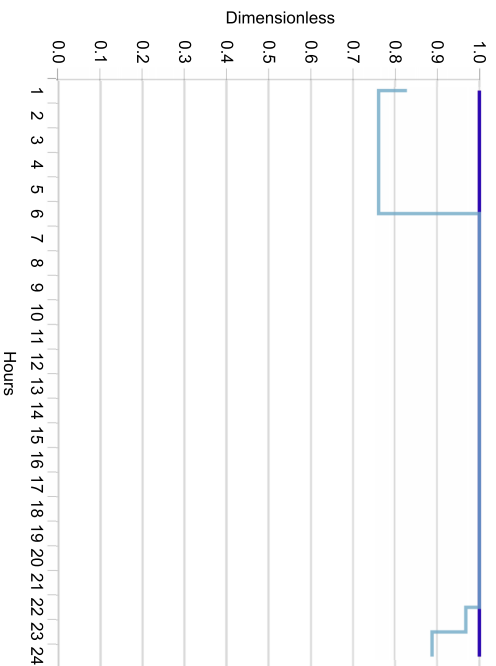
Equipment-Bedroom
■ summer design day
■ winter design day
■ default profile



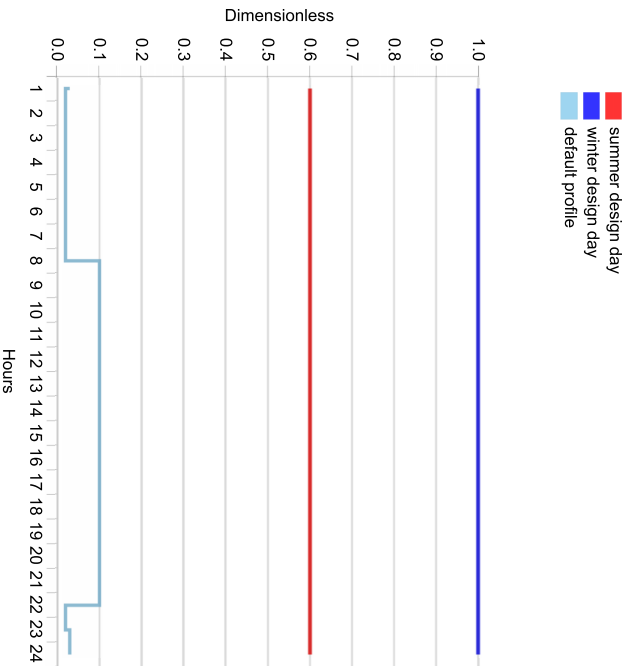
Equipment-Common
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■ default profile



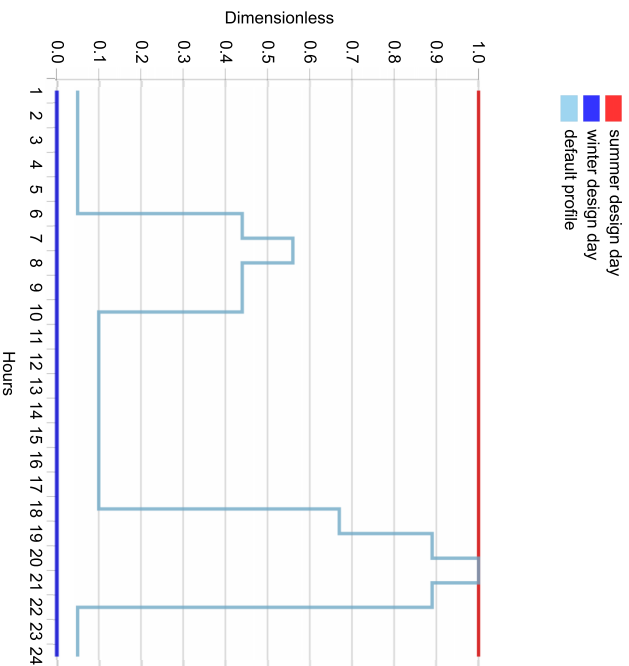
Infiltration-Attic
■ summer design day
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■ default profile



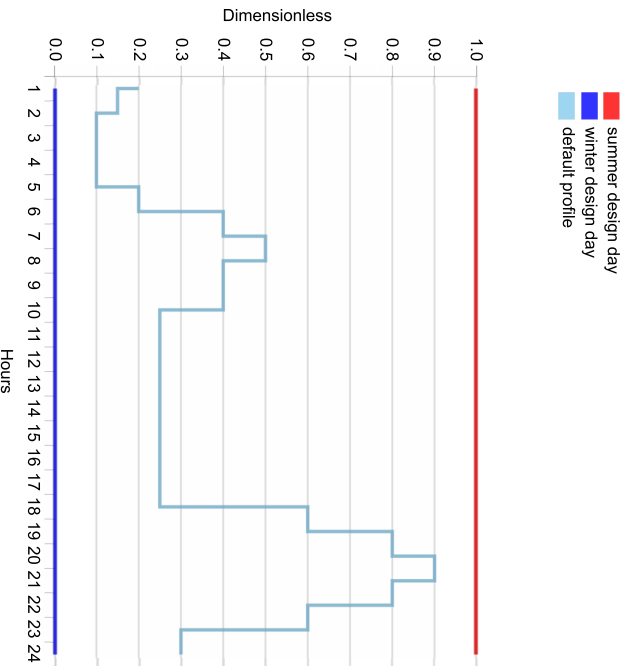
Infiltration-Building



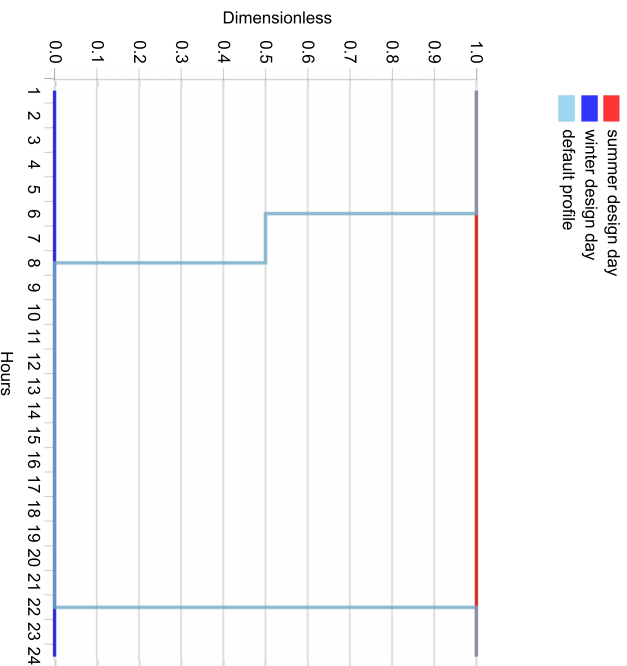
Lighting-Bedroom



Lighting-Common

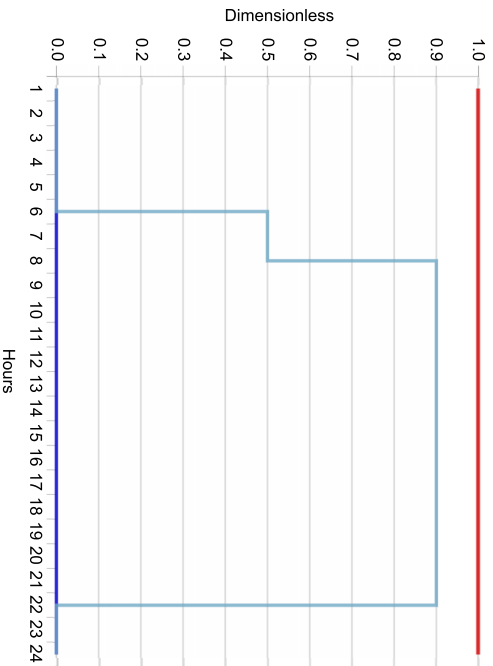


Occupancy-Bedroom



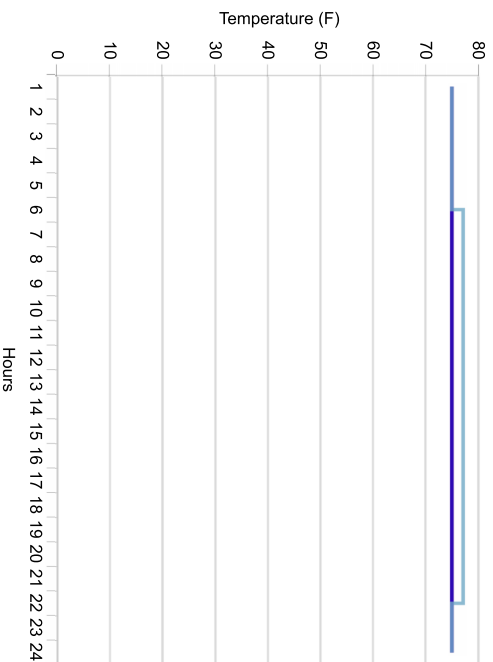
Occupancy-Common

- summer design day
- winter design day
- default profile



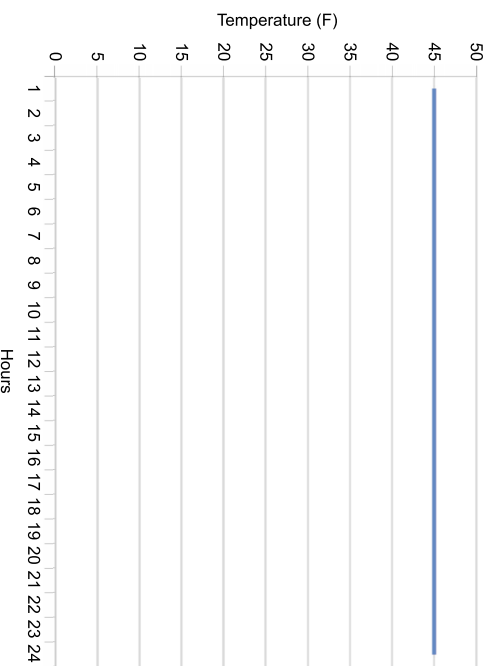
Thermostat-CigSetp

- summer design day
- winter design day
- default profile



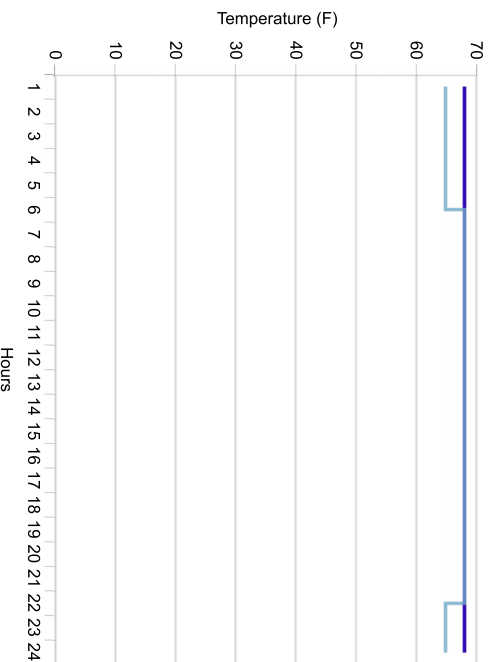
Thermostat-FizProtect

- summer design day
- winter design day
- default profile



Thermostat-HigSetp

- summer design day
- winter design day
- default profile



Measure Warnings

Measure Warning Summary

Description	Count
Number of measures in workflow	2
Number of measures with warnings	0
Total number of warnings	0