

OpenStudio Results

Model Summary

Building Summary

Information	Value	Units
Building Name	RESIDENTIAL BUILDING MILANO NO INSULATION	building_name
Net Site Energy	428,157	kBtu
Total Building Area	4,483	ft^2
EUI (Based on Net Site Energy and Total Building Area)	95.50	kBtu/ft^2
OpenStudio Standards Building Type		

Weather Summary

	Value
Weather File	MILAN - ITA IWECData WMO#=160660
Latitude	45.62
Longitude	8.73
Elevation	692 (ft)
Time Zone	1.00
North Axis Angle	0.00
ASHRAE Climate Zone	

Sizing Period Design Days

	Maximum Dry Bulb (F)	Daily Temperature Range (R)	Humidity Value	Humidity Type	Wind Speed (mph)	Wind Direction
MILANO-LINATE ANN CLG .4% CONDNS DB=>MWB	91.4	18.36	75.38	Wetbulb [F]	5.14	220.0
MILANO-LINATE ANN CLG .4% CONDNS DP=>MDB	83.3	18.36	74.3	Dewpoint [F]	5.14	220.0
MILANO-LINATE ANN CLG .4% CONDNS ENTH=>MDB	87.8	18.36	33.32	Enthalpy [Btu/lb]	5.14	220.0
MILANO-LINATE ANN CLG .4% CONDNS WB=>MDB	87.8	18.36	77.36	Wetbulb [F]	5.14	220.0
MILANO-LINATE ANN HTG 99.6% CONDNS DB	22.82	0.0	22.82	Wetbulb [F]	0.89	240.0
MILANO-LINATE ANN HTG WIND 99.6% CONDNS WS=>MCDB	47.84	0.0	47.84	Wetbulb [F]	23.04	240.0
MILANO-LINATE ANN HUM_N 99.6% CONDNS DP=>MCDB	36.14	0.0	11.3	Dewpoint [F]	0.89	240.0

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
-------------------------	-----

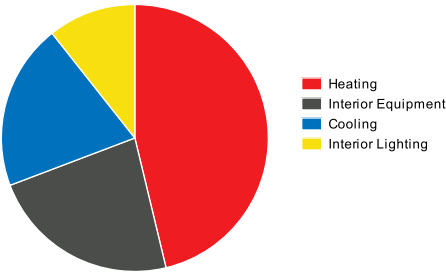
Unmet Hours Tolerance

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

Annual Overview

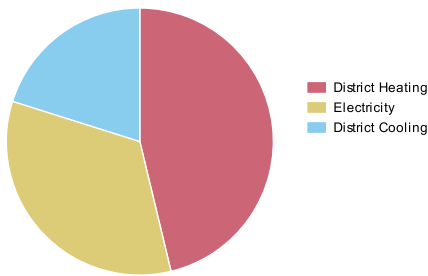
End Use - view table

End Use	Consumption (kBtu)
Heating	197,990
Cooling	86,157
Interior Lighting	45,581
Exterior Lighting	0
Interior Equipment	98,431
Exterior Equipment	0
Fans	0
Pumps	0
Heat Rejection	0
Humidification	0
Heat Recovery	0
Water Systems	0
Refrigeration	0
Generators	0



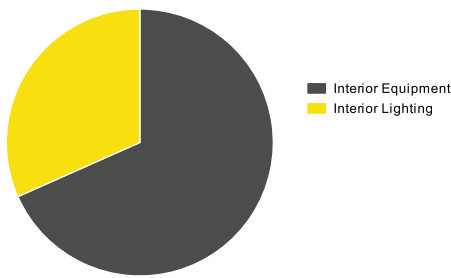
Energy Use - view table

Fuel	Consumption (kBtu)
Electricity	144,011
Natural Gas	0
Additional Fuel	0
District Cooling	86,157
District Heating	197,990



EUI - Electricity - view table

End Use	Consumption (kWh)
Heating	0
Cooling	0
Interior Lighting	13,358
Exterior Lighting	0
Interior Equipment	28,847
Exterior Equipment	0
Fans	0
Pumps	0
Heat Rejection	0
Humidification	0
Heat Recovery	0
Water Systems	0
Refrigeration	0
Generators	0



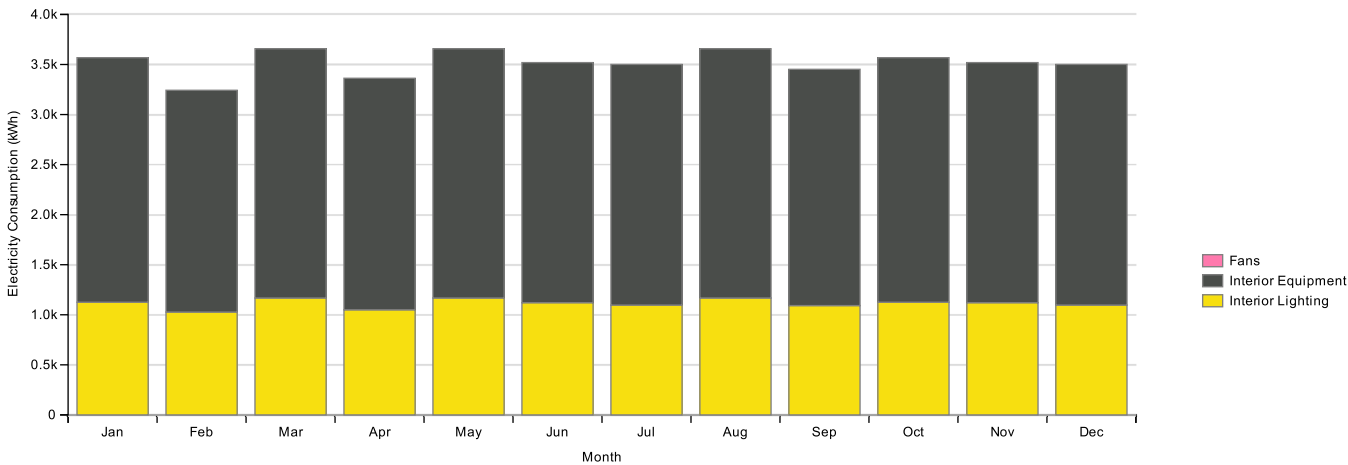
EUI - Gas - view table

End Use	Consumption (therms)
Heating	0
Cooling	0
Interior Lighting	0
Exterior Lighting	0
Interior Equipment	0
Exterior Equipment	0
Fans	0
Pumps	0
Heat Rejection	0
Humidification	0
Heat Recovery	0
Water Systems	0

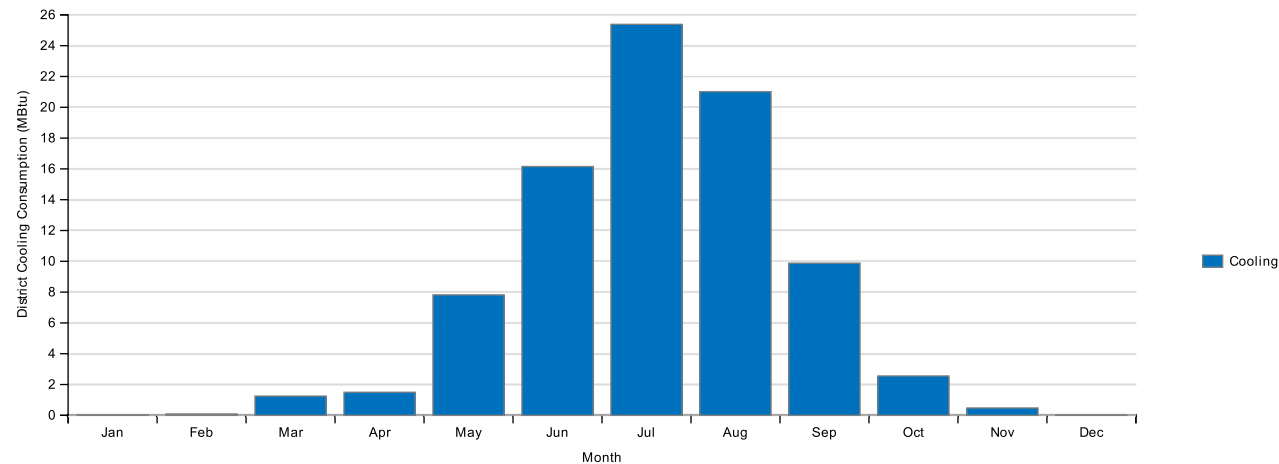
Refrigeration	0
Generators	0

Monthly Overview

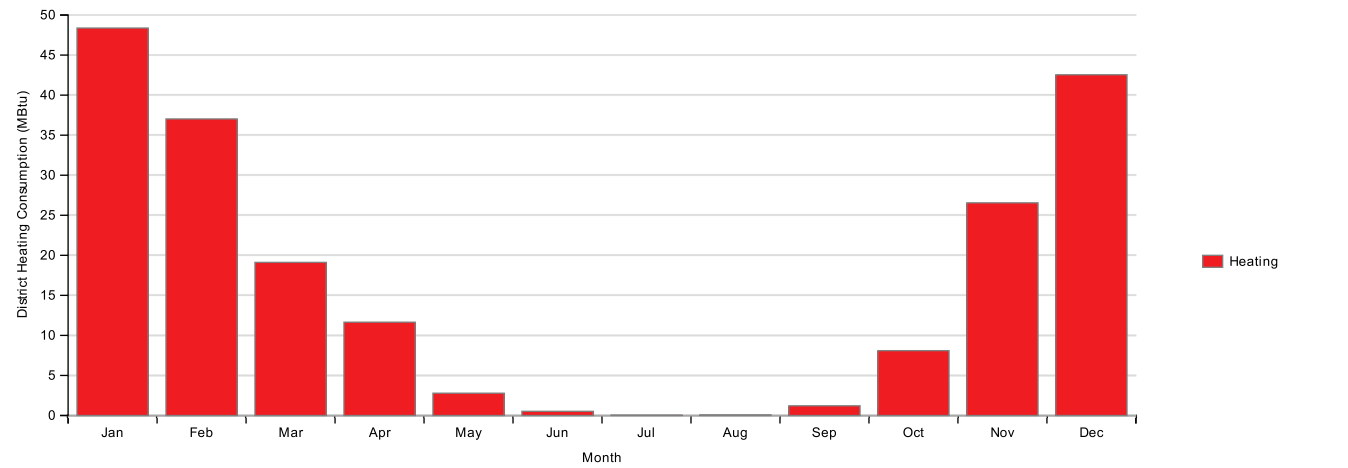
Electricity Consumption (kWh) - view table



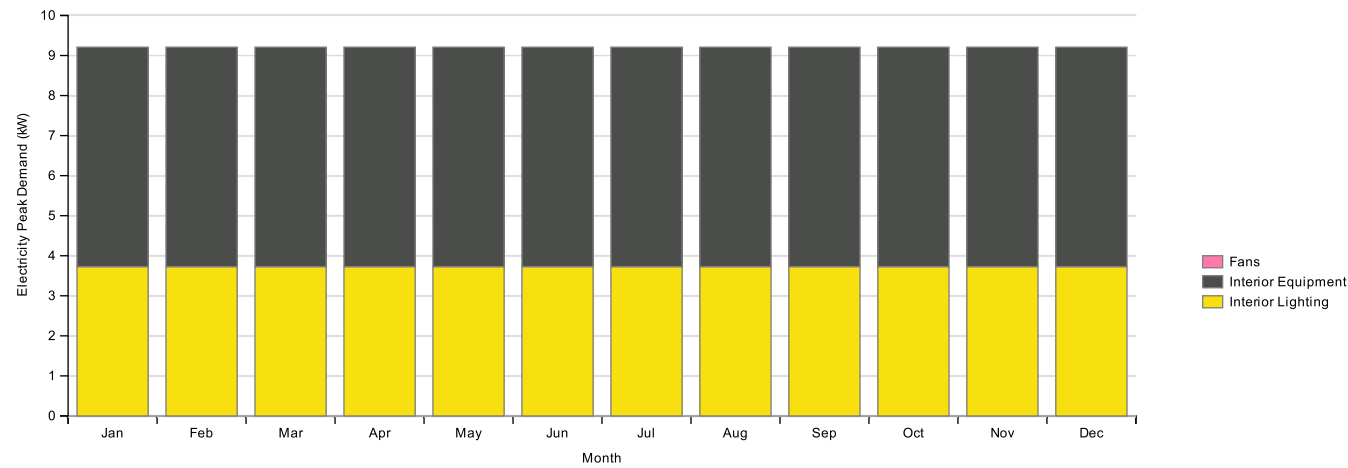
District Cooling Consumption (MBtu) - view table



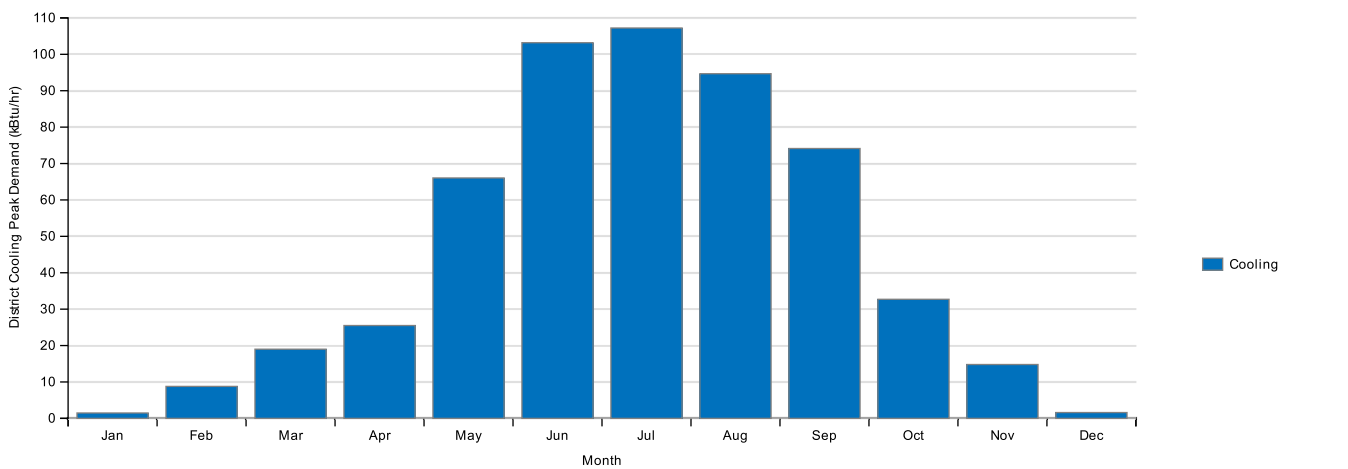
District Heating Consumption (MBtu) - view table



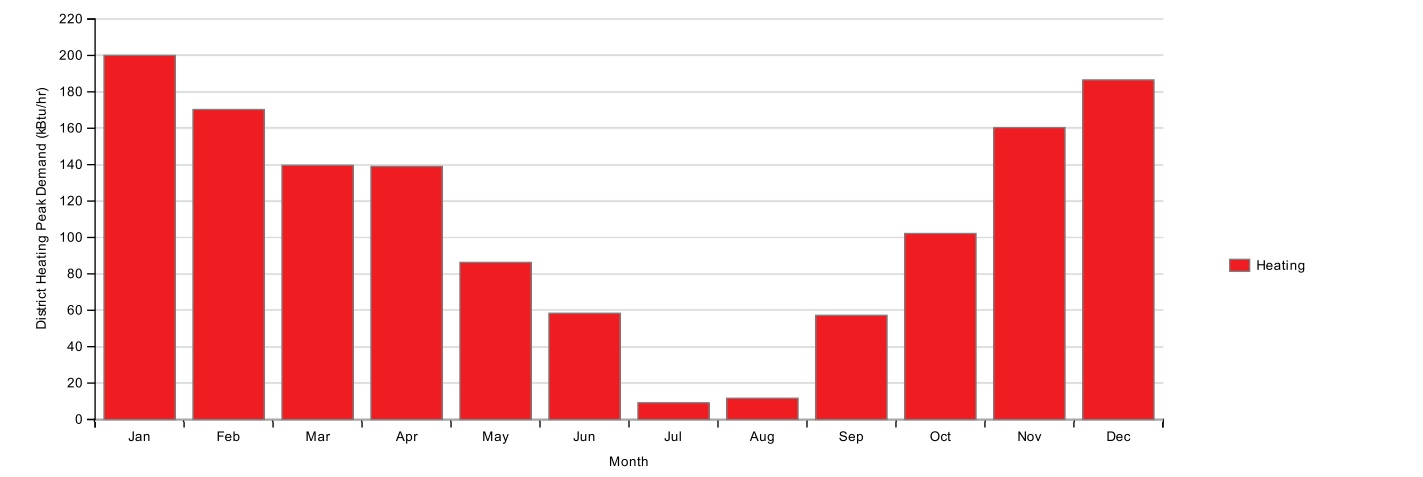
Electricity Peak Demand (kW) - view table



District Cooling Peak Demand (kBtu/hr) - view table



District Heating Peak Demand (kBtu/hr) - view table



Utility Bills/Rates

No Data to Show for Utility Bills/Rates

Envelope

Base Surface Constructions

Construction	Net Area (ft^2)	Surface Count	R Value (ft^2*h*R/Btu)
ASHRAE 189.1-2009 ExtRoof IEAD ClimateZone 1	1,494	6	19.96
ASHRAE 189.1-2009 ExtWall Mass ClimateZone 1	4,348	33	1.33

Sub Surface Constructions

Construction	Area (ft^2)	Surface Count	U-Factor (Btu/ft^2*h*R)
ASHRAE 189.1-2009 ExtWindow ClimateZone 1	692	33	

WWR & Skylight Ratio

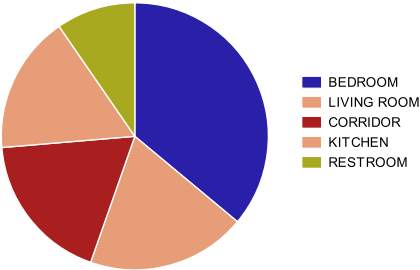
Description	Total (%)	North (%)	East (%)	South (%)	West (%)
Gross Window-Wall Ratio	13.73	11.99	7.38	23.03	8.27
Gross Window-Wall Ratio (Conditioned)	13.73	11.99	7.38	23.03	8.27
Skylight-Roof Ratio	0.0				

Space Type Breakdown

Space Type Breakdown - view table

Space Type Name	Floor Area (ft^2)	Standards Building Type	Standards Space Type
BEDROOM	1,616	Office	IT_Room
CORRIDOR	820	Office	Corridor
KITCHEN	750	Office	BreakRoom
LIVING ROOM	867	Office	Lobby

RESTROOM	430	Office	Restroom
----------	-----	--------	----------



Space Type Summary

BEDROOM
(6 spaces and 6 thermal zones)

Definition	Value	Unit	Inst. Multiplier
189.1-2009 - Office - IT_Room - CZ1-3 People Definition	0.0050	people/ft^2	1.0
189.1-2009 - Office - IT_Room - CZ1-3 Electric Equipment Definition	1.5600	W/ft^2	1.0
189.1-2009 - Office - IT_Room - CZ1-3 Lights Definition	0.9900	W/ft^2	1.0
189.1-2009 - Office - IT_Room - CZ1-3 Infiltration	0.0595	cfm/ext surf area ft^2	
189.1-2009 - Office - IT_Room - CZ1-3 Ventilation (outdoor air method Sum)	0.0500	cfm/floor area ft^2	

CORRIDOR
(3 spaces and 3 thermal zones)

Definition	Value	Unit	Inst. Multiplier
189.1-2009 - Office - Corridor - CZ1-3 People Definition	0.0010	people/ft^2	1.0
189.1-2009 - Office - Corridor - CZ1-3 Electric Equipment Definition	0.1600	W/ft^2	1.0
189.1-2009 - Office - Corridor - CZ1-3 Lights Definition	0.4500	W/ft^2	1.0
189.1-2009 - Office - Corridor - CZ1-3 Infiltration	0.0595	cfm/ext surf area ft^2	
189.1-2009 - Office - Corridor - CZ1-3 Ventilation (outdoor air method Sum)	0.0500	cfm/floor area ft^2	

KITCHEN
(3 spaces and 3 thermal zones)

Definition	Value	Unit	Inst. Multiplier
189.1-2009 - Office - BreakRoom - CZ1-3 People Definition	0.0500	people/ft^2	1.0
189.1-2009 - Office - BreakRoom - CZ1-3 Electric Equipment Definition	4.4600	W/ft^2	1.0
189.1-2009 - Office - BreakRoom - CZ1-3 Lights Definition	1.0800	W/ft^2	1.0
189.1-2009 - Office - BreakRoom - CZ1-3 Infiltration	0.0595	cfm/ext surf area ft^2	
189.1-2009 - Office - BreakRoom - CZ1-3 Ventilation (outdoor air method Sum)	15.0000	cfm/person	

LIVING ROOM
(3 spaces and 3 thermal zones)

Definition	Value	Unit	Inst. Multiplier
------------	-------	------	------------------

189.1-2009 - Office - Lobby - CZ1-3 People Definition	0.0100	people/ft^2	1.0
189.1-2009 - Office - Lobby - CZ1-3 Electric Equipment Definition	0.0700	W/ft^2	1.0
189.1-2009 - Office - Lobby - CZ1-3 Lights Definition	1.1700	W/ft^2	1.0
189.1-2009 - Office - Lobby - CZ1-3 Infiltration	0.0595	cfm/ext surf area ft^2	
189.1-2009 - Office - Lobby - CZ1-3 Ventilation (outdoor air method Sum)	15.0000	cfm/person	

RESTROOM
(3 spaces and 3 thermal zones)

Definition	Value	Unit	Inst. Multiplier
189.1-2009 - Office - Restroom - CZ1-3 People Definition	0.0100	people/ft^2	1.0
189.1-2009 - Office - Restroom - CZ1-3 Electric Equipment Definition	0.0700	W/ft^2	1.0
189.1-2009 - Office - Restroom - CZ1-3 Lights Definition	0.8100	W/ft^2	1.0
189.1-2009 - Office - Restroom - CZ1-3 Infiltration	0.0595	cfm/ext surf area ft^2	
189.1-2009 - Office - Restroom - CZ1-3 Ventilation (outdoor air method Sum)	0.9600	cfm/floor area ft^2	

Interior Lighting Summary

Interior Lighting Summary

	Zone	Lighting Power Density (W/ft^2)	Total Power (W)	Schedule Name	Scheduled Hours/Week (hr)	Actual Load Hours/Week (hr)	Return Air Fraction	Consumption (kWh)
BEDROOM 1 1F 189.1-2009 - OFFICE - IT_ROOM - CZ1-3 LIGHTS	BEDROOM 1 1F	0.99	262.94	OFFICE BLDG LIGHT	61.85	61.85	0.0000	847.22
BEDROOM 1 2F 189.1-2009 - OFFICE - IT_ROOM - CZ1-3 LIGHTS	BEDROOM 1 2F	0.99	262.94	OFFICE BLDG LIGHT	61.85	61.85	0.0000	847.22
BEDROOM 1 GF 189.1-2009 - OFFICE - IT_ROOM - CZ1-3 LIGHTS	BEDROOM 1 GF	0.99	262.94	OFFICE BLDG LIGHT	61.85	61.85	0.0000	847.22
BEDROOM 2 1F 189.1-2009 - OFFICE - IT_ROOM - CZ1-3 LIGHTS	BEDROOM 2 1F	0.99	270.35	OFFICE BLDG LIGHT	61.85	61.85	0.0000	872.22
BEDROOM 2 2F 189.1-2009 - OFFICE - IT_ROOM - CZ1-3 LIGHTS	BEDROOM 2 2F	0.99	270.35	OFFICE BLDG LIGHT	61.85	61.85	0.0000	872.22
BEDROOM 2 GF 189.1-2009 - OFFICE - IT_ROOM - CZ1-3 LIGHTS	BEDROOM 2 GF	0.99	270.35	OFFICE BLDG LIGHT	61.85	61.85	0.0000	872.22
CORRIDOR 1F 189.1-2009 - OFFICE - CORRIDOR - CZ1-3 LIGHTS	CORRIDOR 1F	0.45	122.96	OFFICE BLDG LIGHT	61.85	61.85	0.0000	397.22
CORRIDOR 2F 189.1-2009 - OFFICE - CORRIDOR - CZ1-3 LIGHTS	CORRIDOR 2F	0.45	122.96	OFFICE BLDG LIGHT	61.85	61.85	0.0000	397.22
CORRIDOR GF 189.1-2009 - OFFICE - CORRIDOR - CZ1-3 LIGHTS	CORRIDOR GF	0.45	122.96	OFFICE BLDG LIGHT	61.85	61.85	0.0000	397.22
KITCHEN 1F 189.1-2009 - OFFICE - BREAKROOM - CZ1-3 LIGHTS	KITCHEN 1F	1.08	270.17	OFFICE BLDG LIGHT	61.85	61.85	0.0000	872.22
KITCHEN 2F 189.1-2009 - OFFICE - BREAKROOM - CZ1-3 LIGHTS	KITCHEN 2F	1.08	270.17	OFFICE BLDG LIGHT	61.85	61.85	0.0000	872.22

11/1/2018OpenStudio Results

KITCHEN GF 189.1-2009 - OFFICE - BREAKROOM - CZ1-3 LIGHTS	KITCHEN GF	1.08	270.17	OFFICE BLDG LIGHT	61.85	61.85	0.0000	872.22
LIVING ROOM 1F 189.1-2009 - OFFICE - LOBBY - CZ1-3 LIGHTS	LIVING ROOM 1F	1.17	338.02	OFFICE BLDG LIGHT	61.85	61.85	0.0000	1088.89
LIVING ROOM 2F 189.1-2009 - OFFICE - LOBBY - CZ1-3 LIGHTS	LIVING ROOM 2F	1.17	338.02	OFFICE BLDG LIGHT	61.85	61.85	0.0000	1088.89
LIVING ROOM GF 189.1-2009 - OFFICE - LOBBY - CZ1-3 LIGHTS	LIVING ROOM GF	1.17	338.02	OFFICE BLDG LIGHT	61.85	61.85	0.0000	1088.89
RESTROOM 1F 189.1-2009 - OFFICE - RESTROOM - CZ1-3 LIGHTS	RESTROOM 1F	0.81	116.22	OFFICE BLDG LIGHT	61.85	61.85	0.0000	375.0
RESTROOM 2F 189.1-2009 - OFFICE - RESTROOM - CZ1-3 LIGHTS	RESTROOM 2F	0.81	116.22	OFFICE BLDG LIGHT	61.85	61.85	0.0000	375.0
RESTROOM GF 189.1-2009 - OFFICE - RESTROOM - CZ1-3 LIGHTS	RESTROOM GF	0.81	116.22	OFFICE BLDG LIGHT	61.85	61.85	0.0000	375.0

Plug Loads Summary

Electric Plug Load Consumption

	Electricity Annual Value (kWh)
InteriorEquipment:Electricity:Zone:BEDROOM 1 1F	1963.89
InteriorEquipment:Electricity:Zone:BEDROOM 1 2F	1963.89
InteriorEquipment:Electricity:Zone:BEDROOM 1 GF	1963.89
InteriorEquipment:Electricity:Zone:BEDROOM 2 1F	2016.67
InteriorEquipment:Electricity:Zone:BEDROOM 2 2F	2016.67
InteriorEquipment:Electricity:Zone:BEDROOM 2 GF	2016.67
InteriorEquipment:Electricity:Zone:CORRIDOR 1F	208.33
InteriorEquipment:Electricity:Zone:CORRIDOR 2F	208.33
InteriorEquipment:Electricity:Zone:CORRIDOR GF	208.33
InteriorEquipment:Electricity:Zone:KITCHEN 1F	5283.33
InteriorEquipment:Electricity:Zone:KITCHEN 2F	5283.33
InteriorEquipment:Electricity:Zone:KITCHEN GF	5283.33
InteriorEquipment:Electricity:Zone:LIVING ROOM 1F	94.44
InteriorEquipment:Electricity:Zone:LIVING ROOM 2F	94.44
InteriorEquipment:Electricity:Zone:LIVING ROOM GF	94.44
InteriorEquipment:Electricity:Zone:RESTROOM 1F	47.22
InteriorEquipment:Electricity:Zone:RESTROOM 2F	47.22
InteriorEquipment:Electricity:Zone:RESTROOM GF	47.22

Exterior Lighting

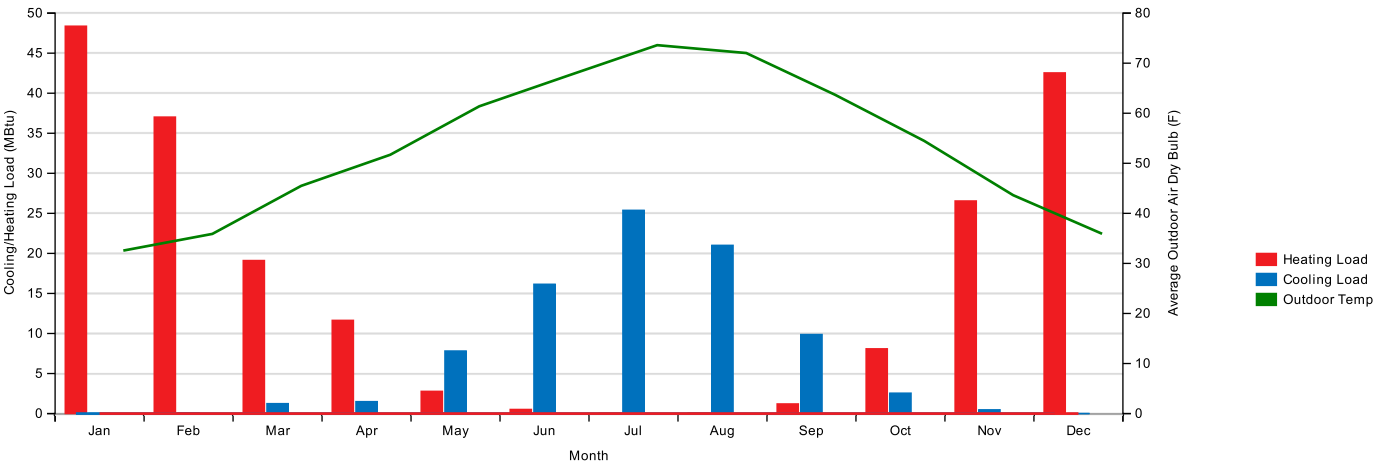
No Data to Show for Exterior Lighting

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)	>= 88 (F)	Unmet Clg (hr)	Unmet Clg - Occ (hr)	Mean Temp (F)
BEDROOM 1 1F	0	0	0	1467	565	220	2297	494	408	2340	247	722	0	0	0	70.3 (F)
BEDROOM 1 2F	0	0	0	1623	526	194	2363	468	405	2277	227	677	0	0	0	70.1 (F)
BEDROOM 1 GF	0	0	0	1484	689	258	2384	663	557	2199	253	273	0	0	0	69.7 (F)
BEDROOM 2 1F	0	0	0	1520	635	221	2437	520	410	2133	262	622	0	0	0	70.0 (F)
BEDROOM 2 2F	0	0	0	1697	570	181	2474	521	407	2081	244	585	0	0	0	69.8 (F)
BEDROOM 2 GF	0	0	0	1517	751	260	2534	747	558	2010	225	158	0	0	0	69.3 (F)
CORRIDOR 1F	0	0	0	1486	796	205	3067	469	507	1666	269	295	0	0	0	69.3 (F)
CORRIDOR 2F	0	0	0	1643	707	171	3059	463	436	1672	262	347	0	0	0	69.2 (F)
CORRIDOR GF	0	0	0	1545	945	278	3472	735	721	974	68	22	0	0	0	68.3 (F)
KITCHEN 1F	0	0	0	408	658	256	1183	601	637	3398	241	1378	0	0	0	72.9 (F)
KITCHEN 2F	0	0	0	782	610	234	1309	607	542	3210	209	1257	0	0	0	72.3 (F)
KITCHEN GF	0	0	0	288	847	347	1246	778	783	3364	406	701	0	0	0	72.3 (F)
LIVING ROOM 1F	0	0	0	1668	560	164	2737	442	371	1939	243	636	0	0	0	69.8 (F)
LIVING ROOM 2F	0	0	0	1804	506	144	2790	395	373	1913	226	609	0	0	0	69.6 (F)
LIVING ROOM GF	0	0	0	1685	671	217	2906	567	565	1685	218	246	0	0	0	69.1 (F)
RESTROOM 1F	0	0	0	2367	517	208	3482	463	460	1114	78	71	0	0	0	67.8 (F)
RESTROOM 2F	0	0	0	2382	491	203	3464	441	445	1156	88	90	0	0	0	67.8 (F)
RESTROOM GF	0	0	0	2467	609	200	3665	465	442	845	29	38	0	0	0	67.3 (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 (%)	>= 80 (%)	Mean Relative Humidity (%)
BEDROOM 1 1F	2058	818	852	2073	1161	768	512	280	153	53	13	40.3 (%)
BEDROOM 1 2F	2093	805	808	1935	1117	820	581	321	176	59	21	40.6 (%)
BEDROOM 1 GF	2023	799	768	1497	1064	809	742	513	301	132	75	42.4 (%)
BEDROOM 2 1F	1984	789	842	1821	1179	845	673	371	165	57	13	41.2 (%)
BEDROOM 2 2F	2032	774	822	1692	1148	819	732	433	185	76	22	41.4 (%)
BEDROOM 2 GF	1969	762	773	1276	1089	744	866	606	369	190	81	43.3 (%)
CORRIDOR 1F	2205	748	675	1107	1104	854	905	603	348	131	50	42.5 (%)
CORRIDOR 2F	2221	749	680	1140	1060	845	894	613	324	149	53	42.4 (%)
CORRIDOR GF	2179	733	626	675	667	679	822	831	628	457	274	46.1 (%)
KITCHEN 1F	1449	887	1677	1832	1880	657	282	77	19	0	0	40.2 (%)
KITCHEN 2F	1520	880	1209	1986	1946	762	327	103	21	6	0	40.5 (%)
KITCHEN GF	1368	850	941	1430	1882	1066	694	372	134	23	0	43.0 (%)
LIVING ROOM 1F	1624	777	895	1470	1533	862	540	524	282	162	51	43.3 (%)
LIVING ROOM 2F	1749	764	860	1353	1468	884	589	554	297	145	54	43.2 (%)
LIVING ROOM GF	1599	762	800	946	1109	856	916	759	486	270	161	46.0 (%)
RESTROOM 1F	2205	733	618	634	590	586	638	781	751	592	355	46.9 (%)
RESTROOM 2F	2206	739	618	634	602	596	646	799	752	578	332	46.8 (%)
RESTROOM GF	2205	733	599	616	539	573	586	672	613	581	461	48.1 (%)

Zone Overview

Zone Summary

	Area (ft^2)	Conditioned (Y/N)	Part of Total Floor Area (Y/N)	Volume (ft^3)	Multiplier	Gross Wall Area (ft^2)	Window Glass Area (ft^2)	Lighting (W/ft^2)	People (ft^2/person)	Plug and Process (W/ft^2)
BEDROOM 1 1F	265.55	Yes	Yes	2656.02	1.00	370.71	59.74	0.99	199.99	1.56
BEDROOM 1 2F	265.55	Yes	Yes	2656.02	1.00	370.71	59.74	0.99	199.99	1.56
BEDROOM 1 GF	265.55	Yes	Yes	2656.02	1.00	370.71	59.74	0.99	199.99	1.56
BEDROOM 2 1F	273.08	Yes	Yes	2730.88	1.00	334.65	24.22	0.99	199.99	1.56
BEDROOM 2 2F	273.08	Yes	Yes	2730.88	1.00	334.65	24.22	0.99	199.99	1.56
BEDROOM 2 GF	273.08	Yes	Yes	2730.88	1.00	334.65	24.22	0.99	199.99	1.56
CORRIDOR 1F	273.3	Yes	Yes	2732.3	1.00	200.1	43.27	0.45	999.97	0.16

CORRIDOR 2F	273.3	Yes	Yes	2732.3	1.00	200.1	43.27	0.45	999.97	0.16
CORRIDOR GF	273.3	Yes	Yes	2732.3	1.00	200.1	43.27	0.45	999.97	0.16
KITCHEN 1F	250.15	Yes	Yes	2501.69	1.00	183.74	43.59	1.08	20.02	4.46
KITCHEN 2F	250.15	Yes	Yes	2501.69	1.00	183.74	43.59	1.08	20.02	4.46
KITCHEN GF	250.15	Yes	Yes	2501.69	1.00	183.74	43.59	1.08	20.02	4.46
LIVING ROOM 1F	288.9	Yes	Yes	2889.09	1.00	488.9	38.75	1.17	100.0	0.07
LIVING ROOM 2F	288.9	Yes	Yes	2889.09	1.00	488.9	38.75	1.17	100.0	0.07
LIVING ROOM GF	288.9	Yes	Yes	2889.09	1.00	488.9	38.75	1.17	100.0	0.07
RESTROOM 1F	143.48	Yes	Yes	1434.83	1.00	101.72	20.99	0.81	100.0	0.07
RESTROOM 2F	143.48	Yes	Yes	1434.83	1.00	101.72	20.99	0.81	100.0	0.07
RESTROOM GF	143.48	Yes	Yes	1434.83	1.00	101.72	20.99	0.81	100.0	0.07
Total	4483.38			44833.74		5039.34	691.69	0.92	75.46	1.36
Conditioned Total	4483.38			44833.74		5039.34	691.69	0.92	75.46	1.36
Unconditioned Total	0.0			0.0		0.0	0.0	0.0	0.0	0.0
Not Part of Total	0.0			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)
BEDROOM 1 1F	Cooling	0.59 (ton)	0.68 (ton)	366.57	421.66	7/21 16:45:00	89.2	0.02
BEDROOM 1 1F	Heating	8.36 (kBtu/h)	10.45 (kBtu/h)	228.84	286.05	1/21 06:00:00	22.82	0.0
BEDROOM 1 2F	Cooling	0.63 (ton)	0.72 (ton)	391.99	449.2	7/21 17:15:00	88.38	0.02
BEDROOM 1 2F	Heating	9.77 (kBtu/h)	12.21 (kBtu/h)	266.98	332.66	1/21 06:00:00	22.82	0.0
BEDROOM 1 GF	Cooling	0.45 (ton)	0.52 (ton)	281.81	324.19	7/21 16:45:00	89.2	0.02
BEDROOM 1 GF	Heating	7.95 (kBtu/h)	9.93 (kBtu/h)	216.13	271.22	1/21 06:00:00	22.82	0.0
BEDROOM 2 1F	Cooling	0.49 (ton)	0.56 (ton)	305.12	351.73	7/21 17:15:00	88.38	0.02
BEDROOM 2 1F	Heating	7.43 (kBtu/h)	9.29 (kBtu/h)	203.41	254.27	1/21 06:00:00	22.82	0.0
BEDROOM 2 2F	Cooling	0.53 (ton)	0.62 (ton)	332.66	383.52	7/21 18:15:00	86.31	0.02
BEDROOM 2 2F	Heating	8.88 (kBtu/h)	11.1 (kBtu/h)	241.55	303.0	1/21 06:00:00	22.82	0.0
BEDROOM 2 GF	Cooling	0.37 (ton)	0.43 (ton)	230.96	264.86	7/21 16:45:00	89.2	0.02
BEDROOM 2 GF	Heating	7.07 (kBtu/h)	8.83 (kBtu/h)	192.82	241.55	1/21 06:00:00	22.82	0.0

11/1/2018

OpenStudio Results

CORRIDOR 1F	Cooling	0.28 (ton)	0.32 (ton)	175.87	201.29	7/21 19:00:00	84.24	0.02
CORRIDOR 1F	Heating	5.68 (kBtu/h)	7.1 (kBtu/h)	154.68	192.82	1/21 06:00:00	22.82	0.0
CORRIDOR 2F	Cooling	0.34 (ton)	0.39 (ton)	211.89	243.67	7/21 19:00:00	84.24	0.02
CORRIDOR 2F	Heating	7.2 (kBtu/h)	9.0 (kBtu/h)	197.06	245.79	1/21 06:00:00	22.82	0.0
CORRIDOR GF	Cooling	0.15 (ton)	0.17 (ton)	91.11	105.94	7/21 18:45:00	84.92	0.02
CORRIDOR GF	Heating	5.54 (kBtu/h)	6.93 (kBtu/h)	150.44	188.58	1/21 06:00:00	22.82	0.0
KITCHEN 1F	Cooling	1.04 (ton)	1.2 (ton)	648.38	745.85	7/21 15:45:00	90.57	0.02
KITCHEN 1F	Heating	4.37 (kBtu/h)	5.46 (kBtu/h)	118.66	188.58	1/21 06:00:00	22.82	0.0
KITCHEN 2F	Cooling	1.07 (ton)	1.24 (ton)	669.57	771.27	7/21 15:45:00	90.57	0.02
KITCHEN 2F	Heating	5.72 (kBtu/h)	7.15 (kBtu/h)	156.8	194.94	1/21 06:00:00	22.82	0.0
KITCHEN GF	Cooling	0.92 (ton)	1.06 (ton)	576.34	661.09	7/21 15:30:00	90.84	0.02
KITCHEN GF	Heating	4.18 (kBtu/h)	5.23 (kBtu/h)	114.42	188.58	1/21 06:00:00	22.82	0.0
LIVING ROOM 1F	Cooling	0.57 (ton)	0.66 (ton)	355.97	408.94	7/21 20:45:00	80.98	0.02
LIVING ROOM 1F	Heating	9.26 (kBtu/h)	11.58 (kBtu/h)	252.15	315.71	1/21 06:00:00	22.82	0.0
LIVING ROOM 2F	Cooling	0.61 (ton)	0.71 (ton)	383.52	440.73	7/21 20:45:00	80.98	0.02
LIVING ROOM 2F	Heating	10.78 (kBtu/h)	13.48 (kBtu/h)	294.52	368.69	1/21 06:00:00	22.82	0.0
LIVING ROOM GF	Cooling	0.43 (ton)	0.5 (ton)	271.22	311.48	7/21 20:45:00	80.98	0.02
LIVING ROOM GF	Heating	8.69 (kBtu/h)	10.86 (kBtu/h)	237.31	296.64	1/21 06:00:00	22.82	0.0
RESTROOM 1F	Cooling	0.32 (ton)	0.37 (ton)	197.06	226.72	7/21 15:00:00	91.4	0.02
RESTROOM 1F	Heating	10.07 (kBtu/h)	12.58 (kBtu/h)	273.34	343.26	1/21 06:00:00	22.82	0.0
RESTROOM 2F	Cooling	0.34 (ton)	0.39 (ton)	209.77	241.55	7/21 15:15:00	91.13	0.02
RESTROOM 2F	Heating	10.86 (kBtu/h)	13.58 (kBtu/h)	296.64	370.8	1/21 06:00:00	22.82	0.0
RESTROOM GF	Cooling	0.26 (ton)	0.3 (ton)	161.03	186.46	7/21 15:00:00	91.4	0.02
RESTROOM GF	Heating	10.0 (kBtu/h)	12.5 (kBtu/h)	273.34	341.14	1/21 06:00:00	22.82	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)
BEDROOM 1 1F	0.51	1.33	2656	0.0	0.0	0.167	0.002	0.31	0.005
BEDROOM 1 2F	0.51	1.33	2656	0.0	0.0	0.287	0.004	0.31	0.005
BEDROOM 1 GF	0.51	1.33	2656	0.0	0.0	0.167	0.002	0.31	0.005
BEDROOM 2 1F	0.53	1.37	2731	0.0	0.0	0.147	0.002	0.31	0.005
BEDROOM 2 2F	0.53	1.37	2731	0.0	0.0	0.266	0.003	0.31	0.005
BEDROOM 2 GF	0.53	1.37	2731	0.0	0.0	0.147	0.002	0.309	0.005
CORRIDOR 1F	0.15	0.27	2732	0.0	0.0	0.088	0.001	0.309	0.005
CORRIDOR 2F	0.15	0.27	2732	0.0	0.0	0.207	0.003	0.309	0.005
CORRIDOR GF	0.15	0.27	2732	0.0	0.0	0.087	0.001	0.309	0.005
KITCHEN 1F	4.81	12.51	2502	0.0	0.0	0.088	0.001	1.37	0.004
KITCHEN 2F	4.81	12.51	2502	0.0	0.0	0.208	0.003	1.37	0.004
KITCHEN GF	4.81	12.51	2502	0.0	0.0	0.088	0.001	1.37	0.004
LIVING ROOM 1F	1.11	2.89	2889	0.0	0.0	0.202	0.003	0.273	0.001
LIVING ROOM 2F	1.11	2.89	2889	0.0	0.0	0.322	0.004	0.273	0.001
LIVING ROOM GF	1.11	2.89	2889	0.0	0.0	0.202	0.003	0.273	0.001
RESTROOM 1F	0.55	1.43	1435	0.0	0.0	0.084	0.001	5.928	0.098
RESTROOM 2F	0.55	1.43	1435	0.0	0.0	0.204	0.003	5.929	0.098
RESTROOM GF	0.55	1.43	1435	0.0	0.0	0.084	0.001	5.925	0.098

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	428157.4	95.5	95.5
Net Site Energy	428157.4	95.5	95.5
Total Source Energy	1262435.5	281.6	281.6
Net Source Energy	1262435.5	281.6	281.6

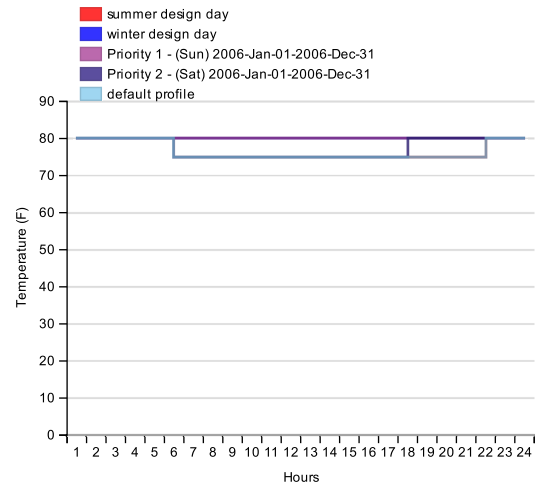
Site to Source Energy Conversion Factors

	Site=>Source Conversion Factor
Electricity	3.167
Natural Gas	1.084
District Cooling	1.056
District Heating	3.613

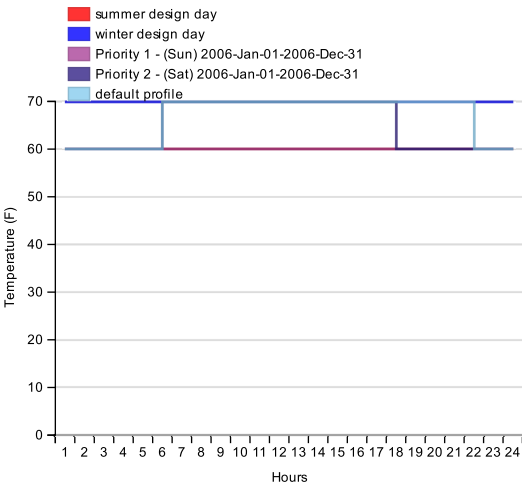
Schedule Overview

Schedule Overview - view table

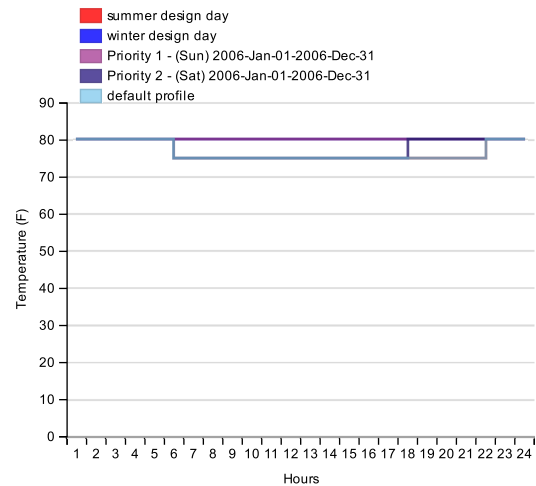
Large Office ClgSetp



Large Office HtgSetp



Medium Office ClgSetp



Medium Office HtgSetp

