# OpenStudio Results

# **Model Summary**

#### **Building Summary**

Information	Value	Units
Building Name	RESIDENTIAL BUILDING MILANO	building_name
Net Site Energy	354,256	kBtu
Total Building Area	4,483	ft^2
EUI (Based on Net Site Energy and Total Building Area)	79.02	kBtu/ft^2
OpenStudio Standards Building Type		

#### Weather Summary

	Value
Weather File	MILAN - ITA IWEC Data 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

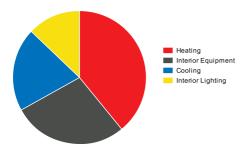
#### Unmet Hours Tolerance

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

# **Annual Overview**

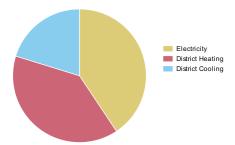
#### End Use - view table

End Use	Consumption (kBtu)
Heating	138,571
Cooling	71,674
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



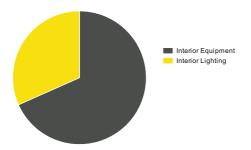
### Energy Use - view table

Fuel	Consumption (kBtu)
Electricity	144,011
Natural Gas	0
Additional Fuel	0
District Cooling	71,674
District Heating	138,571



#### 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

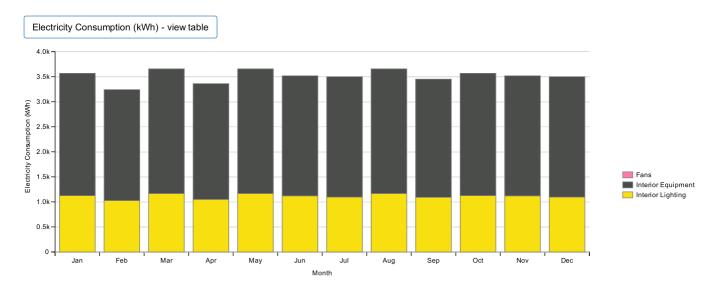


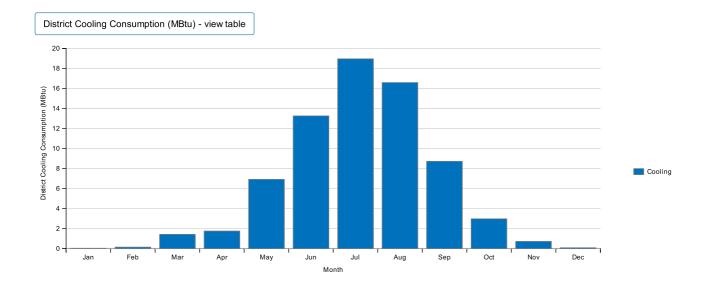
#### EUI - Gas - view table

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

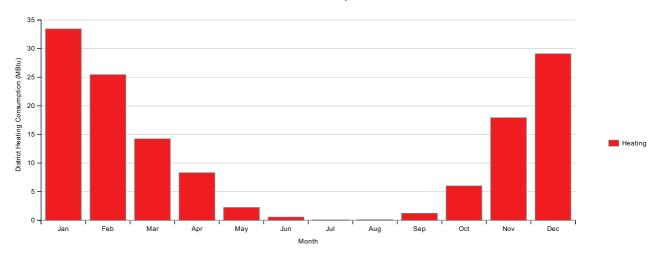
Refrigeration	0
Generators	0

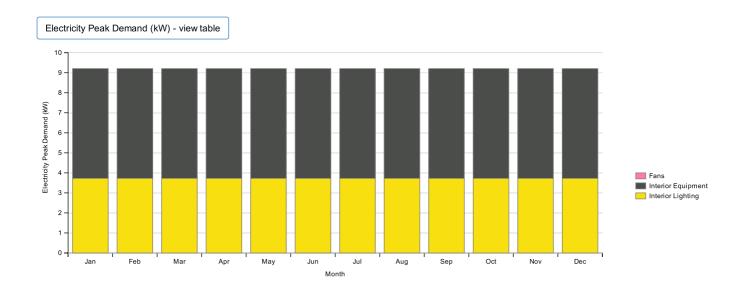
# Monthly Overview

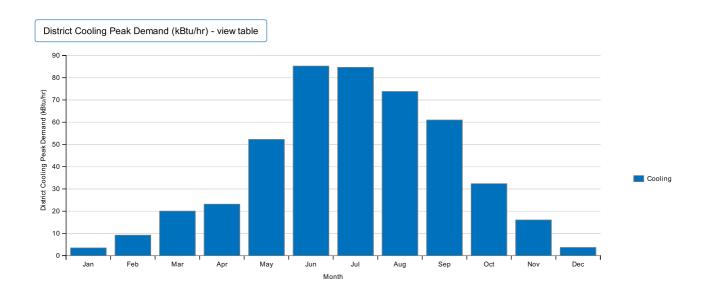




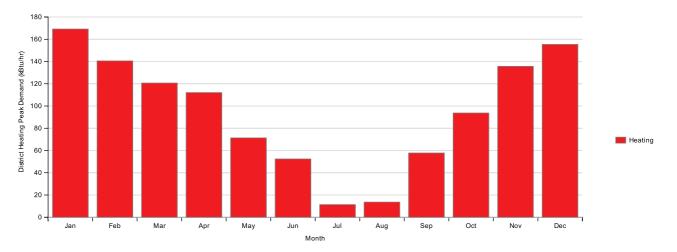
District Heating Consumption (MBtu) - view table







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	5.76

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

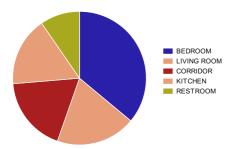
Description	Total (%)	North (%)	East (%)	South (%)	West (%)
Gross Window-Wall Ratio	13.73	11.99	7.38	23.03	8.27
Gross Window-Wall Ratio (Conditioned)	13.73	11.99	7.38	23.03	8.27
Skylight-Roof Ratio	0.0				

# 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
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# 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	
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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

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

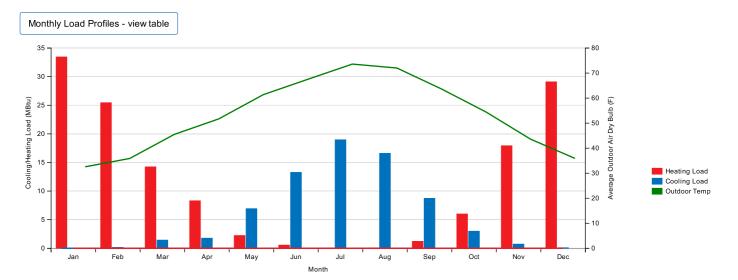
## **Exterior Lighting**

No Data to Show for Exterior Lighting

### Water Use Equipment

No Data to Show for Water Use Equipment

### **HVAC Load Profiles**



# **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	1356	654	270	1960	615	624	2536	313	432	0	0	0	70.3 (F)
BEDROOM 1 2F	0	0	0	1530	614	250	2091	560	584	2404	272	455	0	0	0	70.0 (F)
BEDROOM 1 GF	0	0	0	1417	840	319	2123	897	826	2193	105	40	0	0	0	69.4 (F)
BEDROOM 2 1F	0	0	0	1325	703	277	1955	688	624	2479	328	381	0	0	0	70.2 (F)
BEDROOM 2 2F	0	0	0	1517	649	243	2103	659	556	2319	290	424	0	0	0	70.0 (F)
BEDROOM 2 GF	0	0	0	1362	892	332	2134	983	910	2062	69	16	0	0	0	69.3 (F)
CORRIDOR 1F	0	0	0	1318	895	292	2994	638	636	1688	194	105	0	0	0	69.2 (F)
CORRIDOR 2F	0	0	0	1551	774	215	3014	557	544	1691	219	195	0	0	0	69.1 (F)
CORRIDOR GF	0	0	0	1418	1134	410	3552	936	754	543	13	0	0	0	0	68.0 (F)
KITCHEN 1F	0	0	0	163	618	316	838	693	729	3814	281	1308	0	0	0	73.5 (F)
KITCHEN 2F	0	0	0	575	685	254	1005	657	665	3502	205	1212	0	0	0	72.6 (F)
KITCHEN GF	0	0	0	17	834	483	1011	913	953	3748	519	282	0	0	0	72.5 (F)
LIVING ROOM 1F	0	0	0	1518	719	200	2517	606	538	2101	285	276	0	0	0	69.6 (F)
LIVING ROOM 2F	0	0	0	1694	644	163	2612	539	463	2044	275	326	0	0	0	69.5 (F)
LIVING ROOM GF	0	0	0	1592	900	307	2825	874	730	1477	47	8	0	0	0	68.6 (F)
RESTROOM 1F	0	0	0	2365	587	194	3506	495	437	1065	52	59	0	0	0	67.7 (F)
RESTROOM 2F	0	0	0	2379	544	188	3476	470	444	1110	79	70	0	0	0	67.7 (F)
RESTROOM GF	0	0	0	2495	642	233	3658	480	413	784	26	29	0	0	0	67.2 (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	812	798	1748	1288	873	628	345	133	46	27	40.8 (%)
BEDROOM 1 2F	2094	793	774	1665	1228	871	682	393	158	65	21	41.0 (%)
BEDROOM 1 GF	2021	776	754	1129	1127	783	782	555	383	215	185	43.6 (%)
BEDROOM 2 1F	2024	801	816	1635	1344	919	642	352	145	51	20	41.1 (%)
BEDROOM 2 2F	2055	788	791	1543	1306	860	734	418	157	70	19	41.3 (%)
BEDROOM 2 GF	1993	776	763	1045	1088	819	801	590	386	241	204	44.0 (%)
CORRIDOR 1F	2200	749	705	865	1003	831	974	746	396	195	66	43.2 (%)
CORRIDOR 2F	2213	752	690	935	991	847	954	714	397	173	59	43.0 (%)
CORRIDOR GF	2170	745	626	621	575	600	732	735	700	499	333	47.3 (%)
KITCHEN 1F	1535	921	1393	2029	1981	625	205	67	4	0	0	39.9 (%)
KITCHEN 2F	1549	922	1114	1923	2076	817	259	82	18	0	0	40.4 (%)
KITCHEN GF	1454	864	923	1204	1613	1127	808	501	229	35	2	43.5 (%)
LIVING ROOM 1F	1600	772	824	1003	1461	999	930	603	348	142	48	44.5 (%)
LIVING ROOM 2F	1732	746	827	1028	1377	947	892	634	358	140	48	44.1 (%)
LIVING ROOM GF	1570	752	783	677	841	783	798	905	707	452	264	48.3 (%)
RESTROOM 1F	2206	734	620	622	574	585	621	740	690	619	413	47.2 (%)
RESTROOM 2F	2208	738	615	633	589	592	626	759	722	588	387	47.0 (%)
RESTROOM GF	2204	735	598	613	520	566	580	647	574	547	458	48.4 (%)

### **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

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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 (IbWater/IbAir)
BEDROOM 1 1F	Cooling	0.41 (ton)	0.48 (ton)	258.5	296.64	7/21 15:45:00	90.57	0.02
BEDROOM 1 1F	Heating	5.7 (kBtu/h)	7.12 (kBtu/h)	154.68	194.94	1/21 06:00:00	22.82	0.0
BEDROOM 1 2F	Cooling	0.45 (ton)	0.52 (ton)	281.81	324.19	7/21 16:15:00	89.92	0.02
BEDROOM 1 2F	Heating	7.15 (kBtu/h)	8.93 (kBtu/h)	194.94	243.67	1/21 06:00:00	22.82	0.0
BEDROOM 1 GF	Cooling	0.29 (ton)	0.34 (ton)	184.34	211.89	7/21 15:45:00	90.57	0.02
BEDROOM 1 GF	Heating	5.57 (kBtu/h)	6.96 (kBtu/h)	152.56	190.7	1/21 06:00:00	22.82	0.0
BEDROOM 2 1F	Cooling	0.35 (ton)	0.4 (ton)	218.24	252.15	7/21 15:30:00	90.84	0.02
BEDROOM 2 1F	Heating	4.7 (kBtu/h)	5.87 (kBtu/h)	127.13	161.03	1/21 06:00:00	22.82	0.0
BEDROOM 2 2F	Cooling	0.4 (ton)	0.45 (ton)	245.79	283.93	7/21 17:30:00	87.91	0.02
BEDROOM 2 2F	Heating	6.18 (kBtu/h)	7.73 (kBtu/h)	169.51	211.89	1/21 06:00:00	22.82	0.0
BEDROOM 2 GF	Cooling	0.25 (ton)	0.29 (ton)	156.8	180.1	7/21 15:30:00	90.84	0.02
BEDROOM 2 GF	Heating	4.66 (kBtu/h)	5.82 (kBtu/h)	127.13	158.92	1/21 06:00:00	22.82	0.0

710				Орст	Studio Results			
CORRIDOR 1F	Cooling	0.2 (ton)	0.23 (ton)	125.01	141.96	7/21 18:00:00	86.99	0.02
CORRIDOR 1F	Heating	4.08 (kBtu/h)	5.1 (kBtu/h)	112.3	139.85	1/21 06:00:00	22.82	0.0
CORRIDOR 2F	Cooling	0.26 (ton)	0.3 (ton)	161.03	184.34	7/21 18:15:00	86.31	0.02
CORRIDOR 2F	Heating	5.62 (kBtu/h)	7.03 (kBtu/h)	152.56	190.7	1/21 06:00:00	22.82	0.0
CORRIDOR GF	Cooling	0.08 (ton)	0.09 (ton)	50.85	59.33	7/21 17:45:00	87.46	0.02
CORRIDOR GF	Heating	4.14 (kBtu/h)	5.17 (kBtu/h)	112.3	141.96	1/21 06:00:00	22.82	0.0
KITCHEN 1F	Cooling	0.98 (ton)	1.12 (ton)	610.24	701.35	7/21 15:00:00	91.4	0.02
KITCHEN 1F	Heating	3.0 (kBtu/h)	3.76 (kBtu/h)	82.64	188.58	1/21 06:00:00	22.82	0.0
KITCHEN 2F	Cooling	1.01 (ton)	1.16 (ton)	631.43	724.66	7/21 15:15:00	91.13	0.02
KITCHEN 2F	Heating	4.37 (kBtu/h)	5.46 (kBtu/h)	118.66	188.58	1/21 06:00:00	22.82	0.0
KITCHEN GF	Cooling	0.87 (ton)	1.0 (ton)	540.31	620.83	7/21 15:00:00	91.4	0.02
KITCHEN GF	Heating	2.99 (kBtu/h)	3.74 (kBtu/h)	82.64	188.58	1/21 06:00:00	22.82	0.0
LIVING ROOM 1F	Cooling	0.37 (ton)	0.42 (ton)	226.72	260.62	7/21 15:30:00	90.84	0.02
LIVING ROOM 1F	Heating	5.58 (kBtu/h)	6.97 (kBtu/h)	152.56	190.7	1/21 06:00:00	22.82	0.0
LIVING ROOM 2F	Cooling	0.41 (ton)	0.47 (ton)	254.27	292.41	7/21 16:30:00	89.56	0.02
LIVING ROOM 2F	Heating	7.14 (kBtu/h)	8.93 (kBtu/h)	194.94	243.67	1/21 06:00:00	22.82	0.0
LIVING ROOM GF	Cooling	0.25 (ton)	0.28 (ton)	154.68	175.87	7/21 15:30:00	90.84	0.02
LIVING ROOM GF	Heating	5.4 (kBtu/h)	6.75 (kBtu/h)	148.32	184.34	1/21 06:00:00	22.82	0.0
RESTROOM 1F	Cooling	0.29 (ton)	0.34 (ton)	182.22	209.77	7/21 15:00:00	91.4	0.02
RESTROOM 1F	Heating	9.24 (kBtu/h)	11.55 (kBtu/h)	252.15	315.71	1/21 06:00:00	22.82	0.0
RESTROOM 2F	Cooling	0.31 (ton)	0.36 (ton)	194.94	224.6	7/21 15:15:00	91.13	0.02
RESTROOM 2F	Heating	10.05 (kBtu/h)	12.56 (kBtu/h)	273.34	341.14	1/21 06:00:00	22.82	0.0
RESTROOM GF	Cooling	0.24 (ton)	0.28 (ton)	150.44	173.75	7/21 15:00:00	91.4	0.02
RESTROOM GF	Heating	9.27 (kBtu/h)	11.59 (kBtu/h)	252.15	315.71	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	0.31	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	1.371	0.004
KITCHEN 2F	4.81	12.51	2502	0.0	0.0	0.209	0.003	1.371	0.004
KITCHEN GF	4.81	12.51	2502	0.0	0.0	0.088	0.001	1.371	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	354256.1	79.0	79.0
Net Site Energy	354256.1	79.0	79.0
Total Source Energy	1032428.8	230.3	230.3
Net Source Energy	1032428.8	230.3	230.3

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

