

Project Information

Project #: 1121
Name: 1121
Location: Gardnerville, NV

Notes:

Outdoor Conditions

Location: Minden (micro), Nevada
Elevation: 4720 ft
Latitude: 39
Dry Bulb: 4.0 °F
Daily Range: 4.0 °F
Wet Bulb: 59.0 °F

Infiltration

Method: Simple
Stories: 1
Construction: Semi-Tight
Exposure Category: One or Two Exposures
Num Fireplaces: None
Net Air Changes (H/C): 0.30/0.18
Net Flow (H/C): 82 cfm/41 cfm

Indoor Conditions

Room Temp: 65 - 70 °F
Design Temp Diff: 66.0 °F
Humidity: 35
Moisture Diff (Grains):
Ventilation
Num Occupants: 2

Type: Heat Recovery
ACH: 0.20
Outside Air: 55 cfm
Sensible Eff: 50 %

Floorplan/Levels

Main Floor 1,924 ft²
Total Heated Area: 1,924 ft²
Total Cooled Area: 1,622 ft²

Total Heating: 48,220 Btu/hr

Total Sensible: 19,980 Btu/hr

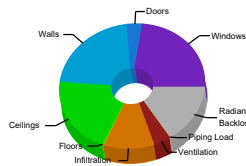
Total Latent: 400 Btu/hr

Load Breakdown

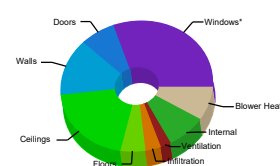
Name	Heating	Sensible	Latent
Windows*	10,682	6,146	
Skylights*	0	0	
Doors	1,496	1,481	
Walls	9,814	2,754	
Below Grade Walls	0		
Ceilings	9,188	4,083	
Floors	196	1,055	
Infiltration	5,066	655	0
Internal		1,660	400
Other	0		
Duct Loads	0	0	0
Ventilation	1,707	440	0
Humidification	3,084		
Piping Load	132		
Radiant Backloss	6,854		
Blower Heat		1,706	
AED*		0	
Total	48,220	19,980	400
Total Area	1,924 ft²	1,622 ft²	

*Average Load Procedure

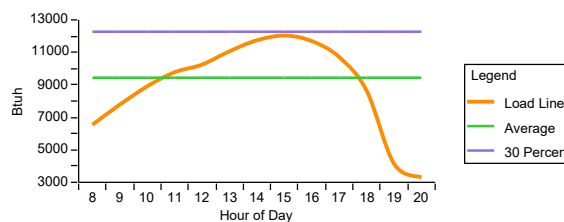
Heating Load Breakdown



Sensible Load Breakdown



Fenestration Load vs Hour of Day - Block Load (Summer)



JSHR: 0.98

CFM/SqFt: 0.73

MJ8 Tons: 1.70

Est. Blower CFM: 1181

SqFt/Ton: 955

Average Load: 9,441 Btu/hr

Excursion Limit: 12,274 Btu/hr

Peak Load: 12,033 Btu/hr

AED Load: 0 Btu/hr

Warnings

The sensible load for some rooms peak during late fall or early winter. This behavior is caused by glass that faces South East, South or South West. Room temperature may be difficult to control if zoning is not provided.

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