



Heat Loss Summary

ASHRAE Load Calculation

Project #: downhill/hodges

February 07, 2018

Project Information

Project #: downhill/hodges
 Name: downhill/hodges
 Location: 33500 meadow creek ranch

Notes:

Load Calculation Summary

Design Location: (User Specified) steamboat springs , Colorado
 Load Calculation Method: ASHRAE
 Outdoor Temperature: -15.0 °F
 Floorplans / Levels:
 Basement 2,505 ft²
 Main Floor 4,139 ft²
 Total Area: 6,644 ft²

Component Losses: 88,020 Btu/hr
 Infiltration/Ventilation: 38,989 Btu/hr
 Radiant Back Losses: 13,312 Btu/hr
 Total Heating Load: 140,321 Btu/hr
 Radiant Heating: 107,762 Btu/hr
 Radiant Back Losses: 13,312 Btu/hr
 Other: 19,247 Btu/hr
 Total Heating Load: 140,321 Btu/hr

Load Calculation Results

Total Project

Room	Area	Heating Type	Room Temp	Walls	Windows	Doors	Skylights	Floor	Ceiling	Infiltration	Additional	Recovered Panel Loss	Design Load	Unit Loss
Total For Project	6,644	RH,OTH	70.0	25,652	27,810	24,280	0	18,971	7,180	38,989	0	-2,560	140,321	22.2

Basement

Slab Below Grade Construction

Room	Area	Heating Type	Room Temp	Walls	Windows	Doors	Skylights	Floor	Ceiling	Infiltration	Additional	Recovered Panel Loss	Design Load	Unit Loss
bedroom 002	381	RH	70.0	2,045	1,142	0	0	2,142	0	1,921	0	0	7,251	20.3
bedroom 005	389	RH	70.0	1,372	1,496	0	0	1,562	0	1,963	0	0	6,394	17.5
bedroom 008	430	RH	70.0	2,781	1,224	0	0	2,093	0	2,169	0	0	8,267	20.5
family room	1,306	RH	70.0	5,342	1,265	1,875	0	4,977	1	6,589	0	0	20,049	16.3
Sub Total	2,505	RH	70.0	11,540	5,127	1,875	0	10,774	1	12,643	0	0	41,960	17.8

Length = ft Area = ft² Temperature = °F Flowrate = USGPM Air Flow = cfm Heat Loss = Btu/hr Unit Heat Loss = Btu/hr-ft² Rv = hr-ft²-°F/btu
 Head Loss = ft water RH = Radiant Floor Heating BB = Baseboard FA = Forced Air OTH = Other Heating SM = Snowmelt N = Not Heated

Created Using LoopCAD 2017 Uponor(US) (2/12/2018)
 Version:17.0.0694 R

Main Floor
Suspended Construction

Room	Area	Heating Type	Room Temp	Walls	Windows	Doors	Skylights	Floor	Ceiling	Infiltration	Additional	Recovered Panel Loss	Design Load	Unit Loss
garage	1,132	RH	70.0	3,512	1,149	10,002	0	2,932	1,963	6,124	0	0	25,682	23.6
guest suite	476	RH,OTH	70.0	2,314	3,944	938	0	2,525	826	3,087	0	0	13,634	30.4
Kitchen	881	RH,OTH	70.0	2,691	3,219	4,918	0	641	1,529	5,435	0	-641	17,791	21.1
Living Room	889	RH,OTH	70.0	2,517	9,556	4,047	0	1,082	1,542	6,978	0	-1,082	24,640	29
master bedroom	761	RH,OTH	70.0	3,078	4,814	2,500	0	1,017	1,320	4,722	0	-837	16,614	23.1
Sub Total	4,139	RH,OTH	70.0	14,112	22,683	22,404	0	8,196	7,180	26,346	0	-2,560	98,361	24.9

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