



Project Summary

Entire House

DL Williams Heating & Cooling L.L.C.

Job: 1
 Date: Jul 29, 2021
 By: DL Williams Heating & C...
 Plan: 929-750

PO Box 2156, Lake City, FL 32056 Phone: 386-754-1987 Email: williamscoolingllc@gmail.com

Project Information

For: 225 SW Pinehurst Dr Forest Country, Mike Todd Construction
 225 SW Pinehurst Dr Forest Country, Lake City, FL 32024

Notes:

Design Information

Weather: Gainesville Regional, FL, US

Winter Design Conditions

Outside db	33 °F
Inside db	68 °F
Design TD	35 °F

Summer Design Conditions

Outside db	92 °F
Inside db	75 °F
Design TD	17 °F
Daily range	M
Relative humidity	50 %
Moisture difference	44 gr/lb

Heating Summary

Structure	26659 Btuh
Ducts	7810 Btuh
Central vent (72 cfm)	2733 Btuh
Outside air	
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	37203 Btuh

Sensible Cooling Equipment Load Sizing

Structure	16970 Btuh
Ducts	9738 Btuh
Central vent (72 cfm)	1351 Btuh
Outside air	
Blower	0 Btuh
Use manufacturer's data	n
Rate/swing multiplier	0.97
Equipment sensible load	27272 Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

Latent Cooling Equipment Load Sizing

Structure	2791 Btuh
Ducts	1936 Btuh
Central vent (72 cfm)	2126 Btuh
Outside air	
Equipment latent load	6853 Btuh

	Heating	Cooling
Area (ft²)	2494	2494
Volume (ft³)	22646	22646
Air changes/hour	0.32	0.16
Equiv. AVF (cfm)	121	60

Equipment Total Load (Sen+Lat)	34125 Btuh
Req. total capacity at 0.70 SHR	3.2 ton

Heating Equipment Summary

Make	Generic
Trade	
Model	SEER 15.0, HSPF 8.5
AHRI ref	
Efficiency	8.5 HSPF
Heating input	
Heating output	35821 Btuh @ 47°F
Temperature rise	27 °F
Actual air flow	1200 cfm
Air flow factor	0.035 cfm/Btuh
Static pressure	0.50 in H2O
Space thermostat	
Capacity balance point = 33 °F	

Cooling Equipment Summary

Make	Generic
Trade	
Cond	SEER 15.0, HSPF 8.5
Coil	
AHRI ref	
Efficiency	12.8 EER, 15 SEER
Sensible cooling	25200 Btuh
Latent cooling	10800 Btuh
Total cooling	36000 Btuh
Actual air flow	1200 cfm
Air flow factor	0.045 cfm/Btuh
Static pressure	0.50 in H2O
Load sensible heat ratio	0.80

Backup:
 Input = 9 kW, Output = 31056 Btuh, 100 AFUE

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



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