



Project Summary

Entire House

Precision Tech Heating & Air LLC

Job: 214000
Date: Sep 11, 2012
By: Dave Rowe

PO Box 877, Alachua, FL 32616-0877 Phone: 352-378-5111 Fax: 386-462-0714 Email: Dave@PrecisionTechInfo.com Web: www.PrecisionTechInfo.com License: CA...

Project Information

For: David J. Rowe
363 SW Mapleton ST, Fort White, FL 32038
Phone: 386-454-2956

Notes: Vented attic wood frame house on slab. R-25 attic, 2-pane windows.

Design Information

Weather: Gainesville Regional AP, FL, US

Winter Design Conditions

Outside db	33 °F
Inside db	70 °F
Design TD	37 °F

Summer Design Conditions

Outside db	92 °F
Inside db	75 °F
Design TD	17 °F
Daily range	M
Relative humidity	50 %
Moisture difference	47 gr/lb

Heating Summary

Structure	20312 Btuh
Ducts	5722 Btuh
Central vent (0 cfm)	0 Btuh
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	26034 Btuh

Sensible Cooling Equipment Load Sizing

Structure	16172 Btuh
Ducts	7210 Btuh
Central vent (0 cfm)	0 Btuh
Blower	0 Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

	Heating	Cooling
Area (ft ²)	1518	1518
Volume (ft ³)	13662	13662
Air changes/hour	0.38	0.20
Equiv. AVF (cfm)	87	46

Use manufacturer's data	n
Rate/swing multiplier	0.97
Equipment sensible load	22681 Btuh

Latent Cooling Equipment Load Sizing

Structure	2660 Btuh
Ducts	1511 Btuh
Central vent (0 cfm)	0 Btuh
Equipment latent load	4170 Btuh

Equipment total load	26851 Btuh
Req. total capacity at 0.70 SHR	2.7 ton

Heating Equipment Summary

Make	Carrier
Trade	INFINITY 20 HP WITH GREENSPEED...
Model	25VNA036A**30
AHRI ref no	4616891

Efficiency	10.5 HSPF
Heating input	
Heating output	35800 Btuh @ 47°F
Temperature rise	30 °F
Actual air flow	1107 cfm
Air flow factor	0.043 cfm/Btuh
Static pressure	0.50 in H2O
Space thermostat	

Cooling Equipment Summary

Make	Carrier
Trade	INFINITY 20 HP WITH GREENSPEED...
Cond	25VNA036A**30
Coil	FE4ANF002++UI
AHRI ref no	4616891
Efficiency	12.7 EER, 18.6 SEER
Sensible cooling	23240 Btuh
Latent cooling	9960 Btuh
Total cooling	33200 Btuh
Actual air flow	1107 cfm
Air flow factor	0.047 cfm/Btuh
Static pressure	0.50 in H2O
Load sensible heat ratio	0.85

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



wrightsoft

Right-Suite® Universal 8.0.24 RSU13546

C:\Users\Dave\Documents\Wrightsoft HVAC\Rowe.rup Calc = MJ8 Front Door faces: S

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Certificate of Product Ratings

AHRI Certified Reference Number: 4616891

Date: 10/30/2012

Product: Split System: Heat Pump with Remote Outdoor Unit-Air-Source

Outdoor Unit Model Number: 25VNA036A**30

Indoor Unit Model Number: FE4ANF002+UI

Manufacturer: CARRIER AIR CONDITIONING

Trade/Brand name: INFINITY 20 HP WITH GREENSPEED INTELLIGENCE

Manufacturer responsible for the rating of this system combination is CARRIER AIR CONDITIONING

Rated as follows in accordance with AHRI Standard 210/240-2008 for Unitary Air-Conditioning and Air-Source Heat Pump Equipment and subject to verification of rating accuracy by AHRI-sponsored, independent, third party testing:

Cooling Capacity (Btuh):	33200
EER Rating (Cooling):	12.70
SEER Rating (Cooling):	18.60
Heating Capacity(Btuh) @ 47 F:	35800
Region IV HSPF Rating (Heating):	10.50
Heating Capacity(Btuh) @ 17 F:	29800

* Ratings followed by an asterisk (*) indicate a voluntary rerate of previously published data, unless accompanied with a WAS, which indicates an involuntary rerate.

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