



**Project Summary**  
**Entire House**  
**Bertie Heating & Air Conditioning**

Job:  
 Date:  
 By: Mike O'Guin

1730 NE 23rd Ave, Gainesville, FL 32609 Phone: 352-331-2005 Fax: 352-371-4942 Email: MIKEO@BERTIEAIR.COM Web: www.bertieair.com

**Project Information**

For: Bobbie Marino  
 255 SW Nevada Ln, Ft White, Fl

Notes:

**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 48 gr/lb

**Heating Summary**

Structure 19428 Btuh  
 Ducts 3270 Btuh  
 Central vent (0 cfm) 0 Btuh  
 Humidification 0 Btuh  
 Piping 0 Btuh  
 Equipment load 22698 Btuh

**Sensible Cooling Equipment Load Sizing**

Structure 19465 Btuh  
 Ducts 4897 Btuh  
 Central vent (0 cfm) 0 Btuh  
 Blower 0 Btuh  
 Use manufacturer's data n  
 Rate/swing multiplier 0.97  
 Equipment sensible load 23656 Btuh

**Infiltration**

Method Simplified  
 Construction quality Average  
 Fireplaces 0

**Latent Cooling Equipment Load Sizing**

Structure 2314 Btuh  
 Ducts 1101 Btuh  
 Central vent (0 cfm) 0 Btuh  
 Equipment latent load 3415 Btuh  
 Equipment total load 27071 Btuh  
 Req. total capacity at 0.70 SHR 2.8 ton

	Heating	Cooling
Area (ft <sup>2</sup> )	984	984
Volume (ft <sup>3</sup> )	8856	8856
Air changes/hour	0.45	0.23
Equiv. AVF (cfm)	66	34

**Heating Equipment Summary**

Make Trane  
 Trade XL14C  
 Model 4WCY4036A3  
 AHRI ref 1062686  
 Efficiency 8.2 HSPF  
 Heating input 34200 Btuh @ 47°F  
 Heating output 26 °F  
 Temperature rise 1200 cfm  
 Actual air flow 0.053 cfm/Btuh  
 Air flow factor 0 in H2O  
 Static pressure  
 Space thermostat

**Cooling Equipment Summary**

Make Trane  
 Trade XL14C  
 Cond 4WCY4036A3  
 Coil  
 AHRI ref 1062686  
 Efficiency 11.8 EER, 14 SEER  
 Sensible cooling 25200 Btuh  
 Latent cooling 10800 Btuh  
 Total cooling 36000 Btuh  
 Actual air flow 1200 cfm  
 Air flow factor 0.049 cfm/Btuh  
 Static pressure 0 in H2O  
 Load sensible heat ratio 0.88

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



Right-Suite® Universal 2012 12.1.05 RSU08134

C:\Users\bertie12\Desktop\Load Calc\Marino B.rup Calc = MJB Front Door faces: N

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# Certificate of Product Ratings

AHRI Certified Reference Number: 1062686

Date: 5/24/2013

Product: Single-Package Heat Pump Air-Source

Model Number: 4WCY4036A3

Manufacturer: TRANE

Trade/Brand name: XL14C

Manufacturer responsible for the rating of this system combination is TRANE

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):	36000
EER Rating (Cooling):	11.75
SEER Rating (Cooling):	14.00
Heating Capacity(Btuh) @ 47 F:	34200
Region IV HSPF Rating (Heating):	8.20
Heating Capacity(Btuh) @ 17 F:	24800

\* 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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