

Dawson
HVAC Load Calculations

for

House Craft Homes
10523 US Highway 441
Alachua FL 32615



Prepared By:

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North Central Florida Air Conditioning
P.O Box 358604
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386-454-4767
Thursday, July 16, 2020

Rhvac is an ACCA approved Manual J, D and S computer program.
Calculations are performed per ACCA Manual J 8th Edition, Version 2, and ACCA Manual D.



Project Report

General Project Information

Project Title: Dawson
 Project Date: Friday, March 1, 2020
 Project Comment: Edit the file AUTOLOAD.RHV so that it contains your company name, weather data, and any other information you would like to have in each new project that you start.

Client Name: House Craft Homes
 Client Address: 10523 US Highway 441
 Client City: Alachua FL 32615
 Client Phone: 386-462-5323
 Client Fax: 888-769-0105
 Client E-Mail Address: housecraftinvoices@gmail.com
 Company Name: North Central Florida Air Conditioning
 Company Representative: R. M. Walsh
 Company Address: P.O Box 358604
 Company City: Gainesville, FL 32635
 Company Phone: 386-454-4767
 Company Fax: 386-454-4854
 Company Comment:

Design Data

Reference City: Gainesville AP, Florida
 Building Orientation: Front door faces South
 Daily Temperature Range: Medium
 Latitude: 29 Degrees
 Elevation: 152 ft.
 Altitude Factor: 0.995

	Outdoor Dry Bulb	Outdoor Wet Bulb	Outdoor Rel.Hum	Indoor Rel.Hum	Indoor Dry Bulb	Grains Differenc e
Winter:	33	30.8	n/a	n/a	70	n/a
Summer:	92	77	51%	50%	75	52

Check Figures

Total Building Supply CFM: 864 CFM Per Square ft.: 0.530
 Square ft. of Room Area: 1,630 Square ft. Per Ton: 454
 Volume (ft³): 15,815

Building Loads

Total Heating Required Including Ventilation Air: 33,388 Btuh 33.388 MBH
 Total Sensible Gain: 24,298 Btuh 69 %
 Total Latent Gain: 10,756 Btuh 31 %
 Total Cooling Required Including Ventilation Air: 35,054 Btuh 2.92 Tons (Based On Sensible + Latent)
 3.59 Tons (Based On 75% Sensible Capacity)

Notes

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 Calculations are performed per ACCA Manual J 8th Edition, Version 2, and ACCA Manual D.
 All computed results are estimates as building use and weather may vary.
 Be sure to select a unit that meets both sensible and latent loads according to the manufacturer's performance data at your design conditions.



Equipment Data - System 1 - Main Floor

Cooling

System Type: Air Source Heat Pump
Outdoor Model: GSZ140241K*
Indoor Model: ARUF25B14A*
Tradename: GSZ14
Outdoor Manufacturer: GOODMAN
Description: Air Source Heat Pump
AHRI Reference No.: 201640401
Capacity: 23,200
Efficiency: 14 SEER

Heating

System Type: Air Source Heat Pump
Model: GSZ140241K*
Tradename: GSZ14
Manufacturer: GOODMAN
Description: Air Source Heat Pump
Capacity: 23,200
Efficiency: 8.2 HSPF