

Residential System Sizing Calculation

Summary

TBD
Anyplace
Lake City, FL 32055

Project Title:
Trent Geibeig Lot 19 Crosswinds Sub

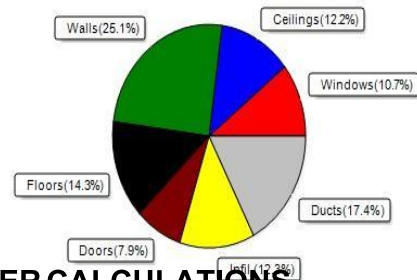
3/23/2025

Location for weather data: Gainesville, FL - Defaults: Latitude(29.7) Altitude(164 ft.) Temp Range(M)			
Humidity data: Interior RH (50%) Outdoor wet bulb (77F) Humidity difference(51gr.)			
Winter design temperature(TMY3 99%)	30 F	Summer design temperature(TMY3 99%)	94 F
Winter setpoint	70 F	Summer setpoint	75 F
Winter temperature difference	40 F	Summer temperature difference	19 F
Total heating load calculation	16906 Btuh	Total cooling load calculation	14617 Btuh
Submitted heating capacity	% of calc Btuh	Submitted cooling capacity	% of calc Btuh
Total (Electric Heat Pump)	100.8 17036	Sensible (SHR = 0.75)	83.9 10352
Heat Pump + Auxiliary(0.0kW)	100.8 17036	Latent	151.2 3451
		Total (Electric Heat Pump)	94.4 13803

WINTER CALCULATIONS

Winter Heating Load (for 1624 sqft)

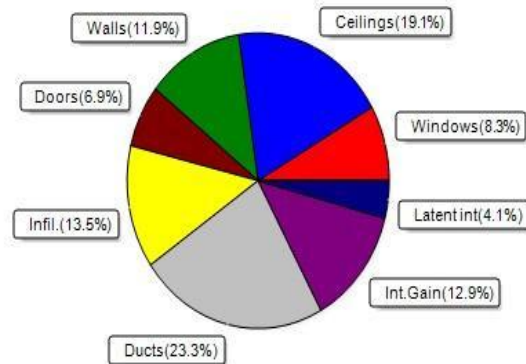
Load component	Load
Window total	113 sqft 1808 Btuh
Wall total	1315 sqft 4246 Btuh
Door total	78 sqft 1335 Btuh
Ceiling total	1624 sqft 2069 Btuh
Floor total	1624 sqft 2424 Btuh
Infiltration	48 cfm 2080 Btuh
Duct loss	2944 Btuh
Subtotal	16906 Btuh
Ventilation Ex:0 cfm; Sup:0 cfm	0 Btuh
TOTAL HEAT LOSS	16906 Btuh



SUMMER CALCULATIONS

Summer Cooling Load (for 1624 sqft)

Load component	Load
Window total	113 sqft 1211 Btuh
Wall total	1315 sqft 1747 Btuh
Door total	78 sqft 1001 Btuh
Ceiling total	1624 sqft 2793 Btuh
Floor total	0 Btuh
Infiltration	36 cfm 741 Btuh
Internal gain	1890 Btuh
Duct gain	2952 Btuh
Sens.Ventilation Ex:0 cfm; Sup:0 cfm	0 Btuh
Blower Load	0 Btuh
Total sensible gain	12335 Btuh
Latent gain(ducts)	453 Btuh
Latent gain(infiltration)	1230 Btuh
Latent gain(ventilation)	0 Btuh
Latent gain(internal/occupants/other)	600 Btuh
Total latent gain	2282 Btuh
TOTAL HEAT GAIN	14617 Btuh



8th Edition

EnergyGauge® System Sizing

PREPARED BY:

DATE: 3/22/25

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