

Residential System Sizing Calculation

Summary

Project Title:
Sellers Residence

Lake City, FL 32025

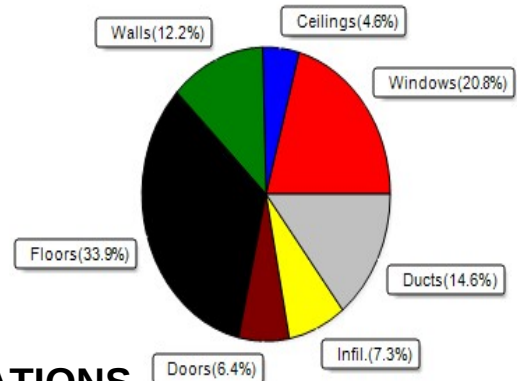
3/28/2022

Location for weather data: Gainesville, FL - Defaults: Latitude(29.7) Altitude(152 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	41155 Btuh	Total cooling load calculation	28158 Btuh
Submitted heating capacity	% of calc Btuh	Submitted cooling capacity	% of calc Btuh
Total (Electric Heat Pump)	102.3 42090	Sensible (SHR = 0.85)	108.7 26220
Heat Pump + Auxiliary(0.0kW)	102.3 42090	Latent	114.9 4627
		Total (Electric Heat Pump)	109.5 30847

WINTER CALCULATIONS

Winter Heating Load (for 2407 sqft)

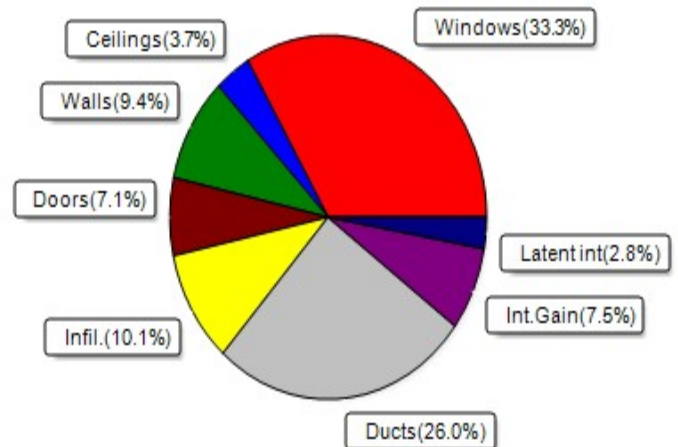
Load component	Load
Window total 390 sqft	8580 Btuh
Wall total 1624 sqft	5021 Btuh
Door total 144 sqft	2650 Btuh
Ceiling total 2407 sqft	1910 Btuh
Floor total 2407 sqft	13971 Btuh
Infiltration 69 cfm	3011 Btuh
Duct loss	6012 Btuh
Subtotal	41155 Btuh
Ventilation Ex:50 cfm; Sup:0 cfm	0 Btuh
TOTAL HEAT LOSS	41155 Btuh



SUMMER CALCULATIONS

Summer Cooling Load (for 2407 sqft)

Load component	Load
Window total 390 sqft	9379 Btuh
Wall total 1624 sqft	2653 Btuh
Door total 144 sqft	1987 Btuh
Ceiling total 2407 sqft	1041 Btuh
Floor total	0 Btuh
Infiltration 52 cfm	1073 Btuh
Internal gain	2120 Btuh
Duct gain	5878 Btuh
Sens.Ventilation Ex:50 cfm; Sup:0 cfm	0 Btuh
Blower Load	0 Btuh
Total sensible gain	24132 Btuh
Latent gain(ducts)	1446 Btuh
Latent gain(infiltration)	1780 Btuh
Latent gain(ventilation)	0 Btuh
Latent gain(internal/occupants/other)	800 Btuh
Total latent gain	4026 Btuh
TOTAL HEAT GAIN	28158 Btuh



8th Edition

EnergyGauge® System Sizing

PREPARED BY: _____

DATE: _____