

Residential System Sizing Calculation

Summary

Energy Gauge
CR 18
Fort White, FL 32952

Project Title:
Reyna Poole residence

Florida Code Example

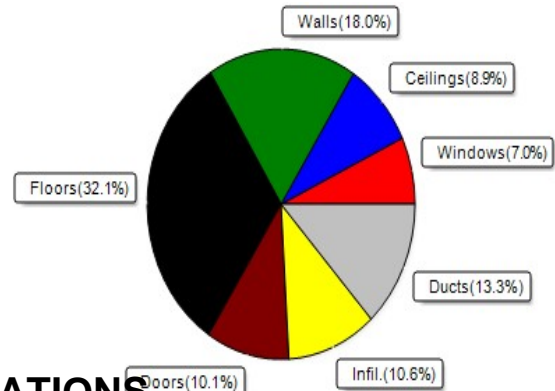
9/5/2024

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	27930	Btuh	Total cooling load calculation	19128	Btuh
Submitted heating capacity	% of calc	Btuh	Submitted cooling capacity	% of calc	Btuh
Total (Electric Heat Pump)	91.3	25500	Sensible (SHR = 0.75)	91.4	14906
Heat Pump + Auxiliary(0.0kW)	91.3	25500	Latent	175.8	4969
			Total (Electric Heat Pump)	103.9	19875

WINTER CALCULATIONS

Winter Heating Load (for 1960 sqft)

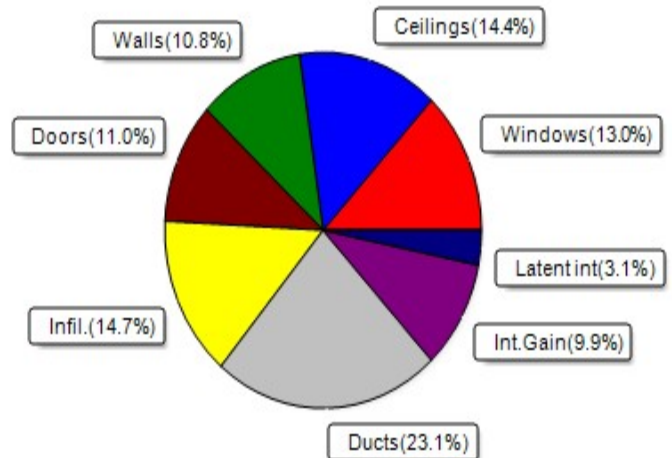
Load component	Load	
Window total	110 sqft	1964 Btuh
Wall total	1552 sqft	5021 Btuh
Door total	158 sqft	2807 Btuh
Ceiling total	1960 sqft	2497 Btuh
Floor total	1960 sqft	8968 Btuh
Infiltration	68 cfm	2962 Btuh
Duct loss		3711 Btuh
Subtotal		27930 Btuh
Ventilation	Ex:0 cfm; Sup:0 cfm	0 Btuh
TOTAL HEAT LOSS		27930 Btuh



SUMMER CALCULATIONS

Summer Cooling Load (for 1960 sqft)

Load component	Load	
Window total	110 sqft	2493 Btuh
Wall total	1552 sqft	2061 Btuh
Door total	158 sqft	2105 Btuh
Ceiling total	1960 sqft	2746 Btuh
Floor total		0 Btuh
Infiltration	51 cfm	1055 Btuh
Internal gain		1890 Btuh
Duct gain		3951 Btuh
Sens.Ventilation	Ex:0 cfm; Sup:0 cfm	0 Btuh
Blower Load		0 Btuh
Total sensible gain		16302 Btuh
Latent gain(ducts)		475 Btuh
Latent gain(infiltration)		1751 Btuh
Latent gain(ventilation)		0 Btuh
Latent gain(internal/occupants/other)		600 Btuh
Total latent gain		2826 Btuh
TOTAL HEAT GAIN		19128 Btuh



8th Edition

EnergyGauge® System Sizing

PREPARED BY: *William Freeman*

DATE: 9/4/24

EnergyGauge® / USRCZB v8.1.05

