

Residential System Sizing Calculation

Summary

Todd and Shelia Widergren
127 NW Treeline Gln
Lake City, FL 32055

Project Title:
Widergren Bedroom Carport

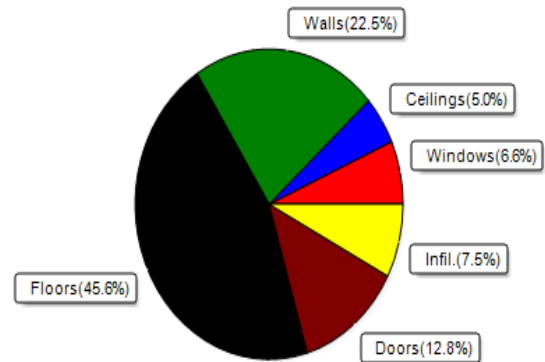
11/21/2022

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 11591 Btuh			Total cooling load calculation 8379 Btuh		
Submitted heating capacity % of calc Btuh			Submitted cooling capacity % of calc Btuh		
Total (Electric Heat Pump) 100.0 11591			Sensible (SHR = 0.75) 84.2 6284		
Heat Pump + Auxiliary(0.0kW) 100.0 11591			Latent 229.1 2095		
			Total (Electric Heat Pump) 100.0 8379		

WINTER CALCULATIONS

Winter Heating Load (for 576 sqft)

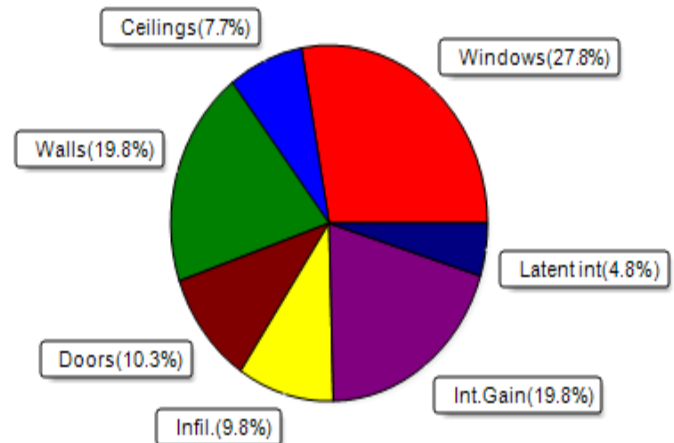
Load component		Load	
Window total	48 sqft	768	Btuh
Wall total	733 sqft	2602	Btuh
Door total	83 sqft	1479	Btuh
Ceiling total	576 sqft	585	Btuh
Floor total	576 sqft	5286	Btuh
Infiltration	20 cfm	870	Btuh
Duct loss		0	Btuh
Subtotal		11591	Btuh
Ventilation	Ex:0 cfm; Sup:0 cfm	0	Btuh
TOTAL HEAT LOSS		11591	Btuh



SUMMER CALCULATIONS

Summer Cooling Load (for 576 sqft)

Load component		Load	
Window total	48 sqft	2328	Btuh
Wall total	733 sqft	1659	Btuh
Door total	83 sqft	864	Btuh
Ceiling total	576 sqft	643	Btuh
Floor total		0	Btuh
Infiltration	15 cfm	310	Btuh
Internal gain		1660	Btuh
Duct gain		0	Btuh
Sens.Ventilation	Ex:0 cfm; Sup:0 cfm	0	Btuh
Blower Load		0	Btuh
Total sensible gain		7464	Btuh
Latent gain(ducts)		0	Btuh
Latent gain(infiltration)		514	Btuh
Latent gain(ventilation)		0	Btuh
Latent gain(internal/occupants/other)		400	Btuh
Total latent gain		914	Btuh
TOTAL HEAT GAIN		8379	Btuh



8th Edition

EnergyGauge® System Sizing

PREPARED BY: _____

DATE: _____