

Residential System Sizing Calculation

Summary

Project Title:
Lot 24 Turkey Run

Lake City, FL 32024

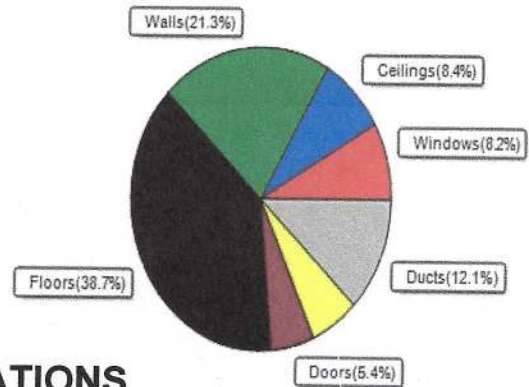
6/21/2019

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			23779	Btuh	
Submitted heating capacity	% of calc	Btuh	Total cooling load calculation		
Total (Electric Heat Pump)	126.2	30000	16890		
Heat Pump + Auxiliary(0.0kW)	126.2	30000			
			Submitted cooling capacity	% of calc	Btuh
			Sensible (SHR = 0.85)	176.3	25500
			Latent	185.2	4500
			Total (Electric Heat Pump)	177.6	30000

WINTER CALCULATIONS

Winter Heating Load (for 1570 sqft)

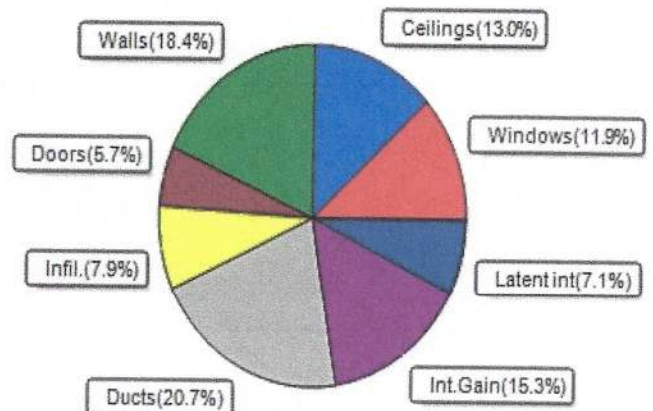
Load component		Load	
Window total	148 sqft	1954	Btuh
Wall total	1467 sqft	5059	Btuh
Door total	80 sqft	1280	Btuh
Ceiling total	1570 sqft	2000	Btuh
Floor total	1570 sqft	9204	Btuh
Infiltration	32 cfm	1402	Btuh
Duct loss		2880	Btuh
Subtotal		23779	Btuh
Ventilation	0 cfm	0	Btuh
TOTAL HEAT LOSS		23779	Btuh



SUMMER CALCULATIONS

Summer Cooling Load (for 1570 sqft)

Load component		Load	
Window total	148 sqft	2012	Btuh
Wall total	1467 sqft	3105	Btuh
Door total	80 sqft	960	Btuh
Ceiling total	1570 sqft	2200	Btuh
Floor total		0	Btuh
Infiltration	24 cfm	500	Btuh
Internal gain		2580	Btuh
Duct gain		3103	Btuh
Sens. Ventilation	0 cfm	0	Btuh
Blower Load		0	Btuh
Total sensible gain		14460	Btuh
Latent gain(ducts)		400	Btuh
Latent gain(infiltration)		829	Btuh
Latent gain(ventilation)		0	Btuh
Latent gain(internal/occupants/other)		1200	Btuh
Total latent gain		2429	Btuh
TOTAL HEAT GAIN		16890	Btuh



8th Edition

EnergyGauge® System Sizing

PREPARED BY: _____

DATE: _____