

Residential System Sizing Calculation

Summary

Project Title:
CRB Investment

Ft, White, FL 32024

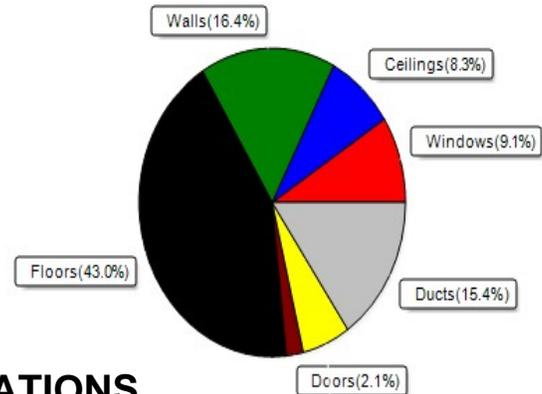
8/1/2019

| | | | | | |
|---|--------------|-------------|---------------------------------------|--------------|--------------|
| 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 | 15376 | Btuh | Total cooling load calculation | 12429 | Btuh |
| Submitted heating capacity | % of calc | Btuh | Submitted cooling capacity | % of calc | Btuh |
| Total (Electric Heat Pump) | 195.1 | 30000 | Sensible (SHR = 0.85) | 252.3 | 25500 |
| Heat Pump + Auxiliary(0.0kW) | 195.1 | 30000 | Latent | 193.7 | 4500 |
| | | | Total (Electric Heat Pump) | 241.4 | 30000 |

WINTER CALCULATIONS

Winter Heating Load (for 1003 sqft)

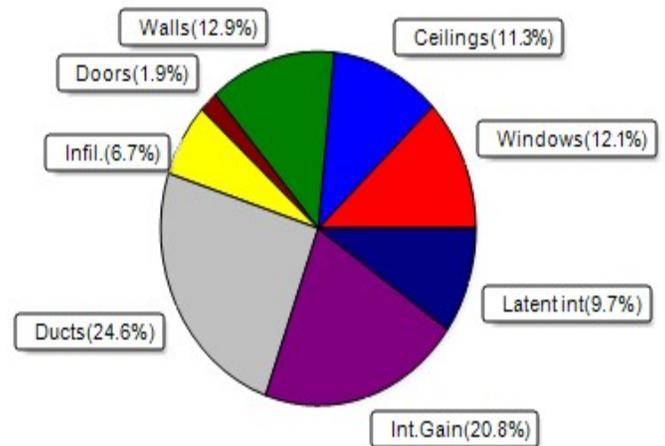
| Load component | Load | |
|------------------------|-----------|-------------------|
| Window total | 106 sqft | 1399 Btuh |
| Wall total | 731 sqft | 2522 Btuh |
| Door total | 20 sqft | 320 Btuh |
| Ceiling total | 1014 sqft | 1278 Btuh |
| Floor total | 1014 sqft | 6608 Btuh |
| Infiltration | 20 cfm | 878 Btuh |
| Duct loss | | 2371 Btuh |
| Subtotal | | 15376 Btuh |
| Ventilation | 0 cfm | 0 Btuh |
| TOTAL HEAT LOSS | | 15376 Btuh |



SUMMER CALCULATIONS

Summer Cooling Load (for 1003 sqft)

| Load component | Load | |
|---------------------------------------|-----------|-------------------|
| Window total | 106 sqft | 1503 Btuh |
| Wall total | 731 sqft | 1608 Btuh |
| Door total | 20 sqft | 240 Btuh |
| Ceiling total | 1014 sqft | 1405 Btuh |
| Floor total | | 0 Btuh |
| Infiltration | 15 cfm | 313 Btuh |
| Internal gain | | 2580 Btuh |
| Duct gain | | 2457 Btuh |
| Sens. Ventilation | 0 cfm | 0 Btuh |
| Blower Load | | 0 Btuh |
| Total sensible gain | | 10106 Btuh |
| Latent gain(ducts) | | 604 Btuh |
| Latent gain(infiltration) | | 519 Btuh |
| Latent gain(ventilation) | | 0 Btuh |
| Latent gain(internal/occupants/other) | | 1200 Btuh |
| Total latent gain | | 2323 Btuh |
| TOTAL HEAT GAIN | | 12429 Btuh |



8th Edition

EnergyGauge® System Sizing

PREPARED BY: _____

DATE: _____

7-7-20