

Project Information

For: Sample Load, Load Calculation
 1234 5th Street, Anywhere, FL 32323
 Phone: 777-777-7777

Notes: **Quick turn around \$99 call 800-810-3280 x 102**

Design Information

Weather: Vero Beach, FL, US

Winter Design Conditions

Outside db	43 °F
Inside db	70 °F
Design TD	27 °F

Summer Design Conditions

Outside db	90 °F
Inside db	75 °F
Design TD	15 °F
Daily range	L
Relative humidity	50 %
Moisture difference	61 gr/lb

Heating Summary

Structure	13736 Btuh
Ducts	5555 Btuh
Central vent (0 cfm)	0 Btuh
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	19291 Btuh

Sensible Cooling Equipment Load Sizing

Structure	21809 Btuh
Ducts	8205 Btuh
Central vent (0 cfm)	0 Btuh
Blower	0 Btuh
Use manufacturer's data	n
Rate/swing multiplier	0.95
Equipment sensible load	28514 Btuh

Infiltration

Method	Simplified	
Construction quality	Average	
Fireplaces	0	
	Heating	Cooling
Area (ft ²)	1795	1795
Volume (ft ³)	14356	14356
Air changes/hour	0.38	0.20
Equiv. AVF (cfm)	91	48

Latent Cooling Equipment Load Sizing

Structure	7199 Btuh
Ducts	2230 Btuh
Central vent (0 cfm)	0 Btuh
Equipment latent load	9429 Btuh
Equipment total load	37942 Btuh
Req. total capacity at 0.70 SHR	3.4 ton

Heating Equipment Summary

Make	
Trade	
Model	
AHRI ref no.	
Efficiency	80 AFUE
Heating input	0 Btuh
Heating output	0 Btuh
Temperature rise	0 °F
Actual air flow	1247 cfm
Air flow factor	0.065 cfm/Btuh
Static pressure	0.80 in H2O
Space thermostat	

Cooling Equipment Summary

Make	Lennox
Trade	XC21 SERIES
Cond	XC21-036-230-05
Coil	CBX40UHV-042*++TDR
AHRI ref no	3946126
Efficiency	13.7 EER, 20 SEER
Sensible cooling	26180 Btuh
Latent cooling	11220 Btuh
Total cooling	37400 Btuh
Actual air flow	1247 cfm
Air flow factor	0.042 cfm/Btuh
Static pressure	0.80 in H2O
Load sensible heat ratio	0.76

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.

Change Out Manual J Information

(Check all that apply)

1. Orientation: (Front door faces) North South East West

Total Air conditioned Square Footage of Home 1792 (if known)

2. Roof Style: Pitched; Fiberglass Shingles Wood Shakes Tile Metal

Flat; Built Up Membrane Tar & Gravel

Color; Dark Medium Light

3. Attic: Vented Non Vented Vapor Barrier Yes No

Sprayed roof deck with Icynene (foam) or similar Yes No

4. Ceiling Insulation: None R-11 R-19 R-22 R-30 R-38

5. Walls: Frame Concrete block

Wall Insulation R-4 R-8 R-11 R-19

6. Finish: Stucco Wood siding Hardy Board

7. Glass: Single pane Double pane Tinted Clear Low E

North Square Feet 24 South Square Feet 24 East Square Feet 48

West Square Feet 36 (French door are counted as glass)

8. Floor: Slab on grade Raised with sealed crawl space Raised with open crawl space

9. Floor insulation: None R-11 R-19 R-22 R-38