

Project Information

For: Sample house
 123 Main road, Your city, CA

Notes:

Design Information

Weather: Atlantic City, NJ, US

Winter Design Conditions

Outside db	9 °F
Inside db	72 °F
Design TD	63 °F

Summer Design Conditions

Outside db	92 °F
Inside db	72 °F
Design TD	20 °F
Daily range	M
Relative humidity	50 %
Moisture difference	45 gr/lb

Heating Summary

Structure	34311 Btuh
Ducts	16615 Btuh
Central vent (64 cfm)	1787 Btuh
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	52713 Btuh

Sensible Cooling Equipment Load Sizing

Structure	24847 Btuh
Ducts	11576 Btuh
Central vent (64 cfm)	553 Btuh
Blower	0 Btuh
Use manufacturer's data	y
Rate/swing multiplier	1.00
Equipment sensible load	36976 Btuh

Infiltration

Method	Simplified
Construction quality	Semi-tight
Fireplaces	0

	Heating	Cooling
Area (ft ²)	1935	1935
Volume (ft ³)	18591	18591
Air changes/hour	0.34	0.18
Equiv. AVF (cfm)	105	56

Latent Cooling Equipment Load Sizing

Structure	2904 Btuh
Ducts	2648 Btuh
Central vent (64 cfm)	1962 Btuh
Equipment latent load	7515 Btuh
Equipment total load	44490 Btuh
Req. total capacity at 0.70 SHR	4.4 ton

Heating Equipment Summary

Make	Generic
Trade	
Model	AFUE 96
AHRI ref	
Efficiency	96 AFUE
Heating input	55208 Btuh
Heating output	53000 Btuh
Temperature rise	24 °F
Actual air flow	2000 cfm
Air flow factor	0.039 cfm/Btuh
Static pressure	0 in H2O
Space thermostat	

Cooling Equipment Summary

Make	Generic
Trade	
Cond	SEER 15.0
Coil	
AHRI ref	
Efficiency	12.8 EER, 15 SEER
Sensible cooling	42000 Btuh
Latent cooling	18000 Btuh
Total cooling	60000 Btuh
Actual air flow	2000 cfm
Air flow factor	0.055 cfm/Btuh
Static pressure	0 in H2O
Load sensible heat ratio	0.83

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