

Project Summary

Main Living AC

Job: A Number or Address
Date: February 26th, 2019
By: John or Ken
Plan: Address

Project Information

For: Your Name, Your Company
Your Address, City, State 00000
Phone: 123-456-7890
Email: Yourname@email.com

Notes: Default insulation values: Attic R-38, Walls R-21, First Floor over basement R-30, Windows U = .35

Design Information

Weather: Boston/Logan Intl, MA, US

Winter Design Conditions

Outside db 8 °F
Inside db 70 °F
Design TD 62 °F

Summer Design Conditions

Outside db 91 °F
Inside db 75 °F
Design TD 16 °F
Daily range L
Relative humidity 50 %
Moisture difference 28 gr/lb

Heating Summary

Structure 28964 Btuh
Ducts 1536 Btuh
Central vent (0 cfm) 0 Btuh
Outside air
Humidification 12401 Btuh
Piping 0 Btuh
Equipment load 42901 Btuh

Sensible Cooling Equipment Load Sizing

Structure 15112 Btuh
Ducts 409 Btuh
Central vent (32 cfm) 552 Btuh
Outside air
Blower 1707 Btuh
Use manufacturer's data y
Rate/swing multiplier 1.00
Equipment sensible load 17779 Btuh

Infiltration

Method Simplified
Construction quality Semi-tight
Fireplaces 1 (Average)

Latent Cooling Equipment Load Sizing

Structure 1423 Btuh
Ducts 785 Btuh
Central vent (32 cfm) 604 Btuh
Outside air
Equipment latent load 2813 Btuh

	Heating	Cooling
Area (ft ²)	1322	1322
Volume (ft ³)	10572	10572
Air changes/hour	0.33	0.14
Equiv. AVF (cfm)	59	25

Equipment Total Load (Sen+Lat) 20592 Btuh
Req. total capacity at 0.70 SHR 2.1 ton

Heating Equipment Summary

Make Carrier
Trade Carrier Performance 96 Two-Sta...
Model 59TP6A060E14--12
AHRI ref 7126206

Efficiency 95 AFUE
Heating input 60000 Btuh
Heating output 58000 Btuh
Temperature rise 75 °F
Actual air flow 700 cfm
Air flow factor 0.023 cfm/Btuh
Static pressure 0.59 in H2O
Space thermostat

Cooling Equipment Summary

Make Carrier
Trade CARRIER
Cond 24AAA524A00300
Coil CNPVP2414ALA+59TP6A060E14--12
AHRI ref 9843809
Efficiency 12.5 EER, 15 SEER
Sensible cooling 16380 Btuh
Latent cooling 7020 Btuh
Total cooling 23400 Btuh
Actual air flow 700 cfm
Air flow factor 0.045 cfm/Btuh
Static pressure 0.59 in H2O
Load sensible heat ratio 0.86

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