Project Information

For: [redacted]

Notes:

Design Information

Weather: Oakland Co Intl, MI, US

Winter Design Conditions

Outside db	6	°F
Inside db	70	°F
Design TD	64	°F

Summer Design Conditions

Outside db	86	°F
Inside db	75	°F
Design TD	11	°F
Daily range	M	
Relative humidity	50	%
Moisture difference	29	gr/lb

Heating Summary

Structure	6630	Btuh
Ducts	542	Btuh
Central vent (0 cfm) (none)	0	Btuh
Humidification	0	Btuh
Piping	0	Btuh
Equipment load	7172	Btuh

Sensible Cooling Equipment Load Sizing

Structure	5650	Btuh
Ducts	155	Btuh
Central vent (0 cfm) (none)	0	Btuh
Blower	0	Btuh
Use manufacturer's data	n	
Rate/swing multiplier	0.91	
Equipment sensible load	5294	Btuh

Infiltration

Method	Simplified
Construction quality	Tight
Fireplaces	0

	Heating	Cooling
Area (ft²)	958	958
Volume (ft³)	12119	12119
Air changes/hour	0.06	0.03
Equiv. AVF (cfm)	13	6

Latent Cooling Equipment Load Sizing

Structure	319	Btuh
Ducts	268	Btuh
Central vent (0 cfm) (none)	0	Btuh
Equipment latent load	587	Btuh
Equipment Total Load (Sen+Lat)	5881	Btuh
Req. total capacity at 0.70 SHR	0.6	ton

Heating Equipment Summary

Make	Fujitsu
Trade	FUJITSU
Model	AOU9RLFC
AHRI ref	5751311

Efficiency	13 HSPF	
Heating input		
Heating output	12000	Btuh @ 47°F
Temperature rise	38	°F
Actual air flow	300	cfm
Air flow factor	0.042	cfm/Btuh
Static pressure	0.36	in H2O

Space thermostat
Capacity balance point = 7 °F

Backup:
Input = 2 kW, Output = 6824 Btuh, 100 AFUE

Cooling Equipment Summary

Make	Fujitsu
Trade	FUJITSU
Cond	AOU9RLFC
Coil	AUU9RLF
AHRI ref	5751311

Efficiency	14.5 EER, 24 SEER	
Sensible cooling	6300	Btuh
Latent cooling	2700	Btuh
Total cooling	9000	Btuh
Actual air flow	300	cfm
Air flow factor	0.052	cfm/Btuh
Static pressure	0.36	in H2O
Load sensible heat ratio	0.91	

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