



### Project Information

For:



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	7076 Btuh
Ducts	663 Btuh
Central vent (SER=65% 41 cfm)	985 Btuh
Energy recovery	
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	8724 Btuh

#### Sensible Cooling Equipment Load Sizing

Structure	3213 Btuh
Ducts	192 Btuh
Central vent (SER=65% 41 cfm)	172 Btuh
Energy recovery	
Blower	0 Btuh
Use manufacturer's data	n
Rate/swing multiplier	0.91
Equipment sensible load	3262 Btuh

#### Infiltration

Method	Simplified
Construction quality	Tight
Fireplaces	0

#### Latent Cooling Equipment Load Sizing

Structure	250 Btuh
Ducts	332 Btuh
Central vent (LER=35% 41 cfm)	503 Btuh
Energy recovery	
Equipment latent load	1084 Btuh

	Heating	Cooling
Area (ft²)	1122	1122
Volume (ft³)	14784	14784
Air changes/hour	0.11	0.05
Equiv. AVF (cfm)	27	13

<b>Equipment Total Load (Sen+Lat)</b>	4346 Btuh
Req. total capacity at 0.81 SHR	0.3 ton

#### Heating Equipment Summary

Make	Fujitsu
Trade	FUJITSU
Model	AOU12RLFC
AHRI ref	202537546
Efficiency	11.7 HSPF
Heating input	
Heating output	16000 Btuh @ 47°F
Temperature rise	38 °F
Actual air flow	400 cfm
Air flow factor	0.052 cfm/Btuh
Static pressure	0.50 in H2O
Space thermostat	
Capacity balance point = 0 °F	

#### Cooling Equipment Summary

Make	Fujitsu
Trade	FUJITSU
Cond	AOU12RLFC
Coil	ARU12RGLX
AHRI ref	202537546
Efficiency	13.4 EER, 21.3 SEER
Sensible cooling	8400 Btuh
Latent cooling	3600 Btuh
Total cooling	12000 Btuh
Actual air flow	<b>400</b> cfm
Air flow factor	0.117 cfm/Btuh
Static pressure	0.50 in H2O
Load sensible heat ratio	0.77

Backup: Carrier  
 Input = 2 kW, Output = 8530 Btuh, 100 AFUE

*Bold/italic values have been manually overridden*

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