

Load Short Form

Entire House

Habitat for Humanity Central Arizona

Job:
Date:
By:

9233 NW Grand Ave, Peoria, AZ Phone: 602.739.0265 Email: jball@habitatcaz.org Web: www.habitatcaz.org

Project Information

For:

Design Information

	Htg	Clg		Infiltration
Outside db (°F)	40	108	Method	Simplified
Inside db (°F)	70	75	Construction quality	Tight
Design TD (°F)	30	33	Fireplaces	0
Daily range	-	M		
Inside humidity (%)	50	50		
Moisture difference (gr/lb)	27	-14		

HEATING EQUIPMENT

Make	
Trade	
Model	
ARI ref no.	
Efficiency	8.5 HSPF
Heating input	
Heating output	23800 Btuh @ 47°F
Temperature rise	28 °F
Actual air flow	807 cfm
Air flow factor	0.059 cfm/Btuh
Static pressure	0 in H2O
Space thermostat	

COOLING EQUIPMENT

Make	
Trade	
Cond	
Coil	
ARI ref no.	
Efficiency	17 SEER
Sensible cooling	16940 Btuh
Latent cooling	7260 Btuh
Total cooling	24200 Btuh
Actual air flow	807 cfm
Air flow factor	0.036 cfm/Btuh
Static pressure	0 in H2O
Load sensible heat ratio	1.00

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
Room1	550	6537	13260	383	474
Room2	253	2827	3858	166	138
Room3	50	334	449	20	16
Room4	45	301	404	18	14
Room5	45	301	404	18	14
Room6	15	100	135	6	5
Room7	145	1522	1855	89	66
Room8	150	1722	2027	101	72
Room9	20	134	179	8	6

Printout certified by ACCA to meet all requirements of Manual J 8th Ed.

Entire House	d	1273	13779	22571	807	807
Other equip loads			2045	2263		
Equip. @ 1.13 RSM				28088		
Latent cooling				45		
TOTALS		1273	15823	28133	807	807

Printout certified by ACCA to meet all requirements of Manual J 8th Ed.

Project Information

For:

Notes:

Design Information

Weather: Phoenix, AZ, US

Winter Design Conditions

Outside db	40 °F
Inside db	70 °F
Design TD	30 °F

Summer Design Conditions

Outside db	108 °F
Inside db	75 °F
Design TD	33 °F
Daily range	M
Relative humidity	50 %
Moisture difference	-14 gr/lb

Heating Summary

Structure	12001 Btuh
Ducts	1778 Btuh
Central vent (65 cfm)	2045 Btuh
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	15823 Btuh

Sensible Cooling Equipment Load Sizing

Structure	20970 Btuh
Ducts	1601 Btuh
Central vent (65 cfm)	2263 Btuh
Blower	0 Btuh
Use manufacturer's data	n
Rate/swing multiplier	1.13
Equipment sensible load	28088 Btuh

Infiltration

Method	Simplified
Construction quality	Tight
Fireplaces	0

Latent Cooling Equipment Load Sizing

Structure	658 Btuh
Ducts	-13 Btuh
Central vent (65 cfm)	-600 Btuh
Equipment latent load	45 Btuh

	Heating	Cooling
Area (ft ²)	1273	1273
Volume (ft ³)	10184	10184
Air changes/hour	0.18	0.09
Equiv. AVF (cfm)	31	15

Equipment total load	28133 Btuh
Req. total capacity at 0.70 SHR	3.3 ton

Heating Equipment Summary

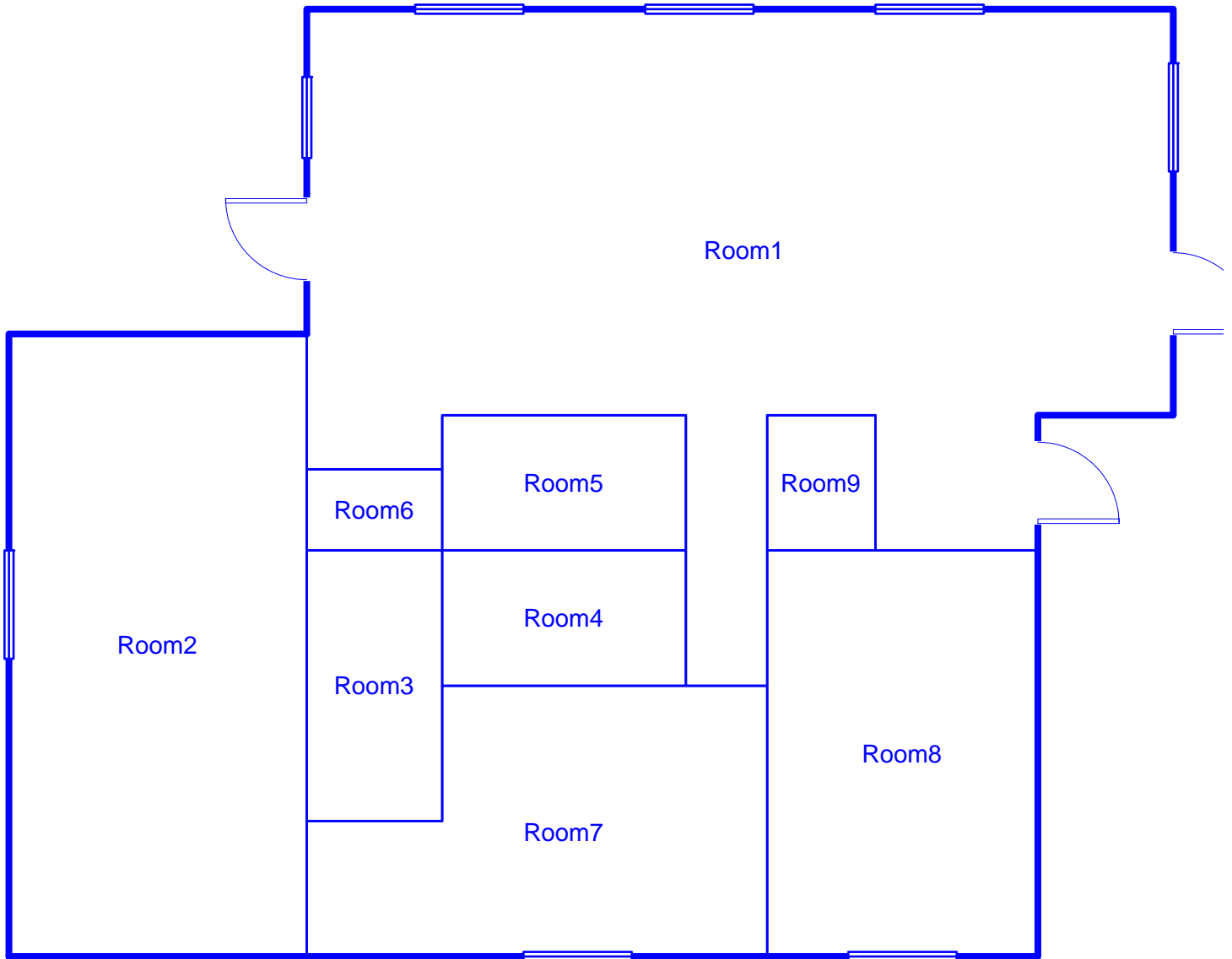
Make	
Trade	
Model	
ARI ref no.	
Efficiency	8.5 HSPF
Heating input	
Heating output	23800 Btuh @ 47°F
Temperature rise	28 °F
Actual air flow	807 cfm
Air flow factor	0.059 cfm/Btuh
Static pressure	0 in H2O
Space thermostat	

Cooling Equipment Summary

Make	
Trade	
Cond	
Coil	
ARI ref no.	
Efficiency	17 SEER
Sensible cooling	16940 Btuh
Latent cooling	7260 Btuh
Total cooling	24200 Btuh
Actual air flow	807 cfm
Air flow factor	0.036 cfm/Btuh
Static pressure	0 in H2O
Load sensible heat ratio	1.00

Printout certified by ACCA to meet all requirements of Manual J 8th Ed.

Level 1



Job #:
Performed for:

Habitat for Humanity Central Arizona

9233 NW Grand Ave
Peoria, AZ
Phone: 602.739.0265
www.habitataz.org jball@habitataz.org

Scale: 1 : 72

Page 1
Right-Suite® Universal
7.1.05 RSU07276
2010-Jan-19 16:13:24
C:\Documents and Settings\jamesb\Desk...