Job: Date: By:

Project Information

For:

ROGER & GINA BUSWELL 58 RED COAT DR, CAMERON, NC 28326

Notes:

Design Information

Weather: Moore Co, NC, US

Winter Design Conditions

Summer Design Conditions

23 °F 70 °F	Outside db Inside db	93 °F 75 °F
47 °F	Design TD	18 °F M
	Relátive ňumidity	50 % 33 gr/lb
	70 °F	70 °F Inside db 47 °F Design TD Daily range

Heating Summary

Sensible Cooling Equipment Load Sizing

Structure	22303	Btuh	Structure	18244	Btuh
Ducts	7515		Ducts	6702	Btuh
Central vent (115 cfm)	5860	Btuh	Central vent (115 cfm)	2190	Btuh
Outside air			Outside air		
Humidification	0	Btuh	Blower	0	Btuh
Piping Equipment load	0	Btuh			
Equipment load	35679	Btuh	Use manufacturer's data	r	1
			Rate/swing multiplier	0.98	
Infiltration			Equipment sensible load	26485	Btuh

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

Latent Cooling Equipment Load Sizing

2060 Btuh

·		(0 /	Ducts Central vent (115 cfm)	1391 2502	Btuh Btuh
Area (ft²)	Heating 2334	Cooling 2334	Outside air Equipment latent load	5953	Btuh
Volume (ft³)	19489	19489	Equipmont latorit load	0000	Dian
Air changes/hour	0.34	0.15	Equipment Total Load (Sen+Lat)	32438	Btuh
Equiv. AVF (cfm)	111	49	Req. total capacity at 0.70 SHR	3.2	ton

Structure

Heating Equipment Summary

Input = 10 kW, Output = 35551 Btuh, 100 AFUE

Cooling Equipment Summary

Make Trade Model AHRI ref	Carrier CARRIER AIR CON 25HBC542A00300 9155624	DITIONING	Make Trade Cond Coil AHRI ref	Carrier CARRIER 25HBC542 FB4CNF04 9155624	
Efficiency Heating inp Heating out Temperatur Actual air fl Air flow fact Static press Space there Capacity ba	put re rise ow tor sure	8.5 HSPF 42000 Btuh @ 47 28 °F 1400 cfm 0.047 cfm/Btuh 0.50 in H2O	Efficiency Sensible of Sensibl	ooling ling ng flow ctor	12.0 EER, 14.5 SEER 29400 Btuh 12600 Btuh 42000 Btuh 1400 cfm 0.054 cfm/Btuh 0.50 in H2O 0.82

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

Backup: Generic AFUE 100

Job: Date: By:

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For:

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Notes:

Design Information

Weather: Moore Co, NC, US

Winter Design Conditions Summer Design Conditions

Outside db	23 °F	Outside db	93 °F
Inside db	70 °F	Inside db	75 °F
Design TD	47 °F	Design TD	18 °F
3		Daily range	M
		Relative humidity	50 %
		Moisture difference	33 gr/lb

Heating Summary

Sensible Cooling Equipment Load Sizing

Structure Ducts Central vent (40 cfm)	8889 2286 0		Structure Ducts Central vent (40 cfm)	7867 Btuh 1189 Btuh 0 Btuh
Humidification Piping	_	Btuh Btuh	Blower	0 Btuh
Piping Equipment load	11175	Btuh	Use manufacturer's data	n
Infiltration	1		Rate/swing multiplier Equipment sensible load	0.98 8838 Btuh

Method Construction quality	Simplified Semi-tight	Latent Cooling	Equipment Load Sizing
Fireplaces	1 (Average)	Structure	569 Btuh

Порідось		r (Average)	Ducts Central vent (40 cfm)	487	Btuh Btuh
Area (ft²) Volume (ft³)	Heating 817 7353	Cooling 817 7353	Equipment latent load		Btuh
Air changes/hour Equiv. AVF (cfm)	0.31 39	0.14 17	Equipment Total Load (Sen+Lat) Req. total capacity at 0.70 SHR	9894 1.1	Btuh ton

Heating Equipment Summary

Cooling Equipment Summary

Make Trade Model AHRI ref	n/a n/a n/a n/a			Make Trade Cond Coil AHRI ref	n/a n/a n/a n/a n/a		
Efficiency Heating inpute Heating out Temperatur Actual air flo Air flow fact Static press Space therr	out e rise ow or ure	0 0 0 0 0 n/a	°F cfm	Efficiency Sensible co Latent cooli Total coolin Actual air fle Air flow fact Static press	oling ng g ow or	n/a 0 0 0 0 0 0	Btuh Btuh Btuh cfm cfm/Btuh in H2O

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Project Information

For:

ROGER & GINA BUSWELL 58 RED COAT DR, CAMERON, NC 28326

Notes:

Design Information

Weather: Moore Co, NC, US

Winter Design Conditions Summer Design Conditions

Outside db	23	°F	Outside db	93	°F
Inside db	70	°F	Inside db	75	°F
Design TD	47	°F	Design TD	18	°F
9			Daily range	M	
			Relative humidity	50	%
			Moisture difference	33	ar/lb

Heating Summary

Sensible Cooling Equipment Load Sizing

Structure Ducts Central vent (57 cfm)	3724	Btuh Btuh Btuh	Structure Ducts Central vent (57 cfm)	10005 Btuh 5116 Btuh 0 Btuh
Humidification Pioing	0	Btuh Btuh	Blower	0 Btuh
Piping Equipment load	13278	Btuh	Use manufacturer's data	n
Infiltration			Rate/swing multiplier Equipment sensible load	0.98 14757 Btuh

Method Construction quality	Simplified Semi-tight	Latent Cooling Ed	uipment Load Sizing
Construction quality	4 (A	Characterine	4070 Dtls

Періасез		i (Average)	Ducts Central vent (57 cfm)	694 Btuh 0 Btuh
	Heating	Cooling	Contrait voint (or onn)	o Bian
Area (ft²)	1164	1164	Equipment latent load	1972 Btuh
Volume (ft³)	9312	9312	• •	

Air changes/hour 0.32 0.14 Equipment Total Load (Sen+Lat) 16729 Btuh Equiv. AVF (cfm) Req. total capacity at 0.70 SHR 1.8 ton

Heating Equipment Summary

Cooling Equipment Summary

n/a			Make	n/a		
n/a			rade	n/a		
n/a			Cond	n/a		
n/a			Coil	n/a		
			AHRI ref	n/a		
		n/a			n/a	
ıt			Sensible co	ooling	0	Btuh
out	0	Btuh	Latent cool	ing	0	Btuh
e rise	0	°F	Total cooling	ng	0	Btuh
)W	0	cfm			0	cfm
or	0	cfm/Btuh	Air flow fac	tor	0	cfm/Btuh
	0	in H2O	Static press	sure	0	in H2O
nostat	n/a		Load sensi	ble heat ratio	0	
	n/a n/a n/a ut e rise ow or ure	n/a n/a n/a n/a ut out out our erise ow or our oure our	n/a n/a n/a n/a n/a n/a ut out e rise 0 °F ow 0 cfm or 0 cfm/Btuh oure 0 in H2O	n/a Trade n/a Cond n/a Coil AHRI ref Efficiency sensible co Sensible co but Detailed to the color e rise 0 °F Total coolir bw 0 cfm Actual air flow fac br 0 cfm/Btuh Air flow fac br 0 in H2O Static press	Trade	n/a Trade n/a n/a Cond n/a n/a Coil n/a AHRI ref n/a AHRI ref n/a Sensible cooling 0 out 0 Btuh Latent cooling 0 e rise 0 °F Total cooling 0 ow 0 cfm Actual air flow 0 or 0 cfm/Btuh Air flow factor 0 ure 0 in H2O Static pressure 0

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Weather: Moore Co, NC, US

Winter Design Conditions Summer Design Conditions

Outside db	23 °F	Outside db	93 °F
Inside db	70 °F	Inside db	75 °F
Design TD	47 °F	Design TD	18 °F
•		Daily range	M
		Relative humidity	50 %
		Moisture difference	33 gr/lb

Heating Summary

Sensible Cooling Equipment Load Sizing

Structure Ducts Central vent (17 cfm)		Btuh Btuh Btuh	Structure Ducts Central vent (17 cfm)	1223	Btuh Btuh Btuh
Humidification Piping	_	Btuh Btuh	Blower	0	Btuh
Piping Equipment load		Btuh	Use manufacturer's data	r	ì
Infiltration			Rate/swing multiplier Equipment sensible load	0.98 3527	Btuh

Method	Simplified	Latent Cooling Equipment Load Sizing
Construction quality	Semi-tight	

Fireplaces		1 (Average)	Structure	213 Btuh
•		` ,	Ducts	210 Btuh
			Central vent (17 cfm)	0 Btuh
	Heating	Cooling	· · ·	
Area (ft²)	353	353	Equipment latent load	423 Btuh
\/olume (ft3)	2824	2824		

Volume (ft³)	2824	2824		
Air changes/hour	0.47	0.21	Equipment Total Load (Sen+Lat)	3950 Btuh
Equiv. AVF (cfm)	22	10	Req. total capacity at 0.70 SHR	0.4 ton
. ,				

Heating Equipment Summary

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Make Trade Model AHRI ref	n/a n/a n/a n/a			Make Trade Cond Coil AHRI ref	n/a n/a n/a n/a n/a		
Efficiency Heating inpu Heating outp Temperature Actual air flo Air flow facto Static press Space therm	put e rise ow or ure	0 0 0 0 0 n/a	°F cfm cfm/Btuh	Efficiency Sensible co Latent cool Total coolin Actual air fl Air flow fac Static press	poling ing ag ow tor	n/a 0 0 0 0 0 0	Btuh Btuh Btuh cfm cfm/Btuh in H2O

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