

Job:
Date: Apr 20, 2013
By:

490 So 3rd ave, Lake Butler, FL 32054 Phone: 386-496-3467 Fax: 386-496-3147 Email: nmtouchstone@hotmail.com Web: touchstoneheatingonline.com License CAC058089

For: Dale and Whitney Mowry
Lake city, fla

	Htg	Clg		Infiltration	
Outside db (°F)	20	92	Method		Simplified
Inside db (°F)	70	75	Construction quality		Tight
Design TD (°F)	50	17	Fireplaces		1 (Average)
Daily range	-	M			
Inside humidity (%)	30	50			
Moisture difference (gr/lb)	21	41			

Efficiency	14 SEER
Sensible cooling	55 Btuh
Latent cooling	23 Btuh
Total cooling	78 Btuh
Actual air flow	2000 cfm
Air flow factor	0.035 cfm/Btuh
Static pressure	0.05 in H ₂ O
Load sensible heat ratio	0.49

ROOM NAME	Area (ft ²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
MasterBedroom	224	15829	7710	239	269
W/c	196	6964	2654	105	93
MasterBath	140	7768	4076	117	142
office	168	9942	4493	150	157
Foyer	48	2745	903	41	32
Dinning Room	192	10331	5540	156	193
Hallway	112	3114	1337	47	47
Utility	110	5557	2094	84	73
Bed Room1	144	7292	3082	110	107
Bath Room	72	4700	1793	71	63
Bed Room 2	144	7451	3330	112	116
Toilet	24	2157	733	33	26
Room13	192	10065	3923	152	137
Kitchen	348	19297	7301	291	255
Great Room	475	19519	8400	294	293

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

Entire House	2589	132730	57349	2000	2000
Other equip loads		0	0		
Equip. @ 0.97 RSM			55571		
Latent cooling			59893		
TOTALS	2589	132730	115464	2000	2000

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



Wrightsoft

Right-Suite® Universal 2012 12.1 07 RSU12795

ers\Mark\Documents\Wrightsoft HVAC\Project1.rup Calc = MJB Front Door faces N

2013-Apr-20 11:34:50

Page 2



Project Summary Entire House

Touchstone Heating and Air Inc

Job:

Date: Apr 20, 2013

By:

490 se 2nd ave, Lake Butler, fl 32054 Phone: 386-496-3467 Fax: 386-496-3147 Email: rmtouchstone@hotmail.com Web: touchstoneheatingonline.com License: CAG058099

Project Information

For: Dale and Whitney Mowry
Lake city, fla

Notes:

Design Information

Weather: Washington R. Reagan AP, DC, US

Winter Design Conditions

Outside db	20 °F
Inside db	70 °F
Design TD	50 °F

Summer Design Conditions

Outside db	92 °F
Inside db	75 °F
Design TD	17 °F
Daily range	M
Relative humidity	50 %
Moisture difference	41 gr/lb

Heating Summary

Structure	132730 Btuh
Ducts	0 Btuh
Central vent (0 cfm)	0 Btuh
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	132730 Btuh

Sensible Cooling Equipment Load Sizing

Structure	57349 Btuh
Ducts	0 Btuh
Central vent (0 cfm)	0 Btuh
Blower	0 Btuh
Use manufacturer's data	n
Rate/swing multiplier	0.97
Equipment sensible load	55571 Btuh

Infiltration

Method	Simplified	
Construction quality	Tight	
Fireplaces	1 (Average)	
	Heating	Cooling
Area (ft ²)	2589	2589
Volume (ft ³)	20848	20848
Air changes/hour	0.17	0.06
Equiv. AVF (cfm)	58	21

Latent Cooling Equipment Load Sizing

Structure	59893 Btuh
Ducts	0 Btuh
Central vent (0 cfm)	0 Btuh
Equipment latent load	59893 Btuh
Equipment total load	115464 Btuh
Req. total capacity at 0.70 SHR	6.6 ton

Heating Equipment Summary

Make	York
Trade	York
Model	YHJD60S4
AHRI ref	4454838
Efficiency	8.2 HSPF
Heating input	78 Btuh @ 47°F
Heating output	0 °F
Temperature rise	2000 cfm
Actual air flow	0.015 cfm/Btuh
Air flow factor	0.05 in H2O
Static pressure	
Space thermostat	

Cooling Equipment Summary

Make	York
Trade	York
Cond	YHJD60S4
Coil	6HK06501006
AHRI ref	4454838
Efficiency	14 SEER
Sensible cooling	55 Btuh
Latent cooling	23 Btuh
Total cooling	78 Btuh
Actual air flow	2000 cfm
Air flow factor	0.035 cfm/Btuh
Static pressure	0.05 in H2O
Load sensible heat ratio	0.49

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



Wrightsoft

Right-Suite® Universal 2012 12.1 07 RSU12795

...ers\Mark\Documents\Wrightsoft\HVAC\Project1.rup Calc = MJ8 Front Door faces: N

2013-Apr-20 11:34:50

Page 1



Duct System Summary Entire House

Touchstone Heating and Air Inc

Job:

Date: Apr 20, 2013

By:

490 se 3rd ave, Lake Butler, fl 32054 Phone: 386-496-3467 Fax: 386-496-3147 Email: mtouchstone@hotmail.com Web: touchstoneheatingonline.com License: CACO58009

Project Information

For: Dale and Whitney Mowry
Lake city, fla

	Heating	Cooling
External static pressure	0.05 in H ₂ O	0.05 in H ₂ O
Pressure losses	0 in H ₂ O	0 in H ₂ O
Available static pressure	0.05 in H ₂ O	0.05 in H ₂ O
Supply / return available pressure	0.03 / 0.03 in H ₂ O	0.03 / 0.03 in H ₂ O
Lowest friction rate	0 in/100ft	0 in/100ft
Actual air flow	2000 cfm	2000 cfm
Total effective length (TEL)	0 ft	

Supply Branch Detail Table

Name	Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	H x W (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
Bath Room	h 1793	71	63	0	0	0x0	ShMt	0	0	
Bed Room 2	c 3330	112	116	0	0	0x0	ShMt	0	0	
Bed Room1	h 3062	110	107	0	0	0x0	ShMt	0	0	
Dinning Room	c 2770	78	97	0	0	0x0	ShMt	0	0	
Dinning Room-A	c 2770	78	97	0	0	0x0	ShMt	0	0	
Foyer	h 903	41	32	0	0	0x0	ShMt	0	0	
Great Room	h 2800	98	98	0	0	0x0	ShMt	0	0	
Great Room-A	h 2800	98	98	0	0	0x0	ShMt	0	0	
Great Room-B	h 2800	98	98	0	0	0x0	ShMt	0	0	
Hallway	h 1337	47	47	0	0	0x0	ShMt	0	0	
Kitchen	h 2434	97	85	0	0	0x0	ShMt	0	0	
Kitchen-A	h 2433	97	85	0	0	0x0	ShMt	0	0	
Kitchen-B	h 2433	97	85	0	0	0x0	ShMt	0	0	
MasterBath	c 2038	59	71	0	0	0x0	ShMt	0	0	
MasterBath-A	c 2038	59	71	0	0	0x0	ShMt	0	0	
MasterBedroom	c 3855	119	134	0	0	0x0	ShMt	0	0	
MasterBedroom-A	c 3855	119	134	0	0	0x0	ShMt	0	0	
Room13	h 1961	76	68	0	0	0x0	ShMt	0	0	
Room13-A	h 1961	76	68	0	0	0x0	ShMt	0	0	
Toilet	h 733	33	26	0	0	0x0	ShMt	0	0	
Utility	h 2094	84	73	0	0	0x0	ShMt	0	0	
Wic	h 2654	105	93	0	0	0x0	ShMt	0	0	
office	c 2246	75	78	0	0	0x0	ShMt	0	0	
office-A	c 2246	75	78	0	0	0x0	ShMt	0	0	



Wrightsoft

Right-Suite® Universal 2012 12.1.07 RSU12795

...ers\Mark\Documents\Wrightsoft HVAC\Project1.rup Calc = MJ8 Front Door faces N

2013-Apr-20 11:34 50

Page 1

Return Branch Detail Table

Name	Grill Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb1	0x0	2000	2000	0	0	0	0	0x 0		ShMt	