

Project Information

For: Hentzelman Residence

Design Information

	Htg	Clg	Infiltration	
Outside db (°F)	33	92	Method	Simplified
Inside db (°F)	70	75	Construction quality	Average
Design TD (°F)	37	17	Fireplaces	0
Daily range	-	M		
Inside humidity (%)	30	50		
Moisture difference (gr/lb)	11	52		

HEATING EQUIPMENT

Make
Trade
Model
AHRI ref

Efficiency 100 EFF

Heating input 7.8 kW

Heating output 26781 Btuh

Temperature rise 18 °F

Actual air flow 1324 cfm

Air flow factor 0.047 cfm/Btuh

Static pressure 0.50 in H2O

Space thermostat

COOLING EQUIPMENT

Make
Trade
Cond
Coil
AHRI ref
Efficiency 15 SEER

Sensible cooling 0 Btuh

Latent cooling 0 Btuh

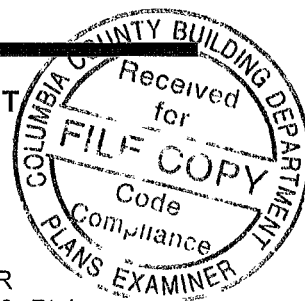
Total cooling 0 Btuh

Actual air flow 1324 cfm

Air flow factor 0.042 cfm/Btuh

Static pressure 0.50 in H2O

Load sensible heat ratio 0.79



ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
Room6	0	0	0	0	0
bed 3	220	3062	3845	144	161
bed 2	170	3067	4073	145	171
mech3	15	0	0	0	0
bath 2	45	372	243	18	10
hall	49	129	133	6	6
foyer	54	758	537	36	23
living	413	5022	6612	237	278
Kitchen	148	4857	5895	229	248
Office	150	2150	3584	101	151
laundry	72	569	1012	27	42
mbed	255	4911	3767	231	158
Clos2	30	467	271	22	11
clos1	30	795	434	37	18
mbath	120	1932	1117	91	47

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

Entire House	d	1770	28091	31523	1324	1324
Other equip loads			0	0		
Equip. @ 0.97 RSM				30577		
Latent cooling				8632		
TOTALS		1770	28091	39209	1324	1324

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



Loads for Multiple Orientations Entire House

Job:
Date: Nov 01, 2013
By:

Project Information

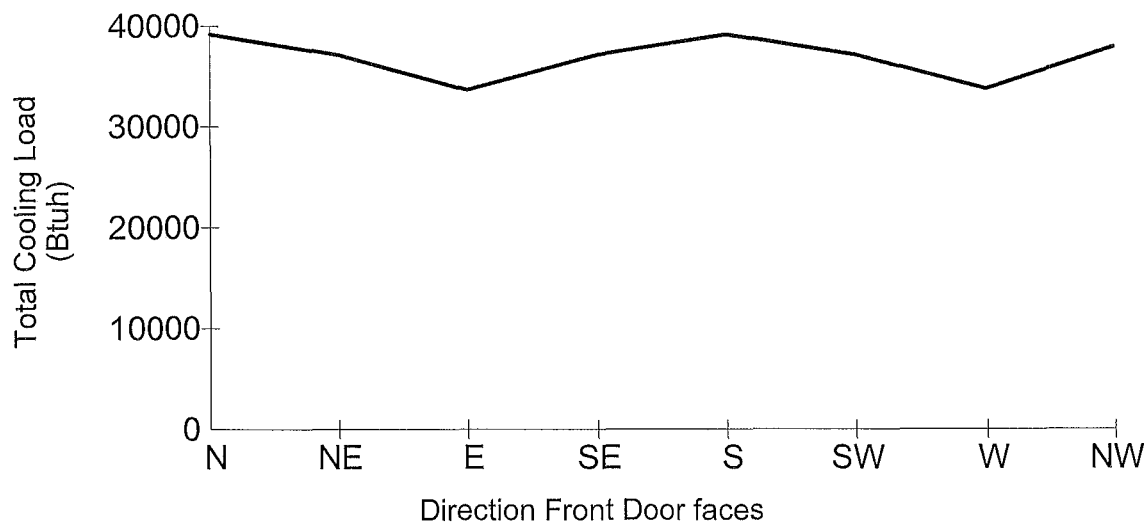
For: Hentzelman Residence

Design Conditions

Location:		Indoor:		Heating	Cooling
Gainesville, FL, US		Indoor temperature (°F)		70	75
Elevation: 151 ft		Design TD (°F)		37	17
Latitude: 30°N		Relative humidity (%)		30	50
Outdoor:		Infiltration:		10.6	52.0
				Moisture difference (gr/lb)	
		Heating	Cooling		
Dry bulb (°F)		33	92		
Daily range (°F)		-	19 (M)		
Wet bulb (°F)		-	77		
Wind speed (mph)		15.0	7.5		

Front Door	North	Northeast	East	Southeast	South	Southwest	West	Northwest
Sensible Load (Btuh)	30577	28685	25572	28685	30532	28701	25676	29275
Latent Load (Btuh)	8632	8443	8098	8443	8633	8443	8098	8614
Total Load (Btuh)	39209	37127	33670	37127	39165	37144	33773	37889
Heating AVF (cfm)	1324	1235	1097	1235	1325	1236	1103	1264
Cooling AVF (cfm)	1324	1235	1097	1235	1325	1236	1103	1264

Building Orientation Cooling Load



Current Orientation: Front Door faces North
Highest Cooling Load: Front Door faces North

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



Right-Suite® Universal 2012 12 1.08 RSU18812
C:\Matt House\My house.rup Calc = MJ8 Front Door faces: N

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Project Information

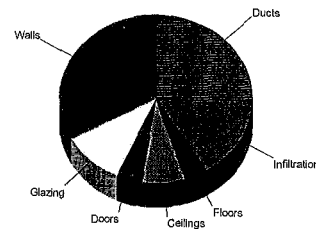
For: Hentzelman Residence

Design Conditions

Location:		Indoor:		Heating	Cooling
Gainesville, FL, US		Indoor temperature (°F)		70	75
Elevation: 151 ft		Design TD (°F)		37	17
Latitude: 30°N		Relative humidity (%)		30	50
		Moisture difference (gr/lb)		10.6	52.0
Outdoor:		Heating	Cooling		
Dry bulb (°F)	33	92			
Daily range (°F)	-	19 (M)			
Wet bulb (°F)	-	77			
Wind speed (mph)	15.0	7.5			
		Infiltration:			
		Method		Simplified	
		Construction quality		Average	
		Fireplaces		0	

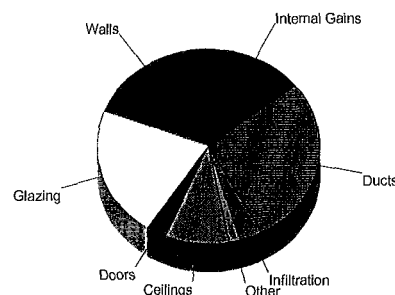
Heating

Component	Btuh/ft²	Btuh	% of load
Walls	3.4	9235	32.9
Glazing	33.3	2930	10.4
Doors	14.4	1212	4.3
Ceilings	1.2	2039	7.3
Floors	0.6	1082	3.9
Infiltration	1.5	4454	15.9
Ducts		7138	25.4
Piping		0	0
Humidification		0	0
Ventilation		0	0
Adjustments		0	0
Total		28091	100.0



Cooling

Component	Btuh/ft²	Btuh	% of load
Walls	2.2	6027	19.1
Glazing	77.2	6796	21.6
Doors	11.4	955	3.0
Ceilings	1.7	2901	9.2
Floors	0.3	497	1.6
Infiltration	0.4	1077	3.4
Ducts		8779	27.8
Ventilation		0	0
Internal gains		4490	14.2
Blower		0	0
Adjustments		0	0
Total		31523	100.0



Latent Cooling Load = 8632 Btuh
Overall U-value = 0.079 Btuh/ft²·°F

WARNING. window to floor area ratio = 5.0% - less than 5%.

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Design Conditions

Location:		Indoor:		Heating	Cooling
Gainesville, FL, US		Indoor temperature (°F)		70	75
Elevation: 151 ft		Design TD (°F)		37	17
Latitude: 30°N		Relative humidity (%)		30	50
Outdoor:		Moisture difference (gr/lb) <td>10.6</td> <td>52.0</td>		10.6	52.0
		Heating	Cooling		
Dry bulb (°F)		33	92		
Daily range (°F)		-	19 (M)		
Wet bulb (°F)		-	77		
Wind speed (mph)		15.0	7.5		
		Infiltration:			
		Method		Simplified	
		Construction quality		Average	
		Fireplaces		0	

Construction descriptions

	Or	Area ft²	U-value Btu/h/ft²-°F	Insul R ft²-°F/Btu/h	Htg HTM Btu/h/ft²	Loss Btu/h	Clg HTM Btu/h/ft²	Gain Btu/h
Walls								
12C-0sw Frm wall, stucco ext, r-13 cav ins, 2"x4" wood frm	n	682	0.091	13.0	3.37	2297	2.20	1500
	e	682	0.091	13.0	3.37	2296	2.20	1499
	s	703	0.091	13.0	3.37	2368	2.20	1546
	w	675	0.091	13.0	3.37	2273	2.20	1483
	all	2743	0.091	13.0	3.37	9235	2.20	6027
Partitions								
(none)								
Windows								
1A-c1ov: 1 glazing, dr glz, vnl frm mat, 1/8" thk	e	40	0.900	0	33.3	1332	76.7	3069
	w	48	0.900	0	33.3	1598	76.7	3683
	all	88	0.900	0	33.3	2930	76.7	6751
Doors								
11D0 Door, wd sc type	n	21	0.390	0	14.4	303	11.4	239
	e	21	0.390	0	14.4	303	11.4	239
	w	42	0.390	0	14.4	606	11.4	477
	all	84	0.390	0	14.4	1212	11.4	955
Ceilings								
16B-30ad Attic ceiling, asphalt shingles roof mat, r-31 roof ins, r-30 ceil ins		1722	0.032	30.0	1.18	2039	1.68	2901
Floors								
19C-19cscp Fir floor, frm fir, 6" thkns, carpet fir fnsh, r-2 ext ins, r-19 cav ins, tight cowl ovr, r-11 wall insul		1722	0.049	30.0	0.63	1082	0.29	497

Project Information

For: Hentzelman Residence

Notes:

Design Information

Weather: Gainesville, FL, US

Winter Design Conditions

Outside db	33 °F
Inside db	70 °F
Design TD	37 °F

Summer Design Conditions

Outside db	92 °F
Inside db	75 °F
Design TD	17 °F
Daily range	M
Relative humidity	50 %
Moisture difference	52 gr/lb

Heating Summary

Structure	20953 Btuh
Ducts	7138 Btuh
Central vent (0 cfm)	0 Btuh
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	28091 Btuh

Sensible Cooling Equipment Load Sizing

Structure	22744 Btuh
Ducts	8779 Btuh
Central vent (0 cfm)	0 Btuh
Blower	0 Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

	Heating	Cooling
Area (ft²)	1770	1770
Volume (ft³)	17375	17375
Air changes/hour	0.38	0.20
Equiv. AVF (cfm)	110	58

Use manufacturer's data	n
Rate/swing multiplier	0.97
Equipment sensible load	30577 Btuh

Latent Cooling Equipment Load Sizing

Structure	4636 Btuh
Ducts	3996 Btuh
Central vent (0 cfm)	0 Btuh
Equipment latent load	8632 Btuh

Equipment total load	39209 Btuh
Req. total capacity at 0.70 SHR	3.6 ton

Heating Equipment Summary

Make	
Trade	
Model	
AHRI ref	
Efficiency	100 EFF
Heating input	7.8 kW
Heating output	26781 Btuh
Temperature rise	18 °F
Actual air flow	1324 cfm
Air flow factor	0.047 cfm/Btuh
Static pressure	0.50 in H2O
Space thermostat	

Cooling Equipment Summary

Make	
Trade	
Cond	
Coil	
AHRI ref	
Efficiency	15 SEER
Sensible cooling	0 Btuh
Latent cooling	0 Btuh
Total cooling	0 Btuh
Actual air flow	1324 cfm
Air flow factor	0.042 cfm/Btuh
Static pressure	0.50 in H2O
Load sensible heat ratio	0.79

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

Project Information

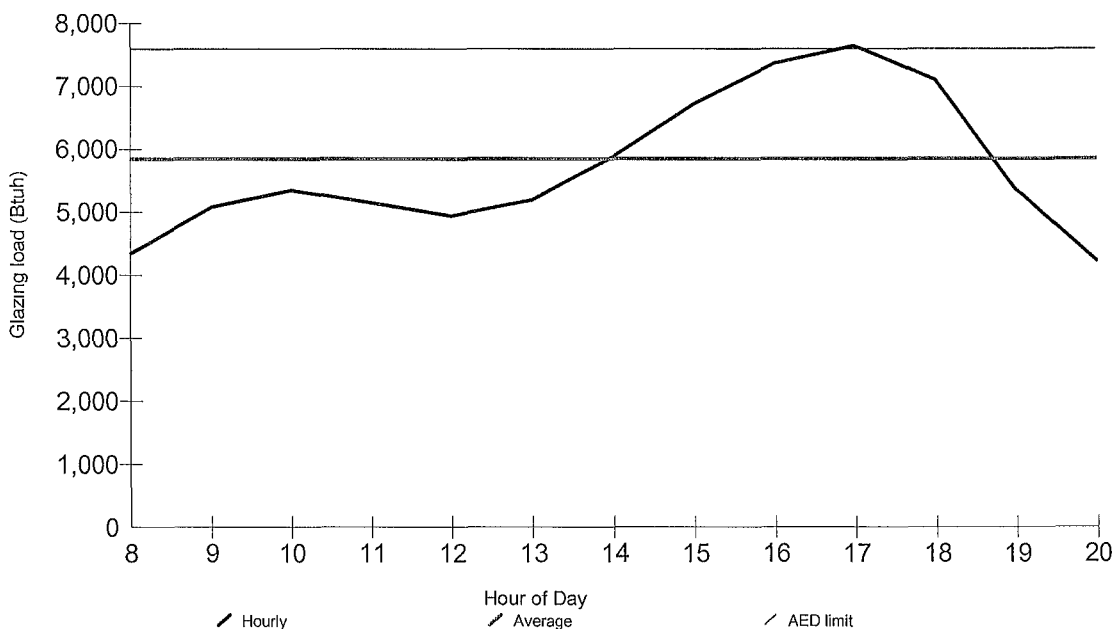
For: Hentzelman Residence

Design Conditions

Location:		Indoor:		Heating	Cooling
Gainesville, FL, US		Indoor temperature (°F)		70	75
Elevation: 151 ft		Design TD (°F)		37	17
Latitude: 30°N		Relative humidity (%)		30	50
		Moisture difference (gr/lb)		10.6	52.0
Outdoor:	Heating	Cooling	Infiltration:		
Dry bulb (°F)	33	92			
Daily range (°F)	-	19 (M)			
Wet bulb (°F)	-	77			
Wind speed (mph)	15.0	7.5			

Test for Adequate Exposure Diversity

Hourly Glazing Load



Maximum hourly glazing load exceeds average by 30.8%.

House does not have adequate exposure diversity (AED), based on AED limit of 30%.

AED excursion: 44 Btuh (PFG - 1.3*AFG)

1	Room name					Entire House				Room6				
2	Exposed wall					293 5 ft				0 ft				
3	Room height					9 8 ft				8 0 ft				
4	Room dimensions					d				0 x 20 0 ft				
5	Room area					1770 0 ft²				0 ft²				
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)	
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool
6	W	12C-0sw	0 091	n	3.37	2 20	703	682	2297	1500	0	0	0	0
	D	11D0	0 390	n	14.43	11 37	21	21	303	239	0	0	0	0
	W	12C-0sw	0 091	e	3 37	2 20	743	682	2296	1499	0	0	0	0
11	G	1A-c1ov	0 900	e	33 30	76.72	40	0	1332	3069	0	0	0	0
	D	11D0	0 390	e	14.43	11 37	21	21	303	239	0	0	0	0
	W	12C-0sw	0 091	s	3 37	2.20	703	703	2368	1546	0	0	0	0
	W	12C-0sw	0 091	w	3 37	2.20	765	675	2273	1483	0	0	0	0
	G	1A-c1ov	0 900	w	33 30	76 72	48	0	1598	3683	0	0	0	0
	D	11D0	0 390	w	14.43	11 37	42	42	606	477	0	0	0	0
	C	16B-30ad	0 032	-	1 18	1 68	1722	1722	2039	2901	0	0	0	0
	F	19C-19cscp	0 049	-	0 63	0 29	1722	1722	1082	497	0	0	0	0
6	c) AED excursion									44				0
	Envelope loss/gain								16498	17177			0	0
12	a) Infiltration								4454	1077			0	0
	b) Room ventilation								0	0			0	0
13	Internal gains		Occupants @ 230			13			2990	1500	0			0
	Appliances/other													0
	Subtotal (lines 6 to 13)								20953	22744			0	0
	Less external load								0	0			0	0
	Less transfer								0	0			0	0
	Redistribution								0	0			0	0
14	Subtotal								20953	22744			0	0
15	Duct loads						34%	39%	7138	8779	34%	39%	0	0
	Total room load								28091	31523			0	0
	Air required (cfm)								1324	1324			0	0

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

Right-J® Worksheet

Entire House

Job:
Date: Nov 01, 2013
By:

1	Room name					bed 3					bed 2				
2	Exposed wall					31 0 ft					28 0 ft				
3	Room height					10 0 ft					10 0 ft				
4	Room dimensions					1 0 x 220 0 ft					1 0 x 170 0 ft				
5	Room area					220 0 ft²					170 0 ft²				
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)		
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool	
6	W	12C-0sw	0 091	n	3.37	2 20	0	0	0	0	0	0	0	0	
11	D	11D0	0 390	n	14.43	11 37	0	0	0	0	0	0	0	0	
	W	12C-0sw	0 091	e	3.37	2 20	0	0	0	0	110	90	303	198	
	G	1A-c1ov	0 900	e	33 30	76 72	0	0	0	0	20	0	666	1534	
	D	11D0	0 390	e	14.43	11 37	0	0	0	0	0	0	0	0	
	W	12C-0sw	0 091	s	3 37	2.20	180	180	606	396	170	170	572	374	
	W	12C-0sw	0 091	w	3 37	2.20	130	118	397	259	0	0	0	0	
	G	1A-c1ov	0 900	w	33 30	76.72	12	0	400	921	0	0	0	0	
	D	11D0	0 390	w	14.43	11 37	0	0	0	0	0	0	0	0	
	C	16B-30ad	0 032	-	1 18	1 68	220	220	260	371	170	170	201	286	
	F	19C-19cscp	0 049	-	0 63	0 29	220	220	138	64	170	170	107	49	
	6	c) AED excursion									181				-76
	Envelope loss/gain								1802	2191			1850	2365	
12	a) Infiltration								474	115			428	103	
	b) Room ventilation								0	0			0	0	
13	Internal gains					Occupants @ 230	2			460	2			460	0
	Appliances/other									0				0	
	Subtotal (lines 6 to 13)								2275	2765			2277	2929	
14	Less external load								0	0			0	0	
	Less transfer								0	0			0	0	
	Redistribution								8	8			10	10	
	Subtotal								2284	2774			2288	2939	
15	Duct loads						34%	39%	778	1071	34%	39%	779	1134	
	Total room load								3062	3845			3067	4073	
	Air required (cfm)								144	161			145	171	

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1	Room name					mech3 0 ft					bath 2 5.0 ft				
2	Exposed wall					8 0 ft					8 0 ft				
3	Room height					3 0 x 5.0 ft					5.0 x 9 0 ft				
4	Room dimensions					15 0 ft²					45.0 ft²				
5	Room area														
	Ty	Construction number	U-value (Btuh/ft²-°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)		
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool	
6	W	12C-0sw	0 091	n	3.37	2.20	0	0	0	0	0	0	0	0	
	D	11D0	0 390	n	14.43	11 37	0	0	0	0	0	0	0	0	
	W	12C-0sw	0 091	e	3.37	2.20	0	0	0	0	40	40	135	88	
	G	1A-c1ov	0 900	e	33 30	76 72	0	0	0	0	0	0	0	0	
11	D	11D0	0 390	e	14.43	11 37	0	0	0	0	0	0	0	0	
	W	12C-0sw	0 091	s	3 37	2.20	0	0	0	0	0	0	0	0	
	W	12C-0sw	0 091	w	3 37	2 20	0	0	0	0	0	0	0	0	
	G	1A-c1ov	0 900	w	33 30	76 72	0	0	0	0	0	0	0	0	
	D	11D0	0 390	w	14.43	11 37	0	0	0	0	0	0	0	0	
	C	16B-30ad	0 032	-	1 18	1 68	15	15	18	25	45	45	53	76	
	F	19C-19ccsp	0 049	-	0 63	0 29	15	15	9	4	45	45	28	13	
6	c) AED excursion									-2				-16	
	Envelope loss/gain								27	27			216	161	
12	a) Infiltration								0	0			61	15	
	b) Room ventilation								0	0			0	0	
13	Internal gains					Occupants @ 230	0			0	0	0		0	0
	Appliances/other									0				0	
	Subtotal (lines 6 to 13)								27	27			277	176	
	Less external load								0	0			0	0	
	Less transfer								0	0			0	0	
	Redistribution								-27	-27			0	0	
14	Subtotal								0	0			277	176	
15	Duct loads						34%	39%	0	0	34%	39%	94	68	
	Total room load								0	0			372	243	
	Air required (cfm)								0	0			18	10	

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

Right-J® Worksheet Entire House

Job:
Date: Nov 01, 2013
By:

1	Room name					hall				foyer				
2	Exposed wall					0 ft				60 ft				
3	Room height					80 ft				80 ft				
4	Room dimensions					10 x 485 ft				60 x 90 ft				
5	Room area					485 ft²				54.0 ft²				
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)	
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool
6	W	12C-0sw	0.091	n	3.37	2.20	0	0	0	0	0	0	0	0
	D	11D0	0.390	n	14.43	11.37	0	0	0	0	0	0	0	0
	W	12C-0sw	0.091	e	3.37	2.20	0	0	0	0	48	27	91	59
	G	1A-c1ov	0.900	e	33.30	76.72	0	0	0	0	0	0	0	0
11	D	11D0	0.390	e	14.43	11.37	0	0	0	0	21	21	303	239
	W	12C-0sw	0.091	s	3.37	2.20	0	0	0	0	0	0	0	0
	W	12C-0sw	0.091	w	3.37	2.20	0	0	0	0	0	0	0	0
	G	1A-c1ov	0.900	w	33.30	76.72	0	0	0	0	0	0	0	0
	D	11D0	0.390	w	14.43	11.37	0	0	0	0	0	0	0	0
	C	16B-30ad	0.032	-	1.18	1.68	49	49	57	82	54	54	64	91
	F	19C-19cscp	0.049	-	0.63	0.29	49	49	30	14	54	54	34	16
6	c) AED excursion									-8				-35
	Envelope loss/gain								88	88			492	370
12	a) Infiltration								0	0			73	18
	b) Room ventilation								0	0			0	0
13	Internal gains		Occupants @ Appliances/other		230		0			0	0			0
	Subtotal (lines 6 to 13)								88	88			565	387
	Less external load								0	0			0	0
	Less transfer								0	0			0	0
	Redistribution								8	8			0	0
14	Subtotal								96	96			565	387
15	Duct loads						34%	39%	33	37	34%	39%	193	149
	Total room load								129	133			758	537
	Air required (cfm)								6	6			36	23

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

Right-J® Worksheet

Entire House

Job:
Date: Nov 01, 2013
By:

1	Room name					living				Kitchen				
2	Exposed wall					48.9 ft				54.0 ft				
3	Room height					10.0 ft				10.0 ft				
4	Room dimensions					10.0 x 413.0 ft				10.0 x 148.0 ft				
5	Room area					413.0 ft²				148.0 ft²				
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)	
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool
6	W	12C-0sw	0.091	n	3.37	2.20	230	230	774	505	180	159	535	349
	D	11D0	0.390	n	14.43	11.37	0	0	0	0	21	21	303	239
	W	12C-0sw	0.091	e	3.37	2.20	0	0	0	0	90	90	303	198
	G	1A-c1ov	0.900	e	33.30	76.72	0	0	0	0	0	0	0	0
11	D	11D0	0.390	e	14.43	11.37	0	0	0	0	0	0	0	0
	W	12C-0sw	0.091	s	3.37	2.20	0	0	0	0	180	180	606	396
	W	12C-0sw	0.091	w	3.37	2.20	260	240	808	527	90	74	249	163
	G	1A-c1ov	0.900	w	33.30	76.72	20	0	666	1534	16	0	533	1228
	D	11D0	0.390	w	14.43	11.37	0	0	0	0	0	0	0	0
	C	16B-30ad	0.032	-	1.18	1.68	413	413	489	696	148	148	175	249
	F	19C-19cscp	0.049	-	0.63	0.29	413	413	260	119	148	148	93	43
6	c) AED excursion									287				190
	Envelope loss/gain								2997	3670			2798	3054
12	a) Infiltration								749	181			825	200
	b) Room ventilation								0	0			0	0
13	Internal gains					Occupants @ 230	4			920	0			0
	Appliances/other									0				1000
	Subtotal (lines 6 to 13)								3746	4771			3623	4253
	Less external load								0	0			0	0
	Less transfer								0	0			0	0
	Redistribution								0	0			0	0
14	Subtotal								3746	4771			3623	4253
15	Duct loads						34%	39%	1276	1841	34%	39%	1234	1642
	Total room load								5022	6612			4857	5895
	Air required (cfm)								237	278			229	248

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

1	Room name					Office					laundry				
2	Exposed wall					14.9 ft					6.0 ft				
3	Room height					10.0 ft					10.0 ft				
4	Room dimensions					10.0 x 149.5 ft					6.0 x 12.0 ft				
5	Room area					149.5 ft²					72.0 ft²				
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)		
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool	
6	W	12C-0sw	0.091	n	3.37	2.20	20	20	67	44	0	0	0	0	
	D	11D0	0.390	n	14.43	11.37	0	0	0	0	0	0	0	0	
	W	12C-0sw	0.091	e	3.37	2.20	110	90	303	198	60	60	202	132	
	G	1A-c1ov	0.900	e	33.30	76.72	20	0	666	1534	0	0	0	0	
11	D	11D0	0.390	e	14.43	11.37	0	0	0	0	0	0	0	0	
	W	12C-0sw	0.091	s	3.37	2.20	20	20	67	44	0	0	0	0	
	W	12C-0sw	0.091	w	3.37	2.20	0	0	0	0	0	0	0	0	
	G	1A-c1ov	0.900	w	33.30	76.72	0	0	0	0	0	0	0	0	
	D	11D0	0.390	w	14.43	11.37	0	0	0	0	0	0	0	0	
	C	16B-30ad	0.032	-	1.18	1.68	150	150	177	252	72	72	85	121	
	F	19C-19cscp	0.049	-	0.63	0.29	150	150	94	43	72	72	45	21	
6	c) AED excursion									-45				-66	
	Envelope loss/gain									1375	2070			333	208
12	a) Infiltration									229	55			92	22
	b) Room ventilation									0	0			0	0
13	Internal gains					Occupants @ 230		2			460	0			0
	Appliances/other										0				500
	Subtotal (lines 6 to 13)									1604	2586			424	730
	Less external load									0	0			0	0
	Less transfer									0	0			0	0
	Redistribution									0	0			0	0
14	Subtotal									1604	2586			424	730
15	Duct loads							34%	39%	546	998	34%	39%	145	282
	Total room load									2150	3584			569	1012
	Air required (cfm)									101	151			27	42

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1	Room name					mbed 57.7 ft					Clos2 6.0 ft				
2	Exposed wall					10.0 ft					10.0 ft				
3	Room height					15.0 x 17.0 ft					6.0 x 5.0 ft				
4	Room dimensions					255.0 ft²					30.0 ft²				
5	Room area														
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)		
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool	
6	W	12C-0sw	0.091	n	3.37	2.20	153	153	516	337	0	0	0	0	
	D	11D0	0.390	n	14.43	11.37	0	0	0	0	0	0	0	0	
	W	12C-0sw	0.091	e	3.37	2.20	135	135	455	297	0	0	0	0	
11	G	1A-c1ov	0.900	e	33.30	76.72	0	0	0	0	0	0	0	0	
	D	11D0	0.390	e	14.43	11.37	0	0	0	0	0	0	0	0	
	W	12C-0sw	0.091	s	3.37	2.20	153	153	516	337	0	0	0	0	
	W	12C-0sw	0.091	w	3.37	2.20	135	93	313	204	60	60	202	132	
	G	1A-c1ov	0.900	w	33.30	76.72	0	0	0	0	0	0	0	0	
	D	11D0	0.390	w	14.43	11.37	42	42	606	477	0	0	0	0	
	C	16B-30ad	0.032	-	1.18	1.68	207	207	245	349	30	30	36	51	
	F	19C-19cscp	0.049	-	0.63	0.29	207	207	130	60	30	30	19	9	
6	c) AED excursion								-246				-18		
	Envelope loss/gain								2781	1815			256	173	
12	a) Infiltration								881	213			92	22	
	b) Room ventilation								0	0			0	0	
13	Internal gains		Occupants @	230		3			690	0				0	
			Appliances/other						0					0	
	Subtotal (lines 6 to 13)								3663	2718			348	196	
	Less external load								0	0			0	0	
	Less transfer								0	0			0	0	
	Redistribution								0	0			0	0	
14	Subtotal								3663	2718			348	196	
15	Duct loads					34%	39%		1248	1049	34%	39%	119	75	
	Total room load								4911	3767			467	271	
	Air required (cfm)								231	158			22	11	

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1	Room name					clo1					mbath				
2	Exposed wall					11 0 ft					25.0 ft				
3	Room height					10 0 ft					10 0 ft				
4	Room dimensions					6 0 x 5.0 ft					1 0 x 12 0 ft				
5	Room area					30 0 ft²					120 0 ft²				
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)		
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool	
6	W	12C-0sw	0 091	n	3 37	2 20	50	50	168	110	70	70	236	154	
	D	11D0	0 390	n	14.43	11 37	0	0	0	0	0	0	0	0	
	W	12C-0sw	0 091	e	3.37	2 20	0	0	0	0	150	150	505	330	
	G	1A-c1ov	0 900	e	33 30	76 72	0	0	0	0	0	0	0	0	
11	D	11D0	0 390	e	14.43	11 37	0	0	0	0	0	0	0	0	
	W	12C-0sw	0 091	s	3 37	2.20	0	0	0	0	0	0	0	0	
	W	12C-0sw	0 091	w	3 37	2.20	60	60	202	132	30	30	101	66	
	G	1A-c1ov	0 900	w	33 30	76 72	0	0	0	0	0	0	0	0	
	D	11D0	0 390	w	14.43	11 37	0	0	0	0	0	0	0	0	
	C	16B-30ad	0 032	-	1 18	1 68	30	30	36	51	120	120	142	202	
	F	19C-19cscp	0 049	-	0 63	0 29	30	30	19	9	120	120	75	35	
6	c) AED excursion									-28				-73	
	Envelope loss/gain								425	273			1059	713	
12	a) Infiltration								168	41			382	92	
	b) Room ventilation								0	0			0	0	
13	Internal gains					Occupants @ 230	0			0	0	0		0	0
	Appliances/other									0				0	0
	Subtotal (lines 6 to 13)								593	313			1441	806	
	Less external load								0	0			0	0	
	Less transfer								0	0			0	0	
	Redistribution								0	0			0	0	
14	Subtotal								593	313			1441	806	
15	Duct loads						34%	39%	202	121	34%	39%	491	311	
	Total room load								795	434			1932	1117	
	Air required (cfm)								37	18			91	47	

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