

HVAC Design and Actual System Data

Heating System	Manufacturer	Model	Nominal size (BTU/hr)
Furnace			
Heat Pump or AC Condenser			
Fan Coil			

Calculated Specified

Total Heating Load	31,800	0
Sensible Cooling Load	19,600	
Latent Cooling Load	2,300	
Sensible Ratio	0.89	

Heating Cooling

Blower Default (CFM)	318	602
Blower Override (CFM)		

Building Characteristics

Conditioned Floor Area (sqrt)	2,200	Slab on Grade %	32
Total Room Area	2,112	Conditioned Basement %	68
Wall Height	7.7	Unconditioned Basement or Crawl Space %	0
Bedrooms	3		

Window Orientation

Room Name	↑ N	↗ NE	→ E	↘ SE	↓ S	↙ SW	← W	↖ NW	Door	Skylight
2- Master Bedroom		6.2				27.4				
1- Great Room		22.4						21.3	20.0	
1- Downstairs Office						18.3				
1- Downstairs Bath		6.2								
1- Dining Room				20.0		18.2				
1- Sunroom		22.1		22.1				24.3	10.3	11.9
2- Nursery Closet										
1/2- Downstairs hallway/stairs up									20.0	
2- Master Bathroom		6.2								
2- Guest Bathroom		6.2								
2- Nursery				9.5		18.9				
2- Master Closet										
2- Upstairs Hallway										
1- Kitchen		6.0								
1- Hallway from Kitch to Great Rm										
2- Guest Bedroom		6.2		9.5						

Total Window Square Footage (sqrt)

Total Room (Floor) Square Footage (sqrt)

Total Window to Floor Ratio (%)

Duct Characteristics

Duct Material	Wire Helix (flex)	Blower CFM	<input type="text" value="318"/>
Attic %	<input type="text" value="0"/>	Max CFM/Register	<input type="text" value="125"/>
Conditioned Area %	<input type="text" value="0"/>	Friction Rate	<input type="text" value=""/>
TEL Calculated	<input type="text" value="0"/>	Unconditioned Basement or Crawl Space %	<input type="text" value="0"/>
TEL Override	<input type="text" value="0"/>		












Building Data

	Selected	Override		Selected	Override
Heating 99% Dry Bulb	9		Additional Blower Load	1707	
Cooling 1% Dry Bulb	85		Internal Shade Coefficient	1.0	
Winter Thermostat Setpoint (°F)	70		Ceiling U-Value	0.026	estimated R-60
Summer Thermostat Setpoint (°F)	75	70	Floor U-Value	0.033	None
Daily Range	Medium	None	Wall U-Value	0.060	R-13+R-5 Board
Summer Design Grains	23		Basement Wall U-Value	0.071	R-11
Elevation (ft)	101		Basement Floor U-Value	0.025	None
Latitude (°N)	43		Slab U-Value	1.180	None
Indoor RH	50		Door U-Value	0.200	
Number of People	4		Window U-Value	0.350	
Appliance/Lighting Load (BTU/hr)	2,400		Window SHGC	0.400	
Internal Gains	3,320	3,320	Duct Insulation	(R-8)	None
Ventilation CFM	52		Duct Leakage	Semi Tig	None
Heating Duct Multiplier	0 %		Heating ACH	0.350	
Cooling Duct Multiplier	0 %		Cooling ACH	0.150	
% Basement Below Grade	75 %				
ASHRAE 152 Duct area default	<input type="checkbox"/>				
Heated slab on grade	<input type="checkbox"/>				

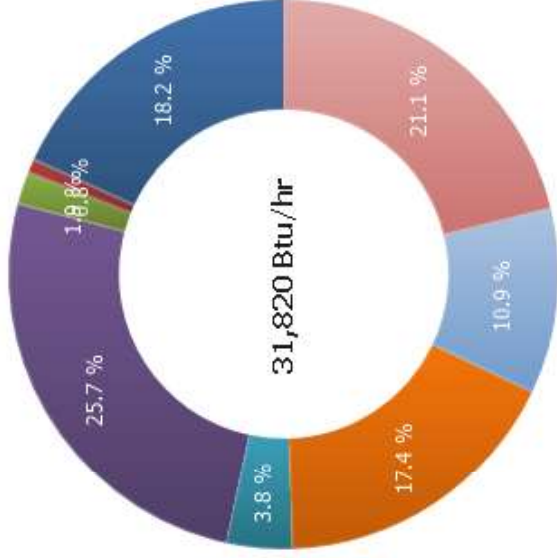
Room Data and Loads

Room Name	Suggested Ducts	Actual Ducts	Duct Size	CFM/Duct	Actual CFM Measured	Floor Area	Ext. Length	Height Override	Uncond Ceiling	Uncond Floor	Heating Load	Cooling Load
2-Master Bedroom	1		3	65		196	28.8	7.7	100 %	0 %	3,050	2,219
1-Great Room	1		3	124		333	60.9	9.2	100 %	100 %	7,166	3,125
1-Downstairs Office	1		3	30		137	12.3	7.7	0 %	100 %	1,623	1,154
1-Downstairs Bath	1		3	16		74	9.0	7.7	0 %	100 %	989	457
1-Dining Room	1		3	70		281	36.3	7.7	0 %	100 %	4,184	2,484
1-Sunroom	2		3	70		211	44.4	9.6	0 %	100 %	5,810	4,222
2-Nursery Closet			3	0		16	1.0		100 %	0 %	27	45
1/2- Downstairs hallway/stairs up	1		3	14		86	6.8	7.7	50 %	50 %	913	420
2-Master Bathroom	1		3	12		71	8.0		100 %	0 %	721	502
2-Guest Bathroom	1		3	12		72	8.0		100 %	0 %	723	504
2-Nursery	1		3	56		191	27.6		100 %	0 %	2,544	1,985
2-Master Closet			3	0		33	7.1		100 %	0 %	55	92
2-Upstairs Hallway	1		3	2		54	1.0		100 %	0 %	197	204
1-Kitchen	1		3	26		160	12.9	7.7	0 %	100 %	1,628	730
1-Hallway from Kitch to Great Rm			3	0		35	1.0		0 %	100 %	58	98
2-Guest Bedroom	1		3	35		172	26.3		100 %	0 %	2,132	1,367
Total	14	0				2,121					31,820	19,608

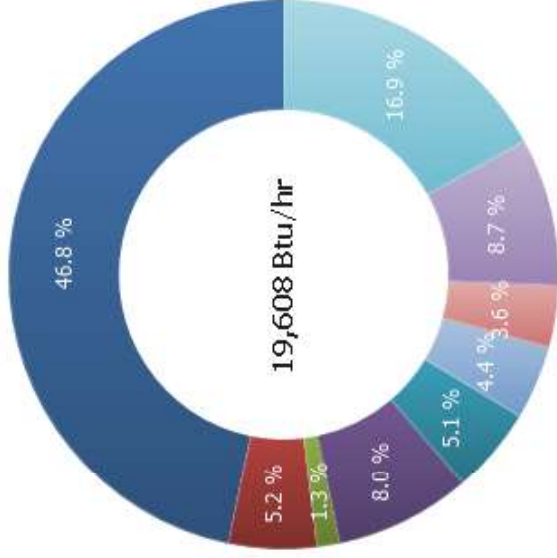
Component Loads

	Heating	Cooling	Color
Windows	5,786	9,168	
Skylights	254	1,013	
Doors	614	262	
Walls	8,189	1,571	
Ceiling	1,225	1,004	
Floors	5,549	0	
Ventilation	3,478	855	
Infiltration	6,726	709	
Ducts	0	0	
Additional Blower		1,707	
Internal Gains		3,320	
Total:	31,820	19,608	

Heating



Cooling



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