

Project Information

For: First Floor - North

Design Information

	Htg	Clg		Infiltration
Outside db (°F)	23	92	Method	Simplified
Inside db (°F)	70	75	Construction quality	Semi-tight
Design TD (°F)	47	17	Fireplaces	1 (Semi-tight)
Daily range	-	M		
Inside humidity (%)	50	50		
Moisture difference (gr/lb)	41	44		

HEATING EQUIPMENT

Make	
Trade	
Model	
AHRI ref	
Efficiency	80 AFUE
Heating input	0 Btuh
Heating output	0 Btuh
Temperature rise	0 °F
Actual air flow	772 cfm
Air flow factor	0.027 cfm/Btuh
Static pressure	0.70 in H2O
Space thermostat	

COOLING EQUIPMENT

Make	
Trade	
Cond	
Coil	
AHRI ref	
Efficiency	0 SEER
Sensible cooling	0 Btuh
Latent cooling	0 Btuh
Total cooling	0 Btuh
Actual air flow	772 cfm
Air flow factor	0.046 cfm/Btuh
Static pressure	0.70 in H2O
Load sensible heat ratio	0.92

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
Foyer	315	2559	1131	70	52
Bath	30	680	285	19	13
Laundry	49	2479	672	68	31
Mud Room	93	1979	702	54	32
Pantry	26	39	42	1	2
Kitchen	211	5148	4810	141	222
Dining	178	2760	1954	76	90
Living Room	220	5402	2651	148	122
Master Bed	211	2468	2706	68	125
Master Bath	87	3250	1215	89	56
M. Water Closet	24	1243	392	34	18
His Closet	47	70	75	2	3
Her Closet	53	79	85	2	4

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

First Floor	1543	28157	16719	772	772
Other equip loads		0	0		
Equip. @ 0.97 RSM			16167		
Latent cooling			1359		
TOTALS	1543	28157	17527	772	772

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	Heating	Cooling
External static pressure	<i>0.70</i> in H2O	<i>0.70</i> in H2O
Pressure losses	<i>0.19</i> in H2O	<i>0.19</i> in H2O
Available static pressure	<i>0.51</i> in H2O	<i>0.51</i> in H2O
Supply / return available pressure	0.388 / <i>0.122</i> in H2O	0.388 / <i>0.122</i> in H2O
Lowest friction rate	<i>0.065</i> in/100ft	<i>0.065</i> in/100ft
Actual air flow	772 cfm	772 cfm
Total effective length (TEL)		264 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
Foyer	h 2559	84	63	0.065	7.0	0x0	VIFx	26.0	175.0	
Bath	h 680	22	16	0.065	5.0	0x0	VIFx	26.0	175.0	
Laundry	h 2479	82	37	0.065	7.0	0x0	VIFx	26.0	175.0	
Mud Room	h 1979	65	39	0.065	7.0	0x0	VIFx	26.0	175.0	
Pantry	c 42	1	2	0.065	5.0	0x0	VIFx	26.0	175.0	
Kitchen-A	c 2405	85	133	0.065	9.0	0x0	VIFx	26.0	175.0	
Kitchen	c 2405	85	133	0.065	9.0	0x0	VIFx	26.0	175.0	
Dining	c 1954	91	108	0.065	8.0	0x0	VIFx	26.0	175.0	
Living Room	h 5402	178	147	0.065	10.0	0x0	VIFx	26.0	175.0	
Master Bed	c 2706	81	150	0.065	9.0	0x0	VIFx	26.0	175.0	
Master Bath	h 3250	107	67	0.065	8.0	0x0	VIFx	26.0	175.0	
M. Water Closet	h 1243	41	22	0.065	6.0	0x0	VIFx	26.0	175.0	
His Closet	c 75	2	4	0.065	5.0	0x0	VIFx	26.0	175.0	
Her Closet	c 85	3	5	0.065	5.0	0x0	VIFx	26.0	175.0	

Bold/italic values have been manually overridden