



Load Short Form
Entire House
HVAC Design Pros, LLC

Job:
 Date: Jan 04, 2022
 By:

PO Box 1036, Saluda, NC 28773 Phone: 828-549-8755 Email: info@HvacDesignPros.com

Project Information

Design Information

	Htg	Clg	Infiltration	Simplified
Outside db (°F)	29	87	Method	Tight
Inside db (°F)	70	75	Construction quality	0
Design TD (°F)	41	12	Fireplaces	
Daily range	-	M		
Inside humidity (%)	35	50		
Moisture difference (gr/lb)	20	-1		

HEATING EQUIPMENT

Make	
Trade	
Model	
AHRI ref	
Efficiency	0 HSPF
Heating input	
Heating output	0 Btuh @ 47°F
Temperature rise	0 °F
Actual air flow	1462 cfm
Air flow factor	0.037 cfm/Btuh
Static pressure	0 in H2O
Space thermostat	
Capacity balance point = 0 °F	

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	1462 cfm
Air flow factor	0.044 cfm/Btuh
Static pressure	0 in H2O
Load sensible heat ratio	0.97

Backup:
 Input = 18 kW, Output = 59822 Btuh, 100 AFUE

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
Z - Mom's	552	6566	6693	244	294
Z - Common	1431	14335	18955	534	833
Z - Office/Guests	1087	9717	8527	362	375
Z - Primary Suite	503	4850	6317	181	278
Z - Gym	297	2003	2476	75	109
Z - Workshop	128	1802	761	67	33

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



Entire House	3998	39272	32150	1462	1462
Other equip loads		1746	515		
Equip. @ 1.00 RSM			32665		
Latent cooling			948		
TOTALS	3998	41018	33613	1462	1462

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Load Multizone Summary Report

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Infiltration Summary

ZONE NAME	Heating				Cooling			
	Volume ft³	ACH	AVF cfm	HTM Btuh/ft²	Volume ft³	ACH	AVF cfm	HTM Btuh/ft²
Z - Mom's	4968	0.16	13	0.7	4968	0.08	7	0.1
Z - Common	15085	0.08	19	0.7	15085	0.04	10	0.1
Z - Office/Guests	9783	0.11	18	0.7	9783	0.06	9	0.1
Z - Primary Suite	4528	0.11	8	0.7	4528	0.06	4	0.1
Z - Gym	2671	0.02	1	0.7	2671	0.01	1	0.1
Z - Workshop	1154	0.16	3	0.7	1154	0.08	2	0.1
Entire House	38189	0.10	64	0.7	38189	0.05	32	0.1

Load and AVF Summary

ROOM NAME	Area ft²	Htg load Btuh	Clg load Btuh	Htg AVF cfm	Clg AVF cfm
Mom's Bed	176	2292	2128	85	94
Mom's Bath	77	544	529	20	23
Mom's	300	3730	4035	139	177
Z - Mom's	552	6566	6693	244	294
Laundry	86	1331	812	50	36
Mud	137	1610	2521	60	111
Dining	331	2251	1108	84	49
Kitchen/Great	570	6078	11675	226	513
Vestibule	144	2282	1874	85	82
Pantry	45	186	39	7	2
Hall 1	119	597	926	22	41
Z - Common	1431	14335	18955	534	833
Office	210	2063	3153	77	139
Guest 2	226	1889	1226	70	54
Guest Bath	90	458	233	17	10
Guest 1	218	1142	1102	43	48
Circ East	280	3527	1987	131	87
Pwdr 2	63	636	826	24	36
Z - Office/Guests	1087	9717	8527	362	375
P. Bed	321	3258	4130	121	182
P. Bath	182	1592	2186	59	96
Z - Primary Suite	503	4850	6317	181	278
Gym	261	1775	1780	66	78
Pwdr 1	36	228	696	8	31
Z - Gym	297	2003	2476	75	109
Workshop	128	1802	761	67	33
Z - Workshop	128	1802	761	67	33
Entire House	3998	39272	32150	1462	1462