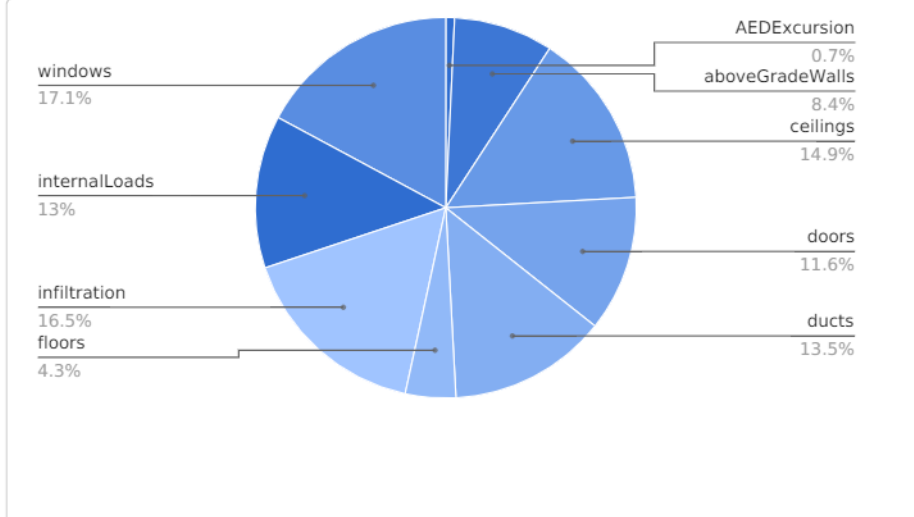


BRISTOL, TRI-CITY AP, TN

Summer Outdoor F:	88	Summer Indoor F:	75	Design Grains:	30	Daily Range:	Medium
Winter Outdoor F:	17	Winter Indoor F:	70	Cooling RH:	50%	Elevation (Ft):	1526

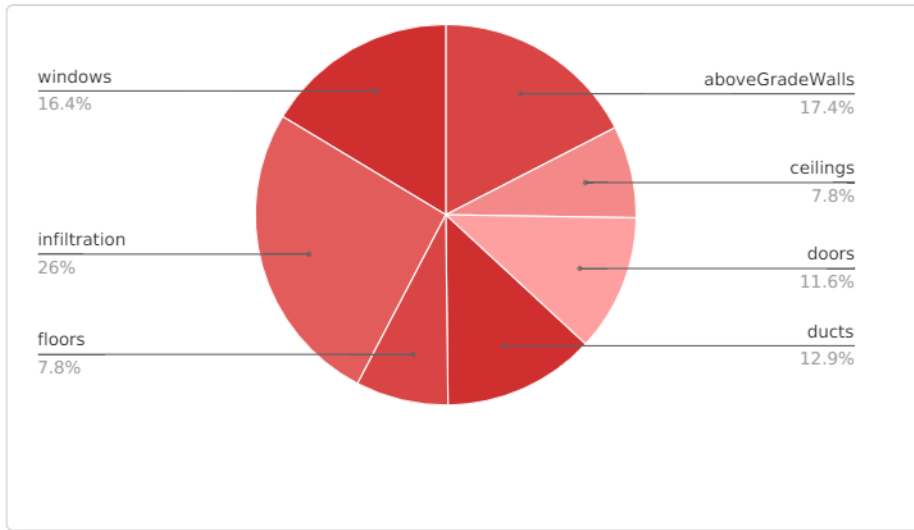
LOAD CALCULATION TOTALS

Heating BTU:	18363	Cooling BTU:	9076	SHR:	0.840	CFM:	347
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Cooling Loads

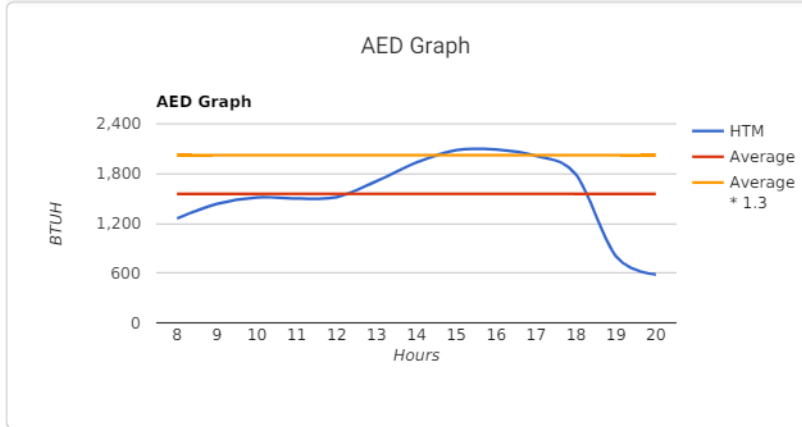
Name	Area	Sensible	Latent
AEDExcursion	0.00	67.30	0.00
aboveGradeWalls	1041.00	766.80	0.00
belowGradeWalls	0.00	0.00	0.00
blowerMotor	0.00	0.00	0.00
ceilings	1506.00	1355.40	0.00
doors	144.00	1048.32	0.00
ducts	0.00	669.06	553.84
floors	1506.00	387.95	0.00
infiltration	0.00	615.71	878.35
internalLoads	0.00	1178.00	0.00
skylights	0.00	0.00	0.00
ventilation	0.00	0.00	0.00
windows	210.00	1555.54	0.00
winterHumidification	0.00	0.00	0.00
Totals	-	7644.07	1432.19



Heating Loads

Name	Area	Heat Loss
AEDExcursion	0.00	0.00
aboveGradeWalls	1041.00	3200.03
belowGradeWalls	0.00	0.00
blowerMotor	0.00	0.00
ceilings	1506.00	1436.72
doors	144.00	2136.96
ducts	0.00	2374.00
floors	1506.00	1440.94
infiltration	0.00	4769.37
internalLoads	0.00	0.00
skylights	0.00	0.00
ventilation	0.00	0.00
windows	210.00	3005.10
winterHumidification	0.00	0.00
Totals	-	18363.13

Warning (1): This application has glass areas that produced relatively large cooling loads for part of the day. Zoning may be required to overcome spikes in solar load for one or more rooms. A zoned system may be required, or some rooms may require zone control (provided by individual, motorized, thermostatically controlled dampers).



Approved ACCA MJ8 Calculations

Calculations are based on the ACCA Manual J 8th Edition and are approved by ACCA. All computed calculations are estimates on building use, weather data, and inputted values such as R-Values, window types, duct loss, etc. Equipment selections should meet both the latent and sensible gain as well as building heat loss. See Cool Calc Manual S Report for equipment sizing verification.

COMPONENT LOADS

Above Grade Walls

Construction Nr.	Exposure	Area	Heating HTM	Cooling HTM	Heating BTU	Sensible BTU	Latent BTU
12D-6s w	E	54.00	3.07	0.74	166.00	39.78	0.00
12D-6s w	N	81.00	3.07	0.74	248.99	59.66	0.00
12D-6s w	E	87.00	3.07	0.74	267.44	64.08	0.00
12D-6s w	N	69.00	3.07	0.74	212.11	50.83	0.00
12D-6s w	E	75.00	3.07	0.74	230.55	55.25	0.00
12D-6s w	N	285.00	3.07	0.74	876.09	209.93	0.00
12D-6s w	N	21.00	3.07	0.74	64.55	15.47	0.00
12D-6s w	W	69.00	3.07	0.74	212.11	50.83	0.00
12D-6s w	N	90.00	3.07	0.74	276.66	66.29	0.00
12D-6s w	W	114.00	3.07	0.74	350.44	83.97	0.00
12D-6s w	N	36.00	3.07	0.74	110.66	26.52	0.00
12D-6s w	W	60.00	3.07	0.74	184.44	44.20	0.00

Below Grade Walls

(none)

Blower Motor

(none)

Ceilings

Construction Nr.	Area	Heating HTM	Cooling HTM	Heating BTU	Sensible BTU	Latent BTU
16B-56 md	54.00	0.95	0.90	51.52	48.60	0.00
16B-56 md	149.00	0.95	0.90	142.15	134.10	0.00
16B-56 md	143.00	0.95	0.90	136.42	128.70	0.00
16B-56 md	746.00	0.95	0.90	711.68	671.40	0.00
16B-56 md	26.00	0.95	0.90	24.80	23.40	0.00
16B-56 md	50.00	0.95	0.90	47.70	45.00	0.00
16B-56 md	78.00	0.95	0.90	74.41	70.20	0.00
16B-56 md	196.00	0.95	0.90	186.98	176.40	0.00
16B-56 md	64.00	0.95	0.90	61.06	57.60	0.00

Doors

Construction Nr.	Exposure	Area	Heating HTM	Cooling HTM	Heating BTU	Sensible BTU	Latent BTU
11	N	24.00	14.84	7.28	356.16	174.72	0.00
11	N	24.00	14.84	7.28	356.16	174.72	0.00
11	N	24.00	14.84	7.28	356.16	174.72	0.00
11	N	24.00	14.84	7.28	356.16	174.72	0.00
11	N	24.00	14.84	7.28	356.16	174.72	0.00
11	N	24.00	14.84	7.28	356.16	174.72	0.00

Ducts

EHLF	ESGF	ELG	Heating BTU	Sensible BTU	Latent BTU
0.15	0.10	553.84	0.00	0.00	0.00

Floors

Construction Nr.	Area	Heating HTM	Heating BTU	Sensible BTU	Latent BTU
19D-0sp	54.00	0.96	51.67	13.91	0.00
19D-0sp	149.00	0.96	142.56	38.38	0.00
19D-0sp	143.00	0.96	136.82	36.84	0.00
19D-0sp	746.00	0.96	713.77	192.17	0.00
19D-0sp	26.00	0.96	24.88	6.70	0.00
19D-0sp	50.00	0.96	47.84	12.88	0.00
19D-0sp	78.00	0.96	74.63	20.09	0.00
19D-0sp	196.00	0.96	187.53	50.49	0.00
19D-0sp	64.00	0.96	61.24	16.49	0.00

Infiltration

NCFM Heating	NCFM Cooling	Heating BTU	Sensible BTU	Latent BTU
85.84	45.18	4769.37	615.71	878.35

Internal Loads

Heating BTU	Sensible BTU	Latent BTU
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	426.75	0.00
0.00	51.25	0.00
0.00	700.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Ventilation

(none)

Windows

Construction Nr.	Exposure	Area	Heating HTM	Heating BTU	Sensible BTU Avg.	Sensible BTU Peak	Latent BTU
10E	E	12.00	14.31	171.72	124.43	248.75	0.00
10E	N	12.00	14.31	171.72	65.69	86.09	0.00
10E	E	24.00	14.31	343.44	248.86	497.50	0.00
10E	N	24.00	14.31	343.44	131.38	172.18	0.00
10E	N	6.00	14.31	85.86	32.85	43.05	0.00
10E	N	36.00	14.31	515.16	197.07	258.27	0.00
10E	N	36.00	14.31	515.16	197.07	258.27	0.00
10E	W	12.00	14.31	171.72	142.27	294.79	0.00
10E	N	12.00	14.31	171.72	65.69	86.09	0.00
10E	W	12.00	14.31	171.72	142.27	294.79	0.00
10E	N	12.00	14.31	171.72	65.69	86.09	0.00
10E	W	12.00	14.31	171.72	142.27	294.79	0.00

Winter Humidification

(none)

Project Name: Fetter Final
Address: 1928 Sweet Creek Road, Bakersville, NC
FormType: HVAC System
HVAC System Name: Mini split



ROOM LOADS

Room Name	Heating	Sensible	Latent	Cooling	CFM
Bath 2	521.18	138.34	34.00	172.34	6.00
Bedroom 2 / Office	2571.70	875.19	136.00	1011.19	44.00
Bedroom 3	2868.23	1102.23	136.00	1238.23	55.00
Great Room	5853.79	2029.32	243.67	2273.00	102.00
Hallway	57.06	33.01	0.00	33.01	1.00
Laundry	769.60	1585.98	28.33	1614.31	80.00
Master Bath	930.04	459.89	51.00	510.89	23.00
Master Bedroom	2943.29	1060.21	158.67	1218.88	53.00
Master Closet	1848.26	753.07	90.67	843.73	38.00