wrightsoft®

Load Short Form
Entire House
High Springs Electric

Job:
Date: March 21, 2024
By: Donna Brackeen
Plan: Litchfield Classic GR

Project Information

For: Brockway Residence, Red Door Homes
1108 SW Central Terr., Ft. White, FL 32038

Design Information

	Htg	Clg
Outside db (°F)	33	92
Inside db (°F)	68	75
Design TD (°F)	35	17
Daily range	-	M
Inside humidity (%)	50	50
Moisture difference (gr/lb)	29	43

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

HEATING EQUIPMENT

Make	Trane		
Trade	TRANE		
Model	4TWR5036H1		
AHRI ref	211215794		
Efficiency	7.8 HSPF2		
Heating input			
Heating output	31800	Btuh @ 47°F	
Temperature rise	0	°F	
Actual air flow	0	cfm	
Air flow factor	0	cfm/Btuh	
Static pressure	0.50	in H2O	
Space thermostat			

Capacity balance point = 24 °F

COOLING EQUIPMENT

Make	Trane		
Trade	TRANE		
Cond	4TWR5036H1		
Coil	TEM6A0D60H51++TDR		
AHRI ref	211215794		
Efficiency	12.0 EER2,14.3 SEER2		
Sensible cooling	23800	Btuh	
Latent cooling	10200	Btuh	
Total cooling	34000	Btuh	
Actual air flow	1133	cfm	
Air flow factor	0.045	cfm/Btuh	
Static pressure	0.50	in H2O	
Load sensible heat ratio	0.85		

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
(Rest of House)	1704	22576	26180	0	1184
(Unconditioned)	459	0	0	0	0
Entire House	2162	22576	25050	0	1133
Other equip loads		0	0		
Equip. @ 0.97 RSM			24399		
Latent cooling			4420		
TOTALS	2162	22576	28819	0	1133

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

Load Short Form
(Rest of House)
High Springs Electric

Job:
Date: March 21, 2024
By: Donna Brackeen
Plan: Litchfield Classic GR

Project Information

For: Brockway Residence, Red Door Homes
1108 SW Central Terr., Ft. White, FL 32038

Design Information

	Htg	Clg
Outside db (°F)	33	92
Inside db (°F)	68	75
Design TD (°F)	35	17
Daily range	-	M
Inside humidity (%)	50	50
Moisture difference (gr/lb)	29	43

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0

HEATING EQUIPMENT

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

COOLING EQUIPMENT

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

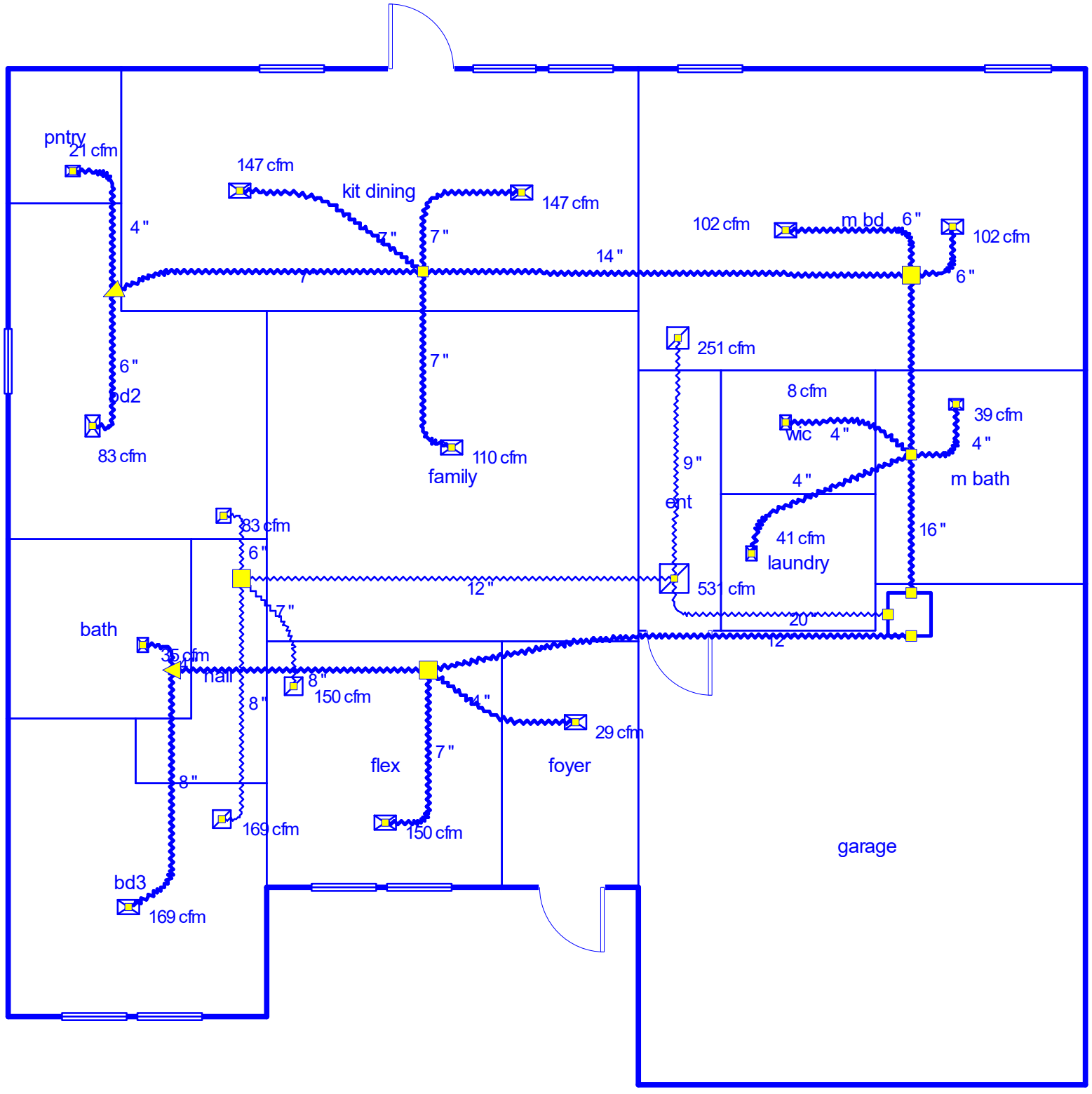
ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
m bd	291	4469	4519	0	204
kit dining	270	3674	6520	0	295
pntry	33	1250	457	0	21
bd2	153	2017	1845	0	83
ent	46	0	0	0	0
family	264	564	2441	0	110
m bath	97	1633	860	0	39
wic	41	161	170	0	8
laundry	45	638	903	0	41
bath	71	973	784	0	35
foyer	72	1562	630	0	29
flex	125	1698	3307	0	150
bd3	148	3936	3744	0	169
hall	47	0	0	0	0

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

(Rest of House)	1704	22576	26180	0	1184
Other equip loads		0	0		
Equip. @ 0.97 RSM			25500		
Latent cooling			4420		
TOTALS	1704	22576	29920	0	1184

Private Provider Plan Review
Completed by Michael Williams
Licenses: BU2215, PX4929, BN7822
Or Associated Duly Authorized Representative
FREEDOM CODE COMPLIANCE

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



Manual S Compliance Report
Entire House
High Springs Electric

Job:
Date: March 21, 2024
By: Donna Brackeen
Plan: Litchfield Classic GR

Project Information

For: Brockway Residence, Red Door Homes
1108 SW Central Terr., Ft. White, FL 32038

Cooling Equipment

Design Conditions

Outdoor design DB:	92.4°F	Sensible gain:	25050	Btuh	Entering coil DB:	77.4°F
Outdoor design WB:	75.8°F	Latent gain:	4420	Btuh	Entering coil WB:	63.6°F
Indoor design DB:	75.0°F	Total gain:	29470	Btuh		
Indoor RH:	50%	Estimated airflow:	1133	cfm		

Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Split ASHP				
Manufacturer:	Trane		Model:	4TWR5036H1+TEM6A0D60H51++TDR	
Actual airflow:	1133	cfm			
Sensible capacity:	23800	Btuh	95% of load		
Latent capacity:	10200	Btuh	231% of load		
Total capacity:	34000	Btuh	115% of load	SHR:	70%

Heating Equipment

Design Conditions

Outdoor design DB:	33.3°F	Heat loss:	22576	Btuh	Entering coil DB:	68.0°F
Indoor design DB:	68.0°F					

Manufacturer's Performance Data at Actual Design Conditions

Equipment type:	Split ASHP					
Manufacturer:	Trane		Model:	4TWR5036H1+TEM6A0D60H51++TDR		
Actual airflow:	0	cfm				
Output capacity:	31800	Btuh	141% of load		Capacity balance:	24 °F
Supplemental heat required:		0 Btuh			Economic balance:	-99 °F

Meets all requirements of ACCA Manual S.

Duct System Summary
Entire House
High Springs Electric

Job:
Date: March 21, 2024
By: Donna Brackeen
Plan: Litchfield Classic GR

Project Information

For: Brockway Residence, Red Door Homes
1108 SW Central Terr., Ft. White, FL 32038

	Heating	Cooling
External static pressure	0.50 in H2O	0.50 in H2O
Pressure losses	0.18 in H2O	0.18 in H2O
Available static pressure	0.32 in H2O	0.32 in H2O
Supply / return available pressure	0.217 / 0.103 in H2O	0.217 / 0.103 in H2O
Lowest friction rate	0.099 in/100ft	0.099 in/100ft
Actual air flow	0 cfm	1133 cfm
Total effective length (TEL)	323 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
bath	c 784	0	35	0.138	4.0	0x 0	VlFx	36.9	120.0	st5
bd2	c 1845	0	83	0.099	6.0	0x 0	VlFx	59.2	160.0	st4
bd3-A	c 3744	0	169	0.130	8.0	0x 0	VlFx	46.7	120.0	st5
family	c 2441	0	110	0.120	7.0	0x 0	VlFx	46.6	135.0	st3
flex	c 3307	0	150	0.165	7.0	0x 0	VlFx	31.7	100.0	st2
foyer	c 630	0	29	0.167	4.0	0x 0	VlFx	30.2	100.0	st2
kit dining	c 3260	0	147	0.120	7.0	0x 0	VlFx	45.7	135.0	st3
kit dining-A	c 3260	0	147	0.119	7.0	0x 0	VlFx	47.1	135.0	st3
laundry	c 903	0	41	0.196	4.0	0x 0	VlFx	15.7	95.0	st1
m bath	c 860	0	39	0.205	4.0	0x 0	VlFx	10.8	95.0	st1
m bd	c 2260	0	102	0.162	6.0	0x 0	VlFx	18.8	115.0	st1
m bd-A	c 2260	0	102	0.158	6.0	0x 0	VlFx	22.7	115.0	st1
pntry	c 457	0	21	0.099	4.0	0x 0	VlFx	59.5	160.0	st4
wic	c 170	0	8	0.202	4.0	0x 0	VlFx	12.8	95.0	st1

Supply Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st5	Peak AVF	0	205	0.130	587	8.0	0 x 0	VinlFlx	st2
st2	Peak AVF	0	383	0.130	488	12.0	0 x 0	VinlFlx	
st4	Peak AVF	0	104	0.099	390	7.0	0 x 0	VinlFlx	st3
st3	Peak AVF	0	509	0.099	477	14.0	0 x 0	VinlFlx	st1
st1	Peak AVF	0	801	0.099	574	16.0	0 x 0	VinlFlx	

Return Branch Detail Table

Name	Grille Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb2	0x 0	0	83	95.4	0.108	425	6.0	0x 0		VlFx	rt2
rb3	0x 0	0	169	103.8	0.099	485	8.0	0x 0		VlFx	rt2
rb4	0x 0	0	150	97.6	0.105	560	7.0	0x 0		VlFx	rt2
rb5	0x 0	0	251	57.8	0.178	568	9.0	0x 0		VlFx	rt1
rb1	0x 0	0	531	56.6	0.182	497	14.0	0x 0		VlFx	rt1

Return Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
rt2	Peak AVF	0	402	0.099	512	12.0	0 x 0	VinlFlx	rt1
rt1	Peak AVF	0	1184	0.099	543	20.0	0 x 0	VinlFlx	

Private Provider Plan Review
Completed by Michael Williams
Licenses: BU2215, PX4929, BN7822
Or Associated Duly Authorized Representative
FREEDOM CODE COMPLIANCE