

DEPARTMENT OF INSPECTIONS, LICENSES & PERMITS 3430 COURT HOUSE DRIVE ELLICOTT CITY, MD 21043 PERMITS (410) 313-2455 INSPECTIONS (410) 313-1850	HOWARD COUNTY RESIDENTIAL HEATING-VENTILATION-AIR CONDITIONING AND REFRIGERATION PERMIT APPLICATION	HVACR PERMIT # <u>M12000960</u> BUILDING PERMIT # <u>B12001926</u>
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BUILDING ADDRESS: <u>4831 Wharff Ln.</u> SUBDIVISION: CENSUS TRACT: LOT: BLOCK:	SUITE/APT: SECTION: TAX MAP: ZONE:	AREA: PARCEL: PROPERTY ID: MAP COORDINATES:	OWNERS NAME: <u>Bryant Okane</u> ADDRESS: <u>4831 Wharff Ln.</u> CITY: <u>Ellicott City</u> STATE: <u>MD</u> ZIP CODE: <u>21043</u> HOME PHONE: <u>410 418 8850</u> WORK PHONE:
TYPE OF IMPROVEMENTS:		USE:	

CHECK ONE	HOW MANY		COMPANY NAME: <u>Supreme Air</u>
SINGLE FAMILY DWELLING ☒	<u>2</u>	ZONES	LICENSEE NAME: <u>Alex Kougiaros</u>
SINGLE FAMILY TOWNHOUSE ☐		ZONES	ADDRESS: <u>6203 Collinsway Rd</u>
MULTI-FAMILY / HOTEL/MOTEL ☐		ROOMS	CITY: <u>Balt.</u>
ASSISTED LIVING HOMES (16 OR FEWER RESIDENTS) ☐		ROOMS	STATE: <u>MD</u> ZIP CODE: <u>21228</u>
			PHONE: <u>410-788-1111</u> HVACR LICENSE NO: <u>47207</u>

☐ New Heating and Air Conditioning
☒ New Geo Thermal System
☐ Heating System Only
☐ Ductless Mini Splits
☐ Other Work (Describe):
☐ Thru The Wall Systems

Replacement
☐ Heating
☐ Air Conditioning
☐ Heating and Air Conditioning

Additions and Alterations
☐ Heating
☐ Air Conditioning
☒ Heating and Air Conditioning

****Replacement Geo Thermal Systems are not required; However, if a tax credit is being sought a permit is required****

Zones Permit Fee = # of Zones x \$40 = <u>80</u> Technology Fee (10% of Permit Fee) = <u>8</u> Plus Application Fee <u>\$50.00</u> Total Fees Due = <u>138</u>	Rooms Permit Fee = # of Rooms x \$80 = _____ Technology Fee (10% of Permit Fee) = _____ Plus Application Fee \$50 <u>\$50.00</u> Total Fees Due = _____
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I HAVE CAREFULLY EXAMINED AND READ THIS APPLICATION AND KNOW IT IS TRUE AND CORRECT. THE WORK DESCRIBED HEREIN WILL BE PERFORMED BY A STATE HVACR LICENSED PERSON(S), AND ALL WORK WILL BE PERFORMED IN COMPLIANCE WITH APPLICABLE CODES AND STANDARDS OF HOWARD COUNTY THE STATE OF MARYLAND.

SIGNATURE OF LICENSEE: Alex Kougiaros DATE: 10/22/12
 PRINT NAME OF LICENSEE: Alex Kougiaros
 Email Address: alex@supremeairllc.com

Validation
 Check Number: 3417
 Cash: _____
 Receipt Number: 8296545

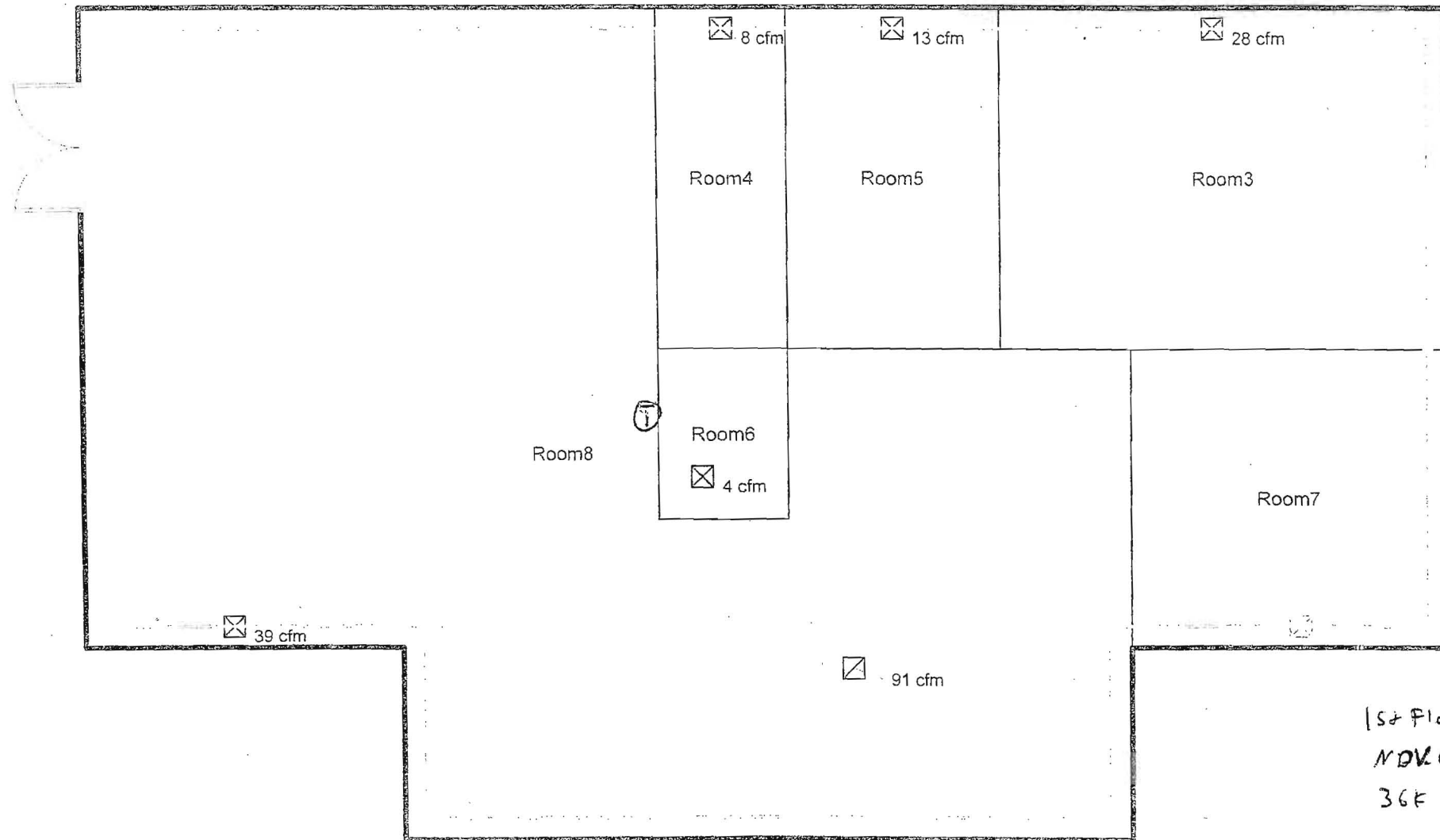
Make check payable to: DIRECTOR OF FINANCE OF HOWARD COUNTY
 Word doc: T:\Updated Forms\hvac application
 Rev:10.2009

Health & Human Services R.E.H.S.



09/20/2012

Basement



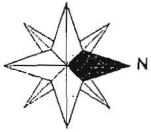
1st Floor / Basement
MDV038 / Water Furnace
36F Btu

Alexandros Kousiannos
MD St. 47207
Alexandros Kousiannos
1/8" p1

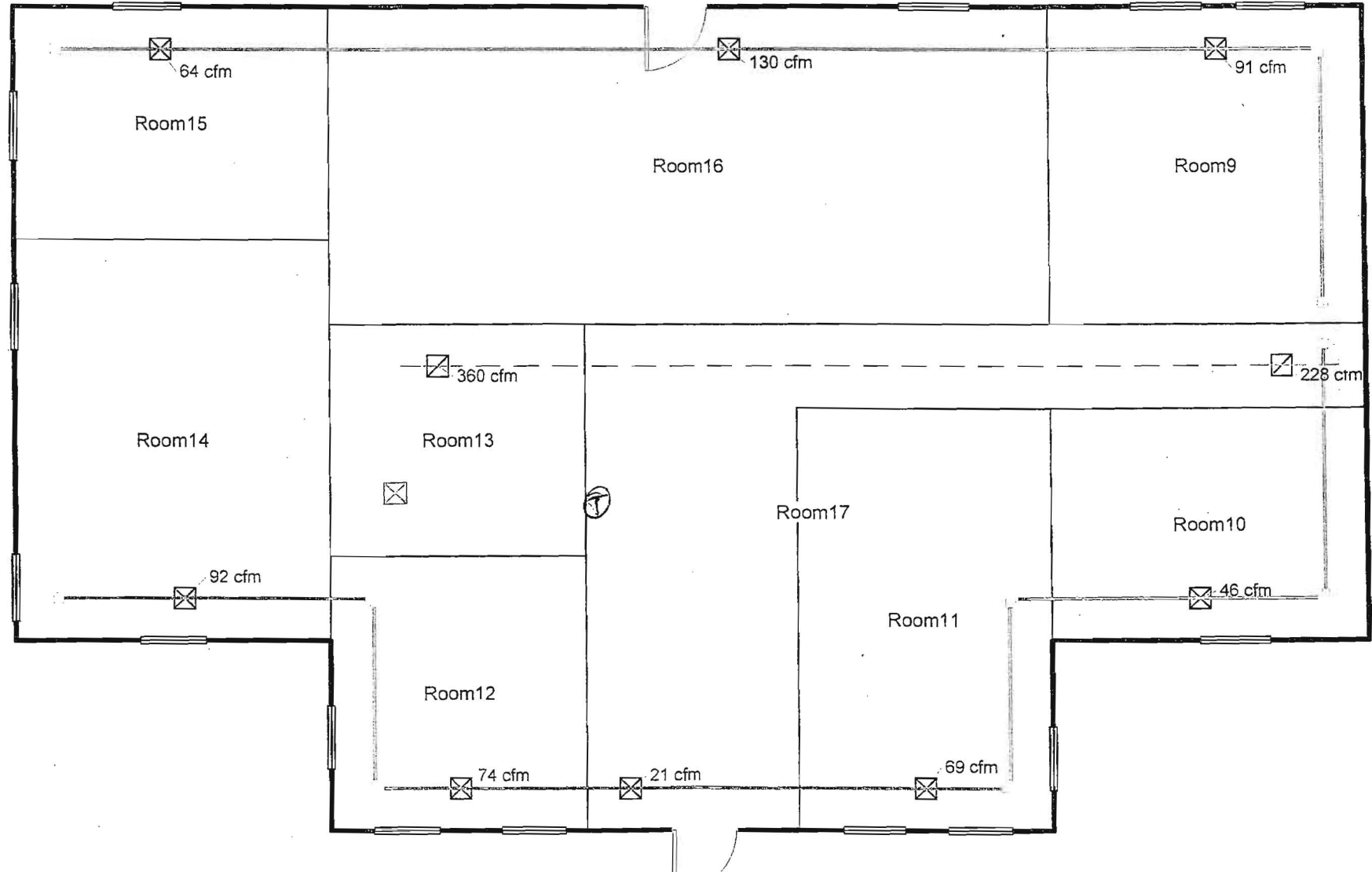
Job #:
Performed for:
Andy Spranis
7831 Wharff LN
Ellicott City, MD 21043

Supreme Air
6203 Collinsway Rd
Baltimore, MD 21228
Phone: 410-788-1114 Fax: 410-522-1178
www.supremeairllc.com Denny@supremeairllc.com

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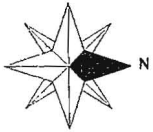
First Floor



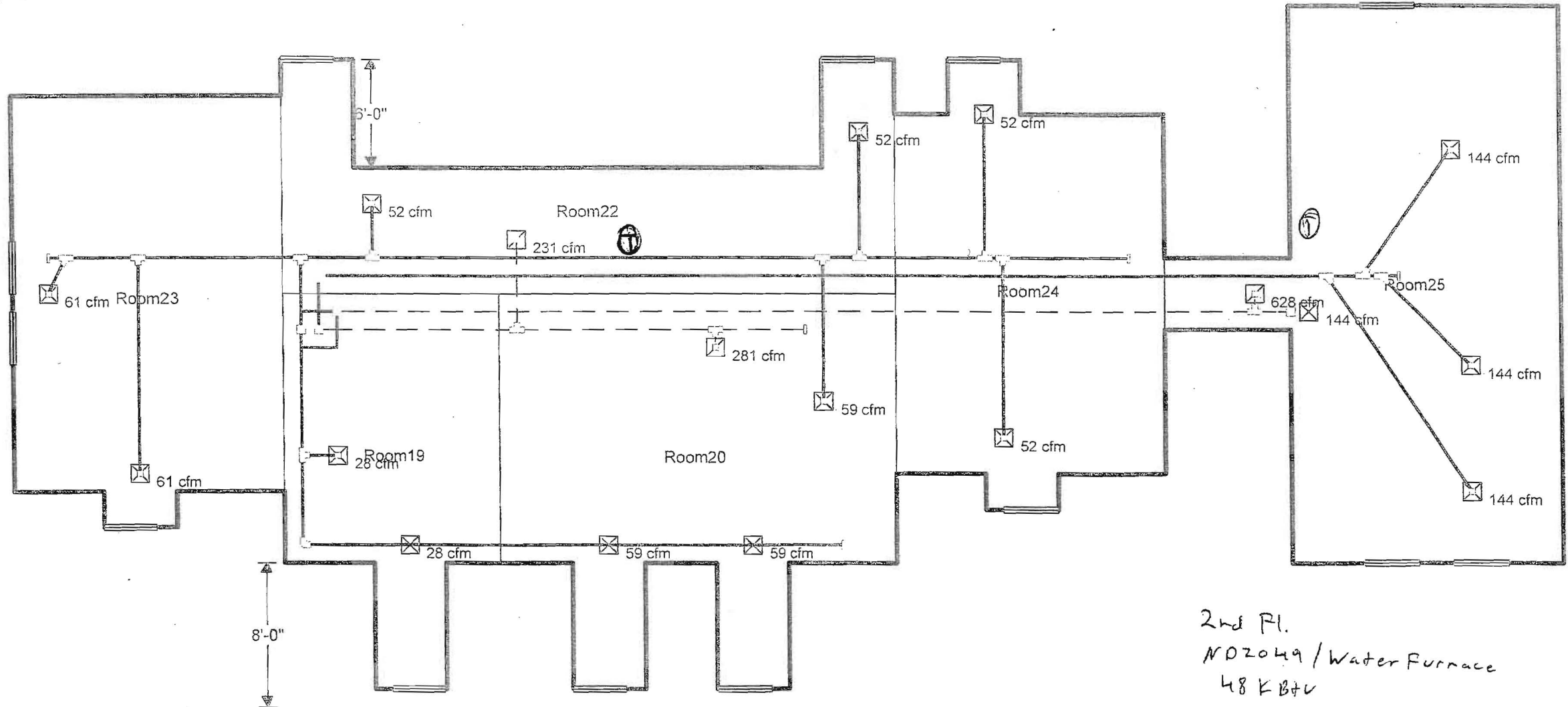
Job #:
Performed for:
Andy Spranis
7831 Wharff LN
Ellicott City, MD 21043

Supreme Air
6203 Collinsway Rd
Baltimore, MD 21228
Phone: 410-788-1114 Fax: 410-522-1178
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Scale: 1 : 85
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Second Floor



2nd Fl.
MD2049 / Water Furnace
48 KBTU

Job #:
Performed for:
Andy Spranis
7831 Wharff LN
Ellicott City, MD 21043

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Scale:
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Right-Suite® Universal 2012
12.0.11 RSU16744
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... start\Spranis, Andy\IR by R.rup

**TRANE**

Load Short Form

Entire House

Supreme Air

M/200960

Job:

Date: Sep 20, 2012

By:

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

Project Information

For: Andy Spranis
7831 Wharff LN, Ellicott City, MD 21043

Design Information

	Htg	Clg	Infiltration	
Outside db (°F)	15	94	Method	Simplified
Inside db (°F)	70	75	Construction quality	Average
Design TD (°F)	55	19	Fireplaces	0
Daily range	-	M		
Inside humidity (%)	50	50		
Moisture difference (gr/lb)	46	37		

HEATING EQUIPMENT

Make	n/a
Trade	n/a
Model	n/a
AHRI ref	n/a
Efficiency	n/a
Heating input	0 MBtuh
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	

COOLING EQUIPMENT

Make	
Trade	
Cond	4
Coil	
AHRI ref	
Efficiency	0 SEER
Sensible cooling	0 Btuh
Latent cooling	0 Btuh
Total cooling	0 Btuh
Actual air flow	1773 cfm
Air flow factor	0.044 cfm/Btuh
Static pressure	0 in H2O
Load sensible heat ratio	0.89

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
Z 1	4452	27379	15350	0	679
2nd floor	2031	35007	25774	0	1140
Entire House	6483	62386	40088	0	1773
Other equip loads		0	0		
Equip. @ 0.99 RSM			39527		
Latent cooling			4950		
TOTALS	6483	62386	44476	0	1773

Bold/italic values have been manually overridden

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



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...stomers\in progress Waiting to start\Spranis, Andy\IR by R.rup Calc = MJ8 Front Door faces:

**TRANE****Load Short Form****2nd floor****Supreme Air**

Job:

Date: Sep 20, 2012

By:

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

Project InformationFor: Andy Spranis
7831 Wharff LN, Ellicott City, MD 21043**Design Information**

	Htg	Clg	Infiltration	Simplified
Outside db (°F)	15	94	Method	Average
Inside db (°F)	70	75	Construction quality	0
Design TD (°F)	55	19	Fireplaces	
Daily range	-	M		
Inside humidity (%)	50	50		
Moisture difference (gr/lb)	46	37		

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)
Room19	208	2142	1252	0	55
Room20	386	5434	3993	0	177
Room22	286	3623	2373	0	105
Room23	338	4220	2775	0	123
Room24	320	3943	2361	0	104
Room25	493	15645	13019	0	576
2nd floor	2031	35007	25774	0	1140
Other equip loads		0	0		
Equip. @ 0.99 RSM			25413		
Latent cooling			2945		
TOTALS	2031	35007	28358	0	1140

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...stomers\in progress Waiting to start\Spranis, Andy\R by R.rup Calc = MJ8 Front Door faces:

**TRANE****Load Short Form****Z 1****Supreme Air**

Job:

Date: Sep 20, 2012

By:

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

Project Information

For: Andy Spranis
7831 Wharff LN, Ellicott City, MD 21043

Design Information

	Htg	Clg	Infiltration	Simplified
Outside db (°F)	15	94	Method	Average
Inside db (°F)	70	75	Construction quality	0
Design TD (°F)	55	19	Fireplaces	
Daily range	-	M		
Inside humidity (%)	50	50		
Moisture difference (gr/lb)	46	37		

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)
Room3	336	2715	626	0	28
Room4	96	693	179	0	8
Room5	160	1156	298	0	13
Room6	48	293	89	0	4
Room7	210	812	0	0	0
Room8	1376	4903	871	0	39
Room9	225	2267	2068	0	91
Room10	165	1766	1035	0	46
Room11	240	2014	1559	0	69
Room12	156	2021	1679	0	74
Room13	132	0	0	0	0
Room14	285	2706	2076	0	92
Room15	165	2036	1446	0	64
Room16	510	2786	2939	0	130
Room17	348	1212	484	0	21

Bold/italic values have been manually overridden

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

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Z 1	4452	27379	15350	0	679
Other equip loads		0	0		
Equip. @ 0.99 RSM			15135		
Latent cooling			2005		
TOTALS	4452	27379	17140	0	679

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...stomers\in progress Waiting to start\Sprains, Andy\R by R.rup Calc = MJ8 Front Door faces:



Load Multizone Summary Report

Supreme Air

Job:
Date: Sep 20, 2012
By:

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

Infiltration Summary

ZONE NAME	Heating				Cooling			
	Volume ft³	ACH	AVF cfm	HTM Btuh/ft²	Volume ft³	ACH	AVF cfm	HTM Btuh/ft²
Z 1	18192	0.26	79	2.9	18192	0.13	40	0.5
2nd floor	16248	0.49	134	2.9	16248	0.25	69	0.5
Entire House	34440	0.37	212	2.9	34440	0.19	109	0.5

Load and AVF Summary

ROOM NAME	Area ft²	Htg load Btuh	Clg load Btuh	Htg AVF cfm	Clg AVF cfm
Room3	336	2715	626	0	28
Room4	96	693	179	0	8
Room5	160	1156	298	0	13
Room6	48	293	89	0	4
Room7	210	812	0	0	0
Room8	1376	4903	871	0	39
Room9	225	2267	2068	0	91
Room10	165	1766	1035	0	46
Room11	240	2014	1559	0	69
Room12	156	2021	1679	0	74
Room13	132	0	0	0	0
Room14	285	2706	2076	0	92
Room15	165	2036	1446	0	64
Room16	510	2786	2939	0	130
Room17	348	1212	484	0	21
Z 1	4452	27379	15350	0	679
Room19	208	2142	1252	0	55
Room20	386	5434	3993	0	177
Room22	286	3623	2373	0	105
Room23	338	4220	2775	0	123
Room24	320	3943	2361	0	104
Room25	493	15645	13019	0	576
2nd floor	2031	35007	25774	0	1140
Entire House	6483	62386	40088	0	1773

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

Project Information

For: **Andy Spranis**
7831 Wharff LN, Ellicott City, MD 21043

Design Conditions

Location:

Baltimore, MD, US
Elevation: 154 ft
Latitude: 39°N

Outdoor:

Dry bulb (°F)
Daily range (°F)
Wet bulb (°F)
Wind speed (mph)

Heating

15

15.0

Cooling

94

19 (M)

75

7.5

Indoor:

Indoor temperature (°F)
Design TD (°F)
Relative humidity (%)
Moisture difference (gr/lb)

Infiltration:

Method
Construction quality
Fireplaces

Heating

70

55

50

45.6

Cooling

75

19

50

36.8

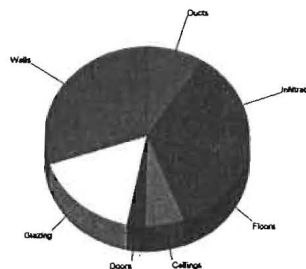
Simplified

Simplific Average

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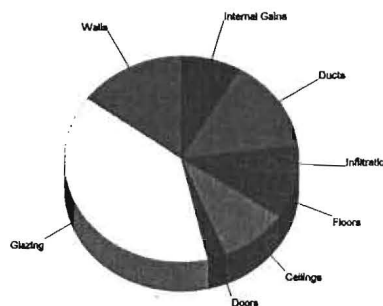
Heating

Component	Btuh/ft ²	Btuh	% of load
Walls	3.3	18788	30.1
Glazing	28.3	10418	16.7
Doors	21.4	1814	2.9
Ceilings	1.4	3851	6.2
Floors	3.3	9087	14.6
Infiltration	2.9	12778	20.5
Ducts		5651	9.1
Piping		0	0
Humidification		0	0
Ventilation		0	0
Adjustments		0	
Total		62386	100.0



Cooling

Component	Btuh/ft ²	Btuh	% of load
Walls	1.1	5983	14.9
Glazing	42.2	15526	38.7
Doors	12.0	1014	2.5
Ceilings	1.4	3799	9.5
Floors	0.9	2335	5.8
Infiltration	0.5	2219	5.5
Ducts		5942	14.8
Ventilation		0	0
Internal gains		3270	8.2
Blower		0	0
Adjustments		0	
Total		40088	100.0



Latent Cooling Load = 4950 Btuh
Overall U-value = 0.087 Btuh/ft²·°F

Data entries checked.

Bold/italic values have been manually overridden



Building Analysis 2nd floor Supreme Air

Job:
Date: Sep 20, 2012
By:

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

Project Information

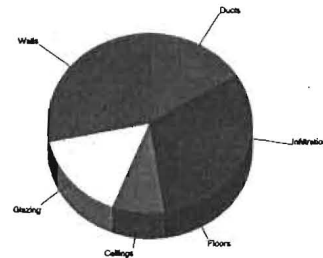
For: Andy Spranis
7831 Wharff LN, Ellicott City, MD 21043

Design Conditions

Location:		Indoor:		Heating	Cooling
Baltimore, MD, US		Indoor temperature (°F)		70	75
Elevation: 154 ft		Design TD (°F)		55	19
Latitude: 39°N		Relative humidity (%)		50	50
		Moisture difference (gr/lb)		45.6	36.8
Outdoor:		Heating	Cooling		
Dry bulb (°F)	15	94			
Daily range (°F)	-	19 (M)			
Wet bulb (°F)	-	75			
Wind speed (mph)	15.0	7.5			
		Infiltration:		Simplified Average	
		Method		0	
		Construction quality			
		Fireplaces			

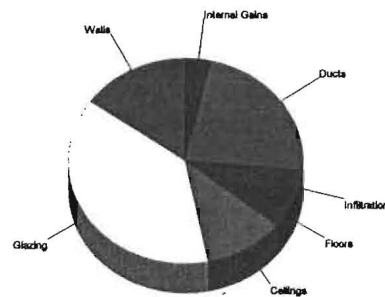
Heating

Component	Btuh/ft²	Btuh	% of load
Walls	3.7	9900	28.3
Glazing	31.0	5541	15.8
Doors	0	0	0
Ceilings	1.4	2867	8.2
Floors	6.1	3005	8.6
Infiltration	2.9	8043	23.0
Ducts		5651	16.1
Piping		0	0
Humidification		0	0
Ventilation		0	0
Adjustments		0	0
Total		35007	100.0



Cooling

Component	Btuh/ft²	Btuh	% of load
Walls	1.5	3897	15.1
Glazing	54.8	9807	38.0
Doors	0	0	0
Ceilings	1.4	2828	11.0
Floors	2.1	1016	3.9
Infiltration	0.5	1397	5.4
Ducts		5909	22.9
Ventilation		0	0
Internal gains		920	3.6
Blower		0	0
Adjustments		0	0
Total		25774	100.0



Latent Cooling Load = 2945 Btuh
Overall U-value = 0.090 Btuh/ft²-°F

Data entries checked.

Bold/italic values have been manually overridden

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

Project Information

For: Andy Spranis
7831 Wharff LN, Ellicott City, MD 21043

Design Conditions

Location:

Baltimore, MD, US
Elevation: 154 ft
Latitude: 39°N

Outdoor:

Dry bulb (°F)
Daily range (°F)
Wet bulb (°F)
Wind speed (mph)

Heating

15

15.0

Cooling

94

19 (M)

75

7.5

Indoor:

Indoor temperature (°F)
Design TD (°F)
Relative humidity (%)
Moisture difference (gr/lb)

Heating

70
55
50
45.6

Cooling

75
19
50
36.8

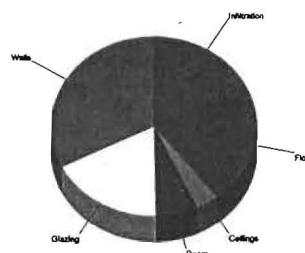
Infiltration:

Method
Construction quality
Fireplaces

Simplified
Average
0

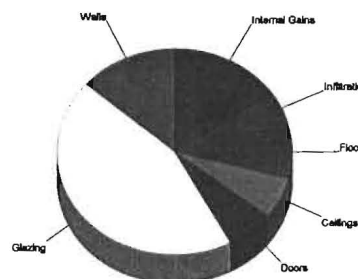
Heating

Component	Btuh/ft ²	Btuh	% of load
Walls	2.9	8888	32.5
Glazing	25.8	4877	17.8
Doors	21.4	1814	6.6
Ceilings	1.4	984	3.6
Floors	2.7	6082	22.2
Infiltration	2.9	4734	17.3
Ducts		0	0
Piping		0	0
Humidification		0	0
Ventilation		0	0
Adjustments		0	
Total		27379	100.0



Cooling

Component	Btuh/ft ²	Btuh	% of load
Walls	0.7	2086	13.6
Glazing	36.0	6788	44.2
Doors	12.0	1014	6.6
Ceilings	1.4	970	6.3
Floors	0.6	1319	8.6
Infiltration	0.5	822	5.4
Ducts		0	0
Ventilation		0	0
Internal gains		2350	15.3
Blower		0	0
Adjustments		0	
Total		15350	100.0



Latent Cooling Load = 2005 Btuh
Overall U-value = 0.085 Btuh/ft²·°F

WARNING: window to floor area ratio = 4.2% - less than 5%.

Bold/Italic values have been manually overridden



Component Constructions

Entire House

Supreme Air

Job:
Date: Sep 20, 2012
By:

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

Project Information

For: Andy Spranis
7831 Wharff LN, Ellicott City, MD 21043

Design Conditions

Location:		Indoor:		Heating	Cooling
Baltimore, MD, US		Indoor temperature (°F)		70	75
Elevation: 154 ft		Design TD (°F)		55	19
Latitude: 39°N		Relative humidity (%)		50	50
		Moisture difference (gr/lb)		45.6	36.8
Outdoor:		Heating	Cooling		
Dry bulb (°F)		15	94		
Daily range (°F)		-	19 (M)		
Wet bulb (°F)		-	75		
Wind speed (mph)		15.0	7.5		
		Infiltration:			
		Method		Simplified	
		Construction quality		Average	
		Fireplaces		0	

Construction descriptions

	Or	Area ft²	U-value Btuh/ft²·°F	Insul R ft²·°F/Btuh	Htg HTM Btuh/ft²	Loss Btuh	Clg HTM Btuh/ft²	Gain Btuh
Walls								
12E-0sw: Frn wall, vnl ext, 1/2" wood shth, r-19 cav ins, 1/2" gypsum board int fnsh, 2"x6" wood frm	n	1012	0.068	19.0	3.74	3785	1.47	1490
	e	1022	0.068	19.0	3.74	3824	1.47	1505
	s	950	0.068	19.0	3.74	3554	1.47	1399
	w	1079	0.068	19.0	3.74	4035	1.47	1589
	all	4064	0.068	19.0	3.74	15198	1.47	5983
15B11-8wc-8: Bg wall, light dry soil, 2"x4" wood int frm, concrete wall, r-12 ins, 10" thk, 1/2" gypsum board int fnsh	n	312	0.041	19.0	2.26	704	0	0
	e	512	0.041	19.0	2.26	1155	0	0
	s	270	0.041	19.0	2.14	577	0	0
	w	512	0.041	19.0	2.26	1155	0	0
	all	1606	0.041	19.0	2.23	3589	0	0

Partitions

(none)

Windows

4A5-2ov: 2 glazing, clr low-e outr, argon gas, vnl frm mat, clr innr, 1/4" gap, 1/8" thk	n	12	0.470	0	25.9	310	14.8	177
	e	156	0.470	0	25.9	4033	38.0	5935
	s	74	0.470	0	25.9	1904	21.2	1558
	w	100	0.470	0	25.9	2585	38.0	3805
	all	342	0.470	0	25.9	8832	33.6	11475
8Ci-6c: Sky glazing, small, r-6 or better curb, plywd shaft lgt shaft, clad wd sash		26	1.110	0	61.0	1586	156	4051

Doors

11D0: Door, wd sc type	e	22	0.390	0	21.4	463	12.0	259
	s	42	0.390	0	21.4	901	12.0	504
	w	21	0.390	0	21.4	450	12.0	252
	all	85	0.390	0	21.4	1814	12.0	1014

Ceilings

16B-38ad: Attic ceiling, asphalt shingles roof mat, r-38 ceil ins, 1/2" gypsum board int fnsh		2693	0.026	38.0	1.43	3851	1.41	3799
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...stomers\in progress Waiting to start\Spranis, Andy\R by R.rup Calc = MJ8 Front Door faces:

Floors

19A-0bswp: Flr floor, frm flr, 10" thkns, hrd wd flr fnsh, tight bsmt ovr	1133	0.295	0	6.10	6906	2.06	2335
21A-24t: Bg floor, light dry soil, 5' depth	1586	0.025	0	1.38	2181	0	0



Component Constructions

2nd floor

Supreme Air

Job:
Date: Sep 20, 2012
By:

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

Project Information

For: Andy Spranis
7831 Wharff LN, Ellicott City, MD 21043

Design Conditions

Location:		Indoor:		Heating	Cooling
Baltimore, MD, US		Indoor temperature (°F)		70	75
Elevation: 154 ft		Design TD (°F)		55	19
Latitude: 39°N		Relative humidity (%)		50	50
Outdoor:		Moisture difference (gr/lb)		45.6	36.8
Dry bulb (°F)	Heating 15	Cooling 94			
Daily range (°F)	-	19 (M)			
Wet bulb (°F)	-	75			
Wind speed (mph)	15.0	7.5			
		Infiltration:			
		Method		Simplified	
		Construction quality		Average	
		Fireplaces		0	

Construction descriptions

	Or	Area ft²	U-value Btuh/ft²·°F	Insul R ft²·°F/Btuh	Htg HTM Btuh/ft²	Loss Btuh	Clg HTM Btuh/ft²	Gain Btuh
Walls								
12E-0sw: Frm wall, vnl ext, 1/2" wood shth, r-19 cav ins, 1/2" gypsum board int fnsh, 2"x6" wood frm	n	712	0.068	19.0	3.74	2663	1.47	1048
	e	605	0.068	19.0	3.74	2264	1.47	891
	s	689	0.068	19.0	3.74	2576	1.47	1014
	w	641	0.068	19.0	3.74	2397	1.47	944
	all	2647	0.068	19.0	3.74	9900	1.47	3897
Partitions (none)								
Windows								
4A5-2ov: 2 glazing, clr low-e outr, argon gas, vnl frm mat, clr innr, 1/4" gap, 1/8" thk	e	83	0.470	0	25.9	2137	38.0	3145
	s	23	0.470	0	25.9	603	21.2	494
	w	47	0.470	0	25.9	1215	38.0	1788
	all	153	0.470	0	25.9	3955	35.5	5427
8Ci-6c: Sky glazing, small, r-6 or better curb, plywd shaft lgt shaft, clad wd sash		26	1.110	0	61.0	1586	156	4051
Doors (none)								
Ceilings								
16B-38ad: Attic ceiling, asphalt shingles roof mat, r-38 ceil ins, 1/2" gypsum board int fnsh		2005	0.026	38.0	1.43	2867	1.41	2828
Floors								
19A-0bswp: Flr floor, frm flr, 10" thkns, hrd wd flr fnsh, tight bsmt ovr		493	0.295	0	6.10	3005	2.06	1016



Component Constructions

Z 1

Supreme Air

Job:
Date: Sep 20, 2012
By:

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

Project Information

For: Andy Spranis
7831 Wharff LN, Ellicott City, MD 21043

Design Conditions

Location:		Indoor:		Heating	Cooling
Baltimore, MD, US		Indoor temperature (°F)		70	75
Elevation: 154 ft		Design TD (°F)		55	19
Latitude: 39°N		Relative humidity (%)		50	50
		Moisture difference (gr/lb)		45.6	36.8
Outdoor:	Heating	Cooling	Infiltration:		
Dry bulb (°F)	15	94	Method		
Daily range (°F)	-	19 (M)	Construction quality		
Wet bulb (°F)	-	75	Simplified Average		
Wind speed (mph)	15.0	7.5	Fireplaces		
			0		

Construction descriptions

Construction descriptions	Or	Area ft²	U-value Btuh/ft²·°F	Insul R ft²·°F/Btuh	Htg HTM Btuh/ft²	Loss Btuh	Clg HTM Btuh/ft²	Gain Btuh
Walls								
12E-0sw: Frm wall, vnl ext, 1/2" wood shth, r-19 cav ins, 1/2" gypsum board int fnsh, 2"x6" wood frm	n	300	0.068	19.0	3.74	1122	1.47	442
	e	417	0.068	19.0	3.74	1560	1.47	614
	s	262	0.068	19.0	3.74	979	1.47	385
	w	438	0.068	19.0	3.74	1638	1.47	645
	all	1417	0.068	19.0	3.74	5299	1.47	2086
15B11-8wc-8: Bg wall, light dry soil, 2"x4" wood int frm, concrete wall, r-12 ins, 10" thk, 1/2" gypsum board int fnsh	n	312	0.041	19.0	2.26	704	0	0
	e	512	0.041	19.0	2.26	1155	0	0
	s	270	0.041	19.0	2.14	577	0	0
	w	512	0.041	19.0	2.26	1155	0	0
	all	1606	0.041	19.0	2.23	3589	0	0
Partitions								
(none)								
Windows								
4A5-2ov: 2 glazing, clr low-e outr, argon gas, vnl frm mat, clr innr, 1/4" gap, 1/8" thk	n	12	0.470	0	25.9	310	14.8	177
	e	73	0.470	0	25.9	1896	38.0	2790
	s	50	0.470	0	25.9	1301	21.2	1065
	w	53	0.470	0	25.9	1370	38.0	2016
	all	189	0.470	0	25.8	4877	32.1	6048
Doors								
11D0: Door, wd sc type	e	22	0.390	0	21.4	463	12.0	259
	s	42	0.390	0	21.4	901	12.0	504
	w	21	0.390	0	21.4	450	12.0	252
	all	85	0.390	0	21.4	1814	12.0	1014
Ceilings								
16B-38ad: Attic ceiling, asphalt shingles roof mat, r-38 ceil ins, 1/2" gypsum board int fnsh		688	0.026	38.0	1.43	984	1.41	970
Floors								
19A-0bswp: Flr floor, frm flr, 10" thkns, hrd wd flr fnsh, tight bsmt ovr		640	0.295	0	6.10	3901	2.06	1319

21A-24t: Bg floor, light dry soil, 5' depth

1586 0.025 0 1.38 2181 0 0



Project Summary

Entire House

Supreme Air

Job:
Date: Sep 20, 2012
By:

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

Project Information

For: Andy Spranis
7831 Wharff LN, Ellicott City, MD 21043

Notes:

Design Information

Weather: Baltimore, MD, US

Winter Design Conditions

Outside db	15 °F
Inside db	70 °F
Design TD	55 °F

Summer Design Conditions

Outside db	94 °F
Inside db	75 °F
Design TD	19 °F
Daily range	M
Relative humidity	50 %
Moisture difference	37 gr/lb

Heating Summary

Structure	56735 Btuh
Ducts	5651 Btuh
Central vent (0 cfm)	0 Btuh
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	62386 Btuh

Sensible Cooling Equipment Load Sizing

Structure	34146 Btuh
Ducts	5942 Btuh
Central vent (0 cfm)	0 Btuh
Blower	0 Btuh
Use manufacturer's data	n
Rate/swing multiplier	0.99
Equipment sensible load	39527 Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	0
Area (ft ²)	Heating 6483 Cooling 6483
Volume (ft ³)	34440 34440
Air changes/hour	0.37 0.19
Equip. AVF (cfm)	212 109

Latent Cooling Equipment Load Sizing

Structure	4513 Btuh
Ducts	437 Btuh
Central vent (0 cfm)	0 Btuh
Equipment latent load	4950 Btuh
Equipment total load	44476 Btuh
Req. total capacity at 0.70 SHR	4.7 ton

Heating Equipment Summary

Make	n/a
Trade	n/a
Model	n/a
AHRI ref	n/a
Efficiency	n/a
Heating input	0 MBtuh
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	

Cooling Equipment Summary

Make	
Trade	
Cond	4
Coil	
AHRI ref	
Efficiency	0 SEER
Sensible cooling	0 Btuh
Latent cooling	0 Btuh
Total cooling	0 Btuh
Actual air flow	1773 cfm
Air flow factor	0.044 cfm/Btuh
Static pressure	0 in H2O
Load sensible heat ratio	0.89

Bold/italic values have been manually overridden

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



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Project Summary

2nd floor

Supreme Air

Job:
Date: Sep 20, 2012
By:

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

Project Information

For: Andy Spranis
7831 Wharff LN, Ellicott City, MD 21043

Notes:

Design Information

Weather: Baltimore, MD, US

Winter Design Conditions

Outside db	15 °F
Inside db	70 °F
Design TD	55 °F

Summer Design Conditions

Outside db	94 °F
Inside db	75 °F
Design TD	19 °F
Daily range	M
Relative humidity	50 %
Moisture difference	37 gr/lb

Heating Summary

Structure	29356 Btuh
Ducts	5651 Btuh
Central vent (0 cfm)	0 Btuh
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	35007 Btuh

Sensible Cooling Equipment Load Sizing

Structure	19865 Btuh
Ducts	5909 Btuh
Central vent (0 cfm)	0 Btuh
Blower	0 Btuh
Use manufacturer's data	n
Rate/swing multiplier	0.99
Equipment sensible load	25413 Btuh

Infiltration

Method	Simplified	
Construction quality	Average	
Fireplaces	0	
	Heating	Cooling
Area (ft²)	2031	2031
Volume (ft³)	16248	16248
Air changes/hour	0.49	0.25
Equiv. AVF (cfm)	134	69

Latent Cooling Equipment Load Sizing

Structure	2508 Btuh
Ducts	437 Btuh
Central vent (0 cfm)	0 Btuh
Equipment latent load	2945 Btuh
Equipment total load	28358 Btuh
Req. total capacity at 0.70 SHR	3.0 ton

Heating Equipment Summary

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

Cooling Equipment Summary

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

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



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Project Summary

Z 1

Supreme Air

Job:
Date: Sep 20, 2012
By:

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

Project Information

For: Andy Spranis
7831 Wharff LN, Ellicott City, MD 21043

Notes:

Design Information

Weather: Baltimore, MD, US

Winter Design Conditions

Outside db	15 °F
Inside db	70 °F
Design TD	55 °F

Summer Design Conditions

Outside db	94 °F
Inside db	75 °F
Design TD	19 °F
Daily range	M
Relative humidity	50 %
Moisture difference	37 gr/lb

Heating Summary

Structure	27379 Btuh
Ducts	0 Btuh
Central vent (0 cfm)	0 Btuh
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	27379 Btuh

Sensible Cooling Equipment Load Sizing

Structure	15350 Btuh
Ducts	0 Btuh
Central vent (0 cfm)	0 Btuh
Blower	0 Btuh
Use manufacturer's data	n
Rate/swing multiplier	0.99
Equipment sensible load	15135 Btuh

Infiltration

Method	Simplified	
Construction quality	Average	
Fireplaces	0	
	Heating	Cooling
Area (ft ²)	4452	4452
Volume (ft ³)	18192	18192
Air changes/hour	0.26	0.13
Equip. AVF (cfm)	79	40

Latent Cooling Equipment Load Sizing

Structure	2005 Btuh
Ducts	0 Btuh
Central vent (0 cfm)	0 Btuh
Equipment latent load	2005 Btuh
Equipment total load	17140 Btuh
Req. total capacity at 0.70 SHR	1.8 ton

Heating Equipment Summary

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

Cooling Equipment Summary

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

Bold/italic values have been manually overridden

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



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**TRANE**

AED Assessment Entire House Supreme Air

Job:
Date: Sep 20, 2012
By:

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

Project Information

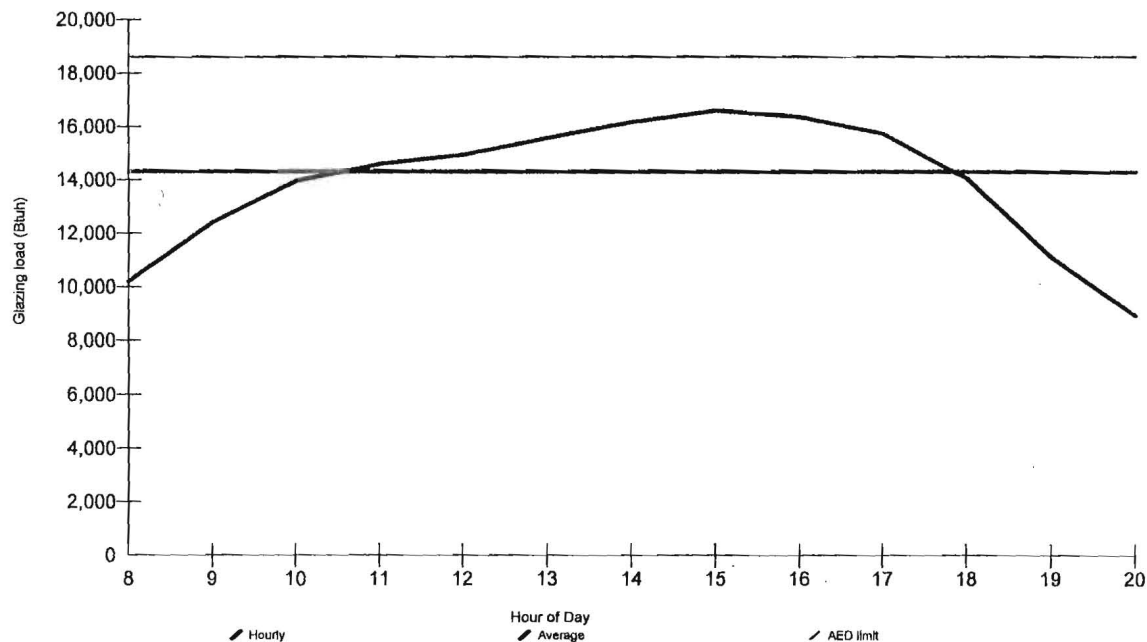
For: Andy Spranis
7831 Wharff LN, Ellicott City, MD 21043

Design Conditions

Location:		Indoor:		Heating	Cooling
Baltimore, MD, US		Indoor temperature (°F)		70	75
Elevation:	154 ft	Design TD (°F)		55	19
Latitude:	39°N	Relative humidity (%)		50	50
		Moisture difference (gr/lb)		45.6	36.8
Outdoor:		Heating	Cooling	Infiltration:	
Dry bulb (°F)		15	94		
Daily range (°F)		-	19 (M)		
Wet bulb (°F)		-	75		
Wind speed (mph)		15.0	7.5		

Test for Adequate Exposure Diversity

Hourly Glazing Load



Maximum hourly glazing load exceeds average by 16.0%.

House has adequate exposure diversity (AED), based on AED limit of 30%.

AED excursion: 0 Btuh

Bold/italic values have been manually overridden



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Page 1



AED Assessment
2nd floor
Supreme Air

Job:
Date: Sep 20, 2012
By:

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

Project Information

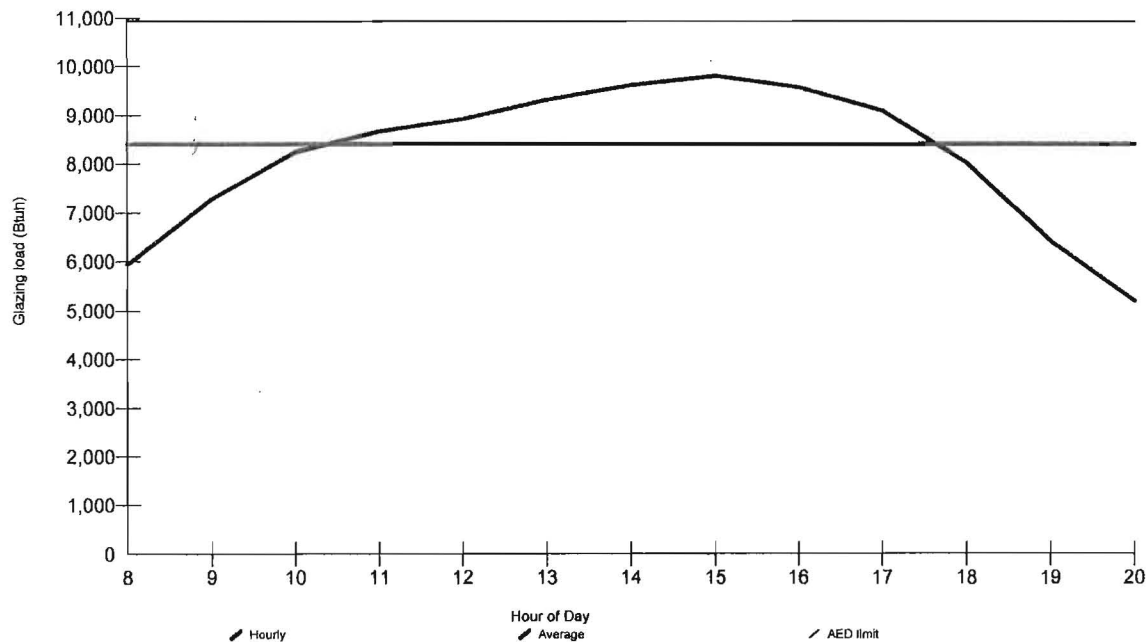
For: Andy Spranis
7831 Wharff LN, Ellicott City, MD 21043

Design Conditions

Location:		Indoor:		Heating	Cooling
Baltimore, MD, US		Indoor temperature (°F)		70	75
Elevation: 154 ft		Design TD (°F)		55	19
Latitude: 39°N		Relative humidity (%)		50	50
		Moisture difference (gr/lb)		45.6	36.8
Outdoor:	Heating	Cooling	Infiltration:		
Dry bulb (°F)	15	94			
Daily range (°F)	-	19 (M)			
Wet bulb (°F)	-	75			
Wind speed (mph)	15.0	7.5			

Test for Adequate Exposure Diversity

Hourly Glazing Load



Maximum hourly glazing load exceeds average by 16.6%.

Zone has adequate exposure diversity (AED), based on AED limit of 30%.

AED excursion: 329 Btuh (PFG - ALP)

Bold/italic values have been manually overridden



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...stomers in progress Waiting to start Spranis, Andy R by R.rup Calc = MJ8 Front Door faces:

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**TRANE****AED Assessment****Z 1****Supreme Air**

Job:

Date: Sep 20, 2012

By:

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

Project Information

For: Andy Spranis
7831 Wharff LN, Ellicott City, MD 21043

Design Conditions**Location:**

Baltimore, MD, US
Elevation: 154 ft
Latitude: 39°N

Indoor:

Indoor temperature (°F)
Design TD (°F)
Relative humidity (%)
Moisture difference (gr/lb)

Heating

70
55
50
45.6

Cooling

75
19
50
36.8

Outdoor:

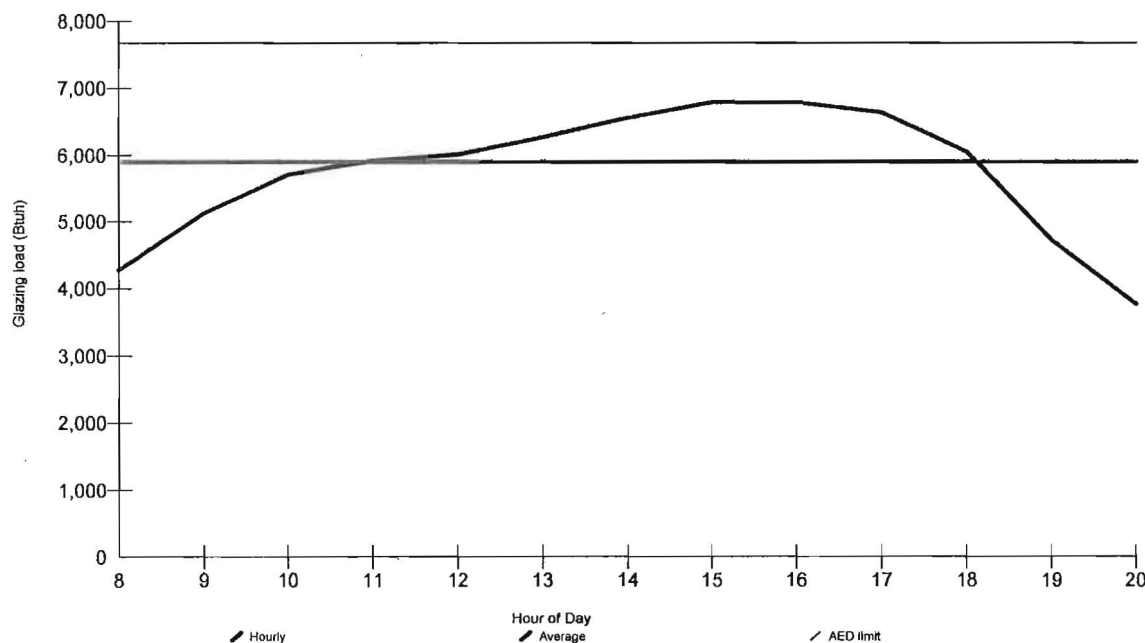
Dry bulb (°F)
Daily range (°F)
Wet bulb (°F)
Wind speed (mph)

Heating

15
-
-
15.0

Cooling

94
19 (M)
75
7.5

Infiltration:**Test for Adequate Exposure Diversity****Hourly Glazing Load****Maximum hourly glazing load exceeds average by 15.0%.****Zone has adequate exposure diversity (AED), based on AED limit of 30%.****AED excursion: 740 Btuh (PFG - ALP)***Bold/Italic values have been manually overridden***wrightsoft®**

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Page 3

...stomers\in progress Waiting to start\Spranis, Andy\R by R.rup Calc = MJ8 Front Door faces:



Right-J® Worksheet

Entire House

Supreme Air

Job:
Date: Sep 20, 2012
By:

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

1	Room name					Entire House					Z 1				
2	Exposed wall					762.0 ft					412.0 ft				
3	Room height					8.0 ft					8.0 ft				
4	Room dimensions					6483.0 ft²					4452.0 ft²				
5	Room area														
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)		
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool	
6	W	12E-0sw	0.068	n	3.74	1.47	1024	1012	3785	1490	312	300	1122	442	
	G	4A5-2ov	0.470	n	25.85	14.78	12	0	310	177	12	0	310	177	
	W	15B11-8wc-8	0.055	n	2.26	0.00	312	312	704	0	312	312	704	0	
11	W	12E-0sw	0.068	e	3.74	1.47	1200	1022	3824	1505	512	417	1560	614	
	G	4A5-2ov	0.470	e	25.85	38.05	156	0	4033	5935	73	0	1896	2790	
	D	11D0	0.390	e	21.45	11.99	22	22	463	259	22	22	463	259	
	W	15B11-8wc-8	0.055	e	2.26	0.00	512	512	1155	0	512	512	1155	0	
	W	12E-0sw	0.068	s	3.74	1.47	1024	950	3554	1399	312	262	979	385	
	G	4A5-2ov	0.470	s	25.85	21.15	74	0	1904	1558	50	0	1301	1065	
	W	15B11-8wc-8	0.055	s	2.14	0.00	312	270	577	0	312	270	577	0	
	D	11D0	0.390	s	21.45	11.99	42	42	901	504	42	42	901	504	
	W	12E-0sw	0.068	w	3.74	1.47	1200	1079	4035	1589	512	438	1638	645	
	G	4A5-2ov	0.470	w	25.85	38.05	100	0	2585	3805	53	0	1370	2016	
	D	11D0	0.390	w	21.45	11.99	21	21	450	252	21	21	450	252	
W	15B11-8wc-8	0.055	w	2.26	0.00	512	512	1155	0	512	512	1155	0		
C	16B-38ad	0.026	-	1.43	1.41	2719	2693	3851	3799	688	688	984	970		
G	8Ci-6c	1.110	-	61.05	155.98	26	0	1586	4051	0	0	0	0		
F	19A-0bswp	0.295	-	6.10	2.06	1133	1133	6906	2335	640	640	3901	1319		
F	21A-24t	0.025	-	1.38	0.00	1586	1586	2181	0	1586	1586	2181	0		
6	c) AED excursion									0				740	
	Envelope loss/gain								43957	28657			22645	12178	
12	a) Infiltration								12778	2219			4734	822	
	b) Room ventilation								0	0			0	0	
13	Internal gains:		Occupants @	230			9			2070	5			1150	
			Appliances/other							1200				1200	
	Subtotal (lines 6 to 13)								56735	34146			27379	15350	
	Less external load								0	0			0	0	
	Less transfer								0	0			0	0	
	Redistribution								0	0			0	0	
14	Subtotal								56735	34146			27379	15350	
15	Duct loads							10%	5651	5942	0%	0%	0	0	
	Total room load								62386	40088			27379	15350	
	Air required (cfm)								0	1773			0	679	

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



Right-J® Worksheet

Entire House

Supreme Air

Job:
Date: Sep 20, 2012
By:

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

1	Room name					2nd floor								
2	Exposed wall					350.0 ft								
3	Room height					8.0 ft								
4	Room dimensions													
5	Room area					2031.0 ft²								
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area or perimeter		Load	
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool
6	W	12E-0sw	0.068	n	3.74	1.47	712	712	2663	1048				
	G	4A5-2ov	0.470	n	25.85	14.78	0	0	0	0				
	W	15B11-8wc-8	0.055	n	2.26	0.00	0	0	0	0				
	W	12E-0sw	0.068	e	3.74	1.47	688	605	2264	891				
11	G	4A5-2ov	0.470	e	25.85	38.05	83	0	2137	3145				
	D	11D0	0.390	e	21.45	11.99	0	0	0	0				
	W	15B11-8wc-8	0.055	e	2.26	0.00	0	0	0	0				
	W	12E-0sw	0.068	s	3.74	1.47	712	689	2576	1014				
	G	4A5-2ov	0.470	s	25.85	21.15	23	0	603	494				
	W	15B11-8wc-8	0.055	s	2.14	0.00	0	0	0	0				
	D	11D0	0.390	s	21.45	11.99	0	0	0	0				
	W	12E-0sw	0.068	w	3.74	1.47	688	641	2397	944				
	G	4A5-2ov	0.470	w	25.85	38.05	47	0	1215	1788				
	D	11D0	0.390	w	21.45	11.99	0	0	0	0				
	W	15B11-8wc-8	0.055	w	2.26	0.00	0	0	0	0				
	C	16B-38ad	0.026	-	1.43	1.41	2031	2005	2867	2828				
	G	8Cl-6c	1.110	-	61.05	155.98	26	0	1586	4051				
	F	19A-0bswp	0.295	-	6.10	2.06	493	493	3005	1016				
	F	21A-24t	0.025	-	1.38	0.00	0	0	0	0				
6	c) AED excursion									329				
	Envelope loss/gain								21313	17548				
12	a) Infiltration								8043	1397				
	b) Room ventilation								0	0				
13	Internal gains: Occupants @ 230 Appliances/other						4			920				
	Subtotal (lines 6 to 13)								29356	19865				
	Less external load								0	0				
	Less transfer								0	0				
	Redistribution								0	0				
14	Subtotal								29356	19865				
15	Duct loads						19%	30%	5651	5909				
	Total room load								35007	25774				
	Air required (cfm)								0	1140				

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



Right-J® Worksheet

2nd floor

Supreme Air

Job:
Date: Sep 20, 2012
By:

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

1 Room name					2nd floor					Room19				
2 Exposed wall					350.0 ft					30.0 ft				
3 Room height					8.0 ft					8.0 ft				
4 Room dimensions					2031.0 ft²					1.0 x 208.0 ft				
5 Room area										208.0 ft²				
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)	
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool
6	W	12E-0sw	0.068	n	3.74	1.47	712	712	2663	1048	56	56	209	82
	G	4A5-2ov	0.470	n	0.00	0.00	0	0	0	0	0	0	0	0
	W	15B11-8wc-8	0.055	n	0.00	0.00	0	0	0	0	0	0	0	0
	W	12E-0sw	0.068	e	3.74	1.47	688	605	2264	891	96	84	315	124
11	G	4A5-2ov	0.470	e	25.85	38.05	83	0	2137	3145	12	0	302	444
	D	11D0	0.390	e	0.00	0.00	0	0	0	0	0	0	0	0
	W	15B11-8wc-8	0.055	e	0.00	0.00	0	0	0	0	0	0	0	0
	W	12E-0sw	0.068	s	3.74	1.47	712	689	2576	1014	88	88	329	130
	G	4A5-2ov	0.470	s	25.85	21.15	23	0	603	494	0	0	0	0
	W	15B11-8wc-8	0.055	s	0.00	0.00	0	0	0	0	0	0	0	0
	D	11D0	0.390	s	0.00	0.00	0	0	0	0	0	0	0	0
	W	12E-0sw	0.068	w	3.74	1.47	688	641	2397	944	0	0	0	0
	G	4A5-2ov	0.470	w	25.85	38.05	47	0	1215	1788	0	0	0	0
	D	11D0	0.390	w	0.00	0.00	0	0	0	0	0	0	0	0
	W	15B11-8wc-8	0.055	w	0.00	0.00	0	0	0	0	0	0	0	0
	C	16B-38ad	0.026	-	1.43	1.41	2031	2005	2867	2828	208	208	297	293
	G	8Cl-6c	1.110	-	61.05	155.98	26	0	1586	4051	0	0	0	0
	F	19A-0bswp	0.295	-	6.10	2.06	493	493	3005	1016	0	0	0	0
	F	21A-24t	0.025	-	0.00	0.00	0	0	0	0	0	0	0	0
6	c) AED excursion									329				59
	Envelope loss/gain								21313	17548			1453	1132
12	a) Infiltration								8043	1397			689	120
	b) Room ventilation								0	0			0	0
13	Internal gains: Occupants @ 230 Appliances/other						4			920	0			0
	Subtotal (lines 6 to 13)								29356	19865			2142	1252
	Less external load								0	0			0	0
	Less transfer								0	0			0	0
	Redistribution								0	0			0	0
14	Subtotal								29356	19865			2142	1252
15	Duct loads						19%	30%	5651	5909	-0%	0%	0	0
	Total room load								35007	25774			2142	1252
	Air required (cfm)								0	1140			0	55

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



Right-J® Worksheet

2nd floor

Supreme Air

Job:
Date: Sep 20, 2012
By:

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

1	Room name					Room20					Room22				
2	Exposed wall					55.0 ft					51.0 ft				
3	Room height					8.0 ft					8.0 ft				
4	Room dimensions					1.0 x 386.0 ft					1.0 x 286.0 ft				
5	Room area					386.0 ft²					286.0 ft²				
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)		
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool	
6	W	12E-0sw	0.068	n	3.74	1.47	152	152	568	224	72	72	269	106	
	G	4A5-2ov	0.470	n	0.00	0.00	0	0	0	0	0	0	0	0	
	W	15B11-8wc-8	0.055	n	0.00	0.00	0	0	0	0	0	0	0	0	
11	W	12E-0sw	0.068	e	3.74	1.47	176	153	571	225	0	0	0	0	
	G	4A5-2ov	0.470	e	25.85	38.05	23	0	603	888	0	0	0	0	
	D	11D0	0.390	e	0.00	0.00	0	0	0	0	0	0	0	0	
	W	15B11-8wc-8	0.055	e	0.00	0.00	0	0	0	0	0	0	0	0	
	W	12E-0sw	0.068	s	3.74	1.47	112	112	419	165	64	64	239	94	
	G	4A5-2ov	0.470	s	25.85	21.15	0	0	0	0	0	0	0	0	
	W	15B11-8wc-8	0.055	s	0.00	0.00	0	0	0	0	0	0	0	0	
	D	11D0	0.390	s	0.00	0.00	0	0	0	0	0	0	0	0	
	W	12E-0sw	0.068	w	3.74	1.47	0	0	0	0	272	249	930	366	
	G	4A5-2ov	0.470	w	25.85	38.05	0	0	0	0	23	0	603	888	
	D	11D0	0.390	w	0.00	0.00	0	0	0	0	0	0	0	0	
W	15B11-8wc-8	0.055	w	0.00	0.00	0	0	0	0	0	0	0	0		
C	16B-38ad	0.026	-	1.43	1.41	386	386	552	544	286	286	409	403		
	G	8Cl-6c	1.110	-	61.05	155.98	0	0	0	0	0	0	0	0	
	F	19A-0bswp	0.295	-	6.10	2.06	0	0	0	0	0	0	0	0	
	F	21A-24t	0.025	-	0.00	0.00	0	0	0	0	0	0	0	0	
6	c) AED excursion									111				312	
	Envelope loss/gain								2713	2157			2451	2170	
12	a) Infiltration								1264	220			1172	204	
	b) Room ventilation								0	0			0	0	
13	Internal gains:		Occupants @	230			1			230	0			0	
			Appliances/other							0				0	
	Subtotal (lines 6 to 13)								3977	2606			3623	2373	
	Less external load								0	0			0	0	
	Less transfer								0	0			0	0	
	Redistribution								0	0			0	0	
14	Subtotal								3977	2606			3623	2373	
15	Duct loads						37%	53%	1457	1387	-0%	0%	0	0	
	Total room load								5434	3993			3623	2373	
	Air required (cfm)								0	177			0	105	

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



Right-J® Worksheet

2nd floor

Supreme Air

Job:
Date: Sep 20, 2012
By:

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

1	Room name					Room23					Room24				
2	Exposed wall					56.0 ft					56.0 ft				
3	Room height					8.0 ft					8.0 ft				
4	Room dimensions					1.0 x 338.0 ft					1.0 x 320.0 ft				
5	Room area					338.0 ft²					320.0 ft²				
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)		
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool	
6	W	12E-0sw	0.068	n	3.74	1.47	16	16	60	24	168	168	628	247	
11	G	4A5-2ov	0.470	n	0.00	0.00	0	0	0	0	0	0	0	0	
	W	15B11-8wc-8	0.055	n	0.00	0.00	0	0	0	0	0	0	0	0	
	W	12E-0sw	0.068	e	3.74	1.47	120	108	405	159	120	108	404	159	
	G	4A5-2ov	0.470	e	25.85	38.05	12	0	302	444	12	0	310	457	
	D	11D0	0.390	e	0.00	0.00	0	0	0	0	0	0	0	0	
	W	15B11-8wc-8	0.055	e	0.00	0.00	0	0	0	0	0	0	0	0	
	W	12E-0sw	0.068	s	3.74	1.47	192	169	631	248	40	40	150	59	
	G	4A5-2ov	0.470	s	25.85	21.15	23	0	603	494	0	0	0	0	
	W	15B11-8wc-8	0.055	s	0.00	0.00	0	0	0	0	0	0	0	0	
	D	11D0	0.390	s	0.00	0.00	0	0	0	0	0	0	0	0	
	W	12E-0sw	0.068	w	3.74	1.47	120	120	449	177	120	108	405	159	
	G	4A5-2ov	0.470	w	25.85	38.05	0	0	0	0	12	0	302	444	
	D	11D0	0.390	w	0.00	0.00	0	0	0	0	0	0	0	0	
	W	15B11-8wc-8	0.055	w	0.00	0.00	0	0	0	0	0	0	0	0	
	C	16B-38ad	0.026	-	1.43	1.41	338	338	483	477	320	320	458	451	
	G	8Ci-6c	1.110	-	61.05	155.98	0	0	0	0	0	0	0	0	
	F	19A-0bswp	0.295	-	6.10	2.06	0	0	0	0	0	0	0	0	
F	21A-24t	0.025	-	0.00	0.00	0	0	0	0	0	0	0	0		
6	c) AED excursion									300				-69	
	Envelope loss/gain								2933	2322			2656	1908	
12	a) Infiltration								1287	223			1287	223	
	b) Room ventilation								0	0			0	0	
13	Internal gains: Occupants @ 230 Appliances/other						1			230	1			230	
	Subtotal (lines 6 to 13)								4220	2775			3943	2361	
14	Less external load								0	0			0	0	
	Less transfer								0	0			0	0	
	Redistribution								0	0			0	0	
	Subtotal								4220	2775			3943	2361	
15	Duct loads						-0%	0%	0	0	-0%	0%	0	0	
	Total room load								4220	2775			3943	2361	
	Air required (cfm)								0	123			0	104	

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



Right-J® Worksheet

2nd floor

Supreme Air

Job:
Date: Sep 20, 2012
By:

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

1	Room name					Room25								
2	Exposed wall					102.0 ft								
3	Room height					8.0 ft					heat/cool			
4	Room dimensions					1.0 x 493.0 ft								
5	Room area					493.0 ft²								
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area or perimeter		Load	
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool
6	W	12E-0sw	0.068	n	3.74	1.47	248	248	928	365				
	G	4A5-2ov	0.470	n	0.00	0.00	0	0	0	0				
	W	15B11-8wc-8	0.055	n	0.00	0.00	0	0	0	0				
	W	12E-0sw	0.068	e	3.74	1.47	176	152	568	224				
11	G	4A5-2ov	0.470	e	25.85	38.05	24	0	620	913				
	D	11D0	0.390	e	0.00	0.00	0	0	0	0				
	W	15B11-8wc-8	0.055	e	0.00	0.00	0	0	0	0				
	W	12E-0sw	0.068	s	3.74	1.47	216	216	808	318				
	G	4A5-2ov	0.470	s	25.85	21.15	0	0	0	0				
	W	15B11-8wc-8	0.055	s	0.00	0.00	0	0	0	0				
	D	11D0	0.390	s	0.00	0.00	0	0	0	0				
	W	12E-0sw	0.068	w	3.74	1.47	176	164	613	241				
	G	4A5-2ov	0.470	w	25.85	38.05	12	0	310	457				
	D	11D0	0.390	w	0.00	0.00	0	0	0	0				
	W	15B11-8wc-8	0.055	w	0.00	0.00	0	0	0	0				
	C	16B-38ad	0.026	-	1.43	1.41	493	467	668	659				
	G	8Ci-6c	1.110	-	61.05	155.98	26	0	1586	4051				
	F	19A-0bswp	0.295	-	6.10	2.06	493	493	3005	1016				
	F	21A-24t	0.025	-	0.00	0.00	0	0	0	0				
8	c) AED excursion									-384				
	Envelope loss/gain									9106	7860			
12	a) Infiltration									2344	407			
	b) Room ventilation									0	0			
13	Internal gains:		Occupants @ 230	Appliances/other			1			230	0			
	Subtotal (lines 6 to 13)									11450	8497			
	Less external load									0	0			
	Less transfer									0	0			
	Redistribution									0	0			
14	Subtotal									11450	8497			
15	Duct loads						37%	53%		4194	4522			
	Total room load									15645	13019			
	Air required (cfm)									0	576			

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



Right-J® Worksheet Z1 Supreme Air

Job:
Date: Sep 20, 2012
By:

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

1	Room name					Z 1				Room3					
2	Exposed wall					412.0 ft				37.0 ft					
3	Room height					8.0 ft				8.0 ft					
4	Room dimensions									21.0 x 16.0 ft					
5	Room area					4452.0 ft²				336.0 ft²					
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)		
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool	
6	W	12E-0sw	0.068	n	3.74	1.47	312	300	1122	442	0	0	0	0	
	W	4A5-2ov	0.470	n	25.85	14.78	12	0	310	177	0	0	0	0	
	W	15B11-8wc-8	0.055	n	2.26	0.00	312	312	704	0	128	128	289	0	
11	W	12E-0sw	0.068	e	3.74	1.47	512	417	1560	614	0	0	0	0	
	W	4A5-2ov	0.470	e	25.85	38.05	73	0	1896	2790	0	0	0	0	
	W	11D0	0.390	e	21.45	11.99	22	22	463	259	0	0	0	0	
	W	15B11-8wc-8	0.055	e	2.26	0.00	512	512	1155	0	0	0	0	0	
	W	12E-0sw	0.068	s	3.74	1.47	312	262	979	385	0	0	0	0	
	W	4A5-2ov	0.470	s	25.85	21.15	50	0	1301	1065	0	0	0	0	
	W	15B11-8wc-8	0.055	s	2.14	0.00	312	270	577	0	0	0	0	0	
	W	11D0	0.390	s	21.45	11.99	42	42	901	504	0	0	0	0	
	W	12E-0sw	0.068	w	3.74	1.47	512	438	1638	645	0	0	0	0	
	W	4A5-2ov	0.470	w	25.85	38.05	53	0	1370	2016	0	0	0	0	
	W	11D0	0.390	w	21.45	11.99	21	21	450	252	0	0	0	0	
	W	15B11-8wc-8	0.055	w	2.26	0.00	512	512	1155	0	168	168	379	0	
	C	16B-38ad	0.026	-	1.43	1.41	688	688	984	970	0	0	0	0	
	F	8Ci-6c	1.110	-	0.00	0.00	0	0	0	0	0	0	0	0	
	F	19A-0bswp	0.295	-	6.10	2.06	640	640	3901	1319	336	336	2048	693	
	F	21A-24t	0.025	-	1.38	0.00	1586	1586	2181	0	0	0	0	0	
6	c) AED excursion									740				-66	
	Envelope loss/gain								22645	12178			2715	626	
12	a) Infiltration								4734	822			0	0	
	b) Room ventilation								0	0			0	0	
13	Internal gains: Occupants @ 230						5			1150	0			0	0
	Appliances/other									1200				0	0
	Subtotal (lines 6 to 13)								27379	15350			2715	626	
	Less external load								0	0			0	0	
	Less transfer								0	0			0	0	
	Redistribution								0	0			0	0	
14	Subtotal								27379	15350			2715	626	
15	Duct loads						0%	0%	0	0	-0%	0%	0	0	
	Total room load								27379	15350			2715	626	
	Air required (cfm)								0	679			0	28	

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



Right-J® Worksheet Z1 Supreme Air

Job:
Date: Sep 20, 2012
By:

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

1 Room name					Room4					Room5				
2 Exposed wall					8.0 ft 6.0 ft heat/cool					8.0 ft 10.0 ft heat/cool				
3 Room height					6.0 x 16.0 ft					10.0 x 16.0 ft				
4 Room dimensions					96.0 ft²					160.0 ft²				
5 Room area														
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)	
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool
6	W	12E-0sw	0.068	n	3.74	1.47	0	0	0	0	0	0	0	0
	G	4A5-2ov	0.470	n	25.85	14.78	0	0	0	0	0	0	0	0
	W	15B11-8wc-8	0.055	n	2.26	0.00	0	0	0	0	0	0	0	0
	W	12E-0sw	0.068	e	3.74	1.47	0	0	0	0	0	0	0	0
11	G	4A5-2ov	0.470	e	25.85	38.05	0	0	0	0	0	0	0	0
	D	11D0	0.390	e	21.45	11.99	0	0	0	0	0	0	0	0
	W	15B11-8wc-8	0.055	e	2.26	0.00	0	0	0	0	0	0	0	0
	W	12E-0sw	0.068	s	3.74	1.47	0	0	0	0	0	0	0	0
	G	4A5-2ov	0.470	s	25.85	21.15	0	0	0	0	0	0	0	0
	W	15B11-8wc-8	0.055	s	2.14	0.00	0	0	0	0	0	0	0	0
	D	11D0	0.390	s	21.45	11.99	0	0	0	0	0	0	0	0
	W	12E-0sw	0.068	w	3.74	1.47	0	0	0	0	0	0	0	0
	G	4A5-2ov	0.470	w	25.85	38.05	0	0	0	0	0	0	0	0
	D	11D0	0.390	w	21.45	11.99	0	0	0	0	0	0	0	0
	W	15B11-8wc-8	0.055	w	2.26	0.00	48	48	108	0	80	80	180	0
	C	16B-38ad	0.026	-	1.43	1.41	0	0	0	0	0	0	0	0
	G	8Ci-6c	1.110	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	19A-0bswp	0.295	-	6.10	2.06	96	96	585	198	160	160	975	330
	F	21A-24t	0.025	-	1.38	0.00	0	0	0	0	0	0	0	0
6	c) AED excursion									-19				-32
	Envelope loss/gain								693	179			1156	298
12	a) Infiltration								0	0			0	0
	b) Room ventilation								0	0			0	0
13	Internal gains: Occupants @ 230						0			0	0			0
	Appliances/other									0				0
	Subtotal (lines 6 to 13)								693	179			1156	298
	Less external load								0	0			0	0
	Less transfer								0	0			0	0
	Redistribution								0	0			0	0
14	Subtotal								693	179			1156	298
15	Duct loads						-0%	0%	0	0	-0%	0%	0	0
	Total room load								693	179			1156	298
	Air required (cfm)								0	8			0	13

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



Right-J® Worksheet Z 1

Supreme Air

Job:
Date: Sep 20, 2012
By:

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

1	Room name					Room6					Room7				
2	Exposed wall					0 ft					29.0 ft				
3	Room height					8.0 ft					8.0 ft				
4	Room dimensions					6.0 x 8.0 ft					15.0 x 14.0 ft				
5	Room area					48.0 ft²					210.0 ft²				
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)		
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool	
6	W	12E-0sw	0.068	n	3.74	1.47	0	0	0	0	0	0	0	0	
	G	4A5-2ov	0.470	n	25.85	14.78	0	0	0	0	0	0	0	0	
	W	15B11-8wc-8	0.055	n	2.26	0.00	0	0	0	0	112	112	253	0	
	W	12E-0sw	0.068	e	3.74	1.47	0	0	0	0	0	0	0	0	
11	G	4A5-2ov	0.470	e	25.85	38.05	0	0	0	0	0	0	0	0	
	D	11D0	0.390	e	21.45	11.99	0	0	0	0	0	0	0	0	
	W	15B11-8wc-8	0.055	e	2.26	0.00	0	0	0	0	120	120	271	0	
	W	12E-0sw	0.068	s	3.74	1.47	0	0	0	0	0	0	0	0	
	G	4A5-2ov	0.470	s	25.85	21.15	0	0	0	0	0	0	0	0	
	W	15B11-8wc-8	0.055	s	2.14	0.00	0	0	0	0	0	0	0	0	
	D	11D0	0.390	s	21.45	11.99	0	0	0	0	0	0	0	0	
	W	12E-0sw	0.068	w	3.74	1.47	0	0	0	0	0	0	0	0	
	G	4A5-2ov	0.470	w	25.85	38.05	0	0	0	0	0	0	0	0	
	D	11D0	0.390	w	21.45	11.99	0	0	0	0	0	0	0	0	
	W	15B11-8wc-8	0.055	w	2.26	0.00	0	0	0	0	0	0	0	0	
	C	16B-38ad	0.028	-	1.43	1.41	0	0	0	0	0	0	0	0	
	G	8Ci-6c	1.110	-	0.00	0.00	0	0	0	0	0	0	0	0	
	F	19A-0bswp	0.295	-	6.10	2.06	48	48	293	99	0	0	0	0	
	F	21A-24t	0.025	-	1.38	0.00	0	0	0	0	210	210	289	0	
6	c) AED excursion									-9				0	
	Envelope loss/gain								293	89			812	0	
12	a) Infiltration								0	0			0	0	
	b) Room ventilation								0	0			0	0	
13	Internal gains: Occupants @ 230						0			0	0			0	0
	Appliances/other									0				0	0
	Subtotal (lines 6 to 13)								293	89			812	0	0
	Less external load								0	0			0	0	0
	Less transfer								0	0			0	0	0
	Redistribution								0	0			0	0	0
14	Subtotal								293	89			812	0	0
15	Duct loads						-0%	0%	0	0		-0%	0%	0	0
	Total room load								293	89			812	0	0
	Air required (cfm)								0	4			0	0	0

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



Right-J® Worksheet

Z 1

Supreme Air

Job:

Date: Sep 20, 2012

By:

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

1 2 3 4 5	Room name		Exposed wall		Room height		Room dimensions		Room area		Room8 124.0 ft 8.0 ft heat/cool 1.0 x 1376.0 ft 1376.0 ft²		Room9 30.0 ft 8.0 ft heat/cool 15.0 x 15.0 ft 225.0 ft²	
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)	
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool
6	W	12E-0sw	0.068	n	3.74	1.47	0	0	0	0	120	120	449	177
	G	4A5-2ov	0.470	n	25.85	14.78	0	0	0	0	0	0	0	0
	W	15B11-8wc-8	0.055	n	2.26	0.00	72	72	162	0	0	0	0	0
	W	12E-0sw	0.068	e	3.74	1.47	0	0	0	0	0	0	0	0
11	G	4A5-2ov	0.470	e	25.85	38.05	0	0	0	0	0	0	0	0
	D	11D0	0.390	e	21.45	11.99	0	0	0	0	0	0	0	0
	W	15B11-8wc-8	0.055	e	2.26	0.00	392	392	884	0	0	0	0	0
	W	12E-0sw	0.068	s	3.74	1.47	0	0	0	0	0	0	0	0
	G	4A5-2ov	0.470	s	25.85	21.15	0	0	0	0	0	0	0	0
	W	15B11-8wc-8	0.055	s	2.14	0.00	312	270	577	0	0	0	0	0
	D	11D0	0.390	s	21.45	11.99	42	42	901	504	0	0	0	0
	W	12E-0sw	0.068	w	3.74	1.47	0	0	0	0	120	93	349	137
	G	4A5-2ov	0.470	w	25.85	38.05	0	0	0	0	27	0	689	1015
	D	11D0	0.390	w	21.45	11.99	0	0	0	0	0	0	0	0
	W	15B11-8wc-8	0.055	w	2.26	0.00	216	216	487	0	0	0	0	0
	C	16B-38ad	0.028	-	1.43	1.41	0	0	0	0	63	63	90	89
	G	8CI-6c	1.110	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	19A-0bswp	0.295	-	6.10	2.06	0	0	0	0	0	0	0	0
	F	21A-24t	0.025	-	1.38	0.00	1376	1376	1892	0	0	0	0	0
6	c) AED excursion									-92				300
	Envelope loss/gain								4903	411			1577	1718
12	a) Infiltration								0	0			689	120
	b) Room ventilation								0	0			0	0
13	Internal gains:		Occupants @	230			2			460	1			230
			Appliances/other							0				0
	Subtotal (lines 6 to 13)								4903	871			2267	2068
	Less external load								0	0			0	0
	Less transfer								0	0			0	0
	Redistribution								0	0			0	0
14	Subtotal								4903	871			2267	2068
15	Duct loads						-0%	0%	0	0	-0%	0%	0	0
	Total room load								4903	871			2267	2068
	Air required (cfm)								0	39			0	91

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



Right-J® Worksheet

Z 1

Supreme Air

Job:

Date: Sep 20, 2012

By:

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

1	Room name					Room10					Room11				
2	Exposed wall					26.0 ft					21.0 ft				
3	Room height					8.0 ft					8.0 ft				
4	Room dimensions					15.0 x 11.0 ft					12.0 x 20.0 ft				
5	Room area					165.0 ft²					240.0 ft²				
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)		
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool	
6	W	12E-0sw	0.068	n	3.74	1.47	88	88	329	130	72	60	224	88	
	G	4A5-2ov	0.470	n	25.85	14.78	0	0	0	0	12	0	310	177	
	W	15B11-8wc-8	0.055	n	2.26	0.00	0	0	0	0	0	0	0	0	
11	W	12E-0sw	0.068	e	3.74	1.47	120	107	399	157	96	72	271	106	
	G	4A5-2ov	0.470	e	25.85	38.05	13	0	345	507	24	0	612	900	
	D	11D0	0.390	e	21.45	11.99	0	0	0	0	0	0	0	0	
	W	15B11-8wc-8	0.055	e	2.26	0.00	0	0	0	0	0	0	0	0	
	W	12E-0sw	0.068	s	3.74	1.47	0	0	0	0	0	0	0	0	
	G	4A5-2ov	0.470	s	25.85	21.15	0	0	0	0	0	0	0	0	
	W	15B11-8wc-8	0.055	s	2.14	0.00	0	0	0	0	0	0	0	0	
	D	11D0	0.390	s	21.45	11.99	0	0	0	0	0	0	0	0	
	W	12E-0sw	0.068	w	3.74	1.47	0	0	0	0	0	0	0	0	
	G	4A5-2ov	0.470	w	25.85	38.05	0	0	0	0	0	0	0	0	
	D	11D0	0.390	w	21.45	11.99	0	0	0	0	0	0	0	0	
	W	15B11-8wc-8	0.055	w	2.26	0.00	0	0	0	0	0	0	0	0	
	C	16B-38ad	0.026	-	1.43	1.41	67	67	96	95	80	80	114	113	
	G	8Ci-6c	1.110	-	0.00	0.00	0	0	0	0	0	0	0	0	
	F	19A-0bswp	0.295	-	6.10	2.06	0	0	0	0	0	0	0	0	
	F	21A-24t	0.025	-	1.38	0.00	0	0	0	0	0	0	0	0	
	6	c) AED excursion									43				90
	Envelope loss/gain								1169	931			1531	1476	
12	a) Infiltration								598	104			483	84	
	b) Room ventilation								0	0			0	0	
13	Internal gains:		Occupants @	230			0			0	0			0	
			Appliances/other							0				0	
	Subtotal (lines 6 to 13)								1766	1035			2014	1559	
	Less external load								0	0			0	0	
	Less transfer								0	0			0	0	
	Redistribution								0	0			0	0	
14	Subtotal								1766	1035			2014	1559	
15	Duct loads						-0%	0%	0	0	-0%	0%	0	0	
	Total room load								1766	1035			2014	1559	
	Air required (cfm)								0	46			0	69	

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



wrightsoft

Right-Suite® Universal 2012 12.0.11 RSU16744

...stomers\in progress Walling to start\Sprains, Andy\R by R.rup Calc = MJ8 Front Door faces:

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Right-J® Worksheet

Z 1

Supreme Air

Job:

Date: Sep 20, 2012

By:

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

1	Room name					Room12					Room13				
2	Exposed wall					21.0 ft					0 ft				
3	Room height					8.0 ft 12.0 x 13.0 ft heat/cool					8.0 ft 12.0 x 11.0 ft heat/cool				
4	Room dimensions														
5	Room area					156.0 ft²					132.0 ft²				
	Ty	Construction number	U-value (Btuh/ft²-°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)		
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool	
6	W	12E-0sw	0.088	n	3.74	1.47	0	0	0	0	0	0	0	0	
	G	4A5-2ov	0.470	n	25.85	14.78	0	0	0	0	0	0	0	0	
	W	15B11-8wc-8	0.055	n	2.26	0.00	0	0	0	0	0	0	0	0	
11	W	12E-0sw	0.068	e	3.74	1.47	96	72	269	106	0	0	0	0	
	G	4A5-2ov	0.470	e	25.85	38.05	24	0	620	913	0	0	0	0	
	D	11D0	0.390	e	21.45	11.99	0	0	0	0	0	0	0	0	
	W	15B11-8wc-8	0.055	e	2.26	0.00	0	0	0	0	0	0	0	0	
	W	12E-0sw	0.068	s	3.74	1.47	72	60	224	88	0	0	0	0	
	G	4A5-2ov	0.470	s	25.85	21.15	12	0	310	254	0	0	0	0	
	W	15B11-8wc-8	0.055	s	2.14	0.00	0	0	0	0	0	0	0	0	
	D	11D0	0.390	s	21.45	11.99	0	0	0	0	0	0	0	0	
	W	12E-0sw	0.068	w	3.74	1.47	0	0	0	0	0	0	0	0	
	G	4A5-2ov	0.470	w	25.85	38.05	0	0	0	0	0	0	0	0	
	D	11D0	0.390	w	21.45	11.99	0	0	0	0	0	0	0	0	
W	15B11-8wc-8	0.055	w	2.26	0.00	0	0	0	0	0	0	0	0		
C	16B-38ad	0.026	-	1.43	1.41	80	80	114	113	0	0	0	0		
	G	8Ci-6c	1.110	-	0.00	0.00	0	0	0	0	0	0	0	0	
	F	19A-0bswp	0.295	-	6.10	2.06	0	0	0	0	0	0	0	0	
	F	21A-24t	0.025	-	1.38	0.00	0	0	0	0	0	0	0	0	
6	c) AED excursion									121				0	
	Envelope loss/gain									1539	1595			0	0
12	a) Infiltration									483	84			0	0
	b) Room ventilation									0	0			0	0
13	Internal gains:		Occupants @	230		0				0	0	0		0	0
			Appliances/other							0	0			0	0
	Subtotal (lines 6 to 13)									2021	1679			0	0
14	Less external load									0	0			0	0
	Less transfer									0	0			0	0
	Redistribution									0	0			0	0
15	Subtotal									2021	1679			0	0
	Duct loads							-0%	0%	0	0	-0%	0%	0	0
	Total room load									2021	1679			0	0
	Air required (cfm)									0	74			0	0

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



wrightsoft®

Right-Suite® Universal 2012 12.0.11 RSU16744

...stomers\in progress Waiting to start\Sprainls, Andy\IR by R.rup Calc = MJ8 Front Door faces:

2012-Oct-20 10:56:35

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Right-J® Worksheet Z 1 Supreme Air

Job:
Date: Sep 20, 2012
By:

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

1	Room name					Room14				Room15					
2	Exposed wall					34.0 ft				26.0 ft					
3	Room height					8.0 ft				8.0 ft					
4	Room dimensions					15.0 x 19.0 ft				15.0 x 11.0 ft					
5	Room area					285.0 ft²				165.0 ft²					
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)		
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool	
6	W	12E-0sw	0.068	n	3.74	1.47	0	0	0	0	0	0	0	0	
11	G	4A5-2ov	0.470	n	25.85	14.78	0	0	0	0	0	0	0	0	
	W	15B11-8wc-8	0.055	n	2.28	0.00	0	0	0	0	0	0	0	0	
	W	12E-0sw	0.068	e	3.74	1.47	120	108	403	159	0	0	0	0	
	G	4A5-2ov	0.470	e	25.85	38.05	12	0	319	469	0	0	0	0	
	D	11D0	0.390	e	21.45	11.99	0	0	0	0	0	0	0	0	
	W	15B11-8wc-8	0.055	e	2.26	0.00	0	0	0	0	0	0	0	0	
	W	12E-0sw	0.068	s	3.74	1.47	152	127	474	186	88	75	281	110	
	G	4A5-2ov	0.470	s	25.85	21.15	25	0	655	536	13	0	336	275	
	W	15B11-8wc-8	0.055	s	2.14	0.00	0	0	0	0	0	0	0	0	
	D	11D0	0.390	s	21.45	11.99	0	0	0	0	0	0	0	0	
	W	12E-0sw	0.068	w	3.74	1.47	0	0	0	0	120	107	400	158	
	G	4A5-2ov	0.470	w	25.85	38.05	0	0	0	0	13	0	336	495	
	D	11D0	0.390	w	21.45	11.99	0	0	0	0	0	0	0	0	
	W	15B11-8wc-8	0.055	w	2.26	0.00	0	0	0	0	0	0	0	0	
	G	16B-38ad	0.026	-	1.43	1.41	52	52	74	73	60	60	86	85	
F	G	8Ci-6c	1.110	-	0.00	0.00	0	0	0	0	0	0	0	0	
	F	19A-0bswp	0.295	-	6.10	2.06	0	0	0	0	0	0	0	0	
	F	21A-24t	0.025	-	1.38	0.00	0	0	0	0	0	0	0	0	
6	c) AED excursion									286				220	
	Envelope loss/gain								1924	1710			1439	1343	
12	a) Infiltration								781	136			598	104	
	b) Room ventilation								0	0			0	0	
13	Internal gains: Occupants @ 230 Appliances/other						1			230	0			0	0
	Subtotal (lines 6 to 13)								2706	2076			2036	1446	
14	Less external load								0	0			0	0	
	Less transfer								0	0			0	0	
	Redistribution								0	0			0	0	
	Subtotal								2706	2076			2036	1446	
15	Duct loads						-0%	0%	0	0		-0%	0%	0	0
	Total room load								2706	2076			2036	1446	
	Air required (cfm)								0	92			0	64	

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



Right-J® Worksheet Z1

Supreme Air

Job:
Date: Sep 20, 2012
By:

6203 Collinsway Rd, Baltimore, MD 21228 Phone: 410-788-1114 Fax: 410-522-1178 Email: Denny@supremeairllc.com Web: www.supremeairllc.com

1	Room name					Room16					Room17				
2	Exposed wall					34.0 ft					14.0 ft				
3	Room height					8.0 ft					8.0 ft				
4	Room dimensions					34.0 x 15.0 ft					1.0 x 348.0 ft				
5	Room area					510.0 ft²					348.0 ft²				
	Ty	Construction number	U-value (Btuh/ft²·°F)	Or	HTM (Btuh/ft²)		Area (ft²) or perimeter (ft)		Load (Btuh)		Area (ft²) or perimeter (ft)		Load (Btuh)		
					Heat	Cool	Gross	N/P/S	Heat	Cool	Gross	N/P/S	Heat	Cool	
6	W	12E-0sw	0.068	n	3.74	1.47	0	0	0	0	32	32	120	47	
	G	4A5-2ov	0.470	n	25.85	14.78	0	0	0	0	0	0	0	0	
	W	15B11-8wc-8	0.055	n	2.26	0.00	0	0	0	0	0	0	0	0	
11	W	12E-0sw	0.068	e	3.74	1.47	0	0	0	0	80	58	218	86	
	G	4A5-2ov	0.470	e	25.85	38.05	0	0	0	0	0	0	0	0	
	D	11D0	0.390	e	21.45	11.99	0	0	0	0	22	22	463	259	
	W	15B11-8wc-8	0.055	e	2.26	0.00	0	0	0	0	0	0	0	0	
	W	12E-0sw	0.068	s	3.74	1.47	0	0	0	0	0	0	0	0	
	G	4A5-2ov	0.470	s	25.85	21.15	0	0	0	0	0	0	0	0	
	W	15B11-8wc-8	0.055	s	2.14	0.00	0	0	0	0	0	0	0	0	
	D	11D0	0.390	s	21.45	11.99	0	0	0	0	0	0	0	0	
	W	12E-0sw	0.068	w	3.74	1.47	272	238	889	350	0	0	0	0	
	G	4A5-2ov	0.470	w	25.85	38.05	13	0	345	507	0	0	0	0	
	D	11D0	0.390	w	21.45	11.99	21	21	450	252	0	0	0	0	
W	15B11-8wc-8	0.055	w	2.26	0.00	0	0	0	0	0	0	0	0		
C	16B-38ad	0.026	-	1.43	1.41	224	224	320	316	62	62	89	87		
G	8CI-6c	1.110	-	0.00	0.00	0	0	0	0	0	0	0	0		
F	19A-0bswp	0.295	-	6.10	2.06	0	0	0	0	0	0	0	0		
F	21A-24t	0.025	-	1.38	0.00	0	0	0	0	0	0	0	0		
6	c) AED excursion									-52				-51	
	Envelope loss/gain								2004	1373			890	428	
12	a) Infiltration								781	136			322	56	
	b) Room ventilation								0	0			0	0	
13	Internal gains:		Occupants @	230		1				230	0			0	
			Appliances/other							1200				0	
	Subtotal (lines 6 to 13)								2786	2939			1212	484	
	Less external load								0	0			0	0	
	Less transfer								0	0			0	0	
	Redistribution								0	0			0	0	
14	Subtotal								2786	2939			1212	484	
15	Duct loads						-0%	0%	0	0		-0%	0%	0	0
	Total room load								2786	2939			1212	484	
	Air required (cfm)								0	130			0	21	

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

CONSERVATION
MENT #1
RETENTION

SLOPES
OF STEEP SLOPES
MAINTAIN

DRAINAGE AREA
31,821 S.F.

Approved Septic System Plan
Howard County Health Department
App'd By: [Signature]
Date: 12/20/12
Biosolids
25 SLOAN

AREA OF DISTURBANCE
1.66 AC
SEPTIC FIELD
AREA: 11,000 S.F.

SEPTIC
TANK

DISTRIBUTION
BOX
GcC
GcB

4' WIRE FENCE
TO REMAIN

GcC
GcB

DRAINAGE AREA
6,074 S.F.

DRAINAGE AREA
5,301 S.F.

N/F
CITIBANK N.A.
TRUSTEE
12498/276
TAX MAP 31
PARCEL 635

SEPTIC
FIELD

EXISTING
HOUSE

EXISTING
WELL

OFF LANE
COUNTY, MARYLAND

MACADAM DRIVEWAY

COMMON
DRIVEWAY
EASEMENT
L.696/F.365

INV.=391.59

TOP GRADE=391.84