



Load Short Form
FC-1 First
 LoadCalcs.net, LLC

Job: 714 4th Street Residence
 Date: February 16, 2021
 By: Scott Pingleton
 Plan: 21-108

Lancaster, KY40444 Phone: 859-792-9798 Email: info@loadcalcs.net Web: www.loadcalcs.net

Project Information

For: 714 4th Street Residence
 714 4th Street, Secaucus, NJ 07094

Design Information

	Htg	Clg	Method	Infiltration
Outside db (°F)	13	94	Shielding / stories	Blower door
Inside db (°F)	70	75	Pressure / AVF	3 (partial) / 2
Design TD (°F)	57	19		50 Pa / 3220 cfm
Daily range	-	M		
Inside humidity (%)	50	50		
Moisture difference (gr/lb)	46	32		

HEATING EQUIPMENT

Make	Trane
Trade	or equivalent
Model	S9V2B040U3VS
AHRI ref	
Efficiency	96 AFUE
Heating input	40000 Btuh
Heating output	39000 Btuh
Temperature rise	41 °F
Actual air flow	866 cfm
Air flow factor	0.074 cfm/Btuh
Static pressure	0.60 in H2O
Space thermostat	

COOLING EQUIPMENT

Make	Trane
Trade	or equivalent
Cond	4TTV8024A1
Coil	4TXCB003DS3+S9V2B040U3VS
AHRI ref	
Efficiency	13.0 EER, 18 SEER
Sensible cooling	17600 Btuh
Latent cooling	4400 Btuh
Total cooling	22000 Btuh
Actual air flow	866 cfm
Air flow factor	0.064 cfm/Btuh
Static pressure	0.60 in H2O
Load sensible heat ratio	0.85

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
Bedroom 1	202	2191	1753	161	113
Dining Room	160	2135	1586	157	102
E Bath	60	340	555	25	36
E Clos	23	0	313	0	20
Entry	173	2076	1414	153	91
Kitchen	234	893	2495	66	161
Living Room	398	3846	4831	283	311
Pantry	54	272	510	20	33
Stairs 1	108	0	0	0	0

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



Right-Suite® Universal 2021 21.0.03 RSU29500

2021-Feb-16 17:22:24

...1-108Working Dwgsl714 4th Street Residence.rup Calc = MJ8 Front Door faces: NW

Page 1

FC-1 First	1412	11753	13458	866	866
Other equip loads		2831	955		
Equip. @ 1.00 RSM			14413		
Latent cooling			2511		
TOTALS	1412	14584	16924	866	866

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Load Short Form
FC-2 Second
 LoadCalcs.net, LLC

Job: 714 4th Street Residence
 Date: February 16, 2021
 By: Scott Pingleton
 Plan: 21-108

Lancaster, KY40444 Phone: 859-792-9798 Email: info@loadcalcs.net Web: www.loadcalcs.net

Project Information

For: 714 4th Street Residence
 714 4th Street, Secaucus, NJ 07094

Design Information

	Htg	Clg		Infiltration
Outside db (°F)	13	94	Method	Blower door
Inside db (°F)	70	75	Shielding / stories	3 (partial) / 2
Design TD (°F)	57	19	Pressure / AVF	50 Pa / 3220 cfm
Daily range	-	M		
Inside humidity (%)	50	50		
Moisture difference (gr/lb)	46	32		

HEATING EQUIPMENT

Make	Trane
Trade	or equivalent
Model	S9V2B040U3VS
AHRI ref	
Efficiency	96 AFUE
Heating input	40000 Btuh
Heating output	39000 Btuh
Temperature rise	32 °F
Actual air flow	1098 cfm
Air flow factor	0.051 cfm/Btuh
Static pressure	0.80 in H2O
Space thermostat	

COOLING EQUIPMENT

Make	Trane
Trade	or equivalent
Cond	4TTV8036A1
Coil	4TXCB006DS3+S9V2B040U3VS
AHRI ref	
Efficiency	12.5 EER, 18 SEER
Sensible cooling	26080 Btuh
Latent cooling	6520 Btuh
Total cooling	32600 Btuh
Actual air flow	1098 cfm
Air flow factor	0.048 cfm/Btuh
Static pressure	0.80 in H2O
Load sensible heat ratio	0.93

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
Bath 2	62	966	853	49	41
Bath 3	61	810	444	41	21
Bedroom 2	266	4029	4131	204	200
Bedroom 3	248	4236	3676	215	178
Clos 2	64	187	524	9	25
Clos 3	44	186	478	9	23
Hall	135	0	0	0	0
Laundry	64	187	1013	9	49
M Bath	125	1104	625	56	30
M Bedroom	367	5582	4897	283	237
M Clos	126	1780	614	90	30
Office	49	911	1429	46	69
Stairs 2	108	1687	4042	86	195

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Right-Suite® Universal 2021 21.0.03 RSU29500

2021-Feb-16 17:22:24

...1-108\Working Dwg\714 4th Street Residence.rup Calc = MJ8 Front Door faces: NW

Page 3

FC-2 Second	1718	21664	22727	1098	1098
Other equip loads		0	0		
Equip. @ 1.00 RSM			22727		
Latent cooling			1719		
TOTALS	1718	21664	24446	1098	1098

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Load Short Form
U-1 Basement
 LoadCalcs.net, LLC

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 Plan: 21-108

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Project Information

For: 714 4th Street Residence
 714 4th Street, Secaucus, NJ 07094

Design Information

	Htg	Clg		Infiltration
Outside db (°F)	13	94	Method	Blower door
Inside db (°F)	70	75	Shielding / stories	3 (partial) / 2
Design TD (°F)	57	19	Pressure / AVF	50 Pa / 3220 cfm
Daily range	-	M		
Inside humidity (%)	50	50		
Moisture difference (gr/lb)	46	32		

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 129 cfm
 Air flow factor 0.030 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 129 cfm
 Air flow factor 0.045 cfm/Btuh
 Static pressure 0 in H2O
 Load sensible heat ratio 0.93

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
B Bath	95	546	229	17	10
Mech	63	0	0	0	0
Open Area	1146	3684	2600	112	118
U-1 Basement	1304	4230	2829	129	129
Other equip loads		0	0		
Equip. @ 1.00 RSM			2829		
Latent cooling			203		
TOTALS	1304	4230	3032	129	129

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Project Information

For: 714 4th Street Residence
 714 4th Street, Secaucus, NJ 07094

Design Conditions

Location:

Newark Liberty Intl, NJ, US
 Elevation: 7 ft
 Latitude: 41°N

Outdoor:

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

Heating

13
 -
 -
 15.0

Cooling

94
 16 (M)
 74
 7.5

Indoor:

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

Heating

70
 57
 50
 46.3

Cooling

75
 19
 50
 31.7

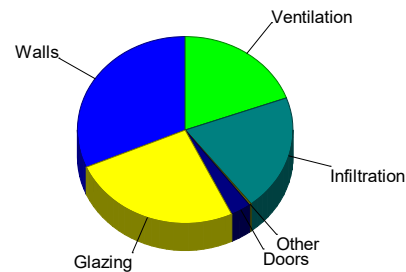
Infiltration:

Method
 Shielding / stories
 Pressure / AVF

Blower door
 3 (partial) / 2
 50 Pa / 3220 cfm

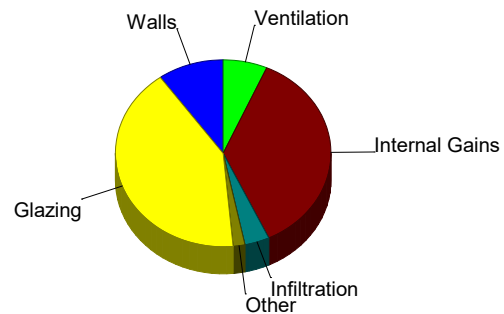
Heating

Component	Btuh/ft²	Btuh	% of load
Walls	3.2	4594	31.5
Glazing	16.6	3736	25.6
Doors	22.3	448	3.1
Ceilings	0	0	0
Floors	0.4	43	0.3
Infiltration	2.2	2932	20.1
Ducts		0	0
Piping		0	0
Humidification		0	0
Ventilation		2831	19.4
Adjustments		0	0
Total		14584	100.0



Cooling

Component	Btuh/ft²	Btuh	% of load
Walls	1.0	1428	9.9
Glazing	26.6	5989	41.6
Doors	12.8	257	1.8
Ceilings	0	0	0
Floors	0	0	0
Infiltration	0.4	534	3.7
Ducts		0	0
Ventilation		955	6.6
Internal gains		5250	36.4
Blower		0	0
Adjustments		0	0
Total		14413	100.0



Latent Cooling Load = 2511 Btuh
 Overall U-value = 0.088 Btuh/ft²-°F

Data entries checked.

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Location:

Newark Liberty Intl, NJ, US
 Elevation: 7 ft
 Latitude: 41°N

Outdoor:

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

Heating

13
 -
 -
 15.0

Cooling

94
 16 (M)
 74
 7.5

Indoor:

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

Heating

70
 57
 50
 46.3

Cooling

75
 19
 50
 31.7

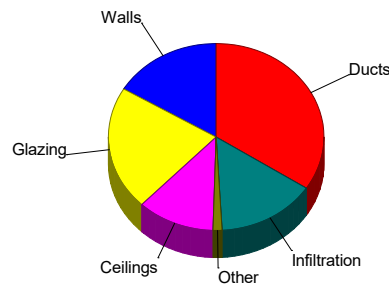
Infiltration:

Method
 Shielding / stories
 Pressure / AVF

Blower door
 3 (partial) / 2
 50 Pa / 3220 cfm

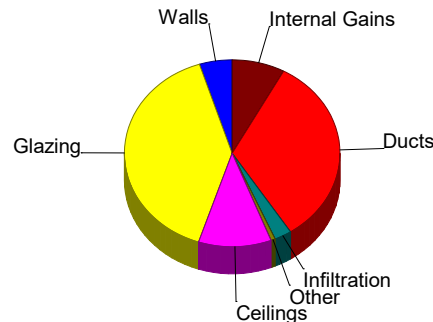
Heating

Component	Btuh/ft²	Btuh	% of load
Walls	2.9	3556	16.4
Glazing	17.5	4650	21.5
Doors	0	0	0
Ceilings	1.5	2523	11.6
Floors	1.0	293	1.4
Infiltration	2.2	3229	14.9
Ducts		7413	34.2
Piping		0	0
Humidification		0	0
Ventilation		0	0
Adjustments		0	0
Total		21664	100.0



Cooling

Component	Btuh/ft²	Btuh	% of load
Walls	0.9	1120	4.9
Glazing	34.3	9096	40.0
Doors	0	0	0
Ceilings	1.5	2481	10.9
Floors	0.5	149	0.7
Infiltration	0.4	588	2.6
Ducts		7493	33.0
Ventilation		0	0
Internal gains		1800	7.9
Blower		0	0
Adjustments		0	0
Total		22727	100.0



Latent Cooling Load = 1719 Btuh
 Overall U-value = 0.056 Btuh/ft²-°F

Data entries checked.

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Design Conditions

Location:

Newark Liberty Intl, NJ, US
 Elevation: 7 ft
 Latitude: 41°N

Outdoor:

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

Heating

13
 -
 -
 15.0

Cooling

94
 16 (M)
 74
 7.5

Indoor:

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

Heating

70
 57
 50
 46.3

Cooling

75
 19
 50
 31.7

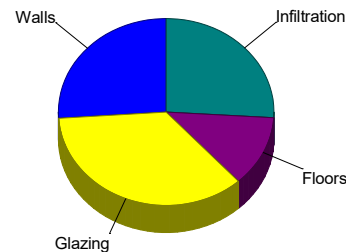
Infiltration:

Method
 Shielding / stories
 Pressure / AVF

Blower door
 3 (partial) / 2
 50 Pa / 3220 cfm

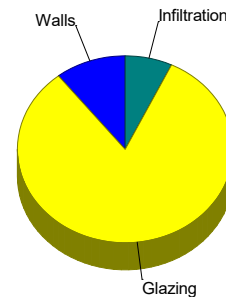
Heating

Component	Btuh/ft²	Btuh	% of load
Walls	2.1	1103	26.1
Glazing	16.6	1507	35.6
Doors	0	0	0
Ceilings	0	0	0
Floors	0.4	522	12.3
Infiltration	2.2	1098	26.0
Ducts		0	0
Piping		0	0
Humidification		0	0
Ventilation		0	0
Adjustments		0	0
Total		4230	100.0



Cooling

Component	Btuh/ft²	Btuh	% of load
Walls	0.6	301	10.6
Glazing	25.6	2329	82.3
Doors	0	0	0
Ceilings	0	0	0
Floors	0	0	0
Infiltration	0.4	200	7.1
Ducts		0	0
Ventilation		0	0
Internal gains		0	0
Blower		0	0
Adjustments		0	0
Total		2829	100.0



Latent Cooling Load = 203 Btuh
 Overall U-value = 0.033 Btuh/ft²-°F

Data entries checked.



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Design Conditions

Location:	Newark Liberty Intl, NJ, US	Indoor:	Indoor temperature (°F)	70	Heating	75	Cooling	75
Elevation:	7 ft	Design TD (°F)	57	57	19			19
Latitude:	41°N	Relative humidity (%)	50	50	50			50
Outdoor:		Moisture difference (gr/lb)	46.3	46.3	31.7			31.7
Heating		Infiltration:						
Dry bulb (°F)	13	Method			Blower door			
Daily range (°F)	-	Shielding / stories			3 (partial) / 2			
Wet bulb (°F)	-	Pressure / AVF			50 Pa / 3220 cfm			
Wind speed (mph)	15.0							

Construction descriptions

Construction descriptions	Or	Area ft ²	U-value Btuh/ft ² °F	Insul R ft ² °F/Btuh	Htg HTM Btuh/ft ²	Loss Btuh	Clg HTM Btuh/ft ²	Gain Btuh
Walls								
Brick, 2x6, drywall	ne	54	0.050	29.0	2.86	154	0.84	45
	nw	112	0.050	29.0	2.86	320	0.84	94
	all	166	0.050	29.0	2.86	475	0.84	140
ICF, R-26	ne	32	0.035	26.0	2.00	64	0.59	19
Vinyl, 2x6, drywall	ne	277	0.050	29.0	2.86	791	0.91	252
	se	207	0.050	29.0	2.86	591	0.91	189
	sw	444	0.050	29.0	2.86	1270	0.91	405
	all	927	0.050	29.0	2.86	2652	0.91	846
Partitions								
Partition		236	0.094	13.0	5.36	1268	1.67	396
Partition Wall: ICF, R-26		54	0.044	26.0	2.52	136	0.52	28
Windows								
Double pane: Double pane; NFRC rated (SHGC=0.31); 50% blinds 45°, medium; foreground = green grass (0.23); 1.5 ft overhang (5 ft window ht, 2 ft sep.); 7 ft head ht	ne	25	0.290	0	16.6	415	23.9	598
	se	30	0.290	0	16.6	498	28.9	866
	all	55	0.290	0	16.6	912	26.6	1464
Double pane: Double pane; NFRC rated (SHGC=0.31); 50% blinds 45°, medium; 1.5 ft overhang (6.7 ft window ht, 2 ft sep.); 7 ft head ht	se	40	0.290	0	16.6	667	26.9	1080
Double pane: Double pane; NFRC rated (SHGC=0.31); 50% blinds 45°, medium; 1.5 ft overhang (5 ft window ht, 2 ft sep.); 7 ft head ht	se	20	0.290	0	16.6	332	26.9	537
Double pane: Double pane; NFRC rated (SHGC=0.31); 50% blinds 45°, medium; foreground = green grass (0.23); 1.5 ft overhang (2 ft window ht, 12.5 ft sep.); 7 ft head ht	sw	5	0.290	0	16.6	83	28.9	144
Double pane: Double pane; NFRC rated (SHGC=0.31); 50% blinds 45°, medium; foreground = green grass (0.23); 1.5 ft overhang (3 ft window ht, 12.5 ft sep.); 7 ft head ht	sw	9	0.290	0	16.6	149	28.9	260
Double pane: Double pane; NFRC rated (SHGC=0.31); 50% blinds 45°, medium; foreground = green grass (0.23); 1.5 ft overhang (5 ft window ht, 12.5 ft sep.); 7 ft head ht	sw	13	0.290	0	16.6	207	28.9	361
	sw	20	0.290	0	16.6	332	28.9	577
	all	33	0.290	0	16.6	539	28.9	938

Double pane: Double pane; NFRC rated (SHGC=0.31); 50% blinds 45°, medium; foreground = green grass (0.23); 2 ft overhang (5 ft window ht, 0.83 ft sep.); 7 ft head ht	nw	30	0.290	0	16.6	498	23.9	718
Double pane: Double pane; NFRC rated (SHGC=0.31); 50% blinds 45°, medium; foreground = new concrete (0.32); 9 ft overhang (6.7 ft window ht, 2.5 ft sep.); 7 ft head ht	nw	34	0.290	0	16.6	556	25.3	849
Doors								
Solid wood	n	20	0.390	0	22.3	448	12.8	257
Ceilings (none)								
Floors								
Slab below grade		108	0.014	15.0	0.40	43	0	0



Project Information

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 714 4th Street, Secaucus, NJ 07094

Design Conditions

Location:	Newark Liberty Intl, NJ, US	Indoor:	Indoor temperature (°F)	70	Heating	75	Cooling	75
Elevation:	7 ft	Design TD (°F)	57	57	19			19
Latitude:	41°N	Relative humidity (%)	50	50	50			50
Outdoor:		Moisture difference (gr/lb)	46.3	46.3	31.7			31.7
Heating	13	Cooling	94					
Dry bulb (°F)	13	16 (M)						
Daily range (°F)	-							
Wet bulb (°F)	-							
Wind speed (mph)	15.0							
		Infiltration:						
		Method				Blower door		
		Shielding / stories				3 (partial) / 2		
		Pressure / AVF				50 Pa / 3220 cfm		

Construction descriptions

	Or	Area ft ²	U-value Btuh/ft ² °F	Insul R ft ² °F/Btuh	Htg HTM Btuh/ft ²	Loss Btuh	Clg HTM Btuh/ft ²	Gain Btuh
Walls								
Brick, 2x6, drywall	ne	9	0.050	29.0	2.86	24	0.84	7
	nw	207	0.050	29.0	2.86	591	0.84	174
	all	215	0.050	29.0	2.86	615	0.84	181
Vinyl, 2x6, drywall	ne	415	0.050	29.0	2.86	1186	0.91	378
	se	236	0.050	29.0	2.86	674	0.91	215
	sw	378	0.050	29.0	2.86	1082	0.91	345
	all	1028	0.050	29.0	2.86	2941	0.91	938

Partitions

(none)

Windows

Double pane: Double pane; NFRC rated (SHGC=0.31); 50% blinds 45°, medium; foreground = green grass (0.23); 1.5 ft overhang (2 ft window ht, 2 ft sep.); 7 ft head ht	ne	5	0.290	0	16.6	83	23.9	120
Double pane: Double pane; NFRC rated (SHGC=0.31); 50% blinds 45°, medium; foreground = green grass (0.23); 1.5 ft overhang (5 ft window ht, 2 ft sep.); 7 ft head ht	ne	15	0.290	0	16.6	249	23.9	359
	se	15	0.290	0	16.6	249	28.9	433
	se	30	0.290	0	16.6	498	28.9	866
	all	60	0.290	0	16.6	995	27.6	1657
Double pane: Double pane; NFRC rated (SHGC=0.31); 50% blinds 45°, medium; 1.5 ft overhang (6.7 ft window ht, 2 ft sep.); 7 ft head ht	ne	20	0.290	0	16.6	333	15.3	308
Double pane: Double pane; NFRC rated (SHGC=0.31); 50% blinds 45°, medium; foreground = green grass (0.23); 1.5 ft overhang (4 ft window ht, 2.33 ft sep.); 7 ft head ht	sw	10	0.290	0	16.6	166	28.9	289
Double pane: Double pane; NFRC rated (SHGC=0.31); 50% blinds 45°, medium; foreground = green grass (0.23); 1.5 ft overhang (5 ft window ht, 2.33 ft sep.); 7 ft head ht	sw	75	0.290	0	16.6	1244	28.9	2164
Double pane: Double pane; NFRC rated (SHGC=0.31); 50% blinds 45°, medium; foreground = green grass (0.23); 1.5 ft overhang (4 ft window ht, 2 ft sep.); 7 ft head ht	nw	14	0.290	0	16.6	232	23.9	335
Double pane: Double pane; NFRC rated (SHGC=0.31); 50% blinds 45°, medium; foreground = green grass (0.23); 1.5 ft overhang (5 ft window ht, 4.08 ft sep.); 7 ft head ht	nw	60	0.290	0	16.6	995	23.9	1435



Sky glazing, small, r-6 or better curb, no shaft lgt shaft, wd sash	21	0.500	0	28.6	601	119	2492
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Doors
(none)

Ceilings

Shingle, R-38, drywall	1697	0.026	38.0	1.49	2523	1.46	2481
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Floors

Partition over Garage	270	0.030	38.0	0.86	232	0.49	132
Partition over ambient space	36	0.030	38.0	1.72	62	0.49	18



Component Constructions

U-1 Basement

LoadCalcs.net, LLC

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 Date: February 16, 2021
 By: Scott Pingleton
 Plan: 21-108

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Project Information

For: 714 4th Street Residence
 714 4th Street, Secaucus, NJ 07094

Design Conditions

Location: Newark Liberty Intl, NJ, US Elevation: 7 ft Latitude: 41°N			Indoor: Indoor temperature (°F) Design TD (°F) Relative humidity (%) Moisture difference (gr/lb)	Heating 70 57 50 46.3	Cooling 75 19 50 31.7
Outdoor: Dry bulb (°F) Daily range (°F) Wet bulb (°F) Wind speed (mph)	Heating 13 - - 15.0	Cooling 94 16 (M) 74 7.5	Infiltration: Method Shielding / stories Pressure / AVF	Blower door 3 (partial) / 2 50 Pa / 3220 cfm	

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								
ICF, R-26								
	ne	61	0.035	26.0	2.00	122	0.59	36
	se	114	0.035	26.0	2.00	228	0.59	67
	sw	190	0.035	26.0	2.00	380	0.59	112
	nw	50	0.035	26.0	2.00	101	0.59	30
	all	415	0.035	26.0	2.00	831	0.59	245
Partitions								
Partition Wall: ICF, R-26								
		108	0.044	26.0	2.52	272	0.52	56
Windows								
Double pane: Double pane; NFRC rated (SHGC=0.31); 50% blinds 45°, medium; foreground = green grass (0.23); 1.5 ft overhang (3 ft window ht, 21.15 ft sep.); 7 ft head ht								
	ne	21	0.290	0	16.6	348	23.9	502
	se	12	0.290	0	16.6	199	28.9	346
	sw	21	0.290	0	16.6	348	28.9	606
	all	54	0.290	0	16.6	896	26.9	1455
Double pane: Double pane; NFRC rated (SHGC=0.31); 50% blinds 45°, medium; foreground = new concrete (0.32); 15 ft overhang (6.7 ft window ht, 1.08 ft sep.); 7 ft head ht								
	ne	20	0.290	0	16.6	333	25.3	509
Double pane: Double pane; NFRC rated (SHGC=0.31); 50% blinds 45°, medium; foreground = green grass (0.23); 5 ft overhang (2 ft window ht, 1.08 ft sep.); 7 ft head ht								
	se	6	0.290	0	16.6	100	12.1	73
Double pane: Double pane; NFRC rated (SHGC=0.31); 50% blinds 45°, medium; foreground = green grass (0.23); 1.5 ft overhang (2 ft window ht, 21.15 ft sep.); 7 ft head ht								
	sw	7	0.290	0	16.6	116	28.9	202
Double pane: Double pane; NFRC rated (SHGC=0.31); 50% blinds 45°, medium; foreground = green grass (0.23); 1.5 ft overhang (1.5 ft window ht, 21.15 ft sep.); 7 ft head ht								
	nw	4	0.290	0	16.6	62	23.9	90

Doors
(none)

Ceilings
(none)

Floors

Slab below grade

1304

0.014

15.0

0.40

522

0

0





Project Summary
FC-1 First
 LoadCalcs.net, LLC

Job: 714 4th Street Residence
 Date: February 16, 2021
 By: Scott Pingleton
 Plan: 21-108

Lancaster, KY 40444 Phone: 859-792-9798 Email: info@loadcalcs.net Web: www.loadcalcs.net

Project Information

For: 714 4th Street Residence
 714 4th Street, Secaucus, NJ 07094

Notes: Hari Patel - homeowner
 801 6th Street 2nd Floor
 Secaucus, NJ 07094

Design Information

Weather: Newark Liberty Intl, NJ, US

Winter Design Conditions

Outside db 13 °F
 Inside db 70 °F
 Design TD 57 °F

Summer Design Conditions

Outside db 94 °F
 Inside db 75 °F
 Design TD 19 °F
 Daily range M
 Relative humidity 50 %
 Moisture difference 32 gr/lb

Heating Summary

Structure 11753 Btuh
 Ducts 0 Btuh
 Central vent (SER=50% 90 cfm) 2831 Btuh
 Energy recovery
 Humidification 0 Btuh
 Piping 0 Btuh
 Equipment load 14584 Btuh

Sensible Cooling Equipment Load Sizing

Structure 13458 Btuh
 Ducts 0 Btuh
 Central vent (SER=50% 90 cfm) 955 Btuh
 Energy recovery
 Blower 0 Btuh
 Use manufacturer's data y
 Rate/swing multiplier 1.00
 Equipment sensible load 14413 Btuh

Infiltration

Method Blower door
 Shielding / stories 3 (partial) / 2
 Pressure / AVF 50 Pa / 3220 cfm

Latent Cooling Equipment Load Sizing

Structure 1542 Btuh
 Ducts 0 Btuh
 Central vent (LER=50% 90 cfm) 970 Btuh
 Energy recovery
 Equipment latent load 2511 Btuh

	Heating	Cooling
Area (ft ²)	1412	1412
Volume (ft ³)	13140	13140
Air changes/hour	0.21	0.11
Equiv. AVF (cfm)	47	25

Equipment Total Load (Sen+Lat) 16924 Btuh
 Req. total capacity at 0.80 SHR 1.5 ton

Heating Equipment Summary

Make Trane
 Trade or equivalent
 Model S9V2B040U3VS
 AHRI ref

Efficiency 96 AFUE
 Heating input 40000 Btuh
 Heating output 39000 Btuh
 Temperature rise 41 °F
 Actual air flow 866 cfm
 Air flow factor 0.074 cfm/Btuh
 Static pressure 0.60 in H2O
 Space thermostat

Cooling Equipment Summary

Make Trane
 Trade or equivalent
 Cond 4TTV8024A1
 Coil 4TXCB003DS3+S9V2B040U3VS
 AHRI ref
 Efficiency 13.0 EER, 18 SEER
 Sensible cooling 17600 Btuh
 Latent cooling 4400 Btuh
 Total cooling 22000 Btuh
 Actual air flow 866 cfm
 Air flow factor 0.064 cfm/Btuh
 Static pressure 0.60 in H2O
 Load sensible heat ratio 0.85

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





Project Summary
FC-2 Second
 LoadCalcs.net, LLC

Job: 714 4th Street Residence
 Date: February 16, 2021
 By: Scott Pingleton
 Plan: 21-108

Lancaster, KY 40444 Phone: 859-792-9798 Email: info@loadcalcs.net Web: www.loadcalcs.net

Project Information

For: 714 4th Street Residence
 714 4th Street, Secaucus, NJ 07094

Notes: Hari Patel - homeowner
 801 6th Street 2nd Floor
 Secaucus, NJ 07094

Design Information

Weather: Newark Liberty Intl, NJ, US

Winter Design Conditions

Outside db 13 °F
 Inside db 70 °F
 Design TD 57 °F

Summer Design Conditions

Outside db 94 °F
 Inside db 75 °F
 Design TD 19 °F
 Daily range M
 Relative humidity 50 %
 Moisture difference 32 gr/lb

Heating Summary

Structure 14251 Btuh
 Ducts 7413 Btuh
 Central vent (0 cfm)
 (none) 0 Btuh
 Humidification 0 Btuh
 Piping 0 Btuh
 Equipment load 21664 Btuh

Sensible Cooling Equipment Load Sizing

Structure 15233 Btuh
 Ducts 7493 Btuh
 Central vent (0 cfm)
 (none) 0 Btuh
 Blower 0 Btuh
 Use manufacturer's data y
 Rate/swing multiplier 1.00
 Equipment sensible load 22727 Btuh

Infiltration

Method Blower door
 Shielding / stories 3 (partial) / 2
 Pressure / AVF 50 Pa / 3220 cfm

Latent Cooling Equipment Load Sizing

Structure 597 Btuh
 Ducts 1123 Btuh
 Central vent (0 cfm)
 (none) 0 Btuh
 Equipment latent load 1719 Btuh

	Heating	Cooling
Area (ft ²)	1718	1718
Volume (ft ³)	14599	14599
Air changes/hour	0.21	0.11
Equiv. AVF (cfm)	51	28

Equipment Total Load (Sen+Lat) 24446 Btuh
 Req. total capacity at 0.80 SHR 2.4 ton

Heating Equipment Summary

Make Trane
 Trade or equivalent
 Model S9V2B040U3VS
 AHRI ref

Efficiency 96 AFUE
 Heating input 40000 Btuh
 Heating output 39000 Btuh
 Temperature rise 32 °F
 Actual air flow 1098 cfm
 Air flow factor 0.051 cfm/Btuh
 Static pressure 0.80 in H2O
 Space thermostat

Cooling Equipment Summary

Make Trane
 Trade or equivalent
 Cond 4TTV8036A1
 Coil 4TXCB006DS3+S9V2B040U3VS
 AHRI ref
 Efficiency 12.5 EER, 18 SEER
 Sensible cooling 26080 Btuh
 Latent cooling 6520 Btuh
 Total cooling 32600 Btuh
 Actual air flow 1098 cfm
 Air flow factor 0.048 cfm/Btuh
 Static pressure 0.80 in H2O
 Load sensible heat ratio 0.93

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





Project Summary
U-1 Basement
 LoadCalcs.net, LLC

Job: 714 4th Street Residence
 Date: February 16, 2021
 By: Scott Pingleton
 Plan: 21-108

Lancaster, KY 40444 Phone: 859-792-9798 Email: info@loadcalcs.net Web: www.loadcalcs.net

Project Information

For: 714 4th Street Residence
 714 4th Street, Secaucus, NJ 07094

Notes: Hari Patel - homeowner
 801 6th Street 2nd Floor
 Secaucus, NJ 07094

Design Information

Weather: Newark Liberty Intl, NJ, US

Winter Design Conditions

Outside db 13 °F
 Inside db 70 °F
 Design TD 57 °F

Summer Design Conditions

Outside db 94 °F
 Inside db 75 °F
 Design TD 19 °F
 Daily range M
 Relative humidity 50 %
 Moisture difference 32 gr/lb

Heating Summary

Structure 4230 Btuh
 Ducts 0 Btuh
 Central vent (0 cfm)
 (none) 0 Btuh
 Humidification 0 Btuh
 Piping 0 Btuh
 Equipment load 4230 Btuh

Sensible Cooling Equipment Load Sizing

Structure 2829 Btuh
 Ducts 0 Btuh
 Central vent (0 cfm)
 (none) 0 Btuh
 Blower 0 Btuh
 Use manufacturer's data y
 Rate/swing multiplier 1.00
 Equipment sensible load 2829 Btuh

Infiltration

Method Blower door
 Shielding / stories 3 (partial) / 2
 Pressure / AVF 50 Pa / 3220 cfm

Latent Cooling Equipment Load Sizing

Structure 203 Btuh
 Ducts 0 Btuh
 Central vent (0 cfm)
 (none) 0 Btuh
 Equipment latent load 203 Btuh

	Heating	Cooling
Area (ft ²)	1304	1304
Volume (ft ³)	5214	5214
Air changes/hour	0.20	0.11
Equiv. AVF (cfm)	17	9

Equipment Total Load (Sen+Lat) 3032 Btuh
 Req. total capacity at 0.70 SHR 0.3 ton

Heating Equipment Summary

Make
 Trade
 Model
 AHRI ref
 Efficiency 0 HSPF
 Heating input
 Heating output 0 Btuh @ 47°F
 Temperature rise 0 °F
 Actual air flow 129 cfm
 Air flow factor 0.030 cfm/Btuh
 Static pressure 0 in H2O
 Space thermostat
 Capacity balance point = 0 °F

Cooling Equipment Summary

Make
 Trade
 Cond
 Coil
 AHRI ref
 Efficiency 0 SEER
 Sensible cooling 0 Btuh
 Latent cooling 0 Btuh
 Total cooling 0 Btuh
 Actual air flow 129 cfm
 Air flow factor 0.045 cfm/Btuh
 Static pressure 0 in H2O
 Load sensible heat ratio 0.93

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



Right-J® Worksheet FC-1 First LoadCalcs.net, LLC

Job: 714 4th Street Residence
Date: February 16, 2021
By: Scott Pingleton
Plan: 21-108

Lancaster, KY40444 Phone: 859-792-9798 Email: info@loadcalcs.net Web: www.loadcalcs.net

				FC-1 First 175.0 ft				Bedroom 1 35.5 ft						
				9.3 ft				9.0 ft		1.0 x 202.4 ft		heat/cool		
				1412.0 ft²				202.4 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	Brick, 2x6, drywall	0.050	ne	2.86	0.84	54	54	154	45	54	54	154	45
	W	ICF, R-26	0.035	ne	2.00	0.59	32	32	64	19	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
11	W	Vinyl, 2x6, drywall	0.050	ne	2.86	0.91	302	277	791	252	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	16.59	23.92	25	0	415	598	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	W	Vinyl, 2x6, drywall	0.050	se	2.86	0.91	297	207	591	189	0	0	0	0
	G	Double pane	0.290	se	16.59	26.86	20	0	332	537	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	16.59	28.86	30	0	498	866	0	0	0	0
	G	Double pane	0.290	se	16.59	26.86	40	0	667	1080	0	0	0	0
	W	ICF, R-26	0.035	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	W	Vinyl, 2x6, drywall	0.050	sw	2.86	0.91	491	444	1270	405	144	132	376	120
	G	Double pane	0.290	sw	16.59	28.86	5	0	83	144	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	9	0	149	260	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	13	0	207	361	13	0	207	361
	G	Double pane	0.290	sw	16.59	28.86	20	0	332	577	0	0	0	0
	W	Brick, 2x6, drywall	0.050	nw	2.86	0.84	176	112	320	94	122	92	262	77
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	16.59	23.92	30	0	498	718	30	0	498	718
	G	Double pane	0.290	nw	16.59	25.34	34	0	566	849	0	0	0	0
	W	ICF, R-26	0.035	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	R	Partition	0.094	-	5.36	1.67	257	236	1268	396	0	0	0	0
	D	Solid wood	0.390	n	22.31	12.77	20	20	448	257	0	0	0	0
	P	Partition Wall	0.044	-	2.52	0.52	54	54	136	28	0	0	0	0
	C	Shingle, R-38, drywa	0.026	-	0.00	0.00	0	0	0	0	0	0	0	0
	G	Sky glazing, small,	0.500	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Partition over Garag	0.030	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Partition over ambie	0.030	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Slab below grade	0.014	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Slab below grade	0.014	-	0.40	0.00	108	108	43	0	0	0	0	0
6	c) AED excursion									0			306	
	Envelope loss/gain								8822	7674			1497	1627
12	a) Infiltration								2932	534			694	126
	b) Room ventilation								0	0			0	0
13	Internal gains:		Occupants @	230	5				1150	0			0	0
			Appliances/other						4100				0	0
	Subtotal (lines 6 to 13)								11753	13458			2191	1753
	Less external load								0	0			0	0
	Less transfer								0	0			0	0
	Redistribution								0	0			0	0
14	Subtotal								11753	13458			2191	1753
15	Duct loads								0	0	-0%	0%	0	0
	Total room load								11753	13458			2191	1753
	Air required (cfm)								866	866			161	113

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



Right-J® Worksheet FC-1 First LoadCalcs.net, LLC

Job: 714 4th Street Residence
Date: February 16, 2021
By: Scott Pingleton
Plan: 21-108

Lancaster, KY40444 Phone: 859-792-9798 Email: info@loadcalcs.net Web: www.loadcalcs.net

1 Room name		Dining Room						E Bath						
2 Exposed wall		32.0 ft						6.0 ft						
3 Room height		9.0 ft						9.0 ft						
4 Room dimensions		1.0 x 159.8 ft						10.0 x 6.0 ft						
5 Room area		159.8 ft²						60.0 ft²						
6	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	Brick, 2x6, drywall	0.050	ne	2.86	0.84	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	ne	2.00	0.59	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
11	W	Vinyl, 2x6, drywall	0.050	ne	2.86	0.91	41	41	116	37	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	W	Vinyl, 2x6, drywall	0.050	se	2.86	0.91	162	132	378	120	0	0	0	0
	G	Double pane	0.290	se	16.59	26.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	16.59	28.86	30	0	498	866	0	0	0	0
	G	Double pane	0.290	se	16.59	26.86	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	W	Vinyl, 2x6, drywall	0.050	sw	2.86	0.91	86	66	187	60	54	49	140	45
	G	Double pane	0.290	sw	16.59	28.86	0	0	0	0	5	0	83	144
	G	Double pane	0.290	sw	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	20	0	332	577	0	0	0	0
	W	Brick, 2x6, drywall	0.050	nw	2.86	0.84	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	16.59	25.34	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	R	Partition	0.094	-	5.36	1.67	0	0	0	0	0	0	0	0
	D	Solid wood	0.390	n	22.31	12.77	0	0	0	0	0	0	0	0
	P	Partition Wall	0.044	-	2.52	0.52	0	0	0	0	0	0	0	0
	C	Shingle, R-38, drywa	0.026	-	0.00	0.00	0	0	0	0	0	0	0	0
	G	Sky glazing, small,	0.500	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Partition over Garag	0.030	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Partition over ambie	0.030	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Slab below grade	0.014	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Slab below grade	0.014	-	0.40	0.00	0	0	0	0	0	0	0	0
6	c) AED excursion									-188				-5
	Envelope loss/gain								1510	1472			223	184
12	a) Infiltration								625	114			117	21
	b) Room ventilation								0	0			0	0
13	Internal gains:		Occupants @		230		0			0	0			0
			Appliances/other							0				350
	Subtotal (lines 6 to 13)								2135	1586			340	555
	Less external load								0	0			0	0
	Less transfer								0	0			0	0
	Redistribution								0	0			0	0
14	Subtotal								2135	1586			340	555
15	Duct loads								-0%	0%			0	0
	Total room load								2135	1586			340	555
	Air required (cfm)								157	102			25	36

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



Right-J® Worksheet FC-1 First LoadCalcs.net, LLC

Job: 714 4th Street Residence
Date: February 16, 2021
By: Scott Pingleton
Plan: 21-108

Lancaster, KY40444 Phone: 859-792-9798 Email: info@loadcalcs.net Web: www.loadcalcs.net

1 Room name						E Clos		Entry						
2 Exposed wall						0 ft		21.0 ft						
3 Room height						9.0 ft		9.0 ft						
4 Room dimensions						4.5 x 5.0 ft		1.0 x 172.6 ft						
5 Room area						22.5 ft²		172.6 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	Brick, 2x6, drywall	0.050	ne	2.86	0.84	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	ne	2.00	0.59	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
11	W	Vinyl, 2x6, drywall	0.050	ne	2.86	0.91	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	W	Vinyl, 2x6, drywall	0.050	se	2.86	0.91	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	16.59	26.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	16.59	28.86	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	W	Vinyl, 2x6, drywall	0.050	sw	2.86	0.91	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	0	0	0	0	0	0	0	0
	W	Brick, 2x6, drywall	0.050	nw	2.86	0.84	0	0	0	0	54	21	59	17
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	16.59	25.34	0	0	0	0	34	0	556	849
	W	ICF, R-26	0.035	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	R	Partition	0.094	-	5.36	1.67	0	0	0	0	135	135	724	226
	D	Solid wood	0.390	n	22.31	12.77	0	0	0	0	0	0	0	0
	P	Partition Wall	0.044	-	2.52	0.52	0	0	0	0	0	0	0	0
	C	Shingle, R-38, drywa	0.026	-	0.00	0.00	0	0	0	0	0	0	0	0
	G	Sky glazing, small,	0.500	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Partition over Garag	0.030	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Partition over ambie	0.030	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Slab below grade	0.014	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Slab below grade	0.014	-	0.40	0.00	0	0	0	0	0	0	0	0
6	c) AED excursion													108
	Envelope loss/gain								0	-37			1338	1200
12	a) Infiltration								0	0			117	21
	b) Room ventilation								0	0			0	0
13	Internal gains:		Occupants @		230		0			0	0			0
			Appliances/other							350				0
	Subtotal (lines 6 to 13)								0	313			1455	1221
	Less external load								0	0			0	0
	Less transfer								0	0			0	0
	Redistribution								0	0			620	193
14	Subtotal								0	313			2076	1414
15	Duct loads								-0%	0%			0	0
	Total room load								0	313			2076	1414
	Air required (cfm)								0	20			153	91

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



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...1-108Working Dwgs\714 4th Street Residence.rup Calc = MJ8 Front Door faces: NW

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Right-J® Worksheet FC-1 First LoadCalcs.net, LLC

Job: 714 4th Street Residence
Date: February 16, 2021
By: Scott Pingleton
Plan: 21-108

Lancaster, KY40444 Phone: 859-792-9798 Email: info@loadcalcs.net Web: www.loadcalcs.net

1 Room name		Kitchen 17.0 ft						Living Room 36.0 ft						
2 Exposed wall		9.0 ft 1.0 x 234.0 ft heat/cool						9.0 ft 1.0 x 398.3 ft heat/cool						
3 Room height		234.0 ft²						398.3 ft²						
4 Room dimensions														
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	Brick, 2x6, drywall	0.050	ne	2.86	0.84	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	ne	2.00	0.59	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
11	W	Vinyl, 2x6, drywall	0.050	ne	2.86	0.91	0	0	0	0	189	164	469	150
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	16.59	23.92	0	0	0	0	25	0	415	598
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	W	Vinyl, 2x6, drywall	0.050	se	2.86	0.91	0	0	0	0	135	75	214	68
	G	Double pane	0.290	se	16.59	26.86	0	0	0	0	20	0	332	537
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	16.59	28.86	0	0	0	0	40	0	667	1080
	W	ICF, R-26	0.035	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	W	Vinyl, 2x6, drywall	0.050	sw	2.86	0.91	153	144	412	131	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	9	0	149	260	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	0	0	0	0	0	0	0	0
	W	Brick, 2x6, drywall	0.050	nw	2.86	0.84	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	16.59	25.34	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	R	Partition	0.094	-	5.36	1.67	0	0	0	0	0	0	0	0
	D	Solid wood	0.390	n	22.31	12.77	0	0	0	0	0	0	0	0
	P	Partition Wall	0.044	-	2.52	0.52	0	0	0	0	0	0	0	0
	C	Shingle, R-38, drywa	0.026	-	0.00	0.00	0	0	0	0	0	0	0	0
	G	Sky glazing, small,	0.500	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Partition over Garag	0.030	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Partition over ambie	0.030	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Slab below grade	0.014	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Slab below grade	0.014	-	0.40	0.00	0	0	0	0	0	0	0	0
6	c) AED excursion									-186				124
	Envelope loss/gain									561	205			2096
12	a) Infiltration									332	60			703
	b) Room ventilation									0	0			0
13	Internal gains:		Occupants @		230		1			230	4			920
			Appliances/other							2000				900
	Subtotal (lines 6 to 13)									893	2495			2800
	Less external load									0	0			0
	Less transfer									0	0			0
	Redistribution									0	0			0
14	Subtotal									893	2495			1047
15	Duct loads									0	0			3846
	Total room load									893	2495			3846
	Air required (cfm)									66	161			283

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



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...1-108\Working Dwg\714 4th Street Residence.rup Calc = MJ8 Front Door faces: NW

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Right-J® Worksheet FC-1 First LoadCalcs.net, LLC

Job: 714 4th Street Residence
Date: February 16, 2021
By: Scott Pingleton
Plan: 21-108

Lancaster, KY40444 Phone: 859-792-9798 Email: info@loadcalcs.net Web: www.loadcalcs.net

1 Room name				Pantry 6.0 ft				Stairs 1 21.5 ft						
2 Exposed wall				9.0 ft heat/cool				13.0 ft heat/cool						
3 Room height				9.1 x 6.0 ft				13.5 x 8.0 ft						
4 Room dimensions				54.5 ft²				108.0 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	Brick, 2x6, drywall	0.050	ne	2.86	0.84	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	ne	2.00	0.59	0	0	0	0	32	32	64	19
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
11	W	Vinyl, 2x6, drywall	0.050	ne	2.86	0.91	0	0	0	0	72	72	206	66
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	W	Vinyl, 2x6, drywall	0.050	se	2.86	0.91	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	16.59	26.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	16.59	28.86	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	W	Vinyl, 2x6, drywall	0.050	sw	2.86	0.91	54	54	154	49	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	0	0	0	0	0	0	0	0
	W	Brick, 2x6, drywall	0.050	nw	2.86	0.84	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	16.59	25.34	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	R	Partition	0.094	-	5.36	1.67	0	0	0	0	122	101	544	170
	D	Solid wood	0.390	n	22.31	12.77	0	0	0	0	20	20	448	257
	P	Partition Wall	0.044	-	2.52	0.52	0	0	0	0	54	54	136	28
	C	Shingle, R-38, drywa	0.026	-	0.00	0.00	0	0	0	0	0	0	0	0
	G	Sky glazing, small,	0.500	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Partition over Garag	0.030	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Partition over ambie	0.030	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Slab below grade	0.014	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Slab below grade	0.014	-	0.40	0.00	0	0	0	0	108	108	43	0
6	c) AED excursion													
	Envelope loss/gain								154	-11			1441	477
12	a) Infiltration								117	21			226	41
	b) Room ventilation								0	0			0	0
13	Internal gains:		Occupants @		230		0			0	0			0
			Appliances/other							500				0
	Subtotal (lines 6 to 13)								272	510			1667	519
	Less external load								0	0			0	0
	Less transfer								0	0			0	0
	Redistribution								0	0			-1667	-519
14	Subtotal								272	510			0	0
15	Duct loads								0	0			0	0
	Total room load								272	510			0	0
	Air required (cfm)								20	33			0	0

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



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...1-108Working Dwgs\714 4th Street Residence.rup Calc = MJ8 Front Door faces: NW

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Lancaster, KY40444 Phone: 859-792-9798 Email: info@loadcalcs.net Web: www.loadcalcs.net

1 Room name				FC-2 Second 175.0 ft				Bath 2 9.5 ft						
2 Exposed wall				8.5 ft				8.5 ft heat/cool						
3 Room height				1717.5 ft²				6.5 x 9.5 ft						
4 Room dimensions				61.8 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	Brick, 2x6, drywall	0.050	ne	2.86	0.84	9	9	24	7	0	0	0	0
	W	ICF, R-26	0.035	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
11	W	Vinyl, 2x6, drywall	0.050	ne	2.86	0.91	455	415	1186	378	0	0	0	0
	G	Double pane	0.290	ne	16.59	23.92	5	0	83	120	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	16.59	23.92	15	0	249	359	0	0	0	0
	G	Double pane	0.290	ne	16.59	23.92	20	0	333	308	0	0	0	0
	W	ICF, R-26	0.035	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	W	Vinyl, 2x6, drywall	0.050	se	2.86	0.91	281	236	674	215	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	16.59	28.86	15	0	249	433	0	0	0	0
	G	Double pane	0.290	se	16.59	28.86	30	0	498	866	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	W	Vinyl, 2x6, drywall	0.050	sw	2.86	0.91	463	378	1082	345	81	71	202	65
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	10	0	166	289	10	0	166	289
	G	Double pane	0.290	sw	16.59	28.86	75	0	1244	2164	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	W	Brick, 2x6, drywall	0.050	nw	2.86	0.84	281	207	591	174	0	0	0	0
	G	Double pane	0.290	nw	16.59	23.92	14	0	232	335	0	0	0	0
	G	Double pane	0.290	nw	16.59	23.92	60	0	995	1435	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	R	Partition	0.094	-	0.00	0.00	0	0	0	0	0	0	0	0
	D	Solid wood	0.390	n	0.00	0.00	0	0	0	0	0	0	0	0
	P	Partition Wall	0.044	-	0.00	0.00	0	0	0	0	0	0	0	0
	C	Shingle, R-38, drywa	0.026	-	1.49	1.46	1718	1697	2523	2481	62	62	92	90
	G	Sky glazing, small,	0.500	-	28.60	118.67	21	0	601	2492	0	0	0	0
	F	Partition over Garag	0.030	-	0.86	0.49	270	270	232	132	0	0	0	0
	F	Partition over ambie	0.030	-	1.72	0.49	36	36	62	18	0	0	0	0
	F	Slab below grade	0.014	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Slab below grade	0.014	-	0.00	0.00	0	0	0	0	0	0	0	0
6	c) AED excursion									295				96
	Envelope loss/gain								11022	12846			460	540
12	a) Infiltration								3229	588			175	32
	b) Room ventilation								0	0			0	0
13	Internal gains:		Occupants @		230		0			0	0			0
			Appliances/other							1800				0
	Subtotal (lines 6 to 13)								14251	15233			635	572
	Less external load								0	0			0	0
	Less transfer								0	0			0	0
	Redistribution								0	0			0	0
14	Subtotal								14251	15233			635	572
15	Duct loads						52%	49%	7413	7493	52%	49%	330	281
	Total room load								21664	22727			966	853
	Air required (cfm)								1098	1098			49	41

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

Lancaster, KY40444 Phone: 859-792-9798 Email: info@loadcalcs.net Web: www.loadcalcs.net

1 Room name		Bath 3						Bedroom 2						
2 Exposed wall		7.5 ft						33.0 ft						
3 Room height		8.5 ft						8.5 ft						
4 Room dimensions		1.0 x 61.3 ft						14.0 x 19.0 ft						
5 Room area		61.3 ft²						266.0 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	Brick, 2x6, drywall	0.050	ne	2.86	0.84	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
11	W	Vinyl, 2x6, drywall	0.050	ne	2.86	0.91	64	59	168	54	0	0	0	0
	G	Double pane	0.290	ne	16.59	23.92	5	0	83	120	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	16.59	23.92	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	W	Vinyl, 2x6, drywall	0.050	se	2.86	0.91	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	W	Vinyl, 2x6, drywall	0.050	sw	2.86	0.91	0	0	0	0	162	132	376	120
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	0	0	0	0	30	0	498	866
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	W	Brick, 2x6, drywall	0.050	nw	2.86	0.84	0	0	0	0	119	89	255	75
	G	Double pane	0.290	nw	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	16.59	23.92	0	0	0	0	30	0	498	718
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	R	Partition	0.094	-	0.00	0.00	0	0	0	0	0	0	0	0
	D	Solid wood	0.390	n	0.00	0.00	0	0	0	0	0	0	0	0
	P	Partition Wall	0.044	-	0.00	0.00	0	0	0	0	0	0	0	0
	C	Shingle, R-38, drywa	0.026	-	1.49	1.46	61	61	91	90	266	266	396	389
	G	Sky glazing, small,	0.500	-	28.60	118.67	0	0	0	0	0	0	0	0
	F	Partition over Garag	0.030	-	0.86	0.49	61	61	53	30	0	0	0	0
	F	Partition over ambie	0.030	-	1.72	0.49	0	0	0	0	3	3	5	1
	F	Slab below grade	0.014	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Slab below grade	0.014	-	0.00	0.00	0	0	0	0	0	0	0	0
6	c) AED excursion									-20				424
	Envelope loss/gain									395	272			2027 2593
12	a) Infiltration									138	25			609 111
	b) Room ventilation									0	0			0 0
13	Internal gains:	Occupants @	230							0	0			0 0
		Appliances/other								0	0			0 0
	Subtotal (lines 6 to 13)									533	298			2636 2704
	Less external load									0	0			0 0
	Less transfer									0	0			0 0
	Redistribution									0	0			15 65
	Subtotal									533	298			2650 2769
14	Duct loads					52%	49%			277	146			1379 1362
	Total room load									810	444			4029 4131
	Air required (cfm)									41	21			204 200

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



Right-J® Worksheet

FC-2 Second

LoadCalcs.net, LLC

Job: 714 4th Street Residence
 Date: February 16, 2021
 By: Scott Pingleton
 Plan: 21-108

Lancaster, KY40444 Phone: 859-792-9798 Email: info@loadcalcs.net Web: www.loadcalcs.net

1 Room name		Bedroom 3						Clos2						
2 Exposed wall		32.5 ft						0 ft						
3 Room height		8.5 ft						8.5 ft						
4 Room dimensions		1.0 x 248.0 ft						7.5 x 8.5 ft						
5 Room area		248.0 ft²						63.8 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	Brick, 2x6, drywall	0.050	ne	2.86	0.84	9	9	24	7	0	0	0	0
	W	ICF, R-26	0.035	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
11	W	Vinyl, 2x6, drywall	0.050	ne	2.86	0.91	106	91	261	83	0	0	0	0
	G	Double pane	0.290	ne	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	16.59	23.92	15	0	249	359	0	0	0	0
	G	Double pane	0.290	ne	16.59	15.34	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	W	Vinyl, 2x6, drywall	0.050	se	2.86	0.91	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	W	Vinyl, 2x6, drywall	0.050	sw	2.86	0.91	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	W	Brick, 2x6, drywall	0.050	nw	2.86	0.84	162	118	336	99	0	0	0	0
	G	Double pane	0.290	nw	16.59	23.92	14	0	232	335	0	0	0	0
	G	Double pane	0.290	nw	16.59	23.92	30	0	498	718	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	R	Partition	0.094	-	0.00	0.00	0	0	0	0	0	0	0	0
	D	Solid wood	0.390	n	0.00	0.00	0	0	0	0	0	0	0	0
	P	Partition Wall	0.044	-	0.00	0.00	0	0	0	0	0	0	0	0
	C	Shingle, R-38, drywa	0.026	-	1.49	1.46	248	248	369	363	64	64	95	93
	G	Sky glazing, small,	0.500	-	28.60	118.67	0	0	0	0	0	0	0	0
	F	Partition over Garag	0.030	-	0.86	0.49	169	169	145	82	0	0	0	0
	F	Partition over ambie	0.030	-	1.72	0.49	33	33	57	16	0	0	0	0
	F	Slab below grade	0.014	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Slab below grade	0.014	-	0.00	0.00	0	0	0	0	0	0	0	0
6	c) AED excursion								220					-16
	Envelope loss/gain								2170	2282			95	78
12	a) Infiltration								600	109			0	0
	b) Room ventilation								0	0			0	0
13	Internal gains:		Occupants @		230		0			0	0			0
			Appliances/other							0				150
	Subtotal (lines 6 to 13)								2770	2391			95	228
	Less external load								0	0			0	0
	Less transfer								0	0			0	0
	Redistribution								16	73			28	124
	Subtotal								2786	2464			123	351
14	Duct loads						52%	49%	1449	1212	52%	49%	64	173
	Total room load								4236	3676			187	524
	Air required (cfm)								215	178			9	25

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





Right-J® Worksheet FC-2 Second LoadCalcs.net, LLC

Job: 714 4th Street Residence
Date: February 16, 2021
By: Scott Pingleton
Plan: 21-108

Lancaster, KY40444 Phone: 859-792-9798 Email: info@loadcalcs.net Web: www.loadcalcs.net

1 Room name				Clos 3				Hall						
2 Exposed wall				0 ft				0 ft						
3 Room height				8.5 ft				8.5 ft						
4 Room dimensions				1.0 x 43.8 ft				1.0 x 135.0 ft						
5 Room area				43.8 ft²				135.0 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	Brick, 2x6, drywall	0.050	ne	2.86	0.84	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
11	W	Vinyl, 2x6, drywall	0.050	ne	2.86	0.91	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	16.59	23.92	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	W	Vinyl, 2x6, drywall	0.050	se	2.86	0.91	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	W	Vinyl, 2x6, drywall	0.050	sw	2.86	0.91	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	W	Brick, 2x6, drywall	0.050	nw	2.86	0.84	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	R	Partition	0.094	-	0.00	0.00	0	0	0	0	0	0	0	0
	D	Solid wood	0.390	n	0.00	0.00	0	0	0	0	0	0	0	0
	P	Partition Wall	0.044	-	0.00	0.00	0	0	0	0	0	0	0	0
	C	Shingle, R-38, drywa	0.026	-	1.49	1.46	44	44	65	64	135	135	201	197
	G	Sky glazing, small,	0.500	-	28.60	118.67	0	0	0	0	0	0	0	0
	F	Partition over Garag	0.030	-	0.86	0.49	40	40	34	20	0	0	0	0
	F	Partition over ambie	0.030	-	1.72	0.49	0	0	0	0	0	0	0	0
	F	Slab below grade	0.014	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Slab below grade	0.014	-	0.00	0.00	0	0	0	0	0	0	0	0
6	c) AED excursion													
	Envelope loss/gain								99	69			201	137
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							150				750
	Subtotal (lines 6 to 13)								99	219			201	887
	Less external load								0	0			0	0
	Less transfer								0	0			0	0
	Redistribution								23	102			-201	-887
	Subtotal								122	320			0	0
14	Duct loads								52%	49%			0	0
	Total room load								186	478			0	0
	Air required (cfm)								9	23			0	0

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



Right-Suite® Universal 2021 21.0.03 RSU29500

2021-Feb-16 17:22:25

...1-108Working Dwgsl714 4th Street Residence.rup Calc = MJ8 Front Door faces: NW

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Right-J® Worksheet FC-2 Second LoadCalcs.net, LLC

Job: 714 4th Street Residence
Date: February 16, 2021
By: Scott Pingleton
Plan: 21-108

Lancaster, KY40444 Phone: 859-792-9798 Email: info@loadcalcs.net Web: www.loadcalcs.net

1	Room name				Laundry 0 ft				MBath 12.0 ft					
	Exposed wall				8.5 ft				8.5 ft					
	Room height				7.5 x 8.5 ft				1.0 x 124.5 ft					
4	Room dimensions				63.8 ft²				124.5 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	Brick, 2x6, drywall	0.050	ne	2.86	0.84	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
11	W	Vinyl, 2x6, drywall	0.050	ne	2.86	0.91	0	0	0	0	102	102	292	93
	G	Double pane	0.290	ne	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	16.59	23.92	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	W	Vinyl, 2x6, drywall	0.050	se	2.86	0.91	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	W	Vinyl, 2x6, drywall	0.050	sw	2.86	0.91	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	W	Brick, 2x6, drywall	0.050	nw	2.86	0.84	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	R	Partition	0.094	-	0.00	0.00	0	0	0	0	0	0	0	0
	D	Solid wood	0.390	n	0.00	0.00	0	0	0	0	0	0	0	0
	P	Partition Wall	0.044	-	0.00	0.00	0	0	0	0	0	0	0	0
	C	Shingle, R-38, drywa	0.026	-	1.49	1.46	64	64	95	93	125	125	185	182
	G	Sky glazing, small,	0.500	-	28.60	118.67	0	0	0	0	0	0	0	0
	F	Partition over Garag	0.030	-	0.86	0.49	0	0	0	0	0	0	0	0
	F	Partition over ambie	0.030	-	1.72	0.49	0	0	0	0	0	0	0	0
	F	Slab below grade	0.014	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Slab below grade	0.014	-	0.00	0.00	0	0	0	0	0	0	0	0
6	c) AED excursion													
	Envelope loss/gain								95	55			477	255
12	a) Infiltration								0	0			221	40
	b) Room ventilation								0	0			0	0
13	Internal gains:				Occupants @	230	0			0	0			0
					Appliances/other					500				0
	Subtotal (lines 6 to 13)								95	555			698	295
	Less external load								0	0			0	0
	Less transfer								0	0			0	0
	Redistribution								28	124			28	124
	Subtotal								123	679			726	419
14	Duct loads						52%	49%	64	334	52%	49%	378	206
	Total room load								187	1013			1104	625
	Air required (cfm)								9	49			56	30

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



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...1-108Working Dwgsl714 4th Street Residence.rup Calc = MJ8 Front Door faces: NW



Right-J® Worksheet FC-2 Second LoadCalcs.net, LLC

Job: 714 4th Street Residence
Date: February 16, 2021
By: Scott Pingleton
Plan: 21-108

Lancaster, KY40444 Phone: 859-792-9798 Email: info@loadcalcs.net Web: www.loadcalcs.net

1 Room name		M Bedroom 42.0 ft						M Clos 23.0 ft						
2 Exposed wall		8.5 ft heat/cool						8.5 ft heat/cool						
3 Room height		1.0 x 367.0 ft						14.0 x 9.0 ft						
4 Room dimensions		367.0 ft²						126.0 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	Brick, 2x6, drywall	0.050	ne	2.86	0.84	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
11	W	Vinyl, 2x6, drywall	0.050	ne	2.86	0.91	38	18	52	17	77	77	219	70
	G	Double pane	0.290	ne	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	16.59	15.34	20	0	333	308	0	0	0	0
	W	ICF, R-26	0.035	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	W	Vinyl, 2x6, drywall	0.050	se	2.86	0.91	162	117	333	106	119	119	340	109
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	16.59	28.86	15	0	249	433	0	0	0	0
	G	Double pane	0.290	se	16.59	28.86	30	0	498	866	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	W	Vinyl, 2x6, drywall	0.050	sw	2.86	0.91	157	127	364	116	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	30	0	498	866	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	W	Brick, 2x6, drywall	0.050	nw	2.86	0.84	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	R	Partition	0.094	-	0.00	0.00	0	0	0	0	0	0	0	0
	D	Solid wood	0.390	n	0.00	0.00	0	0	0	0	0	0	0	0
	P	Partition Wall	0.044	-	0.00	0.00	0	0	0	0	0	0	0	0
	C	Shingle, R-38, drywa	0.026	-	1.49	1.46	367	367	546	537	126	126	187	184
	G	Sky glazing, small,	0.500	-	28.60	118.67	0	0	0	0	0	0	0	0
	F	Partition over Garag	0.030	-	0.86	0.49	0	0	0	0	0	0	0	0
	F	Partition over ambie	0.030	-	1.72	0.49	0	0	0	0	0	0	0	0
	F	Slab below grade	0.014	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Slab below grade	0.014	-	0.00	0.00	0	0	0	0	0	0	0	0
6	c) AED excursion													
	Envelope loss/gain								2872	3033			747	335
12	a) Infiltration								775	141			424	77
	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)								3647	3174			1171	412
	Less external load								0	0			0	0
	Less transfer								0	0			0	0
	Redistribution								25	109			0	0
	Subtotal								3672	3283			1171	412
14	Duct loads						52%	49%	1910	1615	52%	49%	609	203
	Total room load								5582	4897			1780	614
	Air required (cfm)								283	237			90	30

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



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...1-108Working Dwgsl714 4th Street Residence.rup Calc = MJ8 Front Door faces: NW



Right-J® Worksheet FC-2 Second LoadCalcs.net, LLC

Job: 714 4th Street Residence
Date: February 16, 2021
By: Scott Pingleton
Plan: 21-108

Lancaster, KY40444 Phone: 859-792-9798 Email: info@loadcalcs.net Web: www.loadcalcs.net

1 Room name				Office 7.5 ft heat/cool				Stairs 2 8.0 ft heat/cool						
2 Exposed wall				8.5 ft 6.5 x 7.5 ft				8.5 ft 13.5 x 8.0 ft						
3 Room height				48.8 ft²				108.0 ft²						
4 Room dimensions														
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	Brick, 2x6, drywall	0.050	ne	2.86	0.84	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
11	W	Vinyl, 2x6, drywall	0.050	ne	2.86	0.91	0	0	0	0	68	68	194	62
	G	Double pane	0.290	ne	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	16.59	23.92	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	W	Vinyl, 2x6, drywall	0.050	se	2.86	0.91	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	W	Vinyl, 2x6, drywall	0.050	sw	2.86	0.91	64	49	139	44	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	15	0	249	433	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	W	Brick, 2x6, drywall	0.050	nw	2.86	0.84	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	16.59	23.92	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	R	Partition	0.094	-	0.00	0.00	0	0	0	0	0	0	0	0
	D	Solid wood	0.390	n	0.00	0.00	0	0	0	0	0	0	0	0
	P	Partition Wall	0.044	-	0.00	0.00	0	0	0	0	0	0	0	0
	C	Shingle, R-38, drywa	0.026	-	1.49	1.46	49	49	73	71	108	87	129	127
	G	Sky glazing, small,	0.500	-	28.60	118.67	0	0	0	0	21	0	601	2492
	F	Partition over Garag	0.030	-	0.86	0.49	0	0	0	0	0	0	0	0
	F	Partition over ambie	0.030	-	1.72	0.49	0	0	0	0	0	0	0	0
	F	Slab below grade	0.014	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Slab below grade	0.014	-	0.00	0.00	0	0	0	0	0	0	0	0
6	c) AED excursion									134				-166
	Envelope loss/gain								461	682			924	2515
12	a) Infiltration								138	25			148	27
	b) Room ventilation								0	0			0	0
13	Internal gains:		Occupants @		230		0			0	0			0
			Appliances/other							250				0
	Subtotal (lines 6 to 13)								599	958			1072	2542
	Less external load								0	0			0	0
	Less transfer								0	0			0	0
	Redistribution								0	0			38	167
	Subtotal								599	958			1110	2709
14	Duct loads						52%	49%	312	471	52%	49%	577	1333
	Total room load								911	1429			1687	4042
	Air required (cfm)								46	69			86	195

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



Right-J® Worksheet

U-1 Basement

LoadCalcs.net, LLC

Job: 714 4th Street Residence
 Date: February 16, 2021
 By: Scott Pingleton
 Plan: 21-108

Lancaster, KY40444 Phone: 859-792-9798 Email: info@loadcalcs.net Web: www.loadcalcs.net

1 Room name		U-1 Basement							B Bath					
2 Exposed wall		153.5 ft							26.5 ft					
3 Room height		4.0 ft							4.0 ft					
4 Room dimensions		1303.5 ft²							13.5 x 7.0 ft					
5 Room area		1303.5 ft²							94.5 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	Brick, 2x6, drywall	0.050	ne	0.00	0.00	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	ne	2.00	0.59	102	61	122	36	0	0	0	0
	G	Double pane	0.290	ne	16.59	23.92	21	0	348	502	0	0	0	0
	G	Double pane	0.290	ne	16.59	25.34	20	0	333	509	0	0	0	0
11	W	Vinyl, 2x6, drywall	0.050	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	se	2.00	0.59	132	114	228	67	0	0	0	0
	G	Double pane	0.290	se	16.59	12.13	6	6	100	73	0	0	0	0
	G	Double pane	0.290	se	16.59	28.86	12	0	199	346	0	0	0	0
	W	Vinyl, 2x6, drywall	0.050	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	sw	2.00	0.59	218	190	380	112	28	28	56	17
	G	Double pane	0.290	sw	16.59	28.86	7	0	116	202	0	0	0	0
	G	Double pane	0.290	sw	16.59	28.86	21	0	348	606	0	0	0	0
	W	Vinyl, 2x6, drywall	0.050	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	W	Brick, 2x6, drywall	0.050	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G	Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	W	ICF, R-26	0.035	nw	2.00	0.59	54	50	101	30	54	50	101	30
	G	Double pane	0.290	nw	16.59	23.92	4	0	62	90	4	0	62	90
	R	Partition	0.094	-	0.00	0.00	0	0	0	0	0	0	0	0
	D	Solid wood	0.390	n	0.00	0.00	0	0	0	0	0	0	0	0
	P	Partition Wall	0.044	-	2.52	0.52	108	108	272	56	24	24	60	12
	C	Shingle, R-38, drywa	0.026	-	0.00	0.00	0	0	0	0	0	0	0	0
	G	Sky glazing, small,	0.500	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Partition over Garag	0.030	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Partition over ambie	0.030	-	0.00	0.00	0	0	0	0	0	0	0	0
	F	Slab below grade	0.014	-	0.40	0.00	1304	1304	522	0	95	95	38	0
	F	Slab below grade	0.014	-	0.00	0.00	0	0	0	0	0	0	0	0
6	c) AED excursion								0				39	
	Envelope loss/gain								3132	2629			317	187
12	a) Infiltration								1098	200			178	32
	b) Room ventilation								0	0			0	0
13	Internal gains:		Occupants @		230		0		0	0			0	0
			Appliances/other						0	0			0	0
	Subtotal (lines 6 to 13)								4230	2829			495	219
	Less external load								0	0			0	0
	Less transfer								0	0			0	0
	Redistribution								0	0			51	10
14	Subtotal								4230	2829			546	229
15	Duct loads								0%	0%			0	0
	Total room load								4230	2829			546	229
	Air required (cfm)								129	129			17	10

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



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Right-Suite® Universal 2021 21.0.03 RSU29500

...1-108Working Dwgsl714 4th Street Residence.rup Calc = MJ8 Front Door faces: NW



Right-J® Worksheet

U-1 Basement

LoadCalcs.net, LLC

Job: 714 4th Street Residence
 Date: February 16, 2021
 By: Scott Pingleton
 Plan: 21-108

Lancaster, KY40444 Phone: 859-792-9798 Email: info@loadcalcs.net Web: www.loadcalcs.net

1 Room name				Mech		Open Area							
2 Exposed wall				7.0 ft		120.0 ft							
3 Room height				4.0 ft		4.0 ft							
4 Room dimensions				9.0 x 7.0 ft		1.0 x 1146.0 ft							
5 Room area				63.0 ft²		1146.0 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 Brick, 2x6, drywall	0.050	ne	0.00	0.00	0	0	0	0	0	0	0	0
	W ICF, R-26	0.035	ne	2.00	0.59	0	0	0	0	102	61	122	36
	G Double pane	0.290	ne	16.59	23.92	0	0	0	0	21	0	348	502
	G Double pane	0.290	ne	16.59	25.34	0	0	0	0	20	0	333	509
11	W Vinyl, 2x6, drywall	0.050	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	G Double pane	0.290	ne	0.00	0.00	0	0	0	0	0	0	0	0
	W ICF, R-26	0.035	se	2.00	0.59	0	0	0	0	132	114	228	67
	G Double pane	0.290	se	16.59	12.13	0	0	0	0	6	6	100	73
	G Double pane	0.290	se	16.59	28.86	0	0	0	0	12	0	199	346
	W Vinyl, 2x6, drywall	0.050	se	0.00	0.00	0	0	0	0	0	0	0	0
	G Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	G Double pane	0.290	se	0.00	0.00	0	0	0	0	0	0	0	0
	W ICF, R-26	0.035	sw	2.00	0.59	28	28	56	17	162	134	268	79
	G Double pane	0.290	sw	16.59	28.86	0	0	0	0	7	0	116	202
	G Double pane	0.290	sw	16.59	28.86	0	0	0	0	21	0	348	606
	W Vinyl, 2x6, drywall	0.050	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	G Double pane	0.290	sw	0.00	0.00	0	0	0	0	0	0	0	0
	W Brick, 2x6, drywall	0.050	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	G Double pane	0.290	nw	0.00	0.00	0	0	0	0	0	0	0	0
	W ICF, R-26	0.035	nw	2.00	0.59	0	0	0	0	0	0	0	0
	G Double pane	0.290	nw	16.59	23.92	0	0	0	0	0	0	0	0
	R Partition	0.094	-	0.00	0.00	0	0	0	0	0	0	0	0
	D Solid wood	0.390	n	0.00	0.00	0	0	0	0	0	0	0	0
	P Partition Wall	0.044	-	2.52	0.52	0	0	0	0	84	84	211	43
	C Shingle, R-38, drywa	0.026	-	0.00	0.00	0	0	0	0	0	0	0	0
	G Sky glazing, small,	0.500	-	0.00	0.00	0	0	0	0	0	0	0	0
	F Partition over Garag	0.030	-	0.00	0.00	0	0	0	0	0	0	0	0
	F Partition over ambie	0.030	-	0.00	0.00	0	0	0	0	0	0	0	0
	F Slab below grade	0.014	-	0.40	0.00	63	63	25	0	1146	1146	459	0
	F Slab below grade	0.014	-	0.00	0.00	0	0	0	0	0	0	0	0
6	c) AED excursion												-38
	Envelope loss/gain							81	16			2734	2426
12	a) Infiltration							61	11			860	156
	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)							142	27			3593	2583
	Less external load							0	0			0	0
	Less transfer							0	0			0	0
	Redistribution							-142	-27			91	17
14	Subtotal							0	0			3684	2600
15	Duct loads					-0%	0%	0	0			0	0
	Total room load							0	0			3684	2600
	Air required (cfm)							0	0			112	118

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

