

Residential Heating and Cooling

Load Calculations For

Santos Residence
123 Main Street
Sacramento, CA 95825

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3D Isometric Views of Home
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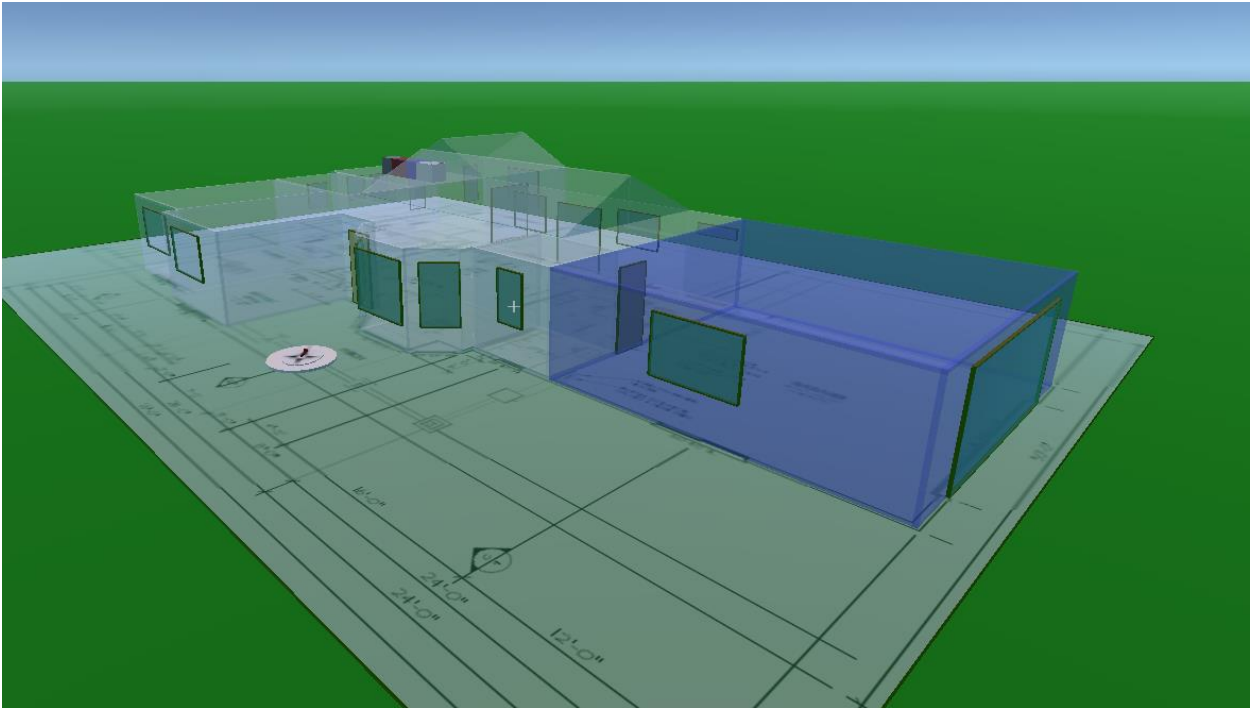
Please send questions to kwikmodel@gmail.com.

DISCLAIMER: Installing contractor always ultimately responsible for the performance and code compliance of the systems they install. Load calculations are just one component of a well-designed system. Coded Energy, Inc. is not responsible for the accuracy of the information provided to us.

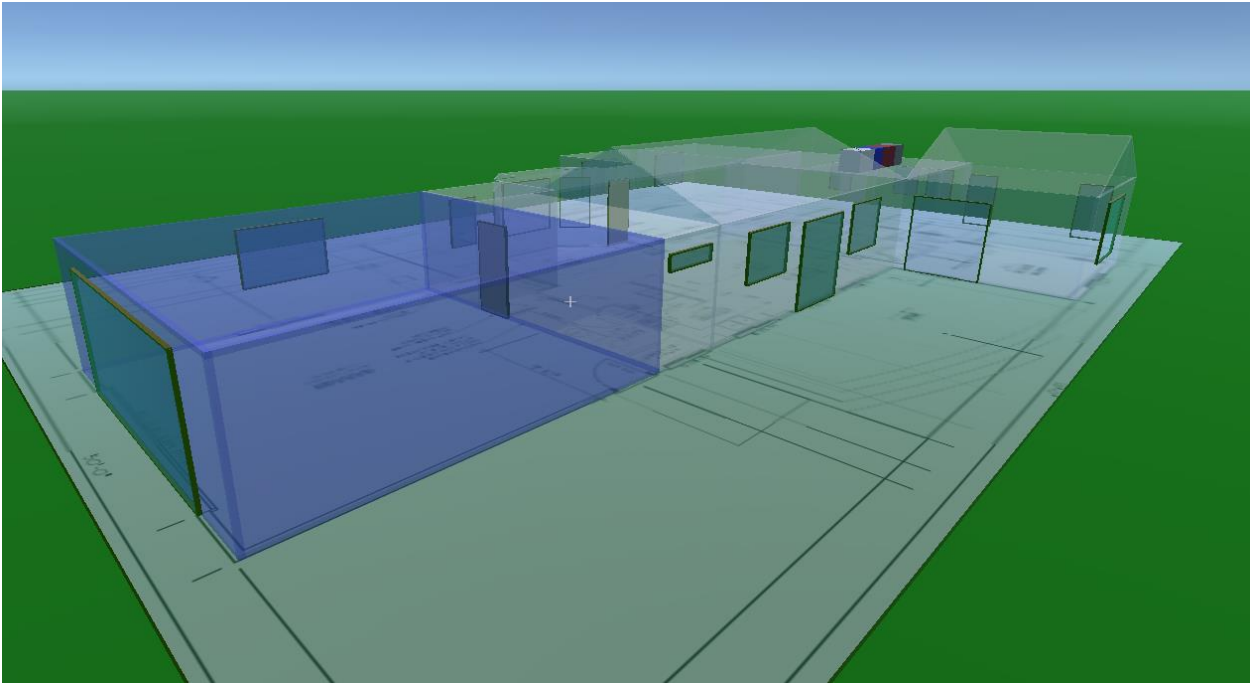
View From West



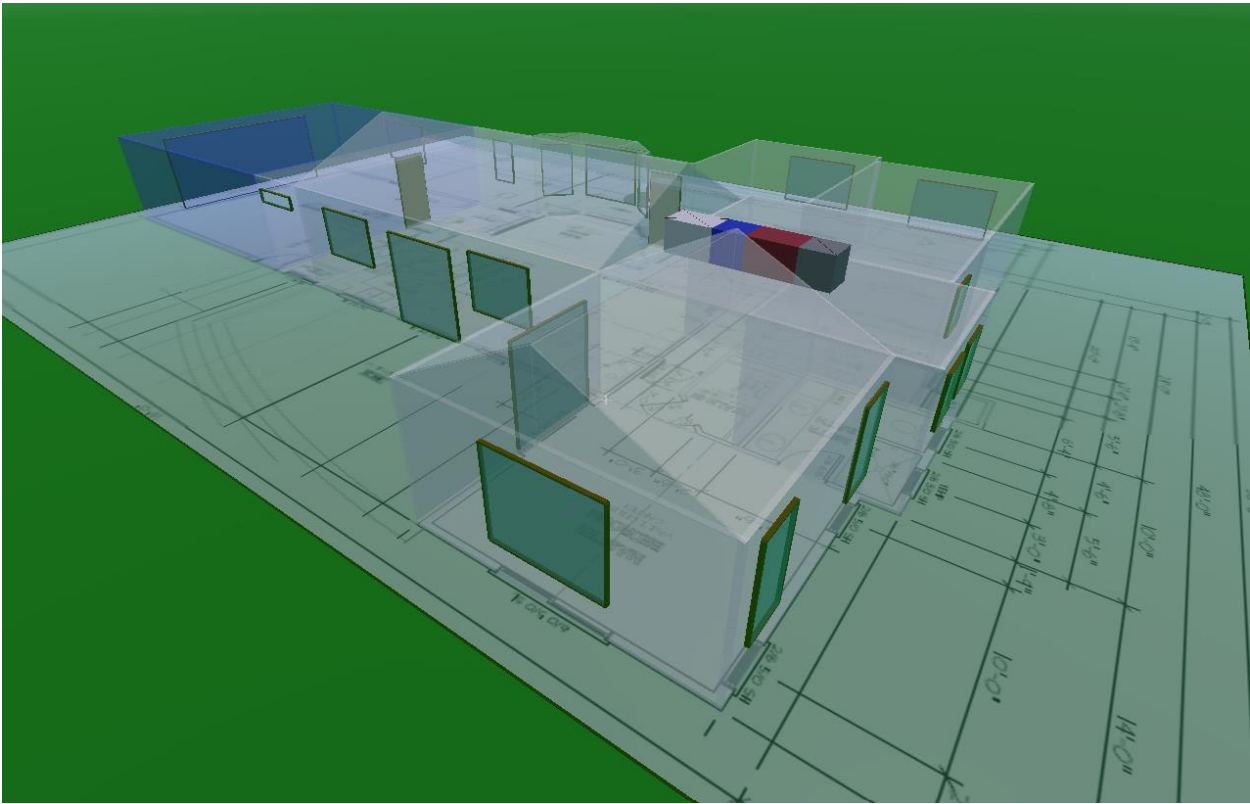
View From South



View From East



View From North



Residential System Sizing Calculation

Summary

Sample Report
123 Main Street
Sacramento, CA 95825

Project Title:
Sample Report

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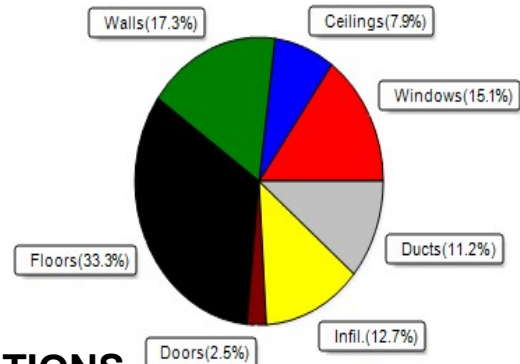
12/6/2023

Location for weather data: Sacramento (Met, CA - Defaults: Latitude(39) Altitude(33 ft.) Temp Range(H)			
Humidity data: Interior RH (50%) Outdoor wet bulb (70F) Humidity difference(0gr.)			
Winter design temperature(CA Med.)	26 F	Summer design temperature(MJ8 99%)	98 F
Winter setpoint	68 F*	Summer setpoint	75 F
Winter temperature difference	42 F	Summer temperature difference	23 F
Total heating load calculation	30850 Btuh	Total cooling load calculation	23778 Btuh
Submitted heating capacity	% of calc Btuh	Submitted cooling capacity	% of calc Btuh
Total (Electric Heat Pump)	0.0 0	Sensible (SHR = NAN)	NAN NAN
Heat Pump + Auxiliary(0.0kW)	0.0 0	Latent	NAN NAN
		Total (Electric Heat Pump)	0.0 0

WINTER CALCULATIONS

Winter Heating Load (for 1754 sqft)

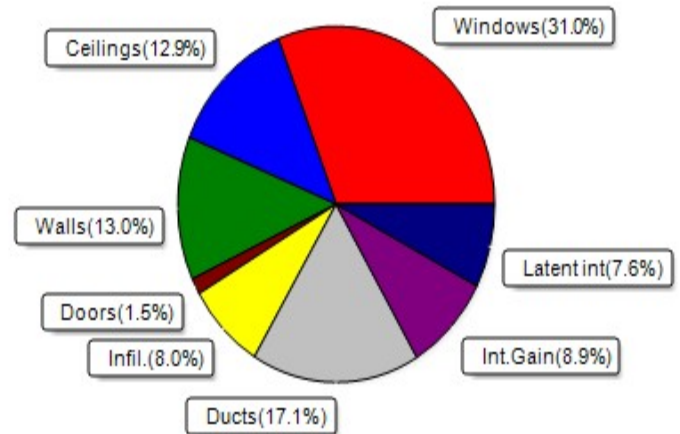
Load component	Load
Window total 317 sqft	4660 Btuh
Wall total 1434 sqft	5345 Btuh
Door total 40 sqft	773 Btuh
Ceiling total 1822 sqft	2437 Btuh
Floor total See detail report	10276 Btuh
Infiltration 85 cfm	3912 Btuh
Duct loss	3448 Btuh
Subtotal	30850 Btuh
Ventilation Ex:60 cfm; Sup:0 cfm	0 Btuh
TOTAL HEAT LOSS	30850 Btuh



SUMMER CALCULATIONS

Summer Cooling Load (for 1754 sqft)

Load component	Load
Window total 317 sqft	7359 Btuh
Wall total 1434 sqft	3095 Btuh
Door total 40 sqft	348 Btuh
Ceiling total 1822 sqft	3075 Btuh
Floor total	0 Btuh
Infiltration 75 cfm	1905 Btuh
Internal gain	2120 Btuh
Duct gain	3961 Btuh
Sens.Ventilation Ex:60 cfm; Sup:0 cfm	0 Btuh
Blower Load	0 Btuh
Total sensible gain	21863 Btuh
Latent gain(ducts)	115 Btuh
Latent gain(infiltration)	0 Btuh
Latent gain(ventilation)	0 Btuh
Latent gain(internal/occupants/other)	1800 Btuh
Total latent gain	1915 Btuh
TOTAL HEAT GAIN	23778 Btuh



* California interior temperatures supersede Manual J defaults.

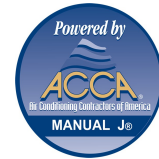


8th Edition

EnergyGauge® System Sizing

PREPARED BY: _____

DATE: _____



Project Information

Sample Report
123 Main Street
Sacramento, CA 95825

Project Title:
Sample Report
Building Type: User
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Project Design Information

Project Status	New (From Plans)		
Occupancy	Single-family detached		
Stories	1		
Rotate Angle	0		
	Heating	Cooling	Infiltration
Outside DB	26 °F	98 °F	Method Proposed ACH(50)
Inside DB	68 °F	75 °F	Proposed Quantity 5.00 ACH(50)
Design TD	42 °F	23 °F	Air Changes Per Hour 0.22(Htg) 0.16(Clg)
Daily Range	-	H	
Inside humidity (%)	50 %	50 %	
Moisture difference (gr/lb)	-	0	

HVAC Design Information

HEATING EQUIPMENT

Make
Model
AHRI ref

Type Electric Heat Pump

Efficiency 7.70 HSPF:

Heating input N/A

Heating output 0 Btuh

Temperature rise 0 °F

Manual S air flow 1000 cfm

Manual S Static pressure 0.28 in H2O

Space thermostat Manual

Capacity balance point = ____

Backup: Electric resistance

Input: 0.00 kW

COOLING EQUIPMENT

Make
Cond
Coil
AHRI ref

Type Central Unit

Efficiency 13.00 SEER

Manual S OEM Sensible cooling Missing Btuh

Manual S OEM Latent cooling Missing Btuh

Manual S OEM Total cooling Missing Btuh

Manual S air flow 1200 cfm

Manual S Static pressure 0.28 in H2O

Load sensible heat ratio NAN

ROOM NAME	Area (sq. ft.)	Heating load (Btuh)	Cooling load (Btuh)	Htg AVF (cfm *)	Clg AVF (cfm **)
Master Bed	314.0	6773	4608	220	256
Master Bath	90.0	1817	973	59	50
Bath 2	136.0	1309	786	42	41
Bedroom 3	186.0	3534	1747	115	110
Bed/office	216.0	3356	1766	109	111
Living/Kitchen	484.5	5671	6987	184	361
Dining/entry	178.0	3694	2521	120	167
Utility	56.0	1790	758	58	47
Bath 3	93.5	2904	1077	94	56
System Excursion(& excursion duct load)			640**		
System Total	1754.0	30850	21863	1000*	1200*
Latent Cooling			1915		
TOTALS	1754.0	30850	23778	1000*	1200*

* CFMs are calculated based on Manual S equipment selection.

** Cooling CFMs may include a portion of the System Excursion depending on room window orientation.

System Sizing Calculations - Summer

Residential Load - Room by Room Component Details

Sample Report
123 Main Street
Sacramento, CA 95825

Project Title:
Sample Report

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12/6/2023

Reference City: Sacramento (Met, CA (Defaults)
Humidity difference: 0gr.

Temperature Difference: 23.0F(MJ8 99%)
Summer Setpoint: 75 °F (Required Manual J default)

Component Loads for Room #1: Master Bed

Window	Type*						Overhang		Window Area(sqft)			HTM		Load
	Panes	SHGC	U	InSh	IS	Ornt	Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded	
1	2 NFRC	0.35, 0.35	D-L	H	SE	2.0ft	1.0ft	40.0	9.4	30.6	11	26	904 Btuh	
2	2 NFRC	0.35, 0.35	D-L	H	NE	2.0ft	1.0ft	30.0	0.0	30.0	11	22	666 Btuh	
3	2 NFRC	0.35, 0.35	D-L	H	NW	2.0ft	1.0ft	12.5	0.0	12.5	11	22	277 Btuh	
4	2 NFRC	0.35, 0.35	D-L	H	NW	2.0ft	1.0ft	12.5	0.0	12.5	11	22	277 Btuh	
Window Total									95 (sqft)					2124 Btuh
Walls	Type	U-Value		R-Value		Area(sqft)		HTM		Load				
				Cav/Sheath										
1	Frame - Wood - Ext	0.09		13.0/0.0		98.0		2.2		213 Btuh				
2	Frame - Wood - Ext	0.09		13.0/0.0		72.0		2.2		157 Btuh				
3	Frame - Wood - Ext	0.09		13.0/0.0		87.0		2.2		189 Btuh				
25	Frame - Wood - Ext	0.09		13.0/0.0		16.0		2.2		35 Btuh				
26	Frame - Wood - Ext	0.09		13.0/0.0		16.0		2.2		35 Btuh				
27	Frame - Wood - Ext	0.09		13.0/0.0		16.0		2.2		35 Btuh				
28	Frame - Wood - Ext	0.09		13.0/0.0		16.0		2.2		35 Btuh				
Wall Total									321 (sqft)			698 Btuh		
Ceilings	Type/Color/Surface	U-Value		R-Value		Area(sqft)		HTM		Load				
2	Vented Attic/DarkShingle	0.032		30.0/0.0		90.0		1.69		152 Btuh				
15	Vented Attic/DarkShingle	0.032		30.0/0.0		125.2		1.69		211 Btuh				
16	Vented Attic/DarkShingle	0.032		30.0/0.0		125.2		1.69		211 Btuh				
Ceiling Total									340 (sqft)			575 Btuh		
Floors	Type	R-Value		Size		HTM		Load						
1	Slab On Grade	0.0		224 (ft-perimeter)		0.0		0 Btuh						
3	Slab On Grade	0.0		90 (ft-perimeter)		0.0		0 Btuh						
Floor Total									314.0 (sqft)			0 Btuh		
Zone Envelope Subtotal:											3397 Btuh			
Infiltration	Type	Wholehouse ACH		Volume(cuft)		Wall Ratio		CFM=		Load				
	Natural(Adjusted for ventilation)	0.16		2960		0.22		14.9		376 Btuh				
Internal gain	Occupants	Btuh/occupant		Appliance		Load								
	0	X 230 +		0		0 Btuh								
Sensible Envelope Load:											3773 Btuh			
Duct load	Notably sealed, Supply(R8.0-Attic), Return(R8.0-Attic) (DGM of 0.221)									835 Btuh				
Sensible Zone Load											4608 Btuh			

Manual J Summer Calculations

Residential Load - Component Details (continued)

Sample Report
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Sacramento, CA 95825

Project Title: Climate:CA_SACRAMENTO_METROPOLITA
Sample Report

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Component Loads for Room #2: Master Bath

Window	Type*						Overhang		Window Area(sqft)			HTM		Load
	Panes	SHGC	U	InSh	IS	Ornt	Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded	
5	2 NFRC	0.35, 0.35	D-L	H	NW	2.0ft	1.0ft	7.5	0.0	7.5	11	22	166 Btuh	
6	2 NFRC	0.35, 0.35	D-L	H	NW	2.0ft	1.0ft	7.5	0.0	7.5	11	22	166 Btuh	
Window Total								15 (sqft)					333 Btuh	
Walls	Type		U-Value	R-Value	Area(sqft)		HTM		Load					
4	Frame - Wood - Ext		0.09	13.0/0.0	16.0		2.2		35 Btuh					
5	Frame - Wood - Ext		0.09	13.0/0.0	16.0		2.2		35 Btuh					
6	Frame - Wood - Ext		0.09	13.0/0.0	65.0		2.2		141 Btuh					
Wall Total								97 (sqft)			211 Btuh			
Ceilings	Type/Color/Surface		U-Value	R-Value	Area(sqft)		HTM		Load					
1	Vented Attic/DarkShingle		0.032	30.0/0.0	90.0		1.69		152 Btuh					
Ceiling Total								90 (sqft)			152 Btuh			
Floors	Type		R-Value	Size		HTM		Load						
2	Slab On Grade		0.0	90 (ft-perimeter)		0.0		0 Btuh						
Floor Total								90.0 (sqft)			0 Btuh			
Zone Envelope Subtotal:											696 Btuh			
Infiltration	Type	Wholehouse ACH		Volume(cuft)		Wall Ratio		CFM=		Load				
	Natural(Adjusted for ventilation)	0.16		720		0.07		4.0		101 Btuh				
Internal gain	Occupants		Btuh/occupant		Appliance		Load							
	0		X 230 +		0		0 Btuh							
Sensible Envelope Load:											797 Btuh			
Duct load	Notably sealed, Supply(R8.0-Attic), Return(R8.0-Attic) (DGM of 0.221)										176 Btuh			
Sensible Zone Load											973 Btuh			

Component Loads for Room #3: Bath 2

Window	Type*						Overhang		Window Area(sqft)			HTM		Load
	Panes	SHGC	U	InSh	IS	Ornt	Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded	
7	2 NFRC	0.35, 0.35	D-L	H	NW	2.0ft	1.0ft	7.5	0.0	7.5	11	22	166 Btuh	
Window Total								8 (sqft)					166 Btuh	
Walls	Type		U-Value	R-Value	Area(sqft)		HTM		Load					
7	Frame - Wood - Ext		0.09	13.0/0.0	60.5		2.2		132 Btuh					
Wall Total								61 (sqft)			132 Btuh			
Ceilings	Type/Color/Surface		U-Value	R-Value	Area(sqft)		HTM		Load					
3	Vented Attic/DarkShingle		0.032	30.0/0.0	136.0		1.69		230 Btuh					
Ceiling Total								136 (sqft)			230 Btuh			

Manual J Summer Calculations

Residential Load - Component Details (continued)

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Floors	Type	R-Value	Size	HTM	Load	
4	Slab On Grade	0.0	136 (ft-perimeter)	0.0	0 Btuh	
	Floor Total		136.0 (sqft)		0 Btuh	
Zone Envelope Subtotal:					528 Btuh	
Infiltration	Type	Wholehouse ACH	Volume(cuft)	Wall Ratio	CFM=	Load
	Natural(Adjusted for ventilation)	0.16	1088	0.04	4.6	116 Btuh
Internal gain	Occupants	Btuh/occupant	Appliance	Load		
	0	X 230 +	0	0 Btuh		
Sensible Envelope Load:					643 Btuh	
Duct load	Notably sealed, Supply(R8.0-Attic), Return(R8.0-Attic)			(DGM of 0.221)	142 Btuh	
Sensible Zone Load					786 Btuh	

Component Loads for Room #4: Bedroom 3

Window	Type*	Overhang	Window Area(sqft)			HTM	Load
8	Panes SHGC U InSh IS Ornt	Len Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded
	2 NFRC 0.35, 0.35 D-L H SW	2.0ft 1.0ft	24.0	9.4	14.6	11	26
	Window Total		24 (sqft)				484 Btuh
Walls	Type	U-Value	R-Value	Area(sqft)		HTM	Load
8	Frame - Wood - Ext	0.09	13.0/0.0	72.0		2.2	157 Btuh
9	Frame - Wood - Ext	0.09	13.0/0.0	124.0		2.2	270 Btuh
	Wall Total			196 (sqft)			426 Btuh
Ceilings	Type/Color/Surface	U-Value	R-Value	Area(sqft)		HTM	Load
4	Vented Attic/DarkShingle	0.032	30.0/0.0	186.0		1.69	314 Btuh
	Ceiling Total			186 (sqft)			314 Btuh
Floors	Type	R-Value	Size	HTM	Load		
5	Slab On Grade	0.0	186 (ft-perimeter)	0.0	0 Btuh		
	Floor Total		186.0 (sqft)		0 Btuh		
Zone Envelope Subtotal:							1224 Btuh
Infiltration	Type	Wholehouse ACH	Volume(cuft)	Wall Ratio	CFM=	Load	
	Natural(Adjusted for ventilation)	0.16	1488	0.14	8.2	206 Btuh	
Internal gain	Occupants	Btuh/occupant	Appliance	Load			
	0	X 230 +	0	0 Btuh			
Sensible Envelope Load:							1431 Btuh
Duct load	Notably sealed, Supply(R8.0-Attic), Return(R8.0-Attic)			(DGM of 0.221)	317 Btuh		
Sensible Zone Load							1747 Btuh

Manual J Summer Calculations

Residential Load - Component Details (continued)

Sample Report
123 Main Street
Sacramento, CA 95825

Project Title: Climate:CA_SACRAMENTO_METROPOLITA
Sample Report

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Component Loads for Room #5: Bed/office

Window	Type*						Overhang		Window Area(sqft)			HTM		Load
	Panes	SHGC	U	InSh	IS	Ornt	Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded	
9	2 NFRC	0.35, 0.35	D-L	H	SW	2.0ft	1.0ft	24.0	9.4	14.6	11	26	484 Btuh	
Window Total								24 (sqft)					484 Btuh	
Walls	Type						U-Value		R-Value		Area(sqft)	HTM	Load	
							Cav/Sheath							
10	Frame - Wood - Ext						0.09	13.0/0.0		72.0	2.2	157 Btuh		
11	Frame - Wood - Ext						0.09	13.0/0.0		92.0	2.2	200 Btuh		
12	Frame - Wood - Ext						0.09	13.0/0.0		12.0	2.2	26 Btuh		
Wall Total										176 (sqft)		383 Btuh		
Ceilings	Type/Color/Surface						U-Value	R-Value	Area(sqft)	HTM	Load			
5	Vented Attic/DarkShingle						0.032	30.0/0.0	204.0	1.69	344 Btuh			
6	Vented Attic/DarkShingle						0.032	30.0/0.0	12.0	1.69	20 Btuh			
Ceiling Total										216 (sqft)		365 Btuh		
Floors	Type						R-Value		Size	HTM	Load			
6	Slab On Grade						0.0		204 (ft-perimeter)	0.0	0 Btuh			
8	Slab On Grade						0.0		12 (ft-perimeter)	0.0	0 Btuh			
Floor Total										216.0 (sqft)		0 Btuh		
Zone Envelope Subtotal:											1232 Btuh			
Infiltration	Type	Wholehouse ACH			Volume(cuft)	Wall Ratio	CFM=	Load						
	Natural(Adjusted for ventilation)	0.16			1728	0.12	8.5	214 Btuh						
Internal gain	Occupants			Btuh/occupant	Appliance	Load								
	0			X 230 +	0	0 Btuh								
Sensible Envelope Load:											1446 Btuh			
Duct load	Notably sealed, Supply(R8.0-Attic), Return(R8.0-Attic) (DGM of 0.221)										320 Btuh			
Sensible Zone Load											1766 Btuh			

Component Loads for Room #6: Living/Kitchen

Window	Type*						Overhang		Window Area(sqft)			HTM		Load
	Panes	SHGC	U	InSh	IS	Ornt	Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded	
10	2 NFRC	0.35, 0.35	D-L	H	NE	2.0ft	1.0ft	17.5	0.0	17.5	11	22	388 Btuh	
11	2 NFRC	0.35, 0.35	D-L	H	NE	2.0ft	1.0ft	40.0	0.0	40.0	11	22	888 Btuh	
12	2 NFRC	0.35, 0.35	D-L	H	NE	2.0ft	1.0ft	20.0	0.0	20.0	11	22	444 Btuh	
Window Total								78 (sqft)					1720 Btuh	

Manual J Summer Calculations

Residential Load - Component Details (continued)

Sample Report
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Project Title: Climate:CA_SACRAMENTO_METROPOLITA
Sample Report

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Walls	Type	U-Value	R-Value	Area(sqft)	HTM	Load
			Cav/Sheath			
13	Frame - Wood - Ext	0.09	13.0/0.0	150.5	2.2	327 Btuh
29	Frame - Wood - Ext	0.09	13.0/0.0	18.0	2.2	39 Btuh
30	Frame - Wood - Ext	0.09	13.0/0.0	18.0	2.2	39 Btuh
31	Frame - Wood - Ext	0.09	13.0/0.0	16.0	2.2	35 Btuh
32	Frame - Wood - Ext	0.09	13.0/0.0	16.0	2.2	35 Btuh
Wall Total				219 (sqft)		475 Btuh
Ceilings	Type/Color/Surface	U-Value	R-Value	Area(sqft)	HTM	Load
17	Vented Attic/DarkShingle	0.032	30.0/0.0	280.7	1.69	474 Btuh
18	Vented Attic/DarkShingle	0.032	30.0/0.0	254.9	1.69	430 Btuh
Ceiling Total				536 (sqft)		904 Btuh
Floors	Type		R-Value	Size	HTM	Load
7	Slab On Grade		0.0	485 (ft-perimeter)	0.0	0 Btuh
Floor Total				484.5 (sqft)		0 Btuh
Zone Envelope Subtotal:						3099 Btuh
Infiltration	Type	Wholehouse ACH	Volume(cuft)	Wall Ratio	CFM=	Load
	Natural(Adjusted for ventilation)	0.16	4845	0.15	19.9	503 Btuh
Internal gain	Occupants	Btuh/occupant	Appliance	Load		
	4	X 230	+	1200	2120 Btuh	
Sensible Envelope Load:						5722 Btuh
Duct load	Notably sealed, Supply(R8.0-Attic), Return(R8.0-Attic) (DGM of 0.221)					1266 Btuh
Sensible Zone Load						6987 Btuh

Component Loads for Room #7: Dining/entry

Window	Type*						Overhang		Window Area(sqft)			HTM		Load
	Panes	SHGC	U	InSh	IS	Ornt	Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded	
13	2 NFRC	0.35, 0.35	D-L	H	SW	2.0ft	1.0ft	30.0	9.4	20.6	11	26	642 Btuh	
14	2 NFRC	0.35, 0.35	D-L	H	S	2.0ft	1.0ft	15.0	13.7	1.3	11	16	168 Btuh	
15	2 NFRC	0.35, 0.35	D-L	H	W	2.0ft	1.0ft	15.0	1.9	13.1	11	31	424 Btuh	
Window Total								60 (sqft)					1233 Btuh	
Walls	Type	U-Value	R-Value	Area(sqft)	HTM	Load								
			Cav/Sheath											
14	Frame - Wood - Ext	0.09	13.0/0.0	20.0	2.2	43 Btuh								
15	Frame - Wood - Ext	0.09	13.0/0.0	8.0	2.2	17 Btuh								
16	Frame - Wood - Ext	0.09	13.0/0.0	8.0	2.2	17 Btuh								
17	Frame - Wood - Ext	0.09	13.0/0.0	22.0	2.2	48 Btuh								
18	Frame - Wood - Ext	0.09	13.0/0.0	19.0	2.2	41 Btuh								
19	Frame - Wood - Ext	0.09	13.0/0.0	21.9	2.2	48 Btuh								
Wall Total				99 (sqft)		215 Btuh								

Manual J Summer Calculations

Residential Load - Component Details (continued)

Sample Report
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Sample Report

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Doors	Type	Area (sqft)			HTM	Load
	1 Wood - Exterior	20.0			8.7	174 Btuh
	Door Total	20 (sqft)				174 Btuh
Ceilings	Type/Color/Surface	U-Value	R-Value	Area(sqft)	HTM	Load
	7 Vented Attic/DarkShingle	0.032	30.0/0.0	35.0	1.69	59 Btuh
	8 Vented Attic/DarkShingle	0.032	30.0/0.0	104.0	1.69	176 Btuh
	9 Vented Attic/DarkShingle	0.032	30.0/0.0	19.5	1.69	33 Btuh
	10 Vented Attic/DarkShingle	0.032	30.0/0.0	4.5	1.69	8 Btuh
	11 Vented Attic/DarkShingle	0.032	30.0/0.0	5.3	1.69	9 Btuh
	Ceiling Total	168 (sqft)				284 Btuh
Floors	Type	R-Value		Size	HTM	Load
	9 Slab On Grade	0.0		35 (ft-perimeter)	0.0	0 Btuh
	10 Slab On Grade	0.0		104 (ft-perimeter)	0.0	0 Btuh
	11 Slab On Grade	0.0		20 (ft-perimeter)	0.0	0 Btuh
	12 Slab On Grade	0.0		5 (ft-perimeter)	0.0	0 Btuh
	13 Slab On Grade	0.0		5 (ft-perimeter)	0.0	0 Btuh
	Floor Total			168.3 (sqft)		0 Btuh
Zone Envelope Subtotal:						1906 Btuh
Infiltration	Type	Wholehouse ACH	Volume(cuft)	Wall Ratio	CFM=	Load
	Natural(Adjusted for ventilation)	0.16	1424	0.07	6.2	158 Btuh
Internal gain		Occupants	Btuh/occupant	Appliance		Load
		0	X 230	+	0	0 Btuh
Sensible Envelope Load:						2064 Btuh
Duct load	Notably sealed, Supply(R8.0-Attic), Return(R8.0-Attic)				(DGM of 0.221)	457 Btuh
Sensible Zone Load						2521 Btuh

Component Loads for Room #8: Utility

Window	Type*					Overhang		Window Area(sqft)			HTM		Load
	Panes	SHGC	U	InSh	IS Ornt	Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded	
16	2 NFRC	0.35, 0.35	D-L	H	SW	2.0ft	1.0ft	10.0	3.9	6.1	11	26	202 Btuh
	Window Total							10 (sqft)					202 Btuh
Walls	Type	U-Value		R-Value		Area(sqft)			HTM		Load		
				Cav/Sheath									
	20 Frame - Wood - Ext	0.09		13.0/0.0		54.0			2.2		117 Btuh		
21 Frame - Wood - Adj	0.09		13.0/0.0		56.0			2.0		114 Btuh			
	Wall Total				110 (sqft)					232 Btuh			
Ceilings	Type/Color/Surface	U-Value	R-Value		Area(sqft)	HTM		Load					
	12 Vented Attic/DarkShingle	0.032	30.0/0.0		56.0	1.69		95 Btuh					
	Ceiling Total				56 (sqft)			95 Btuh					
Floors	Type	R-Value		Size		HTM		Load					
	14 Slab On Grade	0.0		56 (ft-perimeter)		0.0		0 Btuh					
	Floor Total				56.0 (sqft)		0 Btuh						

Manual J Summer Calculations

Residential Load - Component Details (continued)

Sample Report
123 Main Street
Sacramento, CA 95825

Project Title: Climate:CA_SACRAMENTO_METROPOLITA
Sample Report

KwikModel Base

12/6/2023

	Zone Envelope Subtotal:	528 Btuh
Infiltration	Type Wholehouse ACH Volume(cuft) Wall Ratio CFM= Natural(Adjusted for ventilation) 0.16 448 0.08 3.7	Load 93 Btuh
Internal gain	Occupants Btuh/occupant Appliance 0 X 230 + 0	Load 0 Btuh
	Sensible Envelope Load:	621 Btuh
Duct load	Notably sealed, Supply(R8.0-Attic), Return(R8.0-Attic) (DGM of 0.221)	137 Btuh
	Sensible Zone Load	758 Btuh

Component Loads for Room #9: Bath 3

Window	Type*						Overhang		Window Area(sqft)			HTM		Load
	Panes	SHGC	U	InSh	IS	Ornt	Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded	
17	2 NFRC	0.35, 0.35	D-L	H	NE	2.0ft	1.0ft	4.0	0.0	4.0	11	22	89 Btuh	
	Window Total								4 (sqft)					89 Btuh
Walls	Type		U-Value		R-Value		Area(sqft)			HTM		Load		
					Cav/Sheath									
22	Frame - Wood - Adj		0.09		13.0/0.0		40.0			2.0		82 Btuh		
23	Frame - Wood - Ext		0.09		13.0/0.0		40.0			2.2		87 Btuh		
24	Frame - Wood - Adj		0.09		13.0/0.0		76.0			2.0		155 Btuh		
	Wall Total						156 (sqft)					324 Btuh		
Doors	Type		U-Value		R-Value		Area (sqft)			HTM		Load		
2	Wood - Garage						20.0			8.7		174 Btuh		
	Door Total						20 (sqft)					174 Btuh		
Ceilings	Type/Color/Surface		U-Value		R-Value		Area(sqft)			HTM		Load		
13	Vented Attic/DarkShingle		0.032		30.0/0.0		41.3			1.69		70 Btuh		
14	Vented Attic/DarkShingle		0.032		30.0/0.0		52.3			1.69		88 Btuh		
	Ceiling Total						94 (sqft)					158 Btuh		
Floors	Type		U-Value		R-Value		Size			HTM		Load		
15	Slab On Grade				0.0		41 (ft-perimeter)			0.0		0 Btuh		
16	Slab On Grade				0.0		52 (ft-perimeter)			0.0		0 Btuh		
	Floor Total						93.5 (sqft)					0 Btuh		
	Zone Envelope Subtotal:											744 Btuh		

Manual J Summer Calculations

Residential Load - Component Details (continued)

Sample Report
123 Main Street
Sacramento, CA 95825

Project Title: Climate:CA_SACRAMENTO_METROPOLITA
Sample Report

KwikModel Base

12/6/2023

Infiltration	Type	Wholehouse ACH	Volume(cuft)	Wall Ratio	CFM=	Load
	Natural(Adjusted for ventilation)	0.16	748	0.11	5.4	137 Btuh
Internal gain		Occupants	Btuh/occupant	Appliance		Load
		0	X 230	+	0	0 Btuh
	Sensible Envelope Load:					882 Btuh
Duct load	Notably sealed, Supply(R8.0-Attic), Return(R8.0-Attic) (DGM of 0.221)				195 Btuh	
	Sensible Zone Load					1077 Btuh

The following window Excursion will be assigned to the system loads.

Windows	July excursion for System 1	Excursion Subtotal:	524 Btuh 524 Btuh
Duct load			116 Btuh
	Sensible Excursion Load		640 Btuh

Manual J Summer Calculations

Residential Load - Component Details (continued)

Sample Report
123 Main Street
Sacramento, CA 95825

Project Title: Climate:CA_SACRAMENTO_METROPOLITA
Sample Report

KwikModel Base

12/6/2023

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	Sensible Envelope Load All Zones	17902 Btuh
	Sensible Duct Load	3961 Btuh
	Total Sensible Zone Loads	21863 Btuh
	Sensible ventilation (Ex:60 cfm; Sup:0 cfm)	0 Btuh
	Blower	0 Btuh
	Total sensible gain	21863 Btuh
	Latent infiltration gain (for 0 gr. humidity difference)	0 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	115 Btuh
	Latent occupant gain (4.0 people @ 200 Btuh per person)	800 Btuh
	Latent other gain	1000 Btuh
	Latent total gain	1915 Btuh
	TOTAL GAIN	23778 Btuh

EQUIPMENT

1. Central Unit	#	0 Btuh
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*Key: Window types (Panels - Number and type of panes of glass)
(SHGC - Shading coefficient of glass as SHGC numerical value)
(U - Window U-Factor)
(InSh - Interior shading device: none(No), Blinds(B), Draperies(D) or Roller Shades(R))
- For Blinds: Assume medium color, half closed
For Draperies: Assume medium weave, half closed
For Roller shades: Assume translucent, half closed
(IS - Insect screen: none(N), Full(F) or Half(½))
(Ornt - compass orientation)



Version 8

System Sizing Calculations - Summer

Residential Load - Whole House Component Details

Sample Report
123 Main Street
Sacramento, CA 95825

Project Title:
Sample Report

KwikModel Base

12/6/2023

Reference City: Sacramento (Met, CA (Defaults))
Humidity difference: 0gr.

Temperature Difference: 23.0F(MJ8 99%)
Summer Setpoint: 75 °F (Required Manual J default)

Component Loads for Whole House

Window	Type*					Overhang		Window Area(sqft)			HTM		Load	
	Panes	SHGC	U	InSh	IS Ornt	Len	Hgt	Gross	Shaded	Unshaded	Shaded	Unshaded		
1	2 NFRC	0.35, 0.35	D-L	H	SE	2.0ft	1.0ft	40.0	9.4	30.6	11	26	904	Btuh
2	2 NFRC	0.35, 0.35	D-L	H	NE	2.0ft	1.0ft	30.0	0.0	30.0	11	22	666	Btuh
3	2 NFRC	0.35, 0.35	D-L	H	NW	2.0ft	1.0ft	12.5	0.0	12.5	11	22	277	Btuh
4	2 NFRC	0.35, 0.35	D-L	H	NW	2.0ft	1.0ft	12.5	0.0	12.5	11	22	277	Btuh
5	2 NFRC	0.35, 0.35	D-L	H	NW	2.0ft	1.0ft	7.5	0.0	7.5	11	22	166	Btuh
6	2 NFRC	0.35, 0.35	D-L	H	NW	2.0ft	1.0ft	7.5	0.0	7.5	11	22	166	Btuh
7	2 NFRC	0.35, 0.35	D-L	H	NW	2.0ft	1.0ft	7.5	0.0	7.5	11	22	166	Btuh
8	2 NFRC	0.35, 0.35	D-L	H	SW	2.0ft	1.0ft	24.0	9.4	14.6	11	26	484	Btuh
9	2 NFRC	0.35, 0.35	D-L	H	SW	2.0ft	1.0ft	24.0	9.4	14.6	11	26	484	Btuh
10	2 NFRC	0.35, 0.35	D-L	H	NE	2.0ft	1.0ft	17.5	0.0	17.5	11	22	388	Btuh
11	2 NFRC	0.35, 0.35	D-L	H	NE	2.0ft	1.0ft	40.0	0.0	40.0	11	22	888	Btuh
12	2 NFRC	0.35, 0.35	D-L	H	NE	2.0ft	1.0ft	20.0	0.0	20.0	11	22	444	Btuh
13	2 NFRC	0.35, 0.35	D-L	H	SW	2.0ft	1.0ft	30.0	9.4	20.6	11	26	642	Btuh
14	2 NFRC	0.35, 0.35	D-L	H	S	2.0ft	1.0ft	15.0	13.7	1.3	11	16	168	Btuh
15	2 NFRC	0.35, 0.35	D-L	H	W	2.0ft	1.0ft	15.0	1.9	13.1	11	31	424	Btuh
16	2 NFRC	0.35, 0.35	D-L	H	SW	2.0ft	1.0ft	10.0	3.9	6.1	11	26	202	Btuh
17	2 NFRC	0.35, 0.35	D-L	H	NE	2.0ft	1.0ft	4.0	0.0	4.0	11	22	89	Btuh
	Excursion												524	Btuh
	Window Total							317 (sqft)					7359 Btuh	

Manual J Summer Calculations

Residential Load - Component Details (continued)

Sample Report
123 Main Street
Sacramento, CA 95825

Project Title: Climate:CA_SACRAMENTO_METROPOLITA
Sample Report

KwikModel Base

12/6/2023

Walls	Type	U-Value	R-Value	Area(sqft)	HTM	Load	
			Cav/Sheath				
1	Frame - Wood - Ext	0.09	13.0/0.0	98.0	2.2	213	Btuh
2	Frame - Wood - Ext	0.09	13.0/0.0	72.0	2.2	157	Btuh
3	Frame - Wood - Ext	0.09	13.0/0.0	87.0	2.2	189	Btuh
4	Frame - Wood - Ext	0.09	13.0/0.0	16.0	2.2	35	Btuh
5	Frame - Wood - Ext	0.09	13.0/0.0	16.0	2.2	35	Btuh
6	Frame - Wood - Ext	0.09	13.0/0.0	65.0	2.2	141	Btuh
7	Frame - Wood - Ext	0.09	13.0/0.0	60.5	2.2	132	Btuh
8	Frame - Wood - Ext	0.09	13.0/0.0	72.0	2.2	157	Btuh
9	Frame - Wood - Ext	0.09	13.0/0.0	124.0	2.2	270	Btuh
10	Frame - Wood - Ext	0.09	13.0/0.0	72.0	2.2	157	Btuh
11	Frame - Wood - Ext	0.09	13.0/0.0	92.0	2.2	200	Btuh
12	Frame - Wood - Ext	0.09	13.0/0.0	12.0	2.2	26	Btuh
13	Frame - Wood - Ext	0.09	13.0/0.0	150.5	2.2	327	Btuh
14	Frame - Wood - Ext	0.09	13.0/0.0	20.0	2.2	43	Btuh
15	Frame - Wood - Ext	0.09	13.0/0.0	8.0	2.2	17	Btuh
16	Frame - Wood - Ext	0.09	13.0/0.0	8.0	2.2	17	Btuh
17	Frame - Wood - Ext	0.09	13.0/0.0	22.0	2.2	48	Btuh
18	Frame - Wood - Ext	0.09	13.0/0.0	19.0	2.2	41	Btuh
19	Frame - Wood - Ext	0.09	13.0/0.0	21.9	2.2	48	Btuh
20	Frame - Wood - Ext	0.09	13.0/0.0	54.0	2.2	117	Btuh
21	Frame - Wood - Adj	0.09	13.0/0.0	56.0	2.0	114	Btuh
22	Frame - Wood - Adj	0.09	13.0/0.0	40.0	2.0	82	Btuh
23	Frame - Wood - Ext	0.09	13.0/0.0	40.0	2.2	87	Btuh
24	Frame - Wood - Adj	0.09	13.0/0.0	76.0	2.0	155	Btuh
25	Frame - Wood - Ext	0.09	13.0/0.0	16.0	2.2	35	Btuh
26	Frame - Wood - Ext	0.09	13.0/0.0	16.0	2.2	35	Btuh
27	Frame - Wood - Ext	0.09	13.0/0.0	16.0	2.2	35	Btuh
28	Frame - Wood - Ext	0.09	13.0/0.0	16.0	2.2	35	Btuh
29	Frame - Wood - Ext	0.09	13.0/0.0	18.0	2.2	39	Btuh
30	Frame - Wood - Ext	0.09	13.0/0.0	18.0	2.2	39	Btuh
31	Frame - Wood - Ext	0.09	13.0/0.0	16.0	2.2	35	Btuh
32	Frame - Wood - Ext	0.09	13.0/0.0	16.0	2.2	35	Btuh
	Wall Total			1434 (sqft)		3095	Btuh
Doors	Type			Area (sqft)	HTM	Load	
1	Wood - Exterior			20.0	8.7	174	Btuh
2	Wood - Garage			20.0	8.7	174	Btuh
	Door Total			40 (sqft)		348	Btuh

Manual J Summer Calculations

Residential Load - Component Details (continued)

Sample Report
123 Main Street
Sacramento, CA 95825

Project Title: Climate:CA_SACRAMENTO_METROPOLITA
Sample Report

KwikModel Base

12/6/2023

Ceilings	Type/Color/Surface	U-Value	R-Value	Area(sqft)	HTM	Load
1	Vented Attic/DarkShingle	0.032	30.0/0.0	90.0	1.69	152 Btuh
2	Vented Attic/DarkShingle	0.032	30.0/0.0	90.0	1.69	152 Btuh
3	Vented Attic/DarkShingle	0.032	30.0/0.0	136.0	1.69	230 Btuh
4	Vented Attic/DarkShingle	0.032	30.0/0.0	186.0	1.69	314 Btuh
5	Vented Attic/DarkShingle	0.032	30.0/0.0	204.0	1.69	344 Btuh
6	Vented Attic/DarkShingle	0.032	30.0/0.0	12.0	1.69	20 Btuh
7	Vented Attic/DarkShingle	0.032	30.0/0.0	35.0	1.69	59 Btuh
8	Vented Attic/DarkShingle	0.032	30.0/0.0	104.0	1.69	176 Btuh
9	Vented Attic/DarkShingle	0.032	30.0/0.0	19.5	1.69	33 Btuh
10	Vented Attic/DarkShingle	0.032	30.0/0.0	4.5	1.69	8 Btuh
11	Vented Attic/DarkShingle	0.032	30.0/0.0	5.3	1.69	9 Btuh
12	Vented Attic/DarkShingle	0.032	30.0/0.0	56.0	1.69	95 Btuh
13	Vented Attic/DarkShingle	0.032	30.0/0.0	41.3	1.69	70 Btuh
14	Vented Attic/DarkShingle	0.032	30.0/0.0	52.3	1.69	88 Btuh
15	Vented Attic/DarkShingle	0.032	30.0/0.0	125.2	1.69	211 Btuh
16	Vented Attic/DarkShingle	0.032	30.0/0.0	125.2	1.69	211 Btuh
17	Vented Attic/DarkShingle	0.032	30.0/0.0	280.7	1.69	474 Btuh
18	Vented Attic/DarkShingle	0.032	30.0/0.0	254.9	1.69	430 Btuh
	Ceiling Total			1822 (sqft)		3075 Btuh
Floors	Type		R-Value	Size	HTM	Load
1	Slab On Grade		0.0	224 (ft-perimeter)	0.0	0 Btuh
2	Slab On Grade		0.0	90 (ft-perimeter)	0.0	0 Btuh
3	Slab On Grade		0.0	90 (ft-perimeter)	0.0	0 Btuh
4	Slab On Grade		0.0	136 (ft-perimeter)	0.0	0 Btuh
5	Slab On Grade		0.0	186 (ft-perimeter)	0.0	0 Btuh
6	Slab On Grade		0.0	204 (ft-perimeter)	0.0	0 Btuh
7	Slab On Grade		0.0	485 (ft-perimeter)	0.0	0 Btuh
8	Slab On Grade		0.0	12 (ft-perimeter)	0.0	0 Btuh
9	Slab On Grade		0.0	35 (ft-perimeter)	0.0	0 Btuh
10	Slab On Grade		0.0	104 (ft-perimeter)	0.0	0 Btuh
11	Slab On Grade		0.0	20 (ft-perimeter)	0.0	0 Btuh
12	Slab On Grade		0.0	5 (ft-perimeter)	0.0	0 Btuh
13	Slab On Grade		0.0	5 (ft-perimeter)	0.0	0 Btuh
14	Slab On Grade		0.0	56 (ft-perimeter)	0.0	0 Btuh
15	Slab On Grade		0.0	41 (ft-perimeter)	0.0	0 Btuh
16	Slab On Grade		0.0	52 (ft-perimeter)	0.0	0 Btuh
	Floor Total			1744.3 (sqft)		0 Btuh
Envelope Subtotal:						13877 Btuh
Infiltration	Type	Average ACH	Volume(cuft)	Wall Ratio	CFM=	Load
	Natural(Adjusted for ventilation)	0.29	15449	1	75.4	1905 Btuh
Internal gain		Occupants	Btuh/occupant	Appliance		Load
		4	X 230	+	1200	2120 Btuh
Sensible Envelope Load:						17902 Btuh
Duct load	Notably sealed, Supply(R8.0-Attic), Return(R8.0-Attic)				(DGM of 0.221)	3961 Btuh
Sensible Load All Zones						21863 Btuh

Manual J Summer Calculations

Residential Load - Component Details (continued)

Sample Report
123 Main Street
Sacramento, CA 95825

Project Title: Climate:CA_SACRAMENTO_METROPOLITA
Sample Report

KwikModel Base

12/6/2023

WHOLE HOUSE TOTALS

Whole House Totals for Cooling	Sensible Envelope Load All Zones	17902 Btuh
	Sensible Duct Load	3961 Btuh
	Total Sensible Zone Loads	21863 Btuh
	Sensible ventilation (Ex:60 cfm; Sup:0 cfm)	0 Btuh
	Blower	0 Btuh
	Total sensible gain	21863 Btuh
	Latent infiltration gain (for 0 gr. humidity difference)	0 Btuh
	Latent ventilation gain	0 Btuh
	Latent duct gain	115 Btuh
	Latent occupant gain (4.0 people @ 200 Btuh per person)	800 Btuh
	Latent other gain	1000 Btuh
	Latent total gain	1915 Btuh
	TOTAL GAIN	23778 Btuh

EQUIPMENT

1. Central Unit	#	0 Btuh
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*Key: Window types (Panels - Number and type of panes of glass)
(SHGC - Shading coefficient of glass as SHGC numerical value)
(U - Window U-Factor)
(InSh - Interior shading device: none(No), Blinds(B), Draperies(D) or Roller Shades(R))
- For Blinds: Assume medium color, half closed
For Draperies: Assume medium weave, half closed
For Roller shades: Assume translucent, half closed
(IS - Insect screen: none(N), Full(F) or Half(½))
(Ornt - compass orientation)



Version 8

System Sizing Calculations - Winter

Residential Load - Room by Room Component Details

Sample Report
123 Main Street
Sacramento, CA 95825

Project Title:
Sample Report
Building Type: User
KwikModel Base

12/6/2023

Reference City: Sacramento (Met, CA (Defaults) Winter Temperature Difference: 42.0 °F (CA Med.)
Winter Setpoint: 68 °F (California default supersedes Manual J.)

Component Loads for Room #1: Master Bed									
Window	Panes/Type	Frame	U	Orientation	Area(sqft)	X	HTM=	Load	
1	2, NFRC 0.35	Vinyl	0.35	SE	40.0		14.7	588 Btuh	
2	2, NFRC 0.35	Vinyl	0.35	NE	30.0		14.7	441 Btuh	
3	2, NFRC 0.35	Vinyl	0.35	NW	12.5		14.7	184 Btuh	
4	2, NFRC 0.35	Vinyl	0.35	NW	12.5		14.7	184 Btuh	
	Window Total					95.0(sqft)			1397 Btuh
Walls	Type	Ornt.	Ueff.	R-Value (Cav/Sh)	Area	X	HTM=	Load	
1	Frame - Wood	- Ext	(0.089)	13.0/0.0	98		3.73	365 Btuh	
2	Frame - Wood	- Ext	(0.089)	13.0/0.0	72		3.73	268 Btuh	
3	Frame - Wood	- Ext	(0.089)	13.0/0.0	87		3.73	324 Btuh	
25	Frame - Wood	- Ext	(0.089)	13.0/0.0	16		3.73	60 Btuh	
26	Frame - Wood	- Ext	(0.089)	13.0/0.0	16		3.73	60 Btuh	
27	Frame - Wood	- Ext	(0.089)	13.0/0.0	16		3.73	60 Btuh	
28	Frame - Wood	- Ext	(0.089)	13.0/0.0	16		3.73	60 Btuh	
	Wall Total					321(sqft)			1197 Btuh
Ceilings	Type/Color/Surface		Ueff.	R-Value	Area	X	HTM=	Load	
2	Flat ceil/D/Shing		(0.032)	30.0/0.0	90		1.3	120 Btuh	
15	Flat ceil/D/Shing		(0.032)	30.0/0.0	125		1.3	167 Btuh	
16	Flat ceil/D/Shing		(0.032)	30.0/0.0	125		1.3	167 Btuh	
	Ceiling Total					340(sqft)			455Btuh
Floors	Type		Ueff.	R-Value	Size	X	HTM=	Load	
1	Slab On Grade		(1.180)	0.0	44.0 ft(perim.)		49.6	2181 Btuh	
3	Slab On Grade		(1.180)	0.0	0.0 ft(perim.)		49.6	0 Btuh	
	Floor Total					314 sqft			2181 Btuh
	Room Envelope Subtotal:							5229 Btuh	
Infiltration	Type	Wholehouse ACH	Room Volume	Wall Ratio	CFM=			Load	
	Natural(Adjusted for ventilation)	0.22	2960	0.22	17.1			787 Btuh	
Duct load	Notably sealed, Supply(R8.0-Attic), Return(R8.0-Attic) (DLM of 0.126)						757 Btuh		
Room #1	Sensible Room Subtotal							6773 Btuh	

Manual J Winter Calculations

Residential Load - Component Details (continued)

Sample Report
123 Main Street
Sacramento, CA 95825

Project Title:
Sample Report
Building Type: User
KwikModel Base

12/6/2023

Component Loads for Room #2: Master Bath								
Window	Panes/Type	Frame	U	Orientation	Area(sqft)	X	HTM=	Load
5	2, NFRC 0.35	Vinyl	0.35	NW	7.5		14.7	110 Btuh
6	2, NFRC 0.35	Vinyl	0.35	NW	7.5		14.7	110 Btuh
	Window Total					15.0(sqft)		221 Btuh
Walls	Type	Ornt.	Ueff.	R-Value (Cav/Sh)	Area	X	HTM=	Load
4	Frame - Wood	- Ext	(0.089)	13.0/0.0	16		3.73	60 Btuh
5	Frame - Wood	- Ext	(0.089)	13.0/0.0	16		3.73	60 Btuh
6	Frame - Wood	- Ext	(0.089)	13.0/0.0	65		3.73	242 Btuh
	Wall Total					97(sqft)		362 Btuh
Ceilings	Type/Color/Surface		Ueff.	R-Value	Area	X	HTM=	Load
1	Flat ceil/D/Shing		(0.032)	30.0/0.0	90		1.3	120 Btuh
	Ceiling Total					90(sqft)		120Btuh
Floors	Type		Ueff.	R-Value	Size	X	HTM=	Load
2	Slab On Grade		(1.180)	0.0	14.0 ft(perim.)		49.6	694 Btuh
	Floor Total					90 sqft		694 Btuh
Room Envelope Subtotal:								1396 Btuh
Infiltration	Type	Wholehouse	ACH	Room Volume	Wall Ratio		CFM=	Load
	Natural(Adjusted for ventilation)		0.22	720	0.07		4.7	218 Btuh
Duct load	Notably sealed, Supply(R8.0-Attic), Return(R8.0-Attic) (DLM of 0.126)							203 Btuh
Room #2	Sensible Room Subtotal							1817 Btuh

Component Loads for Room #3: Bath 2								
Window	Panes/Type	Frame	U	Orientation	Area(sqft)	X	HTM=	Load
7	2, NFRC 0.35	Vinyl	0.35	NW	7.5		14.7	110 Btuh
	Window Total					7.5(sqft)		110 Btuh
Walls	Type	Ornt.	Ueff.	R-Value (Cav/Sh)	Area	X	HTM=	Load
7	Frame - Wood	- Ext	(0.089)	13.0/0.0	61		3.73	226 Btuh
	Wall Total					61(sqft)		226 Btuh
Ceilings	Type/Color/Surface		Ueff.	R-Value	Area	X	HTM=	Load
3	Flat ceil/D/Shing		(0.032)	30.0/0.0	136		1.3	182 Btuh
	Ceiling Total					136(sqft)		182Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

Sample Report
123 Main Street
Sacramento, CA 95825

Project Title:
Sample Report
Building Type: User
KwikModel Base

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Floors	Type	Ueff.	R-Value	Size X	HTM=	Load
4	Slab On Grade	(1.180)	0.0	8.5 ft(perim.)	49.6	421 Btuh
	Floor Total			136 sqft		421 Btuh
Room Envelope Subtotal:						939 Btuh
Infiltration	Type	Wholehouse ACH	Room Volume	Wall Ratio	CFM=	Load
	Natural(Adjusted for ventilation)	0.22	1088	0.04	4.8	224 Btuh
Duct load	Notably sealed, Supply(R8.0-Attic), Return(R8.0-Attic)				(DLM of 0.126)	146 Btuh
Room #3	Sensible Room Subtotal					1309 Btuh

Component Loads for Room #4: Bedroom 3

Window	Panes/Type	Frame U	Orientation	Area(sqft)	X	HTM=	Load
8	2, NFRC 0.35	Vinyl 0.35	SW	24.0		14.7	353 Btuh
	Window Total			24.0(sqft)			353 Btuh
Walls	Type	Ornt.	Ueff.	R-Value	Area X	HTM=	Load
8	Frame - Wood	- Ext	(0.089)	13.0/0.0	72	3.73	268 Btuh
9	Frame - Wood	- Ext	(0.089)	13.0/0.0	124	3.73	462 Btuh
	Wall Total			196(sqft)			731 Btuh
Ceilings	Type/Color/Surface	Ueff.	R-Value	Area X	HTM=	Load	
4	Flat ceil/D/Shing	(0.032)	30.0/0.0	186	1.3	249 Btuh	
	Ceiling Total			186(sqft)		249Btuh	
Floors	Type	Ueff.	R-Value	Size X	HTM=	Load	
5	Slab On Grade	(1.180)	0.0	27.5 ft(perim.)	49.6	1363 Btuh	
	Floor Total			186 sqft		1363 Btuh	
Room Envelope Subtotal:						2695 Btuh	
Infiltration	Type	Wholehouse ACH	Room Volume	Wall Ratio	CFM=	Load	
	Natural(Adjusted for ventilation)	0.22	1488	0.14	9.6	444 Btuh	
Duct load	Notably sealed, Supply(R8.0-Attic), Return(R8.0-Attic)				(DLM of 0.126)	395 Btuh	
Room #4	Sensible Room Subtotal					3534 Btuh	

Manual J Winter Calculations

Residential Load - Component Details (continued)

Sample Report
123 Main Street
Sacramento, CA 95825

Project Title:
Sample Report
Building Type: User
KwikModel Base

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Component Loads for Room #5: Bed/office								
Window	Panes/Type	Frame	U	Orientation	Area(sqft)	X	HTM=	Load
9	2, NFRC 0.35	Vinyl	0.35	SW	24.0		14.7	353 Btuh
	Window Total				24.0(sqft)			353 Btuh
Walls	Type	Ornt.	Ueff.	R-Value (Cav/Sh)	Area	X	HTM=	Load
10	Frame - Wood	- Ext	(0.089)	13.0/0.0	72		3.73	268 Btuh
11	Frame - Wood	- Ext	(0.089)	13.0/0.0	92		3.73	343 Btuh
12	Frame - Wood	- Ext	(0.089)	13.0/0.0	12		3.73	45 Btuh
	Wall Total				176(sqft)			656 Btuh
Ceilings	Type/Color/Surface		Ueff.	R-Value	Area	X	HTM=	Load
5	Flat ceil/D/Shing		(0.032)	30.0/0.0	204		1.3	273 Btuh
6	Flat ceil/D/Shing		(0.032)	30.0/0.0	12		1.3	16 Btuh
	Ceiling Total				216(sqft)			289Btuh
Floors	Type		Ueff.	R-Value	Size	X	HTM=	Load
6	Slab On Grade		(1.180)	0.0	25.0 ft(perim.)		49.6	1239 Btuh
8	Slab On Grade		(1.180)	0.0	0.0 ft(perim.)		49.6	0 Btuh
	Floor Total				216 sqft			1239 Btuh
	Room Envelope Subtotal:							2537 Btuh
Infiltration	Type	Wholehouse	ACH	Room Volume	Wall Ratio	CFM=		Load
	Natural(Adjusted for ventilation)		0.22	1728	0.12	9.6		445 Btuh
Duct load	Notably sealed, Supply(R8.0-Attic), Return(R8.0-Attic) (DLM of 0.126)							375 Btuh
Room #5	Sensible Room Subtotal							3356 Btuh

Component Loads for Room #6: Living/Kitchen								
Window	Panes/Type	Frame	U	Orientation	Area(sqft)	X	HTM=	Load
10	2, NFRC 0.35	Vinyl	0.35	NE	17.5		14.7	257 Btuh
11	2, NFRC 0.35	Vinyl	0.35	NE	40.0		14.7	588 Btuh
12	2, NFRC 0.35	Vinyl	0.35	NE	20.0		14.7	294 Btuh
	Window Total				77.5(sqft)			1139 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

Sample Report
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Sacramento, CA 95825

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Building Type: User
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Walls	Type	Ornt.	Ueff.	R-Value (Cav/Sh)	Area X	HTM=	Load
13	Frame - Wood	- Ext	(0.089)	13.0/0.0	151	3.73	561 Btuh
29	Frame - Wood	- Ext	(0.089)	13.0/0.0	18	3.73	67 Btuh
30	Frame - Wood	- Ext	(0.089)	13.0/0.0	18	3.73	67 Btuh
31	Frame - Wood	- Ext	(0.089)	13.0/0.0	16	3.73	60 Btuh
32	Frame - Wood	- Ext	(0.089)	13.0/0.0	16	3.73	60 Btuh
	Wall Total					219(sqft)	815 Btuh
Ceilings	Type/Color/Surface		Ueff.	R-Value	Area X	HTM=	Load
17	Flat ceil/D/Shing		(0.032)	30.0/0.0	281	1.3	375 Btuh
18	Flat ceil/D/Shing		(0.032)	30.0/0.0	255	1.3	341 Btuh
	Ceiling Total					536(sqft)	716Btuh
Floors	Type		Ueff.	R-Value	Size X	HTM=	Load
7	Slab On Grade		(1.180)	0.0	28.5 ft(perim.)	49.6	1412 Btuh
	Floor Total					485 sqft	1412 Btuh
Room Envelope Subtotal:							4083 Btuh
Infiltration	Type	Wholehouse ACH	Room Volume	Wall Ratio	CFM=		Load
	Natural(Adjusted for ventilation)	0.22	4845	0.15	20.7		954 Btuh
Duct load	Notably sealed, Supply(R8.0-Attic), Return(R8.0-Attic)					(DLM of 0.126)	634 Btuh
Room #6	Sensible Room Subtotal						5671 Btuh

Component Loads for Room #7: Dining/entry

Window	Panes/Type	Frame	U	Orientation	Area(sqft) X	HTM=	Load
13	2, NFRC 0.35	Vinyl	0.35	SW	30.0	14.7	441 Btuh
14	2, NFRC 0.35	Vinyl	0.35	S	15.0	14.7	220 Btuh
15	2, NFRC 0.35	Vinyl	0.35	W	15.0	14.7	220 Btuh
	Window Total					60.0(sqft)	882 Btuh
Walls	Type	Ornt.	Ueff.	R-Value (Cav/Sh)	Area X	HTM=	Load
14	Frame - Wood	- Ext	(0.089)	13.0/0.0	20	3.73	75 Btuh
15	Frame - Wood	- Ext	(0.089)	13.0/0.0	8	3.73	30 Btuh
16	Frame - Wood	- Ext	(0.089)	13.0/0.0	8	3.73	30 Btuh
17	Frame - Wood	- Ext	(0.089)	13.0/0.0	22	3.73	82 Btuh
18	Frame - Wood	- Ext	(0.089)	13.0/0.0	19	3.73	71 Btuh
19	Frame - Wood	- Ext	(0.089)	13.0/0.0	22	3.73	82 Btuh
	Wall Total					99(sqft)	368 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

Sample Report
123 Main Street
Sacramento, CA 95825

Project Title:
Sample Report
Building Type: User
KwikModel Base

12/6/2023

Doors	Type	Storm Ueff.		Area X	HTM=	Load
1	Wood - Exterior, Door Total	w (0.460)		20 20(sqft)	19.3	386 Btuh 386Btuh
Ceilings	Type/Color/Surface	Ueff.	R-Value	Area X	HTM=	Load
7	Flat ceil/D/Shing	(0.032)	30.0/0.0	35	1.3	47 Btuh
8	Flat ceil/D/Shing	(0.032)	30.0/0.0	104	1.3	139 Btuh
9	Flat ceil/D/Shing	(0.032)	30.0/0.0	20	1.3	26 Btuh
10	Flat ceil/D/Shing	(0.032)	30.0/0.0	5	1.3	6 Btuh
11	Flat ceil/D/Shing	(0.032)	30.0/0.0	5	1.3	7 Btuh
	Ceiling Total			168(sqft)		225Btuh
Floors	Type	Ueff.	R-Value	Size X	HTM=	Load
9	Slab On Grade	(1.180)	0.0	5.0 ft(perim.)	49.6	248 Btuh
10	Slab On Grade	(1.180)	0.0	2.0 ft(perim.)	49.6	99 Btuh
11	Slab On Grade	(1.180)	0.0	6.5 ft(perim.)	49.6	322 Btuh
12	Slab On Grade	(1.180)	0.0	4.2 ft(perim.)	49.6	210 Btuh
13	Slab On Grade	(1.180)	0.0	4.6 ft(perim.)	49.6	228 Btuh
	Floor Total			168 sqft		1108 Btuh
	Room Envelope Subtotal:					2970 Btuh
Infiltration	Type	Wholehouse ACH	Room Volume	Wall Ratio	CFM=	Load
	Natural(Adjusted for ventilation)	0.22	1424	0.07	6.8	312 Btuh
Duct load	Notably sealed, Supply(R8.0-Attic), Return(R8.0-Attic) (DLM of 0.126)					413 Btuh
Room #7	Sensible Room Subtotal					3694 Btuh

Component Loads for Room #8: Utility

Window	Panes/Type	Frame U	Orientation	Area(sqft) X	HTM=	Load
16	2, NFRC 0.35 Window Total	Vinyl 0.35	SW	10.0 10.0(sqft)	14.7	147 Btuh 147 Btuh
Walls	Type	Ornt. Ueff.	R-Value (Cav/Sh)	Area X	HTM=	Load
20	Frame - Wood	- Ext (0.089)	13.0/0.0	54	3.73	201 Btuh
21	Frame - Wood	- Adj (0.089)	13.0/0.0	56	3.73	209 Btuh
	Wall Total			110(sqft)		410 Btuh
Ceilings	Type/Color/Surface	Ueff.	R-Value	Area X	HTM=	Load
12	Flat ceil/D/Shing	(0.032)	30.0/0.0	56	1.3	75 Btuh
	Ceiling Total			56(sqft)		75Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

Sample Report
123 Main Street
Sacramento, CA 95825

Project Title:
Sample Report
Building Type: User
KwikModel Base

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Floors	Type	Ueff.	R-Value	Size X	HTM=	Load
14	Slab On Grade	(1.180)	0.0	15.0 ft(perim.)	49.6	743 Btuh
	Floor Total			56 sqft		743 Btuh
Room Envelope Subtotal:						1375 Btuh
Infiltration	Type	Wholehouse ACH	Room Volume	Wall Ratio	CFM=	Load
	Natural(Adjusted for ventilation)	0.22	448	0.08	4.7	215 Btuh
Duct load	Notably sealed, Supply(R8.0-Attic), Return(R8.0-Attic)				(DLM of 0.126)	200 Btuh
Room #8	Sensible Room Subtotal					1790 Btuh

Component Loads for Room #9: Bath 3

Window	Panes/Type	Frame U	Orientation	Area(sqft)	X	HTM=	Load
17	2, NFRC 0.35	Vinyl 0.35	NE	4.0		14.7	59 Btuh
	Window Total			4.0(sqft)			59 Btuh
Walls	Type	Ornt.	Ueff.	R-Value	Area X	HTM=	Load
				(Cav/Sh)			
22	Frame - Wood	- Adj	(0.089)	13.0/0.0	40	3.73	149 Btuh
23	Frame - Wood	- Ext	(0.089)	13.0/0.0	40	3.73	149 Btuh
24	Frame - Wood	- Adj	(0.089)	13.0/0.0	76	3.73	283 Btuh
	Wall Total				156(sqft)		582 Btuh
Doors	Type	Storm	Ueff.		Area X	HTM=	Load
2	Wood - Garage,	w	(0.460)		20	19.3	386 Btuh
	Door Total				20(sqft)		386Btuh
Ceilings	Type/Color/Surface	Ueff.	R-Value	Area X	HTM=	Load	
13	Flat ceil/D/Shing	(0.032)	30.0/0.0	41	1.3	55 Btuh	
14	Flat ceil/D/Shing	(0.032)	30.0/0.0	52	1.3	70 Btuh	
	Ceiling Total			94(sqft)		125Btuh	
Floors	Type	Ueff.	R-Value	Size X	HTM=	Load	
15	Slab On Grade	(1.180)	0.0	7.5 ft(perim.)	49.6	372 Btuh	
16	Slab On Grade	(1.180)	0.0	15.0 ft(perim.)	49.6	743 Btuh	
	Floor Total			94 sqft		1115 Btuh	
Room Envelope Subtotal:						2267 Btuh	
Infiltration	Type	Wholehouse ACH	Room Volume	Wall Ratio	CFM=	Load	
	Natural(Adjusted for ventilation)	0.22	748	0.11	6.8	313 Btuh	

Manual J Winter Calculations

Residential Load - Component Details (continued)

Sample Report
123 Main Street
Sacramento, CA 95825

Project Title:
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Building Type: User
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Duct load	Notably sealed, Supply(R8.0-Attic), Return(R8.0-Attic) (DLM of 0.126)	325 Btuh
Room #9	Sensible Room Subtotal	2904 Btuh

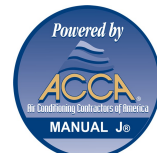
WHOLE HOUSE TOTALS

Totals for Heating	Subtotal Sensible Heat Loss Ventilation Sens. Heat Loss (Ex:60 cfm; Sup:0 cfm) Total Heat Loss	30850 Btuh 0 Btuh 30850 Btuh
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EQUIPMENT

1. Electric Heat Pump	#	0 Btuh
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Key: Window types - NFRC (Requires U-Factor and Shading coefficient(SHGC) of glass as numerical values)
or - Glass as 'Clear' or 'Tint' (Uses U-Factor and SHGC defaults)
U - (Window U-Factor)
HTM - (ManualJ Heat Transfer Multiplier)



Version 8

System Sizing Calculations - Winter

Residential Load - Whole House Component Details

Sample Report
123 Main Street
Sacramento, CA 95825

Project Title:
Sample Report
Building Type: User
KwikModel Base

12/6/2023

Reference City: Sacramento (Met, CA (Defaults) Winter Temperature Difference: 42.0 °F (CA Med.)
Winter Setpoint: 68 °F (California default supersedes Manual J.)

Component Loads for Whole House

Window	Panes/Type	Frame	U	Orientation	Area(sqft)	X	HTM=	Load
1	2, NFRC 0.35	Vinyl	0.35	SE	40.0		14.7	588 Btuh
2	2, NFRC 0.35	Vinyl	0.35	NE	30.0		14.7	441 Btuh
3	2, NFRC 0.35	Vinyl	0.35	NW	12.5		14.7	184 Btuh
4	2, NFRC 0.35	Vinyl	0.35	NW	12.5		14.7	184 Btuh
5	2, NFRC 0.35	Vinyl	0.35	NW	7.5		14.7	110 Btuh
6	2, NFRC 0.35	Vinyl	0.35	NW	7.5		14.7	110 Btuh
7	2, NFRC 0.35	Vinyl	0.35	NW	7.5		14.7	110 Btuh
8	2, NFRC 0.35	Vinyl	0.35	SW	24.0		14.7	353 Btuh
9	2, NFRC 0.35	Vinyl	0.35	SW	24.0		14.7	353 Btuh
10	2, NFRC 0.35	Vinyl	0.35	NE	17.5		14.7	257 Btuh
11	2, NFRC 0.35	Vinyl	0.35	NE	40.0		14.7	588 Btuh
12	2, NFRC 0.35	Vinyl	0.35	NE	20.0		14.7	294 Btuh
13	2, NFRC 0.35	Vinyl	0.35	SW	30.0		14.7	441 Btuh
14	2, NFRC 0.35	Vinyl	0.35	S	15.0		14.7	220 Btuh
15	2, NFRC 0.35	Vinyl	0.35	W	15.0		14.7	220 Btuh
16	2, NFRC 0.35	Vinyl	0.35	SW	10.0		14.7	147 Btuh
17	2, NFRC 0.35	Vinyl	0.35	NE	4.0		14.7	59 Btuh
	Window Total				317.0(sqft)			4660 Btuh
Walls	Type	Ornt.	Ueff.	R-Value (Cav/Sh)	Area	X	HTM=	Load
1	Frame - Wood	- Ext	(0.089)	13.0/0.0	98		3.73	365 Btuh
2	Frame - Wood	- Ext	(0.089)	13.0/0.0	72		3.73	268 Btuh
3	Frame - Wood	- Ext	(0.089)	13.0/0.0	87		3.73	324 Btuh
4	Frame - Wood	- Ext	(0.089)	13.0/0.0	16		3.73	60 Btuh
5	Frame - Wood	- Ext	(0.089)	13.0/0.0	16		3.73	60 Btuh
6	Frame - Wood	- Ext	(0.089)	13.0/0.0	65		3.73	242 Btuh
7	Frame - Wood	- Ext	(0.089)	13.0/0.0	61		3.73	226 Btuh
8	Frame - Wood	- Ext	(0.089)	13.0/0.0	72		3.73	268 Btuh
9	Frame - Wood	- Ext	(0.089)	13.0/0.0	124		3.73	462 Btuh
10	Frame - Wood	- Ext	(0.089)	13.0/0.0	72		3.73	268 Btuh
11	Frame - Wood	- Ext	(0.089)	13.0/0.0	92		3.73	343 Btuh
12	Frame - Wood	- Ext	(0.089)	13.0/0.0	12		3.73	45 Btuh
13	Frame - Wood	- Ext	(0.089)	13.0/0.0	151		3.73	561 Btuh
14	Frame - Wood	- Ext	(0.089)	13.0/0.0	20		3.73	75 Btuh
15	Frame - Wood	- Ext	(0.089)	13.0/0.0	8		3.73	30 Btuh
16	Frame - Wood	- Ext	(0.089)	13.0/0.0	8		3.73	30 Btuh
17	Frame - Wood	- Ext	(0.089)	13.0/0.0	22		3.73	82 Btuh
18	Frame - Wood	- Ext	(0.089)	13.0/0.0	19		3.73	71 Btuh
19	Frame - Wood	- Ext	(0.089)	13.0/0.0	22		3.73	82 Btuh
20	Frame - Wood	- Ext	(0.089)	13.0/0.0	54		3.73	201 Btuh
21	Frame - Wood	- Adj	(0.089)	13.0/0.0	56		3.73	209 Btuh
22	Frame - Wood	- Adj	(0.089)	13.0/0.0	40		3.73	149 Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

Sample Report
123 Main Street
Sacramento, CA 95825

Project Title:
Sample Report
Building Type: User
KwikModel Base

12/6/2023

Walls	Type	Ornt.	Ueff.	R-Value (Cav/Sh)	Area X	HTM=	Load
23	Frame - Wood	- Ext	(0.089)	13.0/0.0	40	3.73	149 Btuh
24	Frame - Wood	- Adj	(0.089)	13.0/0.0	76	3.73	283 Btuh
25	Frame - Wood	- Ext	(0.089)	13.0/0.0	16	3.73	60 Btuh
26	Frame - Wood	- Ext	(0.089)	13.0/0.0	16	3.73	60 Btuh
27	Frame - Wood	- Ext	(0.089)	13.0/0.0	16	3.73	60 Btuh
28	Frame - Wood	- Ext	(0.089)	13.0/0.0	16	3.73	60 Btuh
29	Frame - Wood	- Ext	(0.089)	13.0/0.0	18	3.73	67 Btuh
30	Frame - Wood	- Ext	(0.089)	13.0/0.0	18	3.73	67 Btuh
31	Frame - Wood	- Ext	(0.089)	13.0/0.0	16	3.73	60 Btuh
32	Frame - Wood	- Ext	(0.089)	13.0/0.0	16	3.73	60 Btuh
	Wall Total				1434(sqft)		5345 Btuh
Doors	Type		Storm Ueff.		Area X	HTM=	Load
1	Wood - Exterior,		w (0.460)		20	19.3	386 Btuh
2	Wood - Garage,		w (0.460)		20	19.3	386 Btuh
	Door Total				40(sqft)		773Btuh
Ceilings	Type/Color/Surface		Ueff.	R-Value	Area X	HTM=	Load
1	Flat ceil/D/Shing		(0.032)	30.0/0.0	90	1.3	120 Btuh
2	Flat ceil/D/Shing		(0.032)	30.0/0.0	90	1.3	120 Btuh
3	Flat ceil/D/Shing		(0.032)	30.0/0.0	136	1.3	182 Btuh
4	Flat ceil/D/Shing		(0.032)	30.0/0.0	186	1.3	249 Btuh
5	Flat ceil/D/Shing		(0.032)	30.0/0.0	204	1.3	273 Btuh
6	Flat ceil/D/Shing		(0.032)	30.0/0.0	12	1.3	16 Btuh
7	Flat ceil/D/Shing		(0.032)	30.0/0.0	35	1.3	47 Btuh
8	Flat ceil/D/Shing		(0.032)	30.0/0.0	104	1.3	139 Btuh
9	Flat ceil/D/Shing		(0.032)	30.0/0.0	20	1.3	26 Btuh
10	Flat ceil/D/Shing		(0.032)	30.0/0.0	5	1.3	6 Btuh
11	Flat ceil/D/Shing		(0.032)	30.0/0.0	5	1.3	7 Btuh
12	Flat ceil/D/Shing		(0.032)	30.0/0.0	56	1.3	75 Btuh
13	Flat ceil/D/Shing		(0.032)	30.0/0.0	41	1.3	55 Btuh
14	Flat ceil/D/Shing		(0.032)	30.0/0.0	52	1.3	70 Btuh
15	Flat ceil/D/Shing		(0.032)	30.0/0.0	125	1.3	167 Btuh
16	Flat ceil/D/Shing		(0.032)	30.0/0.0	125	1.3	167 Btuh
17	Flat ceil/D/Shing		(0.032)	30.0/0.0	281	1.3	375 Btuh
18	Flat ceil/D/Shing		(0.032)	30.0/0.0	255	1.3	341 Btuh
	Ceiling Total				1822(sqft)		2437Btuh

Manual J Winter Calculations

Residential Load - Component Details (continued)

Sample Report
123 Main Street
Sacramento, CA 95825

Project Title:
Sample Report
Building Type: User
KwikModel Base

12/6/2023

Floors	Type	Ueff.	R-Value	Size X	HTM=	Load	
1	Slab On Grade	(1.180)	0.0	44.0 ft(perim.)	49.6	2181 Btuh	
2	Slab On Grade	(1.180)	0.0	14.0 ft(perim.)	49.6	694 Btuh	
3	Slab On Grade	(1.180)	0.0	0.0 ft(perim.)	49.6	0 Btuh	
4	Slab On Grade	(1.180)	0.0	8.5 ft(perim.)	49.6	421 Btuh	
5	Slab On Grade	(1.180)	0.0	27.5 ft(perim.)	49.6	1363 Btuh	
6	Slab On Grade	(1.180)	0.0	25.0 ft(perim.)	49.6	1239 Btuh	
7	Slab On Grade	(1.180)	0.0	28.5 ft(perim.)	49.6	1412 Btuh	
8	Slab On Grade	(1.180)	0.0	0.0 ft(perim.)	49.6	0 Btuh	
9	Slab On Grade	(1.180)	0.0	5.0 ft(perim.)	49.6	248 Btuh	
10	Slab On Grade	(1.180)	0.0	2.0 ft(perim.)	49.6	99 Btuh	
11	Slab On Grade	(1.180)	0.0	6.5 ft(perim.)	49.6	322 Btuh	
12	Slab On Grade	(1.180)	0.0	4.2 ft(perim.)	49.6	210 Btuh	
13	Slab On Grade	(1.180)	0.0	4.6 ft(perim.)	49.6	228 Btuh	
14	Slab On Grade	(1.180)	0.0	15.0 ft(perim.)	49.6	743 Btuh	
15	Slab On Grade	(1.180)	0.0	7.5 ft(perim.)	49.6	372 Btuh	
16	Slab On Grade	(1.180)	0.0	15.0 ft(perim.)	49.6	743 Btuh	
	Floor Total			1744 sqft		10276 Btuh	
	Envelope Subtotal:						23491 Btuh
Infiltration	Type	Wholehouse ACH	Volume(cuft)	Wall Ratio	CFM=		
	Natural(Adjusted for ventilation)	0.22	15449	1.00	84.8	3912 Btuh	
Duct load	Notably sealed, R8.0, Supply(Att), Return(Att)				(DLM of 0.126)	3448 Btuh	
All Zones	Sensible Subtotal All Zones					30850 Btuh	

WHOLE HOUSE TOTALS

Totals for Heating	Subtotal Sensible Heat Loss	30850 Btuh
	Ventilation Sens. Heat Loss (Ex:60 cfm; Sup:0 cfm)	0 Btuh
	Total Heat Loss	30850 Btuh

EQUIPMENT

1. Electric Heat Pump	#	0 Btuh
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Manual J Winter Calculations

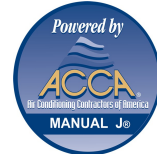
Residential Load - Component Details (continued)

Sample Report
123 Main Street
Sacramento, CA 95825

Project Title:
Sample Report
Building Type: User
KwikModel Base

12/6/2023

Key: Window types - NFRC (Requires U-Factor and Shading coefficient(SHGC) of glass as numerical values)
or - Glass as 'Clear' or 'Tint' (Uses U-Factor and SHGC defaults)
U - (Window U-Factor)
HTM - (ManualJ Heat Transfer Multiplier)



Version 8