



# **Manual J8 Load Calculation**

Project #:1

# **Project Information**

Project #: 1 Notes:

Name: Post Office Road Location: Waitsfield

Wet Bulb:

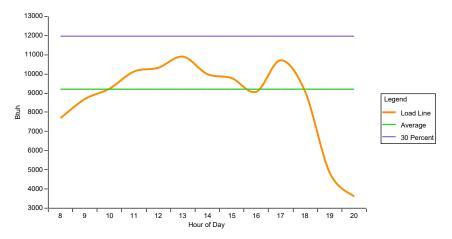
Outdoor	Conditions	
Location:		Morrisville-
		Stowe State
		AP,Vermont
Elevation:		732'
Latitude:		44.53
	Heating	Cooling
Dry Bulb:	-8.0 °F	82.4 °F
Daily Range	e:	Medium

Indoor Conditions					
	Heating	Cooling			
Room Temp:	65 - 68 °F	65 - 75 °F			
Design Temp Diff:	76.0 °F	7.4 °F			
Humidity:	35	50			
Moisture Diff (Grains):		19.1			

Floorplan/Levels		
Basement	993	ft²
Main Floor	1,336	ft²
Second Floor	807	ft²
Total Heated Area:	3,136	ft²
Total Cooled Area:	3,106	ft²

### Fenestration Load vs Hour of Day (Summer)

68.6 °F



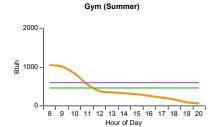
Average Load: 9,206 Btu/hr Excursion Limit: 11,968 Btu/hr

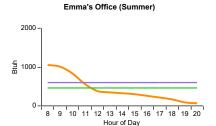
Peak Load: 10,907 Btu/hr AED Load: 0 Btu/hr

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## **Cooling Rooms**



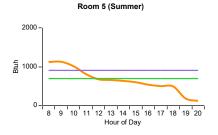


Average Load: 462 Btu/hr Excursion Limit: 601 Btu/hr

Den (Summer)

Peak Load: 1,052 Btu/hr AED Load: 451 Btu/hr Average Load: 462 Btu/hr Excursion Limit: 601 Btu/hr

tu/hr Peak Load: 1,052 Btu/hr Btu/hr AED Load: 451 Btu/hr



Average Load: 284 Btu/hr Excursion Limit: 369 Btu/hr



Peak Load: 346 Btu/hr AED Load: 0 Btu/hr Average Load: 695 Btu/hr Excursion Limit: 904 Btu/hr

Eaundry Room (Summer)

2000

8 9 10 11 12 13 14 15 16 17 18 19 20

Hour of Day

Average Load: 1,735 Btu/hr Excursion Limit: 2,255 Btu/hr

Peak Load: 2,734 Btu/hr AED Load: 479 Btu/hr Average Load: 570 Btu/hr Excursion Limit: 741 Btu/hr

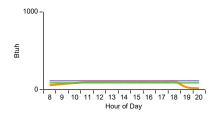
Peak Load: 1,105 Btu/hr AED Load: 364 Btu/hr

Peak Load: 1,127 Btu/hr

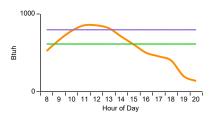
AED Load: 223 Btu/hr

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Master Bathroom (Summer)



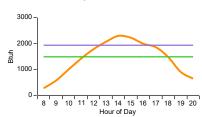
Average Load: 88 Btu/hr

Excursion Limit: 115 Btu/hr

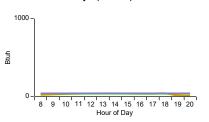
Peak Load: 107 Btu/hr AED Load: 0 Btu/hr

Average Load: 614 Btu/hr Excursion Limit: 798 Btu/hr Peak Load: 854 Btu/hr AED Load: 56 Btu/hr

Dining Room (October)



Foyer (Summer)



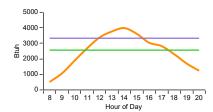
Average Load: 1,489 Btu/hr Excursion Limit: 1,935 Btu/hr

AED Load: 361 Btu/hr

Average Load: 31 Btu/hr

Peak Load: 38 Btu/hr AED Load: 0 Btu/hr

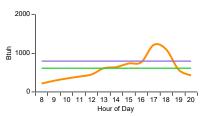
Living Room (October)



Peak Load: 2,296 Btu/hr

Excursion Limit: 41 Btu/hr

Kitchen (Summer)

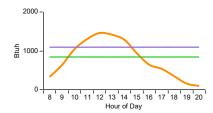


Average Load: 2,562 Btu/hr Excursion Limit: 3,330 Btu/hr Peak Load: 3,984 Btu/hr AED Load: 654 Btu/hr

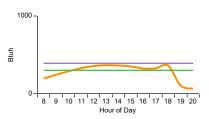
Average Load: 611 Btu/hr Excursion Limit: 794 Btu/hr Peak Load: 1,213 Btu/hr AED Load: 419 Btu/hr

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#### Bedroom 4 (Summer)

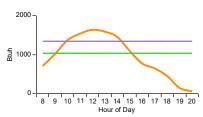


Average Load: 842 Btu/hr Excursion Limit: 1,094 Btu/hr

Peak Load: 1,460 Btu/hr AED Load: 365 Btu/hr Average Load: 301 Btu/hr Excursion Limit: 391 Btu/hr

Peak Load: 367 Btu/hr AED Load: 0 Btu/hr

### Bedroom 2 (October)



Average Load: 1,031 Btu/hr Excursion Limit: 1,340 Btu/hr

Peak Load: 1,636 Btu/hr AED Load: 296 Btu/hr Project #: 1 AED Report

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# Warnings

The sensible load for some rooms peak during late fall or early winter. This behavior is caused by glass that faces South East, South or South West. Room temperature may be difficult to control if zoning is not provided.

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