

Design Indoor Cooling Temp.: 75 °F  
 Design Outdoor Cooling Temp.: 86 °F  
 Temp. Difference Cooling :11°F  
 Indoor Humidity: 50 Grains difference: 29

Design Indoor Heating Temp.: 70 °F  
 Design Outdoor Heating Temp.: 6 °F  
 Temp. Difference Heating :64° F

Area: Framingham, MA  
 Front Door Orientation North

## Whole House Load Calculator

TD: Cool: 11°F Heat: 64°F	Sq. ft. - types 1 and 2		shading	Sq. ft. - types 1 and 2		shading	Sq. ft. - types 1 and 2		Sq. ft.
Outside Wall: North	1: 450	2:	Windows x	1: 50	2:	Glass Doors x	1:	2:	Doors 26
Outside Wall: South	1: 450	2:	Windows L	1: 95	2:	Glass Doors L	1:	2:	Doors 26
Outside Wall: E & W	1: 1360	2:	Windows L	1: 110	2:	Glass Doors L	1:	2:	Doors
Outside Wall: NE & NW	1:	2:	Windows x	1:	2:	Glass Doors x	1:	2:	Doors
Outside Wall: SE & SW	1:	2:	Windows L	1:	2:	Glass Doors L	1:	2:	Doors
Sky Lights	N:	S:	E-W: 24	NE-NW:	SE-SW:				
Floor - (linear ft. if slab)	1: 770	2:	<b>Basement</b>	Walls-above grade: 250	below grade: 650	sq. ft.			
Ceiling	1: 750	2: 750	<b>Basement</b>	Floor -- 730	width 23ft. or	feet below grade: 8 ft.			
Number of: Appliances	Fireplaces 0								
Number of People	4		Fresh air	recommended: 97cfm →	49	CFM			
Conditioned - Sq. ft.: 1900		Cubic. Ft.: 20790		Construction: very tight		Duct system: -----			
<b>Calculate Load</b>		Total Btu's Cooling <b>19762</b>		Sensible Load <b>17518</b>		Latent Load <b>2244</b>		Total Btu's Heating <b>41533</b>	

### Btu breakdown

	Sensible	Latent	Heating
walls	608		6079
windows	6408		9302
ceilings	3488		5856
doors	393		1198
floors	935		5979
appliances	0		
people	920	800	
glass doors	0		0
skylights	3720		1644
basement walls	160		3722
basement floor	0		888
infiltration	293	478	3415
fresh air	593	966	3450
duct load	0	0	0
<b>Totals</b>	<b>17518</b>	<b>2244</b>	<b>41533</b>

### Structure types

Outside Walls 1: Siding or Stucco R21 insulation w/R6 board  
 Outside Walls 2:  
 Windows 1: double pane - blinds  
 Windows 2:  
 Glass Doors 1:  
 Glass Doors 2:  
 Floors 1: closed or vented crawl tile no insulation  
 Floor 2:  
 Ceiling 1: Ceiling under attic space R-25  
 Ceiling 2: Ceiling under roof joists R-11  
 Doors: Metal with storm  
 Skylights: skylight double pane 45 degree angle  
 Basement Walls: block brick or concrete - R15 insulation  
 Basement Floor: R3 or higher insulation  
 Win ht.: 5' 0" Overhang: 1.5' Top to overhang: 2'