Design outdoor Temperature	27	Degrees F	Coldest temperature expected in a "normal" year more...
Heating Degree Days	4500	Degree F - day	Heating Degree Days more...

○ Natural Gas ● Fuel Oil ○ Propane ○ Electricity	3.5	$'s per gallon	80 Furnace Efficiency (%) more...

Area and Rvalue Inputs

Ceilings

Ceilings --- Enter the area and R value for each ceiling area in the house that is exposed to outside temperatures.   Help on R values ...

	Area (sqft)	Rvalue	UA (BTU/hr-F)	Design Loss (BTU/hr)	Yearly Heat Loss (million BTU/yr)
Ceiling 1	1000	13	76.9	3308	8.3
Ceiling 2	0	0	0	0	0
Ceiling 3	0	0	0	0	0
Ceiling 4	0	0	0	0	0

Walls

Enter the area and R value for each wall area in the house that is exposed to outside temperatures. Do not include window and door area.

	Area (sqft)	Rvalue	UA (BTU/hr-F)	Design Loss (BTU/hr)	Yearly Heat Loss (million BTU/yr)
wall 1	2208	13	169.8	7303	18.3
wall 2	0	0	0	0	0
wall 3	0	0	0	0	0
wall 4	0	0	0	0	0

Windows & Doors

Enter the area and R value for each group of windows or doors having the same R value. (U = 1/R, so a window listed with a U of 0.33 has an R value of 3)

	Area (sqft)	Rvalue	UA (BTU/hr-F)	Design Loss (BTU/hr)	Yearly Heat Loss (million BTU/yr)
Group 1	414	2	207	8901	22.4
Group 2	80	.81	98.8	4247	10.7
Group 3	55.5	2.5	22.2	955	2.4
Group 4	0	0	0	0	0

Floors

Floors - Wood Joist Type --- Enter the area and R value for each floor area in the house that is exposed to outside temperatures. Estimating R Value for crawl spaces ...

	Area (sqft)	Rvalue	UA (BTU/hr-F)	Design Loss (BTU/hr)	Yearly Heat Loss (million BTU/yr)
Floor 1	0	0	0	0	0
Floor 2	0	0	0	0	0
Floor 3	0	0	0	0	0
Floor 4	0	0	0	0	0

Slabs

Slab on Grade Floors --- Heat loss from slab on grade floors is primarily dependent on the length of the perimeter and not the area of the floor. "Rvalue" here is the effective R value per foot of perimeter. Estimating effective R Value for slabs ...

	Perimeter (ft)	Rvalue per ft of perimeter (1)	UA (BTU/hr-F)	Design Loss (BTU/hr)	Yearly Heat Loss (million BTU/yr)
Full Slab	155	1.5	103	4443	11.2

Infiltration

House Volume is the total volume of the heated space of the house cubic feet (floor area times the ceiling height)
Typical Air Changes Per Hour:
   0.33 -- very tight -- minimum for health
   0.5 -- tight -- new, careful construction
   1.0 -- leaky -- typical existing construction??

	House Volume (cubic ft)	Air Changes per hour	UA (BTU/hr-F)	Design Loss (BTU/hr)	Yearly Heat Loss (million BTU/yr)
Whole House	20777	.75	280	12061	30.3

Internal Heat Gains

These are heat gains from warm bodies, lights, appliances, ...
This is heat that your furnace does not need to provide.
If you don't want to account for internal heat gains, enter 0 for the number of occupants

	Number of Occupants		Internal Gains (BTU/hr)	Design Loss (BTU/hr)	Yearly Heat Loss (million BTU/yr)
	2		1314	-1314	-11.5

Summary Outputs (see table above for detail outputs)

[Calculate] Click to update Heat Loss results.

Item	UA (BTU/hr-F)	Design Loss (BTU/hr)	Year Loss (Million BTU/yr)	Fuel Cost (US dollars)	Ten Year Cost 10% infla $'s	Greenhouse Gas (lb CO2)
Ceiling Loss	77	3308	8.3	256	4077	1454
Wall Loss	170	7303	18.3	565	9003	3210
Window Loss	328	14103	35.4	1091	17384	6199
Floor Loss	0	0	0	0	0	0
Slab Loss	103	4443	11.2	344	5477	1953
Infiltration	280	12061	30.3	933	14868	5301
Totals	959	41218	103.5	3190	50810	18117
Internal Gains		-1314	-11.5	-355	-5649	

Internal heat gains (warm bodies, lights, ...) supply some of the heat listed above -- the line below shows approximately the contribution of internal heat gains -- this is heat that your furnace does NOT have to supply.

Heat Loss -- Millions of BTU per Year