



HEAT LOSS CALCULATOR FOR SINGLE ROOMS

IMPORTANT: This heat loss calculator is designed for estimation purposes only, due to the many variables in both building construction and materials that may exist no responsibility can be taken for inappropriately installed equipment

DATE:

CUSTOMER NAME:

ROOM NAME:

ROOM DIMENSIONS

(Enter lineal ft dimensions in appropriate shaded area and enter number of exposed (cold) walls of that length or width in appropriate shaded area.

NOTE : walls adjoining heated area's have no heat loss through that wall)

LENGTH OF ROOM (FT)	[<input type="text" value="12"/>]	[<input type="text" value="2"/>] <# OF EXPOSED WALLS
WIDTH OF ROOM (FT)	[<input type="text" value="15"/>]	[<input type="text" value="0"/>] <# OF EXPOSED WALLS
HEIGHT OF ROOM (FT)	[<input type="text" value="8"/>]	

WALL & CEILING INSULATION VALUES

(Select values by entering " Y " in appropriate column)

Note: If room is situated below a heated area there is no ceiling heat loss

Note: Fiberglas batt insulation has an R value of approx 3 per inch

WALL INSULATION LEVEL (select one only)

NO INSULATION	[<input type="text"/>]
R6	[<input type="text"/>]
R8	[<input type="text"/>]
R10	[<input type="text" value="Y"/>]
R12	[<input type="text"/>]
R20	[<input type="text"/>]

CEILING INSULATION LEVEL

(select one only if applicable, if there is no ceiling loss leave blank)

NO INSULATION	[<input type="text"/>]
R12	[<input type="text" value="Y"/>]
R20	[<input type="text"/>]
R26	[<input type="text"/>]
R32	[<input type="text"/>]
R40	[<input type="text"/>]

DOOR AND WINDOW VALUES

(Select values by entering " Y " in appropriate "type" column ,sq ft area values in " size "column)

NOTE: Enter values for outside doors only (Doors adjoining heated area's have no heat loss)

TYPE OF DOORS

WOOD	[<input type="text"/>]
WOOD C/W STORI	[<input type="text"/>]
INSUL. METAL	[<input type="text"/>]
SLIDING GLASS	[<input type="text"/>]

SIZE OF DOORS (SQ. FT)

DOOR 1	[<input type="text"/>]
DOOR2	[<input type="text"/>]
DOOR3	[<input type="text"/>]

Room (All)

TYPES OF WINDOWS

SINGLE PANE []
DOUBLE PANE []
TRIPLE PANE []

SIZE OF WINDOWS (SQ. FT.)

WINDOW #1 [30]
WINDOW #2 []
WINDOW #3 []

FLOOR TYPE & INSULATION VALUE

(Select values by entering " Y " in appropriate column)

Note: If room is above heated space there is no floor loss

Use one type of floor construction only, if room is above heated area leave all fields blank

CONCRETE SLAB (ON GRADE)

c/w perimeter insulation

NO INSUL. []
R11 []
R28 []

BASEMENT SLAB (BELOW GRADE)

c/w perimeter insulation

NO INSUL. []
R11 []
R28 []

FRAME FLOORS OVER UNHEATED AREA

NO INSUL. []
R12 []
R20 []
R32 []
R40 []

INFILTRATION VALUES & CALCULATION

Infiltration losses include both losses through structure construction (e.g. cracks, leaks etc) as well as losses due to the normal air changes such as opening of outside doors etc.

Note: Calculations are based on average residential values only, adjustments should be made for non-standard situations such as high traffic entrances etc or for alternate building construction materials and methods

Note: Values listed are for sheltered or partially sheltered to wind exposure

Use next lower value for exposed locations and second story rooms

(Select values by entering " Y " in appropriate column)

INFILTRATION CATEGORY

INFILTRATION GUIDELINES

POOR [] POOR : loose construction with no attempt to air sealing
AVERAGE [] AVERAGE: pre 1970 style of construction c/w air/vapour barriers, no attempt to seal joints within vapour barriers
GOOD [] GOOD : as above but with specific attempts to tape and seal air/vapour barriers, floor and joist headers sealed.
TIGHT [] TIGHT : R-2000 style of construction

ALTERNATE DESIGN TEMPERATURE DIFFERENCE (D.T.D)

Note: The above calculated values are based on a design temperature difference of 72 degrees F (based on an outside temperature of 0 degrees F and a required inside temperature of 72 degrees F)

There may be situations where this value should be adjusted accordingly.

- These include**
- 1) Rooms that are currently partially heated**
 - 2) Geographical locations that are either warmer or colder than a 75 degree temp difference**
 - 3) Situations where an inside temperature of 72 degrees is not required**

Insert required design temperatures in shaded area

Min inside temp 60
D.T.D. : 70] Degrees F Min Design Temp = -10
CALCULATED HEAT LOSS 15122 WATTS
btu/ft 47483 BTU

LF of convector input f 180 600 79 feet
120 300 158 feet

FOR HARD COPY AND SUMMARY GO TO PRINT COPY
(See area to left of chart, highlight and print)