

Homeowner Heat Loss and Equipment Identification Form

Homeowner _____

Gas Contractor _____

Job address _____

Contr Phone _____

Contr Phone _____

City of Minneapolis requires this heating heat loss form for furnaces and boilers installed in single family homes or duplexes be **left at the job site**.

Do **not** submit the heating load calculations with your permit application.

(Note: You can use the form you are presently using, as long as it has all the information contained on the City form).

Measurements and calculations:

1. Sq. Ft exposed walls above grade _____ sqft x "U" _____ x 88 degree design temperature = _____
 (Note: A typical 2x4 wall with 2x4 wood framing without insulation has a U value of 1.08 and a wall with 3½" of insulation has a "U" value of 0.063.)

2. Sq. Ft. of the ceiling area----- _____sqft x "U" _____ x 88 = _____
 (Note: A typical 2x4 framing with 5" of insulation has a U value of 0.05, with 9" of insulation has a U value of 0.032.)

3. Sq. ft of basement floor area below grade----- _____ sqft x 3 Btu's/Sq Ft = _____

4. Sq. ft. of wall area below grade----- _____ sqft x 6 Btu's/Sq. Ft = _____

5. Lin. Ft of infiltration for windows----- _____ x (.5) X 1.08 x 88 = _____

6. Lin. Ft of infiltration for doors----- _____ x (1.25) X (1.08) x 88 = _____

7. Lin. Ft of infiltration for sliding doors----- _____ x (.75) X (1.08) x 88 = _____

8. Allowance for exhaust fans: 600 Btu's per kitchen fan 200 Btu's per Bath fan----- = _____

9. Allowance for fireplaces: 1,500 Btu's each ----- = _____

10. Total Btu loss for all above items----- = _____

11. Add for combustion air (0.001) x net loss above x (12.5) x (0.075) x 88----- = _____

12. Total lines 10 and 11 to determine heat loss (Or substitute heat loss from other) = _____

13. Safety factor – Multiply heat loss by 1.10 to determine additional allowance----- = _____

(This is the size furnace you should use in this structure. The code does allow you to use the next size available providing that the appropriate equipment is not readily available. Equipment whose capacity exceeds the design load may be used if the overall annual energy costs are not increased.)

The undersigned, as applicant for a heating permit, hereby affirms the above information has been prepared by or for him/herself, or under his/her direction; hereby acknowledges the information to be correct and accurate.

Proposed furnace/boiler size: _____ Btu's. Proposed furnace/boiler make: _____

Proposed furnace/boiler model no. _____

Signature: _____

Date: _____