

Use of Wood-Burning Stoves and Other Solid Fuel-Burning Heating Appliances

Once again, given the expected demands on fossil fuels (oil and gas) for the 2007 – 2008 winter heating season, it is anticipated that many Massachusetts homeowners may again seek to supplement the heating of their homes by using wood or other solid fuels this winter. Remember, you are bringing FIRE into your home by installing a solid fuel-burning appliance.

It is strongly recommended that smoke detectors and carbon monoxide (CO) alarms be installed prior to use - note that the State Building Code (780 CMR) and the State Fire Code (527 CMR) have requirements for when and where smoke alarms and CO alarms are required and State law and the Fire Code have required CO detectors retro-fit installed by March 31, 2006 in most residential occupancies.

The information that follows is intended for those who are considering using solid fuel-burning equipment and fireplaces to heat/supplement heat their homes. While specific sections of the Massachusetts State Building Code (780 CMR) are identified for informational use only, this Fact Sheet should not be used as a substitute for all applicable requirements of the Building Code, Boiler Regulations, or the Appliance Manufacturer's installation, operation and maintenance requirements.

General Requirements

Solid fuel-burning appliances include: factory-built fireplaces, coal-burning appliances, wood stoves, wood pellet stoves, corn and nut shell-burning pellet stoves, wood-fired boilers and any other solid fuel-burning appliance intended to provide heat to a building or space within a building, as well as certain ancillary components such as factory-built chimneys, vent piping and certain specialized installation components for some products.

Solid fuel-burning appliances utilized within the dwelling **must be**:

- I. Listed as tested in accordance with National Safety Standards and labeled for the intended use.
- II. Placed a safe and established distance from combustible materials such as wood, draperies, furniture, carpets, wood flooring, etc..
- III. Properly vented to the outside of the building.
- IV. Installed and operated in accordance with all applicable Building Code requirements and those of the appliance manufacturer.
- V. Inspected by building official to ensure compliance with the Building Code.
- VI. wood-fired boilers must be constructed in accordance with the Massachusetts State Boiler Regulations 522 CMR which adopts the A.S.M.E code and must have the applicable A.S.M.E. code symbol stamp (see figure 1).

VI. Maintained in accordance with the appliance manufacturer's requirements.

CHECKLIST REQUIREMENTS FOR THE INSTALLATION AND USE OF WOOD BURNING AND OTHER SOLID FUEL-BURNING HEATING APPLIANCES

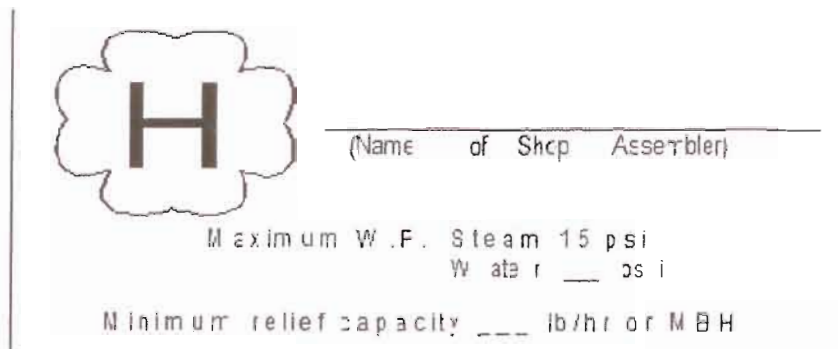
1. Solid Fuel Burning Appliance is Listed and Labeled, boilers are stamped with the A.S.M.E code symbol stamp (see figure 1).
2. Installer holds a Construction Supervisor License (CSL) (unless the homeowner is going to install the appliance).
3. If installation is an owner-occupied building of up to 4 units, the individual signing the contract with the homeowner holds a Home Improvement Contractor Registration.
4. The Building Permit is obtained prior to installation.
5. The location where the appliance is being installed has a satisfactory supply of fresh air.
6. The location where the appliance is being installed is NOT near flammable vapors, gasoline, explosives or other combustible liquids, fibers or dust.
7. The location where the appliance is being installed provides for the required clearances from combustible construction and other objects such as furniture, drapes, carpets, etc., etc.
8. The location where the appliance is being installed has proper floor protection/hearth extension under or in front of the appliance.
9. The appliance has proper venting to the outside of the building.
10. If the appliance vents through a chimney, the connector pipe from the appliance to the chimney is the correct type and size and is installed with the required clearances to combustibles.
11. If the appliance vents through combustible walls or roof or ceiling, the vent system uses listed thimbles or specialized piping or free clearances where the vent system passes through combustible construction.
12. The appliance does not share a flue or vent with other appliances.
13. The building inspector has inspected the appliance after installation but before use.

***If you have any questions about properly installing a solid fuel-burning appliance, you should contact the Building Inspector**

**** It is strongly recommended that smoke detectors and carbon monoxide (CO) alarms be installed prior to use - note that the State Building Code (780 CMR) and the State Fire Code (527 CMR) have requirements for when and where smoke alarms and CO alarms are required and State law and the Fire Code have required CO detectors retrofit installed by March 31, 2006 in most residential occupancies.**

Figure 1

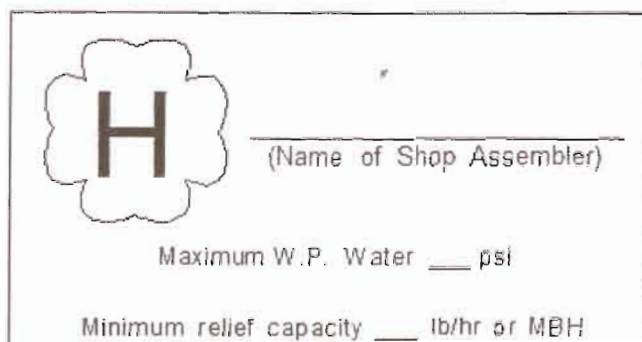
**FORM OF STAMPING ON COMPLETED CAST IRON BOILERS
OR THEIR NAMEPLATES**



A stamping form for cast iron boilers. It features a large, stylized letter 'H' inside a cloud-like border on the left. To the right of the 'H' is a horizontal line for the shop assembler's name. Below the name line are two lines for pressure ratings: 'Maximum W.P. Steam 15 psi' and 'Water ___ psi'. At the bottom is a line for 'Minimum relief capacity ___ lb/hr or MBH'.

FIGURE 2

BOILERS SUITABLE FOR WATER ONLY



A stamping form for water-only boilers. It features a large, stylized letter 'H' inside a cloud-like border on the left. To the right of the 'H' is a horizontal line for the shop assembler's name. Below the name line are two lines for pressure ratings: 'Maximum W.P. Water ___ psi' and 'Minimum relief capacity ___ lb/hr or MBH'.

DETAILS

**REQUIREMENTS FOR THE INSTALLATION AND USE OF WOOD-BURNING AND OTHER
SOLID FUEL-BURNING HEATING APPLIANCES & THE USE OF FIREPLACES**

Given the expected demands on fossil fuels (oil and gas) for the 2006 – 2007 winter heating season, it is anticipated that many Massachusetts homeowners may again seek to supplement the heating of their homes by using wood or other solid fuels this winter.

Remember, you are bringing FIRE into your home by installing a solid fuel-burning appliance. Safety is **imperative**.

The following information is intended to assist those considering using solid fuel-burning equipment and fireplaces to heat their homes. While specific sections of the Massachusetts State Building Code (780 CMR) are identified for informational use only, please note this Fact Sheet should not be used as a substitute for all applicable requirements of the Building Code, Massachusetts State Boiler Regulations, or the Appliance Manufacturer's installation, operation and maintenance requirements.