

Heating Safely with Solid Fuels - Chimney, Wood, Coal and Pellet Stoves

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In Massachusetts in 2007, there were 880 fires incidents involving solid fueled appliances, fireplaces, and chimneys. These fires were responsible for one civilian death, three civilian injuries, 13 fire services injuries, and resulted in \$3.3 million in property losses. These incidents make up 29% of all fires linked to heating systems.

With the rising cost associated with heating homes, there is the temptation to utilize alternative sources of heating. However, many times people overlook critical safety issues while using alternative heating sources in their homes.

Tips for Safe Use of Wood, Coal and Pellet Stoves

Before you purchase a heating stove, make sure that it has approval from Underwriter's Laboratories Inc. or another recognized independent testing lab.

Installation

- A building permit needs to be obtained prior to installation of fireplaces, fireplace inserts, wood, coal or pellet burning stoves and must be inspected by the local building inspector prior to their initial use as required by the Massachusetts State Building Code.
- Allow at least 36 inches of clearance around the appliance to prevent combustibles from coming into contact with heat sources.
- Solid fuel heating appliances cannot share a common flue with chimney flues utilized by other solid, fossil, or gas fired appliances.

A qualified mason should inspect the chimney and flue before the stove is used. Cracks in the flue or mortar joints can allow flames and heated gases to extend into the structure.

Proper Use

Most chimney fires occur because of a build-up of **creosote**, a tarry by-product of burning wood.

- Have your chimney flue cleaned before each heating season. Burn only dry, well seasoned, hardwood to reduce creosote accumulation.
- Don't use flammable liquids to start a fire.
- Never leave children unattended near the stove
- Check that the damper is open before lighting the fire. A closed damper will result in an accumulation of smoke and carbon monoxide in the home. Do not close the damper until the fire is out and the embers are cold.
- Use a fireplace screen to prevent flying sparks and embers from falling out on to the floor.

- Install and maintain smoke detectors and carbon monoxide alarms to provide protection for your family.

Fires From Ashes

To prevent fires from ashes, ashes that are cleaned out from the stove or fireplace should be shoveled into a metal bucket with a metal lid and placed outside on the ground away from the building. There have been many recent fires from ashes stored underneath a deck or porch or inside the garage or from ashes stored in cardboard boxes. A live ember can continue to smolder unnoticed for quite some time.

Install Smoke and Carbon Monoxide Alarms

Install smoke alarms to warn of a fire, but also have carbon monoxide (CO) alarms in the home to warn about deadly fumes from a faulty furnace, fireplace and oven flue or other venting problem.

Problems with heating systems is the #1 source of carbon monoxide in homes. Both types of alarms are required by law in Massachusetts.