

INFORMATION TO SHARE WITH YOUR INSUREDS

Hazards of Alternative Heating Stoves

As colder weather prevails around much of the country, many of our insureds are likely using alternative heating sources in their homes and businesses. With that in mind, the Insurance Institute for Business & Home Safety (IBHS) offers the following safety information.

Use Caution

Before using any new heating device, install carbon monoxide detectors in several parts of the house.

Stove Placement

Heating stoves vary in construction regarding self-contained insulation and thermal protection. Thus, a single layer iron-walled stove can generate enormous heat several feet in all directions, while more sophisticated multiple walled insulated forced air stoves can remain safe to the touch when in use.

Stove placement must take into consideration adequate space for installation, maintenance or replacement, flue and vent pipe routing, and most importantly, safe location relative to combustible materials. Properly tested and rated stoves will have an attached safety label and an installation manual that will detail the manufacturer's recommended minimum separations (typically not less than 36 inches) from combustibles.

In most cases, protection of the floor or combustible surface under a stove is



required and specified, including shielding beneath and extending on all sides in accordance with the code and label requirements. This includes adequate protection in front of the fire box and where ash removal is required.

Following are some additional general guidelines for times when labels are missing.

Pellet Stoves

These modern devices operate through an automated fuel-delivery process. In some designs, a fan delivers air to the fire and blows exhaust byproducts out of a vent pipe that is smaller and typically less expensive than a chimney. Often, a separate fan blows air through heat exchangers in the stove and out into the home.

- Always hire an installer who is licensed and certified.

- Outlets must be checked for proper voltage, grounding and polarity.
- According to model building codes, multiple walled, insulated, forced-air stoves within compartments or alcoves should have a minimum of 3 inches of working space clearance along the sides, back and top, with a total width of the enclosing space being at least 12 inches wider than the stove.
- Stoves having a firebox open to the atmosphere should have at least a 6-inch working space along the front combustion chamber side.
- Keep the stove clear of all combustible materials.
- Use PL vent pipes tested to Underwriters Laboratories (UL) 641. Relining may be required.
- Altitudes higher than 2,500 feet may require special venting.
- An outside air source may be required for houses with tight construction or strong kitchen, bath or other exhaust fans.
- Manufacturer instructions must be followed regarding sealing joints and seams, particularly of pressurized mechanical exhaust vents.
- Regular cleaning and maintenance are critical to ensure safe operation.
- Components should be inspected daily.

Wood Stoves

These traditional heat sources remain popular, but have been linked to an increase in house and chimney fires.

- Choose a UL-tested stove.
- Second-hand stoves should be free of broken parts or cracks.
- Keep the stove clear of combustible

materials.

- Noncombustible floor covering should be used under and around the stove. The material should extend 18 inches on all sides.
 - Prior to using the stove, place a layer of sand or firebrick in the bottom of the firebox.
 - Vent pipes or chimneys must be inspected prior to use.
- If a stove pipe is used:
- Use 22- or 24-gauge metal with a total length of less than 10 feet.
 - Maintain at least 18 inches between the top of the stove pipe and the ceiling or other combustible material.
 - Ensure that the stove pipe enters the chimney at a spot higher than the top of the stove firebox and that it does not extend into the chimney flue lining.
 - The inside thimble diameter should be the same size as the stove pipe for proper seal.
 - The stove pipe should not pass through a floor, closet or concealed space, or enter the chimney in the attic.

Whether masonry or metal, the chimney should extend:

- At least 3 feet above the highest point where it passes through the roof and at least 2 feet above any portion of the building within 10 feet (horizontally) of the chimney.
- The chimney flue lining should not be blocked.
- Keep the chimney flue and stove pipe clean and free of obstructions.

For more information visit:
<http://www.disastersafety.org>.