June 24, 2015

SOLID FUEL HEATING

What is it?

A solid fuel appliance is any heater that uses wood, wood pellets, coal or even crops, such as corn, as a fuel source. If not properly installed or maintained, solid fuel appliances can be one of the nation's leading causes of fire deaths and property loss with contributing factors such as improper installation, maintenance, fueling operation and arranging household contents too close to the unit.

Installation

- When buying a new solid fuel heating appliance, make sure it carries the mark of an independent testing laboratory such as UL or Warnock-Hersey.
- Have it installed by a qualified technician according to local codes and manufacturers' instructions.
- Maintain a 36" clearance from the solid fuel heating device to any combustible materials unless the testing laboratory allows for closer installation. This includes, but is not limited to, wood framing and trim, furniture, sheetrock, etc.

No coverage *is provided for any loss caused by *UNAUTHORIZED* use of wood heat or other solid fuel.*

All solid fuel heating appliances must be inspected and approved by us in order for coverage to apply.

Use Proper Fuel

Hardwoods, such as maple, beech, ash, hickory, or oak are the best fuel for wood burning.

Wood should be cut, split and air-dried for at least a year before burning. Well-seasoned hardwood will show cracks in the ends.

Wood will dry faster and remain dry and protected from the elements if stored in a shed or under a tarp.

Store firewood at least 36" away from the wood heating appliance.

Do not use flammable liquids to start the fire. Use clean newspaper and/or dry kindling.

Ash Disposal

Each year firefighters respond to thousands of fires caused by improper disposal of hot coals or ashes from fireplaces and wood burning stoves.

Hot coals hidden in a pile of ashes are well insulated and can remain hot enough to start a fire for up to four days.

The only safe means for ash storage is in a metal container with a tight fitting lid. This helps keep air from blowing through and disturbing ashes which can emit sparks.

Courtesy of Ram Mutual Insurance

CHIMNEYS

The chimney for a wood stove must be flue-lined masonry or UL Listed and factory-built. Occasionally in older homes, chimneys constructed of double brick are utilized for solid fuel heating purposes. These types of double-brick chimney systems have been problematic and pose a fire hazard as the mortar between the bricks is prone to deterioration allowing for a potentially dangerous situation. Never, under any circumstances, should an unlined, single-brick chimney be used for venting of a solid fuel heating device.

Metal Chimneys should be completely disassembled after a chimney fire and checked for damage. Discoloration of the exterior and/or distortion on the interior indicates a breakdown of the insulating material and serious damage to the chimney. Any questionable section(s) will need to be replaced.

A wood burning stove should never be connected to a flue which vents a gas appliance. Deadly, unburned vapors from the oil/gas-fired burner could back up into the stove and the room where it is located.

REGULAR CLEANING

Use a wire brush to clean your stovepipe and chimney at least once a year and occasionally use a controlled, high-temperature fire in the stove or furnace.

Avoid salt-based chemical cleaners, and never use heavy items such as chains, bricks or a brush on the end of a rope as they could seriously damage the interior chimney lining.

Have the chimney cleaned and inspected by a certified chimney sweep.

Avoid Creosote Build-up

Creosote is a highly combustible fuel that burns intensely. A slow-burning fire, such as those found in a modern, airtight stove damped way down, can produce a flue temperature of approximately 100-200 degrees Fahrenheit. These comparatively low temperatures do not sufficiently carry all of the unburned, combustible gases into the atmosphere. Instead they condense along the walls of the stovepipe and the chimney as creosote.

Creosote is generally described as:

- A sticky liquid that will run down the chimney and stovepipe where it will be burned.
- A flaky black deposit which is easily removed by brushing.
- A hard, glazed tar which is almost impossible to remove, except by a certified professional chimney sweep.

Stovepipes, Connectors and Wall Pass-Throughs

Venting the stove is the most important part of the wood burning system. It consists of lengths of 24-guage or heavier stovepipe which connect the stove to an approved chimney. Many of the stove-related fire losses originate as the result of the venting system installation. Several manufacturers offer UL Listed double-wall black stovepipe which will allow reduced air-space clearance from the stovepipe to combustibles.

The vent must be as short as possible with no more than two right angle elbows. The sections of stovepipe should be assembled with crimped, male ends of the sections facing down towards the stove. Stovepipe sections should be fastened with at least three sheet metal screws or other fasteners. Seams must overlap and face up on inclined runs.

Stovepipe clearance is extremely important. It must never pass through an interior wall, floor, or ceiling and should never be used for a chimney because the elements will rust. Where possible, the stovepipe must go directly into a flue-lined masonry or UL Listed, factory-built chimney. If the stovepipe must pass through an exterior wall to reach the chimney, an approved wall pass-through device is required. Consult fire codes regarding additional methods for connecting wood heating appliances through combustible walls as provided by NFPA Standard 211.

Courtesy of Ram Mutual Insurance