

Fireplaces and Chimneys

DID YOU KNOW THAT...

- a fireplace removes more heat from your house than it puts in?
- even though you are roasting in front of an open fire, the temperature of the room is not changing significantly and can even be dropping?
- there is no chemical on the market that will clean a chimney?
- you lose more heat through a fireplace opening, than through the equivalent size hole in the wall?
- burning trash in your fireplace will damage your chimney and create a safety hazard?
- as little as one millimeter of creosote lining the chimney can reduce a stove's efficiency by up to 15 percent?

A HEATING DEVICE

Infrared energy is radiated outward from the fire. This energy is converted to heat on the surface it strikes, such as skin, the surface of a chair or your clothes. But if something comes between you and the fire, you notice the difference. The temperature of the air has not gone up one degree, and chances are it has dropped because air needed to supply the fire comes from outside at much cooler temperatures.

A wood stove, accompanied by a glass enclosure on the fireplace, is the best way to heat with wood.

The average volume of air that is pulled through an open chimney in an hour is equal to twice the total volume of air in your house. This varies slightly depending on the chimney and the size of the house but not by much. So all night while your furnace is busy pumping hot air in, the chimney very efficiently pumps the hot air out. This is why glass enclosures are important in helping to stop heat loss.

CHIMNEY CAPS

There are five good reasons to have a chimney cap:

1. It keeps out the rain. Rain can soak into the mortar joints, weaken them and, therefore, weaken the chimney. If you have a metal firebox, rain will cause rust. If you have a wood stove insert, rain will rust it rapidly.
2. A cap will keep out birds and other varmints. Bird droppings down the

- chimney can cause a bad smell and a breeding ground for mites.
3. Installing a chimney cap can prevent roof fires, as its spark arrestor will trap the hot embers.
 4. A cap inhibits downdrafting. Backpuffing of smoke can result from several factors. One of these is downdrafting, blowing smoke back down into the room.
 5. A cap keeps out leaves. Leaves can choke a flue and set off a chimney fire in a dirty flue.

KEEP IT ALL CLEAN

A build-up of creosote in a chimney is a potential fire hazard. Dust-like carbon deposits called creosote collect on the inside of a chimney flue, impairing the draft. Creosote is a natural by-product of burning wood. The build-up will vary depending on the type of wood most used in the fireplace.

Soft woods, including pine and artificial logs, produce the highest level of creosote. These burn fast and leave a high deposit of creosote. Juniper is a little better. The best woods to use are hard woods, which include cedar, oak and mesquite. These burn slower, hotter and leave fewer deposits of creosote.

Creosote burns with an intense flame that can damage mortar. In a matter of seconds the fire spreads up through the flue, as the creosote is burning, creating a draft that only helps the fire burn. This is a chimney fire; it sounds like a roar, like a rocket taking off in your living room.

If you think you have a chimney fire, leave the house and call 9-1-1.

The National Fire Protection Association recommends that chimneys be inspected once a year and cleaned if needed. When used regularly, the chimney should be checked every six months. How do you know whether your chimney needs cleaning? You may be able to tell by using a powerful light and a mirror to look up the flue from the bottom. If the bricks look pink, you're okay. If they are black or furry looking, it's time for cleaning.

FIREPLACE SAFETY

- Don't build a fire too big for the fireplace.
- Don't use fire starters such as charcoal lighter, kerosene or gasoline to start the fire.
- Fireplaces radiate heat just like space heaters so furniture and other combustibles should be kept a safe distance from the fire.
- Be sure the chimney is clean and in good condition.
- Be sure the damper is open before starting a fire.
- Don't burn trash in the fireplace.
- A screen or glass doors should cover the front of the fireplace to prevent sparks from flying out into the room.
- Seasoned wood is safer than green wood. Hardwoods have less creosote build-up than softwoods.

- Ashes should be removed into a metal container and allowed to thoroughly cool before being placed in the trash container.
- Don't leave small children alone in a room with a fire.
- Do not leave a fire burning when you go to bed or leave the house.