

Fireplace and Woodstove Safety

The two leading causes of fireplace and woodstove fires are creosote build-up and improper disposal of ashes.

Creosote

Creosote is a sticky liquid or tar-like substance caused by incomplete combustion in your woodstove or fireplace. Extremely cold outdoor temperatures rapidly cool your chimney, causing creosote to harden and stick to the inside of it.

Creosote is extremely flammable. A severe chimney fire can occur with only 1/4th accumulation. Creosote can be minimized by controlling two variables: burning fuel at the correct temperature, and choosing appropriate wood.

Fires should burn at a temperature of approximately 300* Fahrenheit. You can purchase a stove pipe thermometer to help gauge the temperature. Fires should be kept small, but they should burn at a constant, brisk rate. When fires burn at lower temperatures, incomplete combustion contributes to creosote buildup.

The second variable is the type of wood you choose. Burn only seasoned hardwoods. Wood is seasoned when it has been allowed to dry for at least one year. Green wood and softwoods (such as pine) contain more moisture which contributes to creosote buildup. By splitting and thoroughly drying the wood, you allow for more complete combustion lessening the creosote effect.

How Often Should I Clean My Chimney?

If the fireplace is used only on occasion, it should be inspected, and cleaned if necessary, at least once a year. If you use your fireplace or woodstove frequently, cleaning should be performed more often. If your wood burning appliance is your primary source of heat, you should inspect your chimney and flue pipes at least once every other week for creosote build-up.

Be aware that airtight stoves present a unique problem: because of the limited air supply and low temperature fires, creosote accumulation is more rapid. Remember, if the creosote is more than 1/4" deep, you can have a fire.

How Do I Clean My Chimney?

You can clean the chimney yourself or you can have someone do it for you. It is preferable to use mechanical methods (brushes) to clean your chimney. Chemical solvents may contain abrasives that can damage metal pipes or chimney liners. Use brushes purchased for this purpose or hire a chimney sweep to do the job for you. This simple procedure can save you valuable time, effort and expense later.

What To Do If A Fire Does Occur?

Creosote build-up is inevitable. Despite efforts to maintain a clean unit and conscious efforts to burn wood properly, no wood burning system is 100% safe. What's important is to know what to do in case of a chimney fire. Creosote fires can burn at temperatures in excess of 3,000* Fahrenheit. The seams in your stove pipe are designed to withstand much lower temperatures. As a result, a creosote fire causes the joints and masonry in your chimney to over expand, creating cracks and breakage. It is critical that you have your chimney inspected after a fire. If there are cracks and breaks in the seams, they will need to be repaired, otherwise there is the chance of a fire started by a wayward spark getting through the cracks and breaks into the attic or roof or your home.

How Will I Recognize A Chimney Fire?

The extremely high temperature creates a strong up-draft through your fire box and flue. This draft causes a roaring sound and is often the only clue you'll have to a chimney fire. Other warning signs may include sucking noises, shaking pipes, and/or stove pipes glowing red. Teach everyone in your home what to do in case of a fire.

1. **Evacuate** your home and call **9-1-1** from a neighbors house
2. Keep family members a safe distance away and have them watch for flames or smoke on the roof.
3. If you can do so safely, cut off the fire's air supply by closing any intake vents before evacuating.
4. Wait outside for the fire department to arrive. Do not cancel your call to the fire department – even if the fire appears to have extinguished itself.