

Efficient Burning Techniques

The key is to burn small, hot fires, using hardwood — that will minimize creosote accumulation and maximize heat output.



Keep fires burning hot with flames, not smoldering with a lot of smoke.

Be careful not to add too much firewood. In a fireplace, keep the top of the flames visible below the fireplace opening. In a woodstove, keep the flames confined to the woodstove itself.

With glass doors, keep the doors wide open with the screen closed for a good half hour after starting the fire. When you see the fire is burning well, close the doors and set any draft controls.

It's better to add smaller loads more often than to cram in a lot of wood trying to get an all-day burn.

When you're ready to put out a fire, separate the logs by moving them to the side of the fireplace or stand them on end in the back of the fireplace. Close the screen or glass doors tightly, but don't close the damper until you're sure the fire and coals are completely out.

How to Avoid Chimney Fires

Creosote is the main cause of chimney fires

A buildup of creosote is highly combustible and can result in a chimney fire. To minimize creosote:

Burn only seasoned woods.

Do not burn trash in a fireplace or woodstove.

Don't allow the fire to smolder.

Contact your chimney professional to clean your chimney regularly.

What to do if you have a chimney fire

Get everyone out of the house.

Call the Fire Department.

Don't close the damper. If you have a fireplace with glass doors, close the doors and the vents. If you have a woodstove, close the doors and the air inlets.

If flames are visible at the chimney top, hose down the roof, but not the chimney. Spraying water on a hot chimney could damage it.

Call a chimney professional before using it again. Even a small chimney fire can damage the chimney, making it unsafe to use.



For more information, contact:

How to safely enjoy your home fire



- Easy tips for starting your fire •
- Valuable troubleshooting hints •
- Efficient burning techniques •
- How to avoid chimney fires •

Easy Tips for Starting Your Fire

Open the damper

This is forgotten more often than most people care to admit.



Ingredients

You will need three things to start a fire.

Tinder. A few sheets of crumpled up newspaper make the best tinder. You can also use small twigs, pine needles, or pine cones.

Kindling. Large twigs, small branches, and small splits of wood anywhere from 1/4" to 1" in thickness will do. This is the most important ingredient for building a good fire and usually the most overlooked.

Fuel. Use only well-seasoned hardwood. If you have to burn softwoods, be certain they are well-seasoned. Look for split, dry wood that has been stacked several months. Loose bark and cracks in the ends are signs of seasoned wood.

Starting the fire

Arrange two small to medium sized pieces of firewood on the grate, and place some crumpled up newspaper for tinder between the logs.

Now cover the tinder with several pieces of kindling. Be generous with the kindling — it's the most important element in starting your fire.

Now, place two more pieces of firewood on top of the kindling and two more at right angles to these

two. Leave some space between the logs for air circulation.

Warm up the flue

For fireplaces, warm up the flue by holding a piece of burning rolled-up newspaper in the (opened) damper region for 10-15 seconds. This helps the flue establish a good draft. Then light the tinder. Within a few minutes, you should have a nice, hot, roaring fire!

Important dos and don'ts

Do check the manufacturer's guidelines for your woodstove or insert.

Do use seasoned hardwood.

Do use commercial fire starters if you like. They eliminate the need for tinder and reduce the amount of kindling required.

Don't use charcoal lighter fluid or other flammable liquids. These are extremely dangerous. (Gel fire starters are okay.)

Don't use coal in a woodstove or fireplace unless there are specific written instructions — it will burn, but not safely.

Don't burn artificial logs in a woodstove, unless they are specifically designed for woodstove use. Artificial logs can dirty the chimney much faster than regular wood, and can be hazardous in certain situations.

Don't burn treated lumber, trash, or anything other than wood in your fireplace or woodstove.

Valuable Troubleshooting Hints

Smoke problems

Is your damper open? If it is and the smoking continues, open a nearby window a crack for a minute or two until the fire is going well — then you can close it again.

If it just smokes when you light the fire, it may be because the flue is cold. Did you warm the flue with a burning rolled-up newspaper held in the damper region? (If not, that usually works.)

If the chimney continues to smoke, call a chimney professional. Your chimney may be clogged by animal nests or an accumulation of soot and creosote, or it may have additional problems.

Chimney odors

The sour, sickly odor is the smell of creosote. The solution is to call a chimney professional to clean your chimney and install a chimney cap to prevent water from entering and reacting with the creosote. Your chimney professional can also recommend a good chimney deodorant to handle any remaining odor which has been absorbed into the masonry.



Creosote buildup

Slow smoldering fires and/or the use of unseasoned wood can create "cool" smoke and weak draft. Under these conditions the smoke condenses and sticks to the chimney's interior, forming highly flammable creosote. Read our section on "Efficient Burning Techniques" for the solution to this problem.