

## Wood Burning Efficiency Tips

Wood smoke is caused by the incomplete combustion of wood. This can pollute the air indoors and outdoors as well as contribute to higher heating costs. Fortunately, the cure for cutting down on pollution and waste also cuts the costs by burning wood with safety and efficiency.

- ❑ Burn seasoned wood. Up to 50% of the weight of green wood can be moisture, which has to be burned off before heat can be released into your house. Seasoned wood burns hotter and more efficiently, helps decrease the amount of creosote buildup in your stovepipe, and, you money.
- ❑ Make your fires small and hot. This burns volatile gases more quickly, producing fewer safety hazards and air quality problems than a fire that is over-damped. Smaller, hotter fires mean more frequent loading and tending the stove...but the improved efficiency and air quality are worth the effort.
- ❑ Monitor the temperature of the gases as they leave the stove by putting a stack thermometer on the flue of the stove. Optimum range for most efficiency and least pollution: about 300 to 400 °F.
- ❑ Remove excess ashes. Too much can clog your stove's air-intake vents and cut down on the amount of oxygen needed for wood burning.
- ❑ Tighten up your house. Insulation, weather stripping, storm windows and caulking can reduce the amount of wood required to heat your home.
- ❑ Check your "smokestack." Burn your stove at different rates, then go outside and check the emissions. The absence of smoke indicates that your stove is burning cleanly and effectively.
- ❑ Inspect your stove. Once or twice a year, depending on how often it's used, your entire stove and chimney should be inspected. Look for warping, check the baffle to make sure there are no gaps, check for creosote. Call me, your installer.
- ❑ Choose the proper size stove. A properly sized wood stove will do its job efficiently even on the coldest days. One that is too large needs to be damped down, which increases creosote production. The insulation in your home is a factor as well. To be sure you select the right-size stove, knowing the number of square feet to be heated, and the amount of insulation surrounding the area to be heated is an important factor that you should discuss with me in choosing your stove.
- ❑ Buy the most efficient stove you can afford. It'll pay for itself in the long run. Research has made great strides in designing fireboxes, drafts, catalytic combustors and other devices that improve combustion and reduce smoke. Maybe it's time to retire that old "smoker" and modernize.
- ❑ Burn only the fuel your stove was designed for. Don't burn coal in a wood stove, for example, unless your stove was designed to handle both wood and coal. Trash shouldn't be burned in your stove either. It increases the chance of starting a chimney fire, and some plastics and other trash emit harmful gases ruining your catalytic combustor. Driftwood, treated wood, artificial logs, or anything containing plastics, lead, zinc or sulfur will damage your catalytic combustor.

## Call the Chimney Sweep!

There are two main reasons for keeping your chimney and stovepipe clean: to reduce the possibility of fire and to maintain the efficiency of your wood stove. You can do your part by operating your stove correctly, and by brushing or vacuuming the catalytic combustor gently. But for serious cleaning and preventive maintenance, you should develop a relationship with a good chimney sweep, such as myself. This professional will make sure your chimney is in good repair, check the stove for leaks or cracks in the housing, and look over the catalytic combustor for signs of damage or deterioration.