



On a chilly evening there is nothing more relaxing than gathering around a warm, cozy fire that radiates rich, soothing heat. The only greater comfort comes from knowing that you are also helping to protect your neighborhood air quality from excessive wood smoke. So, how can you enjoy a wood fire that emits very little smoke? The answer is simple...by burning wood responsibly!

WHAT IS RESPONSIBLE WOOD BURNING?

It's about minimizing the emissions from a wood fire. Practice responsible wood burning habits (such as building small hot fires, using seasoned wood or manufactured non-wax firelogs) and using low emission wood-burning hearth products (such as wood-burning stoves and fireplace inserts certified by the U.S. Environmental Protection Agency (EPA) and new state-of-the-art clean-burning fireplaces). Burning wood responsibly is about doing the right thing for you, your family, and your neighbors, while protecting your ability to burn wood well into the future.

WOOD HEAT IS IN DEMAND

With recurring concerns about the high cost of home heat, more people are heating their homes with firewood. As a renewable, biomass fuel, firewood is abundant and relatively inexpensive. Burning wood for heat also helps people take control of high home heating bills and can even keep a house warm when the power goes out.

THE NEED TO BURN RESPONSIBLY

Despite cleaner technologies, many wood fires are still built in traditional open fireplaces or older uncertified wood stoves and fireplace inserts manufactured and installed before 1992. Burning firewood in these older wood heaters can produce significantly more smoke and pollute the air outdoors and inside the home.

FIREPLACE AND STOVE INDUSTRY PROTECTING CLEAN AIR

For more than a decade, the fireplace and stove industry has been developing and manufacturing wood-burning products that emit, in many cases, less than 6 grams of emissions per hour (EPA-certified products need to emit no more than 7.5 grams per hour) compared to the 42 grams of particulate per hour from wood burners manufactured in the 1970s and 1980s. In addition to these appliances, there are now companies that produce manufactured wood fuels, such as manufactured firelogs and wood pellets made from sawdust, that help reduce wood smoke. To help spread the word about the availability of these products, the hearth industry – including specialty retailers – is actively involved in public education efforts that encourage people within North America to changeout old uncertified hearth products for low emission wood-burning hearth products. Specialty retailers are also actively involved in teaching people how to practice responsible wood burning habits.

VISIT A HEARTH SPECIALTY RETAILER

For help with responsible wood burning, or for more information about low emission hearth products, visit a specialty retailer for experienced advice. Specialty retailers are wood burning experts and can be an excellent source of information on how to choose the right low emission hearth product for your home.

For a list of specialty retailers, visit www.hpba.org.

TIPS TO BURN WOOD RESPONSIBLY

■ **USE A LOW EMISSION HEARTH PRODUCT:** There are many types of low emission wood-burning hearth products available for new construction and existing homes. The key is determining the type of product, as well as the right type of wood fuel, to meet your needs.

- **EPA-Certified Wood Stoves and Wood Fireplace Inserts:** All wood stoves and wood fireplace inserts manufactured and sold today in the United States are required to meet strict emission standards and to be certified by EPA. To meet this standard, all stoves must prove emissions of less than 7.5 grams of particulate per hour. All EPA-certified wood stoves and fireplace inserts have a permanent label on the back that bears the name of the United States Environmental Protection Agency. Canada does not have a certification program but does recommend the purchase of EPA-certified products.
- **Pellet Stoves and Pellet Fireplace Inserts:** Pellet stoves and pellet fireplace inserts burn wood pellets made from recycled sawdust and are the lowest emission wood burners available. Because of their very low emissions, pellet stoves and pellet fireplace inserts are exempt from EPA-certification.
- **Masonry Heaters:** Masonry heaters are high performance, very clean burning and substantially-sized wood burners that produce a tremendous amount of heat. Similar to pellet appliances, masonry heaters are exempt from EPA-certification.
- **Cleaner-Burning Masonry Fireplaces:** There are cleaner wood-burning fireplaces that look much like traditional fireplaces but produce fewer emissions than EPA-certified wood stoves and fireplace inserts. Some local jurisdictions do have qualification processes to recognize these fireplaces as cleaner burning.

■ **UPGRADE TRADITIONAL FIREPLACES:** Install an EPA-certified fireplace insert or a pellet fireplace insert into an existing fireplace.

■ **CHANGEOUT OLD WOOD STOVES OR FIREPLACE INSERTS:** People with older wood stoves and inserts can cut emissions substantially by replacing these appliances with a low-emission hearth product. After changing out an old wood stove or fireplace insert, it is important to take the stove out of circulation so it can never be used again. In some jurisdictions around the country, it is illegal to install these old products. The most environmentally-friendly step is to have these hearth products recycled by a local steel recycler.

■ **USE SEASONED FIREWOOD:** Seasoned firewood has around 20 percent moisture content and should be stacked and dried for six months before burning. Seasoned wood is easier to light and will burn more readily and efficiently. The type of seasoned firewood also impacts the fire. Hardwoods such as oak, hickory and elm tend to produce a longer-lasting fire.

■ **BUILD SMALL HOT FIRES:** To reduce emissions, use smaller pieces of seasoned firewood and build small hot fires.

■ **START A FIRE WITH A FIRE STARTER:** The best way to start a wood-burning fire is with balled newspaper and kindling or a solid fire starter.

■ **USE MANUFACTURED FIRELOGS:** Sawdust manufactured firelogs (no wax) are ideal for occasional use in a traditional fireplace to cut emissions. Sawdust-only firelogs can be used in both fireplaces and wood stoves and also reduce wood smoke.

■ **USE HEARTH PRODUCTS CORRECTLY AND PERFORM SERVICE REGULARLY:** Consult a specialty retailer about how to use hearth products correctly, follow the instructions in the owner's manual for the hearth product, and have your hearth product serviced regularly by a professional certified by the National Fireplace Institute (NFI).

HOW NEW TECHNOLOGY REDUCES WOOD SMOKE

Traditional fireplaces and old wood stoves and fireplace inserts smoke excessively because they do not burn wood with complete combustion, which includes burning the smoke too. Smoke is essentially unburned fuel. For wood to burn completely, the right environment must exist. This includes the proper mix of fuel, oxygen and heat.

Wood-burning hearth products now include technology that creates an optimum burning environment and essentially burns the smoke away. An example of this technology is the two types of EPA-certified wood stoves and fireplace inserts – Catalytic and Non-Catalytic. Catalytic wood stoves and fireplace inserts have honeycombed chambers coated with a metal catalyst (usually platinum or palladium) that works to increase the rate of combustion. The catalytic combustor burns away gases and particulate that would normally be emitted into the air. Catalytic wood stoves provide the ability for people to burn wood at lower temperatures for longer periods of time. With non-catalytic wood stoves, combustion occurs in the firebox. These stoves are generally less expensive than catalytic wood stoves and require less maintenance.