

RESPONSIBLE WOOD BURNING

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...burn wood responsibly!

What is Responsible Wood Burning?

Responsible wood burning is about minimizing the emissions from a wood fire. It entails practicing responsible wood burning habits (such as building small hot fires, using seasoned wood or manufactured 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 and new state-of-the-art clean burning fireplaces) to help reduce wood smoke by more than 85 percent. Essentially, 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, many people throughout North America are once again heating their homes with firewood. As a renewable, biomass fuel, firewood is abundant and 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 available technologies, many wood fires are still built in either traditional fireplaces or older wood stoves and fireplace inserts manufactured, sold and installed before 1988. Because of the inefficiency and the lack of smoke control technology in these older hearth products, burning firewood in these wood burners can produce significantly more smoke than is necessary.

Hearth Industry Protecting Clean Air

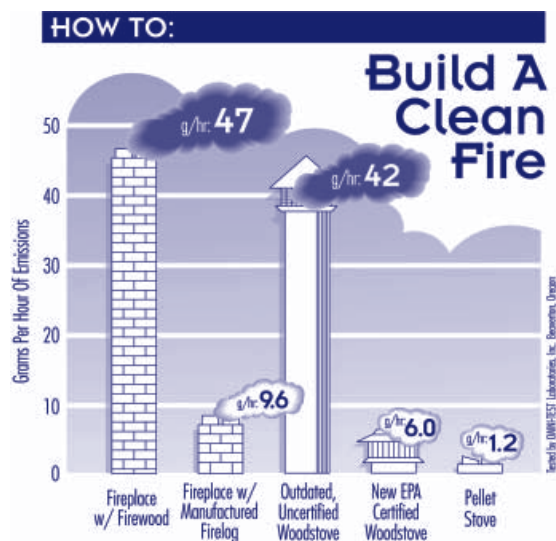
For more than a decade, hearth products manufacturers have been developing and manufacturing wood burning hearth products that emit, in many cases, less than 6 grams of emissions per hour (EPA-certified products need to emit no more than 7.5 grams per hour) compared to the 42 grams of particulates per hour from wood burners manufactured in the 70s and 80s. In addition to these appliances, there are now companies that produce manufactured wood fuels, such as manufactured firelogs and wood pellets, 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 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 emissions hearth products, visit a specialty retailer for experienced advice. Specialty retailers are trained wood burning experts and can be the best source of information on how to choose the right low emission hearth product.

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

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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 Fireplace Inserts:**

All wood stoves and fireplace inserts manufactured and sold today in the United States are required to be certified by the U.S. Environmental Protection Agency. To meet this standard, all stoves must prove emissions of less than 7.5 grams of particulates 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 Fireplace Inserts:** Pellet stoves and fireplace inserts burn pellets made from recycled sawdust and are the lowest emission wood burners available. Pellet stoves and 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. Masonry heaters are exempt from EPA-certification.

• **Clean Burning Fireplaces:** There are clean burning fireplaces that look much like traditional fireplaces but produce just as few emissions as EPA-certified wood stoves and fireplace inserts. Although these fireplaces do not qualify for testing, some local jurisdictions do have qualification processes to recognize these fireplaces as clean burning.

✓ **Upgrade Traditional Fireplaces:** Install an EPA-certified fireplace insert or a pellet fireplace insert into an existing fireplace. Or, use a wax/sawdust firelog to reduce emissions by approximately two-thirds.

✓ **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 old wood stoves or fireplace inserts, it is important to take the stoves out of circulation altogether so they 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:** 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 a fire starter.

✓ **Use Manufactured Firelogs:** Wax/sawdust manufactured firelogs 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 manual for the hearth product, and have your hearth product serviced regularly by a specialty retailer.

How New Technology Reduces Wood Smoke

Traditional fireplaces and old wood stoves and inserts smoke excessively because they do not burn wood with complete combustion. Smoke is essentially unburned fuel. In order for wood to burn completely, the right environment must exist. This includes the proper mix of fuel, oxygen and heat. New 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 ceramic 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 particulates 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.