

## The Easy and Efficient Way to Heat Your Home: FIREPLACES, STOVES, INSERTS AND LOG SETS



While many people agree that a roaring fire on a cold day helps make a house a home, choosing from today's myriad of hearth options can be confusing, especially when trying to balance aesthetics with efficiency. From style to fuel type and heating needs to installation restrictions, there is a fireplace, stove, insert or log set that is right for you and your house.

Traditional fireplaces provide the ambiance of a roaring fire, but send most of their heat and all of the combustion by-products up the chimney. Today's consumers not only demand ambiance, but also want to capture the heat while reducing the environmental impact. Manufacturers have responded with attractive fireplaces, stoves and other options that warm the living areas of your home while saving you money on your heating bill.

Enjoying a fire can be as simple as pushing a button or as engaging as cutting your own wood, building and tending a fire. Your local hearth retailer can help determine the best product based on climate, lifestyle and your home's layout.

### Did You Know?

**Zone heating (putting heat where you need it, when you need it) allows you to turn down the thermostat on your central heating system, and save money on your energy bill.**

### Zone Heating: Heat Where and When You Need It

A central furnace can waste money by heating your entire home – even unoccupied rooms. Zone heating, with a fireplace, stove, or logset insert in the rooms your family

occupies most, allows you to turn down the thermostat of the central furnace and can decrease your fuel bill by 20 to 40 percent.\* Zone heating is the perfect solution for warming a cold room or a new room addition.

### More Choices Than Ever

Every year, hearth manufacturers offer more products in sizes, styles and colors to match your home décor with features to enhance your enjoyment. Let [www.hpba.org](http://www.hpba.org) or your local retailer help you find the latest in hearth technology and design for your home.

### Fireplaces

Modern fireplaces are engineered as a firebox enclosed within a steel cabinet. Air circulates between the inner and outer boxes transferring the heat to your room and keeping the outer wall relatively cool. Spacers surrounding the cabinet allow it to be installed close to the wood framing in new construction or remodeling.

Compared to a site-built fireplace, factory-built systems are surprisingly inexpensive to purchase and install. They use a safe, lightweight chimney (or no chimney at all) and do not need the additional structural support required for a masonry chimney. They can be easily and safely installed in almost any room.

### Stoves

Freestanding stoves are the most versatile hearth product. They can be made from cast iron, steel or stone and come in a wide selection of sizes and styles finished in porcelain, enamel or paint. Today's stoves are very efficient, produce minimal ash, burn longer and use less fuel. Heat radiates from their thick metal or stone construction to keep homes cozy on the coldest winter days. And many have a ceramic glass to allow fire viewing.

### Fireplace Inserts

Fireplace inserts install into existing fireplaces – masonry or factory-built – to improve efficiency and reduce environmental impact. A fireplace insert is essentially the same as a freestanding stove except it uses an existing chimney, though a flue liner or other modification may be necessary. Vent-free natural gas, propane and electric fireplace inserts require no chimney or flue modification.

### Manufactured Log Sets

If you have an existing fireplace but dislike hauling in the logs and scooping out the ash, a gas or electric log set puts an instant fire at your fingertips. Both gas and electric log sets provide dramatic realism, from the realistic ceramic fiber or concrete logs down to the glowing embers. Electric log sets are especially popular for apartments where access to gas may be limited.

### Did You Know?

**Fireplaces add value to your home - about 12 percent per fireplace. - National Association of Realtors**



## Ambiance vs. Heating: Is there a Choice?

There can be a balance between aesthetics and efficiency in hearth products. But there are a number of products on the market that are designed for ambiance and decorative purposes only. These decorative hearth products should not be confused with heater-listed options that are featured on the attached chart entitled "At-a-Glance."

### Decorative Hearth Products

<b>Fireplaces</b>	<b>Open, traditional wood, some direct-vent gas and electric fireplaces</b>
<b>Stoves</b>	<b>Some direct-vent gas and electric stoves</b>
<b>Inserts</b>	<b>Direct-vent gas and some electric inserts</b>
<b>Log Sets</b>	<b>Vented gas and some electric log sets</b>

## A Hearth Product For Any Room: Easier and More Affordable Than You Think

Installing a fireplace once required building an expensive chimney, base and flue system. With today's multiple venting options, a fireplace, stove or log set can be installed almost anywhere in your home – even in non-traditional locations such as the kitchen, home office, master bedroom or even the bathroom.

Many hearth products can be installed in an existing room affordably with very little effort and without the need for major remodeling. Whether updating an existing hearth product or adding a new fireplace, fireplace insert, stove or log set, there are a variety of products available to fit your budget.

For safe and reliable installation of any hearth product, the Hearth, Patio & Barbecue Association (HPBA) recommends that a professional installer certified by the National Fireplace Institute® perform all installation tasks.

## Fueling the Fire

When selecting an appliance, it is important to evaluate product efficiency with the price of the selected fuel in the geographic location in which you reside.

HPBA has developed an easy to use fuel calculator ([www.hpba.org/fuelcalculator](http://www.hpba.org/fuelcalculator)) that provides the projected cost of the hearth product's use. Your local hearth retailer can help you decide which fuel will suit your needs and lifestyle.

## Wood Fireplaces, Stoves and Inserts

The wood-burning technology in today's stoves reduces pollution and increases efficiency. Residential wood stoves

are now certified by the U.S. Environmental Protection Agency (EPA) to produce as much as 90 percent less wood smoke emissions than uncertified wood-burning appliances.

## Gas Fireplaces, Stoves, Inserts and Log Sets

Gas stoves, fireplaces, fireplace inserts and log sets are all available with manual controls, remotes, wall thermostats and remote thermostats. Most offer blowers to help circulate the heat. Gas inserts and log sets can provide a unique alternative to existing wood-burning fireplaces. Gas stoves, fireplaces, inserts and log sets can burn either natural gas or propane.

## Pellet, Corn and Alternative Fuel Stoves and Inserts

Pellet stoves and fireplace inserts use fuel made from renewable resources – recycled wood waste, dried corn, and other materials, and have been growing in popularity. Simple to use, the pellets are poured into a hopper, which feeds the fuel automatically into the stove's burn pot. A single load can burn up to 24 hours.

### Did You Know?

**According to the National Association of Home Builders, fireplaces rank among the top three features desired by new home buyers.**

## Electric Fireplaces

Electric hearth products have great appeal for consumers because of their ease of installation, safe, cool-to-the-touch exteriors, and their clean, hassle-free convenience. Thanks to new technology, electric fireplace users can enjoy the ambiance of a fire with or without heat. Electric fireplaces can be installed in virtually any room without special venting or fuel supply as they simply plug into any standard household electrical outlet.

**Manufacturers are continually working to improve the options available to consumers. From models that offer higher efficiency ratings to more diverse designs, there is a hearth product for every home.**



Find out more at [www.hpba.org](http://www.hpba.org)

\* ACEE 1990 Summer Study on Energy Efficiency in Buildings. Proceedings, Volume 9.

# HPBA Heating Products at-a-Glance: Your Local Hearth Retailer Can Help Select the Best Product For Your Home

TYPE	BENEFITS	INSTALLATION	FUEL USE/TYPE	COST* INCLUDES ESTIMATED PRICE OF AVG. PRODUCT AND INSTALLATION (in US\$)	ESTIMATED EFFICIENCY** EFFICIENCY IS MEASURED DIFFERENTLY FOR DIFFERENT FUEL TYPES
<b>Fireplaces</b>	<p>Most <b>fireplaces</b> are engineered and pre-built.</p> <p><b>Factory-built fireplaces</b> are available in a range of sizes and can be open on one, two ("see-through" and corner models), three ("peninsula") or four sides ("oasis").</p> <p>Brick, stone, marble and other facing materials can be combined with your choice of mantels to suit your décor.</p>	<p><b>Factory-built fireplaces</b> are surprisingly inexpensive, use a safe, lightweight chimney and do not need any additional structural support. Because they have fewer limitations than site-built masonry fireplaces, they can be easily and safely installed in almost any room.</p> <p><b>Gas vent-free fireplaces</b> require no chimney or flue modification.</p> <p><b>Electric fireplaces</b> simply plugin to an electrical outlet.</p>	<p><b>Fireplaces</b> burn wood as well as natural gas or propane.</p> <p><b>Electric fireplaces</b> offer amazing realism.</p>	<p> Typical cost of post construction (remodel) of an <b>EPA certified wood-burning fireplace</b>: \$3,000-\$5,000.</p> <p> Typical cost of post construction (remodel) of a <b>gas fireplace</b>: \$3,000-\$5,000 (assumes no gas line work).</p> <p> <b>Electric fireplaces</b> are the easiest to install as no venting or chimney is required. The typical cost: \$500-\$3,000.</p>	<p> <b>Factory-built fireplaces</b> (EPA Certified) are <b>heater-listed</b> and can be 60 - 80% efficient.</p> <p> <b>Heater-listed direct-vent gas fireplaces</b> are 58 - 80% efficient.</p> <p> <b>Vent-free gas fireplaces</b> are 92 - 99% efficient.</p> <p> <b>Condensing gas fireplaces</b>, an emerging technology, are 82 - 94% efficient.</p> <p> <b>Electric fireplaces</b> with heating elements are up to 99% efficient.</p>
<b>Stoves</b>	<p>The most versatile hearth product, <b>stoves</b> are available in a wide selection of sizes and styles, and can be made of steel, stone or cast iron.</p>	<p>A <b>stove</b> can be installed almost anywhere in the home. As stove construction is extremely air-tight and durable, clearance to walls could be as little as six inches.</p> <p><b>Vent-free gas stoves</b> require no chimney or fire modification.</p>	<p><b>Free-standing stoves</b> burn wood, natural gas propane, coal, wood pellets, oil or run on electricity.</p>	<p> Typical cost of a <b>freestanding wood stove with new chimney</b>: \$3,000-\$4,200.</p> <p> <b>Pellet stove</b>: \$3,500-\$4,000.</p> <p> <b>Gas stove</b>: \$3,000-\$4,000.</p> <p> <b>Electric stoves</b> offer easy installation and require no venting or chimney. The typical cost: \$100-\$600.</p>	<p> <b>Wood stoves</b> (EPA certified) are 60 - 80% efficient.</p> <p> <b>Pellet stoves</b> are 50 - 80% efficient.</p> <p> <b>Corn stoves</b> are 40 - 75% efficient.***</p> <p> <b>Heater-listed direct-vent gas stoves</b> are 58 - 80% efficient.</p> <p> <b>Vent-free gas stoves</b> are 92 - 99% efficient.</p> <p> <b>Electric stoves</b> are up to 99% efficient.</p>
<b>Inserts</b>	<p><b>Fireplace inserts</b> are heating units that retrofit into an existing fireplace (masonry or factory-built). Inserts are used to change an existing non-efficient fireplace into an efficient room heater.</p>	<p><b>Inserts</b> utilize the existing chimney, though a flue liner or other modification may be necessary.</p> <p><b>Vent-free inserts</b> for gas, electric or propane require no chimney or flue modification. Most have blowers to circulate the heat.</p>	<p><b>Fireplace inserts</b> burn wood, natural gas, propane, wood and corn pellets, or run on electricity.</p>	<p> Typical cost of a <b>wood, pellet or gas insert</b> into existing fireplace with new liner: \$3,000-\$4,000 (assumes no gas line work).</p> <p> <b>Electric inserts</b> are simple to install into an existing unused masonry fireplace. The typical cost: \$100-\$300.</p>	<p> <b>Wood inserts</b> (EPA certified) are 60 - 80% efficient.</p> <p> <b>Pellet inserts</b> are 50 - 80% efficient.</p> <p> <b>Heater-listed direct-vent gas fireplace inserts</b> are 58 - 80% efficient.</p> <p> <b>Vent-free gas inserts</b> are 92 - 99% efficient.</p> <p> <b>Electric inserts</b> are up to 99% efficient.</p>
<b>Log Sets</b>	<p>A <b>set of logs</b> may be the most convenient way to have flames at your fingertips. Log sets provide dramatic realism from the ceramic logs.</p>	<p><b>Log sets</b> can be inserted into an existing fireplace, though modifications may be necessary.</p> <p><b>Vent-free gas log sets</b> require no chimney or fire modification.</p>	<p><b>Log sets</b> use natural gas, propane or run on electricity.</p>	<p> Typical cost of <b>vent-free gas log sets</b>: \$400-\$1,000.</p> <p> Typical cost of <b>electric log sets</b>: \$100-\$300.</p>	<p> <b>Vent-free gas log sets</b> are 92 - 99% efficient.</p> <p> <b>Electric log sets</b> are up to 99% efficient.</p>

\* Accessories such as remote controls and gas line work may add to the estimated cost.

\*\*Efficiency Notes: 1) **Vent-free gas appliances**: Some sources use 92-99% depending on how efficiencies are measured. 2) **Electric appliances**: The energy efficiency measured on this chart does not take into account getting electricity to the house. 3) **Canadian residents**: For more information on the efficiency ratings for gas fireplaces, stoves and inserts, go to <http://oee.nrcan.gc.ca/equipment/english/fireplace-search.cfm>. Vent-free products are not available in Canada.

4) **Data for efficiency ratings came from multiple sources, including: HPBA members, energy.cas.psu.edu, Vent-Free Gas Products Alliance, hometips.com.** 5) The estimated efficiency number (higher is better) is the result of measuring how much energy comes out of the hearth product from the amount of fuel put into it.

\*\*\* The delivered efficiency of corn stoves is slightly less than pellet stoves due to the higher moisture content in corn compared to wood pellets.

Visit [www.hpba.org/fuelcalculator](http://www.hpba.org/fuelcalculator) to learn more.