

Guide to Gas Fireplaces

A Gas Fireplace gives you all the ambiance, warmth and comfort of a traditional wood-burning fireplace. They are convenient, easy to use and cost effective. Clean and low-maintenance, Gas Fireplaces can be turned on/off with the flick of a switch, the turn of a thermostat or with a convenient remote control.

The growing popularity of Gas Fireplaces has created a demand for an ever increasing array of styles and sizes to fit every decor and budget.

Gas Fireplaces also provide an increased sense of heating security since most models don't require electricity to operate. The next time the power goes out during a winter storm, your Gas Fireplace will continue to keep you warm and cozy.

Types of Gas Fireplaces

Gas Fireplaces have simulated logs and a gas burner inside their own firebox with ceramic or tempered glass fronts.

A Zero-Clearance Gas Fireplace is designed to be installed where no masonry/brick fireplace currently exists. They can be backed up to a wall or inserted into an opening cut into the wall and then framed in with standard building materials. The logs and burner are inside their own firebox, around which is an inner and outer shell. A zero-clearance Gas Fireplace is an ideal way to add a fireplace to your construction or remodel plans without the expense of building a masonry fireplace structure.

Free-Standing Stoves are an attractive option for homes with or without a chimney, as they come with multiple venting options. They can be installed almost anywhere in your home. Today's gas stoves look like wood stoves and heat like wood stoves.

Many sizes, styles and colors are available on the market. They can be placed directly on a wood floor with no added heat protection. If placed directly on carpet or linoleum, floor protection (usually a hearth pad) is needed. A free-standing gas stove is a perfect choice for replacing an old wood stove. Many designs use a 4" B-Vent or a listed chimney liner.

Gas Inserts are a convenient and affordable way to convert your existing wood-burning fireplace to natural gas. Inserts fit into your existing fireplace and use your home's existing chimney. Much like any other appliance, it is important to spend the time to choose a fireplace insert that fits your needs and your lifestyle, whether more formal or relaxed.

Gas Logs are primarily decorative open flame-type appliance consisting of a metal frame or base supporting simulated vented logs that sit in an existing masonry fireplace. This option provides less heating capability than a zero-clearance, free-standing stove or gas insert.

Types of Venting

A Direct Vent Fireplace is the ideal solution for homes that do not have an existing chimney. A Direct Vent Fireplace is a sealed combustion unit that draws outside air in and exhausts its combustion products outside eliminating the need for a standard



chimney system. A Direct Vent Fireplace can be installed virtually anywhere in the house. A glass panel in direct vent units is critical to keeping the combustion system sealed from the home and maintaining indoor air quality.

Natural Draft Fireplaces typically use a B-vent or, in an existing chimney, an approved flexible aluminum liner. Venting is required to remove combustion gases from the firebox to the outdoors.

Some Gas Fireplaces feature **Power Venting**, in which an electrical fan assists the venting process. This allows units to be vented with horizontal and vertical flues from locations in a home where a conventional flue cannot be installed. Note: You can also extend the horizontal run of the vent from typically 20' for a Direct Vent to 40' for a Power Vent.

Energy Efficiency

In Canada the EnerGuide Fireplace Efficiency (FE) rating is the only recognized measurement of the efficiency of vented gas fireplaces. The rating is based on products tested to the CSA P.4.1-15 test standard for gas fireplaces. All vented gas fireplaces sold in Canada must be tested to this standard.

The FE rating is an accurate measurement of fireplace efficiency based on how it operates in a Canadian home.

The rating is expressed as a percentage. The higher the EnerGuide rating, the more efficient the model; a higher rating signifies that the fireplace is designed to use gas more efficiently to produce heat. It is not an indication of how much heat the unit will generate.

Some units have ratings as low as 30% while the most energy efficient units currently achieve ratings in the 50% to 70% range.

The EnerGuide label is typically found in sales brochures of participating manufacturers. You will find the FE rating on the EnerGuide label and/or beside the model number listing and the specifications in the brochure.

EnerGuide is backed by the Government of Canada. Visit their web site at www.oee.nrcan.gc.ca/equipment to view a directory listing the make, model number and efficiency rating.

Pilot Lights

There are two basic models available on the market - 'standing pilot' and 'electronic ignition'. Pilot lights, if left to run continuously, can increase your annual energy costs. You will save energy and money by turning off the pilot light when the fireplace is not being used, especially during the summer.

Other fireplaces have what is known as 'electronic ignition', eliminating the need for a continuous pilot. Electronic ignition is available in both battery power and 110 volt. It should be noted that 110-volt systems would render the fireplace inoperative during a power outage.

Zone Heating

Zone Heating allows for heating certain areas of your home. There are many hearth products applicable for zone heating, including Gas Fireplaces, Gas Stoves and Fireplace Inserts. The key to selecting the correct hearth product is determining the zones of the house to heat, the level of desired heat, intended use patterns, and the convenience factor.

Maintenance

Here are some general tips for annual maintenance to keep your Gas Fireplace, Gas Inserts or Gas Log sets running and looking its best.

- Remember on the initial burn of your Gas Fireplace to run it a minimum of 4-6 hours continuously.
- Remember to clean your glass with the correct glass cleaner (Do not use Windex) after your first 4-6 hour burn.
- Remember to dust and clean your fireplace before the beginning of the heating season.
- Remember to have your fireplace serviced annually by a licensed installer.

Check List / New Gas Fireplace

- Remove all protective labels and coatings on glass or trim - must be done prior to initial start-up.
- Check for gas leaks - if you smell raw gas, turn off main gas supply valve to fireplace and contact your gas company immediately.
- On initial lighting of unit, burn on a moderate day and open windows in the room for the first few hours, as there is some curing of the paint during the initial burn.
- Make sure the warranty card is filled out completely and returned to the manufacturer.

New/Existing Gas Fireplace

Vacuum out fireplace cavities and heat exchange area - this improves heating efficiency, air quality and keeps the electrical contacts clean. It is important to keep the lower area of the fireplace free from dust and lint build-up, which could eventually burn out the Fan motor (if installed).

Clean glass at least annually - provides an unobstructed view of your beautiful fire. It is recommended that fireplace glass cleaners be used. Using a glass cleaner not recommended for fireplace glass can cause "rainbowing" of the glass. For the correct type of fireplace glass cleaner visit your local hearth specialty retailers.

- Do not use harsh chemicals (Windex), oven cleaners or scouring powders as these can scratch and damage the glass. Make sure glass is 'cool to the touch' before cleaning.
- Check piezo igniter - without turning gas on, watch for a spark at the pilot when pushing igniter button to ensure a safe start-up.
- Check to ensure logs are in their appropriate spot (shown in installation manual) and add embers if necessary to provide the best looking fire possible. Flame impingement on Logs can cause soot build up on Log set and on fireplace glass.
- Test all optional equipment (fans, remotes, wall switches, thermostats) for proper operation. Replace batteries or call your local hearth retailer to repair/replace.
- Review fireplace light up procedures - a lighting procedure card is attached to the valve cavity area of the fireplace.
- Remember that the glass on the fireplace will "fog up" during each lighting, and will dissipate after a couple of minutes. This is due to condensation from the glass temperature change and is not harmful to the glass or fireplace.

Frequently Asked Questions

Can I use an existing chimney?

A free-standing gas stove can use the existing chimney but it must be relined with a listed aluminum chimney liner. Direct-vent free-standing gas stoves can be vented vertically, using an existing chimney as long as the direct-vent pipe system fits through the existing damper and flue, and as long as the pipes extend to the top of the flue.

When should I consider a Gas Fireplace insert?

A Gas Fireplace insert is needed for converting from a wood-burning fireplace to a Gas Fireplace. If you are looking for a unit to provide supplemental heating, as well as the beauty of a flickering fire with the flick of a switch or the turn of a thermostat with no mess or fuss, then an insert is the answer.

Can inserts be installed into factory-built fireplaces, or just masonry fireplaces?

Both. A Gas Fireplace insert can be installed in an existing masonry fireplace or in a factory-built metal fireplace.

Am I limited to a certain size of Gas Fireplace insert?

Yes. There are two sizes available in natural vent models. The dimensions of the existing fireplace to be converted must be considered to make sure a specific insert will fit. The Btu output should also be considered when selecting a Gas Fireplace insert.

If I am not going to use an existing masonry fireplace, where else can a Gas Fireplace insert be installed?

A roughed in frame can be built around a zero clearance kit and the respective Gas Fireplace insert inserted into this kit. This kit will allow the framing and insert to have minimum clearances to combustibles for the top and sides of the insert.

Do I need insulation around the Gas Fireplace insert?

No. The inserts are designed to have adequate space on the sides for air exchange. Correct measurement of the existing masonry fireplace is important. The insert should never be forced into a space that is too small.

Can I vent the Gas Fireplace insert into an existing chimney?

Yes. Gas inserts are available in natural vent and direct vent units. The existing masonry clay liner or the factory-built chimney would have to be relined with a listed flexible aluminum liner or B-Vent pipe to assure a good updraft for the chimney to exhaust flue gases. Gas inserts have either a 4" or 3" flue outlet depending on the insert model. Your dealer will be able to assist and advise you which insert and vent application is required. Venting requirements differ for direct vent inserts.

Can I hook up a Gas Fireplace to a wall thermostat or use a remote control?

Yes. Most millivolt powered Gas Fireplaces are available in models that can include a wall-mounted millivolt thermostat or a remote control.

What is the advantage to a "Direct Vent" Fireplace?

A Direct Vent Gas Fireplace or Insert is the best hearth choice when it comes to protecting the air inside your home that your family and friends breathe. A Direct Vent design hearth product is engineered to include a sealed glass front that keeps gases such as carbon monoxide, nitrous oxide and excess moisture from entering your home. This glass front provides you with a full, clear view of a beautiful fire. This design uses air from outside your home to fuel the gas fire rather than pulling air from inside.

Are Gas Fireplaces safe?

Yes. All Gas Fireplaces are equipped with safety features such as a 100% fail-safe shut-off valve. If the pilot flame goes out, the gas flow will automatically turn off. In addition, all models must meet strict safety certification requirements.

How to clean my fireplace glass?

It is recommended that fireplace glass cleaners be used. Using a glass cleaner not recommended for fireplace glass could cause "rainbowing" of the glass. Do not use harsh chemicals (Windex), oven cleaners or scouring powders as these can scratch and damage the glass. For the correct type of fireplace glass cleaner visit your local hearth specialty retailers.

How often should I have my fireplace serviced or inspected?

Service your fireplace annually. Vacuum out fireplace cavities and heat exchange area annually to improve the heating efficiency and air quality.

How often do I have to clean the Gas Fireplace and vent?

Although the frequency of your fireplace servicing and maintenance will depend on use and the type of installation, you should have a qualified service technician perform an appliance check-up at the beginning of each heating season.

What fuels are available to operate my fireplace?

All Gas Fireplaces are equipped to burn either Natural Gas or Liquid Propane. When you order a fireplace, you and your hearth retailer must determine which fuel you will need. If, after the fireplace is installed, you want to convert from one fuel to the other, this can be easily done (for most models) using a conversion kit. Your local hearth retailer can tell you whether your fireplace can be converted. Some models are approved for use with Natural Gas only.

Do I need a permit to have a fireplace installed?

Check with your local hearth retailer to ensure that any necessary permits that may be required by your local enforcing authority are obtained.

Is "Direct Vent" the same thing as "vent free"?

No. Direct Vent Fireplaces use a sealed glass front to completely isolate combustion gasses and moisture from your home. This is especially important in new construction homes that are built very tightly. Vent free or unvented fireplaces are not approved for use in Canada.

Does a Direct Vent need to be on an outside wall?

No, with today's venting options, hearth products can be installed very economically almost anywhere in the home.

Will a fan increase the heat output of a Gas Fireplace?

Yes, aside from the fact that fireplaces radiate heat from their fronts, there is still heat that can be withdrawn from the parts of the fireplace body that are closed in behind the wall. While there is an air channel that allows airflow around the firebox, allowing it to absorb the heat via conduction, this channel is somewhat restrictive by its size. Using a fan increases the airflow through this channel, thereby maximizing the heat being conducted from the back and sides of the fireplace.

Can a fan be added to my Gas Fireplace?

Fans are optional on most heat circulating (grilles on top and bottom of fireplace) units, and on some hearth products the fan is standard. Adding a fan is easily accomplished if power (110v AC) was provided to the electrical junction box of the fireplace at the time of initial installation. If power was not provided, a fan option is still possible, but installation is complicated and therefore more costly. Contact your local hearth retailer to determine if your particular fireplace model and installation will accept an optional fan.

Who would install the gas line?

A licensed gas fitter is required to install your gas line. Check the yellow pages or contact your nearest hearth retailer for a recommendation.

What is a gigajoule?

A gigajoule (GJ) is a metric measurement of energy content of fuel. It is used to express the heat energy produced when burning a fuel gas. One GJ is equal to 948,213 BTU's. Natural gas appliances are rated in British Thermal Units (BTUs) per hour. If your gas furnace is rated at 100,000 BTU's then it will burn .948 GJs per hour.

To locate a qualified contractor nearest you that can install your gas fireplace, visit www.hrai.ca/contractorlocator.php or for more consumer tips and information, visit www.hrai.ca/educationcentre.html.