

# Natural gas fireplaces



Natural gas fireplaces with a standing pilot light work without any kind of electricity, which can be very handy if the power goes off.

Designed for comfort, convenience and style, natural gas fireplaces are a practical and esthetically pleasing addition to your home. They offer all the enjoyment of an open flame, without the cleaning and preparation a wood-burning fire involves. They start immediately and provide steady, even heat as required.

## Easy to warm up to

Natural gas fireplaces have many advantages:

- Instant on/off controls give you a cosy warm area at the flick of a switch, without the need to chop and store wood.
- Convenient and clean, with no messy wood chips, bark, ash, smoke, bugs or chimney cleaning.
- There are no sparks or creosote build-up in chimneys to cause fires. And like all gas appliances, natural gas fireplaces are equipped with safety shut-off valves.
- Natural gas fireplaces cost only pennies per hour to operate.
- Efficiently heat a specific space rather than your whole house.
- According to Environment Canada, natural gas produces approximately 100 times less air pollution than burning wood.
- You'll be reducing greenhouse gas emissions from your fireplace when you switch from propane or wood.
- Whatever your decorating style, room size or home design, there's a natural gas fireplace model to suit your taste, layout and budget. Choose from styles that feature simulated logs or coals.
- Many new fireplaces have a thermostatically controlled burner that can maintain a steady temperature setting in the room. And when you leave the room, you can conserve energy by turning the fireplace down or off. Some manufacturers also offer remote controls.

## Types of natural gas fireplaces

### 1. Insert

An insert is installed into a traditional open fireplace with a masonry or factory-produced metal-lined cavity. The chimney is lined with a certified B-vent which is attached to the insert for venting. (see illustration 1)

### 2. Zero clearance

Zero clearance units are self-contained fireplace housings, complete with logsets. They are designed to be installed during renovation or new home construction, where there is no existing fireplace cavity. They are built-in, usually against a wall and because they require no masonry foundation, can be placed on any level of the home. Zero clearance units are often direct vented through an outside wall. (see illustration 2)

### 3. Free standing

Free standing natural gas fireplaces are modeled on traditional wood-burning stoves. Free standing units have a lot of surface area which radiates warmth into the room. (see illustration 3)

## Types of Log sets

There are two common types of log sets.

### Sand pan

A sand pan log set has a gas burner buried in a bed of sand.

### Open grate

The burner is located under an open grate.

Both types have decorative ceramic logs placed above the burner.

Installed in an open masonry fireplace (no glass front), log sets may waste more heat energy than they produce. Room air heated by the home's furnace may escape up the vent or chimney. The flame effect, while esthetically pleasing, only provides a small amount of radiant heat into the room. The overall result may be a loss of heat from the room.

While log sets can have glass doors, unless there is a method of heat exchange in the firebox area, you won't get a reasonable level of heating efficiency from this kind of fireplace.

## Types of venting

### Direct venting

Direct venting (DV) is one of the more efficient and versatile methods of venting because the fireplace is sealed. Therefore, heated room air is not lost from inside the house. Outside air is drawn directly into the firebox. Products of combustion are then vented back outdoors and sealed from the room. This eliminates the risk of combustion products spilling into the home.

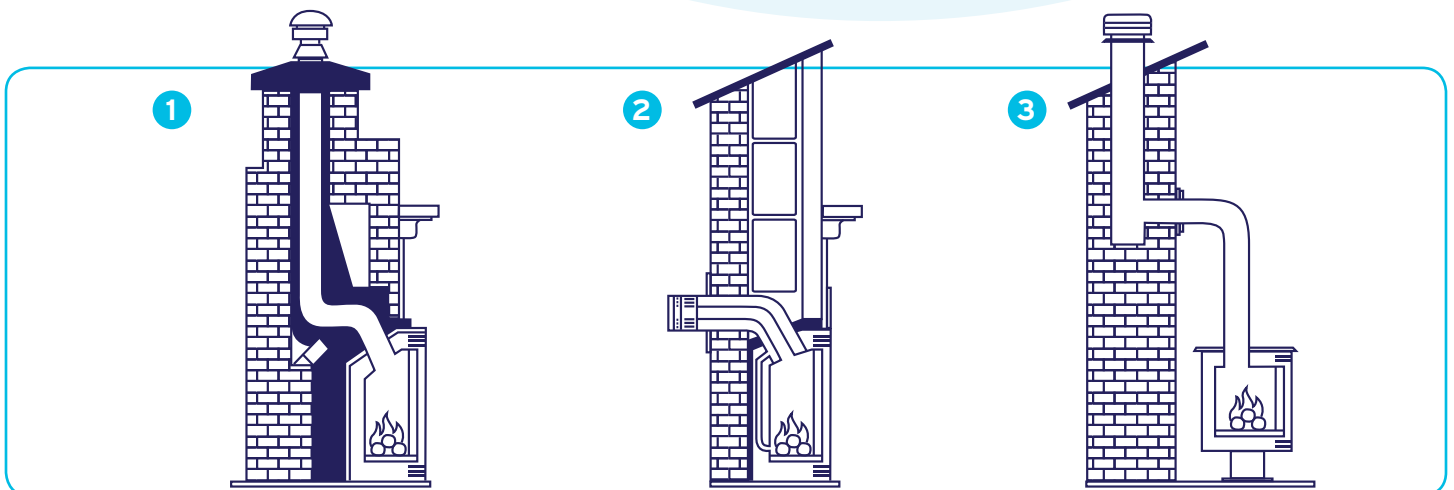
Cool room air is drawn into the fireplace, where it is heated and circulated, then released back into the room. This type of venting allows you to install the fireplace on the outside wall without the need for a chimney. Direct vents can exit into a vertical wall to the outside, or extend for a limited distance horizontally or vertically through an outside wall or roof. Direct vents offer superior flexibility if you are renovating or building a new home.

### Gravity or natural draft venting

This method of venting usually refers to an existing vertical chimney and requires the use of a certified B-vent or approved chimney liner. As hot air rises, this system takes advantage of the natural draft caused by the flames.

### Power venting

Power vent fireplaces have fan-assisted venting. This allows the fireplace venting to extend horizontally through side walls, eliminating the need for a vertical flue or chimney. Like direct vent fireplaces, they are suitable for applications where a vertical flue is not practical and where there is extra distance between the fireplace and outside wall.





## Shopping tips: what to look for

### Heat input and output

A natural gas fireplace's heat-input rating is the amount of fuel energy the fireplace consumes. Most models range from 19,000 to 40,000 BTUs input. The heat output (the amount of useful heat generated from burning) will depend on the model's design and energy efficiency. Some of the features that improve heating capability include: heat exchangers, fixed-glass fronts, radiative surfaces, variable setting controls and/or thermostats.

### Energy-efficiency ratings

Look for the unit's Fireplace Efficiency (FE) rating. It is determined through testing to a standard issued by the Canadian Standards Association: CSA p.4.1-02. The FE rating is expressed as a percentage. Therefore the higher the rating, the more efficient the unit. And, only the top 25 per cent qualify for the EnerChoice designation. The EnerChoice designation helps you choose the best models for energy efficiency and heating ability.

### Size

Size is important to consider and biggest is not always best. If there's too much heat, you'll have to turn the flame down too low or shut the fireplace off altogether. Choose a BTU rating in accordance with the size of the room you're heating.

### Variable setting controls

Look for units with variable flame control so you can fine-tune the temperature for increased comfort while saving energy. Also look for controls that make it easy to turn off and relight the pilot.

### Automatic thermostat controls

These will allow you to shut off the fireplace at specified temperatures. They can be wall-mounted or remote controlled, and some may be programmable.

### Standing pilot system

A small, continuously-running pilot light allows you to fire-up your unit effortlessly at any time, without the need for electricity. During warmer months the pilot flame can be turned off to conserve energy and reduce costs. Your other option is an intermittent ignition system, powered by either 120-240 volt electricity supply or a battery. It consumes no unnecessary gas to maintain a pilot flame, so you conserve energy.

### Variable speed fans

These increase heat circulation, some with automatic operation, and others with manual control.

### Log types

It's all up to personal taste. Whether you prefer the glowing effect of ceramic fibre, or the flames with cement or cast logs, shop around for a unit to suit your taste.

### Warranty

Most fireplaces offer a one-year warranty on parts. Some brands carry excellent warranties.

### Safety reminder

Keep children, pets and combustibles away from the hot exterior with a protective screen.

## Maintaining your natural gas fireplace

By purchasing a natural gas fireplace, you've made an investment that will bring you comfort and satisfaction for years to come. To help ensure that your fireplace always operates safely and at peak performance, here are some simple tips for its care and maintenance:

- Familiarize yourself with the owner's manual and manufacturer's operating instructions, and keep the instructions handy.
- Contact your fireplace dealer if you do not understand the instructions for your fireplace.
- If your fireplace is being installed in a home during construction or renovations, do not operate it until the area is thoroughly cleaned (drywall dust and other contaminants may harm the fan, motors and burners).
- Have a registered gas contractor clean and inspect your fireplace.
- Check venting periodically, as recommended in the owner's manual.
- If viewing glass or seal need replacing, use only materials supplied by the fireplace manufacturer (items must be suitable for the application and



temperature) and do not use your fireplace until this repair is complete.

- Check the manufacturer's instructions before adding or modifying a mantel or surround – a minimum clearance to combustible materials is required.
- Keep the external vent clear of debris.

There are some recognizable signs that your fireplace may be in need of service. These may include:

- pilot light outages
- booming noises upon ignition
- delayed ignition (slow to start up)
- excessive soot or corrosion inside the fireplace or on the vent
- any continuous or intermittent odour – either the rotten eggs or sulphur smell of natural gas or a sharp odour that may cause eyes to sting

Install a natural gas fireplace today for many years of comfort and ambience.

*The information provided on this sheet should be used as a guide only. All natural gas piping and appliance installations should meet manufacturer's instructions and all applicable codes, standards and regulations.*

## Get comfortable. Get connected to gas.

### Building or renovating?

Ask your architect or building contractor to include natural gas pre-piping in the plans.

### For more information

For further details about natural gas appliances, contact your local appliance retailer or gas contractor.

### Get connected

To get your home connected to natural gas, or to enquire about extending your natural gas piping, call Terasen Gas toll-free at 1-888-224-2710.

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