

Guide to Gas Fireplaces

BY JAMES CLELAND

Gas fireplaces and stoves are easily the most popular segment of the home-hearth industry, outselling wood-burning models nearly three to one. Convenience is the driving force behind the popularity of gas. There's no cordwood to haul, store, and stack. There's no ash to clean up, and no smoke smell filling the house. Instead, there's a steady supply of fuel piped directly to the unit. When you want a fire, you can have one up and running with the push of a button, often without getting up from your seat. When it's time for bed, you can shut down the fire just as easily.

Although it's simple to use a gas fireplace, it's not so simple to install one. Further complicating matters, there are three basic types, and the design options are nearly limitless. To keep up with Houston's booming housing market, the company I work for installs dozens of fireplaces every week.

Here, I share what I've learned about choosing among the three basic gas-fireplace types. I also explain what it takes to install and maintain a gas fireplace and identify the features and accessories you should consider when planning a purchase.

Gas is a different experience

Although gas fireplaces are convenient, wood purists often counter that splitting and storing firewood is great exercise and that having a good supply of wood means a reliable source of heat in all conditions without the risk of a disrupted fuel supply. In addition, those who like building and tending fires likely will be disappointed by the experience of a gas fire. The flames are less varied, the color is uniform compared to a wood fire,

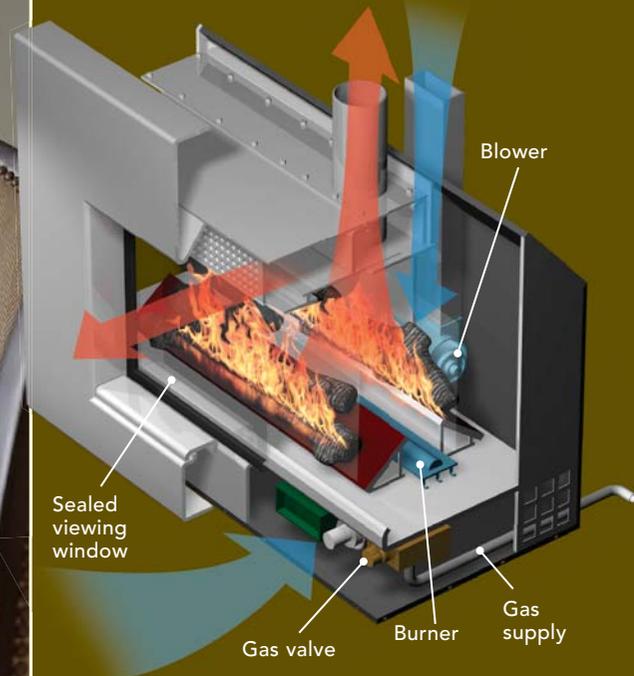


An industry veteran explains how to get

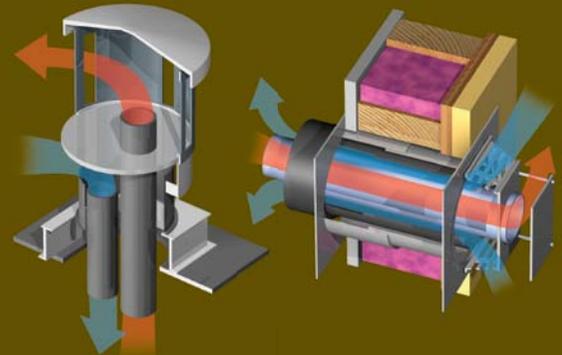


HOW IT WORKS

The gas supply comes into the bottom of the fireplace housing, where it connects to the main gas valve. Older models had a fuel-wasting standing pilot, but modern fireplaces have an electronic ignitor that lights the pilot, which in turn lights the burner. Once the pilot is lit, the gas valve opens and the burner ignites. Many units have a remote control to change flame height and Btu output by opening or closing the gas valve. Near the gas valve is a battery compartment and a manual ignition system, which makes it possible to use the fireplace in power outages.



Two ways to vent



Roof cap A roof-vent termination looks a lot like a chimney cap for a wood-burning fireplace, but it has two pipes inside: one for combustion by-products and a second for combustion air.

Wall cap A wall-vent termination typically makes installation easier, but it gets hot when the stove is operating, which can create a risk of burns when the termination is close to outdoor walkways or seating areas.

the right gas fireplace for your home

A FIRE FOR ALL PLACES



Traditional Freestanding gas stoves such as the Tiara from Heat & Glo provide a traditional look with modern convenience. Available in several finishes, this cast-iron stove vents through the top for a classic woodstove look. Stoves and fireplaces also can be vented through the rear, which is often an easier installation method.

Modern Gas fireplaces used to look just like their wood-burning counterparts, but new designs take many forms. The Flatfire from Wittus, for example, has a long narrow firebox fit for modern spaces. There are also sophisticated remote controls that enable you to change the flame height and output, set a timer, and control built-in lighting.

Outdoor Gas fireplaces are becoming more common in outdoor rooms and entertainment areas, where they provide a natural gathering spot and can take the chill off during a cool evening. The 42-in. Heatilator Dakota is made from stainless steel for corrosion resistance.



and there's no opportunity to move logs around with a poker.

But even though they don't crackle or produce that sweet smell of smoke, gas fireplaces continue to look more realistic every year. Manufacturers use real firewood to make the molds for casting the log sets, and then they often hand paint them, further adding to their realistic look. My favorite recent innovation is LED lighting in the bottom of the firebox that simulates the look of glowing coals.

Sizing and installation

Excluding custom commercial models, gas fireplaces are sized from about 10,000 to about 50,000 Btu of heat per hour. The size of the unit should be based on the size of the space where it's located, not the whole house. Unfortunately, many buyers have a "bigger is better" mentality, which can lead to an oversize fireplace that drives folks out of the room. Besides heat output, the physical dimensions of the fireplace should be considered, as a fireplace that's too big or too small looks out of place even to casual observers. Manufacturers have sizing charts and online calculators that take into account the size of the room and the size of the wall.

Installing a gas fireplace is often more complicated than installing a wood fireplace. A manufactured wood fireplace is typically installed by the fireplace dealer without additional subcontractors, but a gas fireplace requires an electrician to run the cable that powers lights and the ignition system, as well as a plumber to run the gas or propane line to the unit. Coordinating the subtrades is the builder's responsibility for new-home installations. In retrofits, this subcontracted work can be handled by the fireplace dealer, the homeowner, or a general contractor.

Venting

Perhaps one of gas's best attributes is that venting options are greater than with wood. With a wood-burning fireplace, you pretty much have to go straight up through the roof or straight up the outside of an exterior wall with insulated flue pipe, which can be expensive and, depending on the floor plan, may not be possible at all. Masonry chimneys are even more costly and inflexible when it comes to venting.

The first option for venting a gas fireplace is to choose one that doesn't require venting in the first place. While this may seem like

an easy installation, my company advises clients to steer clear of unvented fireplaces for a number of reasons (see "Is 'vent free' a good idea?" right). Next, there are models that use standard B-vent flue pipe and are vented atmospherically through the roof like a gas furnace or water heater. Generally speaking, you can use two elbows for snaking around obstacles, and you need to maintain manufacturer-specified rise-to-run ratios so that the appliance drafts correctly. Finally, there are direct-vent fireplaces, which have the most-flexible venting options. Direct-vent models send their combustion by-products directly through a wall or roof using two-chamber pipe that also acts as a combustion-air intake. Even though the flue pipe used with a direct-vent gas fireplace costs more than B-vent flue pipe, the total installed cost is often less, because a more direct route to the exterior of the building often means using less pipe. Direct-vent flue pipe also can be run horizontally in joist cavities, and some direct-vent models can accommodate up to four 90° elbows in their flues. For especially long and complicated runs, a power vent fan can be added to the vent system to improve draft. This fan can be placed either at the vent termination or at an accessible spot along the vent pipe. With any gas fireplace, it's critical to follow the manufacturer's installation instructions exactly. The instructions explain proximity to combustible materials and how close vent terminations can be to windows and doors, overhangs, porches, and walkways.

Useful features

The heat from a gas fireplace is mostly radiant, so it works best when you're directly in front of it. If you're hoping to heat a larger space more efficiently, consider a model with an electric blower, which is an option on many models. I think it's also a good idea to opt for a gas fireplace with adjustable flames so that you can control the amount of heat being produced. This is especially important in my area, where it's seldom cold enough for a raging fire.

The biggest innovations in gas fireplaces in recent years have come in the form of increasingly sophisticated remote controls. Multifunction remotes can control flame height, built-in lighting, and circulation blowers. They also can be programmed to a specific thermostat setting—automatically adjusting the burner as needed—and can be

Is "vent free" a good idea?

At first glance, there's something very appealing about a vent-free gas fireplace. Not having a flue saves money on the installation and allows you to put the fireplace virtually anywhere. Unfortunately, the fireplace's combustion by-products aren't magically treated. Instead, the gases, which include carbon monoxide (CO), are released into the room. CO in sufficient concentration can cause fatigue, dizziness, and even death. To make these fireplaces safer, manufacturers include a sensor that shuts off the appliance if the oxygen level drops to an unsafe level. Running a gas appliance without a flue also puts a lot of water vapor into the air. At a minimum, this water vapor can lead to condensation on windows and doors that obscures the view and can rot or discolor sashes and sills. Excess indoor humidity can also aggravate allergies because it causes dust mites and mold to flourish. With today's tighter houses, I believe there's no place for unvented gas appliances, fireplaces included.

set to shut off the fire after a predetermined amount of time, much like the sleep timer on your television. A new batch of electronic controls are expected to work with smartphones and tablets.

Maintenance

Modern gas fireplaces are durable and long lasting, and we see few problems related to product failure. When we do get a service call, the problem is usually a result of improper maintenance.

Unlike the superefficient blue flame of a cookstove, fireplaces have a fuel-rich yellow flame (meant to replicate a wood fire) that produces more soot than a blue flame. As a result, every year the burners and ignition system should be cleaned by a manufacturer-certified technician. □

James Cleland is service coordinator at Perfection Wholesale Supply in Houston.