



The Care and Maintenance of Factory Built Fireplaces

Fire is one of nature's primal forces, and it has always held a special place in the lives of humankind. In fact, we've relied on fire for so many things that it has become ingrained into our culture and lifestyle.

Throughout history, fire has been crucial to human existence. Primitive people relied on fire to cook their food, to keep them warm, and to provide light. Although we no longer depend on fire in quite the same way, images of children around campfires and holiday gatherings around open fireplaces abound. Just as our use of fire has changed over the centuries, the fireplaces and heating appliances that contain the fire and make it useful have also changed. In Classical Greece and Rome, homes contained simple firepits. In Medieval Europe, simple masonry fireplaces were developed. In the 1800's, a nobleman, Count Rumford, improved masonry fireplace design.

In the past, fireplaces and chimneys were constructed on-site as the house was being built. The performance of the fireplace was often dependent upon proper construction. Now there are factory-built fireplaces, which are pre-manufactured according to an engineered design. Proper installation, of course, is still a critical factor in the safe operation of these units.

Whether you have bought a house that already has a factory-built unit in your home, you probably have some questions about how to take care of your fireplace. The information below explains some of the most frequently asked questions about factory-built fireplaces.

Q. What is a factory-built fireplace?

Unlike traditional site-built masonry fireplaces, most factory-built fireplaces are made of metal, and may use a combination of insulated walls, glass doors, air-cooled pipe and blowers to circulate the heat produced by the fire. The factory-built fireplace and chimney are a complete system, engineered to work safely and efficiently together. Both units (fireplace and chimney) undergo testing together, then are listed specifically for use with each other. In other words, a factory-built fireplace has a specific chimney that is appropriate for use with that fireplace.

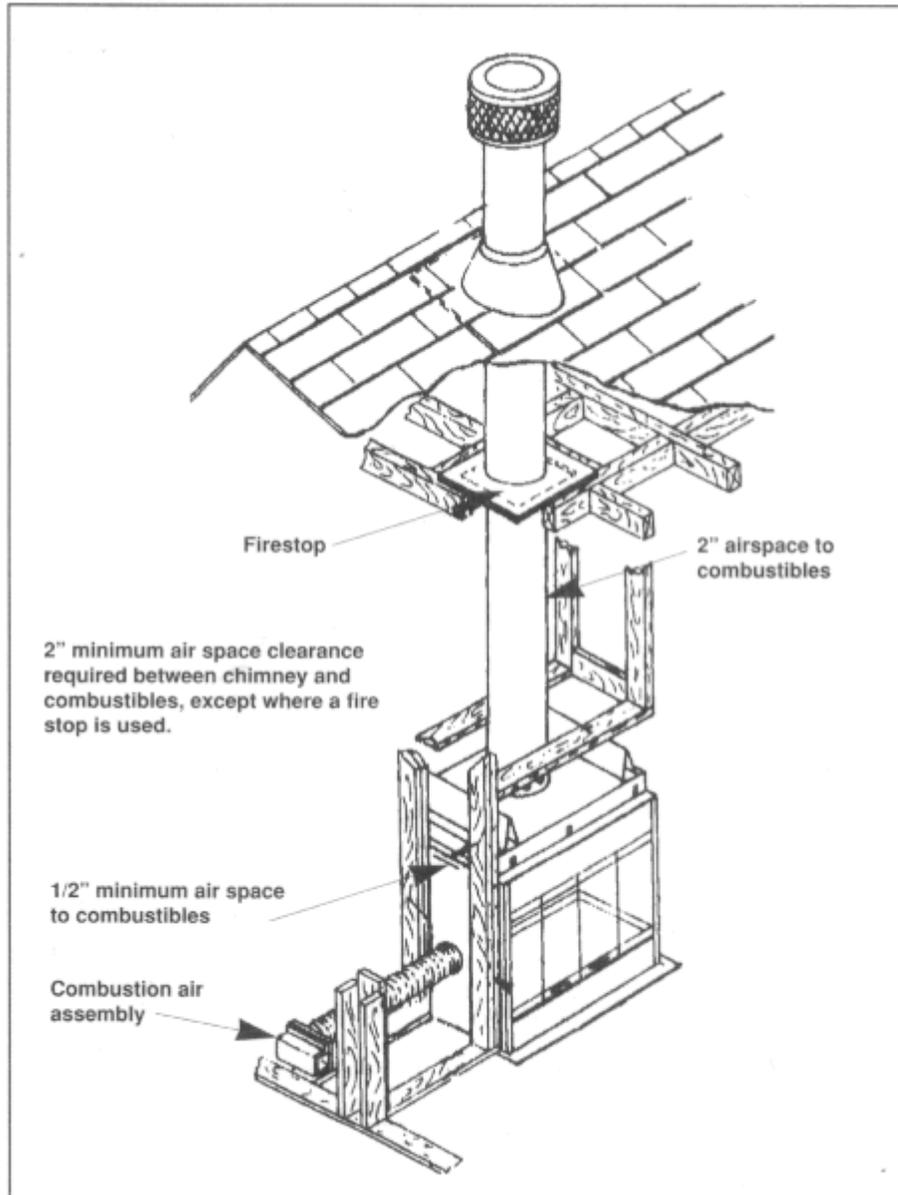
Although models vary, factory-built fireplaces generally heat in one of two ways. With the standard radiant heat method, the heat produced by the fire radiates from the fireplace into the room. With the forced air method, which uses louvers and at least on blower, heat circulates around the walls of the fireplace and then is forced out into the room.

Q. How is a factory-built fireplace different from a traditional fireplace?

Because a factory-built unit is so much lighter than masonry fireplaces, these fireplaces do not require the cement foundation necessary for masonry. The insulation and/or cooling spaces built into these systems allow the back of the fireplace to be placed closer to combustible materials than was previously possible.

Although most units are metal, pre-manufactured masonry fireplaces are also available. These masonry models incorporate special engineering techniques that are not used in most field-constructed fireplaces, including a listed venting system.

Like metal factory-built fireplaces, pre-manufactured masonry fireplaces reduce the clearance to combustibles and increase the amount of heat produced by the fireplace. These advantages, coupled with the lasting nature of masonry, make pre-cast refractory fireplaces and other modular masonry fireplace systems an attractive, if somewhat more expensive, alternative to the sometimes-inexpensive materials and construction of the mass-produced factory-built fireplace.



Q. What's the safest way to use a factory-built fireplace?

As with any fireplace, proper use is critical to safe and efficient operation of factory-built fireplaces. When you light a fire, keep in mind the following considerations:

- The damper must be fully open before starting a fire and left open until the fire is out. If a source for outside air for combustion exists, be sure that it is open before you light the fire.
- Don't overload the fireplace. If you do, burning logs could roll out. Never use wet or green wood.
- The fireplace will emit more radiant heat with the glass doors open. Be sure to close the screen to prevent sparks from flying out into your living room. Close the glass doors to reduce heat logs from the room into the chimney only when your fire is dying down. Glass doors on a factory-built fireplace must be tested and listed for that particular fireplace. It can be dangerous to use the wrong set of glass doors on your fireplace. Bifold doors, if left partially open, may draw gas and flames out of the fireplace opening into the room.
- Never start a fire with liquid fire starters, i.e. gasoline, kerosene, etc.

- Do not burn Christmas trees or a lot of paper in your fireplace. These types of fires, which get very hot very quickly, are extremely dangerous to the area surrounding your fireplace and can warp the doors or break the glass.
- Keep the base of the fireplace free of excessive ash accumulation. The area underneath the burning logs should be free of ash. Make sure ash does not build up to a point where it hinders the air supply under the logs.
- Do not install a wood stove—whether free-standing or insert style—into a factory built fireplace and chimney system, unless the insert you are using has been tested and listed for use with the fireplace and approved by the manufacturer of the chimney system (not the stove manufacturer alone). Installing an insert into a fireplace system that is not designed for either the weight or the intense heat the stove produces could result in a house fire and will also void any warranty issued by the fireplace manufacturer.
- Annual inspection and cleaning of your factory built fireplace and chimney is recommended by the National Fire Protection Association and the Chimney Safety Institute of America.

Q. Does a factory-built fireplace really need annual maintenance?

A factory built fireplace is tested and listed as a decorative heating appliance. The type of fireplace is relatively new to the market and has gone through many changes in design in just the past few years. The units are engineered with specific components that, when installed properly and used correctly, will give you years of enjoyable use.

As homes change owners, instruction manuals can be misplaced or lost. Nearly all manufacturers will send an original instruction manual when asked. However, as time goes by, it becomes increasingly difficult to find replacement parts for the older units. Manufacturers can go out of business, complicating the problem. Regular service and maintenance will help owners keep a step ahead of potential problems.

A factory-built unit will reach the end of its useful life when repair of the unit is no longer possible, particularly if the components that are necessary to maintain the listing are no longer available.

Q. How can I be sure the factory-built fireplace is installed correctly?

A factory-built fireplace is the only built-in home appliance that does not require an access door or other means to monitor its condition. And it is not easily removed for inspection.

However, since most problems associated with the units result from improper installation, serious consideration should be given to installing an inspection door behind the fireplace. This access will allow for an examination to confirm that the system was installed according to code and can be used to track the unit's condition as time goes on. It is an all too common occurrence to find insulation, Styrofoam, wood, tarpaper, fiberglass insulation, blown insulation or trash in contact with the fireplace or the chimney and hidden from view.

Fire stops must be installed. These sections of non-combustible material—generally metal—cover the opening where the chimney passes through floor or ceiling. In the event of a house fire, missing fire stops could cause fire to travel from one floor to the other, seeking oxygen.

As always, reputable chimney professional firms should be used when these units are purchased and installed. Local codes and the manufacturer's installation instructions should be followed to the letter.

With attention to these details, factory built fireplaces can allow homeowners to add the warmth and glow of a fireplace to almost any part of their house for a minimal investment.

Q. Where can I install a factory-built fireplace?

Because metal factory-built units may be relatively lightweight and require less clearance between the fireplace and combustible materials, they afford homeowners a wide range of design and placement choices.

The location of the fireplace is nearly unlimited, as long as proper clearances and venting methods are maintained. Factory-built fireplaces have been installed in bathrooms, kitchens, lofts, family rooms and living rooms. They can be installed on a sunken level, floor level, or eye level. They can be flush with an exterior wall or installed on an interior wall.

Q. What does a factory-built fireplace look like?

Factory-built fireplaces are available in styles as varied as housing styles around the world. They can be finished with practically any material, allowing many design options. A homeowner may choose to finish the area surrounding the fireplace with a traditional full-surround mantle, painted or stained, in plain designs or intricate scrollwork designs. They may choose to use a simple rough-hewn mantle of cedar, or they may use stonework. The front face of the fireplace can be finished with a variety of materials, including tile or marble. Most factory-built fireplaces come in a black finish, although many manufacturers offer them dressed with brass trim.

The units are available in a wide variety of “viewing” styles also. There are the traditional single-faced units, corner units, see-through units, open-ended units, three sided units or open all-around island units. Whatever designs the homeowner can imagine, factory built fireplaces can usually fit the bill.

About CSIA & CSIA Certified Chimney Sweeps

The Chimney Safety Institute of America is a no-profit educational foundation that has established the only nationally recognized certification and accreditation program for chimney sweeps in the United States. The program was developed in keeping with CSIA’s commitment to chimney and venting system safety and to the elimination of residential chimney fires, carbon monoxide intrusion and other chimney-related safety hazards. CSIA devotes its resources to education the public, chimney service professionals and other fire prevention specialists, and the insurance industry about the prevention and correction of chimney venting system hazards. For additional information, please contact:

Chimney Safety Institute Of America
16021 Industrial Drive, Suite 8
Gaithersburg, MD 20877
(301) 963-6900

©Copyright 1995 Chimney Safety Institute of America, Inc.