

## #9 Fireplaces

Fireplaces are popular woodburning appliances in Canada. Many people find that a fireplace enhances the beauty of a room, and they enjoy using it when entertaining or sharing a family evening at home.

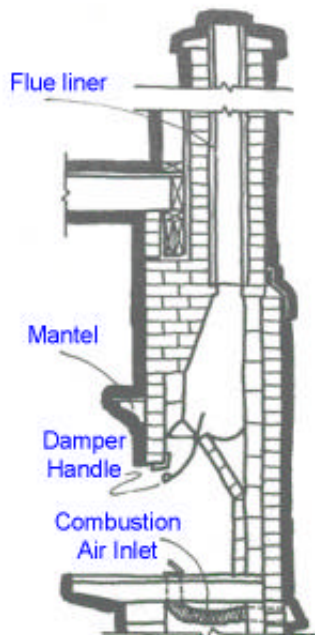
But a fireplace can only be truly enjoyed if it's properly installed, operated and maintained so that it is safe. Whether you have a masonry (brick or stone) or factory-built fireplace, there are a number of things you can do to keep your home fires burning safely.

### AN EQUIPMENT GLOSSARY

#### Traditional Masonry Fireplace

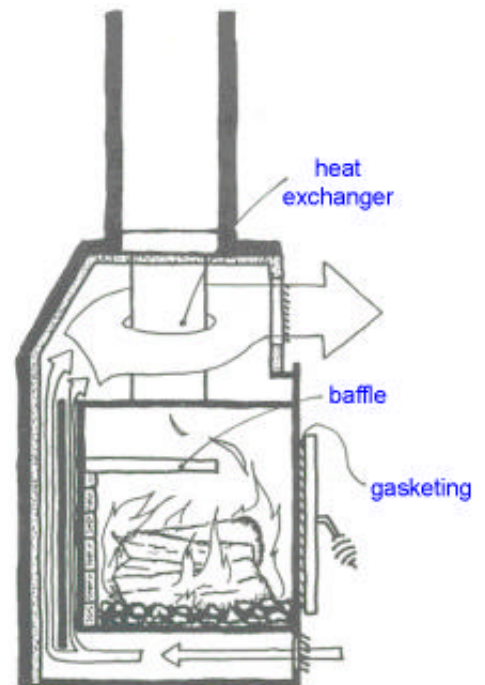
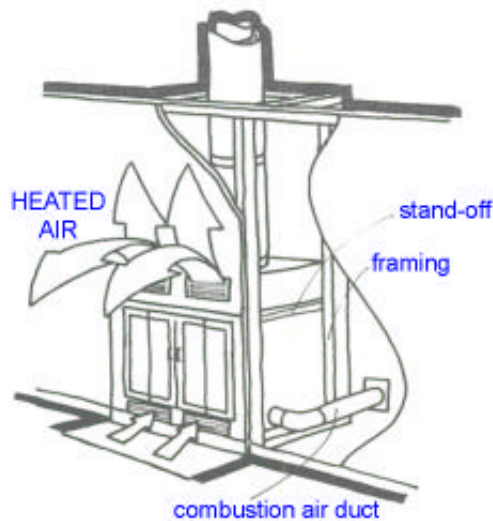
A fireplace built on site using brick or stone. In addition to radiating out into the room, heat from the fire is absorbed by the masonry. To take advantage of this stored heat, the fireplace should be built within the house rather than on an exterior wall.

Many people alter traditional masonry fireplaces by adding glass doors or installing fireplace inserts. If you are considering such alterations, you should consult a WETT certified professional or a certified masonry professional to be sure the alteration does not compromise the safety of the fireplace.



A traditional masonry fireplace

A conventional factory-built fireplace



A high-efficiency factory-built fireplace

## Conventional Factory-Built Fireplace

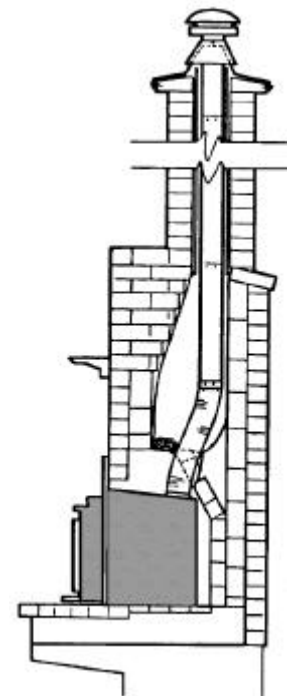
This type of appliance is constructed with insulation and stand-offs for air flow between the firebox and the outer shell to keep the outside surface cool. It can be enclosed within a normal wall structure. These appliances are sometimes referred to as "zero clearance" fireplaces, but this term can be misleading since they do have specific clearance requirements, which are given on the label and in the manual of certified equipment. They must be properly installed, preferably by a WETT certified installer.

## High-Efficiency Factory-Built Fireplace

A factory built fireplace designed for serious space heating use. The combustion design is similar to that of a space heater. Properly installed and used, this kind of fireplace can provide a significant amount of heat...safely. A WETT certified professional should do the installation.

## Fireplace Insert

An appliance designed to be installed within or partly within the firebox area of a traditional masonry fireplace. An insert can transform an inefficient open fireplace into an efficient space heater. Hearth mount stoves are inserts designed to be installed on the hearth extension of a masonry fireplace. Be sure to consult a WETT certified professional before installing an insert or hearth mount.



## CHOOSING A SYSTEM

### What is most important to you?

- watching the fire?
- cutting your heating bill?
- the unique comfort of direct heat?
- efficient circulation of heat to all parts of your house?

### What woodburning system can satisfy all of these needs?

#### Masonry Fireplace?

Masonry fireplaces are intended for occasional use, and are not usually expected to make a significant contribution to house heating. They are attractive, offer the pleasures of fire viewing and the comfort of direct heat and, if properly installed and operated, can help moderate your heating bills.

#### Factory-Built Fireplace?

There are a number of different factory-built fireplaces on the market. Like masonry fireplaces, most of these attractive appliances are intended for occasional woodburning. High-efficiency units can be used for space heating.

## Space Heater?

Properly installed and operated, a space heater can help cut your heating bill while providing the unique comfort of direct heat. Depending on the size and layout of your house, this heat can be circulated fairly efficiently. Units with glass doors are available if watching the fire is important to you.

## Fireplace Insert?

Properly installed and operated, a fireplace insert has the same attributes as a modern space heater.

## Furnace?

You can't watch the fire or enjoy the comfort of direct heat with a furnace. However, a furnace can circulate heat to all parts of the house and can reduce your heating costs. A furnace may be a suitable choice for a very large or sprawling house.

For more information on space heaters, inserts and woodburning furnaces, consult these other WISE fact sheets:

#2 Space Heating With Wood

#10 Fireplace Inserts

#12 Central Heating With Wood.

## FACTORY-BUILT FIREPLACES

All factory-built fireplaces are tested and certified to a specific safety standard. The label and installation manual for a factory-built fireplace will tell you exactly how the appliance should be installed and operated, including what kind of chimney to use with it and what kind of doors you can put on it.

Have your factory-built fireplace installed by a WETT certified installer. Never make any alterations to a factory-built fireplace. Check with your local building authorities to find out exactly what rules apply to you.

## GLASS DOORS

Many people install glass doors on the front of open fireplaces to save energy by reducing the amount of heated room air that is drawn up the chimney. If you are considering doing this, keep the following safety points in mind.

- When glass doors are closed during operation of a fireplace, the temperature within the firebox and chimney increases substantially. For this reason, it's best to build smaller fires in fireplaces with add-on glass doors.

- Any options such as glass doors, decorative trims, fans, etc. added to a factory-built fireplace must be certified for use with that particular unit. Using anything else may cause the fireplace to overheat, and will void the manufacturer's warranty.

➤ Be sure to consult a WETT certified professional before adding glass doors. The glass in some add-on fireplace doors can shatter if heated too quickly or when subjected to extremely high temperatures.

## FIREPLACE SAFETY

A safe fireplace:

- has the right chimney for the appliance (see WISE fact sheet #5)
- a rain cap on the chimney to prevent rusting of dampers and other steel parts,
- proper hearth protection - the hearth must be 400 mm (16 in.) deep and must be constructed of non-combustible material, with no gaps, cracks or breaks
- a screen to keep embers and sparks from escaping into the room
- tongs or heat-resistant gloves stored conveniently nearby to be used when picking up any wood or coals that may roll out, and
- a fire extinguisher nearby.

## OPERATING TIPS

➤ For a factory-built fireplace, follow the manufacturer's instructions carefully. If you don't have an operating manual, write to the manufacturer to request one. (The manufacturer's name will be on the label.)

➤ Use only properly seasoned dry wood. It will burn cleaner and produce less creosote. See WISE fact sheet #11 for tips on buying, processing and seasoning wood.

➤ Never use flammable liquids to start or "freshen up" a fire.

➤ Never let the fire smolder. But don't get carried away building a roaring fire either, your fireplace might not be able to take the heat! A steady-burning, 3-log fire is best.

➤ If your fire's built properly using seasoned wood and your chimney is working well, you shouldn't need a bellows.

➤ Never burn chemically treated wood, wrapping paper, magazines or other coated or colored papers in your fireplace. These can give off noxious substances when burned.

➤ Don't let ashes build up.

➤ Use a covered metal bucket for ashes. Store it carefully - either outside, or on a concrete floor well away from walls or anything that could burn.

➤ Use a mirror and flashlight to inspect the damper. Never look directly up the chimney unless you're wearing proper eye protection.

➤ Inspect your chimney regularly, and keep it clean. (See fact sheets #5 and #8 for tips on chimney maintenance).



Covered ash bucket

*This fact sheet is intended only to provide an introduction to the topic of "Fireplaces" not a "how to" manual! Be sure to consult a WETT certified professional for more detailed information and explanations.*

## The WISE Fact sheet Series

1. Is Your Wood Heat Installation Safe?
2. Space Heating With Wood
3. Appliance and Flue Pipe Clearances
4. Reducing Clearances With Heat Shields
5. Chimneys
6. Flue Pipes
7. Operating Your Appliance ...Safely
8. Maintaining Your Heating System
9. Fireplaces
10. Fireplace Inserts
11. Purchasing, Processing and Seasoning Wood
12. Central Heating With Wood

## WISE is supported by:

- Ministry of the Solicitor General
- Ministry of Housing
- Ministry of Energy Ontario
- Ministry of Consumer and Commercial Relations

## Wood Energy Technical Training (WETT)

The Wood Energy Technical Training Inc, is a non-profit, educational institution established in 1988. Provincial affiliates of WETT Inc are dedicated to chimney and venting system safety, and to the elimination of residential chimney fires, carbon monoxide intrusion and other chimney related hazards that result in the loss of lives and property. WETT devotes its resources to educating the public, chimney service professionals, and other fire prevention specialists about the prevention and correction of chimney and venting system hazards.

WETT has developed a training and certification program for wood heat appliance installers, inspectors, chimney sweeps and other professionals called the "Wood Energy Technical Training" (WETT) program. Be sure that any wood heat professional you consult is WETT certified. Look for the WETT logo, it's your best guarantee of reliable advice. For additional information, contact:

*Wood Energy Technical Training Inc* at 1-888-358-9388 or fax at 1-416-968-6818 or email at [info@wettinc.ca](mailto:info@wettinc.ca)

The local British Columbia affiliate is the Wood Energy Technicians of British Columbia, aptly named "*WETBC*". They can be reached at [zigi@shaw.ca](mailto:zigi@shaw.ca) or phone/fax is 1-604-941-4172. Our web site is at [www.wetbc.ca](http://www.wetbc.ca)

**WETT Your Assurance of Reliable Advice**