

What Type of Fireplace Do You Have?

By Karen Lamansky
Lindemann Chimney Supply

Fireplaces are typically thought to be constructed of brick or stone. There are actually many different building materials and construction methods available. Each has characteristics that make it unique.

Masonry – The Old Standby

Masonry fireplaces are the old standby – often lasting hundreds of years with little maintenance. They are built by a mason or masons who commonly built them as their father did.

Usually constructed with brick, round field stone or cut field stone, today some may integrate block or even concrete. The walls and sides of the fireplace are several inches thick, helping provide heat protection and stability to the fireplace.

Older fireplaces may have regular brick or stone also on the inside of the firebox. However, over the years it's been proven that these materials can't withstand the temperatures from the fire.

Rumford fireplaces were an improvement over the large old open "walk-in" type fireplaces. They featured tall openings that were shallow, reflecting more heat into the room. The smoke chamber was streamlined to minimize turbulence and direct the flue gases up the chimney with minimal heat loss from the room.

Today's modern masonry fireplaces may be constructed of firebrick, a cast refractory material or a heavy metal liner. One newer fireplace includes a heavy-duty refractory "liner" that absorbs heat and directs it back into the room via a sloped back wall. This fireplace sends more heat into the room than a conventional fireplace. The smoke chamber above the firebox consists of the same refractory material, efficiently directing flue gases up and out the chimney.

Above the firebox in a conventional fireplace, the smoke chamber is usually constructed of several inches of brick although not quite as thick as the firebox. The smoke chamber should have a smooth inner wall built of firebrick or other approved material. If this isn't the case, a high-temperature material can be used to create better flow, optimum draft and most importantly, insulate the smoke chamber helping prevent heat transfer.



The chimney is usually constructed as the same materials of the fireplace. Because a chimney is only designed to contain flue gases, and not fire, a brick chimney is only one brick thick. A clay tile or insulated stainless steel liner may be used.

Pre-Fabricated Fireplaces – A Shortcut to Traditional Construction

You may hear them referred to as pre-fabricated, factory-built or zero clearance fireplaces. These units are engineered and manufactured at a factory and consist of a metal constructed firebox that incorporates air space to help maintain safe temperatures to combustibles.

These units are installed by everyone from professional hearth installers, builders and carpenters to handymen and even do-it-yourself homeowners. It's critical that these units are constructed according to the manufacturer's installation instructions to comply with the listing.

The inner firebox consists of panels attached to the metal framework with clips. These panels are designed to resist high temperatures and provide thermal protection. Some panels are made of a poured refractory type mix. Newer style panels are made of compressed vermiculite. They come in brick patterns, smooth, and some have specialty designs.

A metal chimney is used to vent the majority of pre-fabricated fireplaces. Because of the engineering that goes into the design, the firebox is able to use a much smaller flue opening to vent properly. The advantage of a factory-built fireplace is that it's more efficient than the old traditional fireplace but the downside is that it won't last as long. Most have a life expectancy of around 20 years.

Specialty Fireplaces – Convenient Fires

Many new fireplace designs have surfaced in recent years carrying with them lots of options. Today, electric fireplaces are designed with a realistic "flame" and are portable so they can be moved from room to room.

Gas fireplaces can include a remote control to set up burn times, flame intensity and even a thermostat. The fire is realistic, featuring lifelike logs of ceramic refractory material or a special fiber. In addition, today's gas fireplaces can include direct-vent, which not only vents out the wall, but also provides incoming air. This is ideal for newer airtight homes.

Vent-free fireplaces provide maximum heat value for your dollar. However, they use the oxygen in your home for combustion and then vent the products of combustion back into your home. These units go through strict testing to ensure their safety. However, some areas of the country still don't accept them.

A natural vent gas fireplace is usually vented with type B Gas Vent, (B-Vent), or a factory-built chimney. They have many of the options as direct-vent with the exception of the different type of venting.

No matter what type of fireplace you have, always be sure to keep it maintained, including the chimney or vent. Damage or deterioration left unchecked could lead to costly repairs down the road. Most importantly, make time to use it and enjoy it in the way it was designed.

Karen Lamansky has been involved with the hearth industry for 20 years and is the author of "Fireplace Design Ideas" published by Creative Homeowner.