

HOW VENTLESS FIREPLACES WORK

Ventless gas fireplaces **don't require a chimney or venting system of any kind**, allowing all the heat that's produced to stay inside your home.

They function on a **closed-loop system** and rely on natural convection. Cool indoor room air is drawn into the firebox for combustion, then hot exhaust is expelled into the room.

Equipped with special burners that use a small amount of Natural Gas or Liquid Propane, **Ventless units emit little to no gases after combustion**. What remains will typically be made up of water vapor and carbon dioxide. Though **any dangerous gases left will be minimal and within safe limits**, Ventless fireplaces include built-in sensors that monitor the oxygen level in the room. This important feature allows them to operate safely without a chimney.

SAFETY CONCERNS OF VENTLESS FIREPLACE

Certain states, like California, have outlawed indoor installations of Ventless fireplaces altogether, while others have strict installation requirements.

If you're installing a Ventless appliance in your home or commercial space, always take the safe route and **check your local building, city, state, and fire codes, along with the minimum room size requirement** to ensure your product is compliant.

Lung Irritation

Ventless appliances can **intensify odors that are already present inside your home**. Impurities, such as pet hair, scented candles, fresh paint, and cleaning chemicals, are drawn into the firebox, along with the fresh indoor room air used for combustion. When these scents are emitted back into the

room, they often become stronger and can potentially cause lung irritation in sensitive individuals.

For this reason, it's not recommended to install a Ventless fireplace if you or someone in your household has **asthma, allergies, or chronic bronchitis**.

Increased Humidity Levels

As oxygen burns for combustion in a Ventless fireplace, water vapor is produced, which **increases humidity levels in your home**. This can be a great source of extra moisture in the dry winter months, especially if you live in a cold climate.

However, if you plan on letting your Ventless fireplace burn for an extended amount of time, it's recommended to **leave a window cracked near the fireplace** to prevent excess condensation, which could lead to mold or mildew growth.

REQUIRED SAFETY CRITERIA

Oxygen Depletion Sensors

Without enough oxygen, Ventless fireplaces won't burn cleanly. For this reason, each fireplace is equipped with an **Oxygen Depletion Sensor (ODS)**, which continuously monitors the oxygen levels in the room and automatically shuts the fireplace off if oxygen levels drop below the **safe threshold of 18%**. You will also need to install a **carbon monoxide detector near your fireplace** as a secondary precaution.

BTU Limits

While Ventless fireplaces make great secondary heating sources, they are limited to a **maximum of 40,000 BTUs per hour** to ensure there is enough oxygen left in the room.

For bedroom and bathroom installations, the maximum BTU output is even more limited, allowing only **6,000 to 10,000 BTUs, no matter the size of the space.**

APPROPRIATE BURNING MEDIA

Ventless fireplaces come with a variety of media options, like **fire glass, gas logs,** and river rocks and stones.

If you choose gas logs for your media bed, they **must be installed to the manufacturer's specifications** and cannot be modified in any way. **Ventless gas logs** are **designed to fit together in a specific pattern** to prevent the flames from impinging on the logs.

If the flames brush against the log set inside your Ventless fireplace, the finishing material will burn off and create harmful byproducts that infiltrate your home.

Always be sure to **follow the diagram in the installation manual** to ensure you've achieved the proper placement for your Ventless gas logs.

INSTALLATION GUIDELINES

Since they don't require a chimney or venting of any kind, Ventless appliances offer you more freedom and flexibility to **add ambiance to a variety of spaces.** They're ideal for condos, apartments, offices, and high-rise penthouses due to their **straightforward installation.** However, Ventless fireplaces will require a **hard-piped gas line** for installation. If you don't have a gas line inside of your home already, you'll need to **hire a licensed professional in your area** to install one for you.

To make sure you're selecting an appropriate and safe location for your Ventless fireplace, we recommend choosing a few models that you like,

then **checking their installation manuals for specific installation requirements.**

Be sure to measure the **cubic footage** of your space to make sure it's compliant with the room size requirements noted in each manual.

From there, you'll need to ensure the fireplace and location you've chosen satisfy your **local, city, and state codes.**

Once you've purchased your Ventless fireplace, you'll need to **hire a license professional to install it.** If an individual who isn't adequately trained and certified in gas products installs the fireplace, the warranty will be void on your product and you may encounter technical issues, or severe health and safety concerns.