

Why We Don't Do "Ventless" Gas Stoves

Our commitment to safety

Because of our commitment to build stoves meeting only the highest safety and air quality standards, Woodstock Soapstone does not (and will not) manufacture "ventless" gas stoves (also called "unvented" gas stoves, or "ventfree" gas stoves). Gas stoves advertised as "ventless" use indoor air for combustion, and then vent the combustion by-products back into your home. Using a ventless stove has been shown to increase indoor air pollution and create excessive moisture, causing harmful conditions for both a home and its occupants.

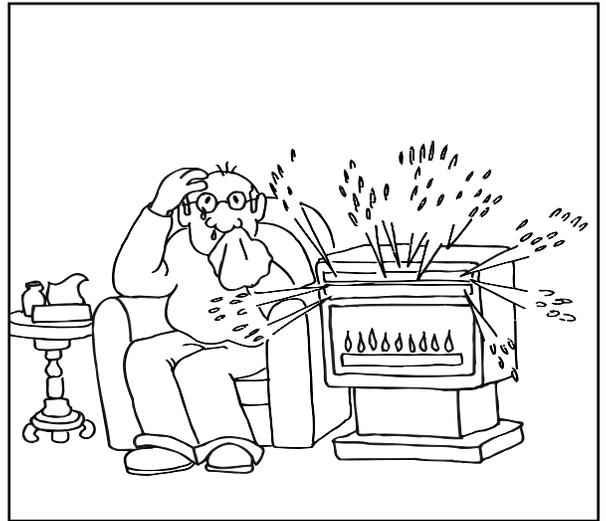
According to [Consumers Reports](#) "... [ventless gas] heaters contribute significantly to indoor air pollution. If you're planning to buy a gas fireplace, a vented model should be your first choice. That's especially wise if any household member has asthma or another respiratory ailment that may be exacerbated by particulate matter, or if your home is very airtight - and so will disperse the fireplace's emissions less readily. A vented gas fireplace needn't cost more to buy and install than an unvented model, since some units require only a small vent pipe that runs horizontally to any outside wall."

Adverse effects of ventless gas stoves

Poor air quality: Combustion is never 100% efficient; some combustion by-products or exhaust are always produced. In a "ventless" gas stove, post-combustion byproducts and exhaust are vented into the home, along with any excess moisture. These combustion byproducts include: carbon monoxide, carbon dioxide, nitrogen dioxide, and water vapor. These byproducts can degrade indoor air quality and may cause unnecessary exposure to toxic gases.

Moisture, mold, or mildew: Constant use of "ventless" products will exhaust a lot of moisture into the home, which could lead to excessive condensation, mold, or mildew. This may cause or exacerbate allergic reactions. Excessive moisture can also lead to deterioration of the structure of your home. Wood can be severely damaged by mold, mildew, or dry rot.

Long-term safety issues: We don't believe that "ventless" products are a good option for residential heating. Ventless gas stoves and unvented kerosene or butane heaters can contribute significantly to unhealthy living conditions.



In our opinion, "ventless" gas stoves promise something that is too good to be true. Warning labels recommend that a window be open during operation. We wonder - can a stove be safe and efficient if you have to run it with the window open? Some ventless stove labels indicate that the stove should not be used for more than an hour or two at a time. How safe can it be if you can only use it sparingly? And what about warnings not to use ventless stoves as a primary heat source?

These stoves remind us of unvented kerosene heaters which were popular briefly in the 1980s until the same health concerns were identified. These concerns are the reason ventless stoves are illegal in at least five states and in all of Canada. They are also why it is unlawful to install them in a mobile home anywhere in the United States. And we feel that they are more than enough reason for us (and you) to choose a safer option - direct vent.

Our choice: direct-vent technology

Woodstock Soapstone uses direct-vent technology for our stoves because it is proven to be clean, safe and reliable. Unlike unvented stoves, direct-vent gas stoves use fresh air drawn from outside the house - which is very important if your house is new or tightly insulated. And, unlike ventless stoves, any exhaust and moisture is vented outside the house.

"Direct-vent" technology utilizes a two way intake/exhaust pipe which draws outside air in for combustion and lets exhaust gases out at the same time. This direct-vent pipe is a pipe within a pipe: it has an inside tube that lets exhaust gases out, and an outside channel which is used to bring in combustion air. The outer walls of the pipe do not get too hot, because the fresh air intake is used to insulate the hot exhaust pipe.

Another advantage - no power is required for operating the stoves, so the stoves will continue to operate safely even during power outages. Each stove is safety certified to ANSI and UL Standards.

