Bringing Dormant Masonry Fireplaces Back to Life

A New Venting Solution

Leaders in-Venting Innovation™ May 2020

This white paper is available for download at no cost at www.duravent.com

This paper is written with regard to applicable codes and standards and intended for use and application in the United States of America and Canada.
All over North America, you will find masonry fireplaces that have been closed-off or re-purposed for other uses. Examples abound from the practical (displays of candles, books, records, etc.) to amusing (dog-bed), to out-and-out ridiculous (an aquarium)!

In urban areas, a dormant fireplace can be caused by a wide variety of factors. It could be access to seasoned firewood is limited. The cost of firewood can also be prohibitive in some regions. It might be personal preference; some people are just not comfortable burning wood. On occasion however, a dormant fireplace could be an indication of problems with the overall condition of the system. It may just not be safe to use for its intended purpose.

When homes change hands, new owners often want to bring a fireplace back to life, and it is easy to do with today’s gas fireplace inserts. This makes perfect sense. Gas inserts are convenient, safe, and efficient. Aside from creating that rich, warm, cozy atmosphere; a quality gas insert can also serve as a space heater. Having a reliable source of back-up heat for the home in the event of a power outage can be reassuring.

In the past, many homeowners have learned this option was not financially viable for them due to the condition or character of the fireplace’s masonry chimney. In some cases, the top portion of the chimney is missing, it was toppled or removed to make way for a renovation. Safe access could also be the reason. A steep roof or surrounding obstacles can also create potential roadblocks. The final reason could be physics. Some chimneys are too tall to work with traditional gas fireplace venting systems.

The good news is times have changed. A new venting solution could permit many of these masonry fireplaces to be refurbished. DuraVent now offers a **HORIZONTAL vent kit** for use with direct-vent gas fireplace inserts. The termination for this kit is positioned on the back of an exterior chimney just above the smoke shelf. This allows you to safely vent the fireplace through the lower portion of an existing masonry chimney.

This new venting solution is a real game-changer for homeowners, fireplace manufacturers, and fireplace dealers. Potential applications that might use this new kit include:

- A masonry chimney where the top portion has been removed due to damage or renovation
- Heritage structures where character and aesthetics limit venting or termination options
- Homes with an extremely steep roof pitch or over-height chimney create safety concerns for an installer
- Homes where access or jobsite conditions make typical vent installations, future inspections, and servicing cost-prohibitive

**Terminating Vent Through Chimney Wall**

The concept of horizontal venting is hardly new. It is done all the time with gas zero-clearance fireplaces using concentric direct-vent, but this type of venting is not suited for use in a masonry fireplace. Aside from space limitations, any venting product used must be flexible so it can be passed up through the masonry fireplace’s damper and smoke shelf. If we can use aluminum flex to terminate an insert vertically, why can’t we do it horizontally? Good question. **Now you can** - providing it is approved by the insert manufacturer.
While required rise will vary according to the gas insert manufacturer, DuraVent’s new Horizontal Vent Kit for DV Inserts includes two 10-foot lengths of 3-inch DuraFlex aluminum — more than enough material to go from the appliance connections up to the horizontal termination, according to Dalton Hooker, DuraVent’s Regional Manager in Western Canada.

“This length also provides enough material to make a soft, gradual transition from vertical to horizontal at the top where the inlet and outlet exit the masonry outer wall,” explained Hooker.

Installation of the vent kit is remarkably straight-forward and should take no more than a few hours to complete. The installer first marks the exterior wall where the termination hole should be cut, taking care to allow just enough space for the flex to pass through. With 3” diameter aluminum flex, both the exhaust and intake can be passed through the space left by removing a standard brick and any associated mortar. To determine approximate vent length, a weighted rope can be fed through the opening and dropped down to the smoke shelf below.

The installer can then reach up, grab the rope, and pull it down into the top of the existing fireplace. The aluminum flex comes compressed but can be stretched to the desired length. The installer should include at least 14“-to-16” length to allow for a soft bend where the flex lengths transition from vertical to horizontal at top. After a trial-fit, the installer can then attach both lengths of flex to the appliance according to the OEM’s instructions. Next, fasten both the intake and exhaust to the appropriate collars on the termination. To make this easier, the flex length that serves as exhaust is marked on both ends with red tape. The final step is to mount the termination to the exterior of the masonry chimney. The termination cap, flex lengths, and clamps are all included as a single turnkey solution. The installer must supply their own anchor bolts to secure the termination. While “Tap-Con” screws often work best, the size and length can vary based on brick or stone materials the chimney was originally built with.

“While this is a new application, these are not new components. We have simply redesigned our proven HC high-wind horizontal termination to work with co-linear flex”, said Hooker.

Prior to installing the fireplace insert or vent system, be sure to confirm that the horizontal vent kit is approved by the appliance manufacturer. Additionally, it is important to read the instructions supplied for the appliance and for the vent kit.

DuraVent prides itself on being a leader in venting solutions. In this case we have identified an issue and created an easy and cost-effective solution to help bring life back into an abandoned masonry fireplace.

For more information on venting solutions, visit: www.duravent.com