ASK THE INSPECTOR COLUMN FOR SEPTEMBER 14, 2016
HEADLINE: CONVENIENCE OF A GAS FIREPLACE

In recent years, there have been notable advancements in gas fireplaces and free standing gas units to the point where they now rival some of the best looking wood stoves. Gas fireplaces and free standing models have come a long way with respect to efficiency, and as an environmentally friendly alternative to a wood burning fireplace or stove. One of the largest advantages to a gas fireplace is the cleanliness factor; no wood to carry, no ashes to remove and no effort required to keep it burning. A gas fireplace eliminates the annual cleaning of the chimney, as well, not to mention the safety of a sealed combustion unit, meaning little chance of toxic combustion gases entering the room. Lastly, the convenience of an on/off switch and an ever-present supply of fuel are worth considering. Most models can be converted to propane, which means that country folk can also enjoy the benefits of this type of zoned heating.

If you are in the market, first establish what type of unit you are looking for. It is possible that an existing wood fireplace can be retrofitted for a gas insert unit. This type of vent is called direct venting and can also be done in an existing chimney or through a wall. If your home is newer and has been well insulated, direct vent or zero clearance, as they are also called, is the only recommendation. Being able to turn the fireplace down through modulation is a nice feature. Older fireplaces tended to heat a room quickly, especially if the unit was oversized for the area. While the majority of older units had a pilot light, newer models have electronic or intermittent ignition and this is a good idea. I have heard from a couple of gas techs that if you leave a pilot light on year round you can eat upwards of $50 annually in wasted fuel. If you currently have a pilot light model and only use it intermittently, turn the pilot light off during the off season. I recommend that you consider a variable speed fan for your fireplace. This will greatly increase the efficiency and improve circulation. Ask to see one running, as some are not as quiet as others. Another suggestion would be to place ceiling fans in the same room as a fireplace, since this also help with circulation.

The glass fronts used on all fireplaces can be tempered or ceramic glass. Tempered glass is considerably cheaper, but can be more susceptible to breakage and does not transmit as much heat as does ceramic glass. Ceramic glass is also less likely to shatter. Some of the recent ceramic log kits installed in gas fireplaces create the dancing flames and the realistic red glow of a wood fire. Pay close attention to the actual design of the unit. If it is properly designed it will have channels around the combustion chamber. This allows the room air to circulate naturally by convection. Some models have a secondary heat exchanger for even greater efficiency.A unit that extends into the room, either with a bay window front or a freestanding unit will give you the most efficiency and heat radiation. With respect to cost, I have seen these units installed from $3,000 and up. Remote controls, trim kits, styles of mantels and surrounds, hearth pads and accessories can really add up quickly. Very much like buying a car, it is wise to shop around and get at least three quotations.

When it’s time to visit the showroom, take a look at the EnerGuide Rating System on each fireplace. This fireplace efficiency (FE) rating program was introduced in 2003 and it set a standardized method of testing gas fireplaces. Some gas fireplaces are far from

efficient. Manufacturers are working towards an 80 rating, compared to some earlier models that barely made half of that level. The highest rated gas fireplace I am aware of right now is a 70. The higher the rating, the more efficient the fireplace. To quote an NRCan report, " a 20,000 BTU rated fireplace with a 70% efficiency will provide the same heat as a 40,000 BTU unit rated at 35% and will use only half the fuel."

There is another level to confirm the efficiency of your potential gas fireplace. All fireplaces and freestanding stoves must be rated if sold in Canada. They will bear an EnerGuide label using a CSA testing model. However, the better models also make the certification of "EnerChoise" label. This certification process began in British Columbia and has a great web site packed with information. Go to www.enerchoise.org and read up on their recommendations.

"Vent-free," as opposed to "direct vent" gas fireplaces should be avoided. While vent-free fireplaces are available in the US, they are not permitted in Canada. A few years ago, one of the liquidation chains brought a bunch of these across the border and the TSSA quickly stepped in and banned sales.

We had a gas fireplace in our previous home and thoroughly enjoyed it on a cold winter night. It was nice to turn it on when friends came for a visit and, currently, for the comfort of our spa guests, we have a propane unit. Fireplaces have a long history in Canadian homes and a gas or propane unit has all the ambiance with none of the work attached to a wood fireplace.

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