



Rationale Supporting Zone Heating

“ 80% of time at home is spent utilizing just 20% of the home.

“ Most of the time, central heating systems do not work at peak efficiency due to over sizing. These systems are sized for the Coldest Weather Conditions Which Only Occur for Brief Periods. “

6 Common Myths about Gas Fireplaces

1. Bigger is Better – 20,000 BTU is Too Small

If a 20,000 BTU heater will do the job then a 40,000 BTU heater should do the job twice as well, right? Wrong! – Good efficiency comes from matching the heater to your heating needs. This is true of any engine – over sizing causes waste and unnecessary expense. As energy costs go up this becomes a bigger factor – just look at what can happen to the auto industry, as fuel costs have risen average engine size has decreased.

2. There's more Value in a 40,000 BTU Fireplace than a 20,000 Btu Fireplace.

Actually the reverse is true in most cases. The larger input is generally due to a larger orifice size which costs no more to produce than a smaller size. The real trick is to produce a unit with a good visual fire and good heat output using a minimal amount of gas. To do this requires engineering. You can make up for lack of engineering by increasing the input of the unit – but what about the operating cost over the life of a unit/ Not to mention the possibility of the increased input actually reducing the life of the unit by over stressing the materials.

3. It's OK to have an oversized heater because the thermostat will regulate fuel consumption.

Many units on the market equipped with thermostats only burn at one rate. Other units burn at variable rates but for technical reasons have a very limited ability to tune down. This limited turndown coupled with the large maximum inputs of most of these heaters result in units still having a minimum input of 20,000BTU/hr. Studies have shown that the average heat demand of an average sized home rarely exceeds 15,000 BTU/hr, with optimum range between 7 – 11,000 BTU. The result is a heater which cycles on for very short periods because the minimum setting of the heater is not low enough to match the heat loss in the room. Efficiency and comfort are sacrificed in this case along with enjoyment because the heater is seldom on.

4. You'll get better comfort and economy with a Thermostat.

Not necessarily. As mentioned above, many units equipped with thermostats only burn at one rate or have such a high minimum input that is poorly matched to the average heat loss. Good efficiency comes from running the unit at a constant rate. Think of the cruise control on a car – you get better mileage running the engine at a constant output rather than speeding up and slowing down. You also get wider temperature swings in the room as the heater cycles more frequently trying to satisfy a small heat requirement with a big input of gas. A heater with a wider turndown range coupled with a thermostat to react to the minor temperature fluctuations will run at a more constant steady rate giving greater efficiency and comfort.

5. A Fireplace with a fan will heat better than without one.

Fans do not produce heat! They simply move air. As the fan pushes a greater volume of air through the heater the outlet temperature of the air will be lower. If a heater has an adequately designed heat exchanger the heat will end up in the room through natural convection. Once the heat is in the room it is possible to distribute it through more effective and quieter air distribution systems such as a ceiling fan. Secondly, a fan can do nothing to enhance radiant heat output as distribution of radiant heat does not depend on air movement. The sun does an excellent job of transmitting heat to the earth without any air movement. Many heaters produce only convective heat with little or no radiant heat output, therefore a fan has a greater overall effect on this type of a heater. So it really gets down to the design, if the fireplace produces little or no heat due to poor design a fan will not help.

6. I don't need a fireplace to heat my room because I already have a furnace.

The central furnace in a home is sized to heat the entire home under the most extreme weather which usually only occurs for brief periods. The majority of the time the furnace is oversized for the job. It will do the job but not as efficiently as a smaller heater sized for the purpose. Fuel savings can be realized by turning down the thermostat on a central heating system and using a smaller unit as a zone heater to efficiently heat a portion of the home.

THERMOSTAT OR

COMFOSTAT?

Thermostat –

Causes your fireplace to cycle on and off. What does this mean?

- Longer warm up time resulting in higher operating costs.
- Your fireplace spends more time being off when you want it on.
- Flame pattern stays the same.
- Not a very accurate control for zone heating.

Comfostat –

Keeps the fireplace on for longer periods of time by automatically adjusting the gas flow instead of simply turning on and off.

More time is spent enjoying the fire.

Over all fuel consumption is lower because the fireplace is only burning the precise amount of gas required, giving you more even temperatures.

The flame pattern changes from a cozy glow to a full flame effect.

You can easily adjust, change and override heat settings with a convenient control located at the top.

Footnote: Manual Valor units offer more accurate control than an on, off thermostat.

You can still save fuel as you use your Valor all year round.

Some things to consider from your friends at **Valor**

HEAT – RADIANT & CONVECTION

Radiant

Heats the objects directly, giving you warmer floors.

Heats in all directions, providing even heat.

Heats across the room, eliminating the need for a noisy blower.

Gives you the feeling that a real fire is famous for.

It's quiet and dust free.

It is especially effective in basements, lower levels and vaulted areas.

Radiant heat in a Valor.

Valor provides more radiant heat per BTU than any other brand. If you heat with a furnace, you have no radiant heat (other than direct sunshine), therefore your home could be more comfortable with a Valor.

Convection.

This is when the air itself is heated.

Hot air rises.

This is the only type of heat provided by a forced air furnace.

It is created by hot flue gases and a high area of heat exchange surface, not by a fan.

Convection heat from a Valor.

Valor fireplaces have a real heat exchanger that is truly effective.

GAS FIREPLACE FANS

What they do.

They add to your operating cost.

They add to your installation cost.

They make noise when you are trying to relax.

They block the natural flow of warm convection air when they are off.

They require expensive service work sooner than any other major component.

What they won't do.

They don't blow heat across the room – they are much too small for that job. The warm air will rise before it reaches you.

They don't provide back up heating in case of a power failure of furnace failure.

They don't product heat. Only good fireplace design will result in effective heating.

They don't add comfort if you already heat with a furnace.

They don't deliver radiant heat – the magical ingredient that makes a fireplace heat across the room, making you cozy and toasty warm.

Footnote: A fan is optional for Valor inserts and freestanding stoves. It can be installed at the same time as the unit, or added after is you still think it's necessary.

Valor fans are of equal or higher quality than other manufacturers.



VALOR vs. THE AVERAGE GAS FIREPLACE

70% adjustment for flame and heat with Valor

33% - 50% adjustment with other brands

Valor adjusts manually or automatically from standard remote control

Other brands adjust manually from the bottom of the unit, behind the grills

Valorstat will automatically self adjust from low to high

Other brands will cycle on and off like a furnace

Valor will heat large areas without a noisy fan

Other brands will charge over \$250 for a fan which will likely fail after five years (average)

Valor used aluminized steel and stainless steel designed for gas, other brands use mild steel; designed for wood. Gas has much more water vapour as a by product than does wood



VALOR vs. THE FURNACE

Valor uses 6500 BTU to 24,000 BTU (average is 16,000 BTU)

Furnace uses 80,000 – 120,000 BTU plus electricity

Valor is a zone heater with radiant and convection heat

The furnace is a central heat with no radiant heat

Valor works if the power fails, a furnace won't

Valor will modulate, a furnace will only cycle on & off

Valor is efficient for the entire heating season

A furnace is oversized most of the heating season



WHAT CAN VALOR DO FOR YOU?

Glance through the brochures and you'll find that Valors are different. This isn't just another knockoff stove line of the same old stuff. All Valors are packed with features that the competition doesn't offer. Our products are unique, prices are competitive, quality top shelf and dealer support is unmatched!

WHAT ARE SOME OF THOSE UNIQUE FEATURES?

- 1) **All models come with a programmable remote control as standard equipment!** The thermostat in this remote can be set at a specific temperature and timed to come on and off twice in a 24 hour period. "You can set your Valor to wake up before you do!"
- 2) **70% adjustment for your flame and heat.** This means Valors can run more constantly at lower heat output levels more efficiently than other brands. You want to watch a fire that looks good, but you want efficiency too, and you don't want high gas bills. Valor provides a winning combination of good looks, great heat and low gas consumption. Our best selling insert, for example, goes from 24,000 BTU's on high, down to 6500 BTU's on low. The perfect zone heater! (Not just on/off.)
- 3) **The remote controls require no electricity!** No power, no problem! This means no fan noise, no service calls and no electricity required! Valoes do in fact heat better than many other brands with fans. (Yes, optional fans are available for people who just have to have them.) Fans add noise – not comfort.
- 4) **Very competitive pricing!** Compare Valors to the competition and you'll find fantastic value. All models include the brick liner and the remote control as standard equipment. All trims are either powder coated or cast iron.
- 5) **Modulating valves create more even heat.** Rather than on/off burn patterns like conventional thermostats, Valors modulate up and down more gradually to create a more even and comfortable heat. The wide BTU range provides the perfect parameters fro this feature to operate within.



- 6) ***Quality that you can't see!*** This is a serious purchasing decision. You owe it to yourself to buy something that will last. When you burn natural gas, water vapour is the main byproduct. The firebox is stainless steel so that it withstands high temperatures. What is the standard gas fireplace made out of?

- 7) ***Unique fireplace packages are available – for Portrait models!*** To finish off their zero-clearance fireplace, Valor offers several beautiful hearth, surround and mantle packages, known as "SUITES". These suites allow you to buy an entire fireplace package at an amazingly good price. You can buy a high quality fireplace Valor package for the same price as a mediocre fireplace package. Installers can install it all in a matter of hours: lay the hearth on the floor, set the fireplace on the hearth, vent it straight out the wall and drop the cabinet mantle over it all, with no framing required! These are available at Fires of Tradition at www.firesoftradition.com



VALOR vs. THE WOODSTOVE

Both will work if the power fails

Both will provide cozy radiant heat

Both can help to reduce gas consumption

Valor does not need chimney cleaning

With a Valor, you don't have to go outside to get the fuel

Valor is easier to turn down once the room is warm

Clean your Valor window twice a year, not twice a week

Valor chimney is inexpensive

No smokey downdraft when you start your Valor