



Green Your Fireplace



WHY GREEN MY FIREPLACE?

When you cozy up to a crackling fireplace on a cold day, you might be robbing your home of heat. An open fireplace is one of the most inefficient heat sources you can use. It will actually draw warm air up the chimney and pull cold air into your home through any unsealed gaps or openings around windows and doors. For the rest of your home to stay warm while you sit by the fire, your heating system has to work harder and longer.

BEST PRACTICE AREA: ENERGY EFFICIENCY

DID YOU KNOW?

One open fireplace (uncovered) will send about 8% of your heating bill up in smoke during winter!

FRIENDLY FIRE LOGS

In 2007 an in-depth EPA study showed conclusively that artificial fire log brands (Northland and Pine Mountain from Conros, Easy Time and Xtra-Time Firelog from Duraflame, and Java-Log from Robustion Technologies) produced 80% less particulate matter than natural cured oak firewood. Amazing but true! What's more, these alternative logs, composed of substances such as compressed sawdust, food fiber, nutshells, or coffee grounds, are more energy efficient and produce 45% more BTU's per pound than oak firewood.

FIRE LOG TIPS

- Purchase only those with non-petroleum based wax binders. (Most now are bound with vegetable based waxes).
- Do not burn artificial logs in wood stoves – they are meant for open hearth fireplaces.
- Never add a log to an existing wood fire or burn more than one at a time.
- Don't break up a log during its burn cycle because it can flare up.

FIREPLACE MAINTENANCE

Depending on the area you live in and the efficiency of your fireplace, a fire can be a cost-effective way to heat your home. An efficient fireplace will definitely reduce the expense of wasted heat energy. Here are a few tips:

- Close the damper tightly when the fireplace is not in use. This can dramatically reduce heat loss.
- Check the damper periodically to ensure it can close tightly and is in good working order.
- If you use the fireplace only occasionally, install glass doors. They act as a barrier against warm air loss up the chimney and stop the pull of cold outside air into the home.
- Add a well-designed insert. Old inserts were poorly designed and inefficient; new ones can greatly increase the heat radiating into your home and limit heat loss. Inserts are available for both gas and wood burning fireplaces.
- If you don't use your fireplace, seal the damper tightly with weatherstripping and fill the chimney with insulation. Be sure to provide some ventilation for the flue or condensation can form in the chimney.
- If you use a pellet stove, be aware of how the fuel is sourced. Using by-products of the food industry as fuel can be sustainable, but growing crops expressly for use as fuel is a shortsighted use of agricultural land.

PURCHASING A NEW FIREPLACE

If you are in the market for a new fireplace, here are some things to keep in mind:

- For a wood-burning fireplace, think about factors like the availability of sustainable wood supplies which affect the environmental impact and cost of burning wood.
- Gas fireplaces burn a non-renewable resource and are limited by the cost of fuel. Some gas fireplaces are less efficient than wood or pellet burning stoves.
- Gas fireplace efficiency has a wide range, from as low as 20% up to about 75%. An inefficient gas stove will be costly for you and for the planet.
- A wood-fired masonry stove is the cleanest way to burn wood and is likely the best fireplace on the market, with efficiency approaching 90%. Because they retain so much heat, they can heat a house from one or two small, hot fires in a 24-hour period. They burn sticks or any hard fuel, they don't need to be stoked, and you can get them designed with a built-in wood fired stove as well. Prices have come down a lot in recent years, especially for prefabricated models made in Canada. The only downside is that they are incredibly heavy (weighing thousands of kilograms), so in most cases, you will need to reinforce your floor.

