

# Take Control & Save®

A Cooperative Effort for Energy Efficiency

[www.TakeControlAndSave.coop](http://www.TakeControlAndSave.coop)

## Fireplace efficiency

### Are your energy dollars going up in flames?

A fireplace or stove can add beauty, warmth and value to your home and set the mood for memorable gatherings of family and friends. But what most people don't realize is it's also a source of major heat loss! Though it may seem contradictory, an open masonry fireplace can cool your house and result in *higher* overall heating costs. The fireplace opening attracts heated indoor air, then releases the warm air through the chimney. A resulting vacuum draws cold outdoor air into your house through windows, doors, and gaps anywhere. You may feel comfortable in front of the fireplace, but your heat pump or furnace runs like crazy trying to keep the rest of the house warm.

However, if you really do like the ambiance of a fire, there are some things you should keep in mind so your fireplace can be as energy-efficient as possible.



### Reduce fireplace heat loss

- Keep your fireplace damper closed unless a fire is going.
- When you use the fireplace, reduce heat loss by opening dampers in the bottom of the firebox (if provided) or open the nearest window approximately one inch, and close doors leading into the room. Lower the thermostat setting to between 50 and 55 degrees F.
- If you never use your fireplace, plug and seal the chimney flue.
- If you do use the fireplace, install tempered glass doors and a heat-air exchange system that blows warmed air back into the room.
- Check the seal on the fireplace flue damper and make it as snug as possible.
- Purchase grates made of C-shaped metal tubes to draw cool room air into the fireplace and circulate warm air back into the room.
- Add heat-resistant caulking around the fireplace hearth.

### Did you know?

*An open damper allows as much warm air to escape as a fully open window! Keep your fireplace damper closed until you build a fire. If you never use your fireplace, plug and seal the chimney flue.<sup>1</sup>*

### Choosing the right fireplace

When buying or upgrading a fireplace you're faced with several options including type, size, features and more. You can choose from a new generation of wood- and pellet-burning systems that are cleaner burning and more efficient than older models, and powerful enough to heat many average-sized, modern homes. It's also important to use a properly sized fireplace for the space to be heated. When it is too big, residents tend to burn fires at a low smolder to avoid overheating, which wastes fuel and is one of the biggest causes of air pollution. Talk with a reputable dealer about size requirements.

## Location, location, location

The location of the fireplace (and chimney) will influence how well heat is distributed and conserved in your home. Most wood- and pellet-burning systems are essentially space heaters, and should be put in the room where you spend most of your time. Ideally, there should also be a way for heat to circulate to the rest of the house.

## Use a professional

For safety and to maximize efficiency, you should consider having a professional install your wood- or pellet-burning system. They will carefully evaluate everything from your chimney to floor protection. A certified professional can also help you choose the best system to heat your home.

## Energy-saving accessories

There are some fireplace accessories that, if used correctly, will help you save energy and reduce heat loss through your fireplace. Airtight fireplace inserts are often the most efficient design and provide the longest burn time on a load of firewood and the greatest maximum heat output. Glass doors and fireplace covers can be added to fit tightly around the fireplace opening and prevent heat loss when not in use.

The fireplace damper is designed to prevent heat from escaping through your chimney. Be sure the damper has a tight seal, or you will see an increase in your heating bills. A flue sealer is a removable stopper that prevents air from escaping through the chimney. These inflatable devices are inexpensive and easy to install.



## Maintenance and safety

To keep your wood- or pellet-burning system operating efficiently and safely, you'll need to maintain it on a regular basis. Before each heating season, have a chimney sweep certified by the Chimney Safety Institute of America inspect your wood-burning system. Clean out the inside of the fireplace with a wire brush periodically to help your wood-burning system heat your home efficiently.

## Take Control & Save!

To find out more about how to save energy and money in your home, visit [www.TakeControlAndSave.coop](http://www.TakeControlAndSave.coop).



## Types of fireplaces

### \* *High-efficiency fireplace inserts*

Essentially, these inserts function like wood stoves, fitting into the masonry fireplace or on its hearth, and use the existing chimney.

### \* *Centralized wood stoves*

Modern, centralized wood heaters use wood gasification technology that burns both wood fuel and associated combustible gases, rendering them efficient up to 80 percent.

### \* *Masonry heaters*

These heaters produce more heat and less pollution than any other wood- or pellet-burning system; and they commonly reach a combustion efficiency of 90 percent.

### \* *Pellet fuel fireplaces*

These fireplaces burn small, long pellets that look like rabbit feed. They are more convenient to operate and have much higher combustion and heating efficiencies than ordinary wood stoves or fireplaces.

To find more about fireplace types and which will best suit your needs, visit the U.S. Department of Energy's website at [www.energysavers.gov](http://www.energysavers.gov).