

# **CONSIDER THE SOURCE**

Even the most modern wood-burning stove will produce smoke and pose other hazards if installed or operated incorrectly. Regardless of what style of wood-burning device you choose for your home, have it cleaned and inspected at least annaully to keep it in peak condition. A wood stove has surface temperatures hotter than 400 degrees and its interior temperatures exceed 1,000 degrees. Any device that can reach temperatures that high must be professionally installed, operated properly and maintained annually to ensure that it does not pose any additional health or safety hazards in your home.



### UNDERSTANDING YOUR WOOD STOVE

PROPER INSTALLATION, CAREFUL OPERATIONS AND REGULAR MAINTENANCE WILL KEEP YOUR WOOD STOVE IN PEAK OPERATING CONDITION SO THAT IT LIMITS SAFETY HAZARDS IN YOUR HOME AND MINIMIZES INDOOR AND OUTDOOR POLLUTION. TO MAKE SURE YOU UNDERSTAND HOW TO OPERATE AND MAINTAIN IT AFTER GETTING IT PROPERLY INSTALLED, VISIT

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# INSTALLATION, OPERATION & MAINTENANCE



## Using Wood Burning Devices Properly



VERSION 1

# **INSTALLATION**

Adding a wood stove to your house, or replacing the current device, must be done properly and according to local building and installation requirements. It is recommended you have the stove professionally installed according to factory specifications. If you installed the stove yourself, it is suggested you have a building inspector or the fire department inspect the installation before you use it. Improperly installed stoves can leak smoke back into your home or cause a house fire. Below are several other important considerations when installing a wood stove:

I. Decide on a location for your stove well in advance of purchasing and installing it. To maximize its efficiency, choose a spot in the room with good insulation so the heat is not lost through the walls or windows.

2. Every wood stove requires a chimney, which should be given careful consideration when deciding where to install it. Chimneys must be the correct diameter for the stove, be the correct height, in the proper location, have at least a twoinch clearance from combustibles and have proper structural support.

3. There are three common types of factory-built metal chimneys: air cooled thermosiphon, solid pack insulated and air insulated. Wood stoves function more efficiently and have less maintenance problems when installed with a solid pack or air insulated chimney.

**4.** Install the device with adequate clearance from any combustible surfaces, including floors, walls, curtains and furniture.

5. As a safety precaution, install carbon monoxide and smoke detectors and keep a 10-pound ABC fire extinguisher nearby. Also familiarize house occupants with fire evacuation procedures.

6. Regularly inspect the installation, especially during the first few months of operation to verify there are no leaks.



Once an EPA-certified stove is installed, the efficiency, emissions and safety of its operation depend on how it is operated. The species of wood burned also affects the stove's operation. These important reminders will help improve the efficiency of your wood stove:

 Before lighting the stove for the first time, read the owner's manual. It will provide guidelines for the best way to build a fire and keep it burning efficiently.

2. One of the most important considerations for operating your stove is wood preparation, (splitting, stacking, storing and covering). Moisture content of the wood should not exceed 20 percent.

**3.** Burn clean, hot fires with plenty of air to prevent visible smoke exhaust from the chimney. This also reduces creosote.

4. Do not burn wood that has been painted or chemically treated, garbage, cardboard or moldy wood.

**5**. The species of wood also affects stove operation. Use hardwood birch if available, especially for overnight fires because it burns longer. Use small, split wood for fire starting, and larger, split pieces, once the fire is burning well.

6. Small, hot fires are the most efficient. Operate the stove this way and regularly attend it.

7. Add small amounts of wood to the stove and operate the draft controls in at least a half-open position. For overnight fires, load the firebox with wood and restrict the draft for a long duration burn. When firing the stove in the morning, open the draft wide open to help burn off the creosote that may have developed from the overnight burn.

8. Most wood stoves do not respond automatically to air flow requirements. Anticipate its performance and regulate the amount of wood and air to achieve uniform heat production for the highest comfort level.

# MAINTENANCE

Creosote is a thick, oily liquid and a usual by-product of burning wood. Wood stove maintenance involves cleaning the chimney to remove creosote deposits, regularly inspecting the installation and removing the ashes. Know what to do in the event of a chimney fire, caused by a buildup of creosote that ignites and burns quickly and hot. In addition to these important steps, here are several other tips for maintaining your wood stove so that it performs safely and efficiently:

1. Clean the chimney at least once a year, or when creosote builds on the chimney walls to one-quarter inch or more, to ensure good stove performance and elimiate chimney fires created by creosote. This can be done using a stiff wire chimney-cleaning brush, or by hiring a professional chimney sweep. If you clean it yourself, wear a facemask to avoid inhaling creosote particles.

2. Check the stove installation before its first use in the fall to make sure there are no hazards created by the stove and clearances from combustible surfaces are maintained.

3. Check the stovepipe used in the chimney connection. It is subject to high temperatures and corrodes over time. If it develops holes or warps, it needs to be repaired, otherwise it can leak smoke into your home.

4. Dispose of ashes properly by placing them in a noncombustible container such as a metal bucket. Charcoal buried in ash may smolder for days and can cause a fire when improperly disposed of in a combustible container

#1

CLEAN

