

Tips and Information to Help You Operate Your Wood Burning Appliance Safely and Efficiently

Fuel Supply

Good quality firewood is the key to successful wood burning. The following tips will help you prepare your fuel supply:

- Season firewood, by cutting and splitting it into pieces and then stacking it in separate, short rows, up off the ground, in an open area. Ensure that the ends of the rows are fully exposed to allow for breezes to carry away the moisture.
- Wood that is cut, split, and stacked properly in the early spring is generally ready for burning in the fall.
- Come fall, after the firewood has been in the sun and wind all summer, ensure it is properly stored for the winter in an area that offers shelter from rain and snow.
- If you are purchasing firewood, be sure that it is seasoned.
- Do not store large amounts of wood inside your house because there is a risk of promoting mould growth, which can contaminate your indoor air with spores.
- Prior to burning, your seasoned firewood should be cut and split to the correct size for your stove or fireplace. A good standard size is approximately 7.5 – 15 cm (3 to 6”) in diameter and 35 – 40 cm (14 to 16”) in length.
- Look for firewood produced using environmentally sustainable harvesting methods. Environmentally sound woodlot management practices include thinning out dying and damaged trees.
- Do not burn materials not intended for use in residential appliances such as: plastics, styrofoam, driftwood, painted wood, plywood, pressure treated wood, or household rubbish.

Starting and Maintaining Your Fire

The following, smart burning tips can help you obtain the best efficiency from your wood appliance and also reduce the amount of smoke emissions coming from your chimney:

- Only use firewood that is fully seasoned and dry enough to burn without hissing and sizzling in the fire.
- Before starting your fire remove any excess ash from the firebox. Excess ashes can clog air intake vents, reducing efficiency.
- Ensure the air control (damper) is fully open.
- Use small pieces of wood kindling and newspaper to start your fire.
- Keep the air control (damper) fully open until the firebox is full of flames and the firebox is thoroughly heated.
- While the fire is burning, never shut or turn down the damper so much that the fire smoulders.
- Burn small, hot, bright fires.
- To maintain the fire in your wood stove, let it burn down to coals, then rake the coals toward the air inlet (wood stove door), creating a mound. Then reload, by adding at least three pieces of wood each time, on and behind the mound of hot coals.



- To maintain your fireplace fire, add fuel as needed to ensure the fire is burning hot and bright.
- Check your chimney frequently for visible smoke emissions. Some smoke should be visible when you light the fire, but for the remainder of the burn it should almost be invisible. If you see excessive smoke from the chimney during the middle of a burn, change your fuel or burning practices.

Using Your Wood Stove Safely

Here are some safety tips to consider:

- Reduce the risk of chimney fires by exchanging your uncertified appliance for one that is EPA certified. EPA certified stoves burn wood more efficiently, reducing creosote build-up and hence, the risk of chimney fires.
- It is recommended that your wood burning appliance, chimney and vents are installed, and annually serviced by a technician who is certified under the Wood Energy Technical Training (WETT) program.
- Keep the doors of your wood stove closed, unless starting or stoking the fire.
- Fireplaces that are not equipped with doors should not be left unattended. Therefore, when you want to stop a fire from burning in this type of fireplace, do so by not adding any additional wood and allowing the fire to extinguish on its own.
- Never start a fire with gasoline, kerosene, charcoal starter, or a propane torch.
- Regularly remove ashes from your appliance into a metal container with a cover. Store the container of ashes outdoors on a cement or brick slab (not on a wood deck or near wood).
- Keep all flammable household items, such as drapes, furniture, newspapers, and books far away from your wood burning appliance.
- Keep a fire extinguisher handy.
- Install and maintain a smoke alarm and a carbon monoxide (CO) detector to provide early warning signs for potentially dangerous situations.

References:

Environment Canada, "[Good Firewood, The Key to Successful Wood Burning](#)"

Environment Canada, 2006, "[Fireplace and Wood Heating](#)"

USEPA, "[Wood Burning Efficiency and Safety - Cleaner Burning Wood Stoves & Fireplaces - EPA](#)"