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Burn Wise Your Guide To Best Burning Practices

IMPORTANT! MUST READ DAKA Wood-Burning Furnace Manual FIRST

This Is A <u>SUPPLEMENT</u> To Your Owner's Manual

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Read the installation-operations manual to familiarize yourself with the controls and features of your DAKA wood burning furnace.

A properly installed, correctly operated wood-burning furnace should produce a minimum amount of smoke. If you see or smell smoke that means you may have a problem. Practice the following guidelines to burn wise in your DAKA wood-burning furnace and reduce smoke inside and outside your home.

Once your DAKA wood-burning furnace is properly installed, building an efficient fire requires good firewood (using the right wood in the right amount) and good fire building practices. The following practical steps will help you obtain the best efficiency from your DAKA wood-burning furnace.

Season wood outdoors through the summer for at least 6 months before burning it. Properly seasoned wood is darker, has cracks in the end grain, and sounds hollow when smacked against another piece of wood. Store wood outdoors, stacked neatly off the ground with the top covered. Air needs to circulate between the ranks of wood. Large tight piles will not season properly.

Wood burns best when the moisture content is less than 20%. A wood moisture meter to test the moisture content of your wood before you burn it is provided.

Burn only dry, well-seasoned split wood.

Use of a smoke vent thermometer to monitor stack temperature is recommended. Normal operation will produce flue gas temperatures in the 300° - 600° F range.

When preparing to light your DAKA wood-burning furnace the auto damper control should be set on high. If it is a forced draft unit the draft fan should be running and the smoke bypass damper should be open if there is one. Also, open the ash pan door 1" - 2". Use only clean newspaper and dry kindling. Don't overload the furnace, a smaller load of wood is best. Getting the stack temperature in the burn range quickly as possible is very important. Too much fuel at one time can cause the stack temperature to drop causing more smoke and less heat. Once the stack temperature is in the operating range the ash pan door should be closed. Never leave your DAKA wood-burning furnace unattended with the ash door unlatched. Now the smoke bypass damper should be closed if there is one and the auto damper control or the wall thermostat on forced draft models can be set to the desired settings.

Keeping the stack temperature in the burn range, high quality, low moisture firewood (20% or less) and an ability of the chimney to produce necessary draft are key factors in maintaining a clean efficient fire with a minimum amount of smoke.

Burn hot fires. Flue temperatures should be between 300° and 600° F.

To maintain proper airflow, regularly remove ashes from you DAKA wood-burning furnace and place into a metal container with a cover and store outdoors.

Buying and burning locally cut firewood decreases the risk of transporting invasive forest pests to your property.

Never burn household garbage or cardboard. Plastics, foam and the colored ink on magazines, boxes, and wrappers produce harmful chemicals when burned. They may also damage your DAKA wood-burning furnace.

Never burn coated, painted, or pressure-treated wood because it releases toxic chemicals when burned.

Never burn ocean driftwood, plywood, particle board, or any wood with glue on or in it. They all release toxic chemicals when burned.

Never burn wet, rotted, diseased, or moldy wood. It will not burn properly and will cause air quality problems.

Keep all flammable household items - drapes, furniture, books, etc. - far away from the appliance.

Start fires only with newspaper, dry kindling and all natural organic fire starters. Never start a fire with gasoline, kerosene, or charcoal starter.

Do not burn wet or green (unseasoned) logs. These will cause creosote buildup that could lead to a chimney fire.

Do not use logs made from wax and sawdust. If you use manufactured logs, choose those made from 100% compressed sawdust.

Build hot fires. A smoldering fire is not a safe or efficient fire.

Keep the doors of your wood-burning furnace closed unless loading or stoking the live fire. Harmful chemicals, like carbon monoxide, can be released into your home.

Regularly remove ashes from your DAKA wood-burning furnace into a metal container with a cover. Store the container of ashes outdoors on a cement or brick slab (not a wood deck or near wood).

Keep a fire extinguisher handy.

Is your wood dry? Take the moisture meter test.

Wet wood can create excessive smoke which is wasted fuel. A moisture meter that allows you to test the moisture level in the wood is provided. **Properly dried wood should have a reading of 20% or less.** Dry wood creates hotter fires. Hotter fires save wood - ultimately saving you time, money, and help to protect the environment. Burn Wisely.

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Refer to your owner's manual for installation guidelines and operating instructions.

Start a small fire with dry kindling then add a few pieces of wood at a time.

Give the fire plenty of air - fully open the air controls until the fire is roaring and stack temperature is in the burn range.

Burn the fire to heat the chimney or flue before adding more wood.

Keep space between the firewood as you add more to the fire. Large tightly stacked loads of wood may not be able to burn efficiently.

Check for local burn bans and avoid wood furnace use while in effect.

Avoid burning garbage, treated lumber, or saltwater driftwood. Burning these items can damage your furnace and cause serious health issues.

Check your chimney regularly and have your stove and chimney professionally inspected and serviced yearly.

A smoldering fire or smoke from the chimney are both signs that a fire needs more air or your wood is too moist. There is a difference between smoke and water vapor. A good hot fire may produce some water vapor but very little smoke.

1. SPLIT

- Start with the right sized wood
- Split wood dries much faster
- Split the wood in a range of sizes to fit your stove, but no larger than 6 inches in diameter
- Split small pieces for kindling

2. STACK

- Stack wood to allow air circulation
- Build the stack away from buildings
- Keep wood off the ground stack it on rails
- Stack wood in a single row with the split side down

3. COVER

- Cover the top of the stack to protect it from rain or snow
- Make sure there is space between the cover and the stacked wood don't allow the cover to rest directly on top
- Keep the sides open so air can circulate through the stack

4. STORE

- Allow enough dry time
- Softwoods take about 6 months
- Hardwoods take about 12 months
- Cracked ends on the wood typically mean it is dry enough to burn

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