OUTDOOR WOOD BOILER RECOMMENDATIONS

Provided by the Fairbanks North Star Borough, Air Quality Program

Manufacturer's Recommended Best Burn Practices from www.epa.gov/owhh/bestpractices.htm

and the

Hearth, Patio and Barbecue Association (HPBA), Outdoor Furnaces Manufacturers Caucus http://www.outdoorfurnacefacts.com/wood-corn-heating-best-practices/best-burn-practices/

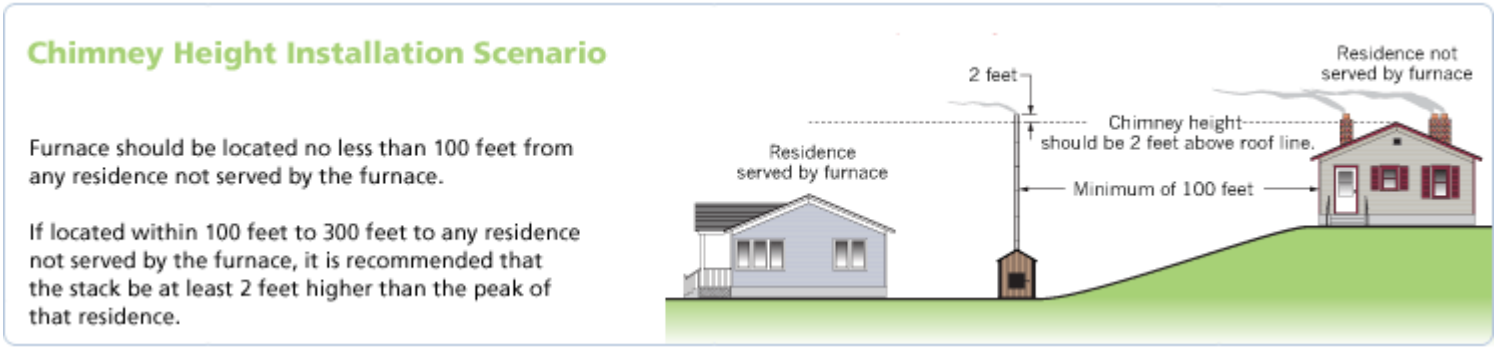
Safe Wood Burning Practices

- Operate according to manufacturer's instructions.
- Never start a fire with gasoline, kerosene, charcoal starter, or a propane torch.
- Do not burn any wood that does not meet the definition of clean wood.
- Build hot fires. **A smoldering fire is not an efficient fire.**
- Keep the doors of your OWHH closed unless you are loading or stoking the live fire.
- Regularly remove ashes from your OWHH into a metal container with a cover.
- Follow best practices for stack heights and proximity to property lines.

Installation Affects Air Quality, Health, and Efficiency

EPA recommends that your wood-fired hydronic heater be professionally installed to insure its safety and proper performance. There are many building code requirements (e.g. heat output, efficiency, life-cycle longevity) and safety requirements that are applicable in most areas. Your dealer can assist you in finding a qualified professional.

LOCATION: It is recommended that the unit be located with due consideration to the prevailing wind direction.



Practical Tips for Building a Fire

Once your wood-fired hydronic heater is properly installed, building an effective 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 wood-fired hydronic heater.

- Season wood outdoors through the hot, dry 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, stacking it neatly off the ground with the top covered.
- Burn only dry, well-seasoned wood that has been split properly.

Regularly remove ashes from the outdoor wood-fired hydronic heater into a metal container with a cover and properly cool before disposal.

Using Your Wood-fired Hydronic Heater Safely

Safety Begins at Installation

Using a wood-fired hydronic heater safely starts with proper installation. EPA recommends using a professional installer as the best way to ensure correct, safe installation.

Safety Includes Yearly Maintenance

EPA and fire officials recommend having your wood-fired hydronic heater, chimney, and vents professionally inspected and cleaned, if necessary, each year to keep them in safe working order.

Safe Wood Burning Practices

Once your outdoor wood-fired hydronic heater is properly installed, follow these guidelines for safe operation:

- Start fires only with clean newspaper and dry kindling. Never start a fire with gasoline, kerosene, charcoal starter, or a propane torch.
- Do not burn wet or green (unseasoned) logs.
- Do not use logs made from wax and sawdust in your wood-fired hydronic heater.
- Build robust, hot fires. A smoldering fire is not a safe or efficient fire.
- Keep the doors of your wood-fired hydronic heater closed unless loading or stoking the live fire.
- Regularly remove ashes from your wood-fired hydronic heater 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).
- For a more efficient burn, pay careful attention to loading times and amounts. Follow the manufacturer's written instructions for recommended loading times and amounts.
- Keep a fire extinguisher handy.

Burn Smart
A properly designed, installed, and correctly used outdoor wood-fired hydronic heater releases significantly less pollution into the environment. A fire that is burning properly produces little or no smoke from the chimney. If you see a lot of smoke coming from a chimney, that's air pollution. It can affect the health of everyone in your neighborhood.

Follow the additional precautions below:

- Never burn household garbage or cardboard. Plastics and the colored ink on magazines, boxes, and wrappers produce harmful chemicals when burned.
- Never burn coated, painted, or pressure-treated wood because it releases toxic chemicals when burned.
- Never burn 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.

A Clean, Healthy Outdoor Environment
Wood smoke results from incomplete burning (wasted energy). When released outdoors it becomes air pollution. In some parts of the United States during a typical wood heating season, wood smoke can account for about 80% of the air pollution in a residential area. Call or Visit:

- http://co.fairbanks.ak.us/airquality/ to see the FNSB's Air Quality Forecast (or call 907-459-1234 for a recorded message).
- http://www.dec.state.ak.us/air/am/aq_sr.htm for state wide Air Quality advisories (the latter part of the URL is ..../am/aq_sr.htm)
- State and local air pollution agencies: State Department of Enviromental Conservation at 907-451-2167 and local FNSB Air Quality at 907-459-1325 to find out whether there are restrictions due to air quality on wood burning in your area.
- AIRNow Inversions to learn more about restrictions on wood burning during a temperature inversion. (http://airnow.gov/index.cfm?action=static.inversions)
- Wood-fired hydronic heater owners can help prevent pollution by following these practical recommendations for buying, installing, operating, and maintaining their heaters. If you see a lot of smoke from your neighbors' wood-fired hydronic heater, urge them to visit the EPA web site: www.epa.gov/owhh/bestpractices.htm