Non-Catalytic Wood Stoves

Non-catalytic wood stoves are the most popular and least expensive EPA-certified stove sold in Alaska. They have a heavily insulated firebox constructed from durable materials and a large baffle system that introduces preheated air into the combustion chamber. These stoves hold the wood smoke and gases released during a longer burn. The smoke and gases are heated to high temperatures, which creates a secondary burn of these elements, reducing heat loss and smoke released up the chimney. While a non-catalytic wood stove cannot match the long, even heat output of a catalytic stove, it produces a roaring fire that is enjoyable to watch. Although they are slightly less efficient, non-catalytic wood stoves have internal features that create a good environment for complete combustion.

Advantages:

- Efficient use of wood, low emissions and reduced creosote deposits
- Least expensive modern wood stove
- Easy to operate and maintain
- Can use wood fuels such as bio-bricks and bio-logs

Disadvantages:

- Stove operates most efficiently with short, hot fires; will not sustain an "overnight" burn.
- Baffles and other internal features degrade over time and will need to be replaced.

Clean, Efficient Wood Stoves

In February 2015, the U.S. Environmental Protection Agency (EPA) updated its clean air standards for residential wood heaters. The updates, based on improved wood heater technology, strengthen emissions standards for new stoves, and for the first time include previously unregulated new wood heaters. These new standards will not affect wood heaters already in use in homes, and emission standards will be phased in over the next five years for new stoves. For more information on the new Performance Standards, visit www2.epa.gov/residential-wood-heaters/fact-sheet-summary-requirements-woodstoves-and-pellet-stoves.

The current emission limit for certified non-catalytic wood stoves is 7.5 grams/hour; however, combustion technology has advanced so rapidly that many new stoves already meet limits established in the new standards. EPA-certified stoves have a permanent label on the back indicating this certification and listing emission levels of the stove. For a complete and current list of EPA-certified wood stoves, go to www2.epa.gov/sites/production/files/2013-08/documents/certifiedwood.pdf.