

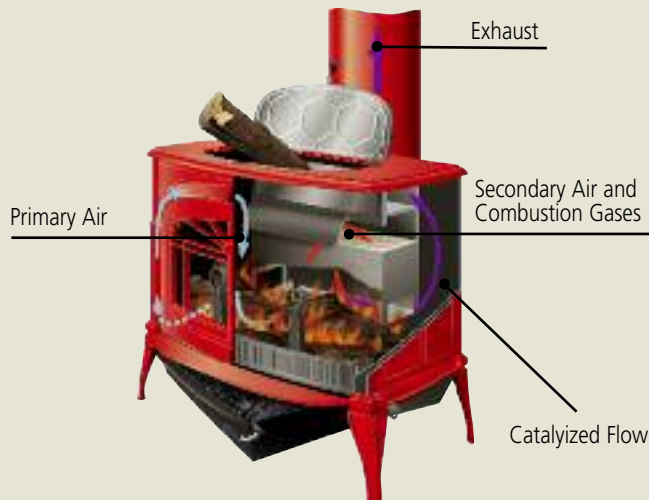
# Catalytic vs Non-Catalytic Wood Stoves What's right for you?

## Catalytic

A higher efficiency heating machine, catalytic wood stoves are ideal for those who wish to supplant a major portion of their heating needs with their wood stove.

- Higher efficiency
- Longer burn times
- Advanced features such as top-loading, swing-out ash pan and thermostatic control

- 1) Primary air enters the stove through a thermostatically controlled flap in the back and is preheated as it is drawn through the interior walls of the stove and finally to the air wash.
- 2) Thermostatically controlled secondary air mixes with the smoke (which is unburned wood gases) beginning the secondary combustion process and providing an optional mixture for greater efficiency.
- 3) The mixture passes through a catalytic combustor which lowers the smoke's burning temperature from 1,200 °F to 600 °F and causes it to ignite. This catalytic combustion turns the smoke and other pollutants into usable heat.



## Non-Catalytic

Homeowners will save money and time with a non-catalytic model. Easier to start and operate, the non-catalytic wood stove is ideal for those with less heating demands on their wood stoves.

- Slightly lower cost
- Lively flame picture
- No catalytic combustor to replace
- Easier to operate

- 1) Primary combustion air enters the stove and is preheated then introduced above the glass doors. This primary air flow is adjustable and provides control of fuel burn rate and heat output. The sweeping action of the airwash system helps keep the glass clean for better view of the fire.
- 2) Jets of combustion air enter through the shoe refractory and maintain a superheated primary combustion zone of coals and burning fuel where combustible gasses ignite as they pass into the secondary combustion zone.
- 3) Flames entering the highly insulated secondary combustion chamber are further mixed with staged secondary combustion air which provides the optimum level of oxygen to more completely burn off any remaining combustible gasses. This results in lower emissions, higher efficiency and a stable, even heat output from your stove.

