

How it works: The Hardy Wood Burner as home heat source



FORCED AIR SYSTEM: A hot water heating coil is installed in the supply side of your new or existing air handler and ductwork. A new wall thermostat which regulates heat from the Hardy Furnace performs two functions: when it senses your need for heat according to your temperature setting, it turns the water pump on to circulate the hot water through the coil and secondly turns on the blower inside your central unit to force air across the hot water coil. This forces hot air into your central duct system. Your existing furnace can serve as a backup heating source.

The Hardy Outside Woodburning Furnace is designed to be located next to your firewood storage for convenient loading, normally twice a day. This removes the fire danger from your home and keeps wood trash, smoke and ashes out of your home. The Hardy Furnace does not require special equipment to transport or relocate. The furnace firebox is constructed of 14 and 16 gauge 304 stainless steel for the best heat transfer possible. The heat transfer efficiency is three times better with 16 gauge 304 stainless steel than with 3/8" carbon steel. The all stainless steel firebox also resists rusting and burnout that occur in standard carbon steel. The stainless steel smoke stack that passes through the water chamber resisting burnout and corrosion. The insulated all stainless steel firebox door and ash door hold the heat in and resist burnout and corrosion. The firebox comes standard with thick, heavy cast iron grates to make weekly ash removal simple and fast. The use of chemicals inside the water tank is not necessary because of the corrosion resistance of 304 stainless steel. Since hot water evaporates, Hardy invented a condenser stack located on the rear of the furnace that condenses the steam and returns it to the water tank. The water tank is vented to the atmosphere to eliminate the safety hazards common with a pressurized boiler. Standard features on Hardy Furnaces are an adjustable aquastat, combustion blower for damper control, 4GPM at 20 feet of head circulator pump with an on/off control relay, and automatic water level controls. The Standard Hardy also comes equipped with a heat exchanger to provide hot water for your domestic use. The Hardy provides hot water for hot air duct systems, water baseboard, radiant floor heat, unit heaters and other existing Hydronic systems.

SOURCE: <http://www.outsideheating.com/howitworks.html>