



## Manufacturer's Comment

The Vermont DownDrafter<sup>tm</sup> is probably one of the most versatile and sophisticated heating devices on the market today.

It is a freestanding stove, or a central forced air add-on furnace, and it is a domestic hot water heater if you wish it to be. Whatever the operational mode you choose, it is a supersophisticated—and patented—wood powered source of heat.

Unlike conventional woodburners. the DownDrafter forces unburned smoke and combustible gases down through an intensely hot bed of wood coals (C) thus superheating volatiles before bringing them in contact with oxygen (B) which results in better combustion of these volatiles.

Good combustion of volatiles namely efficiency-leads to consumption of less wood during a heating season for a given amount of total heat output.

The burn rate and heat output are evenly maintained at pre-selected levels in two ways: 1. the firebox chamber functions as a wood magazine (A) which steadily renews the coal bed by gravity as fuel is consumed; 2. an adjustable bi-metal thermostat admits more or less air to the combustion chamber, thus governing combustion of the volatiles.

The extremely even heat output resulting from these two forms of regulation has been graphed in The Woodburner's Encyclopedia by Dr. Jay Shelton.

The DownDrafter features two internal plenums which continuously transform radiant heat into warm air which is, in turn, either circulated by the blower directly into the rooms to be heated, or into a forced air furnace's plenum for redistribution via ductwork.

Conversion to a central mode is simple, inexpensive and not necessarily permanent. All that is required is two manifolds which capture the heated air from the plenums (and cost about \$50) and a little pipe to make the connection.

Similarly, a hot water coil can be easily inserted into either plenum and connected to your domestic hot water tank—and as easily disconnected at a later date should you wish. The coil costs less than \$150 and should pay for itself in one heating season.

The DownDrafter features solid

construction of welded steel plate, including a 1/4" top, cast iron grates and baffles, airtight cast iron loading door and separate ash cleanout door. It comes with a thermometer to monitor stack temperatures and adjustable electrical thermostat which controls the on/off temperature setting for the 265 CFM blower.

The DownDrafter is protected by U.S. Pat. No. 4,194,487.

## **Specifications**

H/W/L: 32 x 26 x 34 in.

Flue Size: 8 in. Weight: 500 lbs.

Flue Height: 31 in. Log Length Cap.: 24 in.

Performance: 60,000 BTU/hr. Firebox: 5 cu. ft., steel,

cast iron, firebrick

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