

# THINK DIFFERENT. THINK NAPOLEON.

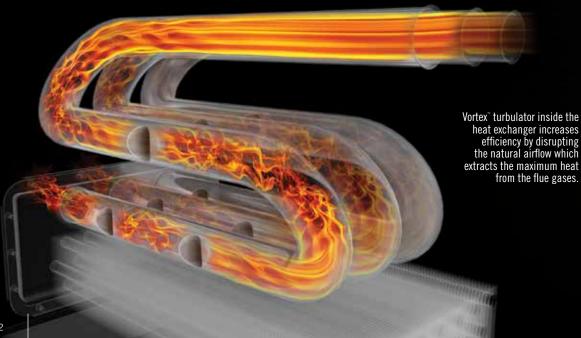
Napoleon's Hybrid Series furnaces boast clean energy with sleek hybrid fuel designs. Hybrid furnaces switch from wood to their secondary heat source automatically. If the furnace runs out of wood, a second thermostat controlling the optional electric, oil or gas components will engage and keep your house warm even if you are not home. During power failures, the wood burning portion uses gravity air flow for emergency heating. Napoleon's Hybrid Series Furnaces are extremely clean burning and certified to the latest emission standards (CSA B415.1-10) with efficiency ratings as high as 77.2%. The Napoleon Hybrid Series are among the cleanest, most efficient furnaces on the market.

## That's Napoleon.



Napoleon's wood and 9600 gas furnace combination is an award winning product. Napoleon's 9600 features a patented vortex turbulator for top performance. The wood and gas combination work together to efficiently provide home comfort all season long.

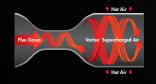




#### **Conventional Heat Exchanger** Hot air radiating 700°



#### Patented Vortex Technology **Heat Exchanger** Hot air radiating 800°



#### Combined with a Napoleon gas furnace and the HMFK-GT transition kit





9600 is wifi capable



Vesta Award Winner



The Editor's at Green Builder magazine have selected the HMF150 for their HOT 50 Product list; a collection of advanced products that their editor's believe will have a significant impact on sustainable construction.

## TRIPLE FUEL COMBINATIONS

## Hybrid150 & 200

With a firebox volume of 3.4 cu. ft. the Hybrid 150 will handle heating requirements up to 2000 sq. ft. while the Hybrid 200's 4.5 cu. ft. capacity will provide heat for areas up to 3000 sq. ft. for well insulated homes. Both models are also now Central A/C adaptable for further convenience and versatility.

- 1. Clean out door
- 2. Wood heat exchangers
- 3. Cabinet
- 4. Bypass damper
- 5. Ceramic glass or solid insulated cast door
- 6. 4" Ash lip
- 7. Ash dump & pan
- 8. Optional stainless steel oil combustion & heat exchanger module
- 9. Opening for ductwork
- 10. Air control
- 11. Direct outside air
- 12. 6" Flue
- 13. Outside air collar
- 14. Bypass damper control rod
- 15. Baffle
- 16. Stainless steel secondary air tubes
- 17. High temperature refractory liner
- 18. Oil exhaust
- 19. Opening for return air duct (left or right side option)
- 20. Blower (left or right side option)
- 21. Optional electric element
- 22. Optional oil burner module
- 23. Wood fire chamber
- 24. Stainless steel replaceable airwash system
- 25. Levelling legs
- 26. Cleaning brush and rod come standard
- 27. Heat resistant leather gloves come standard

cabinet features sound dampening, high density fibre insulation.

Optional electric element.

Available in 15, 18 & 20 kW for Hybrid 150.

Available in 18, 20 & 25 kW for Hybrid 200.



Heavy duty, 24 gauge powder coated

The modular component design allows the blower module to be moved to either side of the main furnace to facilitate installation.

Return air

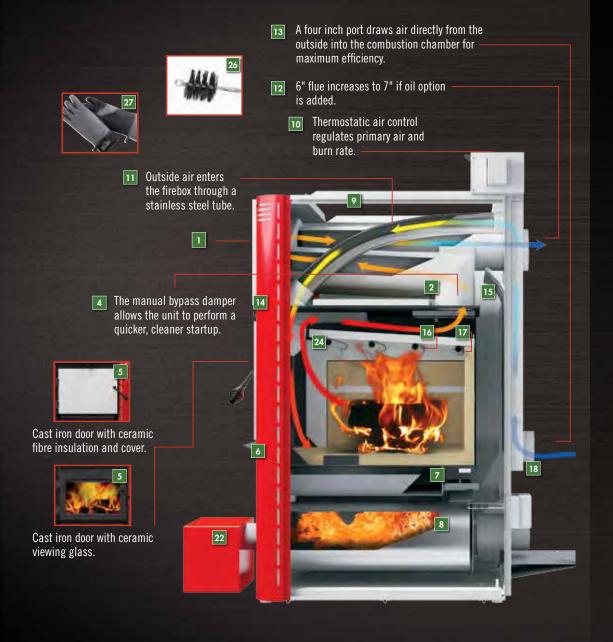
filters.

designed to use

19

standard 16" x 25" furnace

Blower, air ducts and electric furnace module can be installed on the left or right side of the furnace for versatile installations.



### **ADVANCED COMBUSTION SYSTEM**

#### Oil Furnace:

The stainless steel combustion chamber/heat exchanger of the oil furnace module can be connected to your choice of Beckett or Riello high-efficiency burners to give you many years of reliable and safe performance.

#### Wood Furnace:

A stainless steel tube combustion system achieves a secondary burn cycle. Not only are you getting energy from the wood, but also from the wood gases which are mixed at the precise ratio of temperature and oxygen. To achieve an extraordinary clean burn without a catalytic combustor, horizontal jets of super heated secondary air are mixed with the fire's smoke to burn off released smoke particles. You can watch the torch-like secondary flames just below the ceiling during the burn. This results in more heat, cleaner exhaust, fast start up, less chimney maintenance and less trips to the woodpile.

### TRIPLE FUEL COMBINATION ADVANTAGES

Leave home for an extended period without worrying about how to keep your wood furnace operational. Napoleon Hybrid Series furnaces switch from wood to the secondary heating source automatically. If the furnace runs out of wood, a second thermostat controlling the optional electric, oil or gas components will keep your home warm even when you're not there. During power failures, the wood portion of the furnaces are designed to use gravity air flow for emergency heating. High fire can be maintained by using a manual override on the primary air control. The stainless steel combustion chamber / heat exchanger of the oil furnace module can be connected to your choice of Beckett or Riello high-efficiency burners to give you many years of reliable and safe performance. Depending on the Hybrid model, optional electric heating modules are available in 15, 18, 20 and 25 kW ratings.

## MODULAR DESIGN OFFERS FLEXIBLE INSTALLATIONS

Napoleon's Canadian made 9600 Series gas furnace has been configured to operate with the multi-fuel Hybrid. Combining the environmentally conscious features of the Hybrid furnaces with the efficiency of the 9600 Series gas furnace offers superior performance. Napoleon's Hybrid furnaces are designed with features such as insulated cabinets and knockouts on both sides to offer multiple configuration options and incredibly low clearances for easy installation. The various configurations can be seen below - left hand return air configurations are shown, right hand return air configurations can be achieved by easy reversal of side panels.



Wood only furnace





Add-on wood furnace to your existing heating system





A combination wood / electric furnace







A combination wood / oil furnace







A triple-fuel wood / oil / electric furnace







## **HYBRID WOOD BURNING CYCLE**

Hybrid 150 and 200 WOOD HEATING CYCLE 80lb - Full Load 110lb - Full Load

Hybrid 150	Hybrid 200					Dependant on	
110,000 BTU's	150,000 BTU's	Maximum Burn Rate				Fuel and Load	
	100,000 BTU's	Average Burn Rate	Refuel	Retuel	1	Refuel	
	o otart		Use a Propane Gas, Oil or	Electric back-up heat source to le	evel out the heat cycle.		

Use the following chart as a general guideline for selecting either the Hybrid 150 or Hybrid 200 based upon heat loss calculation results for the application being considered.

Model	Calculated BTU's Required		
HMF150	40,000 - 60,000 BTU's		
HMF200	60,000 - 100,000 BTU's		

## **NAPOLEON - CELEBRATING OVER 40 YEARS OF HOME COMFORT PRODUCTS**







#### **SPECIFICATIONS**

	HMF150	HMF200
Maximum peak input capacity (wood)*	150,000 BTU's	200,000 BTU's
Maximum peak output capacity (wood)*	110,000 BTU's*	150,000 BTU's*
Average output capacity (wood)* - see graph below	60,000 BTU's*	100,000 BTU's*
Optional oil furnace module (input)	70,000 - 93,000 BTU's / Up to 85% AFUE	70,000 - 93,000 BTU's / Up to 85% AFUE
Electric furnace module (optional)	51,000 - 70,000 BTU's (15 - 20 kW)	70,000 - 85,000 BTU's (18 - 25 kW)
Efficiency (wood) (maximum)**	72.1%	77.2%
Emissions (wood)	3.4 grams per hour	4.5 grams per hour
Blower	4 speed - 1400 CFM	4 speed - 1400 CFM
Recommended exhaust pipe size (wood only), (in)	6	6
Recommended exhaust pipe size (wood/oil/combo), (in)	7	7
Type of chimney	High temperature 6"	High temperature 6"
Max. Log length (in)	24	30
Loading capacity	3.4 cu. ft. / APR 110Pds	5 cu. ft. / APR 110Pds
Furnace dimensions (complete with blower), (in)	48 w x 32 d x 52 h	48 w x 39 d x 52 h
Furnace dimensions (wood/oil with blower), (in)	48 w x 42 d x 52 h	48 w x 49 d x 52 h
Furnace dimensions (wood/electric with blower), (in)	60 w x 32 d x 52 h	60 w x 39 d x 52 h
Furnace dimensions (wood/electric/oil with blower), (in)	60 w x 42 d x 52 h	60 w x 49 d x 52 h
Minimum clearance to combustibles (in)	14 sides x 24 back x 48 front	14 sides x 24 back x 48 front
Firebox dimensions (in)	18 w x 24 d x 13 ½ h	20 w x 32 d x 13 ½ h
Firebox front opening (in)	16 ½ w x 9 ½ h	16 ½ w x 9 ½ h
Hot air plenum dimensions (in)	22 w x 24 d	22 w x 31 d
Cold air plenum dimensions (in)	14 w x 23 d	14 w x 23 d

<sup>\*</sup>BTU output is not a continuous, steady output; it cycles by the amount and frequency with which the fuel is loaded in the furnace. \*\*Depending on burn conditions





24 Napoleon Road, Barrie, Ontario, Canada L4M 0G8 103 Miller Drive, Crittenden, Kentucky, USA 41030 7200 Trans Canada Highway, Montreal, Quebec, Canada H4T 1A3

Tel: 1-866-820-8686 Fax: 705-725-1150

hvac@napoleonproducts.com napoleonheatingandcooling.com















**Authorized Dealer** 

Certification Standards: CSA B366.1-M91. B140.4-04. B212-00. UL 1995/CSA C22.2 No.236. UL 391. UL 727.CSA B415.1-10 All specifications and designs can change. Registered trademark of Wolf Steel Ltd.