

VALLEY COMFORT WOOD BURNING FURNACES AND HEATERS

www.valleycomfort.com

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This section contains product and TECHNICAL DATA only.
For additional information and product pricing please contact your local **ECCO** Sales Branch.

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ASHRAE

American Society of
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HRAI

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HARDI

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SMACNA

Sheet Metal and Air
Conditioning Contractors'
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www.smacna.org



SPIDA

Spiral Duct
Manufacturers
Association
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WOOD FURNACES — MP80

Wood heat “feels so good” and a central forced air system means that this warm feeling is spread evenly throughout your home.

The heart of this unit is the efficient combustion chamber/heat exchanger based on the famous Valley Comfort 4 port draft principle. The MP80 can be used as an independent wood furnace, with the optional 900 CFM blower or added on to a gas, oil or electric furnace. Automatic switchover between fuels is as simple as setting the thermostat.

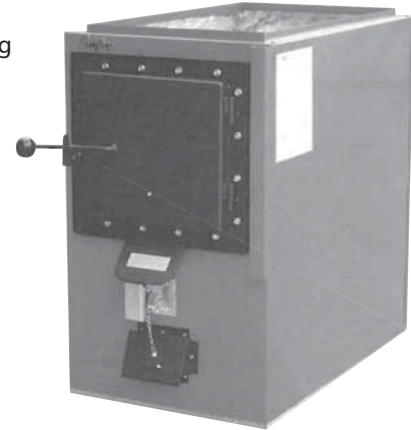
Loading the large capacity (4 cubic foot) cast iron lined fire box is easy through the 12" x 13" fire door. It will accommodate logs up to 24 inches to provide an average 8 hours of continuous burning.

The MP80's reliability is proven in thousands of homes across the country and is proudly supported by qualified dealers coast to coast.

Valley Comfort has been a leader in the solid fuel industry for over 50 years offering quality, service, and reliability.

Features:

- 18" x 30-1/2" warm air plenum outlet
- Five-year limited warranty on combustion chamber/heat exchanger
- Convenient 6" rear flue pipe
- Baked enamel finish
- Adjustable secondary air is preheated by passage through door chamber and introduced high into firebox for better secondary burn
- Alternate furnace may be positioned on either side of add-on
- Foil backed insulated steel cabinet assures maximum control of heated air, reducing direct radiation
- Combustion air regulated by wall thermostat and electric control system
- Close 2" hot air plenum clearance
- CSA Approved fan/limit, electrical controls and interlock relay provides automatic switchover to alternate furnace while preventing overheating
- Famous distributed draft Valley Comfort design firebox with stainless steel baffle for high efficiency, takes full 24" wood
- Large 13" x 12" firebox door for easy loading and cleanout
- Long-lasting efficient cast iron firebox liners
- 948 cu. in. preheat chamber surrounds combustion area and low velocity here assures super-heated combustion air enters through four air ducts above firebed to provide maximum efficiency



Use as a Wood
Furnace Only

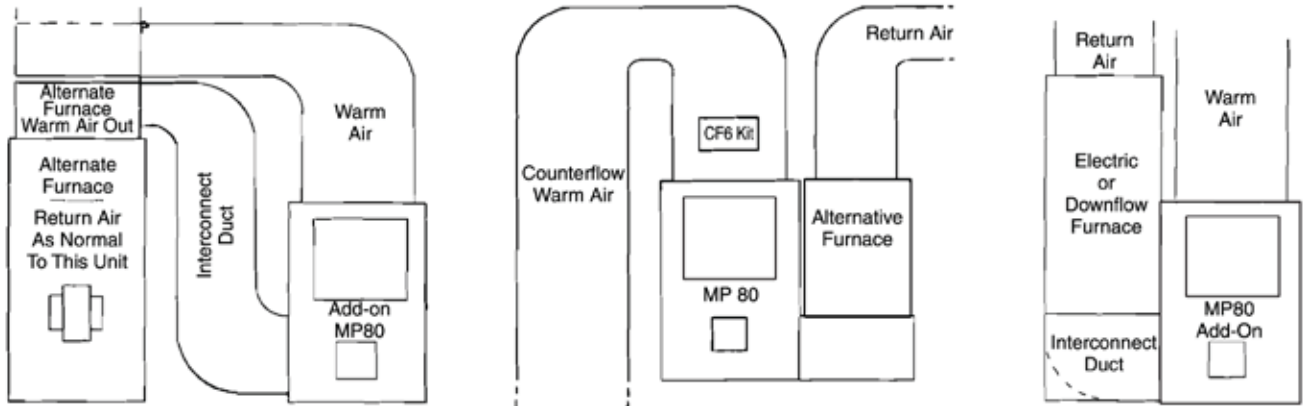


Add on to Electric,
Gas or Oil Furnace

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WOOD FURNACES — MP80 (cont'd)

TYPICAL INSTALLATION DIAGRAMS



APPROVALS:

- WH PN009 to CSA B366.1
- For use with the following furnaces
 - 1) Oil – Input .81 to 1.2 USGPH
 - 2) Gas – Maximum Output 120,000 BTU
 - 3) Electric – 10KW to 25KW

Minimum alternate furnace fan capacity - 900 CFM

CAPACITIES:

- 80,000 BTU
- 4 Cubic Foot Firebox

DIMENSIONS:

- Fuel Door Opening: 13" × 12"
- Firewood Length: 24"
- Flue Pipe: 6"
- Interconnect Duct: 12" × 18" minimum
- Warm Air Plenum: 18" × 30-1/2"
- Controls: All included, CSA approved
- Center of Flue Height: 26-3/4"
- Length: 35"
- Width: 21"
- Height: 35"
- Weight: 325 pounds

CLEARANCE TO COMBUSTIBLES:

- Warm Air Plenum and first six feet of duct: 2"
- One side: 8"
- Front: 48"
- Flue: 18"

OPTIONS:

- Domestic Hot Water Coil
- Counter Flow Kit
- Blower Assembly

LIMITED WARRANTY:

- Five (5) years on combustion chamber heat exchanger
- One (1) year on electrical controls

Photos and illustrations are for descriptive purposes only. Changes dictated by the manufacturer's continuing design improvement program may not be shown. Contact local building or fire officials regarding restrictions and installation inspection requirements in your area.

CIRCULATORY WOOD HEATING SYSTEMS — VALLEY COMFORT 95

The Valley Comfort 95 circulatory wood heating system has the same qualities of heating efficiency, safety and durability which has earned Valley Comfort its over 50-year reputation for dependable wood heating. Improved heat circulation features are added to provide discriminating homeowners with heating equipment which enhances any living area. In addition, an optional, quiet thermostatically controlled 400 CFM blower will move the heat almost anywhere in a home.



Features

- **Safety** – The Valley Comfort’s air supply is controlled by an automatic thermostat which is pre-set by the homeowner to provide the temperature level required. It automatically regulates the heat output unlike the so-called heat regulators on most stoves. In case of a runaway fire it will shut off the air supply completely.
- **Efficiency** – The unique patented 4-port air supply system provides even burning of logs in the unit and the air convection system moves air around the house.
- **Convenience** – Overnight burning time on one fill of 2' logs is usual with the Valley Comfort heater thanks to the special secondary combustion supply of pre-heated fresh air to burn wood gases.
- **Reliability** – Cast iron liners and metal parts made on precision dies all go towards a home heating system which lasts and lasts and lasts to give good, reliable trouble-free heating for the homeowner.
- **Childproof** – Unlike radiant stoves, Valley Comfort heaters can be safe to a child’s touch – an important feature when there are small children around.

How it Works

Pre-heated secondary air is passed through to the top of the combustion chamber. This allows the unburned volatiles to ignite and greatly improves the efficiency of the heater.

The combination of pre-heated primary air and pre-heated secondary air allows the heater to burn wood with greatly improved efficiency over wood-burning heaters of old.

The sensitive automatic thermostat allows you, at any time, to select the best temperature for your home comfort.



Specifications — Model VC95

HEATING CAPACITY	3 to 7 rooms
WIDTH	34-1/2"
DEPTH	22-1/4"
HEIGHT	35"
FLUE SIZE	6"
FUEL DOOR	9-1/4" x 10-1/4"
LENGTH OF WOOD USED	24"
CAPACITY	4-3/4 cubic feet
400 CFM BLOWER	optional
LINERS	cast
SHIPPING WEIGHT	265 lbs.

Clearances

MINIMUM CLEARANCES TO COMBUSTIBLE MATERIALS

Top: 48" Wood Charging End: 48" Opposite End: 12"
Rear: 24" Flue Pipe: 18" Front: 36"

Combustible floor must be protected with a minimum of 9/32" thick non-combustible material extending 6" beyond rear, front and left side of unit and 18" beyond fire door.



– E.&O.E. – May not be in stock at all branches, if so please allow 10 days for delivery. –
– All Prices F.O.B. Our Warehouse – Subject to Change Without Notice – All Taxes Extra –

HIGH EFFICIENCY WOOD FURNACES – VC 120

Wood only or add-on to Gas, Electric or Oil

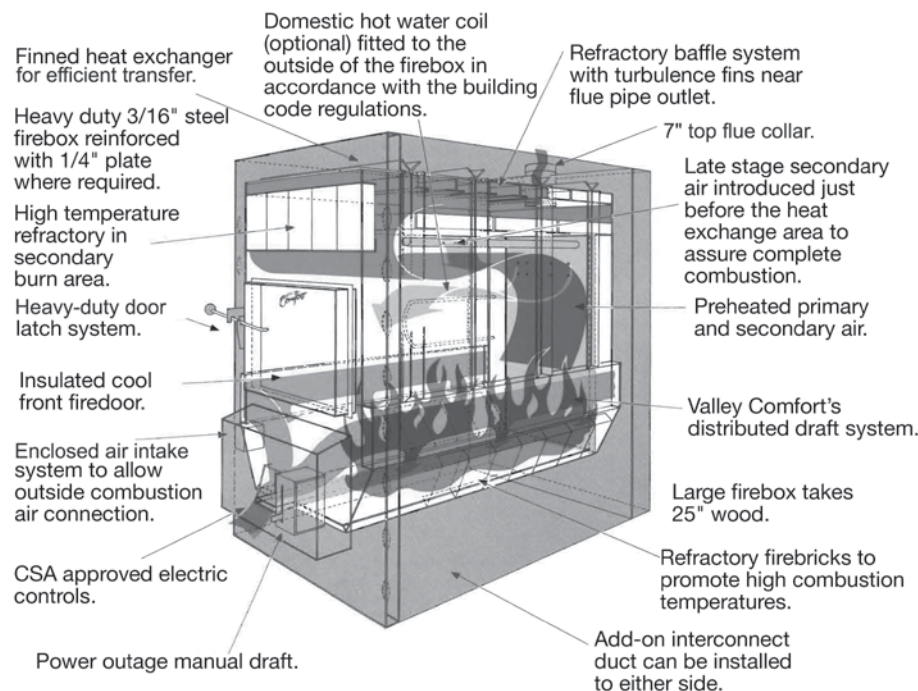
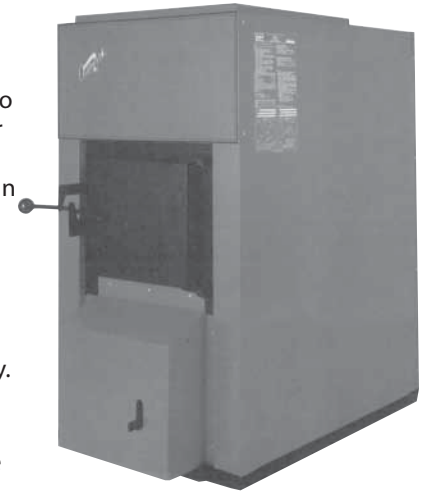
As a leader in the wood-burning furnace industry in Canada Valley Comfort is proud to present their VC 120. The VC 120 brings the latest available technology right into your home. Wood heat has always been a comfortable, reliable source of home heat. Their main objective in developing the VC120 was to advance the state of the art, keeping in step with new technology.

Environmental concerns are now shared by most people on a global scale. You can address those concerns on a personal level by assuring maximum efficiency in your wood-burning system and methods. Energy efficiency goes hand in hand with environmental protection. To that end, the VC 120 was developed to answer these modern day concerns while providing old-fashioned comfort, reliability and economy.

The VC 120 is a high output wood furnace designed for large homes and small commercial installations. Your Valley Comfort dealer will assist you in choosing the correct size furnace for your needs. This furnace has been approved to the latest code requirements and can be used as an add-on to electric, gas or oil furnaces; or as an independent wood furnace with a suitable blower system. When used in combination with an alternate fuel furnace, you get the security and convenience of a back-up system. A unique "power out" capability has been built into the VC 120. This means you have a source of heat even if the house power should fail. Under power-out conditions, the furnace output is limited because there is no distribution fan, but using gravity flow, you will be assured of emergency warmth all the time.

Economical installation costs have also been considered. The 7" top vent flue size reduces overall costs, as does the close clearance approvals for the plenum and duct system. At Valley Comfort, they feel that economy is a long-term consideration.

Valley Comfort refuses to cut corners that would compromise their overall product quality. Long-term economy is assured by this commitment to quality. Valley Comfort has been built on this commitment and that is one reason they have been leaders in the industry since 1953.



COMBUSTION ■ Converting wood from a stored energy source (your wood pile) to a useful, controllable heat source is a complex series of events called combustion. In today's world of environmental and energy conservation concerns, proper control of this process becomes vital. In designing the VC 120, Valley Comfort has gone to great detail to assure maximum efficiency in the combustion chamber. They have carefully brought together the proper mix of preheated primary air and secondary air in a turbulent high temperature firebox to assure a clean-burning, high-output furnace.

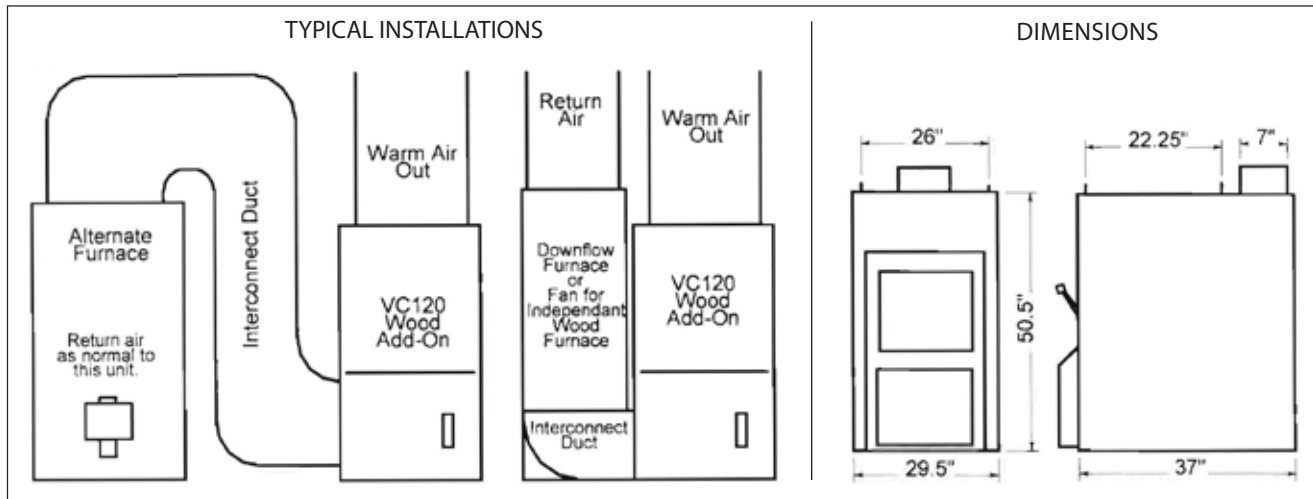
PRIMARY AIR ■ This is the fresh air supplied to the main combustion area. The VC 120 primary air is preheated and fed to the firebox through six size-graduated ports. To assure proper turbulence, the air is introduced above the firebricks down into the main burn area.

SECONDARY AIR ■ During the normal wood-burning cycle, combustible gases are emitted (boiled off) from the wood. Careful engineering design is needed to ensure combustion of these gases. Preheated secondary air in a carefully controlled ratio is added late in the combustion flow to ensure maximum secondary burn. This process is enhanced by high temperatures present in the baffle area. Brick baffles used in the VC 120 contribute to this temperature stabilization.

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– All Prices F.O.B. Our Warehouse – Subject to Change Without Notice – All Taxes Extra –

HIGH EFFICIENCY WOOD FURNACES — VC 120 (cont'd)



SPECIFICATIONS AND DIMENSIONS

Approvals WH – CSA B366 1M87, Report # 6024

For use with the following installations:

Minimum fan capacity all types 900 CFM

1. Independent wood furnace
2. Add-on to electric 15 kW to 30 kW
3. Add-on to gas 80,000 to 140,000 BTU
4. Add-on to oil .81 to 1.25 USGPH

Rating	120,000 BTU nominal	
Height	50.5"	
Width	29.5"	
Length	37"	
Flue Collar	7" Diameter	
Weight	800 lbs. (shipping)	
Flue pipe centre to rear	5.5"	
Hot air plenum opening	22.25"L x 26"W	
Fire door opening	15" x 13"	
Firebox:	Length	27"
	Width	17"
	Height	32"
	Capacity	8.5 cu.ft.
Fuel length	25"	
Recommended draft	.04 water column	
Controls:	All included, CSA approved	

Clearance to combustibles:

Plenum:	2"
First 6' of duct:	2"
One side:	8"
Opposite side:	18"
Front:	48"
Flue:	18"

Construction:

- 3/16" Firebox
- Cast Iron Side Plates
- 3/16" Heat Exchanger
- 20 Gauge Cabinet
- Brick Baffles and Firebox Liners

Firebox design:

1. Distributed primary preheated air
2. Post burn secondary preheated air
3. Brick baffle system

Limited Warranty:

- 5 years on combustion chamber
- 1 year on electrical parts



CATALYTIC INDOOR FURNACES — APEX-CBT

Blaze King's new APEX-CBT, Catalytic indoor furnace is the first furnace to meet and exceed testing requirements of the rigid B415 test standard. The B415 test standard measures both overall efficiency as well as emissions. You'll be impressed with the test results:

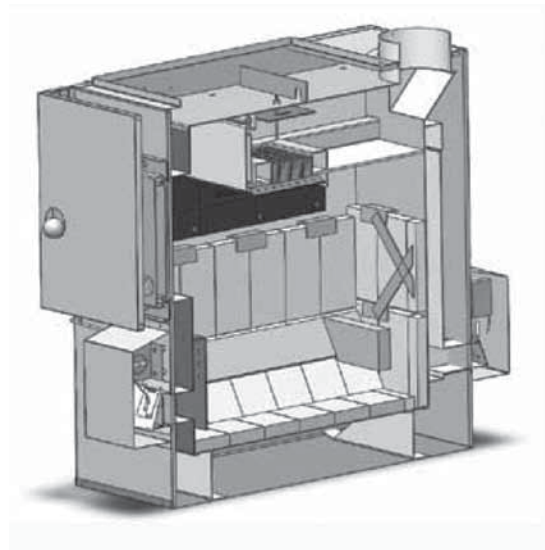
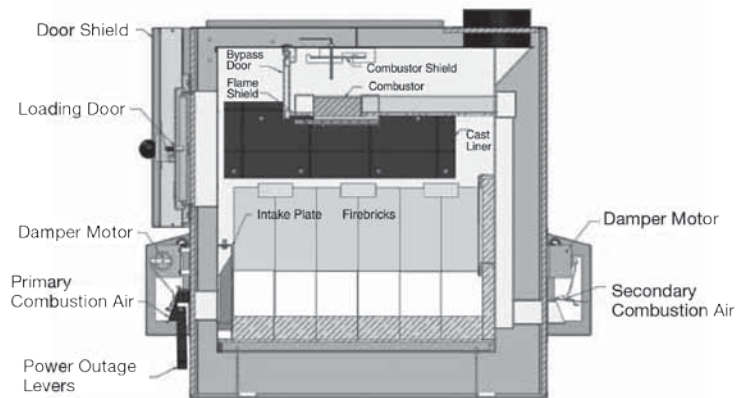
Average Efficiency:	87.2%
Low Heat Value (LHV):	90.7%
BTU Output-High:	47,996
BTU Output-Low:	13,779
Emissions gr/hr:	3.3

Actual BTU output can be increased up to 80,000 BTU's based on wood size, species of wood, moisture content, times between reloading, and draft. Blaze King recommends a flue draft of .05" of water column.



Features:

- Accepts large 26" Logs or Fuel Length
- Use as Stand Alone Furnace or in Combination with an Existing Furnace
- Long Overnight Burns with large 5.7 Cu. Ft. Firebox
- Catalytic Post Burn with Preheated Secondary Air
- 12 Gauge Firebox with Cast Liner and Thermal Firebrick
- 20 Gauge Insulated Cabinet
- Wall Mounted Thermostat
- Optional VB 1000 Blower

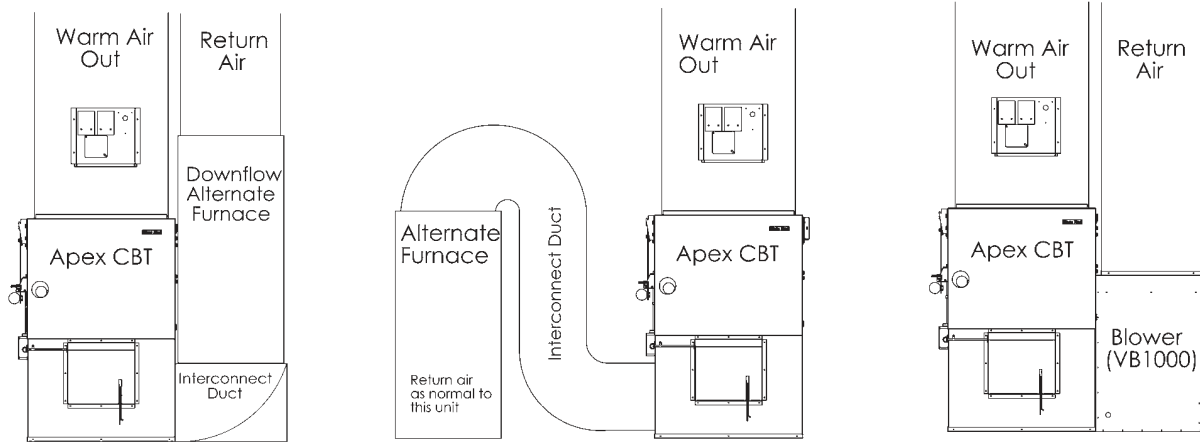


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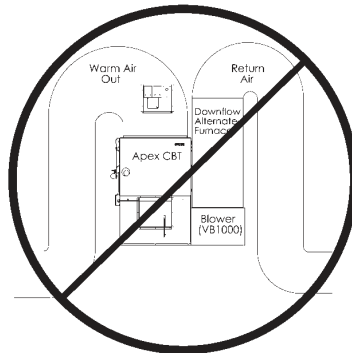
CATALYTIC INDOOR FURNACES — APEX-CBT (cont'd)

POSSIBLE CONFIGURATIONS

There is great flexibility in your choice to help save our environment. You can use the APEX-CBT as a stand-alone renewable fuel furnace to heat your home or reduce your monthly heating bill by using it in combination with your existing furnace system. As a stand-alone furnace, you'll need the Blaze King VB1000 blower. However, if you use the APEX-CBT in combination with your existing system, you'll take advantage of your already present furnace and blower. Here are just a few possible configurations:



The APEX-CBT Output Plenum Size measures a large 25.75" x 24", accommodating all the hot air needed to keep you comfortable in your home. You cannot however install the APEX-CBT to where the warm air outlet operates below the height of the APEX-CBT furnace cabinet.

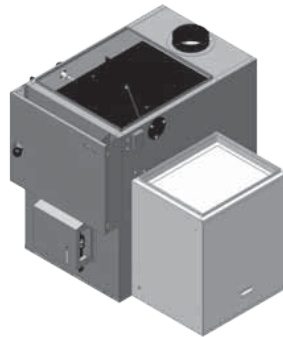


When used in combination with your existing furnace please note the restrictions below.

In Combination With:	Maximum Capacity
Gas	120,000 BTU
Electric	30 KW
Oil	.81-1.2 gallon per/hour

You'll Need a Blower

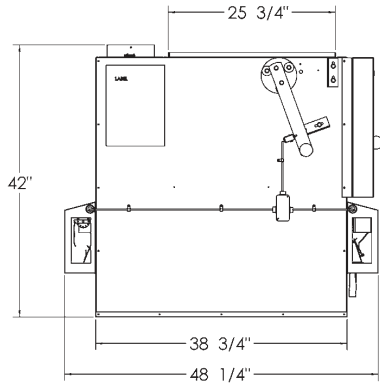
When you purchase your APEX-CBT you'll need a blower system to move the air. In fact, a blower is required. The Blaze King VB1000 is a variable speed 900-1200 CFM blower. It comes with a 24" x 20" air filter. The 1/3rd horsepower, 110V motor operates inside a 20 gauge baked enamel solidly constructed cabinet. To allow for increase airflow, the inlet duct size measures 22" x 17-5/16".



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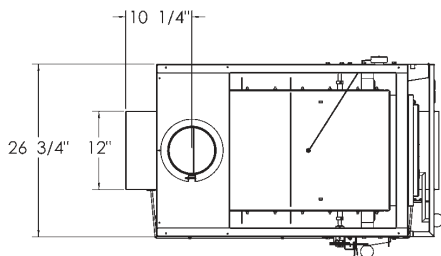
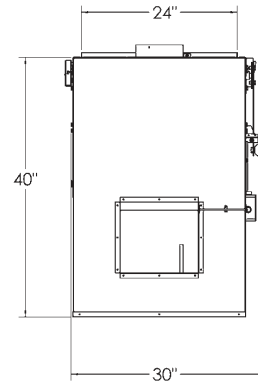
CATALYTIC INDOOR FURNACES — APEX-CBT (cont'd)

CLEARANCES AND SPECIFICATIONS



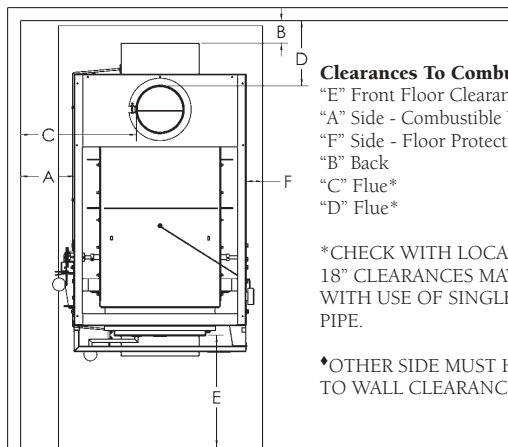
Unit Dimensions

Height	40"/1016mm
Width	26.5"/673mm
Length	48"/1219mm
Fire Door Opening	12" x 13"
Firebox Length	304mm x 330mm
Width	27"/686mm
Height	16"/406mm
Capacity	24"/610mm
Fuel Length	5.7 Cu. Ft.
Weight	26"/660mm
Flue Collar I.D.	550lbs./253kg
	7"



Floor Protection

When installed on a combustible floor, floor protection of a non-combustible shield is required underneath unit protruding 8" to each side and 18" in front of loading door measuring: 66" x 42.5"/1676mm x 1080mm.

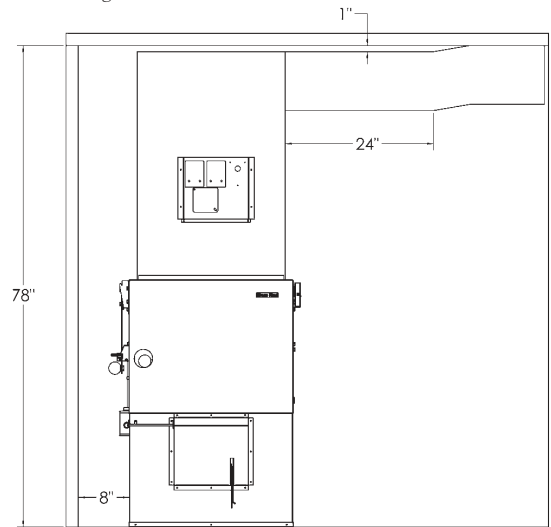


Clearances To Combustibles

"E" Front Floor Clearance	18"/457mm
"A" Side - Combustible Wall ♦	6"/150mm
"F" Side - Floor Protection	8"/203mm
"B" Back	3.5"/90mm
"C" Flue*	16"/410mm
"D" Flue*	10"/254mm

*CHECK WITH LOCAL CODES.
18" CLEARANCES MAY BE REQUIRED WITH USE OF SINGLE WALL STOVE PIPE.

♦OTHER SIDE MUST HAVE 18"/457mm TO WALL CLEARANCE



NOTICE: Improper installation of your wood burning appliance or failure to operate it according to the guidelines detailed in the owners manual, may negate your warranty and endanger your home or family. Contact local building or fire officials about restrictions and installation requirements in your area. Photos and illustrations are for descriptive purposes only. Changes dictated by the manufacturer's continuing design improvement programs may not be shown. These products are covered by one or more patents in the United States, Canada and other countries. All Blaze King® Industries products are manufactured under license agreement from: Blaze King® Industries, 146 A Street, Walla Walla, WA. 99362 and in Canada by Blaze King® Systems Inc. 1290 Commercial Way, Penticton BC V2A3H5. Design and specifications subject to change without notice. 10/09 CP76778 2.5M