

CENTRAL BOILER

E-CLASSIC®

Outdoor Wood Furnaces



CentralBoiler.com

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General Information	

Testimonial-

"I recently bought an E-Classic from a local dealer. When the heater arrived I was skeptical that it could heat my entire house. My home is 8000+ square feet. Well, I'm happy to say I was wrong. This thing is amazing. In the dead of winter I was burning about \$1600 a month in heating oil and propane to heat my house and hot water. I now have more hot water than I know what to do with and my cost savings are out of this world. I know this sounds too good to be true, but it is."

Thad, AK





Thank You for Considering a Central Boiler Product

Central Boiler was established in 1984 and is North America's largest manufacturer of outdoor wood furnaces. We make it our goal to provide our customers with the finest outdoor wood furnaces available anywhere. For you as a consumer, wood heat offers many advantages. This brochure provides you with information on our clean, efficient approach to wood heat. It also highlights the benefits of heating your home or business with an E-Classic outdoor wood gasification furnace.

Testimonial-

"In fact, the E-Classic is quite amazing. I can hardly believe how efficiently this furnace operates. Nothing is wasted. Nothing is more satisfying than walking by the nearly stopped electric meter and stepping into a house more warm and comfortable than it's ever been. All of this with almost no smoke or ash. Simply amazing!"

Bo, IN



Testimonial-

"After using my E-Classic for a year I love it. This is the least amount of work I've ever done to heat completely with wood. I know people with geothermal units who still watch the thermostat use, while I'm at 76 to 78 degrees and warm. Have no regrets at all."

Mark, ON

The E-Classic Can Work for You

The E-Classic outdoor wood gasification furnace is located outside, typically 30 to 50 feet (but as far as 500 feet) away from your home or business, and works with any existing heating system. A water jacket surrounds the furnace firebox and heat exchanger. Heated water is circulated to the home or building through insulated underground pipes. Water-to-air or water-to-water heat exchangers or direct circulation conveys the heat into the structure's forced-air furnace, boiler or radiant floor heating system. This allows for normal thermostatic control for safe, even, clean and comfortable heat.



Heats Entire Home While Saving You Money

Wood is inexpensive or often free. The ability to heat multiple buildings and water with wood can virtually eliminate your heating bills. The E-Classic can in some cases pay for itself in the first two years of use. Over a ten-year period, a homeowner or business may save \$20,000 to \$100,000 or more in heating costs. Our E-Classic offers you an alternative that will save you money so you can set your thermostat where you want with no worries.

A Safe Alternative with Peace of Mind

By keeping the fire outside the home, the E-Classic eliminates the dangers and mess associated with traditional indoor wood stoves. Outside burning removes the threat of devastating chimney fires, dangerous carbon monoxide or oxygen depletion which affects your indoor air quality. It also eliminates the smoke, ashes, odors and soot buildup on walls and ceilings inside your home that indoor burning creates

Burns Less Wood

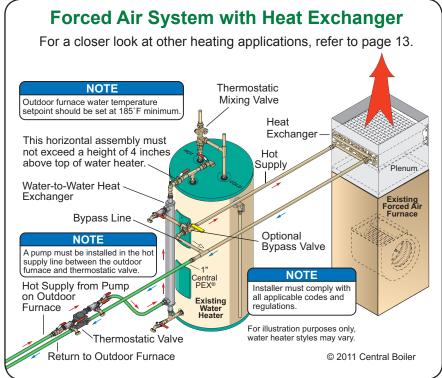
The E-Classic uses a three-stage combustion process to burn wood so completely that combustion efficiencies approach 100%. With the self-cleaning heat exchanger, the E-Classic produces extremely low emissions per Btu of heat delivered and is one of the cleanest ways to heat with wood. The E-Classic uses 25% to 70% less wood compared to traditional wood furnaces or other brands of outdoor wood furnaces. This means less cutting and splitting which significantly reduces the time you spend preparing the wood.

Improved Standard of Living

It's the alternative that eliminates the negative effects of burning wood indoors and increases the advantages of wood heat. It's a choice that can improve your family's living environment and standard of living while eliminating the fire hazards and time-consuming chore of tending a traditional wood stove. The E-Classic saves you time and means less work because it burns larger pieces of wood. The large firebox is designed for easy loading of wood.

Reduce Your Carbon Footprint with Renewable Heat Source

Wood is renewable and carbon neutral. Conventional sources of heat such as propane, natural gas, fuel oil and electricity deplete our irreplaceable fossil fuels. They are also subject to constant price fluctuations. The E-Classic outdoor wood gasification furnace provides a heat source free of foreign nation influence and "the grip of big oil." It takes the age-old idea of heating with wood and modernizes it.



E-CLASSIC

1. Patented Charge Tube

Crossfire air system adds preheated air in all the right places around the base of the fire. As the wood begins to gasify, the gases are added to the extremely hot oxygen from the patented **Charge Tube**. This starts the secondary combustion process.

2. Large Reaction Chamber™

Final combustion takes place as these gases move downward to the **Reaction Chamber.** There, extremely high temperatures aid in complete combustion. This entire process gives this furnace its high efficiency and extremely low emissions. The large, hinged door provides for easy ash removal.



3. Optional Gas-fired Wood Ignition takes the work and worry out of lighting a fire. With just the push of a button, the power ignition will light the fire. It will also automatically relight the fire if needed, even when you are away from home. It is just that easy.

Burner shown here with guard in open position. Guard protects gas burner when not in use.

- **4. Urethane Spray Foam Insulation** that covers the water jacket gives you the best energy savings, even when the conditions outside are at their worst. This insulation provides a 100% airtight, waterproof seal around the water jacket which makes your wood pile last longer.
- **5. High Capacity Water Jacket** provides a balance between firebox volume and water capacity for optimum performance and safety. Continues to supply heat after the wood load is depleted.

6. Insulated Chimney

Two 4-foot all stainless steel insulated chimney sections are standard. Additional sections are available for extending the chimney when needed.

- **7. All-Weather Steel Siding** is overlapped for tighter weather seal. Panels and corners are powder coated for high durability.
- **8. Vent Cap** design eliminates evaporation.

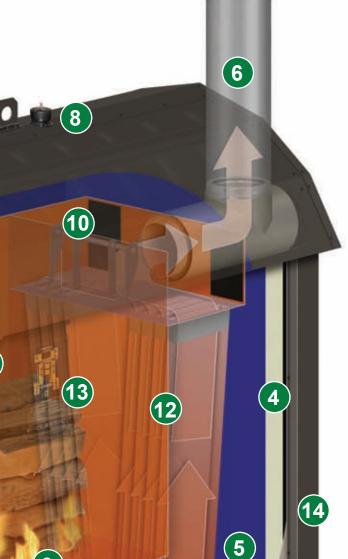
Specifications and design may change without notice. Talk to your local dealer about proper furnace sizing.



9. Triple Insulated Firebox Door is just the right height and features a large opening for easy loading, making your job much easier. The ergonomically designed, lockable door features a Cam Loc door closure that secures the door at all four corners and provides a tight seal each time the door is closed. Its triple insulation keeps the heat in and the cold out for maximum efficiency.







Cutaway View

- **10.** Bypass Door allows you to redirect the exhaust before opening the firebox door. The Bypass Door Alarm reminds you to close the bypass door after you have closed the firebox door for efficient operation of your furnace.
- **11. LED Lights (Photo Electronic Controlled)** The long-lasting, energy-efficient LED night lights save money and enhance safety. They illuminate the inside of the firebox and the front and sides of the outdoor furnace and can be set to conveniently, automatically turn on at night.
- **12. Xtract Heat Exchanger** allows you to get the most heat out of your wood. It is designed to optimize the transfer of heat from the extremely hot gases to the water. The vertical design of the heat exchanger minimizes the amount of maintenance.



13. FireStar II Electronic Controller is your command center. The FireStar II can store and share operational data to help optimize the operation of the furnace. With just the push of a button, you can monitor your furnace or change its settings. The controller's technology also optimizes the gasification process by automatically adjusting the primary and secondary air. This allows for a cleaner and more efficient burn.



14. Insulated Rear Access Panel gives you full access to the Reaction Chamber door, power disconnect and pumps, all from one location. That makes installation and maintenance convenient and easy. The insulated panel keeps the heat in and the cold out, which preheats the combustion air and makes the furnace more efficient.



15. EPA Hangtag The E-Classic 1400, E-Classic 1450, E-Classic 2400 and E-Classic 3200 are all U.S. EPA Phase 2 Hydronic Heater Program qualified.

IR Ignition Ready

Safety tested and listed

Four color combinations to complement your landscape



Realtree™ Camo and Bronze



Green and Bronze



Charcoal and Bronze



Taupe and Bronze



E-Classic 1400	Ignition Ready
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Door
Firebox
Weight2,085 lbs.
Water Capacity
8-Hr Output Rating 107,000 Btu/hr*
12-Hr Output Rating
Manufacturer's Rated Heat Output Capacity 209,000 Btu/hr*

^{*}Based on EPA qualifying test.



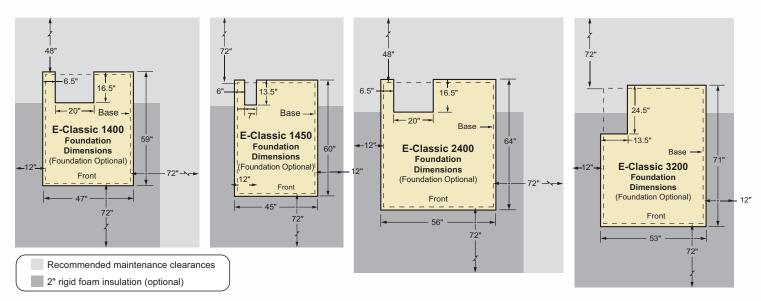
E-Classic 1450 Ignition Ready E-Classic E 1450

Door
Firebox
Weight
Water Capacity 200 Gallons
8-Hr Output Rating 121,000 Btu/hr*
12-Hr Output Rating 80,000 Btu/hr
Manufacturer's Rated Heat Output Capacity 214,000 Btu/hr*

Foundation Dimensions

Outdoor furnace must be installed on a noncombustible foundation that incorporates an enclosure that will prevent supply and return lines from possible exposure to sunlight, fire, or physical

damage that may be caused by an occurrence outside the outdoor furnace enclosure. Foundation may consist of concrete, crushed rock, or patio blocks.



Foundations dimensions are 1-1/2 in. beyond the outside perimeter of the furnace base. Must be installed in accordance with all applicable codes and regulations.



Door	22.5" W x 28.5" H
Firebox	36" L x 43.5" H x 26" W
Weight	2,925 lbs.
Water Capacity	340 Gallons
8-Hr Output Rating	186,000 Btu/hr*
12-Hr Output Rating	125,000 Btu/hr
Manufacturer's Rated	
Heat Output Capacity	250,000 Btu/hr*

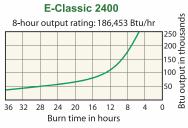


E-Classic 3200 Ignition Ready

Door	22.5" W x 28.5" H
Firebox	40" L x 48" H x 30" W
Weight	3,240 lbs.
Water Capacity	410 Gallons
8-Hr Output Rating	262,000 Btu/hr*
12-Hr Output Rating	175,000 Btu/hr
Manufacturer's Rated Heat Output Capacity	306,000 Btu/hr*

How Btu Output Affects Burn Time









Based on EPA output ratings. Actual Btu output and burn time will be affected by the type of wood burned, its moisture content and other factors.

VESTA Award Wood Products Category

This award honors innovation in design and technology. The E-Classic 2400 was awarded the Vesta award based on features such as the three-stage innovative combustion technology, FireStar electronic controller, Power Ignition and eco-friendly LED lights. The E-Classic 2400's award-winning performance includes its extremely low emissions and 250,000 Btu/hr rating.



ThermoPEX® Insulated Piping System

ThermoPEX is a flexible pre-insulated piping system that saves energy and maximizes system efficiency. ThermoPEX consists of two 1-inch oxygen barrier Central PEX® pipes or two 1-1/4 inch oxygen barrier PEX pipes (supply and return) that are insulated with high-density urethane insulation and a thick, durable, waterproof, UV-protected polyethylene outer jacket. The corrugated design allows flexing for easier installation. ThermoPEX is the best insulated piping system available for your outdoor wood furnace.

Oxygen barrier Central PEX is a high-density, cross-link pipe, rated for 180 degrees F at 100 psi. It is compatible with standard PEX insert fittings which cost much less than competitors' compression fittings. PEX pipes are marked to easily identify supply and return lines.

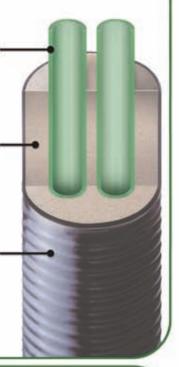
Insulation

Pipe

The high-density urethane insulation provides the ultimate control against heat loss. The high thermal efficiency of the urethane allows for a smaller overall size than some competitors, and provides lower heat loss per foot. The special proprietary formulation of the high density urethane insulation used in ThermoPEX provides ultimate control against heat loss.

Outer Jacket

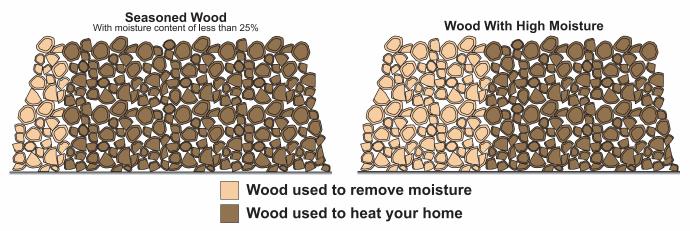
The ThermoPEX high-density polyethylene outer jacket is thick, durable and seamless. It provides the necessary protection and is waterproof. It is corrugated for flexibility and can be easily routed around obstacles. It is also UV-protected and can be installed above ground. It eliminates concerns with ground moisture or water affecting insulating properties of the urethane insulation.



Room Fan Convectors and Panel Radiators



Btu's Lost when Burning High Moisture Content Wood



The difference between a full load of 25% moisture wood and 50% moisture wood is six gallons of water.

Factors that affect your fuel burn rate **Decreased heat loss** Increased heat loss Well insulated building(s) Poorly insulated building(s) Lower Fuel **Higher Fuel** • Minimal cold air infiltration Cold air infiltration Consumption Consumption Warmer temperature Colder temperature · Using seasoned wood with · Using wood with high moisture moisture content of less than 25%

Furnace Sizing Worksheet - Using Previous Heating History Including Water Heater **Fuel Type Fuel Oil Propane Natural Gas Electricity** Wood† gallons gallons cubic feet, therms kilowatts cords Units **Units per Month** x 0.0087/cu.ft Multiplier x 1.18 x 0.78 x 0.037 x 150 x 0.87/therm Sizing Value

New, Well-Insulated Homes & Buildings†† **Total Sizing Value** New well-insulated buildings with R28 walls. R40 ceilings, insulated basement walls. Normal sizing allows for one picture window and one patio door. Calculation does not allow for extremely large glass or air exchange heat losses. Homes that are not well insulated are not applicable in this calculation. Use previous heating history to determine sizing. Suggested Sizing Range **Furnace** We recommend you complete a heat loss estimate (e.g., Hydronics Institute - form 1504WH - whole-house heat loss). 0-475 E-Classic 1400, E-Classic 1450 E-Classic 2400 250-710 Total sq. ft. E-Classic 3200 500-1800* Multiplier x 0.06 Compare your Total Sizing Value to the Suggested Sizing Range for the listed models. **Total Sizing Value** Estimate subject to change

Be sure to consult your dealer when sizing. Previous heating efficiencies and heat loss need to be considered when sizing a furnace. This is only a guideline.

This sizing worksheet calculation estimates the existing fossil fuel (heating oil, propane, natural gas) heating equipment performing at 75% efficiency.

[†]Full cords of medium to high-quality wood.

^{††}Improperly insulated radiant slab heating can dramatically affect sizing requirements and heat load.

For the maximum performance and life of your furnace, always insist on using Central Boiler authorized system parts and accessories.

There is no need to chase from here to there for your parts, accessories and maintenance tools. Central Boiler has them all. Central Boiler has thousands of square feet of space dedicated to inventory which our dealer network may access. Overnight, second day, three day, and ground delivery are available to our dealers six days a week.

To locate your nearest Central Boiler dealer, either visit our website at CentralBoiler.com and use the dealer locator or call 1-800-248-4681.

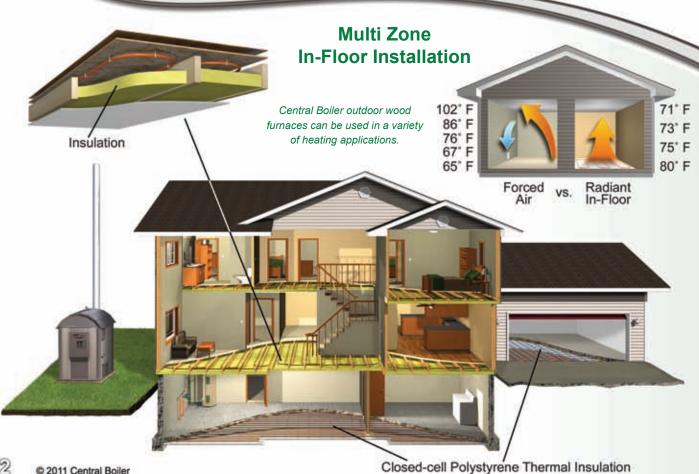
A complete line of parts and accessories

Sample Parts List for Forced Air System

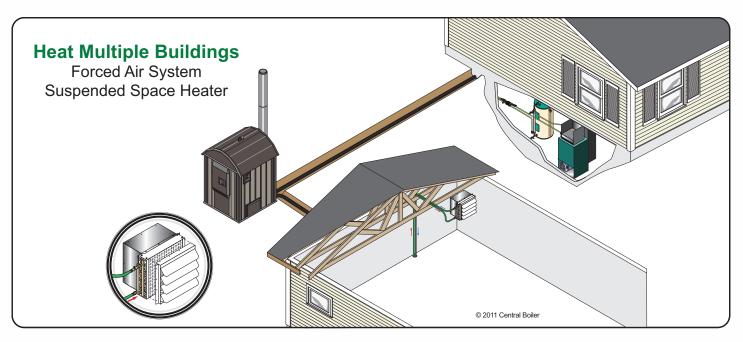
Qty	p/n	Description
1	107	125,000 Btu Heat Exchanger Coil
1	2053	Domestic Water Heater Fittings Kit
1	591	Domestic Water Heat Exchanger
1	171	Circulation Pump
1	224	Isolation Flange Kit, 3/4"
1	588	24 V Programmable Thermostat
1	326	Thermostatic Mixing Valve
1	118	3/4" Close Nipple
1	198	3/4" Ball Valve
6	1330	3/4" MPT x 1" Pex Adapter
8	5978	1" Stainless Steel Clamp
*		ThermoPEX® Insulated Pipe
1	396	Spark Arrestor (Optional)
1	296	Check Valve
**	1650	1650XL Inhibitor Plus
1	297	Ashtrol
1	6593	Ground Rod Kit

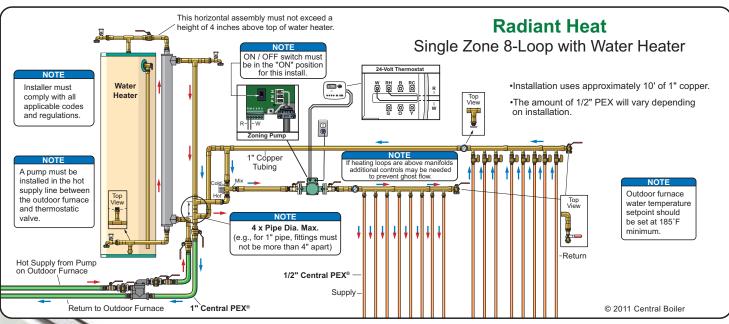
^{*} Installation distance to the outdoor furnace will determine the quantities. Consult dealer on insulation options available.

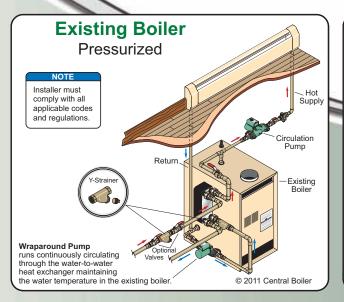
^{**} Amount of inhibitor required will vary with furnace model.

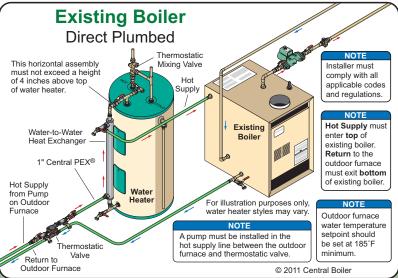


Heating Applications











Authorized Central Boiler Dealers located across the U.S. and Canada

When you're looking for a wood heating system a Central Boiler dealer is there to serve you. A Central Boiler dealer can answer your questions, provide you with literature about the E-Classic outdoor wood gasification furnace and help you choose the model right for your heating needs. To locate a Central Boiler dealer in your area, visit the dealer locator at CentralBoiler.com.

Free 25 Year Limited Warranty

A free 25 year limited warranty is available on the E-Classic if registered at the time of purchase. Central Boiler leads the industry with its commitment to stand behind its outdoor wood furnaces.

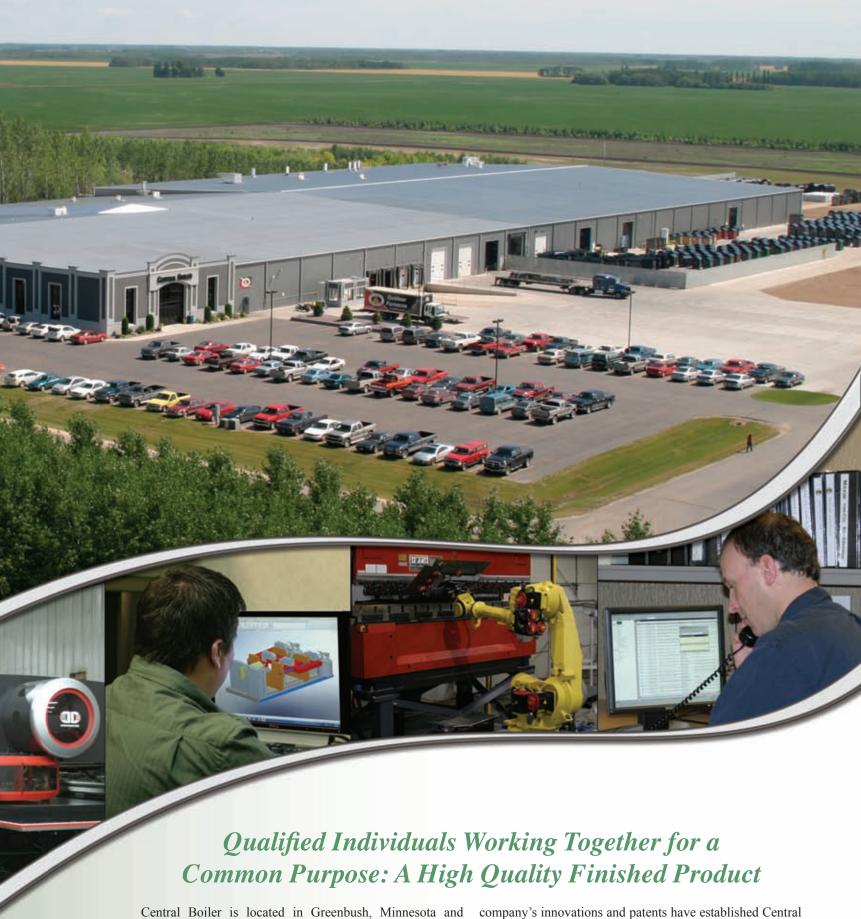
See Warranty Registration form for details.

Testimonial-

"I am using an E-Classic 2400. I load it once a day and forget about it. It is so much more convenient than having to constantly load the indoor wood burner and I am using about half the wood. I am more at ease with the fire outside away from the house along with the dust, bugs and ash. It has also been nice not having to hear the propane hot water heater run at all. The unit is nicely constructed and blends in with the surroundings out in the yard."

Lucas, NC





Central Boiler is located in Greenbush, Minnesota and was established in 1984 and is North America's largest manufacturer of quality outdoor wood furnaces. Based upon a desire to create safer and more efficient heating products, the

company's innovations and patents have established Central Boiler as a leader in product quality. The uncompromising attitude to manufacture the best and always strive to make it better is at the core of the company's growth.



Why You Should Choose the E-Classic by Central Boiler

The Central Boiler E-Classic outdoor wood gasification furnace can provide 100% of the heat and hot water for a typical home. Your Central Boiler dealer can assist you in determining the actual heat and hot water needs for your home and the criteria for proper installation of the system. Actual Btu output and burn time will be affected by the type of wood burned, its moisture content and other factors.

Using wood as a heating fuel is endorsed by the U.S. Forestry Service.

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For the maximum performance and life of your furnace, always insist on using Central Boiler authorized system parts and accessories.

See Owner's Manual for proper chimney height and installation. Minimum chimney height is determined by proximity to other buildings. Consider location and direction smoke may travel with prevailing winds before installing your furnace.

Content of this brochure is information in possession of Central Boiler at the time of the design of this publication and may not represent what was previously manufactured. Product specifications and appearance subject to change.

Operating an outdoor furnace may not be suitable to some individuals' abilities or lifestyles. Be sure to review the Owner's Manual for the appliance with your dealer.

*European EN 303-5 efficiency results for the E-Classic E 1450 are rounded to the nearest whole number. Results vary based on wood species, wood quality, wood quantity and moisture content. The efficiency of other models varies.

Ask your dealer about Outdoor Furnace Best Burn Practices.

