THE OUTDOOR ADVANTAGE®

Heat your entire home and domestic water. The Maxim outdoor wood pellet and corn furnace can be installed safely outdoors next to your home.

CentralBoiler.com
Welcome to the best way to heat with wood pellets, corn or other biomass fuels. Welcome to Central Boiler.

**FREEDOM TO DO MORE** The Maxim outdoor wood pellet and corn furnace features a large integrated hopper (it can hold up to twelve 40-lb bags of wood pellets or approximately eleven bushels of corn!). Combined with a controller that allows the fire to go out if there is no call for heat and electric ignition that will relight it automatically when needed, you’ll have more time to do the things you want to do.

**GET IN YOUR COMFORT ZONE** The Maxim gives you whole-home comfort, not just one room. Because it uses your existing heating system to deliver the heat, you can set the thermostat where you want in different rooms, or you can heat other buildings like your garage.

You can even enjoy unlimited hot water for showers or baths while turning your water heater off.

**PEACE OF MIND** Keep the fire outside and it eliminates the traditional indoor stove hazards. Burning indoors is inherently dangerous as there is a threat of a fire and carbon monoxide buildup.

**IMPROVED INDOOR ENVIRONMENT** The mess stays outside with a Maxim outdoor wood pellet and corn furnace. Anyone that has ever heated with an indoor pellet stove is familiar with the smoke, dust, ashes, odors and soot that often occur.
**Conversion Factors**

**Heat Content of Common Fuels**

- Shelled Corn = 392,000 Btu/bushel
- Fuel Oil = 140,000 Btu/gallon
- Propane = 92,000 Btu/gallon
- Natural Gas = 100,000 Btu/therm
- Electricity = 3,413 Btu/kWh
- Wood Pellets = 320,000 Btu/40 lb bag
  or 16,000,000 Btu/ton

*Source: University of Minnesota Extension Service*

<table>
<thead>
<tr>
<th>One Bushel of Corn</th>
<th>One 40 lb Bag of Wood Pellets</th>
</tr>
</thead>
<tbody>
<tr>
<td>= 2.8 gallons Fuel Oil</td>
<td>= 2.3 gallons Fuel Oil</td>
</tr>
<tr>
<td>= 4.26 gallons Propane</td>
<td>= 3.5 gallons Propane</td>
</tr>
<tr>
<td>= 3.92 therms Natural Gas</td>
<td>= 3.2 therms Natural Gas</td>
</tr>
<tr>
<td>= 114.85 kWh Electricity</td>
<td>= 94 kWh Electricity</td>
</tr>
</tbody>
</table>

Comparisons with 80% efficiencies. Conversion factors were determined by dividing the Btu content of wood pellets or corn by the Btu content of another fuel.

Fuel Btu contents, heating appliance efficiencies and pricing will determine overall heating costs and comparisons.
So simple to install, so simple to use.

How a Maxim outdoor wood pellet and corn furnace works.

While a Maxim outdoor wood pellet and corn furnace is one of the most technologically advanced ways to heat with wood pellets or corn, how it heats is a pretty simple idea. A Maxim outdoor furnace burns wood pellets or corn to heat water. The heated water is circulated through insulated underground pipes called ThermoPEX to the buildings being heated. Heated water can transfer its heat energy by direct circulation or by moving through one or more heat exchangers, or both.

LOCATION The Maxim outdoor furnace is located outside as far as 500 feet away.

CIRCULATION The furnace contains a high volume of water that surrounds the furnace firebox and heat exchanger. This heated water is circulated to buildings through insulated underground pipes which is a highly efficient way to move heat over distances.

INTEGRATION Maxim outdoor furnaces are designed to work with your existing heating system. Water-to-air or water-to-water heat exchangers or direct circulation conveys the heat into the structure's forced-air furnace, radiant baseboard or radiant floor heating system. This allows you to control the heat simply with your thermostat.

UNLIMITED HOT WATER When you install a heat exchanger on your domestic water heater, you can enjoy unlimited hot water and the savings from turning your water heater off.

HEAT MULTIPLE BUILDINGS Unlike an indoor wood stove, a Maxim outdoor wood pellet and corn furnace has the ability to heat multiple buildings such as a house, garage, workshop, shed, greenhouse or barn. It can even be used to heat a swimming pool or hot tub.

Installation is a breeze.

Connect the piping and heat exchangers to your existing heating system and the Maxim is ready to go to work.

Find additional information about how outdoor furnaces work, installation scenarios, and more at CentralBoiler.com
Engineered to the highest standards...ours.

**A Easy Installation**
Simply set the Maxim in place, connect the piping to your existing heating system, and the Maxim is ready to go to work.

**B Easy to Load with Large Integrated Hopper**
Large, top-loading door gives easy access to the hopper. Holds up to 12 bags of wood pellets (or 11 bushels of corn) which allows the furnace to heat for days on a single fuel load.

**C Convenient Operation**
Based on your personalized needs, the FireStar™ II electronic controller automatically controls the water temperature, heat output and air settings. Starting the fire is as easy as pushing a button with the automatic electronic ignition. Capable of data collection with the ability to communicate with other devices (like the FireStar XP).

**D Use Less Fuel**
A hallmark of Central Boiler furnaces for over 30 years, spray-on urethane is the ultimate airtight, waterproof insulation that locks the heat in to reduce fuel usage, even at temperatures of -35°F or colder. It provides 2-3 times the effective R-value of conventional fiberglass batt insulation. Fiberglass batt insulation also settles and compresses over time.

### Comparing Insulation

<table>
<thead>
<tr>
<th></th>
<th>Urethane</th>
<th>Fiberglass Batt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waterproof</td>
<td>✔</td>
<td>-</td>
</tr>
<tr>
<td>Airtight</td>
<td>✔</td>
<td>-</td>
</tr>
<tr>
<td>Effectively covers all surfaces</td>
<td>✔</td>
<td>-</td>
</tr>
<tr>
<td>Maintains R value</td>
<td>✔</td>
<td>-</td>
</tr>
<tr>
<td>Higher R value</td>
<td>✔</td>
<td>-</td>
</tr>
<tr>
<td>Doesn’t compress</td>
<td>✔</td>
<td>-</td>
</tr>
</tbody>
</table>

**ELECTRIC IGNITION**

**Saves Fuel**
When there is no call for heat, the controller stops adding fuel and the fire goes out. When there is a call for heat, the controller automatically relights the fire if needed.
**E Durability and Reliability**
Maxim furnaces are manufactured with attention to detail. From its **sealed and permanently lubricated gear drive** (no chains or sprockets to worry about) to the **aerator** in the burn chamber that agitates the fuel and adds oxygen to the center of the fire, every component must meet the highest standards...ours.

**E Easy Inspection and Maintenance**
Pumps and the inner components of the Maxim are all easily accessible. The **high efficiency heat exchange system** is designed to require less maintenance and is easily accessible with the removable rear exhaust cover.

Central Boiler’s Research and Development department is home to one of the most complete state-of-the-art testing laboratories in the industry. Since 1984, its goal has been to develop, engineer, test and refine a wide range of quality heating products to ensure Central Boiler quality, performance and value are in every outdoor furnace manufactured.
Sample Applications

Dual Heat System
In-Floor Radiant/Forced Air

For illustration purposes only:
- Water heater styles may vary.
- Size of incoming line may vary (depending on application).
- Location of thermostat may vary.

This horizontal assembly must not exceed a height of 4 inches above top of water heater.

Water-to-Water Heat Exchanger
Bypass Line

NOTE
Installer must comply with all applicable codes and regulations.

A pump must be installed in the hot supply line between the outdoor furnace and thermostatic valve.

NOTES
4 x Pipe Dia. Max. (e.g., for 1" pipe, fittings must not be more than 4" apart)

Hot Supply from Pump on Outdoor Furnace
Thermostatic Valve (optional)
Return to Outdoor Furnace

Thermostatic Mixing Valve
Central PEX® Hot Supply

Water Heater
Optional 3-Way Bypass Valve

Forced Air Furnace

Plenum

Pedestal

Heating Multiple Buildings

NOTE
4 x Pipe Dia. Max. (e.g., for 1" pipe, fittings must not be more than 4" apart)

Thermostat

NOTE
Installer must comply with all applicable codes and regulations.

Outdoor furnace water temperature setpoint should be set at 185˚F minimum.

NOTES
4 x Pipe Dia. Max. (e.g., for 1" pipe, fittings must not be more than 4" apart)

Thermostat

NOTE
Installer must comply with all applicable codes and regulations.

Outdoor furnace water temperature setpoint should be set at 185˚F minimum.
Multi-Zone In-Floor

Closed-cell Polystyrene Thermal Insulation

Forced Air vs Radiant In-Floor

1" Central PEX

1" Copper Piping

Return to Outdoor Furnace

Optional Thermostatic Valve

Mixing Valve

Insulation

Poly Vapor Barrier

Slab

1/2" Central PEX Piping is spaced 6" from outside wall. Remaining piping is spaced 12" on center.

Floor Joist

Floor Covering

Sub Floor

2" Minimal heat radiated downward

PEX Hangers should be installed every 18".

It is recommended that you maintain a 2" cavity between piping and insulation for best performance.

NOTE

Return to Outdoor Furnace Thermostatic Valve

Instal must comply with all applicable codes and regulations.

NOTE

Outdoor furnace water temperature setpoint should be set at 185°F minimum.

NOTE

A pump must be installed in the hot supply line between the outdoor furnace and thermostatic valve.

NOTE

Installer must comply with all applicable codes and regulations.

NOTE

ON / OFF switch must be at the "ON" position for this install.

NOTE

Outdoor furnace water temperature setpoint should be set at 185°F minimum.

NOTE

A pump must be installed in the hot supply line between the outdoor furnace and thermostatic valve.

NOTE

Installer must comply with all applicable codes and regulations.

Find more applications at CentralBoiler.com
Choose ThermoPEX. Because performance matters.

Choosing the best insulated piping system for your outdoor furnace is imperative if you want to lower heat loss and reduce the amount of fuel you’ll burn. The ThermoPEX insulated piping system from Central Boiler is a proven system that saves energy and maximizes the efficiency of your outdoor furnace.

**ENERGY EFFICIENT** – ThermoPEX saves energy and maximizes efficiency. The thick waterproof jacket keeps moisture out and the inner urethane insulation locks the heat in. Greater system efficiency maximizes the delivery of heat so you will burn less fuel compared to a system using inferior insulated piping.

**FLEXIBILITY** – Easy to work with, easy to install.

**RELIABILITY** – ThermoPEX is a proven, time-tested insulated piping system.

**INSTALLS FAST** – Easy to handle and easy to install, requiring only a narrow trench approximately a foot deep.

**STAYING CONNECTED.**

Stay connected to the furnace that saves you money on your heating bills from almost anywhere in the world. Adding the FireStar XP wi-fi module keeps you in constant contact with your Central Boiler furnace if you’re away. The FireStar XP wi-fi module can even send you reminders such as when to add fuel.

View operational information and receive text alerts on your smartphone.

Phone not included. Requires data plan, wireless router and internet to enable remote access.

The optional FireStar XP is easy to install and configure.

Wireless outdoor version shown. Also available as desktop or wall-mount version.
Maxim M255 PE

Door ......................... 15.5” x 13.5”
Weight ....................... 1310 lbs
Water Capacity .............. 90 gal.
Hopper Capacity ............ 11 bushel (600 lb)

Included with furnace: Water Test Kit, Cleaning Rod, Flue Brush Kit, Ground Rod Kit, Ash Scoop, Thermostatic Valve Kit and two 4-foot chimney sections

Furnace Base Dimensions

NOTE
Furnace must be installed on a noncombustible surface or 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 furnace enclosure.

CAUTION
Do not use any combustible materials for the foundation.

OPTIONAL 48-BUSHEL EXTERNAL HOPPER
Increase your fuel supply (and the days your Maxim will heat) with an optional transfer auger and an optional hopper that can hold up to 2,440 pounds of wood pellets.
LEADERS IN PRODUCT QUALITY, DESIGN AND INNOVATION

Central Boiler traces its roots back to 1984 in a workshop just south of Greenbush, Minnesota. There, a single idea and some welded pieces of metal would grow into a company that is recognized today as North America’s largest manufacturer of outdoor furnaces. The company’s innovations and patents come from people who take a little more time, pay a little more attention and go a little further to make sure that every Central Boiler product is ready to meet the demands of the real world.

AUTHORIZED MAXIM DEALERS LOCATED ACROSS THE U.S. AND CANADA

When you’re looking for a wood pellet and corn heating system, a Maxim dealer is there to answer questions, provide you with literature about Maxim outdoor furnaces and help you choose the model right for your heating needs.

To locate a Maxim dealer in your area, visit the dealer locator at CentralBoiler.com.

The Maxim M255 PE is EPA certified with wood pellets as a fuel source.

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CentralBoiler.com

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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.

Must be installed in accordance with all applicable codes and regulations.

Ask your dealer about Outdoor Furnace Best Burn Practices.

FREE 5 YEAR LIMITED WARRANTY

A free 5 year limited warranty is available if your Maxim is 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.