



AMERICA'S HEAT BIOMASS FURNACE & BOILER

LMF Manufacturing

Introducing A Truly Efficient Furnace & Boiler

In these times of high energy costs, it makes sense to use a heat source that utilizes a resource that is readily available and cost effective. The America's Heat furnace burns shelled corn, a renewable local commodity. Corn costs less per BTU than other heat sources, plus benefits the local economy by generating business for farmers. The low cost of shelled corn, together with the efficient burning process of this furnace, produces an economical, ecologically safe home heating system. The America's Heat furnaces will also burn wood pellets, barley, oats, wheat and rye.



AH 100



AH 170



AHB 100/170 Boiler

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BURNING CORN MAKES

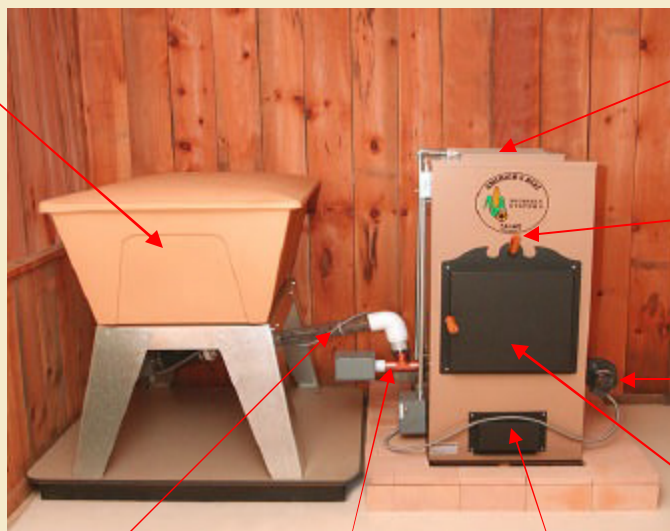


AMERICA'S HEAT BIOMASS FURNACE

Model AH 100

The model AH 100 is a fully automatic biomass furnace rated at 100,000 BTU's. The furnace operates no differently than any fuel oil, LP or natural gas furnace, other than the fact that it burns a solid fuel. Your homes thermostat controls the burn system on the America's Heat furnace. When there is a call for heat, the augers feed fuel to the burn pot. When the furnaces reaches temperature, the room air blower operates to heat your home. When the thermostat is satisfied, the Corn-trol digital system will automatically slow the auger motors and combustion blower to the minimum firing rate to maintain the fire in the burn pot. An America's Heat furnace equipped with a Corn-trol digital system can maintain a fire for several days in low fire mode. The Corn-trol Digital system also makes our furnaces true variable speed units. The computer controls the speed of the augers to produce from 10,000 to 100,000 BTU's. The America's Heat furnace is made as a stand alone system or can be connected to your existing furnace, and will operate with your air conditioning unit during the summer.

Storage Bin – Fourteen bushel capacity for up to 10-day operation on a single load.



Hot Air & Return Plenum Openings - Connects directly to duct work.

Built-in Heat Exchanger Cleaner – Removes residue ash from heat exchanger elements.

Combustion Blower

Combustion Chamber – Induced air flow generates maximum efficiency. Burn 99% complete, leaving about one pound of residue from 100 pounds of corn.

Corn Metering Auger – Transfers kernels from storage bin to furnace auger.

Furnace Auger – Supplies fuel to fire pot.

Ash Pan – For easy removal of ashes.

THE FIRST UL LISTED

The America's Heat furnace is the first shelled corn fired central furnace to be listed by Underwriters Laboratories. Using an auger drive to meter the fuel allows for precise control of combustion. The UL listing assure you of a safe and quality product.

VIEW OF BURN POT



VIEW OF BLOWER



Model AH 100

Dimensions - Furnace.....53"H X 27"W X 46"D
 Dimensions - Bin.....48"H X 36"W X 52"D
 Weight - Furnace.....440 lbs
 Weight - Bin.....50 lbs
 Flue Pipe.....6" Class A
 Plenum Openings.....14' Square
 Heat Exchanger.....14 gauge steel
 Fire Pot.....Cast Iron
 Air Filter.....20" X 20" X 1"
 Bin Capacity.....14 bushels
 Combustion Blower.....60 CFM
 Hot Air Blower....CFM 1200/1500/1800.....1/3 HP - 3 speed
 BTU's.....100,000
 Voltage.....110 volts
 Clearance to Combustibles:
 Top.....32" Front.....30"
 Side.....6" Rear.....18"



AMERICA'S HEAT BIOMASS FURNACE

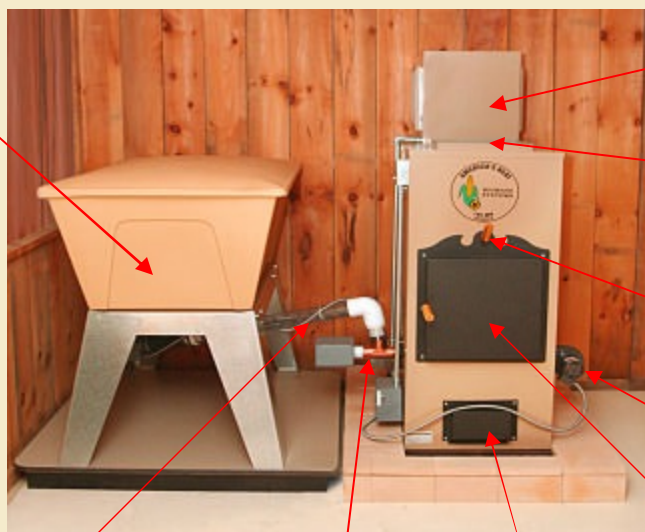
Model AH 170

The model AH 170, is rated at 170,000 BTU's and is similar in operation to the BM 620-9, but the interior of the AH 170 has been completely redesigned. We increased the number of heat fins to scrub extra heat from the exchanger and made the interior of the furnace more aero dynamic. In addition to the redesigned interior we have added larger blowers and faster auger motors. The circulation blower has been mounted on top of the unit and an air chase has been added on both sides enhancing the airflow circulation throughout the unit. By pushing the air down over the internal smoke pipe and circulating it over the new heat fins we've captured more of the units heat making it a much more efficient and safe unit. With the addition of the Corn-tol Digital System our furnaces are now true variable speed units. The computer controls the speed of the auger motors to produce from 10,000 to 170,000 BTU's. The redesigned interior and the addition of the Corn-trol system make the Model AH 170 state of the art technology in the biomass furnace industry.

Storage Bin – Fourteen bushel capacity for up to 10-day operation on a single load.

SAFE, COMFORTABLE HEAT

Your home's thermostat electronically controls the fuel feed system to provide a constant temperature. The furnace will remain lit as long as the bin contains corn, and will shut down automatically if the fuel supply is depleted. The low stack temperature and absence of creosote buildup eliminates the possibility of chimney fires.



Corn Metering Auger – Transfers kernels from storage bin to furnace auger.

Furnace Auger – Supplies fuel to fire pot.

Ash Pan – For easy removal of ashes.

Room Air Blower - Bigger 1/2 HP blower relocated for better air flow

Hot Air & Return Plenum Openings - Connects directly to duct work.

Built-in Heat Exchanger Cleaner – Removes residue ash from heat exchanger elements.

Combustion Blower

Combustion Chamber – Induced air flow generates maximum efficiency. Burn 99% complete, leaving about one pound of residue from 100 pounds of corn.



Model AH 170

Dimensions - Furnace.....	68 3/4" H X 27" W X 46" D
Dimensions - Bin.....	48" H X 36" W X 52" D
Weight - Furnace.....	480 lbs
Weight - Bin.....	50 lbs
Flue Pipe.....	6" Class A
Plenum Openings.....	14" X 18"
Heat Exchanger.....	14 gauge steel
Fire Pot.....	Cast Iron
Air Filter.....	12" X 12" X 1"
Bin Capacity.....	14 bushels
Combustion Blower.....	70 CFM
Hot Air Blower.....	1/2 HP - 4 speed
BTU's.....	170,000
Voltage.....	110 volts

Clearance to Combustibles:

Top.....	32"	Front.....	30"
Side.....	6"	Rear.....	18"



AMERICA'S HEAT BIOMASS BOILER

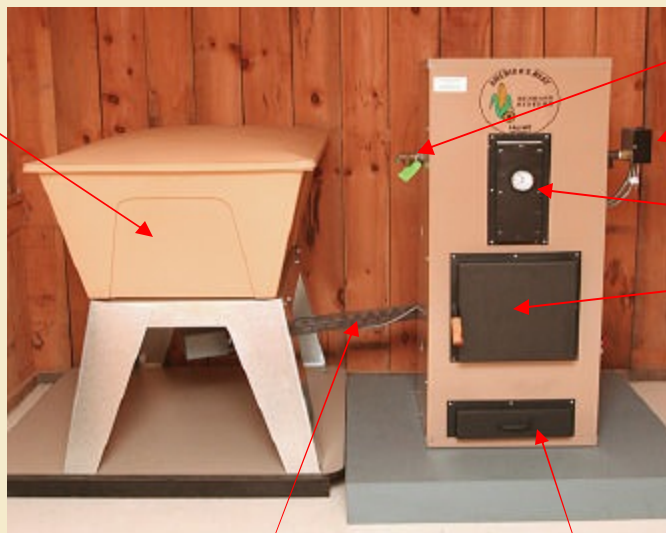
Model AHB 100/ 170

The America's Heat boiler is manufactured in two sizes, a 100,000 BTU and a 170,000 BTU model. Each boiler is made as a stand alone unit or as an add-on to your current system. Our boilers can be used with baseboard registers, radiators, in-floor loops, water to air exchange and can also pre-heat your domestic water for everyday use. The America's Heat Boiler features quality construction for long-lasting performance. The tanks for the America's Heat Boiler's are ASME certified and offer a 20 year limited warranty and are made by Axeman Anderson, who has over 50 years in the boiler industry. With its quality construction and most up to date safety features, the America's Heat boiler is one of the safest and most efficient biomass boilers on the market today.

Storage Bin – Fourteen bushel capacity for up to 10-day operation on a single load.

BURNS CLEAN – NO MORE CREOSOTE

The America's Heat furnace & boiler feeds the corn into the bottom of the combustion chamber, therefore providing the most efficient fuel consumption. The residual ashes (clinkers) are then spilled over the top of the combustion ring into the ash pan. This process, in effect, self cleans the combustion chamber.



Pressure Release Valve

Low Limit Shut off

Pressure Gauge

Combustion Chamber – Induced air flow generates maximum efficiency. Burn 99% complete, leaving about one pound of residue from 100 pounds of corn.

Corn Metering Auger – Transfers kernels from storage bin to furnace auger.

Ash Pan – For easy removal of ashes.

Model AHB 100/170

Dimensions - Boiler.....59"H X 22"W X 30"D
 Dimensions - Bin.....48"H X 36"W X 52"D
 Weight - Furnace.....520 lbs
 Weight - Bin.....50 lbs
 Flue Pipe.....6" Class A
 Heat Tubes.....16
 Heat Exchanger.....6 gauge steel
 Fire Pot.....Cast Iron
 Combustion Blower - 100,000 BTU.....50 CFM
 Combustion Blower - 170,000 BTU.....60 CFM
 Tank Capacity (ASME Certified).....18 gals
 BTU's (2 Models).....100,000 - 170,000
 Low Water Cut-off.....UL Required
 Water Pressure.....between 12 - 14 lbs
 Pipe Size.....1 1/2"
 Bin Capacity.....14 bushels
 Voltage.....110 volts
 Domestic Hot Water Coil available - Coil produces 5 gals per min
 Thermostat Controlled
 Clearance to Combustibles:

Top.....32"
 Side.....6"

Front.....30"
 Rear.....18"

6" Exhaust

Pressure Release Valve



Aquastats

Timer & Relay

Combustion Blower

Furnace Auger – Supplies fuel to fire pot.