



The Ultimate
in Solid Fuel Heating

Wood/Coal Boilers



(Model 45EK-D Wood/Coal Boiler pictured)

Manufactured exclusively in Chippewa Falls, WI USA

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www.energyking.com

ENERGY INDEPENDENCE

For over 30 years, **ENERGY KING** solid-fuel heating appliances have provided homeowners with energy independence by offering high-quality, long-lasting solid-fuel home heating options. By choosing to heat their homes with domestically-produced solid-fuel, owners of **ENERGY KING** heating appliances are choosing energy independence!

ENERGY KING Wood/Coal Boilers are designed to be used independently or as an add-on to your existing hydronic heating system, and burn either air-dried wood, or anthracite or bituminous coal.

Wood: Burning wood for heat is as old as civilization itself. More than any other major fuel, wood provides us with energy independence – an easily available, locally produced and renewable source of heat on which we can rely.

Coal: One of the world's most widely-used fuel sources, coal can provide the energy independence and low fuel prices sought by owners of solid-fuel heating appliances.

SAFETY & RELIABILITY

ENERGY KING Wood/Coal Boilers are constructed of heavy 1/4" steel plate, reinforced with 1/4" steel rods and welded by experienced and certified welders to ensure safety and durability. For additional safety, a 30 PSI pressure relief valve is included with every **ENERGY KING** boiler. **ENERGY KING** Wood/Coal Boilers also feature 2000-degree firebrick and heavy cast iron grates and doors for increased longevity.

ENERGY KING Model A40EK-D Wood/Coal Boilers are built and tested to the exacting standards of the *American Society of Mechanical Engineers (ASME)*, and are independently inspected by a third party authorized inspection agency. You can rest easy knowing that **ENERGY KING** Model A40EK-D Wood/Coal Boilers conform to an internationally recognized standard for safety and quality.

SIZING

It is important to choose a solid-fuel heating appliance that is correctly sized for your home, and when it comes to boilers, bigger is not always better. A slightly undersized Wood/Coal Boiler will generally require short, hot fires which burn cleaner and more efficiently than the slow-burning or smoldering fires generated in an oversized Wood/Coal Boiler.

The estimated heating capacities of **ENERGY KING** Wood/Coal Boilers are:

- 1,500 – 2,500 square feet (models A40EK-D and 35EK-D)
- up to 4,000 square feet (model 45EK-D)

In addition to square footage, some of the factors that may affect your heating needs are your home's age, design, and geographic location (climate). Other factors to consider are your chimney's draft strength and whether you plan to burn wood or coal as your primary fuel source.

A general rule-of-thumb is to choose a solid-fuel boiler that has a similar BTU output to your current (conventional) furnace or boiler.

ABOUT ENERGY KING

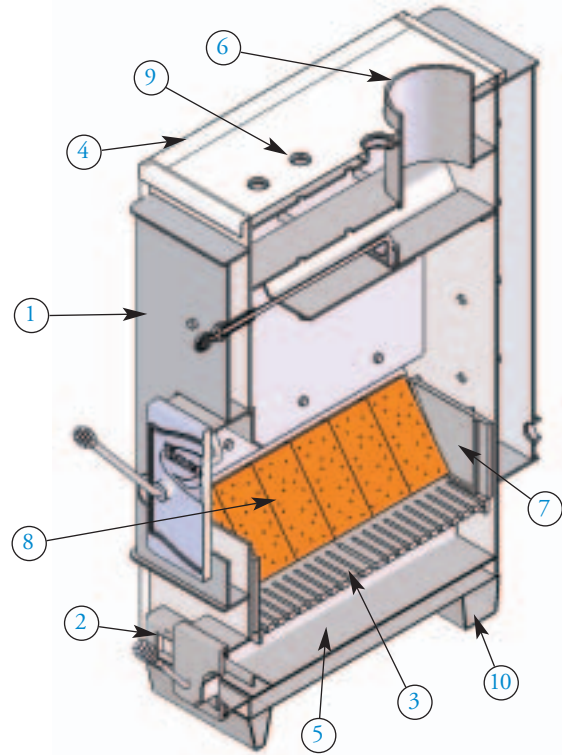
American-made with pride for over 30 years, **ENERGY KING** heating appliances have maintained a commitment to providing quality solid-fuel heating appliances. Our experienced engineers know what it takes to build solid, long-lasting central heating equipment. We use the latest technology to design and build our products, with particular attention to safety, efficiency, reliability, and ease of use. Our ultimate goal is to combine these aspects to guarantee our customers a solid product built for a lifetime of top performance.

ENERGY KING solid-fuel heating appliances continue to be manufactured exclusively in Chippewa Falls, WI USA.

ENERGY KING[™] is a trademark of RJM Manufacturing, Inc.

FEATURES

- 1 Water Jacket:** **ENERGY KING** Wood/Coal Boilers feature a water jacket which surrounds the top, sides, front, and back of the burn chamber to maximize the transfer of heat from the Boiler to your heating system.
- 2 Thermostatically-controlled Forced Air Draft:** When your home cools, **ENERGY KING** Wood/Coal Boiler's wall thermostat turns on the combustion fan to force combustion air into the burn chamber of your **ENERGY KING** Wood/Coal Boiler. The wall thermostat turns off the combustion blower once your home has reached the desired temperature.
- 3 Cast Iron Grates:** **ENERGY KING** Wood/Coal Boilers come standard with stationary cast iron grates. Optional cast iron shaker grates featuring an externally mounted shaker handle are available.
- 4 Insulated Cabinet:** The enameled steel cabinet panels (sides and top) restrain a foil-backed insulation blanket, allowing maximum heat from the Boiler to be transferred into your home's heating system.
- 5 Removable Ash Pan:** **ENERGY KING** Wood/Coal Boilers feature a removable ash pan that spans the full length of the burn chamber for easy clean-up of fine ash accumulation.
- 6 8" Chimney Outlet (Top Vent):** The chimney exhausts smoke and flue gases that are a natural result of combustion, and provides "draft" to the Boiler. (Draft is the force that moves air from the burn chamber up through the chimney.) Venting must be provided using a lined masonry chimney or a listed UL103 type HT factory-built chimney.
- 7 Cast Iron Hearth Plates:** Located at the front and rear of the burn chamber, these plates help to promote efficient combustion by introducing the precise amount of combustion air into the burn chamber.
- 8 Firebrick:** 2000-degree, heat retentive firebrick protects the sides of the **ENERGY KING** Wood/Coal Boiler's burn chamber, and helps to maintain high internal temperatures for more efficient and complete combustion.
- 9 Water Inlets & Outlets:** All **ENERGY KING** Wood/Coal Boilers are equipped with a 2" hot water outlet, located on top of the Boiler. The cold water inlets are located on the back of the boiler; the **ENERGY KING** Model A40EK-D is equipped with one 1-1/2" cold water inlet, while **ENERGY KING** Models 35EK-D/45EK-D are equipped with two 1-1/4" cold water inlets.
- 10 Legs:** All **ENERGY KING** Wood/Coal Boilers are raised off the floor on legs. This eliminates the accumulation of moisture between the floor and the bottom of the **ENERGY KING** Wood/Coal Boiler, preventing moisture-damage to the underside of your **ENERGY KING** appliance.



WARRANTY

ENERGY KING Wood/Coal Boilers are quality backed with a 6 year limited warranty on materials and workmanship. Castings, electrical, gauges, relief valves and coils are backed by their manufacturers' warranties. Firebrick and gaskets are not warranted. A copy of the **ENERGY KING** warranty is available in every **ENERGY KING Installation, Operation & Maintenance Manual**, and is available online at www.energyking.com.

ENERGY KING Wood/Coal Boilers

MODEL	A40EK-D	35EK-D	45EK-D
Dimensions (H x W x D)	54.5" x 24" x 43"	54.5" x 24" x 38"	54.5" x 24" x 43"
Shipping Weight (approx.)	1,155 lbs	1,055 lbs	1,155 lbs
Heating Capacity - BTU's (approx.)*	140,000 BTU	140,000 BTU	160,000 BTU
Heating Area (approx.)*	1,500 – 2,500 sq. ft.	1,500 – 2,500 sq. ft.	Up to 4,000 sq. ft.
Water Capacity (approx.)	43 gallons	43 gallons	48 gallons
Water Jacket (Sides, Top, Front & Back)	1/4" SA516-70 Steel Plate	1/4" A36 Steel Plate	1/4" A36 Steel Plate
Burn Chamber Dimensions (H x W x D)	30" x 17" x 30"	30" x 17" x 30"	30" x 17" x 35"
Burn Chamber Volume	8.5 cu. ft.	8.5 cu. ft.	10 cu. ft.
Log Length	26"	26"	32"
Sliding Smoke Baffle	Standard	Standard	Standard
Cast Iron Fuel Loading Door Size (H x W)	15.5" x 13.5"	15.5" x 13.5"	15.5" x 13.5"
Cast Iron Ash Removal Door Size (H x W)	7.25" x 11.5"	7.25" x 11.5"	7.25" x 11.5"
Removable Ash Pan	Standard	Standard	Standard
Flue Size**	8"	8"	8"
Flue Collar Height** (Top Vent)	55.5"	55.5"	55.5"
Leg Height	4"	4"	4"
Insulated Cabinet	Standard	Standard	Standard
Prewired Electrical Components	Standard	Standard	Standard
Draft Controls	Forced	Forced	Forced
Wall Thermostat	Standard	Standard	Standard
Cast Iron Stationary (Wood) Grates	Standard	Standard	Standard
Cast Iron Shaker (Coal) Grates	Optional	Optional	Optional
Cast Iron Hearth Plates (Front & Rear)	Standard	Standard	Standard
Domestic Hot Water Coil, 4"	N/A	Optional	Optional
Warranty***	6 Year Limited	6 Year Limited	6 Year Limited
Complies with Standards	ASME Code, Section 5	N/A	N/A

*The heating capacity specifications are provided as guidelines only and in no way guarantee the output or capacity of the units. The actual BTU output depends on the type of fuel being burned and its condition, the thermostat setting, the draft adjustments and the chimney into which the unit is installed.

**All units require installation into a lined masonry chimney or a listed 8" UL-103 Type HT factory-built chimney. Do not connect this appliance to a chimney flue serving another appliance. It is the consumer's responsibility to make certain that both the appliance and installation are acceptable to their insurance company, as well as ensuring compliance with all local, state and national codes and regulations.

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We are constantly improving and updating our products in order to provide the highest quality and value possible. We reserve the right to make changes and improvements without notice.



Dealer: