

BLAZE KING KING / PRINCESS

Free Standing Wood Stoves





King 40 with Standard Convection Deck and optional Parlor Legs

All materials used in the construction of this install were non combustible materials.



King 40 with Standard Convection Deck, and optional Classic Base



King 40 with Standard Convection Deck, Ultra Pedestal Base, and Ash Drawer

KING

Maximum Performance At 81% real world efficiency, as listed by the EPA, the King is the most efficient wood stove available today. This allows you to get the most heat out of your wood to reduce your heating costs.

Maximum Size The King has the deepest and also one of the largest fireboxes of any stove on the market—it is for serious wood burners. This firebox is great for families who live in colder climates, have larger homes, or need heat for longer periods of time. You can fit up to 80 lbs. of wood into the King's 4.35 cu.ft. firebox; That's equal to 708,275 BTUs of available wood

energy. The King can burn for up to 40 hours on low or produce a tremendous amount of heat for 12 to 16 hours on high, depending on your installation and wood type.

The distance from the door opening to the bottom of the firebox is 9". Our design minimizes any chance of coals rolling forward and out of the firebox when the door is opened. The deep firebox keeps the removal of ash to a minimum making it safer to use.

Style Choices There are three styles to choose from: Parlor Legs, Classic Base, and the Ultra Pedestal. The Parlor cast iron leg option

creates a more traditional look. The Ultra Pedestal option comes with a removable ash drawer with lid as standard. The Classic Base lowers the stove height when replacing an older Blaze King or for low ceiling or alcove installs. The King comes complete with standard side shields, convection deck, and your choice of four door options: Painted, Satin Plated, Gold Plated or Solid. You can also add an optional dual fan kit.

Specifications: King (KE40)	Real World Tested Performance (HHV)
Cord Wood Max BTU™	57,000
Efficiency	81% (EPA listed efficiency)
Maximum Heat input*	708.275 BTU's
Constant Heat output on High*	47,809 BTU's/hour up to 12 hours
Constant Heat output on Low*	14,343 BTU's/hour up to 40 hours
Square Feet Heated	1500 – 3000
Average Heating Time*	10 to 20 hours
Potential Burn Time on Low*	40 hours
Emissions (grams/hour)	1.1 g/hr
Firebox Size	4.35 cu. ft.
Flue Size (do not reduce)	8"
CO (g/min)	0.6

* Cord Wood BTU is calculated using the cord wood test method.

** BTU, heat input and output and heating times depend on influences such as home size, home insulation, installation configuration, wood species, wood moisture content and climatic conditions.



Princess 32 with Standard Convection Deck, optional Ultra Pedestal Base, and Ash Pan

PRINCESS

Correct Firebox Size It is important that you pick the correct stove size to heat your home. The Princess, at 2.9 cu.ft., has a larger size firebox. All Blaze King stoves have a thermostat control, no electricity required, allowing you to consistently and evenly regulate the heat output making every Blaze King usable in a wide variety of homes.

A Deeper Firebox is a Safer Firebox Our design minimizes any chance of coals rolling forward and out of the firebox when the door is opened. The distance from the door opening to the bottom of the firebox is 6", allowing the Princess to hold up to 60 lbs. of wood. Our deeper fireboxes reduce the frequency of ash removal.

Specifications: Princess (PE32)	Real World Tested Performance (HHV)
Cord Wood Max BTU™	51,000
Efficiency	80% (EPA listed efficiency)
Maximum heat input*	473,811 BTU's
Constant Heat output on High*	37,858 BTU's/hour up to 10 hours
Constant Heat output on Low*	12,619 BTU's/hour up to 30 hours
Square Feet Heated	1200 – 2500
Average Heating Time*	8 to 14 hours
Emissions (grams/hour)	0.4 g/hr
Firebox Size	2.91 cu. ft.
Flue Size (do not reduce)	6"
CO (g/min)	0.5

* Cord Wood BTU is calculated using the cord wood test method.
* BTU, heat input and output and heating times depend on influences such as home size, home insulation, installation configuration, wood species, wood moisture content and climatic conditions.

Optional plated doors available for King 40 and Princess 32



Satin Plated Door



Gold Plated Door

Our standard Convection Deck provides a finished appearance and, when optional dual fans are installed, is engineered to keep air moving across the hottest part of the stove.



Princess 32 with Standard Convection Deck, and optional Classic Base



Princess 32 with Standard Convection Deck, and optional Parlor Legs

King and Princess Specifications

King and Princess

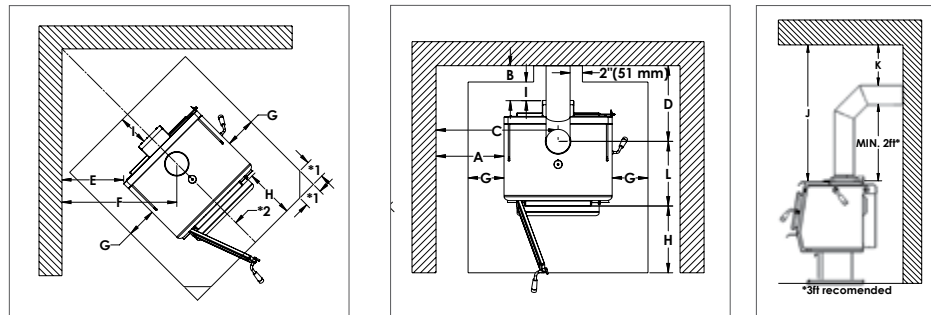
Clearances to Combustibles (See owner's manual for complete list prior to install)

	King 40 Single Wall Pipe*	Princess 32 Single Wall Pipe*
A – Side Wall to Side of Unit	10"	10"
B – Rear Wall to Back of Unit	6"	6"
C – Side Wall to Flue Center	25½"	23½"
D – Rear Wall to Flue Center	16½"	15½"
E – Adjacent Wall to Corner of Unit	4"	4"
F – Adjacent Wall to Flue Center	19¾"	17½"
G – Edge of Hearth Pad to Side of Unit	2" (US) 8" (Canada)	3" (US) 8" (Canada)
J – Minimum Alcove Height (from stove top)	48½"	44"
K – Horizontal Flue to Ceiling*	18"	18"
L – Center of Flue to Edge of Door Opening	17"	17¾"

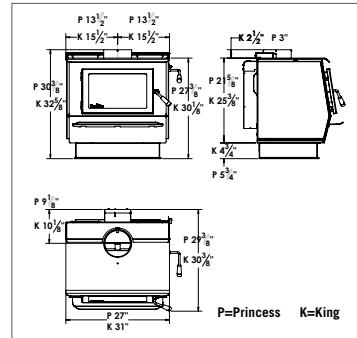
*Check Local Codes/Pipe Manufacturer Requirements for Clearances. In all of Canada and most of USA, 18" Clearances from Single Wall Pipe are required.

Although Single Wall Pipe is used for clearance tests, Blaze King recommends Double Wall Stove Pipe to achieve the best performance from our high efficiency wood stoves

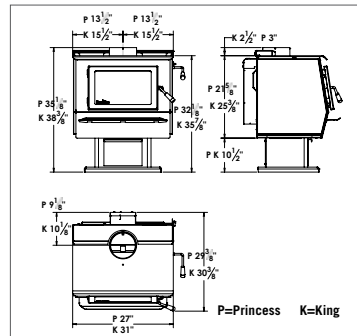
Clearance Diagrams



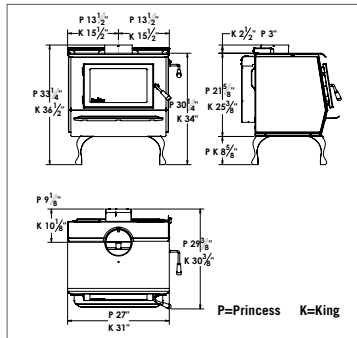
Classic



Ultra



Parlor



Specifications	King KE 40	Princess PE 32
Sq. ft. heating capacity	1,500 up to 3,000 sq.ft.	1,200 up to 2,500 sq.ft.
Wood capacity (soft wood)	55 lb.	40 lb.
Wood capacity (hard wood)	80 lb.	60 lb.
Flue size	8"	6"
Glass Viewing Area	17½" x 10½"	15½" x 9½"
Door opening	18½" x 9¾"	16½" x 8¾"
Firebox depth (front to back)	17¾" (brick to brick) 21½" (brick to glass)	17¾" (brick to brick) 19½" (brick to glass)
Firebox width	22¾"	19¾"
Firebox height	15¼"	12½"
Firebox capacity	4.35 cu.ft.	2.91 cu.ft.
Glass viewing area	17½" x 10½"	15½" x 9½"
Emissions	1.1 grams/hour	0.4 grams/hour
Maximum heat input*	708,275 BTU's	473,811 BTU's
Heat output on high**	51,527 BTU's/hour for 12 hours	47,218 BTU's/hour for 10 hours
Heat output on low	15,485 BTU's/hour	13,630 BTU's/hour
Max Crib fuel test BTU's	34,985 BTU's	30,381 BTU's
Max Cord Wood test BTU's	52,000 BTU's	51,000 BTU's
Approx Weight (Firebox only)	420 lbs.	370 lbs.

* Heating capacity is determined by geographic location and actual heat loss calculation of the dwelling.

Options	King KE 40	Princess PE 32
Ultra Pedestal with Ash Drawer	O	O
Parlor Legs (Satin Plated – Black)	O	O
Ash Pan for Parlor Leg option	O	O
Classic Pedestal Base	O	O
Painted Door (Black)	O	O
Satin or Gold Plated Door	O	O
Solid Door	O	O
Dual Fan Kit	O	O
Rear Heat Shields*	O	O
Side Shields	S	S
Convection Deck	S	S

S = Standard Feature, O = Optional Feature

* Rear Heat Shield for mobile home install if fan kit is not fitted

Burn Chart demonstrates how a Blaze King burns longer, cleaner & more efficiently

The King KE40 graph plots the results of a test run by Blaze King in its R&D laboratory. The lines on this graph trace the temperatures recorded by sensors at the catalytic combustor and in the flue pipe. The stove was placed on a scale to determine fuel weight. The wood species was Douglas Fir with approximate moisture content of 15%.

The Blue Line indicates the amount of wood that was placed in the firebox, 55lbs. The steady decline in the blue line demonstrates how the wood is consumed at an even pace throughout the entire burn cycle.

The Red Line shows the temperatures recorded at the combustor. Wood burns in an uneven manner. The fluctuations in temperature are the result of the wood being consumed and collapsing. This channels carbon (smoke) to the combustor

increasing its temperature. Our thermostat then automatically regulates the fire to maintain an even heat distribution into the home.

The Grey Line shows the temperature of the flue gases exiting the stove. These temperatures rarely exceed 300°F even though the combustor reaches temperatures of 1200°F. This is the magic of a Blaze King as we heat your home and not the great outdoors.

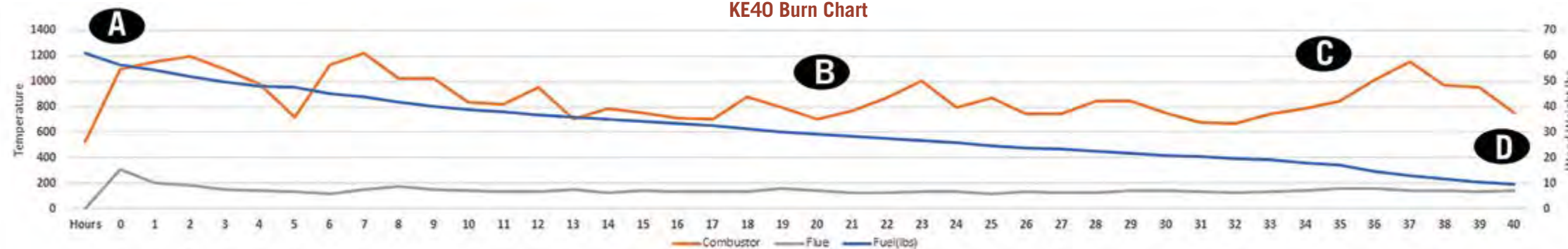
A – The stove was initially run on high to reach equilibrium and then turned to a low setting.

B – After 20+ hours on low burn and 27 pounds of fuel remain. Average fuel consumption so far 1.4 lbs. per hour. As Douglas Fir contains approximately 8,000 BTU's per lb. As such the stove is delivering 14,343 BTU's of heat per hour.

C – Peaks result as the burning wood collapses, stirring up sparks and smoke, which is fuel for the combustor, and exposing unburned wood to the fire, resulting in rising firebox temperatures. Note how the thermostat responds to this increase, controlling the air intake to the fire, and automatically lowering the combustion to its previous operating level.

D – After 40+ hours of clean burning, the catalytic combustor finally goes out, having simply run out of fuel. The remaining volatile materials are being consumed within the firebox, before they can reach the combustor. The fire itself is not completely out. A bed of hot coals remains, continuing to produce heat for an additional 7 hours! Adding more fuel during that time would recharge the fire and relight the combustor. That's more than 47 hours of continuous heating, with the potential for continuing the burn indefinitely.

KE40 Burn Chart



BLAZE KING

King and Princess Features

Catalytic Technology Blaze King has been making large wood stoves for over 40 years. Over this time period we have built a tradition of craftsmanship and performance that is unequalled. In 1983 Blaze King invented the first hybrid wood stove using air tubes and a catalytic combustor. A year later Blaze King received the first certificate of compliance, number 001, for the first clean burning wood stove in North America. We received this certificate from the Oregon Department of Environmental Air Quality which regulated wood heaters prior to the EPA. A refined version of this technology is what you see in every Blaze King today.

Thermostat control (No electricity required) Blaze King's built-in thermostat constantly monitors the heat output of your stove. It automatically adjusts the air required for combustion. This unique technology, where we combine the efficiencies of a catalytic combustor with a built-in thermostat, provides the longest burn times of any wood stove. You get a full night's sleep without having to reload your stove. It also means that when you return from work, your stove is still hot and your home is warm.

70% heat turn down Fine-tuned automatic airflow, as our thermostat and catalyst work in tandem, allows you to turn the heat down in your Blaze King stove by up to 70%. Non Blaze King stoves only turn down by 30% and have little control over their heat output. Because of this most people with non Blaze King stoves use expensive electric heat in the spring and fall as they cannot control the heat output of their secondary air wood stove. With a 70% heat turn down ability, a Blaze King is perfect in shoulder seasons, saving you money on heating costs.

Easy to operate Light a fire as per the instructions in your owner's manual. After you have established a good fire and the thermometer needle is well into the active zone simply select your heat setting. Your Blaze King will now automatically control the heat from your stove until you need to load it again, which could be up to 40 hours later depending on the model you selected.

Burn 33% less wood The combination of our exclusive thermostat and catalytic combustor technology makes your Blaze King stove one of the most efficient wood stoves in the world. The proof of this is in our flue temperatures. Ordinary wood stoves have flue temperatures of between 600°F and 900°F while your Blaze King flue temperatures are between 150°F and 300°F. Non Blaze King stoves pump valuable heat up the flue. Your Blaze King stove keeps the heat in your home saving you money. By making your stove this efficient you will burn up to 33% less wood, cut, stack, load and clean 33% less wood. This is a major advantage that only a Blaze King offers.

Less Cleaning All Blaze King stove's produce very fine ash because we extract every last drop of energy from the wood. As a result you can go for very long periods before you have to empty your stove.

Close Clearances The unique design of a Blaze King makes it possible for it to be placed tightly into a corner. Close clearance options allow for more versatile installs. Blaze King stoves only require a spark protector for ember protection, saving you hundreds of dollars on your installation costs.



10 Year Extended Warranty

Because we believe in the technology and craftsmanship built into every Blaze King stove, we are proud to offer a 10 year 100% extended warranty on your catalytic converter.