

SERIES 2



EFFICIENT & ECONOMICAL GAS-FIRED HOT WATER HOME



BURNHAM SERIES 2 GAS-FIRED HOT WATER BOILER

Quality Home Heating You Can Count On

If you're investigating a heating system for your new home, or if you're replacing an old, inefficient, worn-out boiler, a Burnham Series 2 gas-fired hot water boiler is the home heating investment that's right for you.

Burnham's Series 2 boiler offers you all the benefits of hot water heat together with the advantages of quality cast iron construction and advanced engineering. When you specify Burnham, you get home heating that is comfortable, economical, and reliable — all from a boiler that's safe, quiet, and field proven in thousands of installations.

High Efficiency Model Available

The high efficiency version of the Series 2, the Series 2H provides Annual Fuel Utilization Efficiencies (AFUE) of 84% and is available in four sizes from 62-164 MBH input. In addition to all the features included in the Series 2, the Series 2H features an intermittent ignition system and stainless steel flue baffles for even greater heat transfer and efficiency.

Make a Smart Investment

There are few investments you'll ever make that are more important than your heating system. With the guidance of a qualified heating contractor, you can easily customize your heating system and choose options

that add comfort and value to your home. Burnham's Series 2 makes heating your home with gas a practical investment today and one you'll appreciate over the years.

Start Saving Now!

Many old boilers operate at around 60% efficiency. This means that 40% of your fuel dollars are wasted. A Series 2 boiler, with an AFUE of up to 84%, can reduce your heating bills by as much as 28%. Your Series 2 boiler virtually pays for itself in a few short years by saving money spent on fuel the old system is wasting.

Use the following formula (illustrated at bottom) to compare the Series 2 boiler to the 60% efficiency of a typical 20-year-old boiler.

In the example shown, the homeowner could realize a \$429 savings the first year alone. Check with your contractor to calculate your savings potential.

Abundant Hot Water

How to Determine Your Savings

Formula:

$$\frac{\text{Your Current Boiler's Efficiency Rating}}{84} \times \text{Your Current Annual Fuel Bill} = \text{Your Estimated New Fuel Bill}$$

Example:

Your present boiler's efficiency is rated at 60% and your annual fuel bill is \$1500.

$$\frac{60}{84} \times \$1500 = \$1071$$

= \$429 Savings

Today's homeowners need more hot water than ever before, for showers, dishwashers, washing machines, bathtubs, etc.

By combining the Series 2 boiler with Burnham's Alliance™ indirect-fired water heater, you'll have sufficient hot water to meet all your needs.

The Alliance water heater utilizes the high heating capability of your boiler to provide year-round hot water at a very low operating cost.



Built to Last

Made in the USA — Every Burnham® boiler is made in the U.S.A. To ensure the highest level of quality all Burnham boiler castings are produced "in-house" at our foundry in Zanesville, Ohio. Burnham is the only boiler manufacturer that can make such a claim.

Operating Features

- **Rugged cast iron sections**
Superior pin design extracts the maximum amount of heat, reducing fuel consumption and saving you money.
- **Steel couplings**
At Burnham we use steel couplings called "nipples" to join our cast iron sections. Steel nipples increase the longevity of

your boiler. They are not affected by petroleum based chemicals, including antifreeze, which can deteriorate the cheaper rubber type gaskets substituted for steel push nipples in some competitors' boilers.

- **Fuel saving vent damper**
This automatically closes the flue to prevent heat from escaping up the chimney after the burner shuts off and reopens it again before the burner comes on.
- **Stainless steel burners**
Stainless steel, unlike aluminized steel, ensure long life with no rusting.

- **Step-opening gas valve**
This type of gas valve enables the boiler to start on low fire and continue on to high fire safely and smoothly providing quiet ignition and long life.

- **Honeywell controls**
High quality brand name controls assure reliability and availability.

- **Combustible floor certified**
The Series 2 boiler can be installed safely on most floors in your home without worry. No extra cost floor shield to buy.

- **Blocked vent switch**
This switch safely shuts down the boiler in the event the chimney or vent system becomes blocked, by sensing excessive heat exiting the draft hood.

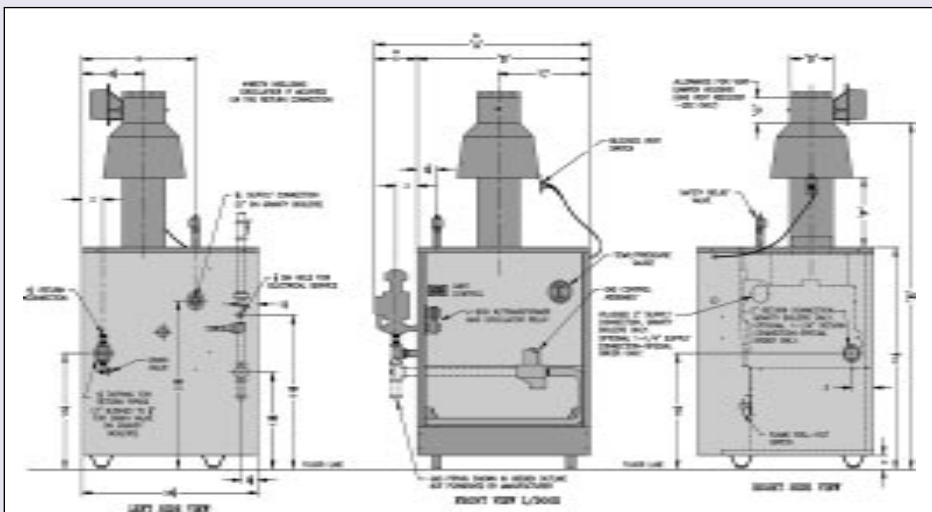
- **Flame roll-out switch**
If the flue-ways within the boiler become blocked or restricted, the flame roll-out switch will automatically shut off gas flow to prevent combustion byproducts from spilling into your home.
- **Concealed Controls**
All controls are safety hidden under the boiler jacket to prevent damage and tampering.

MODEL	A	B	C	D	E	F	G
202	18-3/4	10-3/4	6-3/8	4	45-4/8	8-1/2	10 [1]
202X	20	12	6	4	45-4/8	8-1/2	4-3/4
203	20	12	6	4	45-4/8	8-1/2	4-3/4
204	23-1/4	15-1/4	7-5/8	5	47-1/8	9-1/8	4-3/4
205	26-1/2	18-1/2	9-1/4	6	48-1/2	9-3/4	5-1/4
206	29-3/4	21-3/4	10-7/8	6	48-1/2	9-3/4	5-1/4
207	33	25	12-1/2	7	50-1/8	10-3/8	6-5/8
208	36-1/4	28-1/4	14-1/8	7	50-1/8	10-3/8	6-5/8
209	39-1/4	31-1/2	15-3/4	8	52	11	7-1/4
210	42-3/4	34-3/4	17-3/8	8	52	11	7-1/4

1. 202 only. Dimension 'G' includes allowance for 4" x 3" reducer furnished with boiler.

- Deluxe Insulated Jacket
- Circulator & Piping
- Pressure Temperature Gauge
- Drain Valve
- High Limit
- Circulator Relay
- Transformer and Junction Box
- 100% Shut-off Combination
- Step Opening Gas Valve
- Stainless Steel Burners
- Safety Relief Valve
- Draft Hood
- Vent Damper
- Blocked Vent Switch
- Flame Roll-Out Switch

Dimensions (in inches) and Standard Equipment



Your Hydronic Heating Source

From cast iron and steel boilers to the Alliance™ family of indirect water heaters, radiant heating pipe and accessories, and the EC5000 system manager, Burnham offers all the components for the complete home comfort system. And with the industry's most comprehensive technical support team, now is the time to look where contractors across the country have since 1873, now is the time to look at Burnham.

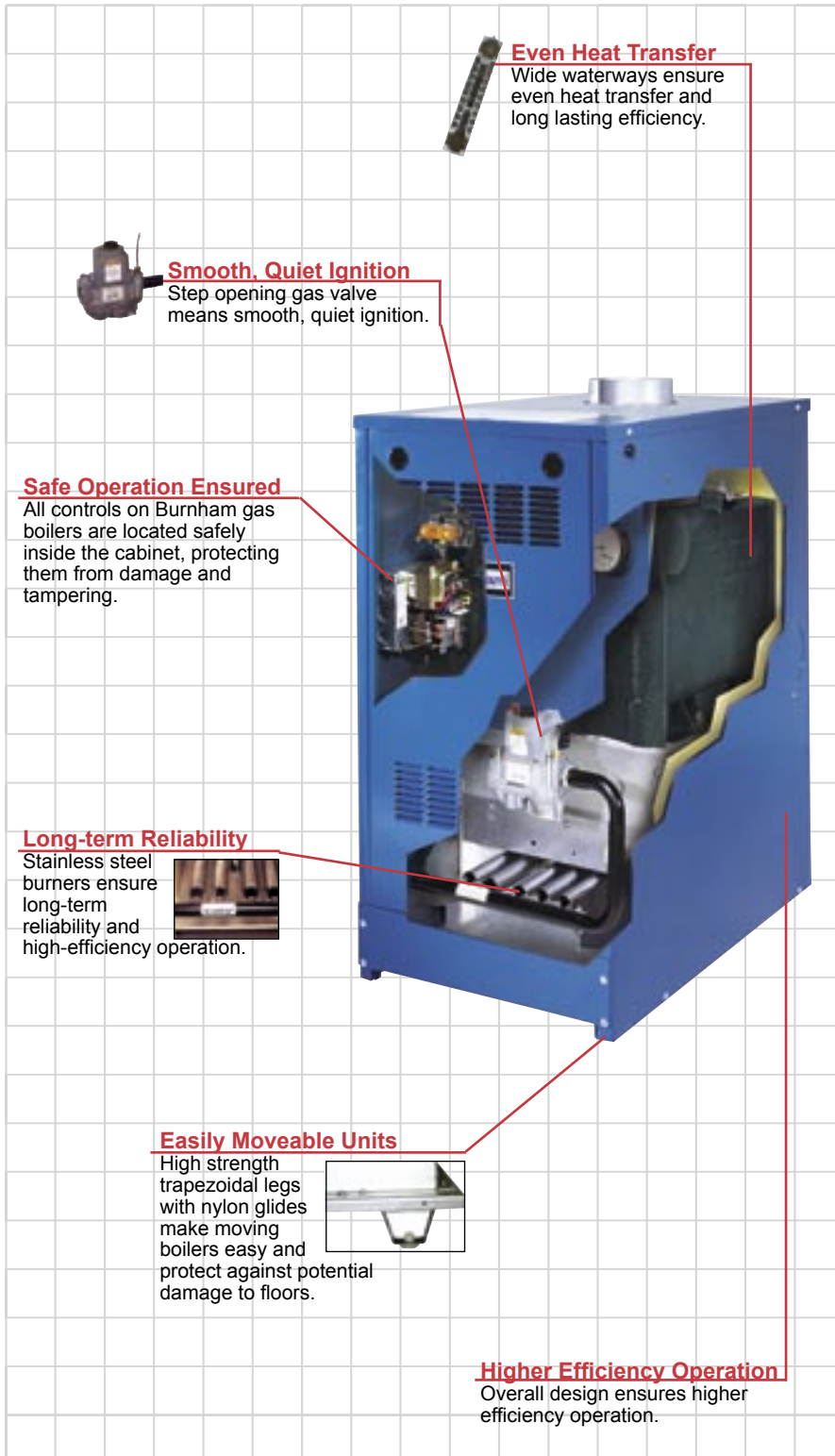
Lifetime True-Blue Limited Warranty

Burnham stands behind every Series 2 boiler with a Lifetime limited warranty on the heat exchanger.

The additional purchase of Burnham's Winter Warmth Assurance plan provides 5 or 10-year blanket coverage.

The program pays 100% of parts and labor on qualified repairs for 5 or 10 years from the date of installation.

See your Burnham Home Heating Team member for more information.

Even Heat Transfer
Wide waterways ensure even heat transfer and long lasting efficiency.

Smooth, Quiet Ignition
Step opening gas valve means smooth, quiet ignition.

Safe Operation Ensured
All controls on Burnham gas boilers are located safely inside the cabinet, protecting them from damage and tampering.

Long-term Reliability
Stainless steel burners ensure long-term reliability and high-efficiency operation.

Easily Moveable Units
High strength trapezoidal legs with nylon glides make moving boilers easy and protect against potential damage to floors.

Higher Efficiency Operation
Overall design ensures higher efficiency operation.



SERIES 2 BOILER

SPECIFICATIONS



SERIES 2 RATINGS Natural Gas or LP Gas



BOILER NUMBER	INPUT MBH (2)	DOE HEATING CAPACITY MBH (1)	I=B=R NET RATING MBH (3)	AFUE % (1)		APPROX. SHIPPING WEIGHT (LBS.)	MINIMUM RECOMMENDED CHIMNEY SIZE ROUND D . (In.) x H . (F .) () ()
				STANDING PILOT	(EI) ELECTRONIC IGNITION		
202*	37.5	31	27	80.0	82.3	222	4 x 15
202X*	50	42	37	80.2	83.2	272	4 x 15
203*	62	52	45	80.0	82.6	272	4 x 15
204*	96	80	70	80.1	82.3	316	5 x 15
205*	130	108	94	80.2	82.0	364	6 x 15
206*	164	136	118	80.3	81.7	424	6 x 15
207*	198	163	142	80.4	81.4	468	7 x 15
208*	232	191	166	80.4	81.2	524	7 x 15
209*	266	218	190	80.5	80.9	560	8 x 15
210*	299	244	212	80.7	80.6	618	8 x 15
203H*	62	52	45		84.0	274	4 x 15
204H*	96	80	70		84.0	319	5 x 15
205H*	130	108	94		84.0	368	6 x 15
206H*	164	136	118		84.0	429	6 x 15

* When ordering, add suffix 'N' to indicate natural gas. Substitute 'P' when ordering propane. Add 'C' to indicate 24 volt standing pilot. Add 'T' to indicate electronic ignition. Electronic Ignition is standard on the 2H. See Burnham Trade Price Sheet for full model number explanation.

Water Only - 30 PSI working pressure

1. DOE heating capacity and AFUE are based on U.S. Government standard tests.

2. In

reduced at the rate of four percent (4%) for each 1,000 ft. above sea level.

3. Net I=B=R ratings shown are based on normal I=B=R piping and pick up allowance of 1.15. Consult Burnham for installations having unusual piping and pick up requirements such as intermittent system of operation, extensive piping systems, etc.

4. 15' chimney height is from bottom of draft hood opening to top of chimney.

5. Refer to the National Fuel Gas Code, Appendix G for equivalent areas of circular and rectangular flue linings.

Maximum Allowable Working Pressure - 30 PSI (Water Only)

