



# Series 2®

Gas-Fired, Natural Draft,  
Cast Iron Water Boiler



- AFUE Up to 84%
- Natural Draft
- Natural or LP Gas  
38 – 299 MBH (14 sizes)
- Cast Iron Heat Exchanger, 2–10 Sections
- Direct Replacement for Thousands of Existing Boiler Installations
- Solid, Reliable, Time-Tested Design
- Standing Pilot or Electronic Ignition
- Lifetime Limited Warranty



**The Industry Standard  
for over 20 years!**

 **Burnham®**  
Hydronics





# Series 2

Gas-Fired, Natural Draft, Cast Iron Water Boiler

## The Best Selling Gas Boiler In America!

Since its introduction over 20 years ago, the Series 2 has earned a reputation for safety, reliability and durability. With a robust cast iron heat exchanger, long lasting stainless steel burners, over two decades of refinement, and over two million installed in North America, the Series 2 remains one of the most popular choices for those seeking a reliable, long-lasting gas boiler.

### Reliable Cast Iron Heat Exchanger

Series 2 boilers have rugged cast iron heat exchanger sections that are poured in Burnham's own state-of-the-art foundry in Zanesville, Ohio.

This means that Burnham is able to control the quality of this vital component from the time that it's poured to the time that it's installed and tested in the boiler. Burnham is the only domestic boiler manufacturer that can make this claim. The heat exchanger itself features large waterways and thick nipple ports which promote even heat transfer. Steel nipples are used to join sections together.

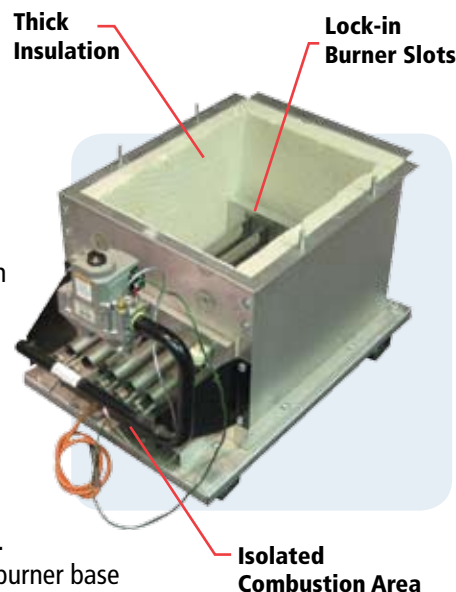
This vital component is impervious to petroleum-based chemicals (like antifreeze) which can break down the rubber gaskets that are used by competitors.



### A Better Burner Base

The burner base in a Series 2 has been engineered to deliver on Burnham's ongoing commitment to safety, reliability, and durability. Underneath its simple two piece design sits stainless steel burner tubes which are secured by lock-in burner slots. An isolated combustion area beneath the burner tubes optimizes airflow and keeps floor temperatures low beneath the boiler. The combustion chamber itself is lined with thick 1" insulation on the sides and 1-1/2" insulation on the rear. This directs the heat generated in combustion upward into the heat exchanger, not out into the boiler jacket and surrounding area.

The superior overall design of the Series 2 burner base results in more BTUs being directed into the heating system, and less energy wasted in the combustion process.



### Safety Without Compromise

Burnham's reputation for building safe products is an ongoing commitment that is taken very seriously. Many additional safety features have been built into the Series 2.

- **Blocked Vent Switch**  
Safely shuts the boiler down if a chimney or vent blockage is detected.
- **Flame roll-out switch**  
If an internal flueway restriction is detected, this device will automatically stop the flow of gas to prevent combustion gases from seeping into the home.
- **Concealed Controls**  
All boiler controls are safely concealed underneath the boiler jacket to prevent damage and tampering.



## Series 2® Boiler

### Reliable Controls

High quality, reliable controls are safely concealed inside the boiler jacket.

### Step Opening Gas Valve

This type of gas valve enables the boiler to light on low fire. Once a flame is established, the valve gently opens to full fire safely and smoothly. This provides quiet ignition and promotes long boiler life.

### Limited Lifetime Warranty

Burnham backs the Series 2 with a limited lifetime warranty on the heat exchanger. Additional coverage is available by purchasing the Winter Warmth Assurance Plan, which provides blanket protection on parts and labor for 5 or 10 years.



### Fuel Saving Vent Damper

This device automatically closes the flue when the boiler is not firing to prevent heat loss through the chimney, and re-opens prior to burner ignition (not shown).

### 1" Insulation

Surrounds boiler block which reduces heat loss through the boiler jacket.

### Rugged Jacket

Tough powder coated steel jacket designed for durability.



### Trapezoidal legs with Nylon Glides

These high strength legs & glides allow for easy positioning of the boiler, and protect against potential damage to flooring.



## Burnham Alliance SL™ Indirect-fired Water Heaters

For an abundant supply of domestic hot water, be sure to use an Burnham Alliance SL indirect-fired water heater with every boiler application.



The Alliance SL water heaters are designed with an effective hydrastone lining that offers superior corrosion resistance and outstanding performance in a wide variety of water conditions.

Water heaters are available in five sizes and come with a unique 10/2/1 warranty – 10 years on the tank and coil, 2 years labor and 1 year on parts. An optional lifetime warranty is also available.





# Ratings and Specifications



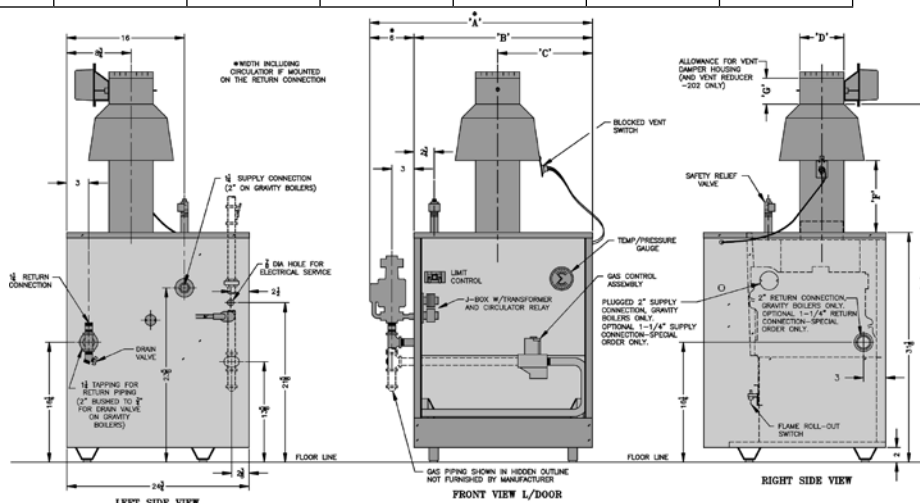
Model	Input MBH	DOE Heating Capacity (MBH)	I=B=R Net Rating MBH	AFUE % (1)		Approx. Shipping Wt. (lbs.)	Min. Rec. Chimney Size Round Dia. (In.) x Ht. (Ft.)
				Standing Pilot	(EI) Electronic Ignition		
202*	38	31	27	80.0	82.3	222	4 x 15
202X*	50	42	37	80.2	83.2	272	4 x 15
203*	62	52	45	80.0	82.6	272	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	N/A	84.0	274	4 x 15
204H*	96	80	70	N/A	84.0	319	5 x 15
205H*	130	108	94	N/A	84.0	368	6 x 15
206H*	164	136	118	N/A	84.0	429	6 x 15

\*When ordering, add suffix 'N' for natural gas, or 'P' for propane. Add 'C' for 24V standing pilot, or 'I' for electronic ignition. Electronic ignition is standard on 2H models. Water only, 30 PSI maximum working pressure. For elevations above 2000 feet, reduce ratings four percent (4%) per 1000 feet above sea level. 15' chimney height is from bottom of draft hood opening to top of chimney. Refer to the National Fuel Gas Code, appendix G for equivalent areas of circular and rectangular flue linings.

## Dimensions in inches

Model	A	B	C	D	E	F	G
202	18-3/4	10-3/4	6-3/8	4	45-1/2	8-1/2	10 (1)
202X	20	12	6	4	45-1/2	8-1/2	4-3/4
203	20	12	6	4	45-1/2	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)



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