

85% Efficient!



Burnham® ES2™

Gas Fired, Chimney Vented, Cast Iron Water Boiler

- 85% AFUE
- Electronic ignition
- Easy, intelligent IQ Control System™
- Outdoor reset available – increases efficiency by 15-20%
- 70 – 280 MBH (7 sizes)
- Industry standard tapping locations fit thousands of existing boiler installations
- Reliable, American-made cast iron heat exchanger
- Lifetime limited warranty



IQ control system

- Consists of the Intelligent Hydronic Control and IQ Option Panel



Intelligent Hydronic Control

- Provides fast and easy “out of the box” installation.
- Simple codes convey boiler status and eliminate guesswork
- Combines aquastat, relay, and ignition functions into a single module
- Two customizable integrated switching relays for easy addition of additional heating zone or indirect water heater



IQ Option Panel

- Enables the easy plug & play installation of optional features such as outdoor reset, LWCO, and high limit



Optional Touchscreen

- LCD displays all boiler settings, diagnostics, and troubleshooting in sentences, not codes



Burnham®
by
U.S. Boiler Company



ES2: Technical Information



Standard Equipment

- Insulated sleek, modern jacket
- Integrated draft diverter, damper and connector included
- Heavy gauge 1" and 1-1/2" base insulation
- Intelligent Hydronic Control – Simple self-diagnostic control system with 3-digit readout for status settings and errors
- IQ Option Panel, accepts plug & play IQ Option Cards for
 - Outdoor reset with DHW priority
 - Auto or manual reset low water cutoff
 - Auto auxilliary high limit
- Step-opening redundant gas valve
- Stainless steel flue baffles
- Spark ignition with retry
- User-friendly wiring with 120V J-box
- Circulator
- Cast iron section assembly
- Resettable blocked vent switch
- Boiler drain valve
- Cast iron supply manifold with safety relief valve tapping



ES2 Ratings & Specifications

Model	AFUE%	Input (MBH)	DOE Heating Capacity (MBH)	Net AHRI Water Rating (MBH)	Vent Size (Inches)	Approx. Shipping Weight. (lbs.)
ES23	85.0	70	59	51	4	254
ES24	85.0	105	89	77	5	301
ES25	85.0	140	119	103	6	353
ES26	85.0	175	149	130	6	405
ES27	85.0	210	178	155	7	464
ES28	85.0	245	208	181	7	514
ES29	85.0	280	238	207	8	564

Available for natural or LP gas

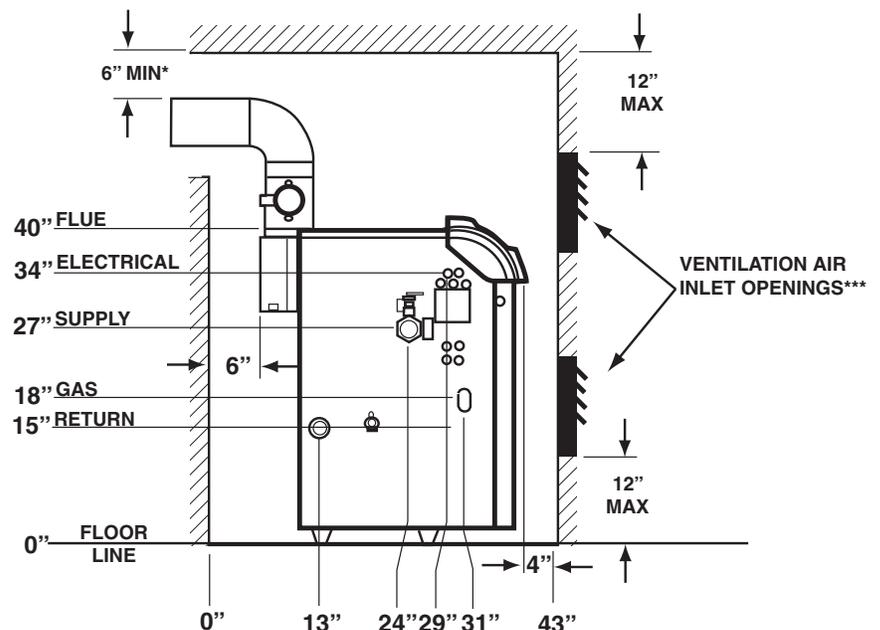
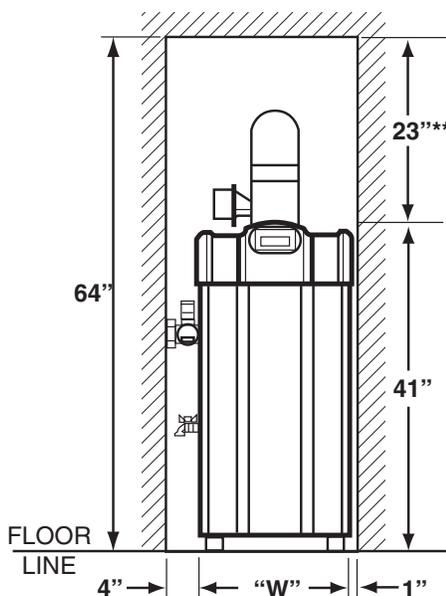
Ratings shown are based on certification to 2,000 ft. For elevations above 2,000 ft, use industry standard derating (4% per 1,000 ft.)

All ES2s are shipped with 30 psi relief valves, MAWP is 50 psi.

Net AHRI Water Ratings shown based on a piping and pickup allowance of 1.15. Consult manufacturer before selecting boiler for installations having unusual piping and pickup requirements, such as intermittent system operation, extensive piping systems, etc.

ES2 Dimensions & Connections

Model	Dimensions (inches)			Connections (inches)				Water Content (gal.)
	Width	Height	Depth	Supply	Return	Gas Valve	Relief Valve	
ES23	12-3/4	41	33	1-1/4	1-1/4	1/2	3/4	2
ES24	15-1/2	41	33	1-1/4	1-1/4	1/2	3/4	3
ES25	18-1/2	41	33	1-1/4	1-1/4	1/2	3/4	4
ES26	21-1/2	41	33	1-1/4	1-1/4	1/2	3/4	5
ES27	24-3/4	41	33	1-1/4	1-1/4	3/4	3/4	6
ES28	27-3/4	41	33	1-1/4	1-1/4	3/4	3/4	7
ES29	30-3/4	41	33	1-1/4	1-1/4	3/4	3/4	8



NOTES:

Caution: chimney, liner, and vent connector must meet requirements specified by manufacturer's installation instructions

* Minimal radial distance around vent pipe and breeching

** Add height required to maintain 6" clearance from all breeching components

*** Area of each opening 1 sq. inch for each 1,000 BTUH input - with minimum of 100 sq. inches. Height of opening should be half the width.

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Phone: 1-888-432-8887

