

HIGH-EFFICIENCY BOILERS

★★★★★ *Five Star* WB-SERIES

Wet Base Residential Boilers



Welcome home!



Five Star



Welcome ... and thank you for considering joining the family of satisfied Columbia Five Star WB-Series Boiler owners. At Columbia, we are committed to providing excellent products, an unparalleled level of service, and great attention to our customers' needs. We designed the Five Star WB-Series with a focus on the highest standards of quality and performance to ensure the level of excellence that today's homeowner expects and deserves.



Why the Five Star?

The Five Star is our premier steel boiler. It incorporates proven commercial technology to deliver ease of service, ease of installation, and efficiency for the homeowner.

3-Pass Design

The Five Star's 3-pass boiler design is the key to providing efficiency up to 86%. Flue gases are re-circulated in the boiler for as long as possible for increased efficiency.

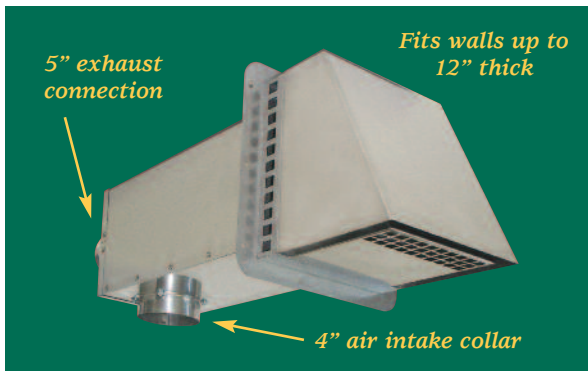
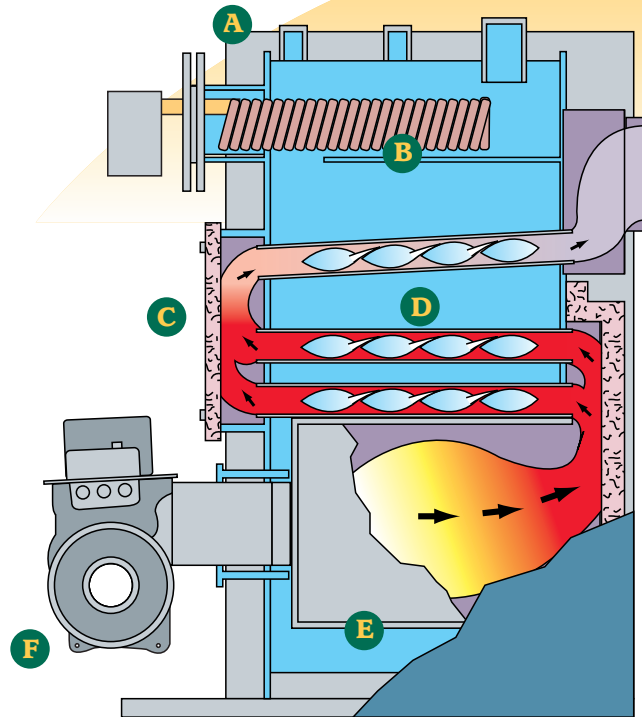
Built to Grow with You

Because all Five Star boilers offer 3 firing rates, you will have the flexibility to increase your heating capacity if your heating requirements expand. (See specs on back.)

Boiler plus Hot Water Heater?

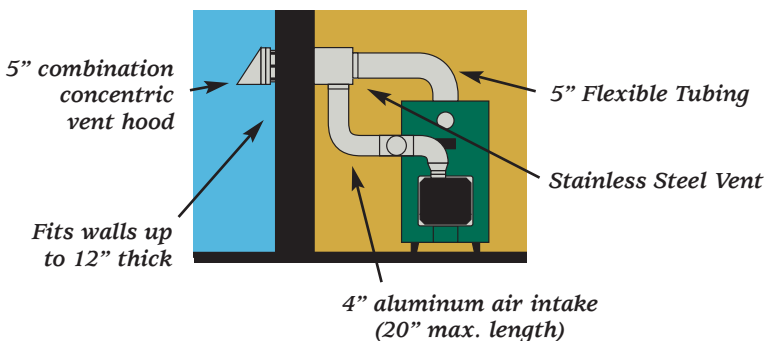
If you're looking for the convenience of an oil boiler that will also supply an abundance of domestic hot water, the Five Star is the right choice for you. All Five Star boilers can be ordered with a tankless coil. The coil is placed directly in the line of the internal water flow for better heat transfer.

- A** Supply port tube prevents air from entering the system.
- B** 5 GPM domestic water coil.
- C** Front access to the horizontal firetubes. promotes easy cleaning.
- D** 3-pass heat exchanger for higher efficiency.
- E** Durable wet base design provides improved efficiency by increasing heat transfer surface area.
- F** Your choice of Beckett NX or AFG, Riello F5 or BF5, or Carlin EZ-1 burners.



Direct Vent System

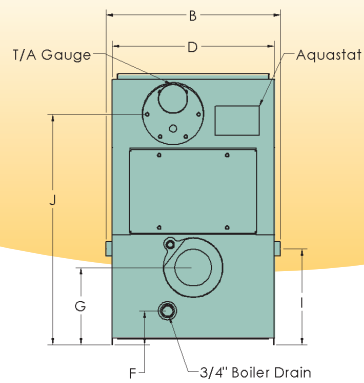
The Five Star WB90, WB100, and WB110 boilers are available with a direct vent system for installations where a chimney is not available or is not safe. This system accommodates walls up to 12" thick and features a 5" exhaust connection. Included is a Concentric Vent Termination Kit with all the necessary hardware to complete your installation. Available burners: Beckett NX, Riello BF5, and Carlin EZ-1.



Five Star

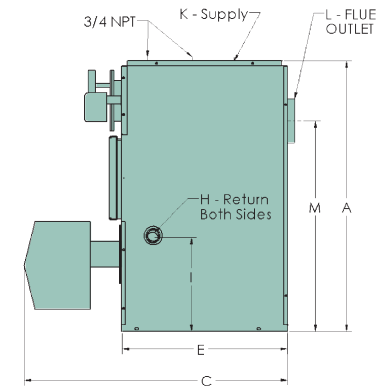
★ FEATURES ★

- 3-pass wet-base design
- High efficiency to 86%
- Standard design pressure to 58 psi
- Superior serviceability with complete access to firetubes for cleaning
- Burners come with quick-disconnects for servicing
- Left and right side return connections
- Limited Lifetime Warranty
- Direct vent capabilities
- Positive pressure-fired vessel
- ASME Rated
- 12 firing rates with 4 boilers
- WB90 through 150 can be installed on combustible floor



Five Star WB-SERIES

Wet Base Residential Boiler Specifications



Boiler Model	WB90	WB100	WB110	WB125	WB135	WB150	WB165	WB175	WB200	WB225	WB250	WB275
Firing Rate (GPH)	0.90	1.00	1.10	1.25	1.35	1.50	1.65	1.75	2.00	2.25	2.50	2.75
Input	126,000	140,000	154,000	175,000	189,000	210,000	231,000	245,000	280,000	315,000	350,000	385,000
Net Output	95,000	105,000	115,000	130,000	140,000	155,000	174,000	184,000	210,000	230,000	253,000	277,000
Heating Capacity	109,000	121,000	132,000	161,000	178,000	200,000	212,000	242,000	N/A	N/A	N/A	N/A
Nozzle@140 psi (Beckett)	.75-80°B	.85-80°B	.90-80°B	1.00-80°B	1.10-80°B	1.25-80°B	1.50-60°B	1.65-60°B	1.75-60°B	2.00-60°B	2.25-60°B	2.50-60°B
Nozzle@150 psi (Riello)	.75-60°B	.85-60°B	.90-60°B	1.00-60°B	1.10-60°B	1.25-60°B	N/A	N/A	N/A	N/A	N/A	N/A
Nozzle@140 psi (Carlin)	.75-60°A	.85-60°A	.90-60°A	1.00-60°A	1.10-60°A	1.25-60°A	N/A	N/A	N/A	N/A	N/A	N/A
 Tubes	10	10	10	16	16	16	18	18	18	24	24	24
Water Content (GAL)	30	30	30	28	28	28	48	48	48	46	46	46
Coil Capacity (GPM)	5	5	5	5	5	5	5/7 Opt.	5/7 Opt.	5/7 Opt.	5/7 Opt.	5/7 Opt.	5/7 Opt.
AFUE-DOE Efficiency	85.1	84.8	84.2	85.0	84.7	84.0	86.0	85.6	84.6	N/A	N/A	N/A
Combustion Efficiency	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	85.5	85.2	84.9
Weight	458	458	458	485	485	485	680	680	680	710	710	710
A) Overall/Jacket Height	37-7/16	37-7/16	37-7/16	37-7/16	37-7/16	37-7/16	45-1/2	45-1/2	45-1/2	45-1/2	45-1/2	45-1/2
B) Overall Width	23-3/4	23-3/4	23-3/4	23-3/4	23-3/4	23-3/4	24	24	24	24	24	24
C) Overall Length	31-3/4	31-3/4	31-3/4	31-3/4	31-3/4	31-3/4	42	42	42	42	42	42
D) Jacket Width	22-1/16	22-1/16	22-1/16	22-1/16	22-1/16	22-1/16	22-1/16	22-1/16	22-1/16	22-1/16	22-1/16	22-1/16
E) Jacket Length	22-3/4	22-3/4	22-3/4	22-3/4	22-3/4	22-3/4	33	33	33	33	33	33
F) 3/4" Drain to Ground	4-3/4	4-3/4	4-3/4	4-3/4	4-3/4	4-3/4	4-3/4	4-3/4	4-3/4	4-3/4	4-3/4	4-3/4
G) C. L. to Burner	10-3/4	10-3/4	10-3/4	10-3/4	10-3/4	10-3/4	12-1/2	12-1/2	12-1/2	12-1/2	12-1/2	12-1/2
H) Return Diameter	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4
I) C. L. to Returns	13-1/8	13-1/8	13-1/8	13-1/8	13-1/8	13-1/8	14-1/8	14-1/8	14-1/8	14-1/8	14-1/8	14-1/8
J) Coil Connect. Height	30-5/8	30-5/8	30-5/8	30-5/8	30-5/8	30-5/8	39-1/4	39-1/4	39-1/4	39-1/4	39-1/4	39-1/4
K) Supply Diameter (npt)	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	1-1/4	2	2	2	2	2	2
L) Flue Outlet	6*	6*	6*	6	6	6	8	8	8	8	8	8
M) C. L. to Flue	29-3/16	29-3/16	29-3/16	29-3/16	29-3/16	29-3/16	35-5/16	35-5/16	35-5/16	35-5/16	35-5/16	35-5/16

*Direct Vent model has 5" flue outlet

2.5m-10/08-BP



Constructed and hydrostatically tested in accordance with ASME Boiler Code, Section IV.