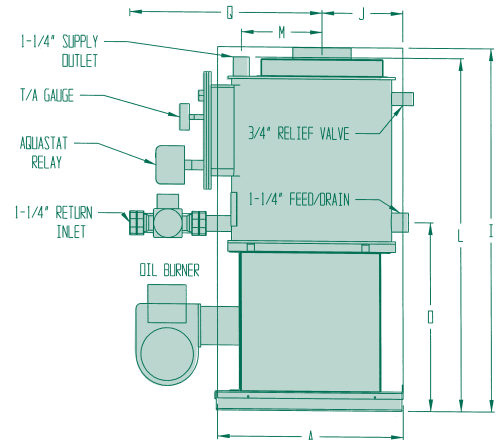
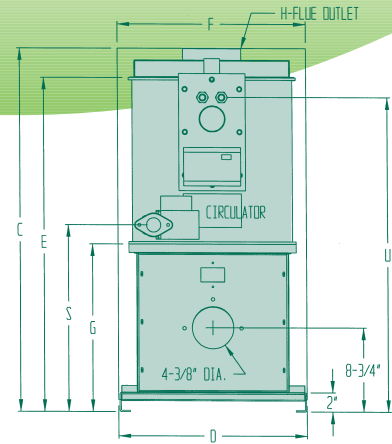


# EMERALD SERIES BOILER SPECIFICATIONS



IBR/DOE RATINGS AND DATA		ENERGY STAR			ENERGY STAR			ENERGY STAR				
Boiler Model No.	EM-85	EM-100	EM-3100	EM-110	EM-125	EM-3125	EM-135	EM-150	EM-165	EM-175	EM-200	
Firing Rate - #2 Fuel	.85	1.00	1.00	1.10	1.25	1.25	1.35	1.50	1.65	1.75	2.00	
Input - MBTU/Hr.	119	140	140	154	175	175	189	210	231	245	280	
Net Output	84	98	103	109	123	127	136	153	166	178	201	
Nozzle @140 psi (Beckett)	.65 80°B	.75 80°B	.75 80°B	.85 80°B	1.00 80°B	1.00 80°B	1.10 80°A	1.25 80°A	1.35 80°A	1.50 80°A	1.65 80°A	
Nozzle @150 psi (Riello)	.65 60°A	.75 60°A	NA	.85 60°A	1.00 60°A	NA	1.10 80°A	1.25 80°A	1.35 80°A	1.50 80°A	1.65 80°A	
Nozzle @140 psi (Carlin)	.65 70°A	.75 70°A	NA	.85 70°A	1.00 60°B	NA	1.10 60°B	1.25 60°B	1.35 60°B	1.50 70°A	1.65 70°A	
AFUE Ratings	83.6	83.1	85.5	83.6	83.3	85.0	83.9	83.8	83.0	83.6	82.5	
GPM Tankless Coil	3	5	5	5	5	5	5	5	5	5	5	
Number of Fire Tubes	8 (2")	10 (2")	8 (3")	12 (2")	14 (2")	8 (3")	8 (3")	10 (3")	10 (3")	14 (3")	14 (3")	
Water Capacity (gallons)	14	13.5	22	13	12.5	22	22	20	20	16	16	
Approx. Shipping Weight (lbs)	285	290	355	295	300	355	355	370	370	390	390	
DIMENSIONS												
Casing	A Length	20"	20"	21"	20"	20"	21"	21"	21"	21"	21"	21"
	C Height	37-1/4"	37-1/4"	46"	37-1/4"	37-1/4"	46"	46"	46"	46"	46"	46"
	D Width	19-1/2"	19-1/2"	21"	19-1/2"	19-1/2"	21"	21"	21"	21"	21"	21"
Boiler	E Height	34-3/8"	34-3/8"	43-3/8"	34-3/8"	34-3/8"	43-3/8"	43-3/8"	43-3/8"	43-3/8"	43-3/8"	43-3/8"
	F Diameter	16-3/4"	16-3/4"	18-3/4"	16-3/4"	16-3/4"	18-3/4"	18-3/4"	18-3/4"	18-3/4"	18-3/4"	18-3/4"
	G Base Hgt.	17"	17"	20-1/2"	17"	17"	20-1/2"	20-1/2"	20-1/2"	20-1/2"	20-1/2"	20-1/2"
Flue Outlet	H Size	6"	6"	6"	6"	6"	6"	8"	8"	8"	8"	
	I Height	37-1/2"	37-1/2"	47"	37-1/2"	37-1/2"	47"	47"	47"	47"	47"	
	J C.L. to Rear	9-1/2"	9-1/2"	10-1/2"	9-1/2"	9-1/2"	10-1/2"	10-1/2"	10-1/2"	10-1/2"	10-1/2"	
Supply Outlet	Size	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"	
	L Height	35-1/4"	35-1/4"	45"	35-1/4"	35-1/4"	45"	45"	45"	45"	45"	
	M C.L. to Outlet	8-1/2"	8-1/2"	8-3/8"	8-1/2"	8-1/2"	8-3/8"	8-3/8"	8-3/8"	8-3/8"	8-3/8"	
Feed/ Drain	Size	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"	
	O Height	19-1/4"	19-1/4"	22-3/4"	19-1/4"	19-1/4"	22-3/4"	22-3/4"	22-3/4"	22-3/4"	22-3/4"	
Return Inlet	Size	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"	
	Q C.L. to Inlet	19-1/2"	19-1/2"	20"	19-1/2"	19-1/2"	20"	20"	20"	20"	20"	
	S Height	19"	19"	22-1/2"	19"	19"	22-1/2"	22-1/2"	22-1/2"	22-1/2"	22-1/2"	
Coil Connect.	Nominal Size	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	
	U Height	32-1/4"	32-1/4"	42"	32-1/4"	32-1/4"	42"	42"	42"	42"	42"	

2.5m-6/08-BP

HIGH-EFFICIENCY BOILERS

# EMERALD SERIES Residential Steel Boilers



Welcome home!



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

COLUMBIA BOILER COMPANY



Box 1070, Pottstown, PA, Phone 610-473-8457, Fax 610.367.6800, Web www.columbiaboiler.com



*Keeping Families Warm for over 70 Years!*

# EMERALD SERIES

RESIDENTIAL STEEL BOILERS

## *Comfort, Reliability, Serviceability, Quality, and Efficiency*

An Emerald boiler provides the advantages of hydronic heat *and* a domestic hot water system ... all in one package! It's the perfect choice for maximizing comfort and convenience.

Emerald boilers have a history of proven service and reliability and are backed by a Limited Lifetime Warranty.



### *Emerald Advantages*

- All trim is mounted on the front of the units for easy access during servicing.
- Jacket top and smoke hood can be removed to expose the fire tubes for cleaning.
- A raised coil flange with bolts and nuts allows easy servicing.
- One-piece, ceramic-fiber combustion chamber is accessible from the front of the boiler.
- Large cast peep site allows an unobstructed view of the flame pattern.
- Eleven different Emerald-series units are available to meet a broad range of installation requirements (see specs on back).
- Can be matched with a built-in tankless coil to supply your family's domestic hot water needs.
- Backed by a Limited Lifetime Warranty.
- The Emerald boiler is packaged with the oil burner primary and the high/low limit circulator relay, pressure temperature gauge, circulator, and clean-cut pump.
- Boiler jacket is painted with a powder coat process to insure a durable finish.
- Capability of front or rear return piping.
- Designed, constructed, and hydrostatically-tested to ASME Standards.



*A built-in "Air Scoop System" provides quiet, air-free operation of your hot water system by removing noisy air pockets.*



*Unique, one-piece, ceramic-fiber chamber forms a durable seal between the heat exchanger and boiler base.*



*Riello R40 (above) and Carlin (below) burners are available for the Emerald.*



## *You can Count on Columbia Steel Boilers*

*Our company's history dates back to 1936 when we began making boilers for simple steam process operations. With the exception of a few wartime years, we have specialized in steel boilers. Today, our hydronic units range from domestic to commercial use ... with worldwide distribution.*

## *Our Commitment to You*

*Our commitment doesn't end with the installation of your boiler. We are committed to outstanding performance, ease of service, and parts availability. We are there for you after the sale. We've been around since 1936 and we'll be around tomorrow.*