



Outdoor 125 PSI Hot Water Boilers Atmospheric / Natural Gas Fired

PRODUCT DESCRIPTION

Rite Atmospheric Natural Gas Fired Watertube Boilers are found at the heart of better engineered closed-loop heating systems all over North America. From conventional space heating systems to heat pumps to industrial process loads, Rite offers 47 basic models, ranging from 480 to 5,000 MBH Input (11 – 119 Boiler Horsepower). These heavy duty, long lasting boilers have been providing heat to schools, churches, commercial buildings, metal finishers and silicone chip makers (to name a few) – **Safely and reliably for nearly fifty years.**

So simple to maintain and operate, Rite Boilers feature **complete waterside access** so that virtually all scale and mud deposits can be seen and mechanically cleaned during a single scheduled maintenance shutdown. The result – **Better fuel efficiency and lower operating cost over the life of your boiler investment.** Consider a few of our other standard features: Floating heads that eliminate pressure vessel cracks and broken welds caused by thermal stress cycling (backed by **Rite's 25 year Thermal Shock Warranty**), Single Stacks on models to 7,500,000 BTUH input, Top supply and return water connections, Rugged Heat Exchangers with minimal pressure drop at normal flow rates can also handle the boiler firing under no flow conditions, Rite's bolted/gasketed headplates that eliminate any possibility of hydraulic explosion in the event that safety devices fail – and you have a better boiler by design.



COVERS REMOVED





Outdoor 125 PSI Water Heating Boilers / Atmospheric Models & Ratings / Natural Gas Fired

STACK / DRAFT REQUIREMENTS

- UL listed for use with Type B Vent when power burner is for natural or L.P. gas fired only.
- Type 316 stainless steel lined stack is required when equipped with #2 oil or combination gas & #2 oil burner.
- Recommended stack height for natural or L.P. gas fired burners is 6 feet
- Recommended stack height for #2 oil or combination gas & #2 oil fired boilers is 10-12 ft.
- The stack should be supported independently of the boiler
- A minimally restrictive rain cap with integral down draft protection (supplied by others) is required.
- Proper draft range is between -.05" to -.09" water column.

AIR REQUIREMENTS

- Adequate Combustion/Ventilation Air is vital for safe, efficient operation. Refer to the latest edition of the Uniform Mechanical Code or consult your local Building and Safety Department for specific requirements.

NATURAL GAS SUPPLY REQUIREMENTS

(STATIC AND AT FLOW)

- Models W48 W * - W76 W * 6" w.c. min. to 14" w.c. max.
 - Models W85 W * - W400 W * 7" w.c. min. to 14" w.c. max.
 - Models W425 W * - W500 W * 15" w.c. min. to 28" w.c. max.
 - For other gas pressures, consult factory or your Rite Representative.
- *Propane Supply Requirements: 11" w.c. min. to 14" w.c.

WATER TEMPERATURES & PRESSURE DROPS

- Minimum return water temperature is 135° F (after start-up). Lower temperature return factory options available.
- Maximum practical supply water temperature is 235° F. Higher temperature/pressure Rite Boilers available.
- Pressure drop for all models is less than 3 feet of total head.

ELEVATION DERATION

Ratings given below are for elevations up to 2000 feet. Above 2000 feet, ratings should be reduced at the rate of 4% for every 1000 feet above sea level.

B.T.U. FORMULA

- BTU Output @ 0-2000' elevation = 60 x 8.3 x T x G.P.M.

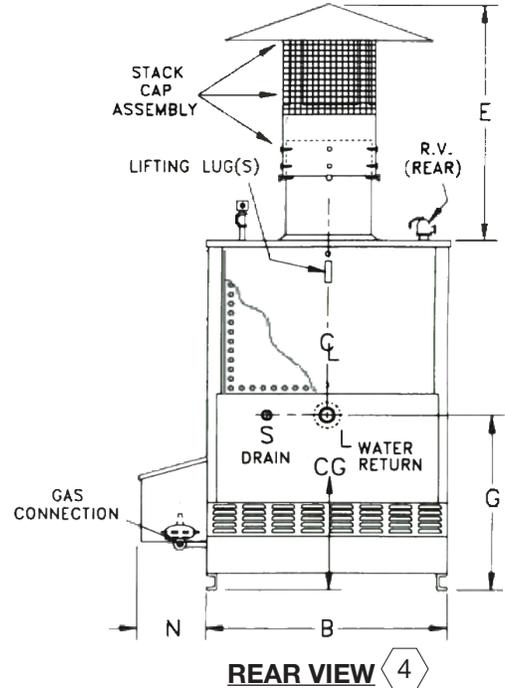
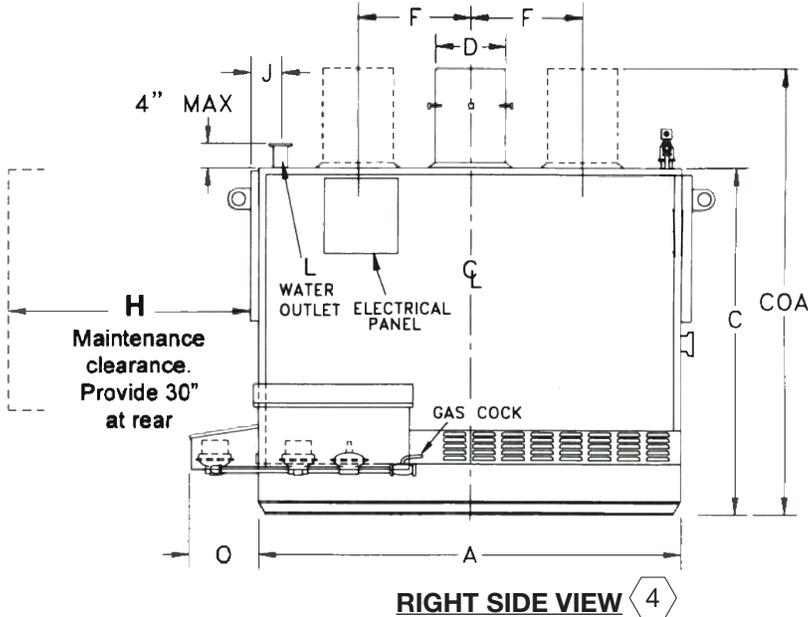
ELECTRICAL REQUIREMENTS

- A Single Point 120/60/1 8 amp supply to the electrical panel.

BOILER MODEL	Input MBH	Nominal Output		E.D.R.	Heating Surface Sq. Ft.	Water Content Gallons	G.P.M. 20° F Rise	G.P.H. 100° F Rise	Approx. Shipping Weight (lbs)
		MBH	Boiler Horsepower						
W48 W	480	384	11	2400	49	21	38	465	1080
W55 W	550	440	13	2750	56	23	44	535	1285
W63 W	630	506	15	3162	63	24	51	615	1390
W76 W	760	608	18	3800	75	27	61	740	1530
WA90 W	900	720	21	4500	89	31	72	875	1700
W85 W	850	680	20	4250	88	40	69	830	1735
W90 W	900	720	21	4500	88	40	72	875	1735
W105 W	1050	840	25	5250	101	43	84	1015	1865
W120 W	1200	960	28	6000	115	47	97	1165	2000
W135 W	1350	1080	32	6750	131	50	110	1315	2140
W150 W	1500	1200	35	7500	145	54	120	1460	2265
W165 W	1650	1320	39	8250	159	57	135	1600	2400
W180 W	1800	1440	43	9000	174	61	145	1750	2510
W200 W	2000	1600	47	10000	192	66	160	1950	2700
WA150 W	1500	1200	35	7500	160	71	120	1460	2430
WA165 W	1650	1320	39	8250	168	75	135	1600	2550
WA180 W	1800	1440	43	9000	190	79	145	1750	2735
WA200 W	2000	1600	47	10000	205	83	160	1950	2960
W225 W	2250	1800	53	11250	230	89	180	2190	3160
W250 W	2500	2000	59	12500	252	94	200	2430	3365
W275 W	2750	2200	65	13750	273	100	220	2670	3590
W300 W	3000	2400	71	15000	295	105	240	2920	3815
W325 W	3250	2600	77	16250	318	111	265	3160	4040
W350 W	3500	2800	83	17500	340	116	285	3400	4265
W375 W	3750	3000	89	18750	362	122	305	3650	4490
W400 W	4000	3200	95	20000	383	127	325	3900	4715
W425 W	4250	3400	101	21250	405	133	345	4140	4940
W450 W	4500	3600	107	22500	428	139	365	4380	5160
W475 W	4750	3800	113	23750	450	145	385	4630	5385
W500 W	5000	4000	119	25000	473	151	405	4870	5610



Outdoor 125 PSI Water Heating Boilers / Atmospheric Models & Dimensions / Natural Gas Fired



BOILER MODEL	A	B	C	COA	CG	D	E	F	G	H	J	L	N	O	S
W48 W	40	26	63	80	42	9	34	0	41	32	2 1/2	2	15	13	1
W55 W	45	26	63	82	42	10	36	0	41	37	2 1/2	2	15	13	1
W63 W	50	26	63	82	42	10	36	0	41	42	2 1/2	2	15	13	1
W76 W	58	26	63	84	42	12	38	0	41	50	2 1/2	2	15	13	1
WA90 W	68	26	63	84	42	12	38	0	41	60	2 1/2	2	15	13	1
W85 W	46	32	67	88	46	12	38	0	41	36	3	3	17	21	1 1/4
W90 W	46	32	67	88	46	12	38	0	41	36	3	3	17	21	1 1/4
W105 W	52	32	67	90	46	14	41	0	41	42	3	3	17	21	1 1/4
W120 W	58	32	67	90	46	14	41	0	41	48	3	3	17	21	1 1/4
W135 W	64	32	67	93	46	16	43	0	41	54	3	3	17	21	1 1/4
W150 W	70	32	67	93	46	16	43	0	41	60	3	3	17	21	1 1/4
WA150 W	55	42	72	98	51	16	43	0	41	42	3 1/2	4 FL	19	23	1 1/2
W165 W	76	32	67	93	46	16	43	0	41	66	3	3	17	21	1 1/4
WA165 W	59	42	72	98	51	16	43	0	41	46	3 1/2	4 FL	19	23	1 1/2
W180 W	82	32	67	88	46	(2) 12	38	18	41	72	3	3	17	21	1 1/4
WA180 W	65	42	72	100	51	18	45	0	41	52	3 1/2	4 FL	19	23	1 1/2
W200 W	90	32	67	90	46	(2) 14	41	20	41	80	3	3	17	21	1 1/4
WA200 W	69	42	72	102	51	20	47	0	41	56	3 1/2	4 FL	19	23	1 1/2
W225 W	73	42	72	102	51	20	47	0	41	60	3 1/2	4 FL	21	27	1 1/2
W250 W	79	42	72	102	51	20	47	0	41	66	3 1/2	4 FL	21	27	1 1/2
W275 W	85	42	72	98	51	(2) 16	43	18	41	72	3 1/2	4 FL	21	27	1 1/2
W300 W	91	42	72	98	51	(2) 16	43	19	41	78	3 1/2	4 FL	21	27	1 1/2
W325 W	97	42	72	98	51	(2) 16	43	21	41	84	3 1/2	4 FL	21	27	1 1/2
W350 W	103	42	72	100	51	(2) 18	45	23	41	90	3 1/2	4 FL	21	27	1 1/2
W375 W	109	42	72	100	51	(2) 18	45	24	41	96	3 1/2	4 FL	21	27	1 1/2
W400 W	115	42	72	100	51	(2) 18	45	25	41	102	3 1/2	4 FL	21	27	1 1/2
W425 W	121	42	72	100	51	(2) 18	45	27	41	108	3 1/2	4 FL	21	27	1 1/2
W450 W	127	42	72	102	51	(2) 20	47	28	41	114	3 1/2	4 FL	21	27	1 1/2
W475 W	133	42	72	102	51	(2) 20	47	30	41	120	3 1/2	4 FL	21	27	1 1/2
W500 W	139	42	72	102	51	(2) 20	47	31	41	126	3 1/2	4 FL	21	27	1 1/2

All dimensions in inches; Subject to change without notice.
FL = Flanged.