

NATIONAL RADIATOR CORPORATION

General Offices: Johnstown, Pa.

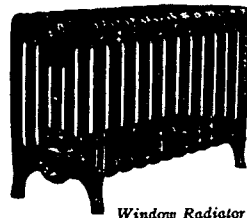
Branch Offices and Warehouses

BALTIMORE	2622 Frisby Street	MILWAUKEE	124-130 Jefferson Street
BOSTON	93-97 Oliver Street	NEW YORK	55 West Forty-second Street
BUFFALO	259-265 Delaware Avenue	OMAHA	108-112 S. Tenth Street
CHICAGO	2445 North Keeler Avenue	PHILADELPHIA	121 North Broad Street
CINCINNATI	Spring Grove and Elmira Avenue	PITTSBURGH	1509 Arrott Building
CLEVELAND	935 East Sixty-third Street	RICHMOND	3032 Norfolk Street
INDIANAPOLIS	431 W. Georgia Street	ST. LOUIS	1042 Central Industrial Street
JOHNSTOWN	221 Central Avenue	WASHINGTON, D. C.	2205 Fifth Street, N.E.

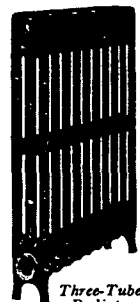
Manufacturers of

Aero Radiators, National Round Boilers, National Jacketed Boilers, Super-Smokeless Boilers, Imperial Sectional Boilers, Low Water Line Boilers, Contento Boilers and Gas Boilers.

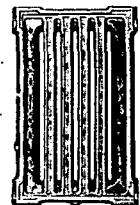
Aero Radiation



Window Radiator



Three-Tube Radiator

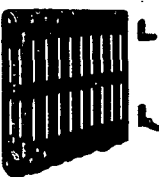


Wall Radiator

Style— Steam or Water	Distance from Floor to Center of Top Tapping	Height in In.	Square Feet per Section
3 Tube— Width of Section 5 1/8"	33 3/4" 27 7/8" 23 1/4" 17 7/8"	36 30 26 20	3 1/2 3 2 1/4 1 3/4
4 Tube— Width of Section 6 3/8"	33 3/4" 27 7/8" 23 1/4" 17 7/8"	36 30 26 20	4 1/4 3 1/2 2 3/4 2 1/4
5 Tube— Width of Section 8 1/8"	33 3/4" 27 7/8" 23 1/4" 20 3/4" 17 7/8"	36 30 26 23 20	5 4 1/4 3 1/2 3 2 3/4
6 Tube— Width of Section 9"	35 7/8" 29 7/8" 23 7/8" 20 7/8" 17 7/8"	38 32 26 23 20	6 5 4 3 1/2 3
7 Tube— Width of Section 12"	33 3/4" 27 7/8" 23 1/4" 17 7/8" 14 1/2" 11 3/4"	36 30 26 20 16 1/2 13 1/2	6 3/4 5 1/2 4 1/4 3 3/4 3 1/4 2 3/4



Five-Tube Radiator



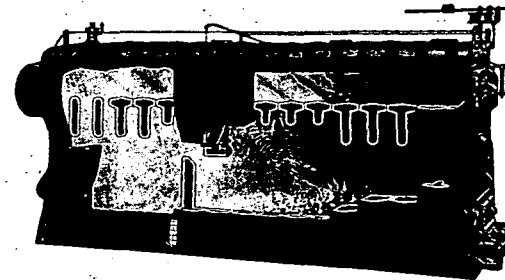
Legless Radiator

Floor to center bottom tapping—4 3/4 in.
Excepting 13 3/4 in. and 16 1/2 in. 7 Tube which is
3 in.

National Aero Wall Radiation

Sections Number	Height Inches	Length or Width	Center to Center Tappings	Sq. Ft. Per Section
5A	13 3/4"	16 7/8"	10 3/4"	5
7A	13 3/4"	21 7/8"	10 3/4"	7
9A	13 3/4"	29 3/4"	10 3/4"	9
7B	21 7/8"	13 3/4"	18 1/2"	7
9B	29 3/4"	13 3/4"	25 1/2"	9

Thickness of sections—2 3/4 in.

National
Super-Smokeless
Boilers

The patented baffle section separates the primary and secondary combustion chambers. The volatile gases from the coking coal in front are intimately mixed with secondary air and consumed smokelessly. The rotative fire travel scours the flue ways resulting in maximum heat transfer.

Boiler Number	Steam Rating	Water Rating	Grate Area Sq. Ft.	Length of Sections Only In.	Length of Sections and Smoke Box In.	Number of Outlets Sizes in.	Chimney		'Boiler Covering Sq. Ft. Surface
							Area In.	Height Ft.	
24 Series—Height of Water Line, 45½". Height Flow Outlet, 54". Width of Sections—35½".									
245	1600	2600	5.00	37¼	48½	1-4"	12x12	40	34
246	2000	3250	6.25	45½	56¾	2-4"	13x13	40	42
247	2400	3900	7.50	53¼	63½	2-4"	13x13	50	50
248	2800	4550	8.75	62	71½	2-4"	14x14	50	58
249	3200	5200	10.00	70¼	79½	3-4"	14x14	55	64
33 Series—Height of Water Line, 53". Height Flow Outlet, 64½". Width of Sections—47".									
335	2900	4650	7.32	37¼	49½	1-5"	14x14	40	42
336	3600	5800	9.10	45½	57½	2-5"	15x15	40	51
337	4300	6950	10.87	53¼	66	2-5"	16x16	40	60
338	5000	8100	12.65	62	72½	2-5"	16x16	50	69
339	5700	9250	14.42	70¼	80¾	3-5"	18x18	50	78
3310	6400	10400	16.20	78½	89	3-5"	18x18	55	87
40 Series—Height of Water Line, 57". Height Flow Outlet, 69". Width of Sections—57½".									
405	4200	6700	9.68	37¼	49½	1-5"	15x15	50	46
406	5200	8300	12.03	45½	57½	2-5"	16x16	50	50
407	6200	9900	14.38	53¼	65¾	2-5"	18x18	50	66
408	7200	11500	16.73	62	74	3-5"	18x18	55	76
409	8200	13100	19.08	70¼	82¾	3-5"	20x20	55	86
4010	9200	14700	21.43	78½	90¾	3-5"	20x20	60	96
4011	10200	16300	23.77	86¾	97	3-5"	21x21	60	106
4012	11200	17900	26.12	95	105½	4-5"	22x22	65	116
4013	12200	19500	28.47	103¼	113½	4-5"	22x22	70	126
4014	13000	20800	30.77	111½	121¼	4-5"	23x23	75	136
4015	13800	22100	32.77	119¾	130	4-5"	23x23	75	146
4016	14600	23400	34.77	128	138¾	4-5"	24x24	80	156
4017	15400	24700	36.77	136¼	146½	4-5"	24x24	80	166
4018	16200	26000	38.77	144½	154¼	4-5"	25x25	80	176
4019	17000	27300	40.77	152¼	163	5-5"	25x25	85	186
4020	17600	28200	42.77	161	171¼	5-5"	25x25	90	196
4021	18200	29200	44.77	169¼	179½	5-5"	25x25	100	206
4022	18800	30200	46.77	177½	187¾	5-5"	26x26	100	216
4023	19400	31200	48.77	185¼	196	5-5"	27x27	100	226
4024	20000	32200	50.77	194	204¼	5-5"	27x27	100	236

*Square feet of exterior boiler surface. Approximate number of pounds of covering per boiler section, 24 series, 50 lb.; 33 series, 60 lb.; 40 series, 67 lb.

National Duplex Super-Smokeless Boilers

Boiler Number	Steam Rating	Water Rating	Grate Area Sq. Ft.	Length of Sections Only In.	Length of Sections and Smoke Box In.	Number of Outlets Sizes in.	Chimney Area In.	Height Ft.	Boiler Covering Sq. Ft. Surface
827	13200	21100	28.76	53 1/4	70 3/4	1-8"	23x23	60	90
828	15200	24300	33.46	62	79	1-8"	24x24	65	104
829	17200	27500	38.16	70 1/4	87 1/4	1-8"	25x25	65	118
8210	19200	30700	42.86	78 1/2	95 1/2	1-8"	26x26	70	132
8211	21200	33900	47.56	86 3/4	103 1/2	1-8"	27x27	70	146
8212	23200	37100	52.26	95	112	1-8"	28x28	75	160
8213	25200	40300	56.96	103 1/4	120 1/4	1-8"	29x29	80	174
8214	26800	42900	61.66	111 1/2	128 1/2	1-8"	29x29	85	188
8215	28400	45500	66.36	119 1/4	136 1/2	1-8"	30x30	85	202
8216	30000	48100	71.06	128	145	1-8"	31x31	90	216
8217	31600	50700	75.76	136 1/4	153 1/4	1-8"	32x32	90	230
8218	33200	53300	80.46	144 1/2	161 1/2	1-8"	32x32	90	244

Height of Water Line, 57 in. Height to Center of Outlet, 81 1/4 in. Width of Boiler, 115 1/4 in.
Regularly furnished with cast iron header, but can be furnished without header when so ordered.

*Square feet of exterior boiler surface. Approximate number of pounds of boiler covering per section, 94 lb.