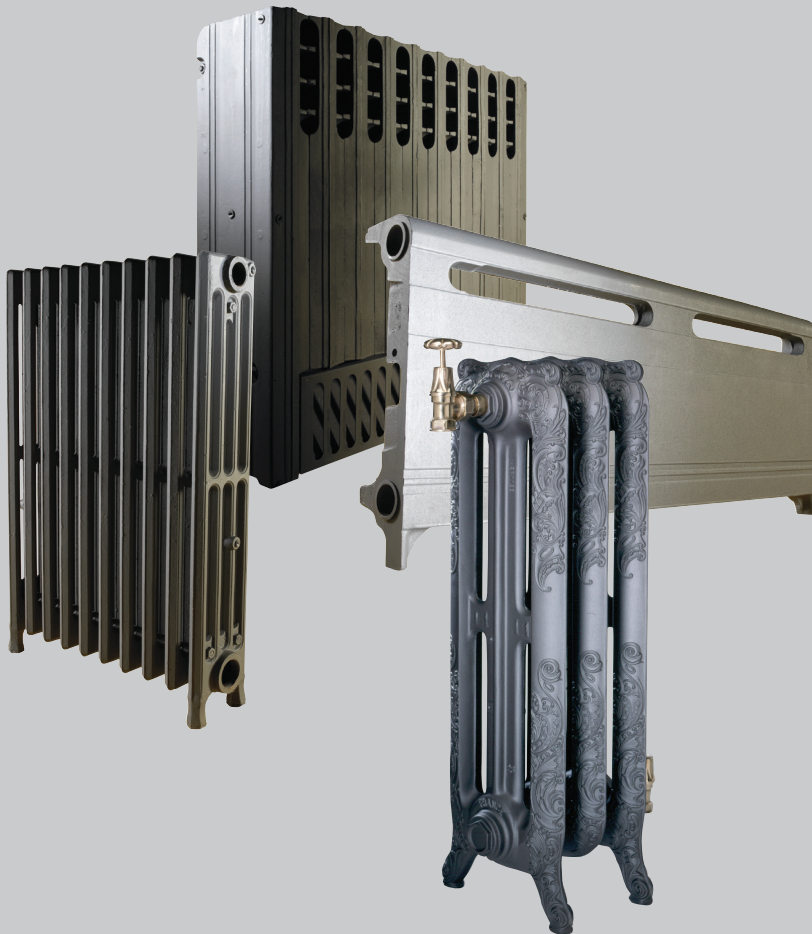




Burnham® **Baseboards** **& Radiators**

**Cast iron heat distribution
for water and steam
heating systems**



- **Baseray® baseboards**
- **Slenderized radiators**
- **Radiant radiators**
- **Classic™ radiators**

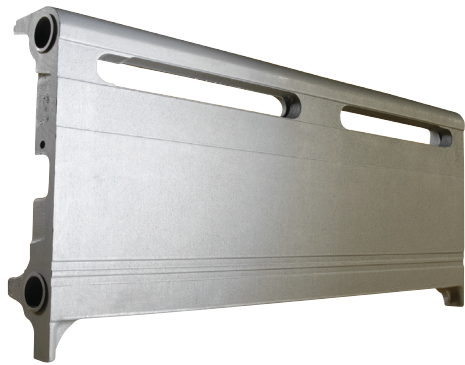
- Rugged cast iron can provide years of reliable service
- Will not bend, dent, or separate, even after years of service
- Sectional design
- Extremely quiet, typical expansion noises associated with thin-metal type radiant heat products are virtually eliminated
- Variety of styles available, can fit into any application
- Can be painted to match room decor
- Ideal replacement products for existing radiators

U.S. Boiler Company



Baseray® Baseboard

Information, Specifications, & Dimensions



Designed with performance and dependability in mind, Baseray Baseboards offer a sleek, low profile design that will fit in well with virtually any room decor. Unlike most baseboards, Baseray can also be painted, providing a seamless match to its surroundings.

The simple, yet effective design of the Baseray provides more than five times the amount of radiant heat to a room. This is due to the fact that the cast iron surface area is much larger than that found on

conventional thin metal baseboards, and that heat can be distributed both in horizontal AND vertical direction. This leads to uniform, even heat distribution in the room, and less than a 2-degree difference between floor and ceiling.

Each section of Baseray Baseboards feature one-piece cast iron construction. This design virtually eliminates the expansion noises created during heating cycles and is built to last much longer than conventional fabricated baseboards.

ASSEMBLIES	18" Left End	24" Left End	24" Int.	24" Right End	12" Right End	18" Panel	24" Panel
1-1/2 Ft. Assembly	—	—	—	—	—	1	—
2 Ft. Assembly	—	—	—	—	—	—	1
2-1/2 Ft. Assembly	1	—	—	—	1	—	—
3 Ft. Assembly	—	1	—	—	1	—	—
3-1/2 Ft. Assembly	1	—	—	1	—	—	—
4 Ft. Assembly	—	1	—	1	—	—	—
4-1/2 Ft. Assembly	1	—	1	—	1	—	—
5 Ft. Assembly	—	1	1	—	1	—	—
5-1/2 Ft. Assembly	1	—	1	1	—	—	—
6 Ft. Assembly	—	1	1	1	—	—	—
SUB-ASSEMBLIES							
5-1/2 Ft. L.H. Sub-Assembly	1	—	2	—	—	—	—
6 Ft. L.H. Sub-Assembly	—	1	2	—	—	—	—
6 Ft. Center Sub-Assembly	—	—	3	—	—	—	—
All R.H. Sub-Assemblies	—	—	Req'd #	1	or	1	—

ASSEMBLY LENGTH	L.H.	CENTER	R.H.
6-1/2 Ft.	5-1/2 Ft.	—	1 Ft.
7 Ft.	6 Ft.	—	1 Ft.
7-1/2 Ft.	5-1/2 Ft.	—	2 Ft.
8 Ft.	6 Ft.	—	2 Ft.
8-1/2 Ft.	5-1/2 Ft.	—	3 Ft.
9 Ft.	6 Ft.	—	3 Ft.
9-1/2 Ft.	5-1/2 Ft.	—	4 Ft.
10 Ft.	6 Ft.	—	4 Ft.
10-1/2 Ft.	5-1/2 Ft.	—	5 Ft.
11 Ft.	6 Ft.	—	5 Ft.
11-1/2 Ft.	5-1/2 Ft.	—	6 Ft.
12 Ft.	6 Ft.	—	6 Ft.
12-1/2 Ft.	5-1/2 Ft.	6 Ft.	1 Ft.
13 Ft.	6 Ft.	6 Ft.	1 Ft.

NOTES:
Available in any length with similar sub-assemblies.
Maximum recommended length for steam: 10 Ft.

BASERAY RATINGS Steam and Hot Water

MODEL NO.	APPROX WT (lbs. Per Linear Foot)	FLOW RATE	NET STEAM RATING	NET WATER RATINGS BTUH Per Linear Foot At Average Water Temperatures Indicated									
9A	15	Lb./Hr.	Sq. Ft.	BTU/Hr. At 215°F	150°F	160°F	170°F	180°F	190°F	200°F	210°F	220°F	230°F
		2000	3.40	860	340	390	450	510	560	610	670	720	770
		500	3.40	860	320	370	430	480	530	580	630	680	730

Use of the 2,000 Lb./Hr. ratings is limited to installations where the flow rate through the baseboard unit is equal to or greater than 2,000 Lb./Hr. (4GPM).

Where the water flow rate through the Baseray is not known, the ratings at the standard flow rate of 500 Lb./Hr. (1GPM) must be used.

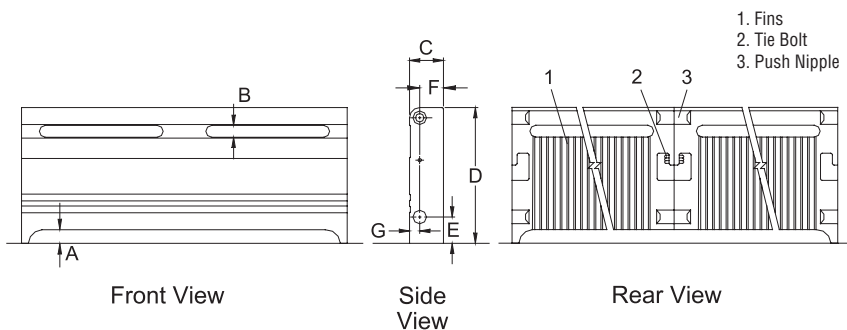
Net Ratings are determined from tests made for baseboard type radiation, including an allowance of 15% for heating effect.

Maximum allowable working pressure - 30 PSI, water; 15 PSI, steam. Water content - 0.3 gal./lineal foot. For pressure drop information, see installation manual.

Ratings are based on active length. Active length equals total length.

BASERAY DIMENSIONS

A	B	C	D	E	F	G
1"	7/8"	2-1/2"	9-7/8"	1-3/4"	1-3/4"	3/4"



Classic™ Radiators

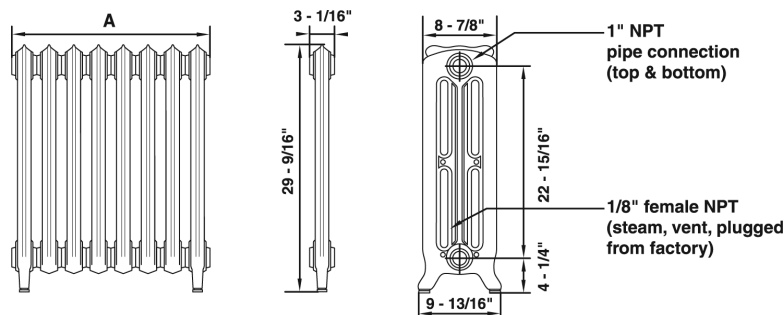
Information, Specifications, & Dimensions

MODEL NO.	NUMBER OF SECTIONS (3.07" each)	A-WIDTH (inches)	SQUARE FEET (EDR*)	WATER OUTPUT BTU/H (180°F avg. temp.)	STEAM OUTPUT BTU/H (215°F avg. temp.)	SHIPPING WEIGHT (lbs.)
CR-3-CF	3	9.2	9.2	1564	2208	77
CR-5-CF	5	15.4	15.3	2618	3672	129
CR-7-CF	7	21.5	21.4	3655	5136	177
CR-9-CF	9	27.6	27.5	4692	6600	226
CR-5-AF	5-Intermediate	15.4	15.3	2618	3672	129
8074011	End section w/ vent	3.1	3.1	524	734	26

*Equivalence of direct radiation of heating surface based upon the standard heat emission of 240 BTU per square foot per hour.

Stock sizes available for immediate shipment. Assemble 5 section intermediate with 3, 5, 7 or 9 section stock size to make a custom size. End section with vent is also used as intermediate leg support for radiators with more than 16 sections. Water Content —0.61 gal/section. Output based on room temperature of 70°F.

Maximum recommended pressure 30 PSI water, 15 PSI steam. Special tool required for disassembly/assembly. Rating square ft./section = 3.05



For the ultimate in replacement radiators, especially in period-home renovation projects, look no further than Burnham Classic Radiators. Providing efficient heat transfer and the timeless styling of a bygone era, these elegant radiators are in a class by themselves.

All Classic Radiators feature durable cast iron construction with ornate surface detail. To complete the appearance, brass valves are also available

Cast iron provides very quiet operation, as the typical expansion noises associated with other radiators are eliminated. The heat retention properties of cast iron also provide the ability to shield outside walls and windows to stop cold air infiltration.

Radiant Radiators

Information, Specifications, & Dimensions

RADIANT RADIATOR RATINGS

Size - Number of Sections	Length 2-1/4" per Section (inches)	Free Standing EDR*, Square Feet per Section 2.25
4	9"	9.0
6	13-1/2"	13.5
8	18"	18.0
10	22-1/2"	22.5
12	27"	27.0
14	31-1/2"	31.5
16	36"	36.0
18	40-1/2"	40.5
20	45"	45.0
22	49-1/2"	49.5
24	54"	54.0
26	58-1/2"	58.5
28	63"	63.0
30	67-1/2"	67.5
32	72"	72.0
34	76-1/2"	76.5
36	81"	81.0
38	85-1/2"	85.5
40	90"	90.0
42	94-1/2"	94.5
44	99"	99.0



*Increase radiator size 10% when recessed.

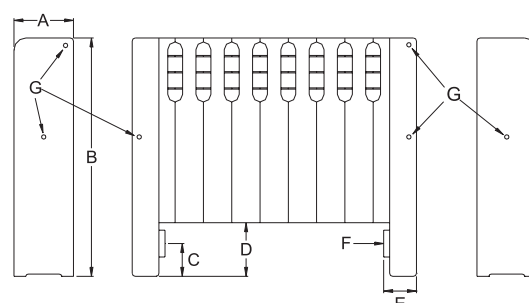
Heating surface based upon the standard heat emission of 240 BTU per square foot per hour. Furnished in even number of sections up to 44 sections. Maximum allowable working pressure - 30 PSI, water; 15 PSI, steam. Water content - 0.15 Gal./section

Radiant Radiators can be used as replacement recessed radiators for cabinets and other interior structures, or as standalone heat distributors.

Designed to draw cool air in through the bottom and project warm air out through the top ports, radiant radiators feature durable cast iron construction and sectional design. These products offer very quiet operation, as the typical noises associated with other types of fabricated radiators are eliminated.

RADIANT RADIATOR DIMENSIONS

A	B	C	D	E	F	G*
5"	20"	2-3/4"	4-1/2"	1-7/8"	1-1/4"	1/8"
				NPT		NPT



*Vent tapping sizes; high vents for water, mid-height vents for one pipe steam

Slenderized Radiators

Information, Specifications, & Dimensions

Size No. of Sections	Length 1-3/4" per Sections (inches)	Square Feet - EDR*		
		4-Tube		6-Tube
		19" High	25" High	25" High
4	7"	6.4	8	12
6	10-1/2"	9.6	12	18
8	14"	12.8	16	24
10	17-1/2"	16.0	20	30
12	21"	19.2	24	36
14	24-1/2"	22.4	28	42
16	28"	25.6	32	48
18	31-1/2"	28.8	36	54
20	35"	32.0	40	60
22	38-1/2"	35.2	44	66
24	42"	38.4	48	72
26	45-1/2"	41.6	52	78
28	49"	44.8	56	84
30	52-1/2"	48.0	60	90
32	56"	51.2	64	96
34	59-1/2"	54.4	68	102
36	63"	57.6	72	108
38	66-1/2"	60.8	76	114
40	70"	64.0	80	120
42	73-1/2"	67.2	84	126
44	77"	70.4	88	132
46	80-1/2"	73.6	92	138
48	84"	76.8	96	144

Slenderized Radiators provide heat in a low profile package. Lower and slimmer than most conventional radiators, they feature a rugged and reliable cast iron sectional design which easily enables the installation of multiple units.

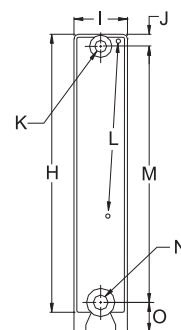
Center leg section furnished on 30 section and better
* Heating surface based upon the standard heat emission of 240 BTU per square foot per hour.

Add 1/2" for each bushing.

Furnished in even number section up to 48 sections.

Maximum allowable working pressure - 30 PSI, water; 15 PSI steam. Consult factory for higher pressure.

Water content - 19-4:0.08 Gal./section; 25-4:0.12 Gal./section; 26-6:0.17 Gal./section



SLENDERIZED RADIATOR DIMENSIONS

Size	H	I	J	K	L	M	N	O
25-6	23-13/16"	6-15/16"	1-1/16"	1"	1/8"	21-7/16"	1-1/4"	2-1/2"
25-4	23-13/16"	4-7/16"	1-1/16"	1"	1/8"	21-7/16"	1-1/4"	2-1/2"
19-4	17-13/16"	4-7/16"	1-1/16"	1"	1/8"	15-7/16"	1-1/4"	2-1/2"

NPT NPT

NPT

Obsolete Sizes – All Types

Burnham Radiant Radiators

23 X 7-1/2	Wall
3.40 sq. ft. per sec.	2.25 sq. ft. per sec.

Fero - 2-1/2" center

Height	RATING - Square Feet Per Section				
	3 Tube	4 Tube	5 Tube	6 Tube	7 Tube
14"	—	—	—	—	2.67
17"	—	—	—	—	3.25
20"	1.75	2.25	2.67	3.00	3.67
23"	2.00	2.50	3.00	3.50	—
26"	2.33	2.75	3.50	4.00	4.75
32"	3.00	3.50	4.33	5.00	5.50
38"	3.50	4.25	5.00	6.00	6.75

Federal - Old Style Column Radiation

Height	RATING - Square Feet Per Section				
	1 Col. 2-1/2" ctr.	2 Col. 2-1/2" ctr.	3 Col. 2-1/2" ctr.	4 Col. 3" ctr.	5 Col. 3" ctr.
14"	—	—	—	—	4.00
17"	—	—	—	—	4.00
18"	—	—	2.25	3.00	5.00
20"	1.50	2.00	—	—	5.00
22"	—	—	3.00	4.00	6.00
23"	1.67	2.33	—	—	—
26"	2.00	2.67	3.75	5.00	—
32"	2.50	3.33	4.50	6.50	—
38"	3.00	4.00	5.00	8.00	—
44"	—	—	—	10.00	—
45"	—	5.00	6.00	—	—

Burnham Slenderized

Height	RATING - Square Feet Per Section							
	3 Tube		4 Tube		5 Tube		6 Tube	
	1-1/2" ctr.	1-3/4" ctr.	1-1/2" ctr.	1-3/4" ctr.	1-1/2" ctr.	1-3/4" ctr.	1-1/2" ctr.	1-3/4" ctr.
14"	—	—	—	—	—	—	1.50	1.60
17"	—	—	—	—	—	—	1.80	2.00
19"	1.10	—	1.40	—	—	—	—	2.30
20"	—	—	—	—	1.80	—	2.20	—
22"	1.30	—	1.60	1.80	—	2.10	—	—
23"	—	—	—	—	2.10	—	—	—
25"	1.50	1.60	1.80	—	—	2.40	—	—
26"	—	—	—	—	2.40	—	2.90	—
32"	—	—	—	—	3.00	3.00	—	3.70

Recommended System Piping

ONE-PIPE STEAM

Up to 28 sq. ft.	1 inch
Up to 62 sq. ft.	1-1/4 inches

HOT WATER - Two-Pipe Forced Circulation

Up to 100 sq. ft.	1/2 inch
101 sq. ft. and larger	3/4 inch

HOT WATER - TWO-PIPE GRAVITY SYSTEM

First floor - Up to 20 sq. ft.	1/2 inch
21 to 50 sq. ft.	3/4 inch
51 to 100 sq. ft.	1 inch
101 to 175 sq. ft.	1-1/4 inch
Second floor - Up to 30 sq. ft.	1/2 inch
31 to 70 sq. ft.	3/4 inch
71 to 120 sq. ft.	1 inch
121 to 250 sq. ft.	1 1/4 inch

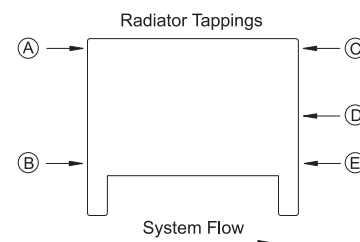
Third floor - Up to 40 sq. ft.	1/2 inch
41 to 100 sq. ft.	3/4 inch
101 to 175 sq. ft.	1 inch
175 to 300 sq. ft.	1-3/4 inch

NOTES:

All sizes based on steel pipe. Vapor tappings, top and bottom opposite ends; supply 3/4 inch, return 1/2 inch.

For tappings on one-pipe hot water systems see AHRI Installation Guide. The last connection taken off the main should be run to a first floor radiator. Radiators in which mains terminate should have one size larger valves.

Heat Emission Chart (70°F room temp)	
Avg. water temp in radiators, °F	Heat emission BTU/Hr. per sq. ft.
150	110
160	130
170	150
180	170
190	190
200	210
210	230
215	240



	A	B	C	D	E
One Pipe Steam	*	supply	+vent	vent	*
Two Pipe Steam	supply	+supply	*	*	return
Hot Water	*	supply	vent	*	return

* Plug + Alternate