

# REPLACEMENT BOILER SIZING CHART

Type of System     Steam                       Forced Hot Water                       Gravity Hot Water

Type of Fuel             Natural Gas             Oil                       Other \_\_\_\_\_

Brand Name of Present Boiler \_\_\_\_\_ Model No. \_\_\_\_\_

Boiler Input \_\_\_\_\_ BTUH      Square Feet of Radiation \_\_\_\_\_

Output (Heating Capacity) \_\_\_\_\_ BTUH

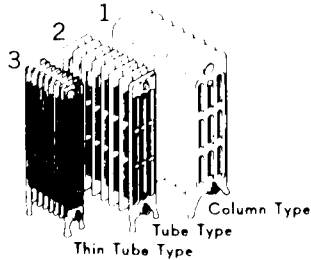
STANDING RADIATION				BASEBOARD RADIATION
ROOM	SQUARE FT. PER SECTION × (From Chart on Back)	NUMBER OF SECTIONS =	RADIATION IN SQUARE FEET	LINEAL FEET (Length of Finned Tube Only)
Total Square Feet of Radiation .....				Total Lineal Feet .....
x Conversion Factor (see below) .....				x 600 BTU/FT.      600
Total BTUH Load .....				.....
Boiler Model Recommended .....				
Input ..... Heating Capacity .....				
(Should be equal to or slightly greater than load)				
<b>CONVERSION FACTORS</b> One sq. ft. of steam radiation = 240 Net Btuh				
One sq. ft. of forced hot water = 185 Net Btuh at 190° F.				

# -sizing TO STANDING RADIATION

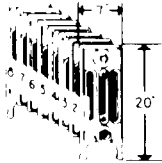
## RADIATOR RATINGS

(All dimensions and ratings are approximate) Radiator output ratings should be used for checking the total radiation on an existing heating plant.

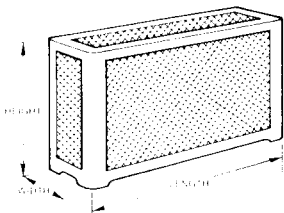
Sketch below shows relative sizes of radiator styles. All are 4 tube (column), 8 section radiators. Each rating is different.



To identify the style of a radiator, count the number of tubes or columns. Then check the width. When you have identified the style (1, 2, or 3), read the radiation per section beneath the radiator style. Example: Radiator sketched below is a 4-tube, 8-section, style 2 (tube type) radiator, 7" wide and 20" high. Multiplying the 2.2 square feet of radiation per section by 8 equals 17.6 square feet of radiation per radiator.

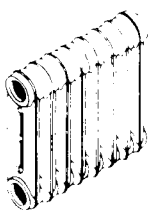


## RADIATOR ENCLOSURES



To determine number of sections: divide length of cover in inches by two. For example, if length of cover is 24", then the radiator has 12 sections.

## SECTIONAL WALL TYPE



Height	Sq. Ft. Radiation Per Section
37"	2½
28½"	1½
21½"	1½
15"	1
13⅞"	¾

## SQUARE FEET OF RADIATION PER SECTION

Columns or Tubes	1	2	3	4	5	6	7
<b>OLD STYLE COLUMN RADIATORS</b>							
Width →	4½"	7¾"	9"	11½"	12½"	12½"	
Height							
45"	3.5	5.0	6.0	10.0			
38"	3.0	4.0	5.0	8.0	10.0		
32"	2.5	3.3	4.5	6.5	8.5		
26"	2.0	2.6	3.7	5.0	7.0	7.0	
23"	1.6	2.3	3.2	4.5			
22"	1.6	2.2	3.0	4.0	6.0	6.0	
20"	1.5	2.0	2.7	3.5	5.0	5.0	
18"	1.3	1.7	2.2	3.0	5.0	4.3	
17"						4.0	
16"					4.0	3.7	
15"		1.5					
14"					4.0	3.0	
13"					3.0	3.0	

## TUBE TYPE

Width →							
Height		5"	7"	8¾"	9¾"	12½"	
38"		3.5	4.2	5.0	6.0		
36"		3.5	4.2	5.0	6.0	7.0	
32"		3.0	3.5	4.3	5.0	6.0	
26"		2.3	2.7	3.5	4.0	5.0	
23"		2.0	2.5	3.0	3.5	4.5	
22"						4.5	
20"		1.7	2.2	2.6	3.0	3.6	
18"						3.5	
17"						3.0	
16"						3.0	
14"						2.5	

## THIN TUBE

Width →							
Height		3½"	4"	4¾"	6"	7⅞"	
38"		2.5	2.8				
32"		2.0	2.6			3.4	
26"			2.4	2.4	3.0	3.0	
25"		1.5	1.8	2.1	2.4	3.0	
23"			1.7	2.0	2.3		
22"		1.3	1.6	1.8	2.2		
20"			1.5	1.7	2.1	2.3	
19"		1.1	1.4	1.6		2.3	

## CONVERSION FACTORS



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