

TABLE 25. HEAT EMITTED BY DIRECT RADIATION—CONVERSION FACTORS

PRESSURE		TEMP. OF STEAM IN DEG. FAHR.	TEMPERATURE OF ROOM IN DEG. FAHR.					
			80 deg. fahr.	75 deg. fahr.	70 deg. fahr.	65 deg. fahr.	60 deg. fahr.	50 deg. fahr.
Vacuum In. Hg.	Lb. Absolute							
23.4	3.71	150	2.188	2.053	1.934	1.828	1.733	1.572
19.7	4.75	160	1.898	1.795	1.701	1.621	1.546	1.412
15.3	5.99	170	1.669	1.590	1.517	1.451	1.391	1.285
12.3	7.51	180	1.488	1.425	1.364	1.311	1.261	1.175
8.7	9.33	190	1.339	1.287	1.239	1.195	1.155	1.081
6.5	11.52	200	1.215	1.172	1.135	1.095	1.060	0.999
Lb. GAGE								
1	15.7	215	1.064	1.029	1.000	0.971	0.943	0.894
2	16.8	219	1.030	1.000	0.970	0.941	0.915	0.870
3	17.8	222	1.004	0.976	0.947	0.921	0.897	0.851
4	18.9	225	0.982	0.954	0.929	0.902	0.878	0.835
5	19.6	227	0.964	0.936	0.909	0.887	0.864	0.822
6	20.8	230	0.943	0.917	0.892	0.869	0.847	0.806
8	22.8	235	0.907	0.883	0.860	0.839	0.818	0.781
10	24.9	240	0.875	0.853	0.831	0.810	0.791	0.756

These conversion factors multiplied by the heat loss from any radiator, operating under the indicated conditions, give the heat loss by the same radiator operating at 215 deg. fahr. in a room at 70 deg. fahr.

TABLE 26. HEAT EMISSION OF DIRECT CAST IRON RADIATION FOR HOT WATER—SINGLE COLUMN RADIATORS
Room Temperature at 70 deg. fahr.

LENGTH INCHES	NUMBER OF SECTIONS	Mean Water Temperature at 170 deg. fahr.									
		45 In.	38 In.	32 In.	26 In.	23 In.	20 In.	18 In.	16 In.	14 In.	12 In.
		Rated Surface Sq. Ft. S	Total B.t.u. per Hr. SR	Rated Surface Sq. Ft. S	Total B.t.u. per Hr. SR	Rated Surface Sq. Ft. S	Total B.t.u. per Hr. SR	Rated Surface Sq. Ft. S	Total B.t.u. per Hr. SR	Rated Surface Sq. Ft. S	Total B.t.u. per Hr. SR
5	1	...	740	2.5	510	1.66	430	1.5	390	1.5	390
	2	...	1220	5.0	850	3.33	725	3.0	650	3.0	650
	3	...	1700	7.5	1190	5.00	1015	4.5	910	4.5	910
10	4	...	2180	10.0	1530	6.66	1310	6.0	1170	6.0	1170
	5	...	2660	12.5	1875	8.33	1605	7.5	1430	7.5	1430
15	6	...	3140	15.0	2205	10.00	1900	9.0	1690	9.0	1690
	7	...	3620	17.5	2535	11.66	2190	10.5	1980	10.5	1980
20	8	...	4100	20.0	2865	13.33	2485	12.0	2270	12.0	2270
	9	...	4580	22.5	3195	15.00	2780	13.5	2470	13.5	2470
25	10	...	5060	25.0	3525	16.66	3075	15.0	2730	15.0	2730
	11	...	5540	27.5	3855	18.33	3365	16.5	2990	16.5	2990
30	12	...	6020	30.0	4185	20.00	3655	18.0	3250	18.0	3250
	13	...	6500	32.5	4515	21.66	3945	19.5	3510	19.5	3510
35	14	...	6980	35.0	4845	23.33	4235	21.0	3770	21.0	3770
	15	...	7460	37.5	5175	25.00	4530	22.5	4030	22.5	4030
40	16	...	7940	40.0	5505	26.66	4825	24.0	4290	24.0	4290
	17	...	8420	42.5	5835	28.33	5115	25.5	4550	25.5	4550
45	18	...	8900	45.0	6165	30.00	5410	27.0	4810	27.0	4810
	19	...	9380	47.5	6495	31.66	5710	28.5	5070	28.5	5070
50	20	...	9860	50.0	6825	33.33	6000	30.0	5330	30.0	5330

LENGTH INCHES		NUMBER OF SECTIONS	TWO-COLUMN RADIATORS									
			45 In.	38 In.	32 In.	26 In.	23 In.	20 In.	18 In.	16 In.	14 In.	12 In.
			Rated Surface Sq. Ft. S	Total B.t.u. per Hr. SR	Rated Surface Sq. Ft. S	Total B.t.u. per Hr. SR	Rated Surface Sq. Ft. S	Total B.t.u. per Hr. SR	Rated Surface Sq. Ft. S	Total B.t.u. per Hr. SR	Rated Surface Sq. Ft. S	Total B.t.u. per Hr. SR
5	1	1250	4	1050	3.33	860	2.66	725	2.33	640	2	540
	2	1365	8	2100	6.66	1720	5.33	1450	4.66	1280	4	865
10	3	2480	12	3150	10.00	2580	8.00	2175	7.00	1920	6	1195
	4	3395	16	4200	13.33	3440	10.66	2830	9.33	2580	8	1520
15	5	4110	20	5250	16.66	4295	13.33	3490	11.66	3135	10	1850
	6	4825	24	6300	20.00	5150	16.00	4145	14.00	3790	12	2170
20	7	5540	28	7350	23.33	5995	18.66	4800	16.33	4445	14	2495
	8	6255	32	8400	26.66	6850	21.33	5455	18.66	5100	16	2820
25	9	6970	36	9450	30.00	7805	24.00	6110	21.00	5755	18	3145
	10	7685	40	10500	33.33	8660	26.66	6765	23.33	6410	20	3470
30	11	8400	44	11550	36.66	9515	29.33	7370	25.66	7065	22	3800
	12	9115	48	12600	40.00	10370	32.00	7975	28.00	7720	24	4125
35	13	9830	52	13650	43.33	11225	34.66	8580	30.33	8375	26	4450
	14	10545	56	14700	46.66	12080	37.33	9185	32.66	8980	28	4775
40	15	11260	60	15750	50.00	12935	40.00	9790	35.00	9635	30	5100
	16	11975	64	16800	53.33	13790	42.66	10395	37.33	10290	32	5425
45	17	12690	68	17850	56.66	14645	45.33	10995	40.00	10945	34	5750
	18	13405	72	18900	60.00	15500	48.00	11595	42.66	11600	36	6075
50	19	14120	76	19950	63.33	16355	50.66	12195	45.33	12250	38	6400
	20	14835	80	21000	66.66	17210	53.33	12795	48.00	12900	40	6725