



Compact Efficient Radiators

*The Choice Of
Professionals*



HENRAD

— The Radiator —

Distinctive Appearance, Outstanding Performance

With a slim profile and smooth, warm white finish, Henrad convector radiators will blend into any room in the house, to provide guaranteed heating performance.

Produced to the highest quality standards, by one of Europe's leading radiator manufacturers, all Henrad radiators conform to BS EN 442, the European Standard for radiators. Further confirmation of this quality is the 10 year manufacturer's warranty on all Henrad radiators.

The stylish end panels and top grille have been specifically designed to produce an attractive appearance, whilst reducing dust accumulation on the convector plates, and adding to the robust efficient and economic performance.

Henrad convector radiators are available in a wide range of outputs and sizes, to ensure that every room in the home can be kept warm and comfortable. And because the slim profile holds less water, your home will heat up fast!

That's why the Henrad convector radiator is the choice of professionals!





- ■ ■ *Slim, Unobtrusive Appearance*
- ■ ■ *Will Blend With Any Décor*
- ■ ■ *Fast, Economic Heat Up*
- ■ ■ *High Performance With Efficiency*
- ■ ■ *149 Models For Sizing Flexibility*
- ■ ■ *Stylish Top Grille And End Panels*
- ■ ■ *10 Year Warranty*
- ■ ■ *Excellent Quality From Leading Manufacturer*
- ■ ■ *Top Grille Designed To Reduce Dust Accumulation*



TEMPERATURE TABLE

The outputs shown in this brochure have been derived from a set test procedure as required under European test standards BS EN 442 (75°C flow; 65°C return; 20°C room temperature). As with all manufacturers the radiator's true output needs to

TEMPERATURES			
Factors for differences between mean water temperature and room temperature in °C and °F other than 50°C (90°F)			
°C		°F	
5°C	0.050	10°F	0.057
10°C	0.123	20°F	0.142
15°C	0.209	30°F	0.240
20°C	0.304	40°F	0.348
25°C	0.406	50°F	0.466
30°C	0.515	60°F	0.590
35°C	0.629	70°F	0.721
40°C	0.748	80°F	0.858
45°C	0.872	90°F	1.000
50°C	1.000	100°F	1.147
55°C	1.132	110°F	1.298
60°C	1.267	120°F	1.454
65°C	1.406	130°F	1.613
70°C	1.549	140°F	1.776
75°C	1.694		

be recalculated if the installation differs from the above parameters. It is common practice, though this may vary, to install radiators with an 82°C flow and 70°C return, i.e. a mean water temperature (MWT) of 76°C. The room temperature requirement will also differ around the home for example

a bedroom will be heated to 18°C and the lounge may be heated to 21°C; by subtracting the room temperature requirement from the MWT (76°C - 21°C = 55°C) you will be able to use the correction table to identify the factor that needs to be applied to gain the correct output for the radiator.

For example, at 55°C a correction factor of 1.132 is required, multiply the radiator output by this factor to gain the new output. If you have calculated a heat requirement for a room, divide the heat requirement by the factor to give the correct radiator output from the Henrad range.

TESTING AND OPERATING PRESSURES

All models are high pressure tested to withstand 10.5 Bar (152.3 psi), to perform at a maximum working pressure of 8 bar (116 psi) at a maximum temperature of 95°C. Higher working pressures are available by request.

CONNECTIONS

Each Henrad radiator has 4 x 1/2 inch connections as standard. There is also a 3/4 inch valve adaptor available, which provides a 3/4 inch connector option to the valve without reducing performance.

APPLICATIONS

Henrad radiators are suitable for two pipe installations. For single pipe applications, it is advisable to use diversion tees in the pipework, as this will assist in obtaining design performance from the radiators.

Although Henrad radiators are suitable for Microbore pipework, the back tappings make it unsuitable for twin entry valves.

INSTALLATION

Everything required for installation can be found within the robust packaging.

Brackets are of a strong design, with open top and deep slots, which facilitate easy and secure installation. Plastic inserts seat the radiator precisely on the bracket minimizing expansion and contraction noise.

The neat nickel-plated plug and vent provide a watertight joint, whilst complementing the superior finish.

To facilitate easy one off replacement nickel-plated brass extension pieces are also available, complete with sealing washer, in 20mm, 30mm and 40mm options.

Recommended height from the floor to the base of the radiator is 150 mm minimum. This allows adequate airflow when the radiator is placed on the bracket.

CAUTION

When designing for domestic systems we recommend that the Henrad Radiators be used only in heating systems complying with British Standard Code of Practice for Central Heating for Domestic Premises BS 5449 Part 1.

Single feed, indirect cylinders are not recommended as should interchange of water occur, fresh aerated water would enter the heating system, resulting in corrosion.

WATER TREATMENT

On completion of the installation the system should be properly flushed and filled in accordance with the British Standard Code of Practice for the Treatment of Water in Domestic Hot Water Central Heating Systems BS 7593.

This will remove flux residues and installation debris, which might promote corrosion and damage within the system.

If it is decided to apply a corrosion inhibitor to maximize the working life of the system, it should be applied in accordance with the manufacturer's instructions and should be suitable for the particular metals within the system.

TWO COAT PAINT PROCESS

Each Henrad Compact Radiator is subjected to a multi stage cleaning and paint process. However unlike other manufacturers the first coat of paint is applied cathodically, this technology is used extensively in the automotive industry. The process ensures a more even and deeper penetration of paint, especially in hidden areas thus providing maximum protection against corrosion. The final powder coat is warm white (RAL 9010) which is stoved and cooled to give a perfect finish.

Outputs at Operating Temperature 75/65/20°C

SINGLE CONVECTOR TYPE 11



SINGLE CONVECTOR TYPE 21



DOUBLE CONVECTOR TYPE 22



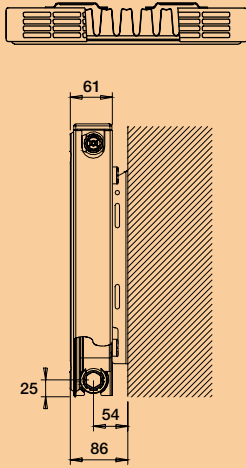
Height	Nominal length		Heat emissions			Heat emissions			Heat emissions		
	mm	inches	Secs	Watts	Btu/hr	Secs	Watts	Btu/hr	Secs	Watts	Btu/hr
300	500	19.7	2031105	255	868	2032105	373	1271	2032205	491	1675
	1000	39.4	2031110	509	1737	2032110	745	2542	2032210	982	3351
	1500	59.1	2031115	764	2605	2032115	1118	3813	2032215	1473	5026
	2000	78.7	2031120	1018	3473	2032120	1490	5084	2032220	1964	6701
450	400	15.7	2011104	302	1032	2012104	422	1440	2012204	548	1871
	500	19.7	2011105	378	1290	2012105	528	1800	2012205	686	2339
	600	23.6	2011106	454	1548	2012106	633	2160	2012206	823	2807
	700	27.6	2011107	529	1806	2012107	739	2520	2012207	960	3274
	800	31.5	2011108	605	2064	2012108	844	2880	2012208	1097	3742
	900	35.4	2011109	680	2322	2012109	950	3240	2012209	1234	4210
	1000	39.4	2011110	756	2579	2012110	1055	3600	2012210	1371	4678
	1100	43.3	2011111	832	2837	2012111	1161	3960	2012211	1508	5146
	1200	47.2	2011112	907	3095	2012112	1266	4320	2012212	1645	5613
	1400	55.1	2011114	1058	3611	2012114	1477	5040	2012214	1919	6549
	1600	63	2011116	1210	4127	2012116	1688	5759	2012216	2194	7485
	1800	70.9	2011118	1361	4643	2012118	1899	6479	2012218	2468	8420
	2000	78.7	2011120	1512	5159	2012120	2110	7199	2012220	2742	9356
	2200	86.6	2011122	1663	5675	-	-	-	2012222	3016	10291
	2400	94.5	2011124	1814	6191	-	-	-	2012224	3290	11227
	2600	102.4	2011126	1966	6707	-	-	-	2012226	3565	12162
2800	110.2	2011128	2117	7223	-	-	-	2012228	3839	13098	
3000	118.1	2011130	2268	7738	-	-	-	2012230	4113	14034	
600	400	15.7	2061104	392	1338	2062104	538	1836	2062204	693	2364
	500	19.7	2061105	490	1672	2062105	673	2295	2062205	866	2955
	600	23.6	2061106	588	2006	2062106	807	2753	2062206	1039	3546
	700	27.6	2061107	686	2341	2062107	942	3212	2062207	1212	4137
	800	31.5	2061108	784	2675	2062108	1076	3671	2062208	1386	4728
	900	35.4	2061109	882	3009	2062109	1211	4130	2062209	1559	5319
	1000	39.4	2061110	980	3344	2062110	1345	4589	2062210	1732	5910
	1100	43.3	2061111	1078	3678	2062111	1480	5048	2062211	1905	6501
	1200	47.2	2061112	1176	4013	2062112	1614	5507	2062212	2078	7092
	1400	55.1	2061114	1372	4681	2062114	1883	6425	2062214	2425	8273
	1600	63	2061116	1568	5350	2062116	2152	7343	2062216	2771	9455
	1800	70.9	2061118	1764	6019	2062118	2421	8260	2062218	3118	10637
	2000	78.7	2061120	1960	6688	2062120	2690	9178	2062220	3464	11819
	2200	86.6	2061122	2156	7356	-	-	-	2062222	3810	13001
	2400	94.5	2061124	2352	8025	-	-	-	2062224	4157	14183
	2600	102.4	2061126	2548	8694	-	-	-	2062226	4503	15365
2800	110.2	2061128	2744	9363	-	-	-	2062228	4850	16547	
3000	118.1	2061130	2940	10031	-	-	-	2062230	5196	17729	
700	400	15.7	2071104	447	1524	2072104	612	2088	2072204	784	2676
	500	19.7	2071105	559	1906	2072105	765	2610	2072205	981	3345
	600	23.6	2071106	670	2287	2072106	918	3132	2072206	1177	4015
	700	27.6	2071107	782	2668	2072107	1071	3654	2072207	1373	4684
	800	31.5	2071108	894	3049	2072108	1224	4176	2072208	1569	5353
	900	35.4	2071109	1005	3430	2072109	1377	4698	2072209	1765	6022
	1000	39.4	2071110	1117	3811	2072110	1530	5220	2072210	1961	6691
	1100	43.3	2071111	1229	4192	2072111	1683	5742	2072211	2157	7360
	1200	47.2	2071112	1340	4573	2072112	1836	6264	2072212	2353	8029
	1400	55.1	2071114	1564	5336	2072114	2142	7309	2072214	2745	9367
	1600	63	2071116	1787	6098	2072116	2448	8353	2072216	3138	10705
	1800	70.9	2071118	2011	6860	2072118	2754	9397	2072218	3530	12044
2000	78.7	2071120	2234	7622	2072120	3060	10441	2072220	3922	13382	

TECHNICAL DATA & DIMENSIONS

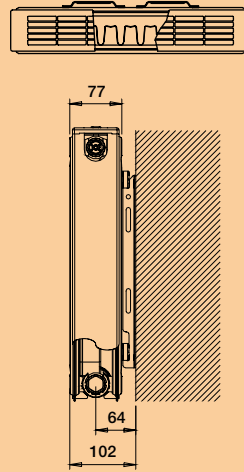
WALL MOUNTING INFORMATION

ALL DIMENSIONS IN MM.

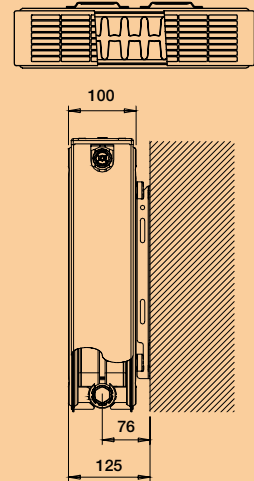
T11



T21

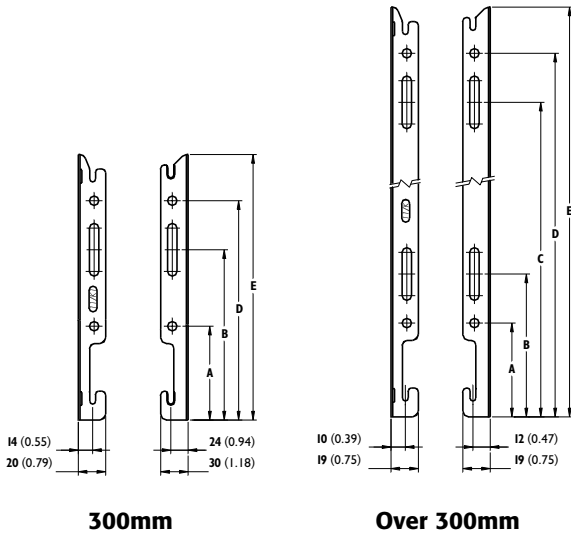


T22



MOUNTING BRACKETS

ALL DIMENSIONS IN MM. INCHES IN BRACKETS



14 (0.55)
20 (0.79)

24 (0.94)
30 (1.18)

10 (0.39)
19 (0.75)

12 (0.47)
19 (0.75)

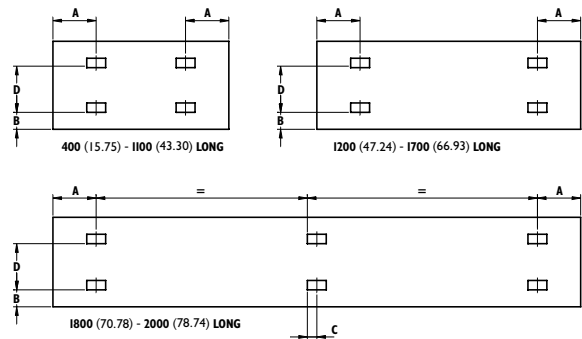
300mm

Over 300mm

	DIMENSIONS mm (in)			
	700 (27.56)	600 (23.62)	450 (17.72)	300 (11.81)
A	65 (2.56)	65 (2.56)	65 (2.56)	65 (2.56)
B	99 (3.90)	99 (3.90)	99 (3.90)	99 (3.90)
C	519 (20.43)	419 (16.50)	269 (10.59)	-
D	553 (21.77)	453 (17.83)	303 (11.93)	153 (6.02)
E	585 (23.03)	485 (19.09)	335 (13.19)	185 (7.28)

LUG POSITIONS

ALL DIMENSIONS IN MM. INCHES IN BRACKETS



400 (15.75) - 1100 (43.30) LONG

1200 (47.24) - 1700 (66.93) LONG

1800 (70.78) - 2000 (78.74) LONG

TYPE 11		
A	400mm	117 (4.61)
A	500 - 3000mm	150 (5.91)
B	400 - 3000mm	85 (3.35)
C	1800 - 3000mm	17 (0.67)

TYPE 21 & TYPE 22	
A	133 (5.24)
B	85 (3.35)

PANEL HEIGHT	D
300 (11.81)	155 (6.10)
450 (17.72)	305 (12.01)
600 (23.62)	455 (17.91)
700 (27.56)	555 (21.95)



HENRAD

The Radiator