



Liberty

Victorian styled decorative cast iron column radiators



Features and Benefits

- Designed for period properties and traditional furnishing styles
- Multiple configurations of 3 to 40 sections
- ½" bsp connection (BBOE) fittings supplied as standard (¾" and 1" also available)
- Delivered to site assembled in lengths up to 15 sections
- Supplied as standard in a primer that requires over painting (by others) or it can be fully factory painted by MHS to many RAL or BS colour finishes (additional costs apply)
- Full range of optional solid brass valves available
- Ten-year guarantee against manufacturing defects

Models: 510, 660, 760 and 954

Outputs: 168 – 6,040 Watts

Maximum working pressure: 6 bar (water tested to 7.8 bar)

Heights: 510 – 954mm

Lengths: 228 – 3,040mm

Types: Floor standing



Liberty



The stunning Victoriana Liberty cast iron column radiator blends with the period setting while providing modern comfort heating.

For period properties and traditional furnishing styles, the Liberty cast iron column radiator from MHS Radiators is the perfect heat emitter. Its scrolled relief patterns and Victoriana looks transform the Liberty from humble radiator to stunning reproduction centrepiece. Where the period setting includes highly-prized panelling, the free-standing Liberty will avoid damage to the wall. The Liberty is supplied as standard in a primer that requires over painting (by others) or it can be fully factory painted by MHS to many RAL/BS colour finishes (additional costs apply)

It is perfect either for new heating systems or for replacing outdated or antique radiators with the minimum disruption to existing installations.

The Liberty is available in four heights of 510mm, 660mm, 760mm and 954mm. Assembled radiators can be delivered to site in lengths up to 15 sections. Further sections may be assembled on site for longer finished radiators.



Each radiator is supplied complete with fittings for 1/2" bsp connection (BBOE) as standard with the option for 3/4" or 1" with TBOE and TBSE connections if required.

To complete the traditional styling, solid brass Chartwell or Kentwell radiator valves will finish your radiators off perfectly.

Liberty radiators have a maximum working pressure of 6 bar (water test = 7.8 bar max) and carry a 10 year guarantee against manufacturing defects.

Single Section Output/Dimensions

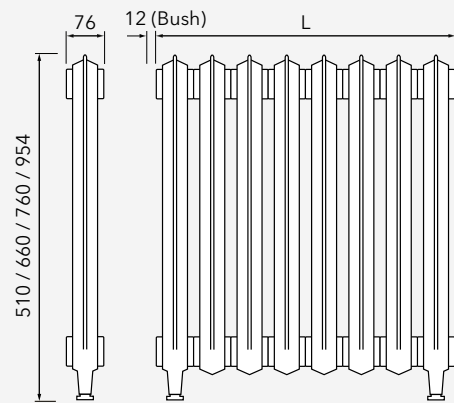
Model		510	660	760	954
Height - With Foot	H1	510	660	760	954
Centres	C	335	500	590	795
Section Width	W	76	76	76	76
Depth	D	203	203	203	203
Water volume per section	Lit	1.83	2.26	2.60	3.30
Dry weight per section	kg	8.70	10.80	11.00	13.50
Output EN442 - Δt 50°C	Watts	74	111	121	151
BS EN442 per sect.	Btu/hr	252	378	403	515
Output EN442 - Δt 55.5°C	Watts	84	127	138	172
BS EN442 per sect.	Btu/hr	286	433	472	586
Output EN442 - Δt 60°C	Watts	93	140	153	191
BS EN442 per sect.	Btu/hr	317	479	523	652
Max delivered assembled lengths		15	15	15	15

Manufacturing tolerance of $\pm 2\text{mm}$ should be allowed in all dimensions.

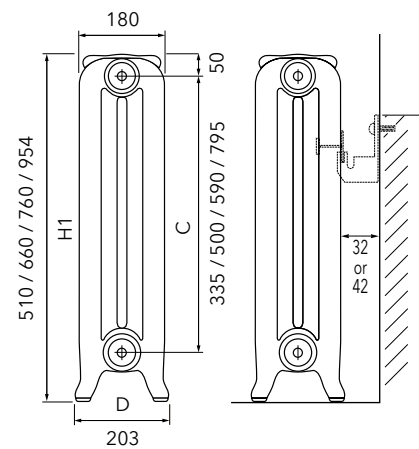
Multiple Section Outputs/Watts 75/65/20°C Δt 50 BS EN442

Sections	L - Length mm	Output 510 H	Output 660 H	Output 760 H	Output 954 H
3 Section	228	222	333	363	453
4 Section	304	296	444	484	604
5 Section	380	370	555	605	755
6 Section	456	444	666	726	906
7 Section	532	518	777	847	1057
8 Section	608	592	888	968	1208
9 Section	684	666	999	1089	1359
10 Section	760	740	1110	1210	1510
11 Section	836	814	1221	1331	1661
12 Section	912	888	1332	1452	1812
13 Section	988	962	1443	1573	1963
14 Section	1064	1036	1554	1694	2114
*15 Section	1140	1110	1665	1815	2265
17 Section	1292	1258	1887	2057	2567
19 Section	1444	1406	2109	2299	2869
21 Section	1596	1554	2331	2541	3171

*Maximum deliverable lengths, further lengths are possible by joining sections on site. Make-up tool is required. To convert Watts to Btus X 3.412.



Note - When connecting bottom opposite ends 24mm must be added to 'L' dimension to allow for the reducing bushes. If connecting top/bottom same end then 12mm must be added to 'L' dimension plus valves.



MHS Cast Iron Colours



Other RAL/BS colours are also available

Due to the limitations of the printing process, finished product colour may vary from this publication.

Bracket and Clamp



Note: For additional stability, it is recommended that a wall tie (available from MHS Radiators) is fitted to each radiator.

IMPORTANT NOTE:

Do not powder coat this product.

Δt	CF
60	1.267
59	1.24
58	1.213
57	1.186
56	1.159
55.5	1.145
55	1.132
54	1.105
53	1.079
52	1.052
51	1.026
50	1.000
45	0.872
40	0.748
35	0.629

Correction Factor Table

The outputs shown within this brochure are based on BS EN442, 75-65-20°C operating conditions, giving a Δt of 50°C, for Δt 's other than this, a correction factor must be applied. This correction factor table assumes an averaged exponent of 1.30. If a more accurate exponent / correction factor is required, please contact MHS Radiators.

Example: Output required @ 82-71-21°C Δt 55.5 the CF = 1.145, therefore multiply the listed output by the correction factor to give actual radiator output under these operating conditions.

Chartwell Valves

Chartwell valves are available in 15mm, 15mm TRV, 1/2" - 3/4" BSP manual



Belgravia Valves

Belgravia valves are available in 15mm connection sizes.



Kentwell Valves

Also available in a gleaming chrome plated finish.



Water Treatment: These products are for use on closed heating systems only; they are not suitable for installation on secondary HWS circuits. On completion of the installation the entire system MUST be thoroughly cleaned and flushed to remove debris/flux residues etc. If a chemical cleanser is used, it must be thoroughly flushed from the system. Following this, the system MUST be dosed with a good eminence water treatment to prevent corrosion. System design, flushing and dosing must be in accordance with BS 5449: 1990, BS EN 12828 & 12831: 2003 and BS 7593: 2006

IMPORTANT: Failure to observe these requirements will render the guarantee on the product void. Corrosion inhibitor must be used in accordance with the manufacturer's instructions and recommendations and should take into account the particular metals within the system.



MHS Radiators Limited, 3 Juniper West, Fenton Way, Southfields Business Park, Basildon, Essex SS15 6SJ
Tel: 01268 546700 Fax: 01268 888260
orders@mhsradiators.co.uk enquiries@mhsradiators.co.uk www.mhsradiators.com

SALES OFFICE - 01268 546700 AFTER SALES SUPPORT - 01268 546775

Sectional Radiators

Assembly Instructions



Please note that these photographs show MHS Clasico radiators, these instructions are also applicable to other MHS sectional type radiators.

1



Place the radiator sections to be joined onto a clean, firm and flat surface, ensuring that the machined faces and internal threads are perfectly flat and clean.

Each radiator section has right and left hand threaded connections on its opposing sides. The nipples also have right and left hand threads. For assembly you will need to identify and match their correct orientations.

For each assembly there are 2 joints to be made. Each joint requires one nipple and one gasket. The nipple key is used to tighten the joint via the indents internally in the nipple.

2



*Note: **Smooth end of nipple = right hand thread**, look into the radiator header, the prior nipples edge will help you orientate your joining nipple correctly.*

Screw by half to one turn a pair of nipples into one end of the radiator assembly (as above).

Place a gasket over each nipple, approximately at the mid-point of the nipple.

DO NOT apply any jointing paste or tapes (e.g. Boss White, PTFE, hemp etc) to the gasket, threads of the nipples or the bushes of the radiator.

3



Slide the second radiator block up to the nipples, ensuring that the section/thread orientations are all correct.

Lay the nipple key over the top of the radiator so that the head is in line with the indents of the nipple to be turned. Mark the key shaft so that when it is inserted, the head aligns with the indents inside the nipple. Slide the key in from the open end of the waterway until it engages into the lugs of the nipple that is to be tightened.

Pull the section blocks together on initial tightening.

By turning the nipple key, rotate the nipple so that it pulls the two radiator assemblies together.

4



IMPORTANT: At this stage only rotate the nipple by one turn then repeat this operation with the other nipple. Repeat both of these operations in turn, gradually pulling the two radiator assemblies together, ensuring they are pulled up in parallel.

Finally, tighten the joints to fully compress the gaskets.

Minimum final torque Clasico, Burlington, Ionic & Liberty 200Nm Decoral and Multisec 140Nm

Notes: Do not excessively exceed these values. Water test only, do not air test.

Finally firmly tighten all bushes c/w gaskets into the left or right handed threaded ports.