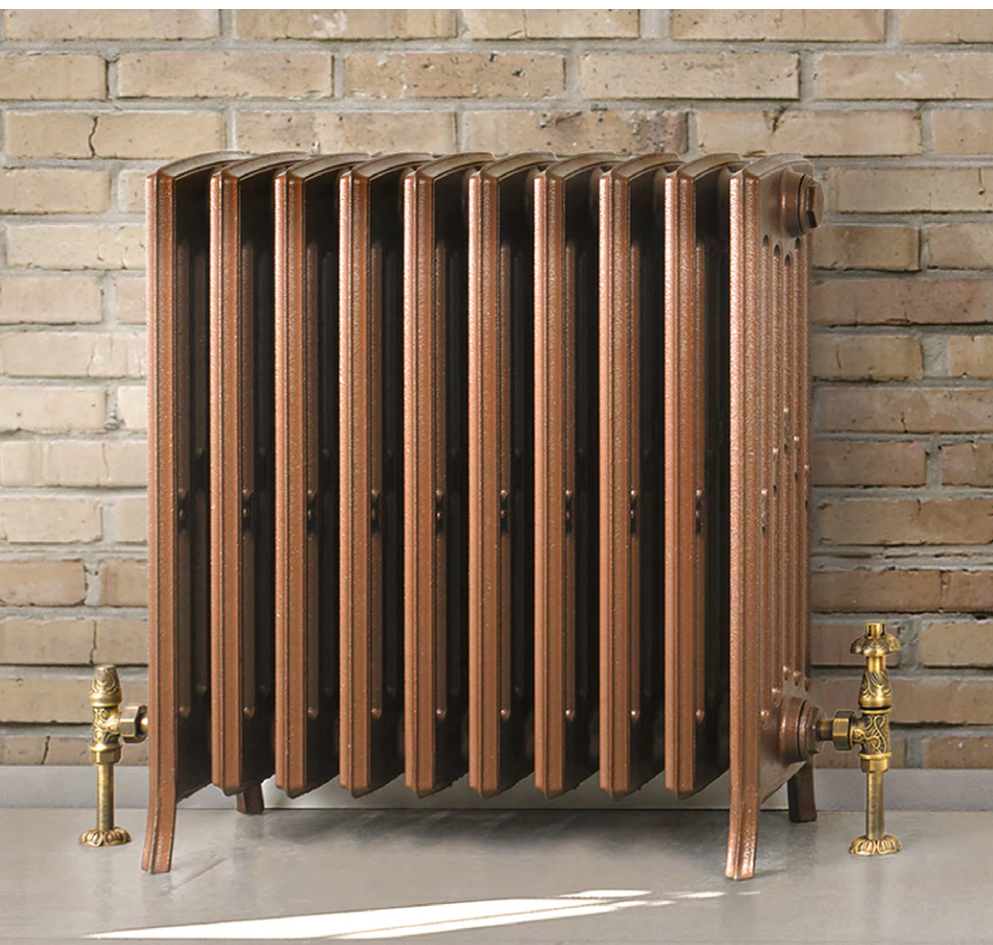




# Ionic

Timeless and elegant cast iron column radiators



## Features and Benefits

- Classic design combined with modern reliability
- Multiple configurations of 3 to 40 sections
- Choice of 1/2", 3/4" and 1" connections
- Supplied as standard in a primer that requires over painting (by others) or it can be fully factory painted by MHS to one of our special finishes or any RAL colour
- Delivered to site assembled in lengths up to 20 sections (depending on model)
- Supplied with plugs, bushes and vents
- Flexible siting with wall brackets or integrated feet

**Models:** 43-2, 58-2, 68-2, 97-2, 28-4, 42-4, 60-4, 70-4, 90-4, 42-6, 60-6, 70-6 and 90-6

**Outputs:** 123-7880 Watts

**Maximum working pressure:** 6 bar

**Heights:** 357-1040mm

**Depths:** 70-221mm

**Types:** Wall-mounted and floor-standing





# Ionic

The versatile Ionic cast iron column radiator combines authentic traditional styling with modern reliability and comfortable heating.

With a classically simple design, the Ionic radiator is an elegant addition to any property. Floor standing models provide a purposeful stance thanks to integral feet, while the wall mounted version offers greater flexibility for siting within a property.

Ideal for modern or traditional settings alike. The Ionic is supplied as standard in a primer that requires over painting (by others) or it can be fully factory painted by MHS to one of our special finishes or any RAL colour, to blend in with almost any colour scheme. Alternatively, our unique hand polished option provides a stunning, high end finish, which is perfect for contemporary interiors.



4 column shown here in Anthracite finish with Chartwell anthracite thermostatic valves and traditional anthracite pipe sleeves.



6 column shown here in Bronze finish with Nostalgia brass thermostatic valves and traditional brass pipe sleeves.

**Note:** Do NOT powder coat this product. Failure to observe this would invalidate the warranty

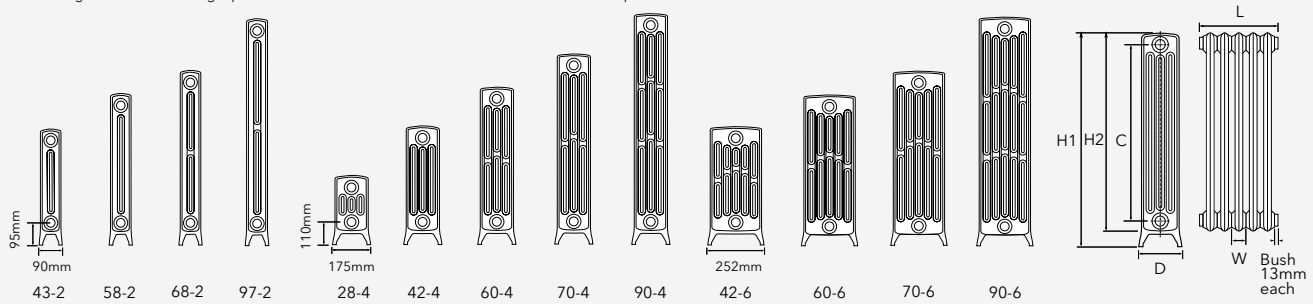
The Ionic is available in three depths of 70mm, 144mm & 221mm, with floor standing heights ranging from 357mm to 1040mm, and can be delivered to site assembled in any length up to 20 sections (depending on model, tables below). Further sections may be assembled on site for longer finished radiators.

Each radiator is supplied complete with plugs, bushes and vents with a choice of 1/2", 3/4" or 1" connections (standard supply 1/2"). Wall brackets or integrated feet can be supplied to allow the maximum flexibility in siting. To complete the traditional styling, choose from our range of Chartwell, Nostalgia and Kentwell valves, available in a choice of 15mm, 1/2" BSP or 3/4" BSP connection sizes.

Ionic radiators have a maximum working pressure of 6 Bar, and carry a 10 year guarantee against manufacturing defects.



**Note** - When connecting bottom opposite ends 26mm must be added to 'L' dimension to allow for the reducing bushes. If connecting top/bottom same end then 13mm must be added to 'L' dimension plus valves.



## Single Section Output/Dimensions

Model		43/2	58/2	68/2	97/2	28/4	42/4	60/4	70/4	90/4	42/6	60/6	70/6	90/6
Height - With Foot	H1	490	640	740	1040	357	475	660	760	960	485	660	760	960
Height - Without Foot	H2	430	580	680	970	300	415	600	700	900	425	600	700	900
Centres	C	350	500	600	900	200	320	500	600	800	350	500	600	800
Section Width	W	60	60	60	60	60	60	60	60	60	60	60	60	60
Depth	D	70	70	70	70	144	144	144	144	144	221	221	221	221
Water volume per section	Lit	0.36	0.48	0.56	0.8	0.35	0.51	0.85	0.97	1.1	0.85	1.2	1.4	1.5
Dry weight per section	kg	2.6	3.41	3.82	5.15	2.4	3.5	5.3	5.9	7.5	5.8	7.74	9.92	13.9
Output EN442 - $\Delta t$ 50°C	Watts	41	46	62	74	43.6	65.1	93	107.8	138.7	95.3	133	151	197
Max delivered assembled lengths		20	20	20	13	20	20	17	17	17	17	17	15	10

\*add 0.5kg per foot section

## Multiple Section Outputs/Watts 75/65/20°C $\Delta t$ 50 BS EN442

Secs	43/2	58/2	68/2	97/2	28/4	42/4	60/4	70/4	90/4	42/6	60/6	70/6	90/6
3	123	138	186	222	131	195	279	323	416	287	399	453	591
4	164	184	248	296	174	260	372	431	555	382	532	604	788
5	205	230	310	370	218	326	465	539	694	478	665	755	985
6	246	276	372	444	262	391	558	647	832	573	798	906	1182
7	287	322	434	518	305	456	651	755	971	669	931	1057	1379
8	328	368	496	592	349	521	744	862	1110	764	1064	1208	1576
9	369	414	558	666	392	586	837	970	1248	860	1197	1359	1773
10	410	460	620	740	436	651	930	1078	1387	955	1330	1510	1970
11	451	506	682	814	480	716	1023	1186	1526	1051	1463	1661	2167
12	492	552	744	888	523	781	1116	1294	1664	1146	1596	1812	2364
13	533	598	806	962	567	846	1209	1401	1803	1242	1729	1963	2561
14	574	644	868	1036	610	911	1302	1509	1942	1337	1862	2114	2758
15	615	690	930	1110	654	977	1395	1617	2081	1433	1995	2265	2955
16	656	736	992	1184	698	1042	1488	1725	2219	1528	2128	2416	3152
17	697	782	1054	1258	741	1107	1581	1833	2358	1624	2261	2567	3349
18	738	828	1116	1332	785	1172	1674	1940	2497	1719	2394	2718	3546
19	779	874	1178	1406	828	1237	1767	2048	2635	1815	2527	2869	3743
20	820	920	1240	1480	872	1302	1860	2156	2774	1910	2660	3020	3940
21	861	966	1302	1554	916	1367	1953	2264	2913	2006	2793	3171	4137

To convert watts to BTU, multiply output shown by 3.412

For other operating conditions refer to the table of correction factors on page 4.

## Multiple Section Outputs/Watts 75/65/20°C $\Delta t$ 50 BS EN442

Secs	43/2	58/2	68/2	97/2	28/4	42/4	60/4	70/4	90/4	42/6	60/6	70/6	90/6
22	902	1012	1364	1628	959	1432	2046	2372	3051	2101	2926	3322	4334
23	943	1058	1426	1702	1003	1497	2139	2479	3190	2197	3059	3473	4531
24	984	1104	1488	1776	1046	1562	2232	2587	3329	2292	3192	3624	4728
25	1025	1150	1550	1850	1090	1628	2325	2695	3468	2388	3325	3775	4925
26	1066	1196	1612	1924	1134	1693	2418	2803	3606	2483	3458	3926	5122
27	1107	1242	1674	1998	1177	1758	2511	2911	3745	2579	3591	4077	5319
28	1148	1288	1736	2072	1221	1823	2604	3018	3884	2674	3724	4228	5516
29	1189	1334	1798	2146	1264	1888	2697	3126	4022	2770	3857	4379	5713
30	1230	1380	1860	2220	1308	1953	2790	3234	4161	2865	3990	4530	5910
31	1271	1426	1922	2294	1352	2018	2883	3342	4300	2961	4123	4681	6107
32	1312	1472	1984	2368	1395	2083	2976	3450	4438	3056	4256	4832	6304
33	1353	1518	2046	2442	1439	2148	3069	3557	4577	3152	4389	4983	6501
34	1394	1564	2108	2516	1482	2213	3162	3665	4716	3247	4522	5134	6698
35	1435	1610	2170	2590	1526	2279	3255	3773	4855	3343	4655	5285	6895
36	1476	1656	2232	2664	1570	2344	3348	3881	4993	3438	4788	5436	7092
37	1517	1702	2294	2738	1613	2409	3441	3989	5132	3534	4921	5587	7289
38	1558	1748	2356	2812	1657	2474	3534	4096	5271	3629	5054	5738	7486
39	1599	1794	2418	2886	1700	2539	3627	4204	5409	3725	5187	5889	7683
40	1640	1840	2480	2960	1744	2604	3720	4312	5548	3820	5320	6040	7880

To convert watts to BTU, multiply output shown by 3.412

For other operating conditions refer to the table of correction factors on page 4.

### Important information

- 1) The standard supply for the Ionic is with integrated feet/wall ties, should the wall mounted option be required this must be stated when ordering.
- 2) It is important to note the integrated foot positioning for this range. Up to 20 sections 2 integrated foot sections are supplied (one at each end). Odd numbers of sections (21 to 39) have 3 feet (one at each end and one positioned centrally). Even numbers of sections (22 to 40) have 4 feet (one at each end and two evenly spaced intermediately). Two wall ties are provided, for stability.
- 3) Brackets provided with wall mounted option :

Up to 17 sections	Up to 17-30 sections	Up to 31-40 sections
4 brackets	6 brackets	8 brackets

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

# Radiator Valves

Chartwell angled



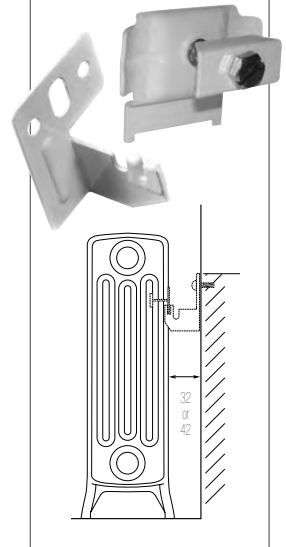
Nostalgia angled



Traditional sleeving kits



Bracket & Clamp



Kentwell angled



Kentwell corner



$\Delta t$	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  $\Delta t$  of 50°C, for  $\Delta t$ '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  $\Delta t$  55.5 the CF = 1.145, therefore multiply the listed output by the correction factor to give actual radiator output under these operating conditions.

**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.

This publication is issued subject to alteration or withdrawal without notice. The illustrations and specifications are not binding in detail. All offers and sales are subject to the Company's current terms and conditions of sale.

**Note:**  
Do not powder coat this product



URS CERTIFICATE NO.75710



URS CERTIFICATE NO.07571



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# 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.