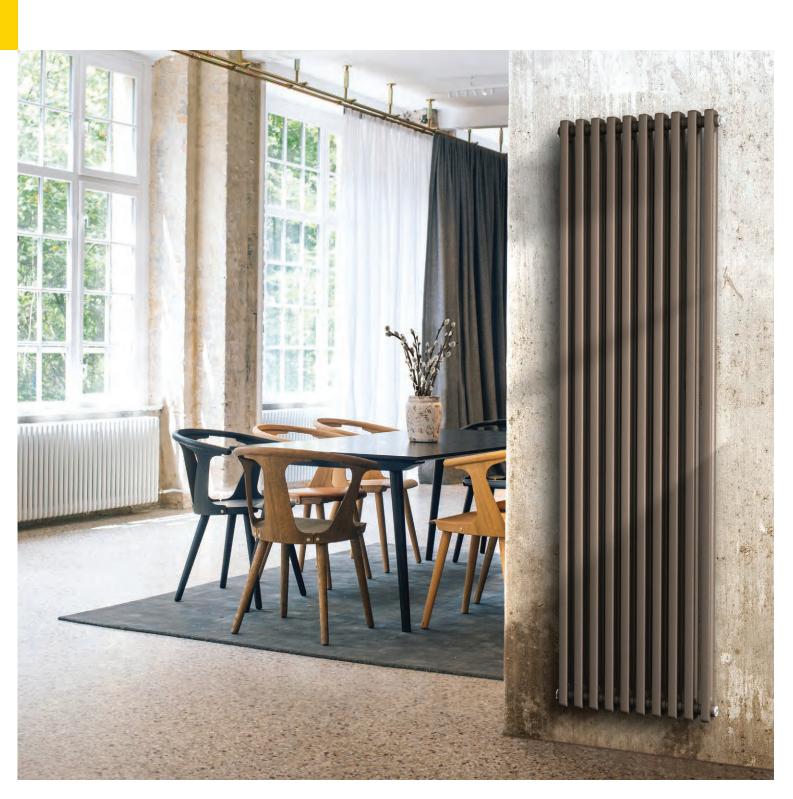
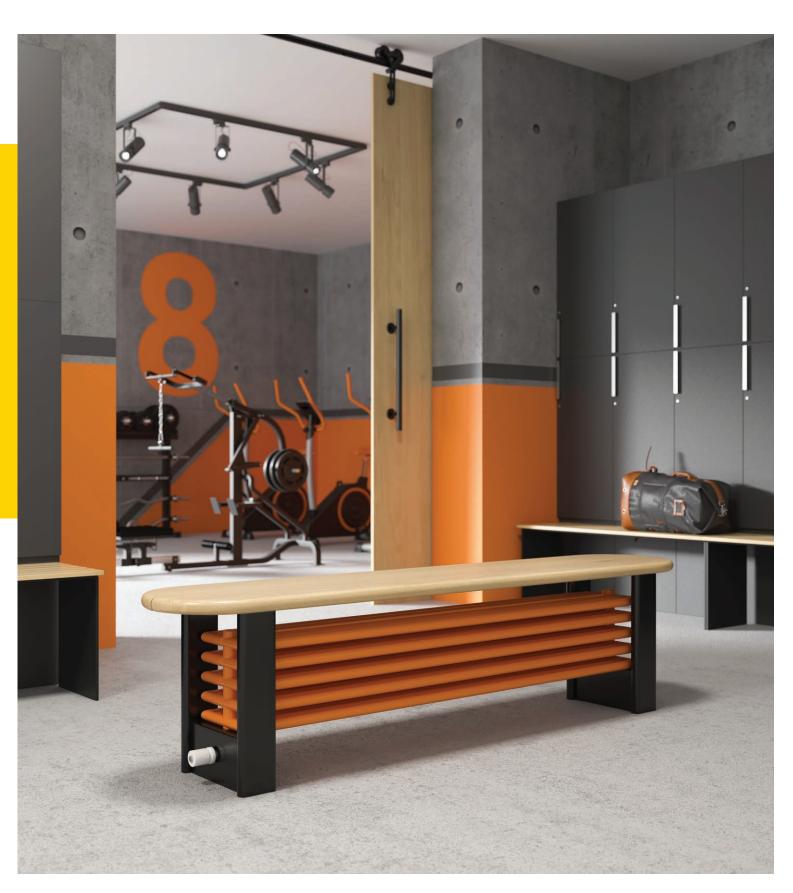
## **Merriott**

# Multicolumn Plus





## What does Merriott stand for?

### Our bespoke heating and cooling solutions are the better choice for commercial applications across the UK and Ireland.

Merriott offers a diverse and versatile range of designer heating solutions. Whether they are building consultants, architects or designers, our customers can tailor our bespoke range of products to satisfy their specification requirements.

We have invested in world-class production facilities and manufacture products of the very highest standard - backed by revolutionary technology, rigorous testing and stringent quality control.

As a company, we have an unwavering commitment to innovation and sustainability, pioneering products that lead the way in design, performance and energy efficiency.

Underpinning all of this is our relationship with our customers: ensuring they can rely on best-in-class service and support, from specification right through to delivery.



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# Multicolumn Plus

Multicolumn Plus radiators integrate state-of- the-art technology with remarkable design, providing their users with the highest qualities of climate comfort and functionality.

The world-unique laser welding method enables achievement of the perfect quality of execution combined with outstanding visual appearance. The characteristic feature is the external shape of the columns, of the profile resembling the letter "D", designed especially to maximize the heating surface area in comparison with analogical columns of the round shape.

We offer 21 radiator heights as standard, ranging between 300mm and 3000mm. The Multicolumn Plus can be manufactured from 2 columns deep up to 6 columns deep, in a wide palette of RAL colours and alternative fixing solutions. This enables the Multicolumn Plus to be integrated into the design of any room space, achieving heat requirements and users' preferences.





The composition and shaping of Multicolumn Plus radiators were especially intended to facilitate maintaining them spotlessly clean, which is a vital feature when considering health care facilities application. Multicolumn Plus radiators are suited to rooms with heightened sanitary requirements and this is supported with a dedicated certificate, issued by the University of Kiel, Germany.

#### Remarkable precision of laser welding

Exceptional advantages of Multicolumn Plus radiators originate in the production process – a world-unique laser welding technique.

The researchers at the University of Stuttgart, in collaboration with their colleagues at the Fraunhofer Institute in Germany, have developed this truly futuristic technology. This innovation allows a precise processing of details, as well as total elimination of welding residue inside radiators.

In contrast to traditionally welded radiators, laser welding leaves a significantly more subtle joint on the radiator's surface, together with the mentioned lack of welding residue, it also reduces the risk of corrosion, as well as considerably prolonging the radiators life-span.

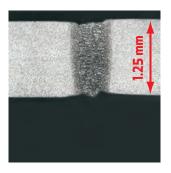
At Merriott, we pride ourselves on the high quality and durability of the Multicolumn Plus radiators that we offer a 10-year warranty on these radiators.

Still, there is one more thing which makes Multicolumn Plus so unique: our assembly line in our German production plant has been awarded a special federal Innovation Award of Thüringen.

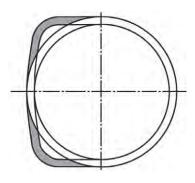
#### **REVIEW OF FEATURES:**

- > Total laser welding ensures perfect appearance of the ready radiator, as well as outstanding quality, prolonged life-span (no welding joints disturbing the heating agent's flow, no welding residue inflicting corrosion)
- > Characteristic "D"-profiled columns, increasing heat output
- Slender stub of the diameter of 1", connecting individual sections, common for all types
- > Connecting stub covers, welded as standard, for highly aesthetic look and long-lasting safety
- > 25mm distancing between sections – with the length of each section equal to 50mm – facilitates cleaning and provides outstanding hygienic qualities
- > Wide choice of the radiator height, offered as standard





The comparison of joints welded traditionally (butt welding, enlarged on the left) with the perfect Multicolumn Plus radiator joint welded with state of the art laser technology (enlarged on the right).



"D"-profiled Multicolumn Plus radiator's columns, as compared with the traditional round column. The cross section shows the significantly larger column's diameter. Increased total surface area (marked gray) provides higher heat output of Multicolumn Plus radiators.

## Range Overview

#### Multicolumn Plus

The Merriott Multicolumn Plus is an elegant section radiator that combines modern architecture with traditional heating technology.

Laser welding practically eliminates all weld joints and provides a guaranteed flat surface. On the interior of the radiator, the laser welding prevents the excess welding material from accumulating and reduces the risk for friction and corrosion. The result is a quieter, more effective radiator that lasts longer. The D-shaped profiles are not only appealing, they also improve performance by up to 10% compared to the conventional design.

#### **OUTPUTS:**

All Merriott Multicolumn Plus radiators have been manufactured and tested in accordance with EN442.

#### FINISH:

Every Multicolumn Plus radiator undergoes a multi-stage pre-treatment process followed by an epoxy polyester primer coating. A stoved epoxy polyester powder coat in white (RAL 9016) is applied to all front and rear surfaces allowing the radiator to be fitted without further painting. The process is monitored to ensure continuous achievement of optimum adhesion, opacity and gloss levels.

#### COLOUR:

An extensive range of other RAL colours are available on request.

#### PACKAGING:

The entire surface of the radiator, including all 4 corners, is protected by cardboard and packed in shrink wrapped polythene.

#### **CONNECTIONS:**

Standard connections are  $4 \times 1/2$ " BSP connections. All Multicolumn Plus radiators are manufactured with an internal baffle to help with water flow. The tapping with the baffle is identified with a red plastic cap, all others being blue. It is important that the water inlet is connected to the tapping identified in red.

Some radiators have reversible connections, please see connection options on page 30.

**Note:** Flow and return positions must be specified at the time of ordering.

#### **TESTING:**

Multicolumn Plus radiators are tested at 13 Bar giving a maximum operating pressure of 10 Bar.

Maximum operating temperature is 110°C.

#### **DIMENSIONAL TOLERANCES:**

Dimensional tolerances are in accordance with EN442.

#### MATERIALS:

Multicolumn Plus radiators are manufactured from 1.25mm thick steel tubes, with a standard diameter of 25mm (I").

#### MOUNTING:

Feet options are available see page 27 for mounting options.

#### THE MULTICOLUMN PLUS:

- Laser welded, which enables sections to be produced completely free from shape defects and internal residues
- Available from two to six columns in a horizontal and vertical configuration, offering a great range of outputs from 101 watts to 12635 watts per section at ΔT50°C
- Available in 21 different heights, from 300 to 3000 mm and standard lengths from 200 to 3000mm

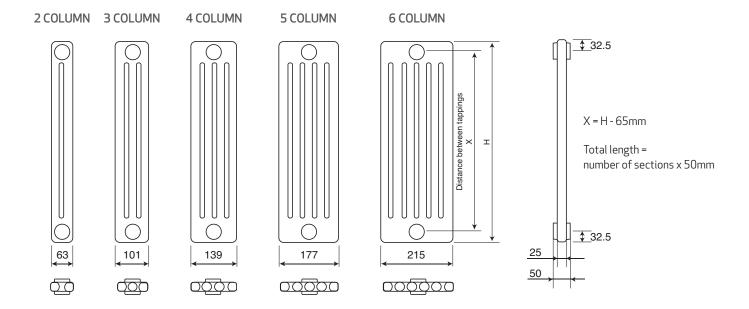
#### WARRANTY:

Merriott radiators are guaranteed for a period of 10 years from date of purchase in respect of defective materials and workmanship. The system should be designed in accordance with British Standard Code of Practice for Water Based Heating Systems in Buildings BS EN 12828:2012+A1:2014 and BS EN 12831: 2003. The installation and commissioning of the system should comply with BS EN 14336:2004. On completion of the installation, the system should be properly flushed and filled in accordance with the British Code of Practice for the Treatment of Water in Domestic Hot Water Central Heating Systems **BS 7593:2006**, Part L of Building Regulations and Good Practice Guidance for Scotland. Merriott strongly recommends the use of corrosion inhibitor for all applications. Failure to observe these standards may invalidate the manufacturer's warranty.

Joined radiators will be delivered with the required joining tool and components to assemble the radiator. Please contact Merriott Sales office for further information.

## Range Options

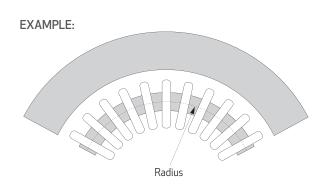
### Column Options

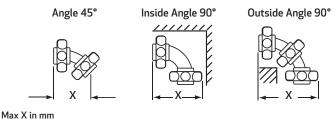


#### **Curved Multicolumns**

On request, certain models and dimensions of Multicolumn Plus radiators are available angled or curved. The picture shows standard angled connections, angle  $45^{\circ}$ , inside angle  $90^{\circ}$  and outside angle  $90^{\circ}$ . For curved radiators, the minimum radius of the curve is 1200mm up to a maximum of 4000mm.

For curved Multicolumn enquiries, please contact the Merriott Sales Office. A drawing will be requested along with the enquiry, this will then be checked and an official drawing produced for approval.





Dimension X 3 Col 2 Col 4 Col 5 Col 6 Col Angle 45° 110 120 133 148 163 Inside Angle 90° 135 154 190 227 266 Outside Angle 90° 152 184 222 262 302

## **Heat Outputs**

## 2 Column Radiators

Expone	ent 'n'	1.2	22	1	23	1.2	23	1.2	23	1	24	1	24	1	24	1	24	1.	25	1	25	1	26
Height	(mm)	30	00	35	50	40	00	45	0	50	00	55	50	60	00	65	50	7.	50	80	00	90	00
	Longth											Output	(Watts	)									
Sections	Length (mm)	ΔT50	ΔT30	ΔT50	ΔΤ30	ΔT50	ΔT30	ΔT50	ΔT30	ΔT50	ΔΤ30	ΔT50	ΔT30	ΔT50	ΔΤ30	ΔΤ50	ΔΤ30	ΔT50	ΔT30	ΔT50	ΔT30	ΔT50	ΔΤ30
4	200	101	54	116	62	131	69	145	77	160	84	174	92	188	99	202	108	231	121	245	131	273	142
5	250	126	67	145	77	163	87	181	96	199	105	217	115	235	124	253	135	288	151	306	164	341	178
6	300	151	80	174	92	196	104	218	115	239	126	261	137	282	149	303	162	346	181	367	196	409	214
7	350	177	94	203	108	228	121	254	134	279	147	304	160	329	174	354	189	404	211	428	229	478	249
8	400	202	107	232	123	261	138	290	154	319	168	348	183	376	198	405	216	461	242	489	262	546	285
9	450 500	227 252	121 134	261 290	139 154	294 326	156 173	326 363	173 192	359 399	189 210	391 435	206 229	423 470	223 248	455 506	243 270	519 577	272 302	551 612	294 327	614 682	320 356
11	550	278	147	319	169	359	190	399	211	439	231	478	252	517	273	556	297	634	332	673	360	750	392
12	600	303	161	348	185	392	208	435	230	479	252	522	275	564	298	607	325	692	362	734	393	819	427
13	650	328	174	376	200	424	225	471	250	518	273	565	298	611	322	657	352	750	393	795	425	887	463
14	700	353	188	405	216	457	242	508	269	558	294	608	321	658	347	708	379	807	423	856	458	955	498
15	750	379	201	434	231	490	260	544	288	598	315	652	344	705	372	759	406	865	453	918	491	1023	534
16	800	404	214	463	246	522	277	580	307	638	336	695	366	752	397	809	433	923	483	979	523	1092	570
17	850	429	228	492	262	555	294	616	326	678	357	739	389	799	422	860	460	980	513	1040	556	1160	605
18	900 950	454	241 255	521	277	588	311	653	346 365	718	378	782	412 435	846	446 471	910	487	1038	544	1101	589	1228	641 676
19 20	1000	480 505	268	550 579	293 308	620 653	329 346	689 725	384	758 798	399 420	826 869	458	893 940	496	961	514 541	1096 1153	574 604	1162 1223	622 654	1296 1364	712
21	1050	530	281	608	323	685	363	761	403	837	441	913	481	987	521	1062	568	1211	634	1285	687	1433	748
22	1100	555	295	637	339	718	381	798	422	877	462	956	504	1034	546	1113	595	1269	664	1346	720	1501	783
23	1150	581	308	666	354	751	398	834	442	917	483	1000	527	1081	570	1163	622	1326	695	1407	752	1569	819
24	1200	606	322	695	370	783	415	870	461	957	504	1043	550	1128	595	1214	649	1384	725	1468	785	1637	854
25	1250	631	335	724	385	816	433	907	480	997	525	1087	573	1176	620	1264	676	1442	755	1529	818	1706	890
26	1300	656	348	753	400	849	450	943	499	1037	546	1130	595	1223	645	1315	703	1499	785	1590	851	1774	926
27	1350	681	362	782	416	881	467	979	518	1077	567	1173	618	1270	670	1365	730	1557	815	1652	883	1842	961
28 29	1400 1450	707 732	375 389	811	431	914	484 502	1015 1052	538 557	1117 1157	588 609	1217 1260	641	1317 1364	694 719	1416 1467	757 784	1614 1672	846 876	1713 1774	916 949	1910 1978	997
30	1500	757	402	869	462	979	519	1032	576	1196	630	1304	687	1411	744	1517	811	1730	906	1835	981	2047	1068
31	1550	782	415	898	477	1012	536	1124	595	1236	651	1347	710	1458	769	1568	838	1787	936	1896	1014	2115	1104
32	1600	808	429	927	493	1044	554	1160	614	1276	672	1391	733	1505	794	1618	865	1845	966	1957	1047	2183	1139
33	1650	833	442	956	508	1077	571	1197	634	1316	693	1434	756	1552	818	1669	892	1903	997	2019	1080	2251	1175
34	1700	858	456	985	524	1110	588	1233	653	1356	714	1478	779	1599	843	1719	920	1960	1027	2080	1112	2319	1210
35	1750	883	469	1014	539	1142	606	1269	672	1396	735	1521	802	1646	868	1770	947	2018	1057	2141	1145	2388	1246
36	1800	909	482	1043	554	1175	623	1305	691	1436	756	1565	824	1693	893	1821	974	2076	1087	2202	1178	2456	1282
37 38	1850 1900	934 959		1072 1100	570 585	1208 1240	640 657	1342 1378		1476 1515		1608 1651		1740 1787					1117 1148				
39	1950	984		1129	601	1273		1414		1555		1695		1834					1178				
40	2000			1158	616	1306	692	1450		1595		1738		1881					1208				
41	2050	1035	549	1187	631	1338	709	1487		1635		1782							1238				
42	2100	1060	563	1216	647	1371	727	1523	806	1675	882	1825	962	1975	1042	2124	1136	2422	1268	2569	1374	2865	1495
43	2150			1245	662	1404		1559		1715		1869							1299				
44	2200		590	1274	678	1436	761	1595	845										1329				
45	2250			1303	693	1469	779	1632	864										1359				
46 47	2300 2350		616 630	1332	708	1501 1534	796	1668	883 902	1834 1874	966					2326			1389	2814			
48	2400			1361 1390	724 739	1567	813 830	1704 1740	902	1914									1419				
49	2450			1419	755		848	1777	941										1480				
50		1262		1448		1632		1813											1510				
	1	- 1		1	I	. 1				1	1	1	1	_	1	l .	- 1		1		1	_	





1.	27	1.	28	1	28	1.3	30	1.	32	1.3	33	1.3	34	1.	34	1.3	34	1.	33
10	00	11	.00	12	00	15	00	18	00	20	00	22	00	25	00	28	00	30	00
									Output	(Watts)									
ΔΤ50	ΔΤ30	ΔT50	ΔΤ30	ΔΤ50	ΔΤ30	ΔΤ50	ΔΤ30	ΔΤ50	ΔΤ30	ΔT50	ΔT30	ΔΤ50	ΔΤ30	ΔΤ50	ΔΤ30	ΔΤ50	ΔΤ30	ΔΤ50	ΔΤ30
301	156	329	170	357	184	443	226	529	267	587	295	647	323	737	369	829	415	892	449
376	196	412	213	447	231	553	283	661	334	734	369	808	404	921	461	1037	519	1116	561
452	235	494	255	536	277	664	339	793	401	881	443	970	485	1105	553	1244	623	1339	673
527	274	576	298	626	323	774	396	926	468	1028	517	1131	566	1290	645	1452	727	1562	785
602	313	658	340	715	369	885	452	1058	534	1175	590	1293	646	1474	738	1659	830	1785	898
677	352	741	383	804	415	996	509	1190	601	1322	664	1455	727	1658	830	1866	934	2008	1010
753	391	823	425	894	461	1106	565	1322	668	1468	738	1616	808	1842	922	2074	1038	2231	1122
828	430	905	468	983	507	1217	622	1455	735	1615	812	1778	889	2027	1014	2281	1142	2454	1234
903	469	988	510	1072	553	1328	678	1587	802	1762	886	1940	970	2211	1106	2488	1246	2677	1346
978	508	1070	553	1162	599	1438	735	1719	868	1909	959	2101	1050	2395	1199	2696	1349	2900	1459
1054 1129	547 587	1152	595	1251	645 692	1549	791	1851	935	2056	1033	2263	1131 1212	2579 2763	1291	2903	1453 1557	3123 3347	1571 1683
1204	626	1235 1317	638 680	1340 1430	738	1660 1770	848 904	1984 2116	1069	2203 2349	1107 1181	2424 2586	1212	2948	1383 1475	3110 3318	1661	3570	1795
1279	665	1399	723	1519	784	1881	961	2248	1136	2496	1255	2748	1374	3132	1567	3525	1765	3793	1907
1355	704	1481	765	1608	830	1992	1017	2380	1202	2643	1328	2909	1454	3316	1660	3733	1868	4016	2020
1430	743	1564	808	1698	876	2102	1074	2513	1269	2790	1402	3071	1535	3500	1752	3940	1972	4239	2132
1505	782	1646	850	1787	922	2213	1130	2645	1336	2937	1476	3233	1616	3685	1844	4147	2076	4462	2244
1580	821	1728	893	1877	968	2323	1187	2777	1403	3084	1550	3394	1697	3869	1936	4355	2180	4685	2356
1656	860	1811	935	1966	1014	2434	1243	2909	1470	3230	1624	3556	1778	4053	2028	4562	2284	4908	2468
1731	899	1893	978	2055	1060	2545	1300	3042	1536	3377	1697	3717	1858	4237	2121	4769	2387	5131	2581
1806	938	1975	1020	2145	1106	2655	1356	3174	1603	3524	1771	3879	1939	4422	2213	4977	2491	5354	2693
1882	978	2058	1063	2234	1153	2766	1413	3306	1670	3671	1845	4041	2020	4606	2305	5184	2595	5578	2805
1957	1017	2140	1105	2323	1199	2877	1469	3438	1737	3818	1919	4202	2101	4790	2397	5392	2699	5801	2917
2032	1056	2222	1148	2413	1245	2987	1526	3570	1804	3965	1993	4364	2182	4974	2489	5599	2803	6024	3029
2107	1095	2304	1190	2502	1291	3098	1582	3703	1870	4112	2066	4526	2262	5158	2582	5806	2906	6247	3142
2183	1134	2387	1233	2591	1337	3209	1639	3835	1937	4258	2140	4687	2343	5343	2674	6014	3010	6470	3254
2258 2333	1173 1212	2469 2551	1275 1318	2681 2770	1383 1429	3319 3430	1695 1752	3967 4099	2004	4405 4552	2214 2288	4849	2424	5527	2766	6221	3114	6693	3366 <u>-</u>
2408	1212	2634	1360	2860	1429	3540	1808	4232	2138	4699	2362	_	_	_	_	_	_	_	_
2484	1290	2716	1403	2949	1521	3651	1865	4364	2204	4846	2435	_	_	_	_	_	_	_	_
2559	1329	2798	1445	3038	1567	3762	1921	4496	2271	4993	2509	-	-	-	-	-	-	-	-
2634	1369	2881	1488	3128	1614	3872	1978	4628	2338	5139	2583	-	-	_	-	-	_	_	-
2709	1408	2963	1530	3217	1660	3983	2034	4761	2405	5286	2657	-	-	-	-	-	-	-	-
2785	1447	3045	1573	3306	1706	4094	2091	4893	2472	5433	2731	-	-	-	-	-	-	-	-
2860	1486	3127	1615	3396	1752	4204	2147	5025	2538	5580	2804	-	-	-	-	-	-	-	-
2935	1525	3210	1658	3485	1798	4315	2204	5157	2605	5727	2878	-	-	-	-	-	-	-	-
3010	1564	3292	1700	3574	1844	4426	2260	5290	2672	5874	2952	-	-	-	-	-	-	-	-
3086	1603	3374	1743	3664	1890	4536	2317	5422	2739	6020	3026	-	-	-	-	-	-	-	-
3161	1642	3457	1785	3753	1936	4647	2373	5554	2806	6167	3100	-	-	-	-	-	-	-	-
3236	1681	3539	1828	3842	1982	4758	2430	5686	2872	6314	3173	-	-	-	-	-	-	-	-
3311	1720	3621	1870	3932	2028	4868	2486	5819	2939	6461	3247	-	-	-	-	-	-	-	-
3387	1760	3704	1913	4021	2075	4979	2543	5951	3006	6608	3321	-	-	-	-	-	-	-	-
3462 3537	1799 1838	3786 3868	1955 1998	4111	2121	5089 5200	2599 2656	6083 6215	3073 3140	6755 6901	3395 3469	-	-	-	_	_	-	-	_
3612	1877	3950	2040	4200	2213	5311	2030	6348	3206	7048	3542	_	_	_	_	_	_	_	_
3688	1916	4033	2040	4379	2259	5421	2769	6480	3273	7195	3616	-	-	-			-	-	
3763	1955	4115	2125	4468	2305	5532	2825	6612	3340	7342	3690	-	-	-	-	-	-	-	-
NOTE												I	l	I	I	l	I	I	I

NOTE:
All outputs are in accordance with BS EN442 certification.
'n' = average exponent value.
Due to manufacturing tolerances of sectional Multicolumn Plus radiators, dimensions shown are subject to slight variance.
Height: Up to 1mm, Length: 0% up to +1%.

Indicates weight of over 100kg

## **Heat Outputs**

### 3 Column Radiators

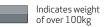
Expon	ent 'n'	1.2	23	1.	23	1	24	1	24	1	25	1.	26	1.2	26	1.2	27	1.	28	1.	28	1	29
Height	: (mm)	30	0	35	50	40	00	45	50	50	00	55	50	60	00	65	50	7!	50	80	00	90	00
	1											Output	(Watts	)									
Sections	Length (mm)	ΔT50	ΔT30	ΔT50	ΔΤ30	ΔT50	ΔΤ30	ΔT50	ΔΤ30	ΔT50	ΔΤ30	ΔT50	ΔT30	ΔT50	ΔT30	ΔT50	ΔT30	ΔT50	ΔΤ30	ΔΤ50	ΔΤ30	ΔT50	ΔΤ30
4	200	142	75	162	86	182	96	202	106	222	116	241	126	260	136	279	149	318	164	336	180	374	192
5	250	177	94	203	107	228	120	252	133	277	145	301	157	325	170	349	187	397	205	421	225	468	241
6	300	212	112	243	128	273	144	303	160	332	174	362	188	390	203	419	224	476	246	505	270	561	289
7	350	248	131	284	150	319	168	353	186	388	203	422	220	456	237	489	262	556	287	589	315	655	337
8	400	283	150	324	171	364	192	404	213	443	232	482	251	521	271	559	299	635	328	673	360	749	385
9	450	319	168	365	193	410	216	454	239	498	261	542	283	586	305	629	336	715	369	757	405	842	433 481
10 11	500 550	354 389	187 206	405 446	214	455 501	240 264	505 555	266 293	554 609	290 319	603	314 345	651 716	339 373	699 769	374 411	794 873	410	841 925	450 495	936 1029	529
12	600	425	224	486	257	546	288	606	319	665	348	723	377	781	407	838	448	953	492	1009	540	1123	577
13	650	460	243	527	278	592	312	656	346	720	377	783	408	846	441	908	486	1032	533		585	1217	625
14	700	496	262	567	300	637	336	707	372	775	406	844	440	911	475	978	523	1112	574	1178	630	1310	673
15	750	531	281	608	321	683	360	757	399	831	435	904	471	976	509	1048	560	1191	615	1262	675	1404	722
16	800	566	299	648	342	728	384	808	426	886	464	964	502	1041	542	1118	598	1270	656	1346	720	1497	770
17	850	602	318	689	364	774	408	858	452	941	493	1024	534	1106	576	1188	635	1350	697	1430	765	1591	818
18	900	637	337	729	385	819	432	909	479	997	522	1085	565	1171	610	1258	673	1429	738	1514	810	1684	866
19 20	950	673 708	355 374	770 810	407 428	865 910	456 480	959 1010	505 532	1052 1108	551 580	1145 1205	597 628	1237 1302	644 678	1328 1397	710 747	1509 1588	779 820	1598 1682	855 900	1778 1872	914 962
21	1050	743	393	851	449	956	504	1060	559	1163	609	1265	659	1367	712	1467	785	1667	861	1767	945	1965	1010
22	1100	779	411	891	471	1001	528	1111	585	1218	638	1326	691	1432	746	1537	822	1747	902	1851	990	2059	1058
23	1150	814	430	932	492	1047	552	1161	612		667	1386	722	1497	780	1607	859	1826	943	1935	1035	2152	1106
24	1200	850	449	972	514	1092	576	1212	638	1329	696	1446	754	1562	814	1677	897	1906	984	2019	1080	2246	1154
25	1250	885	468	1013	535	1138	600	1262	665	1385	725	1507	785	1627	848	1747	934	1985	1025	2103	1125	2340	1203
26	1300	920	486	1053	556	1184	624	1312	692	1440	754	1567	816	1692	881	1817	972	2064	1066	2187	1170	2433	1251
27	1350	956	505	1094	578	1229	648	1363	718		783	1627	848	1757	915	1886	1009	2144	1107	2271	1215	2527	1299
28 29	1400	991	524	1134	599	1275	672	1413	745	1551	812	1687	879	1822	949	1956	1046	2223	1148	2355	1260	2620	1347
30	1450 1500	1027 1062	542 561	1175 1215	621	1320 1366	696 720	1464 1514	771 798	1606 1661	841 870	1748 1808	911	1887 1952	983 1017	2026 2096	1084 1121	2303 2382	1189 1230	2439 2524	1305 1350	2714 2807	1395 1443
31	1550	1097	580	1256	663	1411	744	1565	825	1717	899	1868	973	2017	1051	2166	1158	2461	1271	2608	1395	2901	1491
32	1600	1133	598	1296	685	1457	768	1615	851	1772	928	1928	1005	2083	1085	2236	1196	2541	1312	2692	1440	2995	1539
33	1650	1168	617	1337	706	1502	792	1666	878	1828	957	1989	1036	2148	1119	2306	1233	2620	1353	2776	1485	3088	1587
34	1700	1204	636	1377	728	1548	816	1716	904	1883	986	2049	1068	2213	1153	2376	1270	2700	1394	2860	1530	3182	1635
35	1750	1239	655	1418	749	1593	840	1767	931	1938	1015	2109	1099	2278	1187	2445	1308	2779	1435	2944	1575	3275	1684
36	1800	1274	673	1458	770	1639	864	1817	958	1994	1044	2169	1130	2343	1220	2515	1345	2858				3369	1732
37		1310		1499		1684													1517 1558				
38 39	1900 1950			1539 1580		<ul><li>1730</li><li>1775</li></ul>													1599				
40	2000			1620		1821													1640				
41	2050		767	1661		1866	984												1681				
42			785	1701															1722				
43	2150		804	1742	920														1763				
44	2200		823	1782															1804				
45		1593		1823															1845				
46	2300		860																1886				
47 48		1664 1699																	1927 1968			4398	2309
49		1735																	2009				
50		1770																	2050				





1.3	30	1.	30	1.3	B1	1.3	33	1.	34	1.3	34 <u> </u>	1.3	34 <u> </u>	1	34	1.	33	1	32
10	00	11	.00	12	00	15	00	18	00	20	00	22	00	25	00	28	00	30	00
									Output	(Watts)									
ΔT50	ΔΤ30	ΔT50	ΔΤ30	ΔT50	ΔT30	ΔT50	ΔT30	ΔΤ50	ΔΤ30	ΔT50	ΔT30	ΔΤ50	ΔΤ30	ΔT50	ΔΤ30	ΔΤ50	ΔΤ30	ΔΤ50	ΔΤ30
412	210	449	230	487	247	599	301	712	356	788	394	865	433	982	491	1100	553	1181	597
515	263	562	287	609	309	749	377	890	446	986	493	1081	541	1227	614	1376	692	1476	746
618	316	674	344	730	371	899	452	1068	535	1183	592	1298	649	1473	737	1651	830	1771	895
721	368	786	402	852	433	1049	527	1247	624	1380	690	1514	757	1718	860	1926	968	2066	1044
824	421	899	459	974	494	1198	602	1425	713	1577	789	1730	866	1963	982	2201	1106	2361	1194
927	473	1011	517	1095	556	1348	678	1603	802	1774	887	1946	974	2209	1105	2476	1245	2656	1343
1030	526	1123	574	1217	618	1498	753	1781	891	1971	986	2163	1082	2454	1228	2751	1383	2952	1492
1133	579	1236	631	1339	680	1648	828	1959	980	2168	1085	2379	1190	2700	1351	3026	1521	3247	1641
1236	631	1348	689	1460	742	1798	904	2137	1069	2365	1183	2595	1298	2945	1474	3301	1660	3542	1790
1339	684	1460	746	1582	803	1947	979	2315	1158	2562	1282	2811	1407	3191	1596	3576	1798	3837	1940
1442	736	1573	804	1704	865	2097	1054	2493	1247	2759	1380	3028	1515	3436	1719	3851	1936	4132	2089
1545	789	1685	861	1826	927	2247	1130	2671	1337	2957	1479	3244	1623	3681	1842	4127	2075	4427	2238
1648	842	1797	918	1947	989	2397	1205	2849	1426	3154	1578	3460	1731	3927	1965	4402	2213	4723	2387
1751	894	1910	976	2069	1051	2547	1280	3027	1515	3351	1676	3677	1839	4172	2088	4677	2351	5018	2536
1854	947	2022	1033	2191	1112	2696	1355	3205	1604	3548	1775	3893	1948	4418	2210	4952	2489	5313	2686
1957	999	2134	1091	2312	1174	2846	1431	3384	1693	3745	1873	4109	2056	4663	2333	5227	2628	5608	2835
2060	1052	2247	1148	2434	1236	2996	1506	3562	1782	3942	1972	4325	2164	4909	2456	5502	2766	5903	2984
2163	1105	2359	1205	2556	1298	3146	1581	3740	1871	4139	2071	4542	2272	5154	2579	5777	2904	6198	3133
2266 2369	1157 1210	2471 2584	1263	2677 2799	1360 1421	3296 3445	1657 1732	3918 4096	1960 2049	4336 4533	2169	4758 4974	2380 2489	5400	2702 2824	6052 6327	3043	6494 6789	3282 3432
2472	1210	2696	1320 1378	2921	1483	3595	1807	4096	2138	4730	2268 2366	5190	2597	5645 5890	2947	6602	3319	7084	3581
2575	1315	2809	1435	3043	1545	3745	1883	4452	2228	4928	2465	5407	2705	6136	3070	6878	3458	7379	3730
2677	1368	2921	1492	3164	1607	3895	1958	4630	2317	5125	2564	5623	2813	6381	3193	7153	3596	7674	3879
2780	1420	3033	1550	3286	1669	4045	2033	4808	2406	5322	2662	5839	2921	6627	3316	7428	3734	7969	4028
2883	1473	3146	1607	3408	1730	4194	2108	4986	2495	5519	2761	6055	3030	6872	3438	7703	3872	8265	4178
2986	1525	3258	1665	3529	1792	4344	2184	5164	2584	5716	2859	6272	3138	7118	3561	7978	4011	8560	4327
3089	1578	3370	1722	3651	1854	4494	2259	5342	2673	5913	2958	6488	3246	7363	3684	8253	4149	8855	4476
3192	1631	3483	1779	3773	1916	4644	2334	5520	2762	6110	3057	-	-	-	-	-	-	-	-
3295	1683	3595	1837	3894	1978	4794	2410	5699	2851	6307	3155	-	-	-	_	-	-	-	-
3398	1736	3707	1894	4016	2039	4943	2485	5877	2940	6504	3254	-	-	-	-	-	-	-	-
3501	1788	3820	1952	4138	2101	5093	2560	6055	3029	6701	3352	-	-	-	-	-	-	-	-
3604	1841	3932	2009	4260	2163	5243	2636	6233	3119	6899	3451	-	-	-	-	-	-	-	-
3707	1894	4044	2066	4381	2225	5393		6411	3208	7096	3550	-	-	-	-	-	-	-	-
3810	1946	4157	2124	4503	2287	5543	2786	6589	3297	7293	3648	-	-	-	-	-	-	-	-
3913	1999	4269	2181	4625	2348	5692	2861	6767	3386	7490	3747	-	-	-	-	-	-	-	-
4016	2051	4381	2239	4746	2410	5842	2937	6945	3475	7687	3845	-	-	-	-	-	-	-	-
4119	2104	4494	2296	4868	2472	5992	3012	7123	3564	7884	3944	-	-	-	-	-	-	-	-
4222	2157	4606	2353	4990	2534	6142	3087	7301	3653	8081	4043	-	-	-	-	-	-	-	-
4325	2209	4718	2411	5111	2596	6292	3163	7479	3742	8278	4141	-	-	-	-	-	-	-	-
4428	2262	4831	2468	5233	2657	6441	3238	7657	3831	8475	4240	-	-	-	-	-	-	-	-
4531	2314	4943	2526	5355	2719	6591	3313	7836	3920	8672	4338	-	-	-	-	-	-	-	-
4634	2367	5055	2583	5477	2781	6741	3389	8014	4010	8870	4437	-	-	-	-	-	-	-	-
4737	2420	5168	2640	5598	2843	6891	3464	8192	4099	9067	4536	-	-	-	-	-	-	-	-
4840	2472	5280	2698	5720	2905	7041	3539	8370	4188	9264	4634	-	-	-	-	-	-	-	-
4943	2525	5392	2755	5842	2966	7190	3614	8548	4277	9461	4733	-	-	-	-	-	-	-	-
5046	2577	5505	2813	5963	3028	7340	3690	8726	4366	9658	4831	-	-	-	-	-	-	-	-
5149 NOTE	2630	5617	2870	6085	3090	7490	3765	8904	4455	9855	4930	-	-	-	-	-	-	-	-

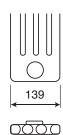
NOTE:
All outputs are in accordance with BS EN442 certification.
'n' = average exponent value.
Due to manufacturing tolerances of sectional Multicolumn Plus radiators, dimensions shown are subject to slight variance.
Height: Up to 1mm, Length: 0% up to +1%.



## **Heat Outputs**

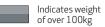
## 4 Column Radiators

Expon	ent 'n'	1.2	23	1	24	1.2	25	1	26	1	26	1	27	1	28	1	29	1.	30	1.	30	1.	31
Height	(mm)	30	00	35	50	40	00	45	50	50	00	55	50	60	00	65	50	7.	50	80	00	90	00
	1											Output	(Watts	)									
Sections	Length (mm)	ΔT50	ΔT30	ΔT50	ΔΤ30	ΔT50	ΔT30	ΔT50	ΔT30	ΔT50	ΔΤ30	ΔT50	ΔT30	ΔT50	ΔΤ30	ΔΤ50	ΔΤ30	ΔT50	ΔΤ30	ΔΤ50	ΔΤ30	ΔΤ50	ΔΤ30
4	200	182	96	208	105	234	122	259	135	284	148	308	160	332	172	357	191	405	207	428	229	476	242
5	250	228	121	260	131	292	153	323	169	354	185	385	200	416	215	446	238	506	259	535	286	595	302
6	300	273	145	312	157	350	184	388	202	425	222	462	239	499	257	535	286	607	310	642	344	714	362
7	350	319	169	364	183	409	214	453	236	496	259	539	279	582	300	624	334	708	362	749	401	832	423
8	400	364	193	416	209	467	245	517	270	567	296	616	319	665	343	713	381	809	414	857	458	951	483
9	450 500	410 456	217 241	468 520	235 261	526 584	275 306	582 647	303 337	638 709	333 370	693 770	359 399	748 831	386 429	802 892	429 477	910 1012	465 517	964	515 573	1070 1189	544 604
11	550	501	265	572	288	642	337	711	371	780	407	847	439	914	472	981	525	1113	569	1178	630	1308	664
12	600	547	289	624	314	701	367	776	404	851	444	924	479	997	515	1070	572	1214	620	1285	687	1427	725
13	650	592	313	677	340	759	398	841	438	921	481	1002	519	1081	558	1159	620	1315	672	1392	744	1546	785
14	700	638	337	729	366	818	428	906	472	992	518	1079	559	1164	601	1248	668	1416	724	1499	802	1665	846
15	750	683	362	781	392	876	459	970	506	1063	555	1156	599	1247	644	1337	715	1517	776	1606	859	1784	906
16	800	729	386	833	418	934	490	1035	539	1134	592	1233	638	1330	686	1427	763	1619	827	1713	916	1903	966
17	850	775	410	885	444	993	520	1100	573		629	1310	678	1413	729	1516	811	1720	879	1820	973	2022	1027
18 19	900 950	820 866	434 458	937 989	471 497	1051	551 581	1164 1229	607 640	<ul><li>1276</li><li>1347</li></ul>	666 703	1387 1464	718 758	1496 1579	772 815	1605 1694	858 906	1821 1922	931 982	1927 2034	1031 1088	2141 2259	1087 1148
20	1000	911	482	1041	523	11168	612	1229	674	1418	740	1541	798	1662	858	1783	954	2023	1034	2141	1145	2378	1208
21	1050	957	506	1093	549	1226	643	1358	708	1488	777	1618	838	1746	901	1872	1001	2124	1086	2248	1202	2497	1268
22	1100	1002	530	1145	575	1285	673	1423	741	1559	814	1695	878	1829	944	1962	1049	2226	1137	2356	1260	2616	1329
23	1150	1048	554	1197	601	1343	704	1488	775	1630	851	1772	918	1912	987	2051	1097	2327	1189	2463	1317	2735	1389
24	1200	1093	578	1249	627	1402	734	1552	809	1701	888	1849	958	1995	1030	2140	1144	2428	1241	2570	1374	2854	1450
25	1250	1139	603	1301	654	1460	765	1617	843	1772	925	1926	998	2078	1073	2229	1192	2529	1293	2677	1432	2973	1510
26	1300	1185	627	1353	680	1518	796	1682	876	1843	962	2003	1037	2161	1115	2318	1240	2630	1344	2784	1489	3092	1570
27 28	1350 1400	1230 1276	651 675	1405 1457	706 732	1577 1635	826 857	1746 1811	910 944	1914 1985	999 1036	2080 2157	1077 1117	2244 2327	1158 1201	2407 2496	1287 1335	2731 2832	1396 1448	2891 2998	1546 1603	3211 3330	1631 1691
29	1450	1321		1509	758	1694	887	1876	977	2056	1030	2234	1117	2410	1244	2586	1383	2934	1499	3105	1661	3449	1752
30	1500	1367	723	1561	784	1752	918	1940	1011	2126	1110	2311	1197	2494	1287	2675		3035	1551	3212	1718	3568	1812
31	1550	1412	747	1613	810	1810	949	2005	1045	2197	1147	2388	1237	2577	1330	2764	1478	3136	1603	3319	1775	3687	1872
32	1600	1458	771	1665	836	1869	979	2070	1078	2268	1184	2465	1277	2660	1373	2853	1526	3237	1654	3426	1832	3805	1933
33	1650	1503	795	1717	863	1927	1010	2134	1112	2339	1221	2542	1317	2743	1416	2942	1574	3338	1706	3533	1890	3924	1993
34	1700	1549	819	1769	889	1986	1040	2199	1146	2410	1258	2619	1357	2826	1459	3031	1621	3439	1758	3640	1947	4043	2054
35	1750	1595	844	1821	915	2044	1071	2264	1180	2481	1295	2696	1397	2909	1502	3121	1669	3541	1810	3747	2004	4162	2114
36 37	1800 1850	1640	868	1873 1925	941	2102	1102	2328	1213	2552	1332	2773	1436	2992	1544	3210	1717 1764	3642	1861	3855 3962	2061	4281 4400	2174
38	1900			1978																4069			
39	1950																			4176			
40	2000																			4283			2416
41	2050																		2120	4390	2348	4876	2476
42								2717												4497		4995	2537
43		1959																					
44 45		2005																	2275	4711		5232	
45 46		2050 2096																4653	2327 2378	4818 4925		5351 5470	
47		2141																		5032		5589	
48		2187															2289	4856	2482	5139	2749	5708	2899
49		2232																4957	2533			5827	2960
50	2500	2278	1205	2602	1307	2920	1530	3234	1685	3544	1850	3852	1995	4156	2145	4458	2384	5058	2585	5354	2863	5946	3020



1.3	32	1.3	33	1.3	B4	1	35	1.	35	1.3	35	1	35	1	34	1	32	1.	32
10	00	11	.00	12	00	15	00	18	00	20	00	22	00	25	00	28	00	30	00
									Output	(Watts)									
ΔT50	ΔT30	ΔT50	ΔT30	ΔT50	ΔT30	ΔT50	ΔT30	ΔΤ50	ΔΤ30	ΔΤ50	ΔT30	ΔΤ50	ΔΤ30	ΔT50	ΔΤ30	ΔΤ50	ΔΤ30	ΔΤ50	ΔΤ30
523	264	570	286	616	308	756	376	896	446	989	492	1084	539	1225	613	1371	690	1469	743
653	331	712	358	770	385	945	471	1120	557	1237	615	1355	674	1532	766	1714	862	1836	929
784	397	854	430	924	462	1134	565	1344	668	1484	739	1626	809	1838	919	2057	1034	2204	1114
915	463	997	501	1078	539	1323	659	1567	780	1731	862	1897	944	2144	1072	2400	1207	2571	1300
1045	529	1139	573	1232	616	1512	753	1791	891	1979	985	2167	1078	2450	1226	2743	1379	2938	1486
1176	595	1281	644	1386	693	1701	847	2015	1003	2226	1108	2438	1213	2757	1379	3085	1552	3305	1671
1307	661	1424	716	1540	770	1890	941	2239	1114	2474	1231	2709	1348	3063	1532	3428	1724	3673	1857
1437	727	1566	788	1694	847	2079	1035	2463	1225	2721	1354	2980	1483	3369	1685	3771	1896	4040	2043
1568	793	1709	859	1848	924	2268	1129	2687	1337	2968	1477	3251	1618	3676	1838	4114	2069	4407	2228
1699	859	1851	931	2003	1001	2456	1223	2911	1448	3216	1600	3522	1752	3982	1992	4457	2241	4774	2414
1830	925	1993	1002	2157	1078	2645	1317	3135	1560	3463	1723	3793	1887	4288	2145	4800	2414	5142	2600
1960	992	2136	1074	2311	1155	2834	1412	3359	1671	3710	1846	4064	2022	4595	2298 2451	5142 5485	2586	5509 5876	2786 2971
2091	1058	2278	1146	2465	1232	3023	1506	3583	1782	3958	1970	4335		4901			2758		
2222 2352	1124 1190	2420 2563	1217 1289	2619	1309 1386	3212 3401	1600 1694	3807 4031	1894 2005	4205 4452	2093 2216	4606 4877	2292 2426	5207 5513	2604 2758	5828 6171	2931 3103	6244	3157 3343
2483	1256	2705	1360	2773 2927	1463	3590		4255	2003	4700	2339	5148	2561	5820	2911	6514	3276	6978	3528
2614	1322	2848	1432	3081	1540	3779	1788 1882	4479	2228	4947	2339	5419	2696	6126	3064	6857	3448	7345	3714
2744	1388	2990	1504	3235	1617	3968	1976	4702	2339	5194	2585	5690	2831	6432	3217	7199	3620	7713	3900
2875	1454	3132	1575	3389	1694	4157	2070	4926	2451	5442	2708	5961	2966	6739	3370	7542	3793	8080	4085
3006	1520	3275	1647	3543	1771	4346	2164	5150	2562	5689	2831	6231	3100	7045	3524	7885	3965	8447	4271
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3398	1719	3702	1862	4005	2002	4913	2447	5822	2897	6431	3200	7044	3505	7964	3983	8914	4482	9549	4828
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3659	1851	3987	2005	4313	2156	5291	2635	6270	3119	6926	3447	7586	3774	8576	4290	9599	4827	10283	5200
3790	1917	4129	2076	4467	2233	5480	2729	6494	3231	7173	3570	7857	3909	8883	4443	9942	5000	10651	5385
3920	1983	4271	2148	4621	2310	5669	2823	6718	3342	7421	3693	8128	4044	9189	4596	10285	5172	11018	5571
4051	2049	4414	2220	4775	2387	5858	2917	6942	3454	7668	3816	-	-	-	-	-	-	-	-
4182	2115	4556	2291	4929	2464	6047	3011	7166	3565	7915	3939	-	-	-	-	-	-	-	-
4312	2181	4699	2363	5083	2541	6236	3105	7390	3676	8163	4062	-	-	-	-	-	-	-	-
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4704	2380		2578	5545	2772	6803	3388	8061	4011	8905	4431	-	-	-	-	-	-	-	-
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5227	2644	5695	2864	6162	3080	7558	3764	8957	4456	9894	4924	-	-	-	-	-	-	-	-
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5489	2776	5980	3007	6470	3234	7936	3952	9405	4679	10389	5170	-	-	-	-	-	-	-	-
5619	2842	6122	3079	6624	3311	8125	4046	-	-	-	-	-	-	-	-	-	-	-	-
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6011	3041	6549	3294	7086	3542	8692	4329	-	-	-	-	-	-	-	-	-	-	-	-
6142	3107	6692	3365	7240	3619	8881	4423	-	-	-	-	-	-	-	-	-	-	-	-
6273	3173	6834	3437	7394	3696	9070	4517	-	-	-	-	-	-	-	-	-	-	-	-
6403	3239	6977	3508	7548	3773	9259	4611	-	-	-	-	-	-	-	-	-	-	-	-
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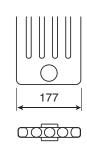
NOTE:
All outputs are in accordance with BS EN442 certification.
'n' = average exponent value.
Due to manufacturing tolerances of sectional Multicolumn Plus radiators, dimensions shown are subject to slight variance.
Height: Up to 1mm, Length: 0% up to +1%.



## **Heat Outputs**

## 5 Column Radiators

Expon	ent 'n'	1.2	24	1.	25	1.3	26	1.2	26	1	27	1.3	28	1	28	1.2	29	1.3	30	1.3	30	1.3	31
Height	(mm)	30	00	3!	50	40	00	45	50	50	00	55	50	60	00	65	50	7!	50	80	00	90	00
	Longth											Output	(Watts	)									
Sections	Length (mm)	ΔT50	ΔT30	ΔT50	ΔΤ30	ΔT50	ΔT30	ΔT50	ΔΤ30	ΔT50	ΔΤ30	ΔT50	ΔT30	ΔT50	ΔΤ30	ΔT50	ΔΤ30	ΔT50	ΔΤ30	ΔT50	ΔT30	ΔT50	ΔΤ30
4	200	224	118	256	134	288	150	319	166	349	181	380	196	410	212	440	235	499	255	529	283	587	298
5	250	280	148	320	168	359	188	398	208	437	227	475	245	512	265	550	294	624	319	661	353	734	373
6	300	336	177	384	201	431	225	478	249	524	272	570	294	615	317	660	353	749	382	793	424	881	448
7	350	392	207	448	235	503	263	557	291	611	317	665	343	717	370	770	412	874	446	925	495	1028	522
8	400	448	236	512	268	575	300	637	332	699	362	760	392	820	423	880	470	998	510	1057	565	1174	597
9	450	504	266	576	302	647	338	717	374	786	408	854	441	922	476	990	529	1123	573	1189	636	1321	671
10 11	500 550	560 616	295 325	640 704	335 369	719 791	375 413	796 876	415 457	873 961	453 498	949	490 539	1025 1127	529 582	1100 1210	588 647	1248 1373	637 701	1321 1453	707 777	1468 1615	746 821
12	600	672	354	768	402	863	450	956	498	1048	544	1139	588	1230	635	1320	706	1498	764	1586	848	1762	895
13	650	728	384	832	436	934	488	1035	540	1135	589	1234	637	1332	688	1429	764	1622	828	1718	919	1908	970
14	700	784	413	896	469	1006	525	1115	581	1222	634	1329	686	1435	741	1539	823	1747	892	1850	989	2055	1044
15	750	840	443	960	503	1078	563	1195	623	1310	680	1424	735	1537	794	1649	882	1872	956	1982	1060	2202	1119
16	800	896	472	1024	536	1150	600	1274	664	1397	725	1519	784	1640	846	1759	941	1997	1019	2114	1131	2349	1194
17	850	952	502	1088	570	1222	638	1354	706	1484	770	1614	833	1742	899	1869	1000	2122	1083	2246	1201	2496	1268
18	900	1008	531	1152	603	1294	675	1434	747	1572	815	1709	882	1845	952	1979	1059	2246	1147	2378	1272	2642	1343
19	950	1064	561	1216	637	1366	713	1513	789	1659	861	1804	931	1947	1005	2089	1117	2371	1210	2510	1343	2789	1417
20 21	1000	1120 1176	590 620	1280 1344	670 704	1438 1509	750 788	1593 1672	830 872	1746 1834	906 951	1899 1994	980 1029	2050 2152	1058 1111	2199 2309	<ul><li>1176</li><li>1235</li></ul>	2496 2621	1274 1338	2643 2775	1413 1484	2936 3083	1492 1567
22	1100	1232	649	1408	737	1581	825	1752	913	1921	997	2089	1029	2255	1164	2419	1294	2746	1401	2907	1555	3230	1641
23	1150	1288	679	1472	771	1653	863	1832	955	2008	1042	2184		2357	1217	2529	1353	2870	1465	3039	1625	3376	1716
24	1200	1344	708	1536	804	1725	900	1911	996	2096	1087	2279	1176	2460	1270	2639	1411	2995	1529	3171	1696	3523	1790
25	1250	1400	738	1600	838	1797	938	1991	1038	2183	1133	2374	1225	2562	1323	2749	1470	3120	1593	3303	1767	3670	1865
26	1300	1455	767	1664	871	1869	975	2071	1079	2270	1178	2468	1274	2664	1375	2859	1529	3245	1656	3435	1837	3817	1940
27	1350	1511	797	1728	905	1941	1013	2150	1121	2358	1223	2563	1323	2767	1428	2969	1588	3370	1720	3568	1908	3964	2014
28	1400	1567	826	1792	938	2013	1050	2230	1162	2445	1268	2658	1372	2869	1481	3079	1647	3494	1784	3700	1979	4110	2089
29	1450	1623	856	1856	972	2085	1088	2310	1204	2532	1314	2753	1421	2972	1534	3189	1705	3619	1847	3832	2049	4257	2163
30	1500	1679	885	1920	1005	2156	1125	2389	1245	2620	1359	2848	1470	3074	1587	3299	1764	3744	1911	3964	2120	4404	2238 2313
31 32	1550 1600	1735 1791	915 944	1984 2048	1039 1072	2228	1163 1200	2469 2548	1287 1328	2707 2794	1404 1450	2943 3038	1519 1568	3177 3279	1640 1693	3409 3519	1823 1882	3869 3994	1975 2038	4096 4228	<b>2191</b> 2261	4551 4698	2313
33	1650	1847	974	2112	1106	2372	1238	2628	1370	2882	1495	3133	1617	3382	1746	3629	1941	4118	2102	4360	2332	4844	2462
34	1700	1903	1003	2176	1139	2444	1275	2708	1411	2969	1540	3228	1666	3484	1799	3739	1999	4243	2166	4492	2403	4991	2536
35	1750	1959	1033	2240	1173	2516	1313	2787	1453	3056	1586	3323	1715	3587	1852	3849	2058	4368	2230	4625	2473	5138	2611
36	1800	2015	1062	2304	1206	2588	1350	2867	1494	3144	1631	3418	1764	3689	1904	3959	2117	4493	2293	4757	2544	5285	2686
37																						5432	
38					1273														2421	5021		5578	
39					1307																	5725	
40					1340											4398	2352	4992	2548	5285	2827 2897	5872 6019	
41 42					1374 1407									4202 4304		4508 4618	<ul><li>2411</li><li>2470</li></ul>	5117 5242	2675	5417 5549	2968		
43					1441											4728			2739			6312	
44					1474									4509		4838	2587	5491	2803	5814			
45					1508																	6606	
46					1541										2433	5058		5741	2930	6078		6753	
47					1575																	6900	
48					1608										2539	5278	2823	5990	3058	6342		7046	
49					1642																		
50	2500	2799	1475	3200	1675	3594	1875	3982	2075	4366	2265	4747	2450	5124	2645	5498	2940	6240	3185	6607	3533	7340	3730



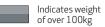
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									Output	(Watts)									
ΔT50	ΔT30	ΔΤ50	ΔΤ30	ΔΤ50	ΔΤ30	ΔΤ50	ΔΤ30	ΔT50	ΔΤ30	ΔΤ50	ΔT30	ΔT50	ΔΤ30	ΔΤ50	ΔΤ30	ΔΤ50	ΔΤ30	ΔΤ50	ΔT30
645	326	703	354	761	381	933	464	1105	550	1219	607	1335	668	1509	759	1685	856	1803	921
807	408	879	442	951	476	1166	581	1381	687	1524	759	1668	835	1886	949	2106	1070	2254	1151
968	489	1055	530	1141	571	1399	697	1657	824	1829	910	2002	1001	2263	1138	2527	1284	2705	1381
1129	571	1230	619	1331	666	1632	813	1933	962	2134	1062	2336	1168	2640	1328	2948	1498	3156	1611
1291	652	1406	707	1521	762	1865	929	2209	1099	2439	1214	2669	1335	3018	1518	3369	1712	3606	1842
1452	734	1582	796	1712	857	2099	1045	2485	1237	2744	1365	3003	1502	3395	1707	3791	1926	4057	2072
1613	815	1758	884	1902	952	2332	1161	2761	1374	3049	1517	3337	1669	3772	1897	4212	2140	4508	2302
1775	897	1934	972	2092	1047	2565	1277	3037	1511	3354	1669	3670	1836	4149	2087	4633	2354	4959	2532
1936	978	2109	1061	2282	1142	2798	1393	3314	1649	3658	1820	4004	2003	4526	2276	5054	2568	5410	2763
2097	1060	2285	1149	2472	1238	3031	1509	3590	1786	3963	1972	4338	2170	4904	2466	5475	2782	5860	2993
2258	1141	2461	1238	2663	1333	3264	1626	3866	1924	4268	2124	4671	2337	5281	2656	5896	2996	6311	3223
2420	1223	2637	1326	2853	1428	3498	1742	4142	2061	4573	2276	5005	2504	5658	2846	6318	3210	6762	3453
2581	1304	2812	1414	3043	1523	3731	1858	4418	2198	4878	2427	5339	2670	6035	3035	6739	3424	7213	3683
2742	1386	2988	1503	3233	1618	3964	1974	4694	2336	5183	2579	5672	2837	6412	3225	7160	3638	7663	3914
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3065	1549	3340	1680	3613	1809	4430	2206	5247	2611	5792	2882	6340	3171	7167	3604	8002	4066	8565	4374
3226	1630	3516	1768	3804	1904	4664	2322	5523	2748	6097	3034	6673	3338	7544	3794	8423	4280	9016	4604
3388	1712	3691	1856	3994	1999	4897	2438	5799	2885	6402	3186	7007	3505	7921	3984	8845	4494	9467	4834
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5162	2608	5625	2829	6086	3046	7462	3716	-	-	-	-	-	-	-	-	-	-	-	-
5324	2690	5801	2917	6276	3142	7695	3832	-	-	-	-	-	-	-	-	-	-	-	-
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5808	2934	6328	3182	6846	3427	8394	4180	-	-	-	-	-	-	-	-	-	-	-	-
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6291	3179	6855	3448	7417	3713	9094	4528	-	-	-	-	-	-	-	-	-	-	-	-
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6937	3505	7559	3801	8178	4094	10027	4993	-	-	-	-	-	_	-	-	-	-	-	-
7098	3586	7734	3890	8368	4189	10260	5109	-	-	-	-	-	-	-	-	-	-	-	-
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7421	3749	8086	4066	8748	4379	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7582	3831	8262	4155	8938	4474	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7743	3912	8437	4243	9129	4570	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7905	3994	8613	4332	9319	4665	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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NOTE:

All outputs are in accordance with BS EN442 certification.
'n' = average exponent value.

Due to manufacturing tolerances of sectional Multicolumn Plus radiators, dimensions shown are subject to slight variance.

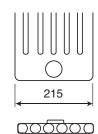
Height: Up to 1mm, Length: 0% up to +1%.



## **Heat Outputs**

### 6 Column Radiators

Expon	ent 'n'	1.2	25	1.	26	1.3	26	1.2	27	1.2	28	1.3	28	1.2	29	1.2	29	1.3	30	1.3	30	1.	31
Height	: (mm)	30	00	3!	50	40	00	45	50	50	00	55	50	60	00	65	0	75	50	80	00	90	00
	Length										(	Output	(Watts)	)									
Sections	(mm)	ΔT50	ΔT30	ΔT50	ΔΤ30	ΔT50	ΔΤ30	ΔT50	ΔT30	ΔT50	ΔT30	ΔT50	ΔΤ30	ΔT50	ΔΤ30	ΔT50	ΔT30	ΔT50	ΔT30	ΔT50	ΔΤ30	ΔT50	ΔΤ30
4	200	266	139	304	158	341	178	378	196	415	214	451	233	487	250	523	280	594	303	629	336	699	355
5	250	332	174	380	198	427	223	473	246	519	268	564	291	609	313	654	350	742	379	786	420	873	444
6	300	398	209	456	238	512	267	568	295	623	322	677	349	731	375	785	420	891	455	943	504	1048	533
7	350	465	244	532	277	597	312	662	344	726	375	790	407	853	438	915	489	1039	531	1100	588	1223	622
8	400	531	278	608	317	683	356	757	393	830	429	903	466	975	500	1046	559	1188	606	1257	672	1397	710
9	450	598	313	683	356	768	401	851	442	934	482	1016	524	1097	563	1177	629	1336	682	1415	757	1572	799
10 11	500 550	664 730	348 383	759 835	396 436	853 939	445	946	491 540	1038 1141	536 590	1128 1241	582 640	1218 1340	625 688	1308 1438	699 769	<ul><li>1485</li><li>1633</li></ul>	758 834	1572 1729	841 925	1747 1921	888 977
12	600	797	418	911	475	1024	534	1135	589	1245	643	1354	698	1462	750	1569	839	1782	910	1886	1009	2096	1066
13	650	863	452	987	515	1109	579	1230	638	1349	697	1467	757	1584	813	1700	909	1930	985	2043	1093	2271	1154
14	700	930	487	1063	554	1195	623	1324	687	1453	750	1580	815	1706	875	1831	979	2078	1061	2201	1177	2445	1243
15	750	996	522	1139	594	1280	668	1419	737	1556	804	1693	873	1828	938	1961	1049	2227	1137	2358	1261	2620	1332
16	800	1062	557	1215	634	1365	712	1514	786	1660	858	1805	931	1949	1000	2092	1119	2375	1213	2515	1345	2795	1421
17	850	1129	592	1291	673	1451	757	1608	835	1764	911	1918	989	2071	1063	2223	1189	2524	1289	2672	1429	2969	1510
18	900	1195	626	1367	713	1536	801	1703	884	1868	965	2031	1048	2193	1125	2354	1259	2672	1364	2829	1513	3144	1598
19	950	1262	661	1443	752	1621	846	1797	933	1971	1018	2144	1106	2315	1188	2484	1329	2821	1440	2986	1597	3319	1687
20	1000	1328	696	1519	792	1707	890	1892	982	2075	1072	2257	1164	2437	1250	2615	1399	2969	1516	3144	1681	3493	1776
21	1050 1100	1394 1461	731 766	1595 1671	832 871	1792 1877	935 979	1987 2081	1031 1080	2179 2283	1126 1179	2370 2482	1222	2559 2680	1313 1375	2746 2877	1468 1538	3118 3266	1592 1668	3301 3458	1765 1849	3668 3843	1865 1954
22 23	1150	1527	800	1747	911	1963	1024	2176	1129	2386	1233	2595	1280 1339	2802	1438	3007	1608	3415	1743	3615	1933	4017	2042
24	1200	1594	835	1823	950	2048	1068	2270	1178	2490	1286	2708	1397	2924	1500	3138	1678	3563	1819	3772	2017	4192	2131
25	1250	1660	870	1899	990	2134	1113	2365	1228	2594	1340	2821	1455	3046	1563	3269	1748	3712	1895	3930	2101	4367	2220
26	1300	1726	905	1974	1030	2219	1157	2460	1277	2698	1394	2934	1513	3168	1625	3400	1818	3860	1971	4087	2186	4541	2309
27	1350	1793	940	2050	1069	2304	1202	2554	1326	2802	1447	3047	1571	3290	1688	3530	1888	4008	2047	4244	2270	4716	2398
28	1400	1859	974	2126	1109	2390	1246	2649	1375	2905	1501	3160	1630	3412	1750	3661	1958	4157	2122	4401	2354	4890	2486
29	1450	1926	1009	2202	1148	2475	1291	2743	1424	3009	1554	3272	1688	3533	1813	3792	2028	4305	2198	4558	2438	5065	2575
30	1500	1992	1044	2278	1188	2560	1335	2838	1473	3113	1608	3385	1746	3655	1875	3923	2098	4454	2274	4715	2522	5240	2664
31	1550	2058	1079	2354	1228	2646	1380	2933	1522	3217	1662	3498	1804	3777	1938	4053	2168	4602	2350	4873	2606	5414	2753
32	1600	2125	1114	2430	1267	2731	1424	3027	1571 1620	3320	1715	3611	1862 1921	3899	2000	4184	2238	4751 4899	2426	5030	2690 2774	5589 5764	2842 2930
33 34	1650 1700	2191 2258	1148 1183	2506 2582	1307 1346	2816 2902	1469 1513	3122 3216	1669	3424 3528	1769 1822	3724 3837	1979	4021 4143	2063 2125	4315 4446	2308 2377	5048	2501 2577	5187 5344	2858	5938	3019
35	1750	2324	1218	2658	1386	2987	1558	3311	1719	3632	1876	3949	2037	4264	2188	4576	2447	5196	2653	5501	2942	6113	3108
36	1800	2390	1253	2734	1426	3072	1602	3406	1768		1930	4062	2095	4386	2250	4707	2517	5345	2729	5658	3026	6288	3197
37							1647																
38							1691									4969	2657	5641	2880			6637	3374
39							1736									5099			2956				
40							1780							4874	2500	5230	2797	5938	3032	6287	3362		3552
41							1825									5361	2867	6087		6444		7161	
42							1869					4739	2444	5117	2625	5492	2937	6235	3184	6602		7336	3730
43 44							1914									5622		6384 6532	3259 3335	6759 6916		7510 7685	3818
45							1958 2003							5361 5483		5753 5884	3077						3907
46							2047							5605		6015		6829	3487	7230		8034	4085
47							2092															8209	
48							2136		2357				2794	5848		6276	3356	7126	3638	7545		8384	4262
49							2181															8558	4351
50	2500	3320	1740	3797	1980	4267	2225	4730	2455	5188	2680	5642	2910	6092	3125	6538	3496	7423	3790	7859	4203	8733	4440



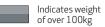
1	32	1.	33	1.3	33	1.3	B4	1.	35	1.:	B4	1	B4	1.3	32	1.3	30	1.	28
10	00	11	00	12	00	15	00	18	00	20	00	22	00	25	00	28	00	30	00
									Output	(Watts)									
ΔT50	ΔΤ30	ΔT50	ΔΤ30	ΔT50	ΔT30	ΔT50	ΔT30	ΔT50	ΔΤ30	ΔT50	ΔT30	ΔT50	ΔΤ30	ΔΤ50	ΔΤ30	ΔΤ50	ΔΤ30	ΔΤ50	ΔΤ30
768	388	837	421	905	455	1110	555	1313	654	1449	725	1586	793	1790	906	1998	1020	2137	1103
960	486	1046	526	1131	569	1387	694	1642	817	1812	907	1982	991	2238	1132	2498	1275	2671	1379
1152	583	1255	631	1358	683	1664	833	1970	980	2174	1088	2378	1190	2685	1358	2997	1531	3206	1654
1344	680	1464	736	1584	797	1942	971	2299	1144	2536	1269	2775	1388	3133	1585	3497	1786	3740	1930
1536	777	1673	842	1810	910	2219	1110	2627	1307	2899	1450	3171	1586	3580	1811	3996	2041	4274	2206
1728	874	1882	947	2037	1024	2497	1249	2955	1471	3261	1632	3568	1785	4028	2038	4496	2296	4808	2481
1920	971	2092	1052	2263	1138	2774	1388	3284	1634	3623	1813	3964	1983	4475	2264	4995	2551	5343	2757
2112	1068	2301	1157	2489	1252	3051	1527	3612	1797	3986	1994	4361	2181	4923	2491	5495	2806	5877	3033
2304	1165	2510	1262	2715	1366	3329	1665	3940	1961	4348	2176	4757	2380	5370	2717	5994	3061	6411	3309
2495	1262	2719	1368	2942	1479	3606	1804	4269	2124	4710	2357	5153	2578	5818	2943	6494	3316	6946	3584
2687	1359	2928	1473	3168	1593	3884	1943	4597	2288	5073	2538	5550	2776	6265	3170	6993	3571	7480	3860
2879	1457	3137	1578	3394	1707	4161	2082	4925	2451	5435	2720	5946	2974	6713	3396	7493	3826	8014	4136
3071	1554	3346	1683	3621	1821	4438	2221	5254	2614	5797	2901	6343	3173	7160	3623	7992	4082	8548	4412
3263	1651	3556	1788	3847	1935	4716	2359	5582	2778	6160	3082	6739	3371	7608	3849	8492	4337	9083	4687
3455	1748	3765	1894	4073	2048	4993	2498	5911	2941	6522	3263	7135	3569	8055	4075	8991	4592	9617	4963
3647	1845	3974	1999	4299	2162	5271	2637	6239	3105	6884	3445	7532	3768	8503	4302	9491	4847	-	-
3839	1942	4183	2104	4526	2276	5548	2776	6567	3268	7247	3626	7928	3966	8950	4528	9990	5102	-	-
4031	2039	4392	2209	4752	2390	5825	2914	6896	3431	7609	3807	8325	4164	9398	4755	10490	5357	-	-
4223	2136	4601	2314	4978	2504	6103	3053	7224	3595	7971	3989	8721	4362	9845	4981	-	-	-	-
4415	2233	4811	2420	5205	2617	6380	3192	7552	3758	8334	4170	9118	4561	10293	5208	-	-	-	-
4607	2330	5020	2525	5431	2731	6658	3331	7881	3922	8696	4351	9514	4759	10740	5434	-	-	-	-
4799	2428	5229	2630	5657	2845	6935	3470	8209	4085	9058	4533	-	-	-	-	-	-	-	-
4991	2525	5438	2735	5884	2959	7212	3608	8538	4248	9421	4714	-	-	-	-	-	-	-	-
5183	2622	5647	2840	6110	3073	7490	3747	8866	4412	9783	4895	-	-	-	-	-	-	-	-
5375	2719	5856	2946	6336	3186	7767	3886	9194	4575	10145	5076	-	-	-	-	-	-	-	-
5567	2816	6066	3051	6562	3300	8045	4025	9523	4739	10508	5258	-	-	-	-	-	-	-	-
5759	2913	6275	3156	6789	3414	8322	4164	9851	4902	10870	5439	-	-	-	-	-	-	-	-
5951	3010	6484	3261	7015	3528	8599	4302	-	-	-	-	-	-	-	-	-	-	-	-
6143	3107	6693	3366	7241	3642	8877	4441	-	-	-	-	-	-	-	-	-	-	-	-
6335	3204	6902	3472	7468	3755	9154	4580	-	-	-	-	-	-	-	-	-	-	-	-
6527	3301	7111	3577	7694	3869	9432	4719	-	-	-	-	-	-	-	-	-	-	-	-
6719	3399	7320	3682	7920	3983	9709	4857	-	-	-	-	-	-	-	-	-	-	-	-
6911	3496	7530	3787	8146	4097	9986	4996	-	-	-	-	-	-	-	-	-	-	-	-
7103	3593	7739	3892	8373	4211	10264	5135	-	-	-	-	-	-	-	-	-	-	-	-
7294	3690	7948	3998	8599	4324	10541	5274	-	-	-	-	-	-	-	-	-	-	-	-
7486	3787	8157	4103	8825	4438	10819	5413	-	-	-	-	-	-	-	-	-	-	-	-
7678	3884	8366	4208	9052	4552	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7870	3981	8575	4313	9278	4666	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8062	4078	8785	4418	9504	4780	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8254	4175	8994	4524	9730	4893	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8446	4272	9203	4629	9957	5007	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8638	4370	9412	4734	10183	5121	-	-	-	-	-	-	-	-	-	-	-	-	-	-
8830	4467	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9022	4564	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9214	4661	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9598	4758 4855	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
9298	4000	-	-	-	-	-	_	-	-	ı -	-		-	-	-	-	-	-	-

NOTE:

All outputs are in accordance with BS EN442 certification.
'n' = average exponent value.

Due to manufacturing tolerances of sectional Multicolumn Plus radiators, dimensions shown are subject to slight variance.

Height: Up to 1mm, Length: 0% up to +1%.



## Weight & Water Contents

## Multicolumn Plus

		Dry Weight pe	er Section (Kg)		
Height (mm)	2 Column	3 Column	4 Column	5 Column	6 Column
300	0.52	0.78	1.05	1.30	1.57
350	0.60	0.89	1.20	1.49	1.86
400	0.68	1.00	1.35	1.67	2.02
450	0.75	1.12	1.49	1.86	2.24
500	0.83	1.23	1.64	2.04	2.46
550	0.91	1.34	1.79	2.23	2.68
600	0.98	1.46	1.94	2.42	2.91
650	1.08	1.60	2.14	2.66	3.20
750	1.21	1.79	2.39	2.97	3.58
800	1.29	1.91	2.54	3.16	3.81
900	1.44	2.13	2.84	3.53	4.24
1000	1.59	2.36	3.14	3.91	4.69
1100	1.75	2.59	3.44	4.28	5.14
1200	1.90	2.81	3.74	4.65	5.58
1500	2.36	3.49	4.64	5.77	6.92
1800	2.82	4.17	5.53	6.88	8.25
2000	3.12	4.62	6.13	7.63	9.15
2200	3.43	5.07	6.73	8.38	10.04
2500	3.89	5.75	7.63	9.49	11.37
2800	4.34	6.43	8.53	10.61	12.71
3000	4.65	6.88	9.12	11.35	13.60

		Water Content	per Section (I)		
Height (mm)	2 Column	3 Column	4 Column	5 Column	6 Column
300	0.40	0.57	0.75	0.93	1.11
350	0.44	0.64	0.84	1.03	1.23
400	0.49	0.70	0.92	1.14	1.35
450	0.53	0.76	1.01	1.24	1.48
500	0.57	0.83	1.09	1.34	1.60
550	0.62	0.89	1.17	1.45	1.73
600	0.66	0.96	1.26	1.55	1.85
650	0.71	1.02	1.34	1.655	1.975
750	0.80	1.15	1.51	1.86	2.22
800	0.84	1.22	1.60	1.97	2.35
900	0.93	1.34	1.76	2.17	2.59
1000	1.02	1.47	1.93	2.38	2.84
1100	1.11	1.60	2.10	2.59	3.10
1200	1.19	1.73	2.27	2.80	3.33
1500	1.46	2.11	2.77	3.42	4.08
1800	1.72	2.49	3.27	4.04	4.82
2000	1.90	2.75	3.61	4.46	5.31
2200	2.08	3.01	3.94	4.87	5.81
2500	2.34	3.39	4.45	5.50	6.55
2800	2.61	3.78	4.95	6.12	7.29
3000	2.79	4.03	5.29	6.53	7.79

## Interconnecting Information

### Instructions for Delivery & Mounting of Sectional Blocks

#### Interconnections

Multicolumn Plus radiators are welded together from individual sections to form sectional blocks and finished radiators. According to the model and height, the number of sections that can be welded together to form a block is limited. This means that according to model and height, there is a maximum length for each block. If a radiator has been ordered whose number of sections is bigger than the maximum number of sections per block, the radiator will automatically be delivered in sectional blocks including nipples, seals and plugs. A radiator with welded back straps is then not available. The sectional blocks should be built up on site into a single radiator with a suitable nippling tool (see accessories) using the supplied nipples and nipple seals.

For radiators interconnected together you should also note:

- > It cannot be delivered with a welded back strap.
- > If a radiator is delivered in sectional blocks, the necessary accessories will be delivered with the radiator: nipples, seals and plugs.
- > Before radiators are connected together, note left and right handed threads.

#### **Block Lengths**

In order to make the delivery and transport of Multicolumn Plus radiators to site easier, long length column radiators, according to model type and height are delivered in single sectional blocks. The maximum number of sections per block is shown in the table below.

#### **Interconnecting Instructions**

Multicolumn Plus radiators delivered to site in blocks should be assembled on site and connected using nipples. In order to ensure the radiators are water tight, only the original seals delivered with the radiator should be used to join the sections together. Other sealants should not be used. The connection of the individual blocks and nipples consists of 1" right and 1" left handed threads. On the inner side of the nipple, two hollows are located to which the nose of the nippling tool attaches when the radiator is being connected.

#### The maximum number of sections for blocks to be factory nippled:

				Blo	ck Lengths	5				
	2 Column		3 Co	lumn	4 Co	lumn	5 Co	lumn	6 Co	lumn
Height	Max S	Max Sections		Max Sections		ections	Max Sections		Max Sections	
(mm)	Per Block	Nippled by Factory	Per Block	Nippled by Factory	Per Block	Nippled by Factory	Per Block	Nippled by Factory	Per Block	Nippled by Factory
300	42	60	42	60	42	60	42	60	42	60
350	42	60	42	60	42	60	42	60	42	60
400	42	60	42	60	42	60	42	60	42	60
450	42	60	42	60	42	60	42	60	42	60
500	42	60	42	60	42	60	42	60	42	60
550	42	60	42	60	42	60	42	60	35	52
600	42	60	42	60	42	60	42	60	35	52
650	42	60	42	60	42	60	42	60	32	48
750	42	60	42	60	42	60	37	53	28	42
800	42	60	42	60	42	60	32	48	26	42
900	42	48	42	48	32	48	26	40	24	36
1000	42	48	42	48	32	48	26	40	22	33
1100	19	-	19	-	19	-	19	-	19	-
1200	19	-	19	-	19	-	19	-	19	-
1500	19	-	19	-	19	-	18	19	15	19
1800	19	-	19	-	19	-	16	19	13	19
2000	19	-	19	-	18	19	14	19	11	17
2200	19	-	19	-	16	19	12	18	10	15
2500	16	-	16	-	14	16	11	16	9	14
2800	16	-	16	-	12	16	10	14	8	12
3000	16	-	16	-	11	16	9	13	8	11

## Interconnecting Information

### Instructions for Delivery & Mounting of Sectional Blocks (cont...)

In order to ensure a reliable seal around the nipples and plugs, please observe the following instructions carefully:

- > Lay the sectional block horizontally on a flat even surface. In order to protect the paint from damage, cardboard or similar should be laid underneath.
- > Carefully remove any paint or contamination from the connection point and surrounding surfaces.
- > Only use the original Multicolumn Plus radiator nipples and 1.5mm column seal (EPDM white). Other sealing materials should not be used.
- > Screw both nipples approximately one turn into the connections of a block, noting the right and left handed threads (left handed threads are carved on the thread coils).
- > Place one washer centrally over each nipple.
- > Connect the next sectional block to the nipple.
- > Feed the nippling tool through the connection of the last attached block into the nipple. The square edge of the nippling tool fits into the back of the nipple. The length of the nippling tool can be measured and specified in advance. Only use the correct nippling tool.
- > Turn the thread with the nippling tool, alternating between both nipples and screw the sectional blocks together (alternately top and bottom). Failure to tighten the nipples alternately will lead to leaks.
- > The torque should be 90+/-10Nm. Ensure nipples and plugs are not cross threaded.
- > Nipples screwed in one at a time will cause leaks.

#### Mounting the Plugs

After connecting together, Multicolumn Plus radiators are sealed with blanking plugs and then connected to the flow and return of the heating system. Blanking plugs with left and right handed threads as well as washers are delivered together with the radiator.

- > Only use the original Multicolumn Plus radiator blanking plugs and 2.6mm washers (EPDM white). Other sealing materials should not be used.
- > Sealing surfaces and threads should be checked for contamination.
- > Attach the washers to the blanking plugs.
- > Hand tighten the plugs, noting the left and right hand threads.
- > Before fully tightening the plugs, check again that the washer is centrally located so that the whole of the washer seals effectively and is not deformed.

- > Blanking plugs should only be fitted with a suitable tool (ring spanner or adjustable spanner) and the torque should be a maximum of 34Nm.
- > The 1" thread used in the radiator is not suitable for direct connection to the heating system. In order to ensure a tight seal, (if necessary with 1" adaptor - see accessories) only use the washers delivered with the radiator.

#### **NIPPLE QUICK GUIDE:**



- > Choose a flat surface.
- > Lay cardboard down.
- > Lay the radiator down carefully.
- > Ensure threads and sealing surfaces are free of dirt and paint residue.



- Thread the original Multicolumn Plus radiator nipples one turn into one block (note left and right handed threads).
- Attach the original Multicolumn Plus radiator washer to both nipples, ensuring it is centrally located.



> Attach the next block to the nipple (ensure the radiator is horizontal and parallel).



- > Insert the nippling tool through one connection of the adjoining
- > Engage the square end of the nippling tool with the back of the nipple.
- > Alternately tighten both nipples in order to ensure equal uniform tightness (un-uniform connection will lead to leaks).

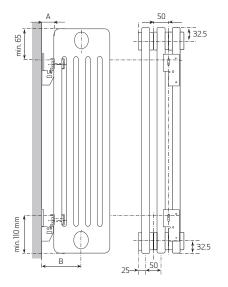


> Final tightening should be done carefully - torque 90+/-10Nm.

## Fixing Details

## Mounting Positions, Dimensions & Wall Brackets

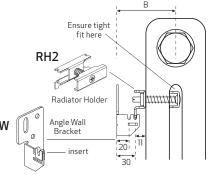
#### **Bracket** Set 1 & 2



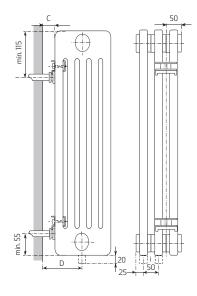
#### **Bracket set with** angled bracket

Bracket set 1: 4 sets Bracket set 2: 6 sets

(Standard brackets - included with every product)

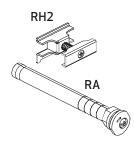


#### Bracket Set 3 & 4



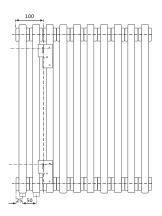
#### **Bracket set with** drill bracket

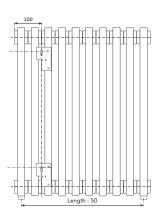
Bracket set 3: 4 sets Bracket set 4: 6 sets

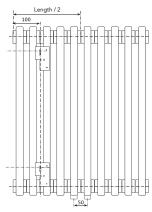


		Brackets -	Set 1 & 2	Brackets - Set 3 & 4			
Model	Nominal Depth (mm)	A Distance from Wall (mm)	B Connection Distance from Wall (mm)	C Distance from Wall (mm)	D Connection Distance from Wall (mm)		
2 Column	63	31/41	63/73	30-50	62-82		
3 Column	101	31/41	82/92	30-50	81-101		
4 Column	139	31/41	101/111	30-50	100-120		
5 Column	177	31/41	120/130	30-50	119-139		
6 Column	215	31/41	139/149	30-50	138-158		

#### Fixing dimensions for different connection options







The two outer fixing axes should be installed between the second and third sections. Each additional fixing axis should be installed as symmetrically as possible.

### Fixing Details

### Mounting Positions, Dimensions & Wall Brackets (cont...)

When ordering a Multicolumn Plus radiator, it will come with the standard fixing set which includes Angled Brackets (RW) and Radiator Holders (RH2). The set includes the correct number of Angled Brackets, Radiator Holders, the necessary screws and plugs (check suitability with the wall) as well as the installation instructions.

We recommend the top Radiator Holder (RH2) is fitted directly under the upper horizontal waterway, as shown in the sections

Optional accessories include a Drill Bracket (RA), Free Standing Floor Brackets (SK2+FK5) and wall brackets of various types and sizes for fixing together with the Radiator Holders (RH2). With a special Adjustable Wall Bracket (RV), the radiator can be installed in a wide variety of distances from the wall.

It is important to use the right number of fixing brackets for each radiator (see fixing points table below).

Each top bracket has a recommended position of directly under the upper horizontal waterway, with the lower bracket position directly below (see page 23) this will give you a vertical fixing axis.

In public areas (for example schools) subject to unusually heavy loads, we recommend wall bracket WKS.

Free standing floor brackets are also available: Floor Bracket (SK2) can be installed to a maximum radiator height of 1000mm and Floor Bracket (FK5) up to 500mm. For every vertical fixing axis, we recommend one Free Standing Bracket/Floor Bracket.

The load bearing capability of the wall must be checked against the weight of the radiator.

#### **Fixing Points**

							Height (mn	n)					
Fixing Points	suc	up to 750	900	1000	1100	1200	1500	1800	2000	2200	2500	2800	3000
4	of Sections	4-20	4-20	4-20	4-20	4-20	4-20	4-20	4-19	4-18	4-16	4-14	4-13
6	Ş	21-36	21-36	21-36	21-36	21-36	21-36	21-33	20-29	19-27	17-24	15-21	14-20
8	.o Je	37-52	37-52	37-52	37-52	37-52	37-52	34-44	30-39	28-36	25-32	22-28	21 - 26
10	Number	53-68	53-68	53-68	53-68	53-68	53-65	45-55	40 - 49	37 - 45	33-40	29-35	27-33
12	Z	69-80	69-80	69-80	69-80	69-80	66-78	56-66	50-60	46-55	41-48	36-44	34-40
					3	Columns - I	Height (mn	n)					
Fixing Points	su	up to 750	900	1000	1100	1200	1500	1800	2000	2200	2500	2800	3000
4	Sections	4-20	4 - 20	4-20	4-20	4-20	4-17	4-15	4-13	4-12	4-10	4-9	4-9
6	Se	21-36	21-36	21-36	21-35	21-33	18-26	16-22	14-20	13-18	11-16	10-14	10-13
8	r of	37-52	37-52	37-52	36-47	34-44	27 - 35	23-30	21 - 27	19-24	17-21	15-19	14-18
10	Number	53-68	53-68	53-65	48-59	45-55	36-44	31-37	28-33	25-30	22-27	20-24	19-22
12	Ž	69-80	69-80	66 - 78	60-72	56-66	45 - 54	38-45	34-41	31-38	28-33	25-30	23 - 28
4 Columns - Height (mm)													
Fixing Points	suc	up to 750	900	1000	1100	1200	1500	1800	2000	2200	2500	2800	3000
4	of Sections	4-20	4 - 20	4-20	4-18	4-16	4-13	4-11	4-10	4-9	4-8	4-7	4-6
6	Ş	21-36	21-32	20-29	19-27	17-24	14-20	12-17	11-15	10-14	9-12	8-11	7-10
8		37-51	33 - 43	30-39	28-36	25-33	21-26	18-22	16-20	15-18	13-16	12-14	11-13
10	Number	52-64	44-54	40-49	37-45	34-41	27-33	23 - 28	21-25	19-23	17-20	15-18	14-17
12	2	65 - 77	55-66	50-59	46-54	42-48	34-41	29-34	26-31	24 - 28	21-25	19-23	18-21
					5	Columns - I	Height (mn	n)					
Fixing Points	suc	up to 750	900	1000	1100	1200	1500	1800	2000	2200	2500	2800	3000
4	Sections	4-14	4-14	4-14	4-14	4-13	4-10	4-9	4-8	4-7	4-6	4-5	4-5
6	Ş	15-24	15-24	15-23	15-21	14-20	11-16	10-13	9-12	8-11	7-10	6-8	6-8
8	er of	25-34	25-34	24-31	22-29	21-26	17-21	14-18	13-16	12-15	11-13	9-11	9-11
10	Number	35-44	35-43	32-39	30-36	27-33	22-27	19-22	17-20	16-18	14-16	12-14	12-13
12	Z	45 - 54	44-50	40-48	37-44	34-40	28-33	23 - 28	21-25	19-23	17-21	15-19	14-17
						Columns -	Height (mn	n)					
Fixing Points	suc	up to 750	900	1000	1100	1200	1500	1800	2000	2200	2500	2800	3000
4	Sections	4-14	4-14	4-13	4-12	4-11	4-9	4-7	4-7	4-6	4-5	4-5	4
6	fSe	15-24	15-21	14-19	13-18	12-16	10-13	8-11	7-10	7-9	6-8	6-7	5-7
8	er of	25-34	22-29	20-26	19-24	17-22	14-18	12-15	11-13	10-12	9-11	8-10	8-9
10	Number	35-43	30-36	27-33	25-30	23 - 28	19-22	16-19	14-17	13-15	12-13	11-12	10-11
12	ş	44-52	37 - 44	34-40	31-36	29-34	23 - 28	20-24	18-21	16-19	14-17	13-15	12-13

## **Mounting Details**

## Wall Mounting Options

Product		Product Code
	Bracket Set 1 - with Angled Brackets  Consists of 4 painted radiator brackets and angle brackets (RH2 & RW) with rubber inlay, screws, plugs, air vent and installation instructions.  White - RAL 9016  Special colour - any RAL  Bracket Set 2 - with Angled Brackets	AZ13DZ9522231000 AZ13DZ952233100*
	Consists of 6 painted radiator brackets and angle brackets (RH2 & RW) with rubber inlay, screws, plugs, air vent and installation instructions.  White - RAL 9016  Special colour - any RAL	AZ13DZ9522232000 AZ13DZ952233200*
	Angled Bracket RW Including rubber inlay. White - RAL 9016 Special colour - any RAL	AZ13DZ9501510000 AZ13DZ950151100*
	Radiator Holder RH2  For use with the above wall brackets (RW), height and side adjustable. Radiator holders are to be mounted at the top and bottom on the rear side of the radiator.  White - RAL 9016  Special colour - any RAL	AZ13DZ9501310000 AZ13DZ950131100*
	Bracket Set 3 - with Drill Brackets  Consists of 4 painted radiator holders (RH2) and 4 drill brackets RA length 160mm complete with screws, plugs and installation instructions.  White - RAL 9016  Special colour - any RAL  Bracket Set 4 - with Drill Brackets  Consists of 6 painted radiator holders (RH2) and 6 drill brackets RA length 160mm complete with screws, plugs and installation instructions.  White - RAL 9016  Special colour - any RAL	AZ13DZ9522233000 AZ13DZ952233300* AZ13DZ9522234000 AZ13DZ952233400*
	Drill Bracket RA  Expansion anchor with double wedge for installation in the wall, galvanized, sound insulated, recommended drilling diameter = 18mm.  Length 100mm  Length 130mm  Length 160mm  Length 200mm	AZ13DZ9501401000 AZ13DZ9501402000 AZ13DZ9501403000 AZ13DZ9501404000
	Wall Bracket RK1 & 2  For use with the radiator holder RH2 which can be easily adjusted.  For wall distances from 35 to 42mm (RK1), White - RAL 9016 as above, Special colour - any RAL  For wall distances 42 to 58mm (RK2), White - RAL 9016 as above, Special colour - any RAL	AZ13DZ9501557000 AZ13DZ950155500* AZ13DZ9501558000 AZ13DZ950155600*

## **Mounting Details**

## Wall Mounting Options (cont...)

Product		Product Code
	<b>Spacer AH2</b> Keeps distance from the wall for wall mounting, accepts no load-bearing function, adjustable wall distance of 35 to 50mm, clamping part of wall plate is transparent plastic.	AZ13DZ9501604000
	Regulating Wall Bracket RV  Adjustable wall distance; recommended models in bold.  RVI: length 70-92mm:  For 2 Column (wall distance 39-60mm) and 3 Column (wall distance 20-41mm), White - RAL 9016 as above, Special colour - any RAL  RV2: length 90-140mm:  For 2 Column (wall distance 59-108mm), 3 Column (wall distance 40-89mm), 4 Column (wall distance 21-70mm) and 5 Column (wall distance 15-51mm), White - RAL 9016 as above, Special colour - any RAL  RV3: length 130-210mm:  For 4 Column (wall distance 61-140mm), 5 Column (wall distance 42-121mm) and 6 Column (wall distance 23-102mm), White - RAL 9016 as above, Special colour - any RAL	AZ13DZ9521634000 AZ13DZ952153700*  AZ13DZ9521635000 AZ13DZ952153800*  AZ13DZ9521636000 AZ13DZ952153900*
	Wall Bracket WKS for radiators heavier than 250kgs For bolting to the wall, robust design, wall distance 40mm, combined with regulating RV wall bracket. White - RAL 9016 as above, Special colour - any RAL	AZ13DZ9521640000 AZ13DZ952164200*
	WSV Wall Rail for heavy applications  For heights 300-495mm; White - RAL 9016  For heights 300-495mm; Special colour - any RAL  For heights 500-695mm; White - RAL 9016  For heights 500-695mm; Special colour - any RAL  For heights 700-3000mm, 2 piece; White - RAL 9016  For heights 700-3000mm, 2 piece; Special colour - any RAL	AZ13DZ9521711000 AZ13DZ952172100* AZ13DZ9521712000 AZ13DZ952172200* AZ13DZ9521713000 AZ13DZ952172300*

## **Mounting Details**

## Floor Mounting Options

Product		Product Code
H	Floor Bracket SK2  Complete system for free-standing radiators, from 2-6 column up to 1000mm high. Finished in the colour of your choice.  Comprises; 3mm thick base-plate for fixing to either finished or unfinished floor. Upright support 35 x 10 x 1.5mm, fixing set with adjustable bracket, security fixing, anti-vibration insert. Adjustable bottom support with spacer and security fixing, anti-vibration insert, white plastic end stop for top of upright.  For radiator height 300mm (H = 460mm), White - RAL 9016  For radiator height 350mm (H = 510mm), Special colour - any RAL  For radiator height 350mm (H = 510mm), Special colour - any RAL  For radiator height 400mm (H = 560mm), Special colour - any RAL  For radiator height 450mm (H = 610mm), Special colour - any RAL  For radiator height 450mm (H = 610mm), Special colour - any RAL  For radiator height 500mm (H = 660mm), Special colour - any RAL  For radiator height 500mm (H = 660mm), Special colour - any RAL  For radiator height 550mm (H = 710mm), White - RAL 9016  For radiator height 550mm (H = 710mm), Special colour - any RAL  For radiator height 600mm (H = 760mm), Special colour - any RAL  For radiator height 600mm (H = 760mm), Special colour - any RAL  For radiator height 750mm (H = 910mm), White - RAL 9016  For radiator height 750mm (H = 910mm), Special colour - any RAL  For radiator height 750mm (H = 1060mm), Special colour - any RAL  For radiator height 900mm (H = 1060mm), Special colour - any RAL  For radiator height 900mm (H = 1160mm), Special colour - any RAL  For radiator height 900mm (H = 1160mm), Special colour - any RAL  For radiator height 900mm (H = 1160mm), Special colour - any RAL  For radiator height 900mm (H = 1160mm), Special colour - any RAL  For radiator height 900mm (H = 1160mm), Special colour - any RAL  For radiator height 900mm (H = 1160mm), Special colour - any RAL	AZ13DZ9522404600 AZ13DZ952250460* AZ13DZ952250510* AZ13DZ952250560* AZ13DZ9522406100 AZ13DZ952250610* AZ13DZ9522406600 AZ13DZ952250660* AZ13DZ9522407100 AZ13DZ952250710* AZ13DZ952250710* AZ13DZ952250760* AZ13DZ952250760* AZ13DZ952250760* AZ13DZ9522407600 AZ13DZ952250760* AZ13DZ9522410600 AZ13DZ952251060* AZ13DZ952251060* AZ13DZ952251160*
	Clamped Floor Bracket FK5  Complete system for free-standing radiators, from 2-6 column up to 500mm high. Finished in the colour of your choice.  Comprises. 3mm thick base-plate for fixing to either finished or unfinished floor, upright support, plate and bearing retainer.  Adjustable 80-110mm, White - RAL 9016  Adjustable 80-110mm, Special colour - any RAL  Adjustable 110-170mm, White - RAL 9016  Adjustable 170-290mm, White - RAL 9016  Adjustable 170-290mm, Special colour - any RAL  Adjustable 170-290mm, Special colour - any RAL	AZ13DZ9522724000 AZ13DZ952272700* AZ13DZ9522725000 AZ13DZ952272800* AZ13DZ9522723000 AZ13DZ952272600*
	Foot Plate Cover for floor bracket SK2 and clamped floor bracket FK5 For finished floor mounting, white plastic.	AZ13DZ9522401000

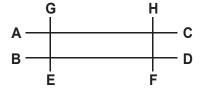
## Accessories

Product		Product Code
	Radiator Nipple  1"  Nipple Seal  1"	AZ13DZ8820230000 AZ13DZ8820210000
	Nipple Tool  1000mm length, 1", for blocks with up to 19 sections 1600mm length, 1", for blocks with up to 30 sections 2200mm length, 1", for blocks with up to 40 sections Applicable for iron nipple rod	AZ13DZ8810313000 AZ13DZ8810314000 AZ13DZ8810315000 AZ13DZ8810309000
	1" Adapter for connection 1" x 1", White - RAL 9016  Right  Left  (NB: female = right)	AZ13DZ8820140000 AZ13DZ8820150000
	Towel Rail  Towel rail 30 x 10mm, with 2 chrome holders, depth 45mm (Only available for radiators between 6 to 20 sections).  White - RAL 9016  Special colour - any RAL  **Please specify number of sections in product code where indicated. i.e "06" for 6 sections (300mm) or "12" for 12 sections (600mm)	AZ13DZ812125**00 AZ13DZ812115**0*



## **Connection Options**

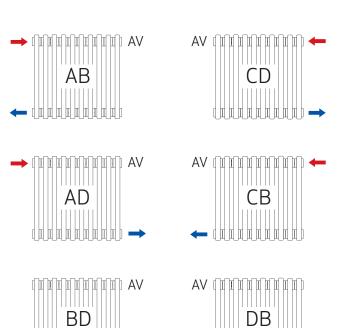
#### **Connection Ladder**

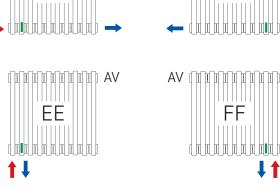


**CONNECTION SIZES AVAILABLE:** 

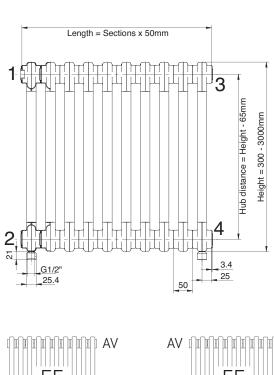
<sup>1</sup>/2" (Standard) 3/4" (Optional)

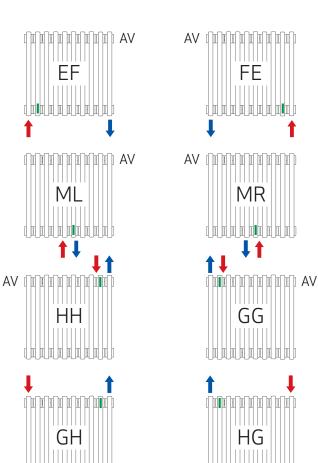
### = Diverter = Flow (in) = Return (out) AV = Air Vent





#### For EF/FE Connection





**Note:** Flow and return position must be specified at point of order.

### **Correction Factors**

#### How to calculate a corrected output

- 1. Calculate the Delta Tincluding air temperature example:
  - Mean Water Temperature (MWT) = ( $^{\circ}$ C Flow +  $^{\circ}$ C Return) / 2 = (65 + 55) / 2 = 60 $^{\circ}$ C Required Air Temperature = 21°C
  - Delta T ( $\Delta$ T) = Mean Water Temperature Required Air Temperature = 60 21 = 39°C
- 2. Note the Delta T 50 output shown for the specific size you require.
- 3. Locate the Exponent ('n') for the product you have selected within the Correction Factor table and your calculated Delta T ( $\Delta$ T).
- 4. Multiply the Delta T 50 output noted, by the correction factor shown.

Outputs stated within this catalogue are shown at  $\Delta T50^{\circ}C$  and also calculated at ∆T30°C.

Multiplying factors required to calculate outputs at different Delta Ts ( $\Delta$ Ts) between 15°C and 60°C are shown in the Correction Factor table below.

#### **EXAMPLE:**

Radiator Selected: 3 Column, 600mm (Height) x 1000mm (Length)

Delta T of System (ΔT): 39°C

Exponent ('n'): 1.26

Output @ Delta T50: 1302 (w)

Corrected Output =

 $1302(w) \times 0.7312(Correction Factor) =$ 952 (w) at ∆T39

Expon	ent 'n'	1.26			
Height	(mm)	600			
Sections	Length				
Sections	(mm)	∆T50	ΔT30		
19	950	1237	644		
20	1000	1302	678		
21	1050	1367	712		

Product example: 3 Column, extracted from page 12.

A T							E	xponent '	n'						
ΔΤ	1.21	1.22	1.23	1.24	1.25	1.26	1.27	1.28	1.29	1.3	1.31	1.32	1.33	1.34	1.35
60	1.2468	1.2491	1.2514	1.2537	1.256	1.2583	1.2606	1.2629	1.2652	1.2675	1.2698	1.2721	1.2744	1.2767	1.2791
59	1.2217	1.2238	1.2258	1.2278	1.2299	1.2319	1.2339	1.236	1.238	1.2401	1.2421	1.2442	1.2462	1.2483	1.2504
58	1.1967	1.1985	1.2003	1.2021	1.2039	1.2056	1.2074	1.2092	1.211	1.2128	1.2146	1.2164	1.2182	1.22	1.2219
57	1.1718	1.1733	1.1749	1.1764	1.178	1.1795	1.1811	1.1826	1.1842	1.1857	1.1873	1.1888	1.1904	1.1919	1.1935
56	1.147	1.1483	1.1496	1.1509	1.1522	1.1535	1.1548	1.1561	1.1574	1.1587	1.16	1.1614	1.1627	1.164	1.1653
55	1.1222	1.1233	1.1244	1.1255	1.1265	1.1276	1.1287	1.1298	1.1308	1.1319	1.133	1.1341	1.1351	1.1362	1.1373
54	1.0976	1.0984	1.0993	1.1001	1.101	1.1018	1.1027	1.1035	1.1044	1.1052	1.1061	1.1069	1.1078	1.1086	1.1095
53	1.0731	1.0737	1.0743	1.0749	1.0756	1.0762	1.0768	1.0774	1.0781	1.0787	1.0793	1.08	1.0806	1.0812	1.0818
52	1.0486	1.049	1.0494	1.0498	1.0502	1.0507	1.0511	1.0515	1.0519	1.0523	1.0527	1.0531	1.0535	1.054	1.0544
51	1.0243	1.0245	1.0247	1.0249	1.0251	1.0253	1.0255	1.0257	1.0259	1.0261	1.0263	1.0265	1.0267	1.0269	1.0271
50	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
49	0.9759	0.9757	0.9755	0.9753	0.9751	0.9749	0.9747	0.9745	0.9743	0.9741	0.9739	0.9737	0.9735	0.9733	0.9731
48	0.9518	0.9514	0.951	0.9506	0.9503	0.9499	0.9495	0.9491	0.9487	0.9483	0.9479	0.9475	0.9472	0.9468	0.9464
47	0.9279	0.9273	0.9267	0.9261	0.9256	0.925	0.9244	0.9239	0.9233	0.9227	0.9221	0.9216	0.921	0.9204	0.9199
46	0.904	0.9033	0.9025	0.9018	0.901	0.9003	0.8995	0.8988	0.898	0.8973	0.8965	0.8958	0.895	0.8943	0.8935
45	0.8803	0.8794	0.8785	0.8775	0.8766	0.8757	0.8748	0.8738	0.8729	0.872	0.8711	0.8702	0.8692	0.8683	0.8674
44	0.8567	0.8556	0.8545	0.8534	0.8523	0.8512	0.8501	0.8491	0.848	0.8469	0.8458	0.8447	0.8436	0.8426	0.8415
43	0.8332	0.8319	0.8307	0.8294	0.8282	0.8269	0.8257	0.8244	0.8232	0.822	0.8207	0.8195	0.8182	0.817	0.8158
42	0.8098	0.8084	0.807	0.8056	0.8042	0.8028	0.8014	0.8	0.7986	0.7972	0.7958	0.7944	0.793	0.7917	0.7903
41	0.7865	0.785	0.7834	0.7819	0.7803	0.7788	0.7772	0.7757	0.7741	0.7726	0.7711	0.7695	0.768	0.7665	0.765
40	0.7634	0.7617	0.76	0.7583	0.7566	0.7549	0.7532	0.7515	0.7499	0.7482	0.7465	0.7449	0.7432	0.7416	0.7399
39	0.7403	0.7385	0.7367	0.7348	0.733	0.7312	0.7294	0.7276	0.7258	0.724	0.7222	0.7204	0.7186	0.7168	0.715
38	0.7174	0.7155	0.7135	0.7116	0.7096	0.7077	0.7057	0.7038	0.7019	0.6999	0.698	0.6961	0.6942	0.6923	0.6904
37	0.6947	0.6926	0.6905	0.6884	0.6863	0.6843	0.6822	0.6802	0.6781	0.6761	0.6741	0.672	0.67	0.668	0.666
36	0.672	0.6698	0.6676	0.6654	0.6632	0.6611	0.6589	0.6567	0.6546	0.6524	0.6503	0.6482	0.646	0.6439	0.6418
35	0.6495	0.6472	0.6449	0.6426	0.6403	0.638	0.6357	0.6335	0.6312	0.629	0.6267	0.6245	0.6223	0.6201	0.6178
34	0.6271	0.6247	0.6223	0.6199	0.6175	0.6151	0.6128	0.6104	0.608	0.6057	0.6034	0.6011	0.5987	0.5964	0.5941
33	0.6049	0.6023	0.5998	0.5974	0.5949	0.5924	0.59	0.5875	0.5851	0.5826	0.5802	0.5778	0.5754	0.573	0.5707
32	0.5827	0.5801	0.5776	0.575	0.5724	0.5699	0.5673	0.5648	0.5623	0.5598	0.5573	0.5548	0.5524	0.5499	0.5474
31	0.5608	0.5581	0.5554	0.5528	0.5502	0.5475	0.5449	0.5423	0.5397	0.5372	0.5346	0.5321	0.5295	0.527	0.5245
30	0.539	0.5362	0.5335	0.5308	0.5281	0.5254	0.5227	0.52	0.5174	0.5148	0.5121	0.5095	0.5069	0.5043	0.5018
29	0.5173	0.5145	0.5117	0.5089	0.5062	0.5034	0.5007	0.498	0.4952	0.4926	0.4899	0.4872	0.4846	0.4819	0.4793
28	0.4958	0.4929	0.4901	0.4873	0.4844	0.4816	0.4788	0.4761	0.4733	0.4706	0.4679	0.4652	0.4625	0.4598	0.4571
27	0.4745	0.4715	0.4686	0.4658	0.4629	0.4601	0.4572	0.4544	0.4516	0.4489	0.4461	0.4434	0.4406	0.4379	0.4352
26	0.4533	0.4503	0.4474	0.4445	0.4416	0.4387	0.4358	0.433	0.4302	0.4274	0.4246	0.4218	0.4191	0.4163	0.4136
25	0.4323	0.4293	0.4263	0.4234	0.4204	0.4175	0.4147	0.4118	0.409	0.4061	0.4033	0.4005	0.3978	0.395	0.3923
24	0.4114	0.4084	0.4054	0.4025	0.3995	0.3966	0.3937	0.3908	0.388	0.3851	0.3823	0.3795	0.3767	0.374	0.3713
23	0.3908	0.3878	0.3848	0.3818	0.3788	0.3759	0.373	0.3701	0.3672	0.3644	0.3616	0.3588	0.356	0.3533	0.3505
22	0.3703	0.3673	0.3643	0.3613	0.3584	0.3554	0.3525	0.3496	0.3468	0.3439	0.3411	0.3383	0.3356	0.3328	0.3301
21	0.3501	0.347	0.344	0.3411	0.3381	0.3352	0.3323	0.3294	0.3266	0.3238	0.321	0.3182	0.3154	0.3127	0.31
20	0.33	0.327	0.324	0.321	0.3181	0.3152	0.3123	0.3095	0.3067	0.3039	0.3011	0.2983	0.2956	0.2929	0.2903
19	0.3101	0.3071	0.3042	0.3013	0.2984	0.2955	0.2926	0.2898	0.287	0.2843	0.2815	0.2788	0.2761	0.2735	0.2708
18	0.2905	0.2875	0.2846	0.2817	0.2789	0.276	0.2732	0.2704	0.2677	0.265	0.2623	0.2596	0.257	0.2544	0.2518
17	0.2711	0.2682	0.2653	0.2624	0.2596	0.2568	0.2541	0.2514	0.2487	0.246	0.2434	0.2407	0.2382	0.2356	0.2331
16	0.2519	0.249	0.2462	0.2434	0.2407	0.238	0.2353	0.2326	0.23	0.2274	0.2248	0.2222	0.2197	0.2172	0.2148
15	0.233	0.2302	0.2274	0.2247	0.222	0.2194	0.2167	0.2141	0.2116	0.2091	0.2066	0.2041	0.2016	0.1992	0.1968

# Multicolumn Plus Bar

The Multicolumn Plus Bar radiator ingeniously integrates the heating function with that of furniture, suitable for the requirements of the building occupant.

Designed by renowned architects, the Multicolumn Plus Bar provides elegance and functionality, which at the same time, is enchanting and one of a kind.

The Multicolumn Plus Bar is an upper class decorative radiator, which can serve as a worktop, and at the same time create space dividers. The worktop's upper board is made of beech wood and constitutes an additional decorative detail in carefully designed high quality rooms. The ingenious solution of externally invisible hydronic heating system connections additionally increases high aesthetic qualities of the radiator.

Superior paint finish quality in a range of RAL colours enriches available options. Flexibility in height and length selection facilitate perfect integration with desired room decor.



#### THE MULTICOLUMN PLUS BAR:

> Decorative radiator, totally laser-welded. Flattened cross section of the external D-profiled columns for maximum heat output

- > Height: 940 (750)\*, 1090 (900)\* mm
- > Length: 720 (700)\*, 920 (900)\*, 1120 (1100)\* mm
- > Depth: 4-columned 224mm; 5-columned - 262mm

#### COLOUR:

As standard RAL 9016, other RAL colours at request; possibility to order radiator in a different RAL colour than decorative frame.

#### PACKAGING:

Packed for transport in environment friendly, edge-protecting packaging, welded in foil.

#### **CONNECTIONS:**

Bottom left of the casing is the supply location, bottom right is the return, internal thread G 1/2". Factory equipped with the valve insert with initial preset together with the thermostatic valve with connecting thread M30x1.5mm, from the top left-hand side; air vent G 1/2" from the top right-hand side.

#### **TESTING:**

Multicolumn Plus Bar radiators are tested at 13 Bar giving a maximum operating pressure of 10 Bar.

Maximum operating temperature is 110°C.

#### **BRACKETS:**

Decorative set for the on-floor mounting and radiator's connections masking, with possibility to mount the top board on the Client's site.

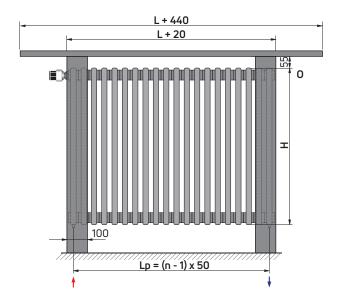
#### **DELIVERY RANGE:**

Delivery with floor stands and decorative set, no top board; plugs and bolts for floor stands mounting and top board mounting are not included.

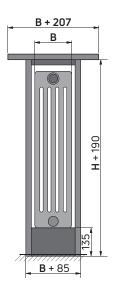
\*Dimensions exclude top board. Radiator dimension shown in brackets.



#### FRONT VIEW



#### SIDE VIEW



H - heightL - lengthB - depth

 $\pmb{\mathsf{Lp}}\text{-}\mathsf{connectors'}\mathsf{spacing}$ 

 ${\bf n}\,$  - number of sections

o - air vent

Expon	ent 'n'	1.	30	1.	30	1.	31	1.	31				
Height	t (mm)		7.	50			9	00					
Number o	f Columns		4	!	5	4		5					
Depth	ı (mm)	13	39	1	77	13	39	177					
Castions	Length	Output (Watts)											
Sections	(mm)	ΔT50	ΔΤ30	ΔT50	ΔΤ30	ΔT50	ΔΤ30	ΔT50	ΔΤ30				
14	700	1416	729	1747	900	1665	851	2005	1050				
18	900	1821	938	2246	1157	2141	1094	2642	1350				
22	1100	2225 1146		2746	1414	2616	1337	3229	1651				
					Weigh	nt (kg)							
14	700	5	50	5	8	5	58	68					
18	900	5	59	7	0	6	59	82					
22	1100	6	59	8	2	8	31	S	17				
		Capacity (I)											
14	700	2.	1.2	26	5.1	24	24.7		).4				
18	900	27	7.2	33	3.5	31.7		39.1					
22	1100	33	3.3	4	1	38	3.8	47.8					

# Multicolumn Plus Bench

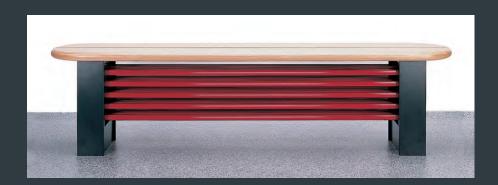
Multicolumn Plus Bench radiators ingeniously integrate the heating function with that of a sitting bench, suitable for the requirements of the building occupant.

While other Multicolumn Plus radiators discreetly perform their function, this radiator literally catch everyone's eye! Designed by renowned architects, the Multicolumn Plus Bench delivers practicality and functionality.

The top board is made of beech wood and constitutes an additional decorative detail. The ingenious solution of externally invisible connecting pipework additionally increases the high aesthetic qualities of the radiator.

All other qualities of the Multicolumn Plus radiator range are naturally featured in the Multicolumn Plus Bench series, which signifies that whatever your internal arrangement is – you will certainly find a matching solution in our offer.

Superior paint finish quality in a range of RAL colours enriches available options.



#### THE MULTICOLUMN PLUS BENCH:

- > Decorative radiator, totally laser-welded. Flattened cross section of the external profiled columns for maximum heat output
- > 4 up to 7 sections, 6 columns, horizontally positioned one on top of another
- > Height: 387 (200)\*, 437 (250)\*, 487 (300)\*, 537 (350)\* mm
- > Length: 1535 (1500)\* up to 2835 (2800)\* mm
- > Depth: 300mm

#### COLOUR:

As standard snow-white RAL 9016, other RAL colours available on request; possibility to order radiator in a different RAL colour than decorative covers.

#### **PACKAGING:**

Packed for transport in environmental friendly, edge-protecting packaging, welded in foil.

#### **CONNECTIONS:**

Bottom left of the casing is the supply location, bottom right is the return, internal thread G 1/2". The Multicolumn Plus Bench with the thermostatic valve with presetting together with the thermostatic head with connection thread M30x1.5mm, from the bottom left-hand side; air vent G 1/2" from the top right-hand side.

#### **TESTING:**

Multicolumn Plus Bench radiators are tested at 13 Bar giving a maximum operating pressure of 10 Bar.

Maximum operating temperature is 110°C.

#### **BRACKETS:**

Decorative set for the on-floor mounting and radiator's connections masking, with possibility to mount the top board on the Client's site.

#### **DELIVERY RANGE:**

2 element's floor consoles set (3 floor consoles for the radiator lengths exceeding 2000mm) and decorative set, no top board (delivery at Client's request).

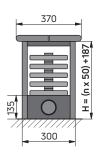
\*Dimensions exclude top board. Radiator dimension shown in brackets.



#### FRONT VIEW

# L + 350 ////////// L - 65 L + 35

#### SIDE VIEW



#### **BOTTOM VIEW**



H - heightL - lengthB - depth

 $\boldsymbol{n} \ \, \text{-number of sections}$ 

o - air vent

Length	n (mm)	15	00	18	300	20	00	25	00	28	00
Number o	f Columns	(	6	(	6	(	5	(	6	(	5
Depth	(mm)	2:	15	2:	15	2:	15	2:	15	2:	15
C+:	Height					Output	(Watts)				
Sections	(mm)	∆T50	ΔΤ30	∆T50	ΔΤ30	ΔT50	ΔΤ30	ΔT50	ΔΤ30	ΔT50	ΔΤ30
4	200	1411	721	1696	868	1886	968	2362	1217	2648	1368
5	250	1742	908	2097	1091	2334	1214	2929	1518	3287	1701
6	300	1934	1002	2337	1212	2606	1353	3285	1708	3695	1923
7	350	2204	1142	2670	1379	2982	1536	3770	1929	4247	2164
						Expon	ent 'n'				
4	200	1	32	1.31		1.31		1.	30	1.	29
5	250	1	28	1.	1.28		28	1.	29	1.	29
6	300	1	29	1.28		1.28		1.28		1.	28
7	350	1	29	1.	29	1.30		1.31		1.	32
						Weigh	it (kg)				
4	200	37	7.5	42	2.8	46	46.4		5.3	64	1.2
5	250	45	5.2	53	1.9	56	5.4	67	7.5	78	3.6
6	300	52	2.9	60	0.9	66	5.3	79	9.6	9	3
7	350	60	0.6	7	'0	76	5.3	91	1.8	10	7.4
						Capac	ity (l)				
4	200	16	5.4	19	9.3	21	L.3	26	5.2	29	9.2
5	250	20	0.4	24	4.1	26	5.6	32	2.8	36	5.5
6	300	24	4.5	2	29	31	L.9	39	9.3	43	3.8
7	350	28	3.6	33	3.8	37	7.2	45	5.9	52	1.1

## Merriott

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