

Specification Guide  
**2020**

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# About Tuscan Foundry Radiators

We have a history of working with metal stretching back to 1893. During the 1914 - 1918 War we were contractors to HM Government. In the 21 years of peace between the wars we expanded into a specialist manufacturer of builders' ironwork, taking out patents for many of the products that we produced. Today Tuscan Foundry Products have become one of the country's leading manufacturers and suppliers of traditional metal heating, plumbing and drainage products.



The Commercial collection offers architects, specifiers and designers an extensive range of styles, from panel, LST, cast iron and multi column radiators, to the latest towel rails and accessories. All models deliver exceptional quality and durability, while also helping create a comfortable and energy efficient environment.

## Scheduler tool

Coming soon in summer **2020**, this new online tool will help consultants quickly create editable schedules, maximising project efficiencies and improving workflows.



# The Tuscan Foundry promise

Design is a serious part of our business, we work collaboratively with architects, designers and contractors to ensure the correct products for the application.

Technical details and drawings are included within this specification guide, but we are happy to discuss projects in more detail via phone, email or on site (site consultancy visits are chargeable)

Our website is continually updated with details of our range, as the industry continues to adopt a more collaborative approach to building design. Specifying Tuscan radiators and heating products has never been easier.

- **Huge selection of stock**

Our warehouse holds a vast stock of our key product lines, so when customers need our radiators, delivery is always swift and prompt.

- **Commitment to quality**

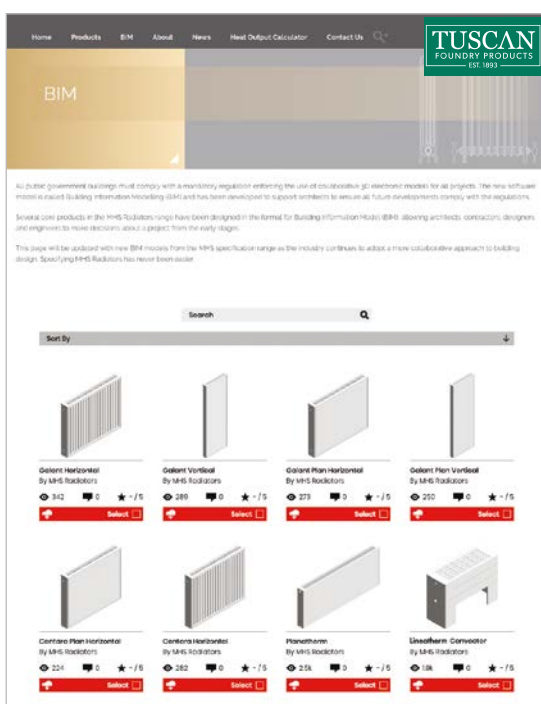
Our products are manufactured adhering to stringent guidelines, including ISO 9001, ISO 14001 and EN 442.

- **Reliability**

Our radiators combine exceptional design with value for money and are guaranteed to last, as reflected by our renowned product warranties.

- **Suitable for a range of applications**

Tuscan Radiators can be used in residential, commercial, retail, healthcare, education and other public sector properties.



# The advantages of radiators with an integrated flow tube

## Achieving Lifetime Homes Standard

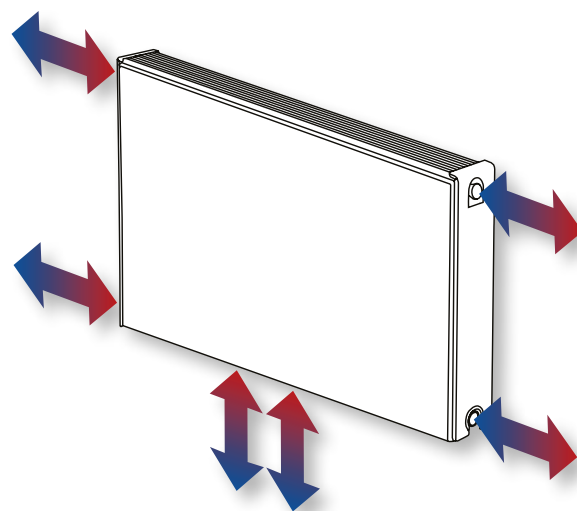
This requirement, in accordance with Document M 2004 (Part M), stipulates that switches, socket outlets and other equipment in habitable rooms are installed at appropriate heights between 450mm and 1200mm from finished floor level.

Any 'service controls', such as TRVs, need to be at least 300mm from any internal room corner. This eliminates any need for reaching or bending down to adjust the settings, and ensures controls remain easily within the reach of wheelchair users and the elderly.

To comply with these standards, Tuscan Radiators has a wide range of products that have integrated flow tubes and underside connections, allowing the TRV head to be positioned at the top of the radiator.

## Compliant products include:

- Galant and Galant Plan (pages 10-15)
- Centara and Centara Plan (pages 16-21)
- Planatherm (pages 22-25)
- Carat (pages 26-29)



## Fast and flexible fit

Radiators with underside connection points provides easy installation and flexibility in terms of TRV location, which is particularly beneficial in new builds or retrofit projects. These connections allow for pipework installation and finishing at first fix, long before radiator size actually needs to be determined, saving on time and labour.

Furthermore, the Centara, Planatherm and Carat ranges also have central located underside connections, which allow for even greater flexibility during installation. Installers are able to position pipework (centrally in front of a window, for example), without having to preplan the size or style of a radiator. They can then return during the second fix, safe in the knowledge all radiators will be positioned correctly, regardless of their size.

## Quality tested

All radiators with an integrated flow tube are manufactured and tested to EN 442. Every radiator carries the CE mark which certifies independent approval of heat output and verifies production under a quality system to EN ISO 9001.



Designed and  
manufactured to  
the latest standards



### Connect with Variocon

All radiators in the Galant, Galant Plan, Centara, Centara Plan, Planatherm and Carat range can utilise the Tuscan Variocon valve set. This can swivel for angled, through the wall connections or can simply come up from the floor for straight connections - making specification/installation considerably easier.

### TRV insert

Every Variocon valve set is supplied with a pre-set valve insert, which enhances the efficiency of the system and reduces energy consumption.



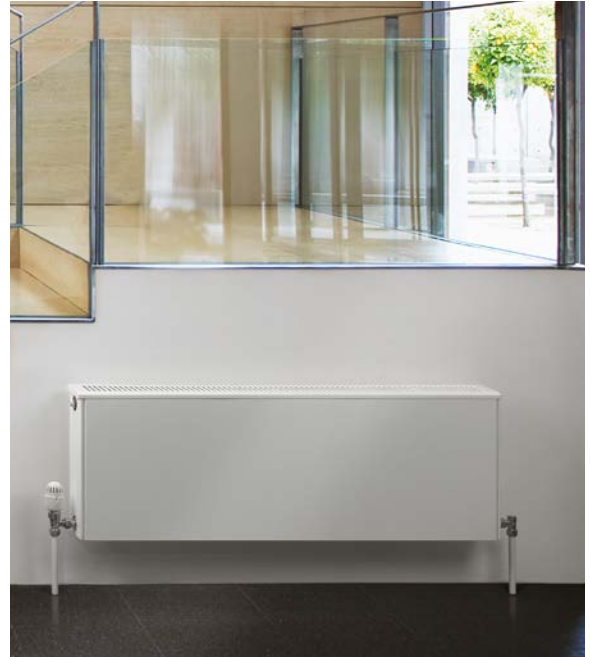
Variocon valve



# Galant & Galant Plan

## Introduction







# Galant Overview



The Galant horizontal is supplied with welded side panels, which, combined with optional top grille security clips, make it the perfect radiator for high-traffic environments such as schools and hospitals.

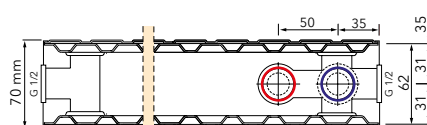
The Galant offers multiple connection options, with 4 side 1/2" bsp-f connections and 2 underside 1/2" bsp-f connections. As a reversible radiator, the underside connections can be on the left or right side. Manufactured from 1.2mm steel, the Galant horizontal radiator has a 6 bar maximum working pressure (8 bar test), with 10 bar maximum working pressure available on request. The Tuscan Galant carries a 10-year guarantee against manufacturing defects.



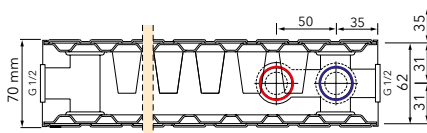
## Features

- Types - 20, 21, 22 & 33
- Material - Steel (1.2mm)
- Finish - RAL 9016 Traffic White  
Other colours available on request
- Heights - 200-900mm
- Lengths - 400-3000mm
- Models - 203
- Outputs - 337 - 4941 watts
- Pressure - 6 bar (8 bar test)  
10 bar available on request
- Warranty - 10 years

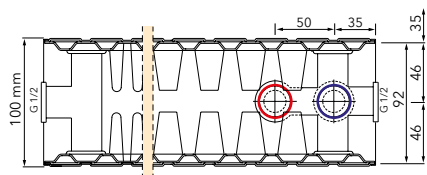
**Type 20** Depth 70mm



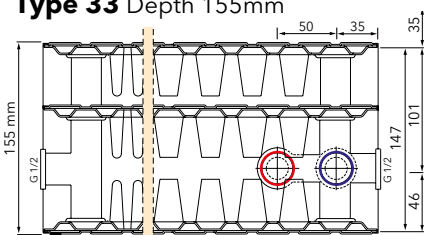
**Type 21** Depth 70mm



**Type 22** Depth 100mm



**Type 33** Depth 155mm



**Note:** if the underside connection is positioned on the left, the wall to pipe centre will be 46mm.

# Galant Technical



Galant - Type 20	Height (mm)		
	500	600	900
Weight kg/metre	21.90	26.10	40.80
Water cont. litres/metre	3.60	4.40	6.40

Galant - Type 21	Height (mm)		
	500	600	900
Weight kg/metre	25.20	30.40	43.10
Water cont. litres/metre	3.60	4.40	6.40

Galant - Type 22	Height (mm)				
	200	350	500	600	900
Weight kg/metre	14.10	24.40	29.30	34.70	49.40
Water cont. litres/metre	1.80	2.80	3.60	4.40	6.40

Galant - Type 33	Height (mm)				
	200	350	500	600	900
Weight kg/metre	21.30	35.60	43.40	51.50	73.00
Water cont. litres/metre	2.60	4.10	5.80	6.70	9.60

Type	Height (mm)															
	200		350		500				600				900			
	22	33	22	33	20	21	22	33	20	21	22	33	20	21	22	33
400	-	-	-	-	337	434	559	-	392	499	659	-	555	704	916	1285
500	-	-	-	-	421	543	699	1025	490	624	824	1170	694	881	1146	1607
600	446	667	710	1054	505	651	838	1230	588	749	988	1403	833	1057	1375	1928
700	-	-	-	-	589	760	978	1435	686	874	1153	1637	972	1233	1604	2249
800	595	890	947	1406	674	868	1118	1640	784	998	1318	1871	1110	1409	1833	2570
900	-	-	-	-	758	977	1257	1845	882	1123	1482	2105	1249	1585	2062	2892
1000	744	1112	1184	1757	842	1085	1397	2050	980	1248	1647	2339	1388	1761	2291	3213
1200	893	1334	1421	2108	1010	1302	1676	2460	1176	1498	1976	2807	-	-	2749	-
1400	1042	1557	1658	2460	1179	1519	1956	2870	1372	1747	2306	3275	-	-	3207	-
1600	1190	1779	1894	2811	1347	1736	2235	3280	1568	1997	2635	3742	-	-	-	-
1800	1339	2002	2131	3163	1516	1953	2515	3690	1764	2246	2965	4210	-	-	-	-
2000	1488	2224	2368	3514	1684	2170	2794	-	1960	2496	3294	-	-	-	-	-
2200	1637	2446	2605	3865	-	-	3073	-	-	-	3623	-	-	-	-	-
2600	1934	2891	3078	4568	-	-	3632	-	-	-	4282	-	-	-	-	-
3000	2232	3336	3552	5271	-	-	4191	-	-	-	4941	-	-	-	-	-

Type 20
  Type 21
  Type 22
  Type 33

Outputs shown in watts at  $\Delta t$  50°C

Visit [www.tuscanfoundry.com](http://www.tuscanfoundry.com) for full details

# Galant Plan Overview



Galant Plan  
Type 20

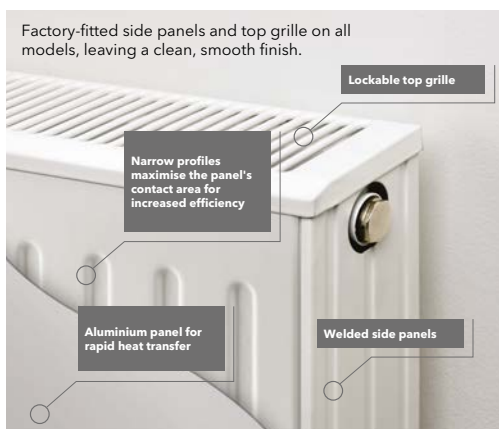
The Galant Plan horizontal radiator is manufactured from 1.2mm steel with a 0.5mm aluminium front plate, ensuring a rapid and efficient heat transfer.

The Galant Plan offers multiple connection options, with 4 side 1/2" bsp-f connections and 2 underside 1/2" bsp-f connections. The underside connections can be on the left or right side, to be specified when ordering. All horizontal models are supplied with welded side panels, which, combined with optional top grille security clips, make it the perfect radiator for high-traffic environments such as schools and hospitals. The Tuscan Galant Plan carries a 10-year guarantee against manufacturing defects.

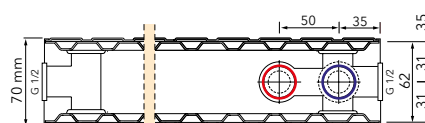


## Features

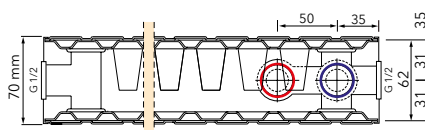
- Types - 20, 21, 22 & 33
- Material - Steel (1.2mm) & 0.5mm aluminium front plate
- Finish - RAL 9016 Traffic White  
Other colours available on request
- Heights - 200-900mm
- Lengths - 400-2000mm
- Models - 163
- Outputs - 336-4019 watts
- Pressure - 6 bar (8 bar test)  
10 bar available on request
- Warranty - 10 years



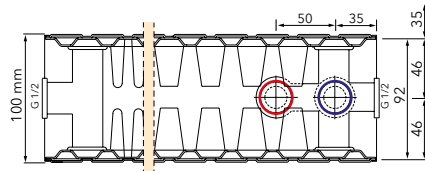
### Type 20 Depth 70mm



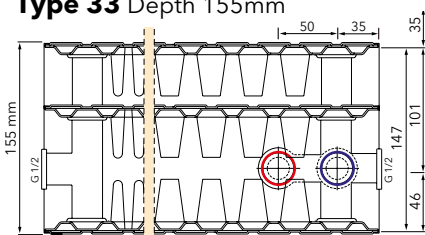
### Type 21 Depth 70mm



### Type 22 Depth 100mm



### Type 33 Depth 155mm



Note: if the underside connection is positioned on the left, the wall to pipe centre will be 46mm.

# Galant Plan

## Technical



Galant Plan - Type 20	Height (mm)		
	500	600	900
Weight kg/metre	23.00	27.50	42.80
Water cont. litres/metre	3.60	4.40	6.40

Galant Plan - Type 21	Height (mm)		
	500	600	900
Weight kg/metre	26.30	31.80	45.10
Water cont. litres/metre	3.60	4.40	6.40

Galant Plan - Type 22	Height (mm)				
	200	350	500	600	900
Weight kg/metre	14.60	25.20	30.40	36.10	51.40
Water cont. litres/metre	1.80	2.80	3.60	4.40	6.40

Galant Plan - Type 33	Height (mm)				
	200	350	500	600	900
Weight kg/metre	21.80	36.40	44.40	52.90	75.00
Water cont. litres/metre	2.60	4.10	5.80	6.70	9.60

Type	Height (mm)															
	200		350		500				600				900			
	22	33	22	33	20	21	22	33	20	21	22	33	20	21	22	33
400	-	-	-	-	336	433	552	-	390	500	652	-	546	665	844	1172
500	-	-	-	-	420	541	690	989	488	625	815	1117	682	831	1055	1465
600	444	632	690	1007	503	649	828	1187	586	749	977	1340	818	997	1265	1758
700	-	-	-	-	587	757	966	1385	683	874	1140	1563	955	1163	1476	2051
800	592	842	920	1343	671	866	1104	1582	781	999	1303	1786	1091	1330	1687	2344
900	-	-	-	-	755	974	1242	1780	878	1124	1466	2010	1228	1496	1898	2637
1000	740	1053	1150	1679	839	1082	1380	1978	976	1249	1629	2233	1364	1662	2109	2930
1200	888	1264	1380	2015	1007	1298	1656	2374	1171	1499	1955	2680	-	-	2531	-
1400	1036	1474	1610	2351	1175	1515	1932	2769	1366	1749	2281	3126	-	-	2953	-
1600	1184	1685	1840	2686	1342	1731	2208	3165	1562	1998	2606	3573	-	-	-	-
1800	1332	1895	2070	3022	1510	1948	2484	3560	1757	2248	2932	4019	-	-	-	-
2000	1480	2106	2300	3358	1678	2164	2760	-	1952	2498	3258	-	-	-	-	-

Type 20
  Type 21
  Type 22
  Type 33

Outputs shown in watts at  $\Delta t$  50°C

Visit [www.tuscanfoundry.com](http://www.tuscanfoundry.com) for full details

# Galant & Galant Plan Vertical Overview

The Galant Vertical is supplied with 1.2mm steel, while the Galant Plan Vertical is also fitted with a 0.5mm aluminium front plate, ensuring a rapid and efficient heat transfer. Supplied with securable side panels and top grille as standard, the Galant Vertical has a 6 bar maximum working pressure (8 bar test), with 10 bar maximum working pressure available on request. The Galant Vertical is supplied with 4 1/2" bsp-f connections and carries a 10-year warranty against manufacturing defects.

## Features

- Types - 20
- Material - Steel (1.2mm), 0.5mm aluminium front plate on Galant Plan Vertical.
- Finish - RAL 9016 Traffic White  
Other colours available on request
- Heights - 1500-2200mm
- Widths - 500, 600 & 900mm
- Models - 18
- Outputs - 999-2597 watts
- Pressure - 6 bar (8 bar test)  
10 bar available on request
- Warranty - 10 years



Galant Plan Vertical  
Type 20



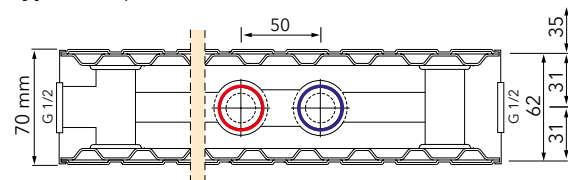
Galant Plan  
Type 20



Galant  
Type 20

## Plan View

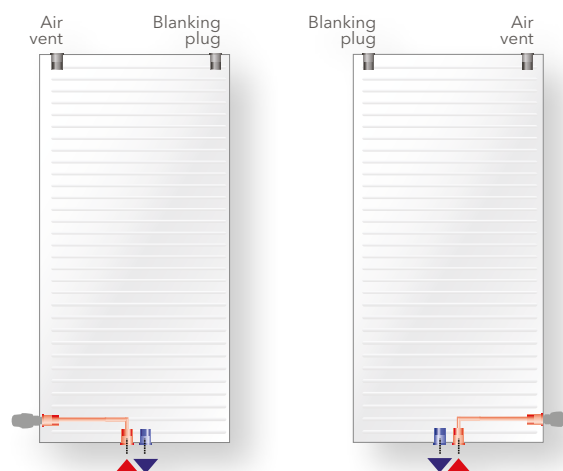
**Type 20** Depth 70mm





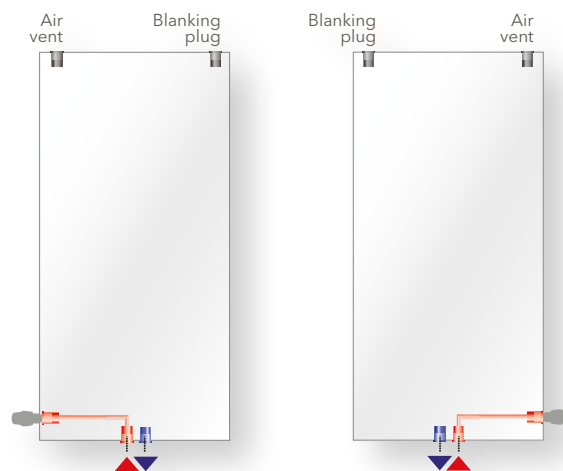
## Galant Vertical

Width	Type 20	Height (mm)		
		1500	1800	2200
500	Watts	1054	1241	1443
	Weight kg/metre	32.90	39.40	48.20
	Water cont. litres/metre	5.40	6.48	7.92
600	Watts	1264	1489	1732
	Weight kg/metre	39.20	47.00	57.40
	Water cont. litres/metre	6.60	7.92	9.68
900	Watts	1896	2233	2597
	Weight kg/metre	61.20	73.40	89.80
	Water cont. litres/metre	9.60	11.52	14.08



## Galant Plan Vertical

Width	Type 20	Height (mm)		
		1500	1800	2200
500	Watts	999	1146	1356
	Weight kg/metre	34.50	41.40	50.60
	Water cont. litres/metre	5.40	6.48	7.92
600	Watts	1137	1304	1543
	Weight kg/metre	41.30	49.50	60.50
	Water cont. litres/metre	6.60	7.92	9.68
900	Watts	1515	1738	2056
	Weight kg/metre	64.20	77.00	94.20
	Water cont. litres/metre	9.60	11.52	14.08



Outputs shown in watts at  $\Delta t$  50°C

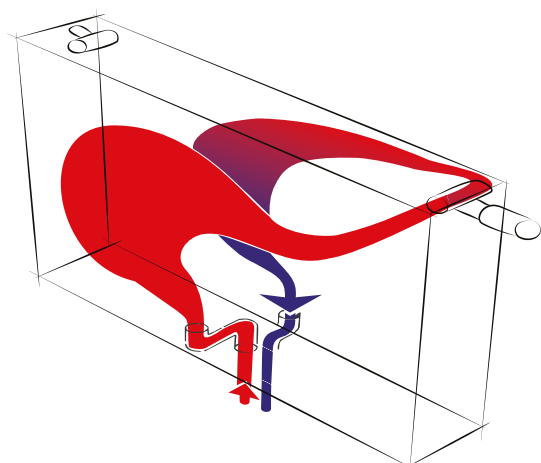
When ordering the Galant Plan Vertical it must be specified if the flow and TRV head (if fitted) will be on the left or right side.

Visit [www.tuscanfoundry.com](http://www.tuscanfoundry.com) for full details

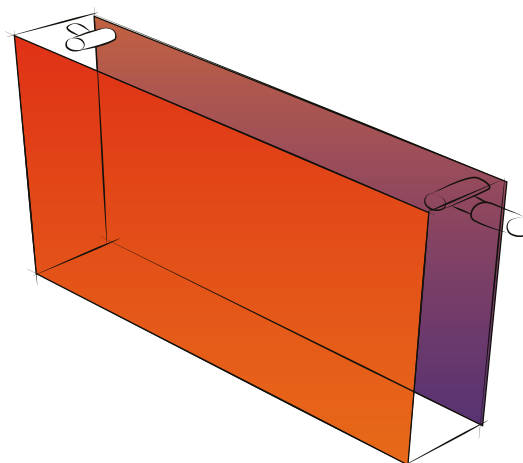
# Centara & Centara Plan

## Introduction

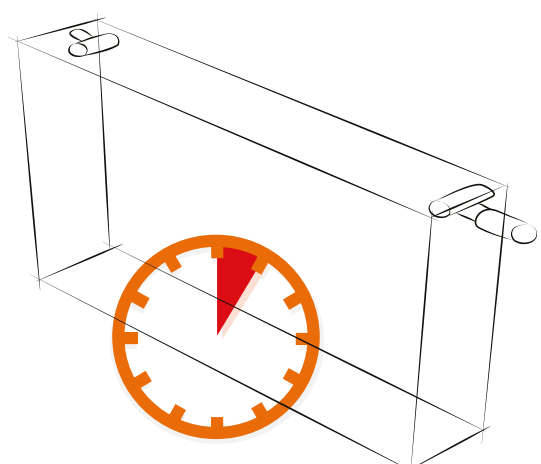
The Centara radiator is cleverly designed to reduce heat loss through the wall, allowing it to deliver more radiant heat than traditional radiators. As a result, the Centara provides end users with the same levels of comfort whilst lowering the thermostat by 1 degree, returning a 5% energy saving.



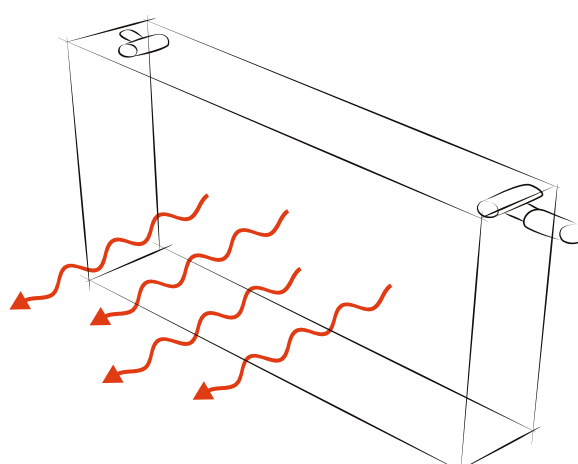
The front panel of the radiator is prioritised



Energy consumption and heat loss through the wall are reduced



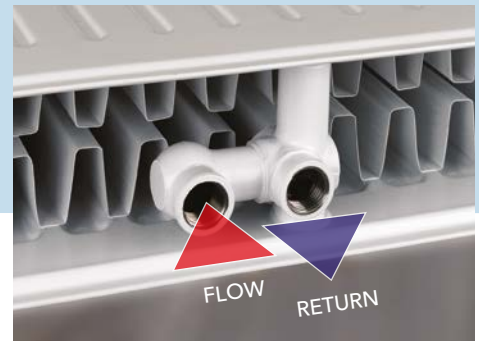
Rapid heat up times



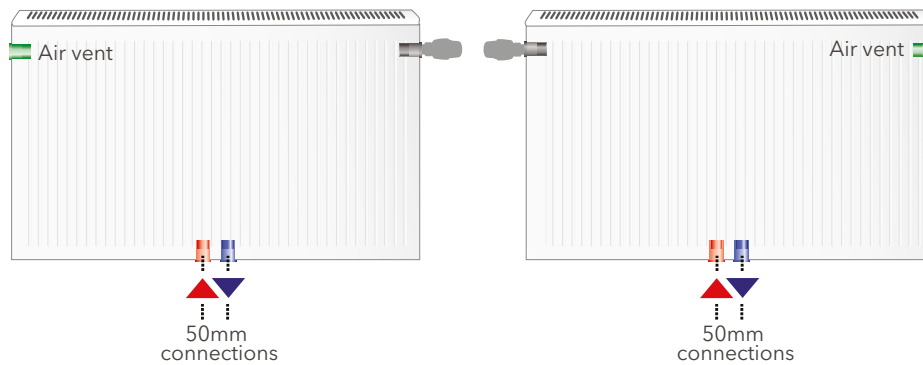
More radiation, less convection

# Centara Connections

**Important note:** The Centara must only be installed with the flow on the left (see diagram below). The special Centara air vent supplied by Tuscan must be installed, while the TRV head can be fitted on either side.



## Underside connection



## Connect with Variocon

All radiators in the Centara range can utilise the Tuscan Variocon valve set. This can swivel for angled, through the wall connections or can simply come up from the floor for straight connections - making specification / installation considerably easier.



The Variocon valve can be supplied with connections suitable for either 15mm copper pipe or 1/2" steel pipe. An optional hose drain union can be supplied to allow the radiator to be drained without disconnecting from the system. The Variocon valve set can be ordered with either a chrome or a white TRV head.



## TRV insert

Every Variocon kit is equipped with a pre-set valve insert, which enhances the efficiency of the system and reduces energy consumption.





# Centara Overview



The Centara radiator range is manufactured from 1.2mm steel and is available in RAL 9016 Traffic White as standard, with other colours available on request. Supplied complete with wall brackets, plug and air vent, welded side panels and top grille as standard, the Centara radiator has a 6 bar maximum working pressure (8 bar test), with 10 bar maximum working pressure available upon request. The Centara is supplied with underside 50mm connections. All models are supplied with welded side panels, which, combined with optional top grille security clips, make it the perfect radiator for high-traffic environments such as schools and hospitals. The Tuscan Centara carries a 10-year guarantee against manufacturing defects.

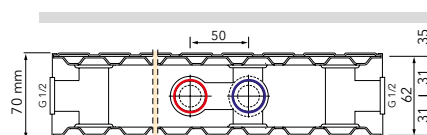


## Features

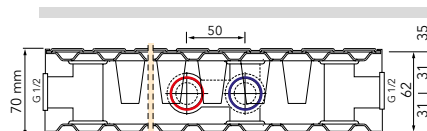
- Types - 20, 21, 22 & 33
- Material - Steel (1.2mm)
- Finish - RAL 9016 Traffic White  
Other colours available on request
- Heights - 350-900mm
- Lengths - 400-2000mm
- Models - 104
- Outputs - 322-3334 watts
- Pressure - 6 bar (8 bar test)  
10 bar available on request
- Warranty - 10 years



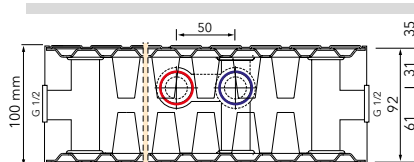
### Type 20 Depth 70mm



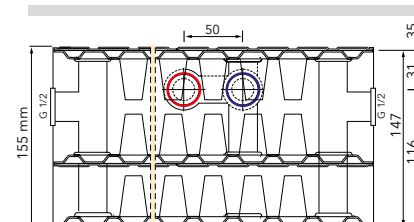
### Type 21 Depth 70mm



### Type 22 Depth 100mm



### Type 33 Depth 155mm



# Centara Technical



Centara - Type 20	Height (mm)		
	500	600	900
Weight kg/metre	21.90	26.10	40.80
Water cont. litres/metre	3.60	4.40	6.40

Centara - Type 21	Height (mm)		
	500	600	900
Weight kg/metre	25.20	30.40	43.10
Water cont. litres/metre	3.60	4.40	6.40

Centara - Type 22	Height (mm)			
	350	500	600	900
Weight kg/metre	24.40	29.30	37.40	49.40
Water cont. litres/metre	2.80	3.60	4.40	6.40

Centara - Type 33	Height (mm)			
	350	500	600	900
Weight kg/metre	35.60	43.40	51.50	73.00
Water cont. litres/metre	4.10	5.80	6.70	9.60

Type	Height (mm)													
	350		500				600				900			
	22	33	20	21	22	33	20	21	22	33	20	21	22	33
400	-	-	322	413	515	-	367	477	614	-	515	588	771	-
500	-	-	403	517	644	-	459	596	768	-	-	736	964	1384
600	-	-	483	620	772	1116	550	715	922	1289	773	883	1157	1661
700	-	-	-	723	901	-	-	834	1075	-	-	1030	1350	1938
800	910	1334	644	826	1030	1554	734	954	1229	1718	-	1177	1542	2214
900	-	-	-	930	1158	1749	-	1073	1382	1933	-	-	1735	2491
1000	1137	1667	805	1033	1287	1943	917	1192	1536	2148	-	1471	1928	2768
1200	1364	2000	966	1240	1544	2332	1100	1430	1843	2578	-	-	2314	-
1400	1592	2334	-	1446	1802	2720	-	1669	2150	3007	-	-	-	-
1600	1819	2667	-	1653	2059	-	-	1907	2458	-	-	-	-	-
1800	2047	3001	-	-	2317	-	-	-	2765	-	-	-	-	-
2000	2274	3334	-	-	2574	-	-	-	3072	-	-	-	-	-

Type 20
  Type 21
  Type 22
  Type 33

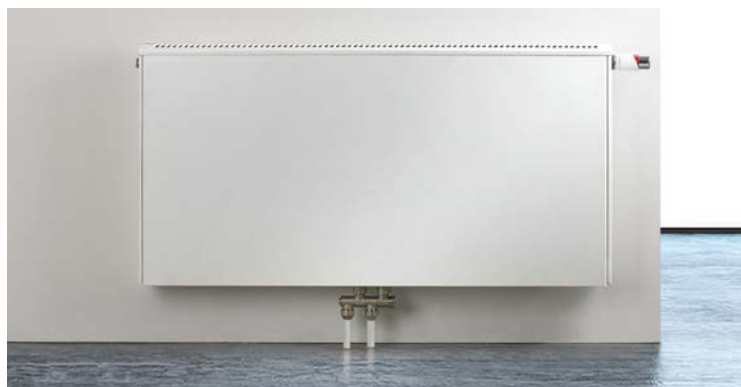
Outputs shown in watts at Δt 50°C

Visit [www.tuscanfoundry.com](http://www.tuscanfoundry.com) for full details

# Centara Plan Overview



The Centara Plan is manufactured from 1.2mm steel with a 0.5mm aluminium front plate and is available in RAL 9016 Traffic White as standard, with other colours available on request. Supplied complete with wall brackets, plug and air vent, welded side panels and top grille as standard, the Centara Plan radiator has a 6 bar maximum working pressure (8 bar test), with 10 bar maximum working pressure available upon request. The Centara Plan is supplied with underside 50mm connections. All models are supplied with welded side panels, which, combined with optional top grille security clips, make it the perfect radiator for high-traffic environments such as schools and hospitals. The Tuscan Centara Plan carries a 10-year guarantee against manufacturing defects.

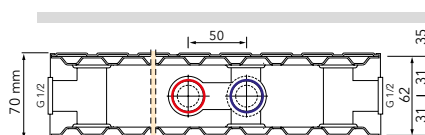


## Features

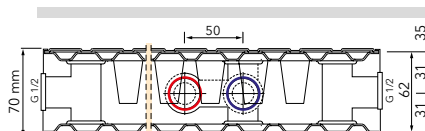
- Types - 20, 21, 22 & 33
- Material - Steel (1.2mm)
- 0.5mm aluminium front plate
- Finish - RAL 9016 Traffic White  
Other colours available on request
- Heights - 350-900mm
- Lengths - 400-2000mm
- Models - 104
- Outputs - 308-2886 watts
- Pressure - 6 bar (8 bar test)  
10 bar available on request
- Warranty - 10 years



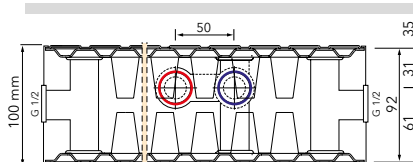
### Type 20 Depth 70mm



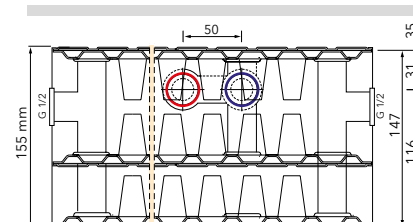
### Type 21 Depth 70mm



### Type 22 Depth 100mm



### Type 33 Depth 155mm



# Centara Plan

## Technical



Centara Plan - Type 20	Height (mm)		
	500	600	900
Weight kg/metre	23.00	27.50	42.80
Water cont. litres/metre	3.60	4.40	6.40

Centara Plan - Type 21	Height (mm)		
	500	600	900
Weight kg/metre	26.30	31.80	45.10
Water cont. litres/metre	3.60	4.40	6.40

Centara Plan - Type 22	Height (mm)			
	350	500	600	900
Weight kg/metre	25.20	30.40	36.10	51.40
Water cont. litres/metre	2.80	3.60	4.40	6.40

Centara Plan - Type 33	Height (mm)			
	350	500	600	900
Weight kg/metre	36.40	44.40	52.90	75.00
Water cont. litres/metre	4.10	5.80	6.70	9.60

Type	Height (mm)													
	350		500				600				900			
	22	33	20	21	22	33	20	21	22	33	20	21	22	33
400	-	-	308	375	514	-	361	441	577	-	487	582	768	-
500	-	-	385	469	643	-	452	552	722	-	-	727	960	1242
600	-	-	461	562	771	1045	542	662	866	1159	730	872	1151	1490
700	-	-	-	656	900	-	-	772	1010	-	-	1018	1343	1738
800	833	1153	615	750	1028	1394	722	882	11545	1546	-	1163	1535	1986
900	-	-	-	843	1157	1568	-	993	1299	1739	-	1454	1727	2235
1000	1041	1441	769	937	1285	1742	903	1103	1443	1932	-	-	1919	2483
1200	1249	1729	923	1124	1542	2090	1084	1324	1732	2318	-	-	2303	-
1400	1457	2017	-	1312	1799	2439	-	1544	2020	2705	-	-	-	-
1600	1666	2306	-	1499	2056	-	-	1765	2309	-	-	-	-	-
1800	1874	2594	-	-	2313	-	-	-	2597	-	-	-	-	-
2000	2082	2882	-	-	2570	-	-	-	2886	-	-	-	-	-

Type 20
  Type 21
  Type 22
  Type 33

Outputs shown in watts at  $\Delta t$  50°C

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# Planatherm Horizontal Overview



The Planatherm Horizontal radiator is manufactured from steel with a flat 2.00mm front waterway panel and 1.10mm thick rear panel, as well as fitted side panels and linear top grille, secure fit wall mounting brackets and 8 connections. Finished in fine textured RAL 9016 Traffic White, the Planatherm radiator has a maximum working pressure of 6 bar (max test pressure 7.8 bar) and carries a 10-year guarantee against manufacturing defects.



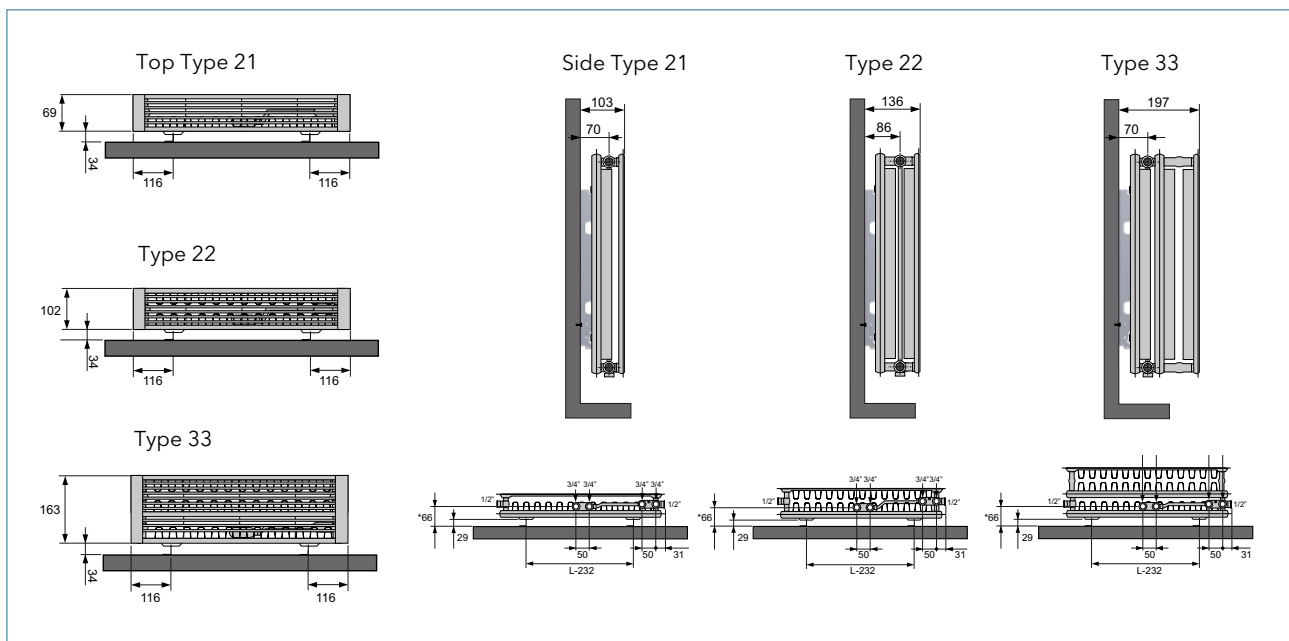
## Features

- Types - 21, 22 & 33
- Material - Steel (2mm front waterway panel with 1.10mm rear panel)
- Finish - Fine textured RAL 9016 Traffic White
- Heights - 300-900mm
- Lengths - 400-3000mm
- Models - 143
- Outputs - 366-5146 watts
- Pressure - 6 bar (7.8 bar test)
- Warranty - 10 years



## Connect with Variocon

The Variocon valve arrangement provides full flexibility when using the underside connections. Supplied with 15mm copper connections (standard) or with 1/2" bsp steel pipe connectors if required. Note: Offsets pipework centres 25mm to the left of radiator connections.



# Planatherm Horizontal Technical



Planatherm - Type 21	Height (mm)				
	400	500	600	700	900
Weight kg/metre	21.32	26.58	31.85	37.27	48.10
Water cont. litres/metre	3.52	4.18	4.85	5.53	6.90

Planatherm - Type 22	Height (mm)					
	300	400	500	600	700	900
Weight kg/metre	18.60	24.80	31.00	37.20	43.73	56.80
Water cont. litres/metre	3.00	3.62	4.23	4.85	5.52	6.85

Planatherm - Type 33	Height (mm)					
	300	400	500	600	700	900
Weight kg/metre	26.35	35.30	44.25	53.20	57.07	64.80
Water cont. litres/metre	4.65	5.53	6.42	7.30	7.80	8.80

Width mm	Type	Height (mm)																	
		300		400			500			600			700			900			
		22	33	21	22	33	21	22	33	21	22	33	21	22	33	21	22	33	
400	-	-	366	-	-	440	562	-	512	657	-	581	749	-	711	925	1286		
600	-	-	548	694	-	661	842	1202	768	985	1396	871	1123	1582	1067	1387	1930		
800	-	-	731	926	1329	881	1123	1602	1024	1314	1862	1162	1498	2110	1422	1850	2573		
1000	900	1300	914	1157	1661	1101	1404	2003	1280	1642	2327	1452	1872	2637	1778	2312	3216		
1200	1080	1560	1097	1388	1993	1321	1685	2404	1536	1970	2792	1742	2246	3164	2134	2774	3859		
1400	1260	1820	1280	1620	2325	1541	1966	2804	1792	2299	3258	-	2621	3692	-	3237	4502		
1600	1440	2080	1462	1851	2658	1762	2246	3205	2048	2627	3723	-	2995	-	-	-	5146		
1800	1620	2340	1645	2083	2990	1982	2527	3605	2304	2956	4189	-	3370	-	-	-	-		
2000	1800	2600	1828	2314	3322	2202	2808	4006	-	3284	4654	-	-	-	-	-	-		
2200	1980	2860	-	2545	3654	-	3089	4407	-	3612	-	-	-	-	-	-	-		
2400	2160	3120	2194	2777	3986	-	3370	4807	-	3941	-	-	-	-	-	-	-		
2600	-	-	-	3008	-	-	3650	-	-	-	-	-	-	-	-	-	-		
3000	-	3900	-	3471	4983	-	-	-	-	-	-	-	-	-	-	-	-		

Type 21
  Type 22
  Type 33

Outputs shown in watts at  $\Delta t$  50°C

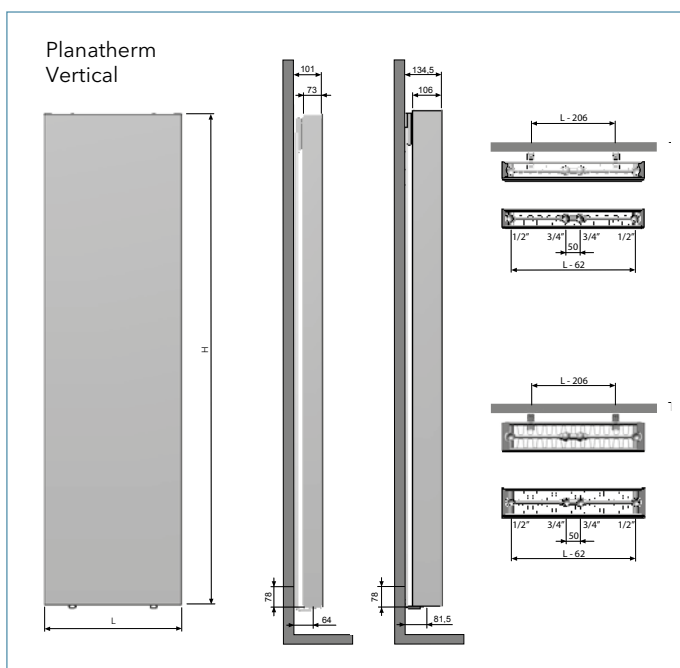
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# Planatherm Vertical Overview

The Planatherm Vertical radiator is made from 1.15mm steel with a 1mm thick front panel, in fine textured RAL 9016 Traffic White finish only. Complete with side panels on all models. Supplied complete with wall brackets, plug and air vent. The Planatherm Vertical has a maximum working pressure of 10 bar (max test 13 bar) with 4 x 1/2" bsp-f connections plus 2 x 3/4" male (euro cone) central connections. These euro cone connections are factory pre-sealed with metal caps. (Variocon Chrome TRV valves with euro cone connections are available at additional cost). The Planatherm Vertical carries a 10-year guarantee against manufacturing defects.

## Features

- Types - 21 & 22
- Material - Steel (1.15mm)
- Finish - Fine Textured RAL 9016 Traffic White
- Heights - 1600-2200mm
- Widths - 400-800mm
- Models - 40
- Outputs - 1047-3251 watts
- Pressure - 10 bar (13 bar test)
- Warranty - 10 years



# Planatherm Vertical Technical



## Planatherm Vertical

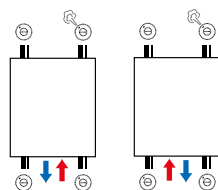
Type 21	Height (mm)				Type 22	Height (mm)			
	1600	1800	2000	2200		1600	1800	2000	2200
<b>Weight kg/metre</b>	77.60	83.92	90.22	98.50	<b>Weight kg/metre</b>	86.16	94.58	103.00	111.62
<b>Water cont. litres/metre</b>	16.22	18.02	19.82	21.62	<b>Water cont. litres/metre</b>	16.22	18.02	19.82	21.62
Width (mm)	Watts	Watts	Watts	Watts	Width (mm)	Watts	Watts	Watts	Watts
<b>400</b>	1047	1120	1198	1283	<b>400</b>	1281	1394	1509	1626
<b>500</b>	1309	1400	1498	1604	<b>500</b>	1601	1743	1886	2032
<b>600</b>	1571	1680	1798	1925	<b>600</b>	1921	2092	2263	2438
<b>700</b>	1833	1960	2097	2246	<b>700</b>	2241	2440	2640	2845
<b>800</b>	2094	2240	2397	2566	<b>800</b>	2562	2789	3018	3251

Outputs shown in watts at  $\Delta t$  50°C

### Central connection

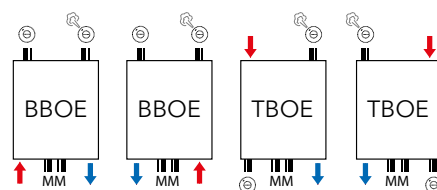
Note: When using this connection you must use the Variocon Chrome TRV Valve with 3/4" euro cone connections.

Note: the Flow must be on the same side as the TRV Head.



The Variocon Chrome TRV valve can swivel for angled, through the wall connections or simply come up from the floor for straight connections to 15mm copper pipe.

### Other connection options



### Variocon Chrome TRV valve and optional chrome heads



The Variocon Chrome TRV valve can swivel for angled, through the wall connections or simply come up from the floor for straight connections to 15mm copper pipe. Connection centres - 50mm Inlet and Outlet.

Note: The Flow must be on the same side as the TRV Head

Variocon Chrome TRV valve body with Tuscan chrome head

**Code: VLVVAR-KIT K**



Variocon Chrome TRV valve body with Standard chrome head

**Code: VLVVAR-KIT J**



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# Carat Horizontal Overview

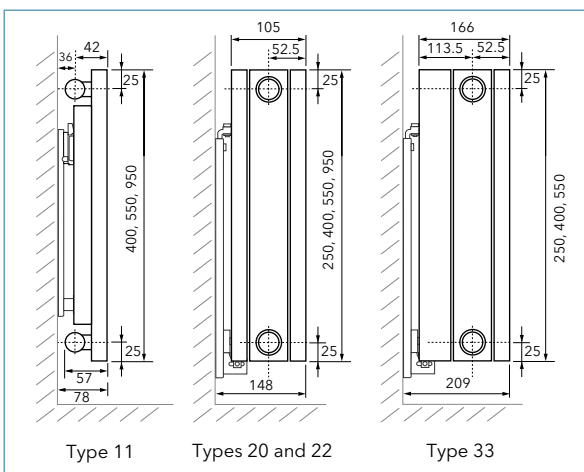


The Tuscan Carat Horizontal radiator is manufactured using 1.75mm flat steel with a profiled rear waterway of 1.25mm steel. Supplied with welded side panels and a top grille as standard (excludes Type 11), the Carat is finished in RAL 9016 Traffic White, with other colours available on request. A top grille clamp can be utilised to secure the top grille. The Carat has a maximum working pressure of 6 bar (8 bar test). It also has 4 side 1/2" bsp-f connections and 2 central 1/2" bsp-f connections,

complete with an integrated flow tube. This integrated flow tube links the right hand central connection to the top right hand connection, where the TRV head can be mounted via a unique TRV insert piece, supplied with the Variocon valve kit. The Carat radiator carries a 10-year guarantee against manufacturing defects.

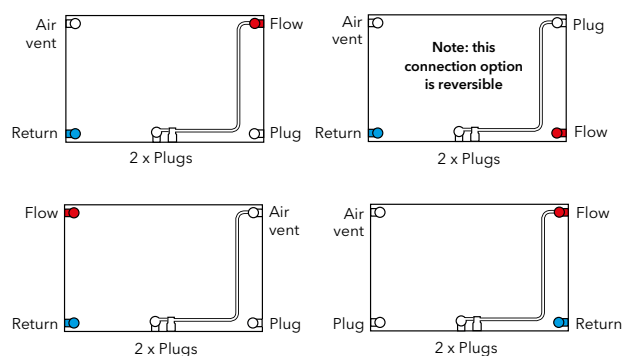
## Features

- Types - 11, 20, 22 & 33
- Material - 1.75mm flat steel with 1.25mm profiled rear waterway
- Finish - RAL 9016 Traffic White  
Other colours available on request
- Heights - 250-950mm
- Widths - 405-3005mm
- Models - 117
- Outputs - 367-4691 watts
- Pressure - 6 bar (8 bar test)
- Warranty - 10 years

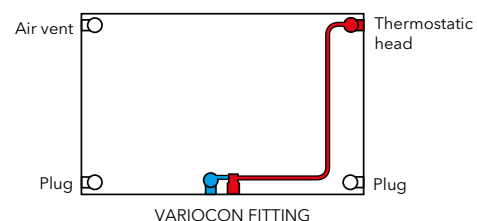


Top grille clamp

## TBOE, BBOE or TBSE Connection Details



## Connection Detail Utilising Variocon Valve & Thermostatic Head.



# Carat Horizontal Technical



Carat Horizontal - Type 11	Height (mm)		
	400	550	950
Weight kg/metre	15.20	21.30	36.60
Water cont. litres/metre	0.90	1.30	1.70

Carat Horizontal - Type 20	Height (mm)		
	400	550	950
Weight kg/metre	24.10	31.00	51.20
Water cont. litres/metre	1.50	2.10	3.40

Carat Horizontal - Type 22	Height (mm)			
	250	400	550	950
Weight kg/metre	19.60	32.00	44.20	74.80
Water cont. litres/metre	1.20	1.50	2.60	3.60

Carat Horizontal - Type 33	Height (mm)		
	250	400	550
Weight kg/metre	28.70	44.80	59.70
Water cont. litres/metre	2.20	3.10	4.10



Type 11



Type 20 & Type 22 with top grille and welded side panels

Type	Height (mm)												
	250		400				550				950		
	22	33	11	20	22	33	11	20	22	33	11	20	22
405	-	-	-	-	-	-	367	393	632	-	581	656	972
505	-	-	-	-	-	-	458	490	788	-	725	-	1211
605	-	-	-	-	744	-	548	587	944	1338	868	980	1451
705	-	-	-	-	-	-	639	685	1101	1559	-	-	1691
805	593	927	576	613	990	1431	729	782	1257	1781	1155	1304	1931
905	-	-	-	-	-	-	820	879	1413	2002	-	-	2171
1005	741	1157	720	766	1236	1787	911	976	1569	2223	-	1628	2411
1205	888	1387	863	918	1482	2142	1092	1170	1881	2665	-	-	2891
1405	1035	1617	1006	1071	1728	2498	1273	1364	2193	3108	-	-	-
1605	1183	1847	1149	1223	1974	2854	1454	1558	2505	3550	-	-	-
1805	1330	2078	1292	1375	2220	3209	1635	1753	2818	3993	-	-	-
2005	1478	2308	1436	1528	2466	3565	1817	1947	3130	4435	-	-	-
2205	1625	2538	-	-	2712	-	-	-	3442	-	-	-	-
2605	1920	2998	-	-	3204	-	-	-	4066	-	-	-	-
3005	2215	3459	-	-	3696	-	-	-	4691	-	-	-	-

Type 11 Type 20 Type 22 Type 33

Outputs shown in watts at  $\Delta t$  50°C

Visit [www.tuscanfoundry.com](http://www.tuscanfoundry.com) for full details

# Carat Vertical Overview

The Tuscan Carat Vertical radiator is manufactured using 1.75mm flat steel with a profiled rear waterway of 1.25mm steel. Finished in RAL 9016 Traffic White as standard, with other colours available on request. Type 20 and 21 models are supplied with side panels. The Carat Vertical has a maximum working pressure of 6 bar (8 bar test). The Carat Vertical has 2 x 1/2" bsp-f connections and is complete with an integrated flow tube. This integrated flow tube links the right hand central connection to the bottom right hand side connection where the TRV head can be mounted via a unique TRV insert piece (additional cost). The Carat Vertical radiator carries a 10-year guarantee against manufacturing defects.

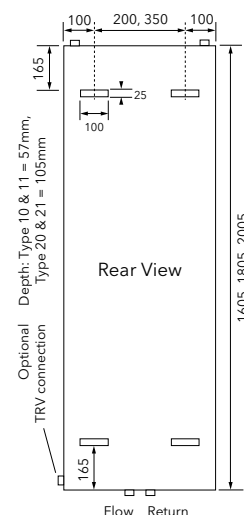
## Features

- Types - 10, 11, 20 & 21
- Material - Steel (1.75mm flat steel with 1.25mm profiled rear waterway)
- Finish - RAL 9016 Traffic White  
Other colours available on request
- Heights - 1605-2005mm
- Widths - 400 & 550mm
- Models - 24
- Outputs - 653-1758 watts
- Pressure - 6 bar (8 bar test)
- Warranty - 10 years



Type 10 & 11

## Vertical Types 10,11, 20 & 21



# Carat Vertical Technical

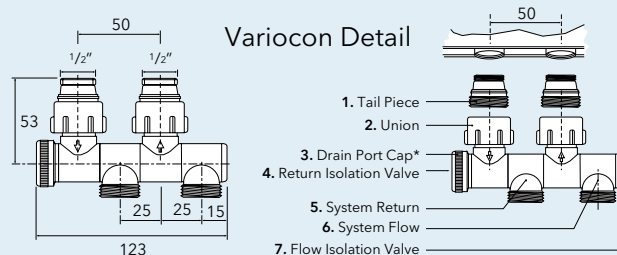


## Carat Accessories

Each Carat radiator can be supplied with the Variocon Valve Set, Integrated Thermostatic Valve Body & Thermostatic Head.

### Variocon

Part NR	
VLVWAR-KIT A	Variocon Valve with 15mm Copper Connections
VLVWAR-KIT B	Variocon Valve with 1/2" BSP Connections



The Variocon connections are positioned centrally on each radiator. For the pipework centres when using the Variocon, set 25mm off centre to the right. The flow connection is always on the right when using the Variocon valve (when viewed from the front).

		Type 10		
Width mm	Height mm	1605	1805	2005
400	Output Watts	653	704	755
	Weight kg	17.80	18.80	19.80
	Water cont. litres	1.40	1.60	1.80
550	Output Watts	837	903	969
	Weight kg	20.30	25.70	27.70
	Water cont. litres	1.90	2.20	2.50

		Type 11		
Width mm	Height mm	1605	1805	2005
400	Output Watts	751	845	906
	Weight kg	21.05	23.85	27.50
	Water cont. litres	1.40	1.60	1.80
550	Output Watts	941	1058	1135
	Weight kg	23.70	34.70	37.25
	Water cont. litres	1.90	2.20	2.50

		Type 20		
Width mm	Height mm	1605	1805	2005
400	Output Watts	1062	1165	1267
	Weight kg	37.80	42.70	47.20
	Water cont. litres	2.60	3.00	3.40
550	Output Watts	1292	1418	1542
	Weight kg	49.80	55.80	61.80
	Water cont. litres	3.60	4.20	4.70

		Type 21		
Width mm	Height mm	1605	1805	2005
400	Output Watts	1149	1262	1371
	Weight kg	38.20	45.49	51.50
	Water cont. litres	2.60	3.00	3.4
550	Output Watts	1474	1618	1758
	Weight kg	55.30	63.00	68.20
	Water cont. litres	3.60	4.20	4.70

Outputs shown in watts at  $\Delta t$  50°C

# Monoplan Horizontal Overview



The Monoplan Horizontal Standard range is made from steel (2mm front panel and 1.25mm internal panel) and finished in RAL 9016 Traffic White as standard, with other RAL colours available on request. It has a 6 bar maximum working pressure (mwp) tested to 7.8 bar, while a high pressure version (10 bar mwp, 13 bar test) is also available at additional cost.

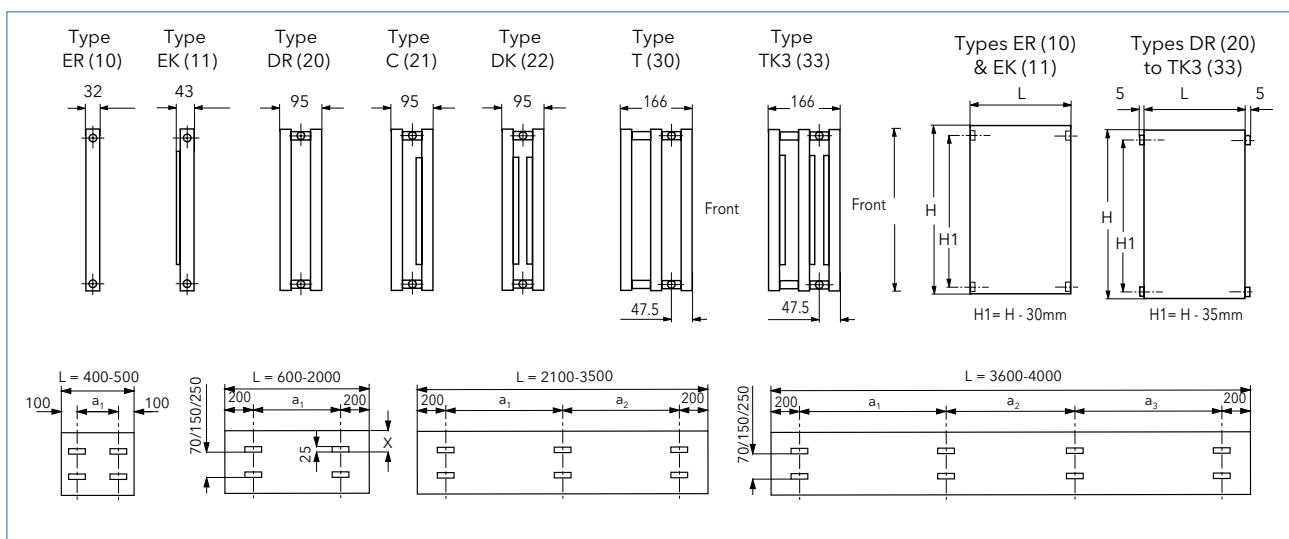
The Monoplan radiator has 1/2" bsp-f connections, with horizontal (BBOE B1D1 detail) as standard, unless otherwise specified. Alternative configurations are also available; these must be specified with each order.

The Monoplan Comfort is available for the Horizontal range for DR to TK3 models. With a top grille and welded on side panels making the radiator flat to all surfaces, the Monoplan Comfort is made from steel and finished in RAL 9016 Traffic White as standard, with other RAL colours available at additional cost. It has a 6 bar maximum working pressure (mwp) tested to 7.8 bar, while a high pressure version (10 bar mwp, 13 bar test) is also available at additional cost.

The Monoplan Comfort has 1/2" bsp-f BBOE B1D1 detail as standard unless shown otherwise. Alternative configurations are also available; these must be specified with each order.

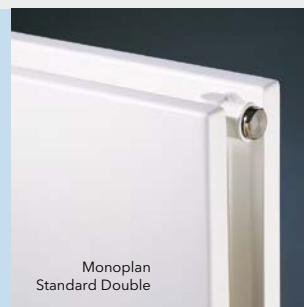
## Features

- Types - ER (10), EK (11), DR (20), C (21), DK (22) T (30), TK3 (33),
- Material - Steel (2mm front panel)
- Finish - RAL 9016 Traffic White  
Other colours available on request
- Heights - 220-950mm
- Lengths - 400-4000mm
- Models - 1813
- Outputs - 111-14756 watts
- Pressure - 6 bar (7.8 bar test)  
10 bar (13 bar test) available on request
- Warranty - 5 years



# Monoplan Horizontal

## Technical



	Type ER (10) - Depth 32mm per linear metre data						
Height (mm)	220	320	420	520	620	720	950
Watts/metre $\Delta t$ 50°C	278	375	466	560	651	749	974
Weight kg/metre	7.5	10.0	14.0	17.4	20.4	22.9	26.8
Water cont. litres/metre	1.7	1.8	2.1	2.3	2.5	2.8	3.2

	Type EK (11) - Depth 43mm per linear metre data						
Height (mm)	220	320	420	520	620	720	950
Watts/metre $\Delta t$ 50°C	371	508	665	824	971	1108	1387
Weight kg/metre	8.6	11.9	15.6	19.2	23.0	26.7	35.6
Water cont. litres/metre	1.7	1.8	2.1	2.3	2.5	2.8	3.2

	Type DR (20) - Depth 95mm per linear metre data						
Height (mm)	220	320	420	520	620	720	950
Watts/metre $\Delta t$ 50°C	468	624	784	941	1095	1248	1592
Weight kg/metre	14.3	19.6	24.9	30.3	35.6	40.9	53.2
Water cont. litres/metre	2.4	2.8	3.5	4.0	4.5	4.9	5.7

	Type C (21) - Depth 95mm per linear metre data						
Height (mm)	220	320	420	520	620	720	950
Watts/metre $\Delta t$ 50°C	561	785	1016	1245	1459	1657	2055
Weight kg/metre	15.4	21.7	28.1	34.4	40.8	47.2	61.9
Water cont. litres/metre	2.4	2.8	3.5	4.0	4.5	4.9	5.7

	Type DK (22) - Depth 95mm per linear metre data						
Height (mm)	220	320	420	520	620	720	950
Watts/metre $\Delta t$ 50°C	674	985	1269	1546	1806	2047	2533
Weight kg/metre	16.5	23.8	31.4	38.8	46.1	53.3	69.2
Water cont. litres/metre	2.4	2.8	3.5	4.0	4.5	4.9	5.7

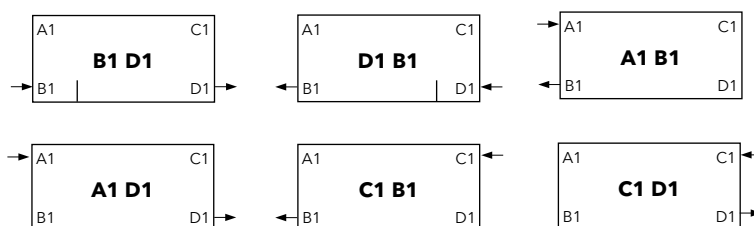
	Type T (30) - Depth 166mm per linear metre data						
Height (mm)	220	320	420	520	620	720	950
Watts/metre $\Delta t$ 50°C	668	899	1124	1346	1564	1778	2251
Weight kg/metre	21.7	30.1	38.1	46.0	54.0	61.9	80.0
Water cont. litres/metre	3.8	4.5	5.2	5.9	6.6	7.3	8.9

	Type TK3 (33) - Depth 166mm per linear metre data						
Height (mm)	220	320	420	520	620	720	950
Watts/metre $\Delta t$ 50°C	987	1439	1849	2252	2629	2980	3689
Weight kg/metre	25.5	36.3	46.6	57.1	67.8	78.8	104.7
Water cont. litres/metre	3.8	4.5	5.2	5.9	6.6	7.3	8.9

All types and all heights are available in the following lengths (mm):

400, 500, 600, 700, 800, 900, 1000, 1100, 1200, 1300, 1400, 1500, 1600, 1700, 1800, 1900, 2000, 2100, 2200, 2300, 2400, 2500, 2600, 2700, 2800, 2900, 3000, 3100, 3200, 3300, 3400, 3500, 3600, 3700, 3800, 3900 & 4000

### Horizontal connections



Default connection B1 D1 (BBOE) flow on the left, return on the right (unless specified otherwise)

Visit [www.tuscanfoundry.com](http://www.tuscanfoundry.com) for full details

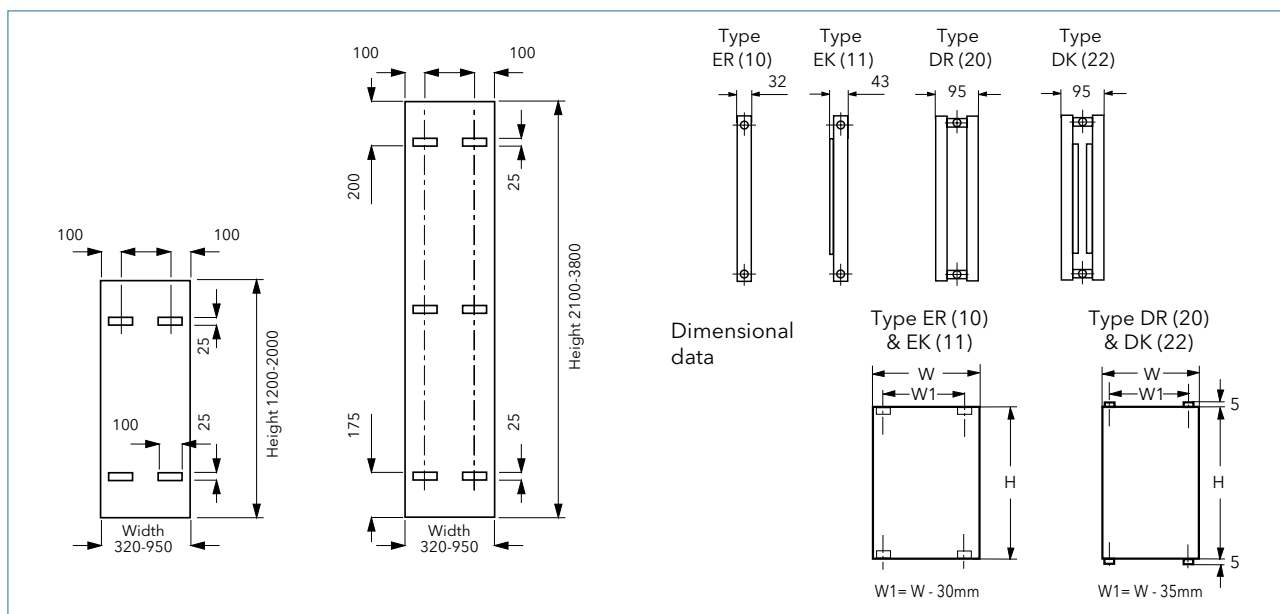
# Monoplan Vertical Overview

The Monoplan Vertical range is made from steel (2mm front panel and 1.25mm internal panel) and finished in RAL 9016 Traffic White as standard, with other RAL colours available on request. DR and DK models have welded in fill side panels. It has a 6 bar maximum working pressure (mwp) tested to 7.8 bar.

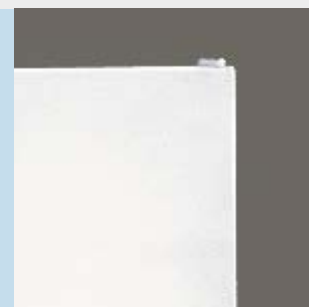
A high pressure version (10 bar mwp, 13 bar test) is also available at an additional cost. The Monoplan radiator has ½" bsp-f connections (B5D5 detail) as standard, unless shown otherwise. Alternative configurations are also available; these must be specified with each order. The Monoplan carries a 5-year guarantee against manufacturing defects.

## Features

- Types - ER (10), EK (11), DR (20), DK (22)
- Material - Steel (2mm front panel)
- Finish - Standard RAL 9016 Traffic White  
Other colours available on request
- Heights - 1200-3800mm
- Widths - 320-950mm
- Models - 648
- Outputs - 406-8664 watts
- Pressure - 6 bar (7.8 bar test).  
10 bar (13 bar test) available on request
- Warranty - 5 years



# Monoplan Vertical Technical



Type ER (10) - Depth 32mm	Width (mm)					
	320	420	520	620	720	950
Watts/metre $\Delta t$ 50°C	338	419	504	586	674	877
Weight kg/metre	10.0	14.0	17.4	20.4	22.9	26.8
Water cont. litres/metre	1.8	2.1	2.3	2.5	2.8	3.2

Type EK (11) - Depth 43mm	Width (mm)					
	320	420	520	620	720	950
Watts/metre $\Delta t$ 50°C	457	599	742	874	997	1248
Weight kg/metre	11.9	15.6	19.2	23.0	26.7	35.6
Water cont. litres/metre	1.8	2.1	2.3	2.5	2.8	3.2

Type DR (20) - Depth 95mm	Width (mm)					
	320	420	520	620	720	950
Watts/metre $\Delta t$ 50°C	562	706	847	986	1123	1433
Weight kg/metre	19.6	24.9	30.3	35.6	40.9	53.2
Water cont. litres/metre	2.8	3.5	4.0	4.5	4.9	5.7

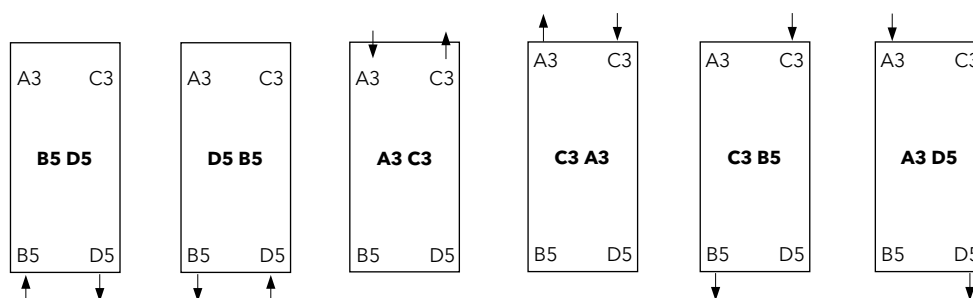
  

Type DK (22) - Depth 95mm	Width (mm)					
	320	420	520	620	720	950
Watts/metre $\Delta t$ 50°C	887	1142	1391	1625	1842	2280
Weight kg/metre	23.8	31.4	38.8	46.1	53.3	69.2
Water cont. litres/metre	2.8	3.5	4.0	4.5	4.9	5.7

All types and all widths are available in the following heights (mm):

1200, 1300, 1400, 1500, 1600, 1700, 1800, 1900, 2000, 2100, 2200, 2300, 2400, 2500,  
2600, 2700, 2800, 2900, 3000, 3100, 3200, 3300, 3400, 3500, 3600, 3700 & 3800

## Vertical connections



Default connection B5 D5 flow on the left, return on the right (unless specified otherwise)



# Lineatherm Horizontal Overview

The Lineatherm Horizontal is made from 1.5mm steel and supplied in RAL 9016 Traffic White as standard, with other colours available on request. It has a maximum working pressure of 4 bar (5.2 bar test) as standard, with 10 bar working (13 bar test) available at additional cost. Complete with a removable decorative top grille as standard, Lineatherm Horizontal (unless otherwise specified) is supplied with ½" bsp-f connections (side connection detail 2 and 7 BBOE). See separate Lineatherm sales brochure for additional connection details. The Lineatherm Horizontal radiator carries a 10-year guarantee against manufacturing defects.

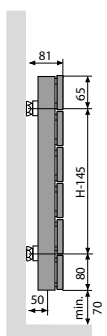


## Features

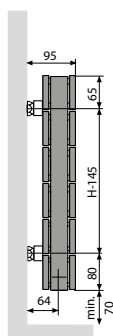
- Types - 10, 11, 20, 21 & 22
- Material - Steel (1.5mm flat oval tubes)
- Finish - RAL 9016 Traffic White  
Other colours available on request
- Heights - 288-868mm
- Lengths - 500-3000mm
- Models - 762
- Outputs - 167-5976 watts
- Pressure - 4 bar (5.2 bar test)  
10 bar (13 bar test) available on request
- Warranty - 10 years



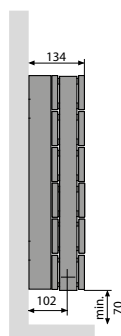
Type 10  
Type 11



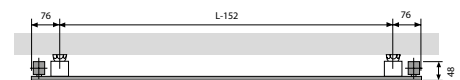
Type 20  
Type 21



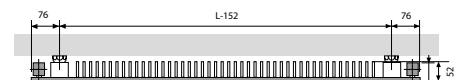
Type 22



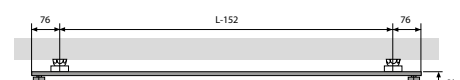
Type 10



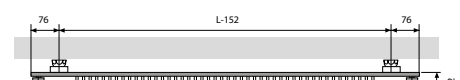
Type 11



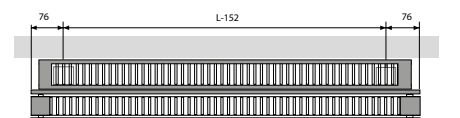
Type 20



Type 21



Type 22



# Lineatherm Horizontal Technical



Height (mm)	Type 10 per linear metre data		
	Watts $\Delta t$ 50°C	Weight kg	Water cont. litres
288	334	7.78	2.22
360	409	9.87	2.80
433	485	12.07	3.45
505	561	14.23	4.10
578	639	16.43	4.76
650	716	18.60	5.40
723	796	20.62	5.98
795	876	22.60	6.54
868	959	24.60	7.10

Type 11 per linear metre data		
Watts $\Delta t$ 50°C	Weight kg	Water cont. litres
544	11.02	2.37
644	14.00	3.00
740	16.64	3.60
830	19.25	4.20
918	21.89	4.80
1001	24.50	5.40
1082	27.21	5.97
1159	29.89	6.53
1235	32.60	7.10

Height (mm)	Type 20 per linear metre data		
	Watts $\Delta t$ 50°C	Weight kg	Water cont. litres
288	567	15.14	4.22
360	696	19.00	5.40
433	824	22.65	6.51
505	949	26.25	7.60
578	1074	29.90	8.71
650	1195	33.50	9.80
723	1317	37.22	10.87
795	1436	40.88	11.93
868	1556	44.60	13.00

Type 21 per linear metre data		
Watts $\Delta t$ 50°C	Weight kg	Water cont. litres
794	17.38	4.26
949	21.50	5.30
1100	25.35	6.43
1245	29.15	7.55
1387	33.00	8.68
1524	36.80	9.80
1660	40.42	10.87
1792	43.98	11.93
1923	47.60	13.00

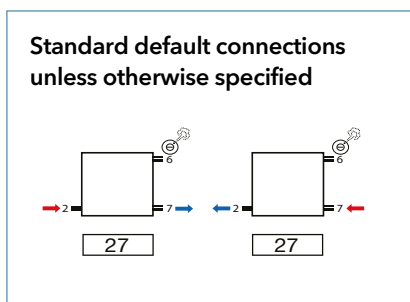
Type 22 per linear metre data		
Watts $\Delta t$ 50°C	Weight kg	Water cont. litres
976	22.14	4.26
1167	27.60	5.30
1350	32.35	6.43
1521	37.05	7.55
1686	41.80	8.68
1841	46.50	9.80
1992	51.19	10.87
2134	55.81	11.93
2273	60.50	13.00

Except where noted, all types and all heights are available in the following lengths (mm):

500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2200, 2400, 2600, 2800\*, 3000\*

\*Note: Type 22 795mm high is not available in length 3000mm

Type 22 868mm high is not available in length 2800mm & 3000mm



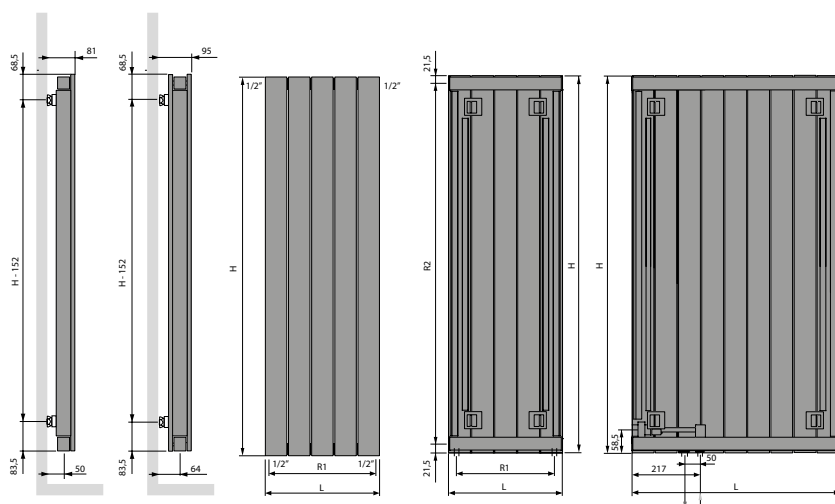
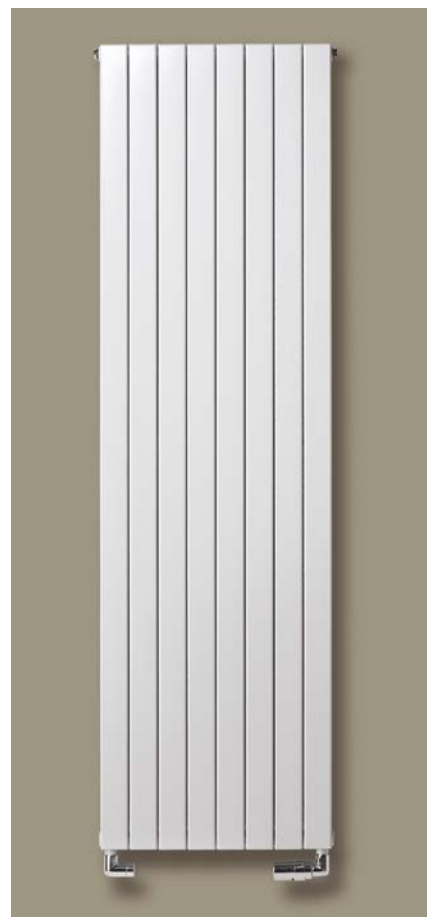
Visit [www.tuscanfoundry.com](http://www.tuscanfoundry.com) for full details

# Lineatherm Vertical Overview

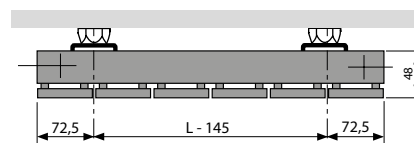
The Lineatherm Vertical is made from 1.5mm steel and supplied in RAL 9016 Traffic White as standard, with other colours available on request. It has a maximum working pressure of 4 bar (5.2 bar test) as standard, with 10 bar working (13 bar test) available at additional cost. Complete with 4 wall brackets and air vent, the Lineatherm Vertical (unless otherwise specified) will be supplied with 1/2" bsp-f connections (downward facing connections detail 1 and 8). See separate Lineatherm sales brochure for additional connection details available. The Lineatherm Vertical radiator carries a 10-year guarantee against manufacturing defects.

## Features

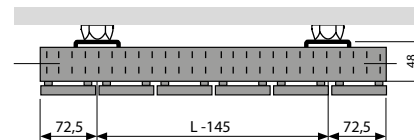
- Types - 10, 11 & 20
- Material - Steel (1.5mm flat oval tubes)
- Finish - RAL 9016 Traffic White  
Other colours available on request
- Heights - 1200-2400mm
- Widths - 215-1013mm
- Models - 231
- Outputs - 300-3737 watts
- Pressure - 4 bar (5.2 bar test)  
10 bar (13 bar test) available on request
- Warranty - 10 years



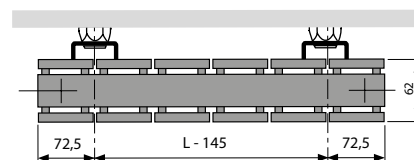
Type 10



Type 11



Type 20



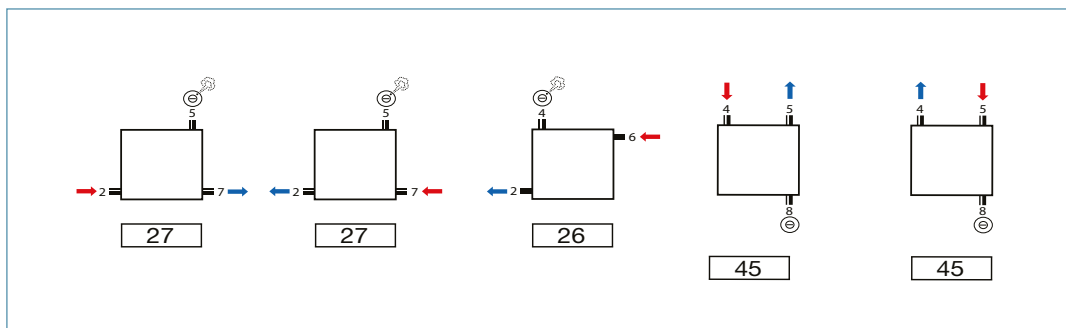
# Lineatherm Vertical Technical



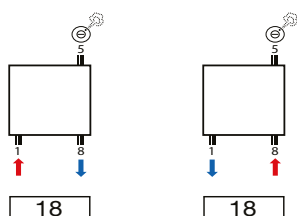
Height (mm)	Type 10 data per tube			Type 11 data per tube			Type 20 data per tube		
	Watts $\Delta t$ 50°C	Weight kg	Water cont. litres	Watts $\Delta t$ 50°C	Weight kg	Water cont. litres	Watts $\Delta t$ 50°C	Weight kg	Water cont. litres
1200	99.94	2.62	0.70	140.41	3.55	0.68	148.17	4.52	1.26
1400	117.00	3.00	0.80	160.14	4.02	0.77	172.67	5.21	1.45
1600	133.54	3.38	0.89	179.32	4.49	0.87	195.40	5.90	1.64
1800	149.51	3.75	1.00	198.00	5.04	0.96	216.22	6.60	1.83
2000	164.85	4.12	1.11	216.22	5.59	1.05	238.08	7.29	2.02
2200	179.54	4.48	1.20	234.00	6.15	1.15	251.95	7.80	2.14
2400	193.55	4.84	1.28	251.38	6.73	1.25	267.87	8.13	2.20

Widths (mm)	215	288	360	433	505	578	650	723	795	868	1013
Number of tubes	3	4	5	6	7	8	9	10	11	12	14

## Lineatherm Vertical connection options 1/2" bsp-f only



### Standard default connections unless otherwise specified



Visit [www.tuscanfoundry.com](http://www.tuscanfoundry.com) for full details

# Lineatherm Convector

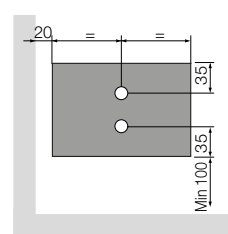
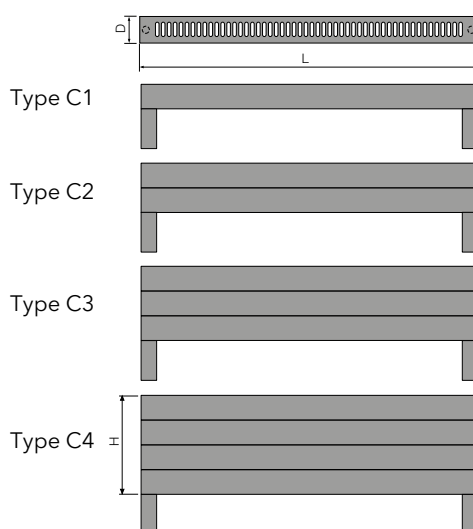
## Overview

The Lineatherm Convecter is made from 1.5mm steel and supplied in RAL 9016 Traffic White as standard, with other finishes available on request. It has a maximum working pressure of 4 bar (5.2 bar test) as standard, with 10 bar working (13 bar test) available at additional cost. Available with a choice of either wall or floor brackets depending on specification, the Lineatherm Convecter has ½" bsp-f connections (see Lineatherm sales brochure for additional information). The Lineatherm Convecter radiator carries a 10-year guarantee against manufacturing defects.



## Features

- Types - C1, C2, C3 & C4
- Material - Steel (1.5mm)
- Finish - RAL 9016 Traffic White  
Other colours available on request
- Heights - 70-280mm
- Lengths - 500-3900mm
- Depths - 80-280mm
- Models - 393
- Outputs - 203-8464 watts
- Pressure - 4 bar (5.2 bar test)  
10 bar (13 bar test) available on request
- Warranty - 10 years



Universal connection arrangement (not type C1, which has a single connection at either end, of which one connection must be the air vent).

# Lineatherm Convectors

## Technical



Depth (mm)	Type C1 - 70mm (H) per linear metre data			Type C2 - 140mm (H) per linear metre data			Type C3 - 210mm (H) per linear metre data			Type C4 - 280mm (H) per linear metre data		
	Watts $\Delta t$ 50°C	Weight kg	Water cont. litres	Watts $\Delta t$ 50°C	Weight kg	Water cont. litres	Watts $\Delta t$ 50°C	Weight kg	Water cont. litres	Watts $\Delta t$ 50°C	Weight kg	Water cont. litres
80	405	6.13	1.31	608	11.46	2.91	756	16.80	4.50	870	22.14	6.10
130	624	8.65	1.75	884	15.53	3.73	1120	22.40	5.70	1355	29.28	7.68
180	843	11.40	2.10	1221	19.80	4.45	1541	28.20	6.80	1838	36.60	9.16
230	1045	13.80	2.40	1511	23.75	5.45	1900	33.70	8.50	2258	43.60	11.56
280	1260	16.00	2.80	1905	27.70	5.95	2351	39.40	9.10	2670	51.10	12.26

Except where noted, all types in all depths are available in the following lengths (mm):

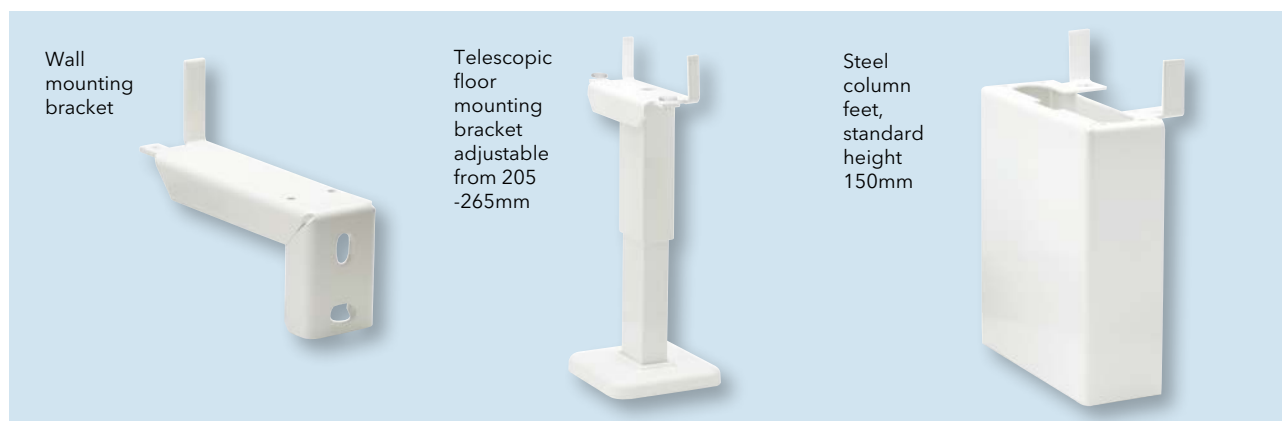
500, 600, 700, 800, 900, 1000, 1100, 1200, 1400, 1600, 1800, 2000, 2200, 2400, 2600, 2800, \*3000, \*3300, \*3600 & \*3900mm

\*Note: Type C3 280mm deep is not available in length 3900mm

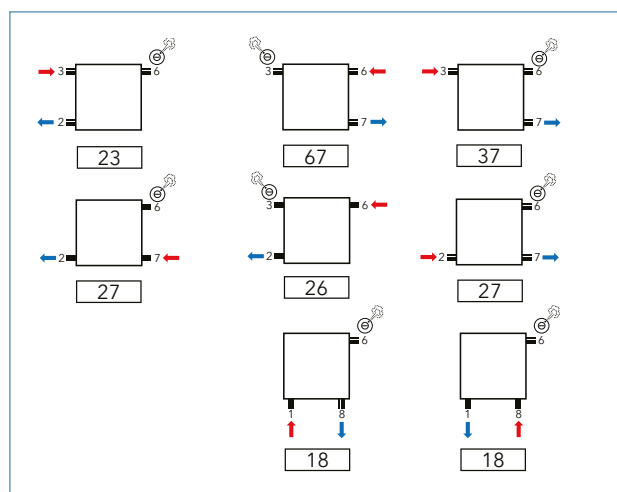
Type C4 230mm deep is not available in lengths 3600mm & 3900mm

Type C4 280mm deep is not available in lengths 3000, 3300, 3600 & 3900mm

### Lineatherm mounting options



### Lineatherm connection options 1/2" bsp-f only



#### Note:

Type C1 has 4 1/2" bsp-f connections at 1, 3, 6 & 8.

Types C2, C3 & C4 have 6 1/2" bsp-f connections at 1, 2, 3, 6, 7 & 8.

Either 3 or 6 must be used as the air vent.

#### Tip:

When using connections 1 & 8, utilise the steel column feet to conceal the pipework.

Visit [www.tuscanfoundry.com](http://www.tuscanfoundry.com) for full details

# Matrix Horizontal Overview

The Matrix Horizontal is made from 1.5mm steel and finished in RAL 9010 Warm White as standard, while RAL 9016 Traffic White is available upon request at no extra cost. Other RAL colours are available at additional cost. Supplied with wall brackets, this radiator has a 5.4 bar maximum working pressure (mwp) (tested to 7 bar) as standard. A high pressure, 2mm steel version is also available with 10 bar mwp (13 bar test) at an additional cost. There are 2 x ½" bsp-f (BBOE 2 and 4 detail) connections as standard unless otherwise specified; alternative configurations are also available (some at extra cost), which must be specified with each order. The Matrix radiator carries a 5-year guarantee against manufacturing defects.



## Features

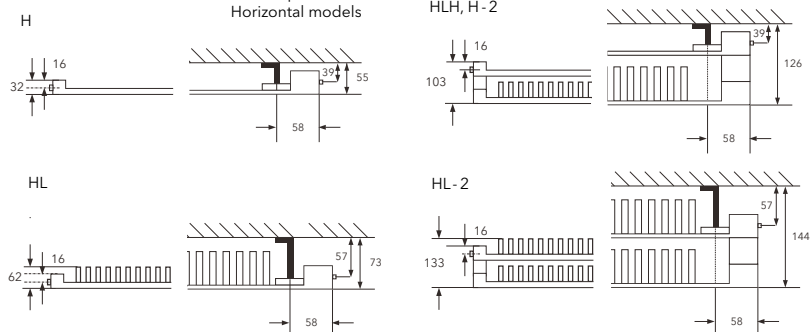
- Types - H (10), HL (11), H-2 (20), HLH (21) & HL-2 (22)
- Material - Steel (1.5mm flat tubes)
- Finish - RAL 9010 Warm White as standard; RAL 9016 Traffic White available at no additional cost. Other colours available on request
- Heights - 70-840mm
- Lengths - 500-6000mm
- Models - 2912
- Outputs - 49-13842 watts
- Pressure - 5.4 bar (7 bar test)  
10 bar (13 bar test) available on request.
- Warranty - 5 years



Horizontal models



Bracket positions - Horizontal models



# Matrix Horizontal Technical



Height (mm)	Type H (10) per linear metre data		
	Watts Δt 50°C	Weight kg	Water cont. litres
70	98	2.06	0.56
140	166	4.06	1.10
210	225	6.18	1.80
280	288	8.19	2.35
350	355	10.38	3.05
420	434	12.55	3.78
490	492	14.58	4.30
560	551	16.68	4.92
630	610	18.79	5.55
700	651	20.89	6.18
770	729	22.99	6.80
840	787	25.00	7.47

Type HL (11) per linear metre data		
Watts Δt 50°C	Weight kg	Water cont. litres
207	3.54	0.56
368	7.35	1.10
505	10.98	1.80
628	14.52	2.35
733	18.44	3.05
834	22.18	3.78
931	25.91	4.30
1022	29.72	4.92
1113	33.37	5.55
1196	37.09	6.18
1248	38.84	6.80
1303	40.60	7.47

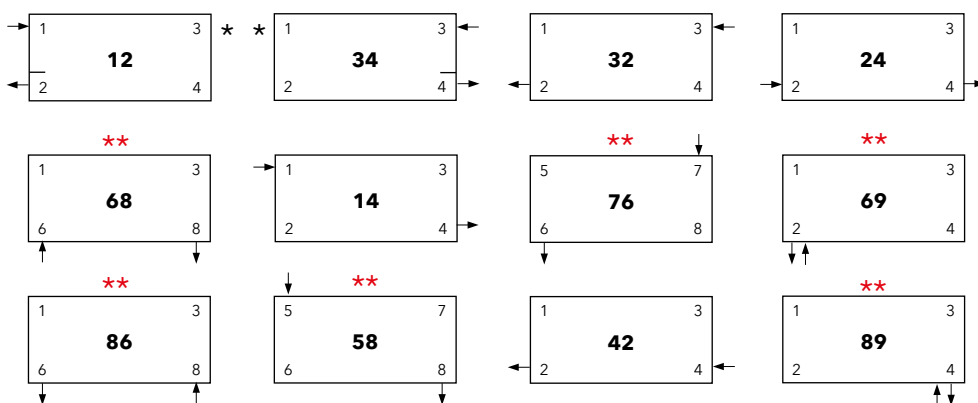
Type H2 (20) per linear metre data		
Watts Δt 50°C	Weight kg	Water cont. litres
180	4.24	1.14
283	8.45	2.25
393	12.61	3.61
511	16.37	4.92
616	20.85	6.25
723	24.68	7.91
830	29.09	8.89
938	33.20	10.21
1044	37.32	11.53
1148	41.44	12.85
1252	45.56	14.17
1355	49.70	15.24

Height (mm)	Type HLH (21) per linear metre data		
	Watts Δt 50°C	Weight kg	Water cont. litres
350	1002	28.58	6.25
420	1139	34.21	7.91
490	1271	39.83	8.89
560	1394	45.37	10.21
630	1513	51.08	11.53
700	1623	56.77	12.85
770	1730	61.02	14.17
840	1839	65.27	15.24

Type HL-2 (22) per linear metre data		
Watts Δt 50°C	Weight kg	Water cont. litres
1362	36.43	6.25
1535	43.53	7.91
1698	50.65	8.89
1848	57.66	10.21
1989	64.87	11.53
2112	72.04	12.85
2208	76.53	14.17
2307	81.14	15.24

All heights and types indicated above are available in lengths from 500mm to 6000mm in 100mm increments.

## Connections



Connection sizes are available in 1/2", 3/4" and 1" on most models. When ordering, the connection size must be given together with the relevant connection number. Standard connection = 24, 1/2" BSP (unless specified otherwise)

\* Air vent \*\* Extra cost

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# Matrix Vertical Overview

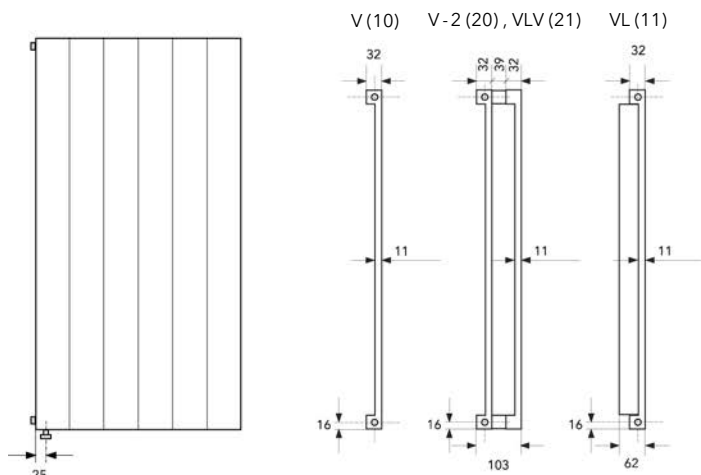
The Matrix Vertical is made from 1.5mm steel and finished in RAL 9010 Warm White as standard, while RAL 9016 Traffic White is available on request at no extra cost. Other RAL colours are available at additional cost. Supplied with wall brackets, this radiator has a 5.4 bar maximum working pressure (mwp) (tested to 7 bar) as standard. A high pressure, 2mm steel version with 10 bar mwp (13 bar test) is also available at extra cost. There are 2 x 1/2" bsp (BBOE 2 and 4 detail) connections as standard unless otherwise specified; alternative configurations are also available (some at extra cost), which must be specified with each order. The Matrix radiator carries a 5-year guarantee against manufacturing defects.



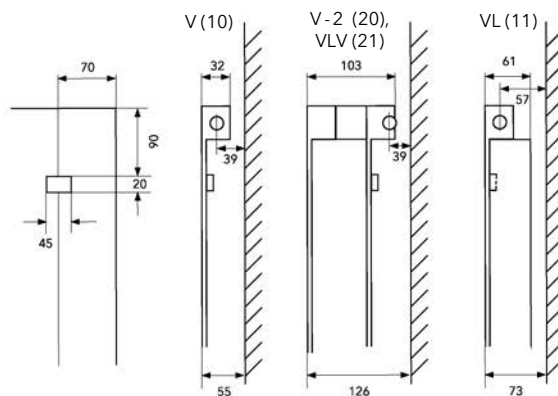
## Features

- Types - V (10), VL (11), V-2 (20) & VLV (21)
- Material - Steel (1.5mm flat tubes)
- Finish - RAL 9010 Warm White as standard; RAL 9016 Traffic White available at no additional cost. Other colours available on request.
- Heights - 1000-3600mm
- Lengths - 70-1400mm
- Models - 840
- Outputs - 68-6360 watts
- Pressure - 5.4 bar (7 bar test)  
10 bar (13 bar test) available on request.
- Warranty - 5 years

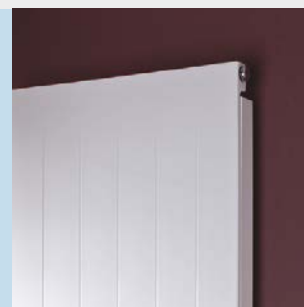
Vertical models



Bracket positions - Vertical models



# Matrix Vertical Technical



Height (mm)	Type V (10) per 70mm width data		
	Watts $\Delta t$ 50°C	Weight kg	Water cont. litres
1000	68	2.11	0.59
1200	81	2.43	0.69
1400	93	2.87	0.80
1600	105	3.25	0.90
1800	117	3.63	1.00
2000	128	4.01	1.11
2200	139	4.39	1.21
2400	150	4.77	1.31
2600	161	5.15	1.45
2800	172	5.53	1.56
3000	182	5.90	1.67
3200	193	6.28	1.78
3400	204	6.66	1.88
3600	214	7.04	1.99

Type VL (11) per 70mm width data		
Watts $\Delta t$ 50°C	Weight kg	Water cont. litres
107	3.35	0.59
123	3.95	0.69
141	4.87	0.80
157	5.64	0.90
172	6.40	1.00
186	7.24	1.11
201	8.00	1.21
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Type V-2 (20) per 70mm width data		
Watts $\Delta t$ 50°C	Weight kg	Water cont. litres
108	4.25	1.20
127	5.04	1.41
145	5.81	1.60
163	6.59	1.80
180	7.37	2.00
197	8.14	2.20
213	8.92	2.40
228	9.70	2.60
243	10.29	2.91
258	11.05	3.12
273	11.81	3.34
288	12.57	3.55
303	13.33	3.77
318	14.08	3.98

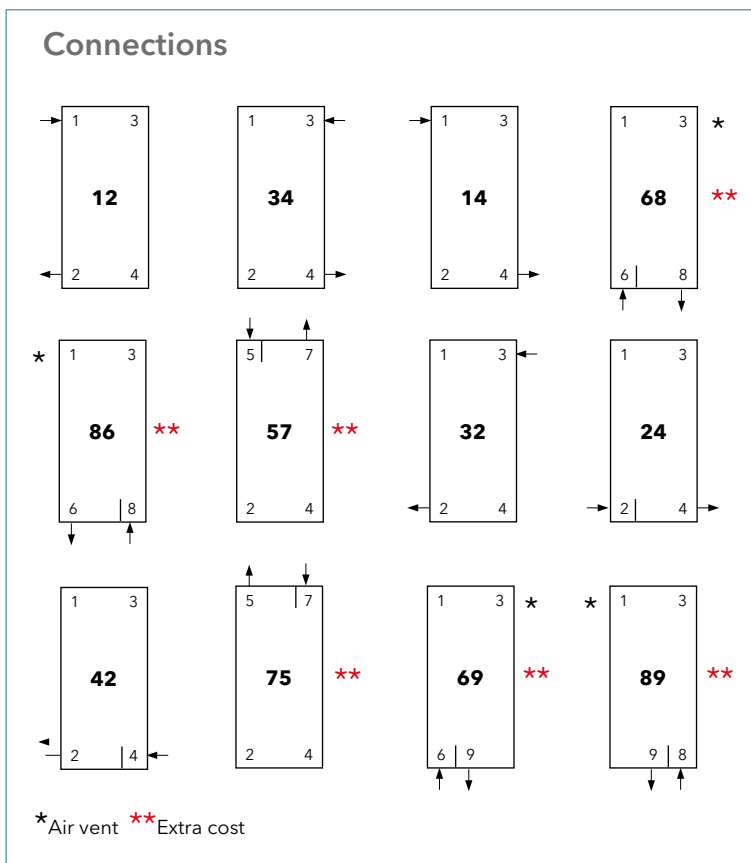
Height (mm)	Type VLV (21) per 70mm width data		
	Watts $\Delta t$ 50°C	Weight kg	Water cont. litres
1000	149	5.47	1.20
1200	176	6.39	1.41
1400	200	7.75	1.60
1600	215	8.89	1.80
1800	237	10.03	2.00
2000	257	11.25	2.20
2200	277	12.47	2.40

All heights and types indicated above are available in widths from 70mm to 1400mm in 70mm increments.

Connection sizes are available in 1/2", 3/4" and 1" on most models.

When ordering, the connection size must be given together with the relevant connection number.

Standard connection = 24, 1/2" BSP (unless specified otherwise)



# Matrix Convector

## Overview

The Matrix Convector is made from 1.5mm steel and finished in RAL 9010 Warm White as standard, while RAL 9016 Traffic White is available on request at no extra cost. Other RAL colours are available at additional cost. Supplied with floor brackets as standard (wall brackets are available on request), this radiator has a 5.4 bar maximum working pressure (mwp) (tested to 7 bar) as standard. A high pressure, 2mm steel

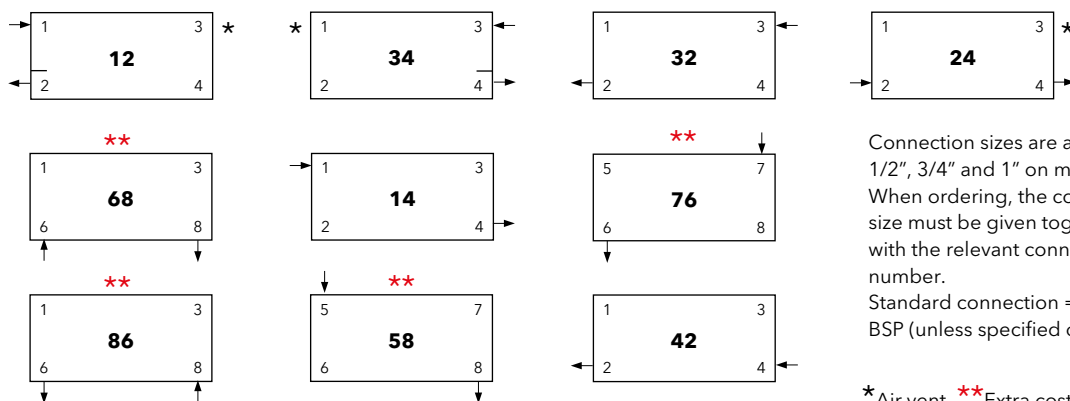
version with 10 bar mwp (13 bar test) is also available at extra cost. There are 2 x 1/2" bsp connections (BBOE 2 and 4 detail) as standard unless otherwise specified; alternative configurations are also available (some at extra cost), which must be specified with each order. The Matrix radiator carries a 5-year guarantee against manufacturing defects.

## Features

- Types - Standard (C), High Output (CP)
- Material - Steel (1.5mm)
- Finish - RAL 9010 Warm White as standard; RAL 9016 Traffic White available at no additional cost. Other colours available on request.
- Heights - 70-280mm
- Lengths - 500-6000mm
- Depths - 73-335mm
- Sizes - 1792
- Outputs - 172-18876 watts
- Pressure - 5.4 bar (7 bar test)  
10 bar (13 bar test) available on request.
- Warranty - 5 years



### Connections



# Matrix Convectors

## Technical



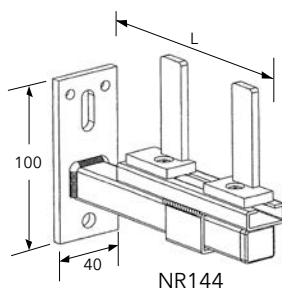
### C Range - standard model

Depth (mm)	Type C7 - 70mm (H) per linear metre data			Type C14 - 140mm (H) per linear metre data			Type C21 - 210mm (H) per linear metre data			Type C28 - 280mm (H) per linear metre data		
	Watts $\Delta t 50^{\circ}\text{C}$	Weight kg	Water cont. (L)	Watts $\Delta t 50^{\circ}\text{C}$	Weight kg	Water cont. (L)	Watts $\Delta t 50^{\circ}\text{C}$	Weight kg	Water cont. (L)	Watts $\Delta t 50^{\circ}\text{C}$	Weight kg	Water cont. (L)
2 Panel - 73mm	344	5.67	1.15	503	11.28	2.40	717	17.72	3.75	877	23.63	5.02
3 Panel - 134mm	599	9.34	1.82	925	19.10	4.05	1188	29.68	5.78	1447	39.39	7.72
4 Panel - 196mm	821	13.03	2.42	1277	27.03	5.01	1643	41.49	8.05	2002	55.28	10.83
5 Panel - 256mm	986	16.63	3.02	1519	34.55	6.09	2060	53.51	10.29	2509	71.36	13.89

### CP Range - high output model

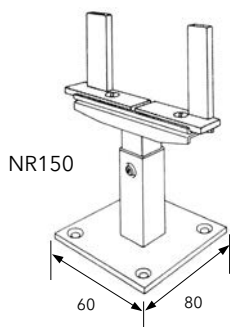
Depth (mm)	Type CP7 - 70mm (H) per linear metre data			Type CP14 - 140mm (H) per linear metre data			Type CP21 - 210mm (H) per linear metre data			Type CP28 - 280mm (H) per linear metre data		
	Watts $\Delta t 50^{\circ}\text{C}$	Weight kg	Water cont. (L)	Watts $\Delta t 50^{\circ}\text{C}$	Weight kg	Water cont. (L)	Watts $\Delta t 50^{\circ}\text{C}$	Weight kg	Water cont. (L)	Watts $\Delta t 50^{\circ}\text{C}$	Weight kg	Water cont. (L)
2 Panel - 92mm	382	6.17	1.15	632	12.85	2.40	851	19.76	3.75	1030	26.67	5.02
3 Panel - 173mm	639	10.23	1.82	1073	21.95	4.05	1447	33.85	5.78	1747	45.75	7.72
4 Panel - 254mm	860	14.90	2.42	1504	31.45	5.01	2046	48.26	8.05	2473	65.08	10.83
5 Panel - 335mm	1120	19.15	3.02	1920	41.17	6.09	26.05	62.50	10.29	3146	83.83	13.89

All heights and types indicated above are available in lengths from 500mm to 6000mm in 100mm increments.



### Wall bracket - convector models

	L	From wall to back of radiator minimum
C - 2	100mm	30mm
C - 3	150mm	30mm
C - 4	200mm	30mm
C - 5	250mm	30mm



### Floor bracket - convector models

When ordering please specify the height required. NR 150/ \_\* \_ \_ \_

Heights	1*	3*	4*	5*	6*
Minimum	65	90	120	180	270
Maximum	90	120	180	270	370

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# Ambiguard Style A with finned element emitter Overview

The Ambiguard Style A is a wall mounted LST with a bottom inlet and top outlet grille, ideal for areas with wet floors such as toilets. The casing is manufactured from 1.2mm steel and is supplied in RAL 9010 Warm White (semi-matt) as standard, with 11 other preferred colours available at an additional cost. The Ambiguard casing is supplied with rounded corners, a lockable access panel, pencil proof grilles and a heat reflective backplate. The front panel is supplied with decorative grooves as standard, with a flat fronted option available

on request. This model houses a finned tube element, which has 8 bar maximum working pressure with 15mm TBOE connections and an automatic air vent. The Ambiguard LST carries a 5-year guarantee against manufacturing defects.

The Ambiguard LST can be provided with optional Internal or External TRV valve sets, and pipework cut-outs at additional cost to be specified with order. (See page 114 for additional information.)

## Features

- Models - E11, E21 & E22
- Material - Steel (1.2mm) casing  
Emitters are of aluminum/copper finned construction
- Finish - RAL 9010 Warm White (semi-matt)  
Other colours available on request
- Heights - 440-1140mm
- Widths - 500-2400mm
- Depths - Types E11 and E21 Emitter: 97mm  
- Types E12 and E22 Emitter: 161mm
- Sizes - 600
- Outputs - 94-3794 watts
- Pressure - 8 bar (10.5 bar test)
- Warranty - 5 years



Flat fronted version available on request

# Ambiguard Style A

## with finned element emitter

### Technical



#### E11 & E21 - 97mm depth

Case Height (mm)	Emitter Type	Case Width (mm)																			
		500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
		Output Watts $\Delta t$ 50°C																			
440	E11	94	142	189	236	283	330	377	425	472	519	566	613	660	708	755	802	849	896	943	991
540	E11	99	148	198	247	297	346	395	445	494	544	593	643	692	742	791	840	890	939	989	1038
	E21	140	210	280	350	420	490	560	630	700	770	840	910	980	1050	1120	1190	1260	1329	1399	1469
640	E11	102	153	204	255	306	358	409	460	511	562	613	664	715	766	817	868	919	971	1022	1073
	E21	146	219	292	365	437	510	583	656	729	802	875	948	1021	1094	1167	1239	1312	1385	1458	1531
740	E11	105	157	209	262	314	366	418	471	523	575	628	680	732	785	837	889	941	994	1046	1098
	E21	152	228	304	380	456	532	608	684	760	836	912	988	1064	1140	1215	1291	1367	1443	1519	1595
840	E11	106	160	213	266	319	372	426	479	532	585	639	692	745	798	851	905	958	1011	1064	1117
	E21	158	237	317	396	475	554	633	712	791	871	950	1029	1108	1187	1266	1346	1425	1504	1583	1662
940	E11	108	162	216	269	323	377	431	485	539	593	647	700	754	808	862	916	970	1024	1078	1131
	E21	165	247	330	412	495	577	660	742	825	907	990	1072	1154	1237	1319	1402	1484	1567	1649	1732
1040	E11	109	163	217	272	326	381	435	489	544	598	652	707	761	815	870	924	978	1033	1087	1142
	E21	172	258	344	430	515	601	687	773	859	945	1031	1117	1203	1289	1375	1460	1546	1632	1718	1804
1140	E11	109	164	219	273	328	383	438	492	547	602	656	711	766	820	875	930	984	1039	1094	1148
	E21	179	269	358	448	537	627	716	806	895	985	1074	1164	1253	1343	1432	1522	1611	1701	1790	1880

#### E12 & E22 - 161mm depth

Case Height (mm)	Emitter Type	Case Width (mm)																			
		500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
		Output Watts $\Delta t$ 50°C																			
440	E12	217	325	434	542	650	759	867	976	1084	1192	1301	1409	1518	1626	1734	1843	1951	2060	2168	2276
540	E12	225	338	451	564	676	789	902	1014	1127	1240	1352	1465	1578	1691	1803	1916	2029	2141	2254	2367
	E22	292	438	584	730	876	1022	1168	1314	1460	1606	1752	1898	2044	2191	2337	2483	2629	2775	2921	3067
640	E12	232	348	464	580	696	813	929	1045	1161	1277	1393	1509	1625	1741	1857	1973	2089	2205	2322	2438
	E22	309	463	617	771	926	1080	1234	1388	1543	1697	1851	2005	2160	2314	2468	2623	2777	2931	3085	3240
740	E12	238	356	475	594	713	832	951	1069	1188	1307	1426	1545	1663	1782	1901	2020	2139	2258	2376	2495
	E22	322	483	645	806	967	1128	1289	1450	1612	1773	1934	2095	2256	2417	2579	2740	2901	3062	3223	3384
840	E12	242	363	484	606	727	848	969	1090	1211	1332	1453	1574	1695	1817	1938	2059	2180	2301	2422	2543
	E22	334	501	668	835	1002	1169	1336	1504	1671	1838	2005	2172	2339	2506	2673	2840	3007	3174	3341	3508
940	E12	246	369	492	615	738	861	984	1107	1230	1353	1476	1599	1723	1846	1969	2092	2215	2338	2461	2584
	E22	344	517	689	861	1033	1205	1377	1550	1722	1894	2066	2238	2411	2583	2755	2927	3099	3271	3444	3616
1040	E12	249	374	499	623	748	873	998	1122	1247	1372	1496	1621	1746	1870	1995	2120	2245	2369	2494	2619
	E22	353	530	707	883	1060	1237	1413	1590	1767	1943	2120	2297	2473	2650	2827	3003	3180	3357	3533	3710
1140	E12	252	378	505	631	757	883	1009	1135	1261	1388	1514	1640	1766	1892	2018	2144	2271	2397	2523	2649
	E22	361	542	723	903	1084	1265	1445	1626	1807	1987	2168	2348	2529	2710	2890	3071	3252	3432	3613	3794

Note: All Style A Wall Mounted models must be mounted 100mm above finished floor level.

# Ambiguard Style B with finned element emitter Overview



The Ambiguard Style B is a floor standing LST with a front facing bottom inlet and top outlet grille. The casing is manufactured from 1.2mm steel and is supplied in RAL 9010 Warm White (semi-matt) as standard, with 11 other preferred colours available at an additional cost. The Ambiguard casing is supplied with rounded corners, a lockable access panel, pencil proof grilles and a heat reflective backplate. The front panel is supplied with decorative grooves as standard, with a flat fronted option available on request. This model houses

a finned tube element, which has 8 bar maximum working pressure with 15mm TBOE connections and an automatic air vent. The Ambiguard LST carries a 5-year guarantee against manufacturing defects.

The Ambiguard LST can be provided with optional Internal or External TRV valve sets, and pipework cut-outs at additional cost to be specified with order. (See page 114 for additional information.)

## Features

- Models - E11, E12, E21, E22, E23 & E33
- Material - Steel (1.2mm) casing  
Emitters are of aluminum/copper finned construction
- Finish - RAL 9010 Warm White (semi-matt)  
Other colours available on request
- Heights - 465-1165mm
- Widths - 500-2400mm
- Depths - Types E11 and E21 Emitter: 97mm  
- Types E12 and E22 Emitter: 161mm  
- Types E23 and E33 Emitter: 260mm
- Sizes - 720
- Outputs - 93-5172 watts
- Pressure - 8 bar (10.5 bar test)
- Warranty - 5 years



Flat fronted version available on request

E11 & E21 - 97mm depth

Case Height (mm)	Emitter Type	Case Width (mm)																			
		500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
		Output Watts $\Delta t$ 50°C																			
465	E11	93	140	186	233	280	326	373	420	466	513	559	606	653	699	746	793	839	886	932	979
565	E11	98	147	196	245	294	343	392	441	490	539	588	638	687	736	785	834	883	932	981	1030
	E21	139	208	278	347	416	486	555	625	694	763	833	902	972	1041	1110	1180	1249	1319	1388	1457
665	E11	102	152	203	254	305	356	406	457	508	559	609	660	711	762	813	863	914	965	1016	1067
	E21	145	217	289	362	434	506	579	651	723	795	868	940	1012	1085	1157	1229	1302	1374	1446	1519
765	E11	104	156	208	260	313	365	417	469	521	573	625	677	729	781	833	885	938	990	1042	1094
	E21	151	226	301	377	452	527	603	678	753	829	904	979	1055	1130	1206	1281	1356	1432	1507	1582
865	E11	106	159	212	265	318	371	424	477	530	584	637	690	743	796	849	902	955	1008	1061	1114
	E21	157	236	314	393	471	550	628	707	785	864	942	1021	1099	1178	1256	1335	1413	1492	1570	1649
965	E11	108	161	215	269	323	376	430	484	538	591	645	699	753	806	860	914	968	1021	1075	1129
	E21	164	245	327	409	491	573	654	736	818	900	981	1063	1145	1227	1309	1390	1472	1554	1636	1718
1065	E11	109	163	217	271	326	380	434	488	543	597	651	706	760	814	868	923	977	1031	1086	1140
	E21	170	256	341	426	511	596	682	767	852	937	1023	1108	1193	1278	1363	1449	1534	1619	1704	1789
1165	E11	109	164	219	273	328	382	437	492	546	601	656	710	765	820	874	929	983	1038	1093	1147
	E21	178	266	355	444	533	621	710	799	888	976	1065	1154	1243	1332	1420	1509	1598	1687	1775	1864

E12 & E22 - 161mm depth

Case Height (mm)	Emitter Type	Case Width (mm)																			
		500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
		Output Watts $\Delta t$ 50°C																			
465	E12	215	322	430	537	644	752	859	966	1074	1181	1289	1396	1503	1611	1718	1825	1933	2040	2148	2255
565	E12	224	336	448	560	672	784	895	1007	1119	1231	1343	1455	1567	1679	1791	1903	2015	2127	2239	2351
	E22	288	433	577	721	865	1009	1153	1298	1442	1586	1730	1874	2019	2163	2307	2451	2595	2739	2884	3028
665	E12	231	346	462	577	693	808	924	1039	1155	1270	1386	1501	1616	1732	1847	1963	2078	2194	2309	2425
	E22	305	458	611	764	916	1069	1222	1375	1527	1680	1833	1986	2138	2291	2444	2597	2749	2902	3055	3208
765	E12	237	355	473	592	710	828	946	1065	1183	1301	1420	1538	1656	1775	1893	2011	2130	2248	2366	2484
	E22	320	480	639	799	959	1119	1279	1439	1599	1759	1918	2078	2238	2398	2558	2718	2878	3038	3197	3357
865	E12	241	362	483	603	724	845	965	1086	1207	1327	1448	1569	1689	1810	1931	2051	2172	2293	2413	2534
	E22	332	498	664	830	996	1162	1328	1494	1659	1825	1991	2157	2323	2489	2655	2821	2987	3153	3319	3485
965	E12	245	368	491	613	736	859	981	1104	1227	1349	1472	1595	1717	1840	1963	2085	2208	2331	2453	2576
	E22	342	514	685	856	1027	1198	1370	1541	1712	1883	2055	2226	2397	2568	2739	2911	3082	3253	3424	3595
1065	E12	249	373	498	622	746	871	995	1119	1244	1368	1493	1617	1741	1866	1990	2115	2239	2363	2488	2612
	E22	352	527	703	879	1055	1231	1407	1582	1758	1934	2110	2286	2461	2637	2813	2989	3165	3341	3516	3692
1165	E12	252	378	503	629	755	881	1007	1133	1259	1385	1510	1636	1762	1888	2014	2140	2266	2391	2517	2643
	E22	360	540	720	899	1079	1259	1439	1619	1799	1979	2159	2339	2519	2698	2878	3058	3238	3418	3598	3778

E23 & E33 - 260mm depth

Case Height (mm)	Emitter Type	Case Width (mm)																			
		500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
		Output Watts $\Delta t$ 50°C																			
665	E23	393	589	785	981	1178	1374	1570	1766	1963	2159	2355	2552	2748	2944	3140	3337	3533	3729	3925	4122
	E33	432	648	864	1080	1295	1511	1727	1943	2159	2375	2591	2807	3023	3239	3454	3670	3886	4102	4318	4534
765	E23	422	633	844	1055	1266	1477	1688	1899	2110	2321	2532	2743	2954	3165	3376	3587	3798	4008	4219	4430
	E33	464	696	928	1160	1392	1625	1857	2089	2321	2553	2785	3017	3249	3481	3713	3945	4177	4409	4641	4874
865	E23	448	672	896	1120	1343	1567	1791	2015	2239	2463	2687	2911	3135	3359	3583	3806	4030	4254	4478	4702
	E33	493	739	985	1231	1478	1724	1970	2217	2463	2709	2956	3202	3448	3694	3941	4187	4433	4680	4926	5172



# Ambiguard Style C with finned element emitter Overview

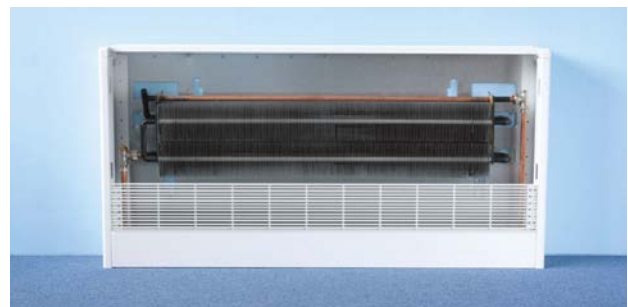
The Ambiguard Style C is a floor standing LST with a top outlet grille, front facing inlet grille above an 85mm high plinth, ideal for running pipework underneath the emitter. The casing is manufactured from 1.2mm steel and is supplied in RAL 9010 Warm White (semi-matt) as standard, with 11 other preferred colours available at an additional cost. The Ambiguard casing is supplied with rounded corners, a lockable access panel, pencil proof grilles and a heat reflective backplate. The front panel is supplied with decorative grooves as standard, with a

flat fronted option available on request.

This model houses a finned tube element, which has 8 bar maximum working pressure with 15mm TBOE connections and an automatic air vent. The Ambiguard LST carries a 5-year guarantee against manufacturing defects. The Ambiguard LST can be provided with optional Internal or External TRV valve sets, and pipework cut-outs at additional cost to be specified with order. (See page 114 for additional information.)

## Features

- Models - E11, E12, E21 & E22
- Material - Steel (1.2mm) casing  
Emitters are of aluminum/copper finned construction
- Finish - RAL 9010 Warm White (semi-matt)  
Other colours available on request
- Heights - 550-1150mm
- Widths - 500-2400mm
- Depths - Types E11 and E21 Emitter: 97mm  
- Types E12 and E22 Emitter: 161mm
- Sizes - 520
- Outputs - 94-3697 watts
- Pressure - 8 bar (10.5 bar test)
- Warranty - 5 years



Internal Style C casing with finned element

# Ambiguard Style C

## with finned element emitter

### Technical



#### E11 & E22 - 97mm depth

Case Height (mm)	Emitter Type	Case Width (mm)																			
		500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
		Output Watts $\Delta t$ 50°C																			
550	E11	94	140	187	234	281	327	374	421	468	514	561	608	655	701	748	795	842	888	935	982
650	E11	98	147	197	246	295	344	393	442	491	541	590	639	688	737	786	835	885	934	983	1032
	E21	139	209	278	348	417	487	556	626	695	765	835	904	974	1043	1113	1182	1252	1321	1391	1460
750	E11	102	153	203	254	305	356	407	458	509	560	610	661	712	763	814	865	916	966	1017	1068
	E21	145	217	290	362	435	507	580	652	725	797	870	942	1014	1087	1159	1232	1304	1377	1449	1522
850	E11	104	156	209	261	313	365	417	469	521	574	626	678	730	782	834	886	939	991	1043	1095
	E21	151	227	302	378	453	529	604	680	755	831	906	982	1057	1133	1208	1284	1359	1435	1510	1586
950	E11	106	159	212	265	319	372	425	478	531	584	637	690	743	796	849	903	956	1009	1062	1115
	E21	157	236	315	393	472	551	629	708	787	865	944	1023	1101	1180	1259	1337	1416	1495	1573	1652
1050	E11	108	161	215	269	323	377	430	484	538	592	646	699	753	807	861	914	968	1022	1076	1130
	E21	164	246	328	410	492	574	656	738	820	902	983	1065	1147	1229	1311	1393	1475	1557	1639	1721
1150	E11	109	163	217	271	326	380	434	489	543	597	652	706	760	814	869	923	977	1032	1086	1140
	E21	171	256	342	427	512	598	683	768	854	939	1025	1110	1195	1281	1366	1452	1537	1622	1708	1793

#### E12 & E22 - 161mm depth

Case Height (mm)	Emitter Type	Case Width (mm)																			
		500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
		Output Watts $\Delta t$ 50°C																			
550	E12	215	323	431	538	646	753	861	969	1076	1184	1292	1399	1507	1615	1722	1830	1937	2045	2153	2260
650	E12	224	336	449	561	673	785	897	1009	1121	1233	1346	1458	1570	1682	1794	1906	2018	2130	2243	2355
	E22	289	434	579	723	868	1013	1157	1302	1447	1591	1736	1880	2025	2170	2314	2459	2604	2748	2893	3038
750	E12	231	347	462	578	694	809	925	1041	1156	1272	1387	1503	1619	1734	1850	1965	2081	2197	2312	2428
	E22	306	459	613	766	919	1072	1225	1378	1531	1684	1838	1991	2144	2297	2450	2603	2756	2909	3063	3216
850	E12	237	355	474	592	711	829	948	1066	1184	1303	1421	1540	1658	1777	1895	2013	2132	2250	2369	2487
	E22	320	481	641	801	961	1121	1282	1442	1602	1762	1922	2083	2243	2403	2563	2723	2884	3044	3204	3364
950	E12	242	362	483	604	725	845	966	1087	1208	1329	1449	1570	1691	1812	1933	2053	2174	2295	2416	2536
	E22	332	499	665	831	997	1164	1330	1496	1662	1829	1995	2161	2327	2493	2660	2826	2992	3158	3325	3491
1050	E12	246	368	491	614	737	859	982	1105	1228	1350	1473	1596	1719	1841	1964	2087	2210	2333	2455	2578
	E22	343	514	686	857	1029	1200	1372	1543	1715	1886	2057	2229	2400	2572	2743	2915	3086	3258	3429	3601
1150	E12	249	373	498	622	747	871	996	1120	1245	1369	1494	1618	1743	1867	1991	2116	2240	2365	2489	2614
	E22	352	528	704	880	1056	1232	1408	1584	1760	1936	2112	2288	2465	2641	2817	2993	3169	3345	3521	3697

# Ambiguard Style T with finned element emitter Overview

The Ambiguard Style T is a floor standing LST with a solid top, front facing bottom inlet and top outlet grilles. The casing is manufactured from 1.2mm steel and is supplied in RAL 9010 Warm White (semi-matt) as standard, with 11 other preferred colours available at an additional cost. The Ambiguard casing is supplied with rounded corners, a lockable access panel, pencil proof grilles and a heat reflective backplate. The front panel is supplied with decorative grooves as standard, with a flat fronted option available on request. This model houses a finned tube

element, which has 8 bar maximum working pressure with 15mm TBOE connections and an automatic air vent. The Ambiguard LST carries a 5-year guarantee against manufacturing defects.

The Ambiguard LST can be provided with optional Internal or External TRV valve sets, and pipework cut-outs at additional cost to be specified with order. (See page 114 for additional information.)

## Features

- Models - E11, E12, E21, E22, E23 & E33
- Material - Steel (1.2mm) casing  
Emitters are of aluminum/copper finned construction
- Finish - RAL 9010 Warm White (semi-matt)  
Other colours available on request
- Heights - 615-1015mm
- Widths - 500-2400mm
- Depths - Types E11 and E21 Emitter: 97mm  
- Types E12 and E22 Emitter: 161mm  
- Types E23 and E33 Emitter: 260mm
- Sizes - 460
- Outputs - 93-5172 watts
- Pressure - 8 bar (10.5 bar test)
- Warranty - 5 years



# Ambiguard Style T

## with finned element emitter

### Technical



#### E11 & E21 - 97mm depth

Case Height (mm)	Emitter Type	Case Width (mm)																			
		500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
		Output Watts $\Delta t$ 50°C																			
615	E11	93	140	186	233	280	326	373	420	466	513	559	606	653	699	746	793	839	886	932	979
715	E11	98	147	196	245	294	343	392	441	490	539	588	638	687	736	785	834	883	932	981	1030
	E21	139	208	278	347	416	486	555	625	694	763	833	902	972	1041	1110	1180	1249	1319	1388	1457
815	E11	102	152	203	254	305	356	406	457	508	559	609	660	711	762	813	863	914	965	1016	1067
	E21	145	217	289	362	434	506	579	651	723	795	868	940	1012	1085	1157	1229	1302	1374	1446	1519
915	E11	104	156	208	260	313	365	417	469	521	573	625	677	729	781	833	885	938	990	1042	1094
	E21	151	226	301	377	452	527	603	678	753	829	904	979	1055	1130	1206	1281	1356	1432	1507	1582
1015	E11	106	159	212	265	318	371	424	477	530	584	637	690	743	796	849	902	955	1008	1061	1114
	E21	157	236	314	393	471	550	628	707	785	864	942	1021	1099	1178	1256	1335	1413	1492	1570	1649

#### E12 & E22 - 161mm depth

Case Height (mm)	Emitter Type	Case Width (mm)																			
		500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
		Output Watts $\Delta t$ 50°C																			
615	E12	215	322	430	537	644	752	859	966	1074	1181	1289	1396	1503	1611	1718	1825	1933	2040	2148	2255
715	E12	224	336	448	560	672	784	895	1007	1119	1231	1343	1455	1567	1679	1791	1903	2015	2127	2239	2351
	E22	288	433	577	721	865	1009	1153	1298	1442	1586	1730	1874	2019	2163	2307	2451	2595	2739	2884	3028
815	E12	231	346	462	577	693	808	924	1039	1155	1270	1386	1501	1616	1732	1847	1963	2078	2194	2309	2425
	E22	305	458	611	764	916	1069	1222	1375	1527	1680	1833	1986	2138	2291	2444	2597	2749	2902	3055	3208
915	E12	237	355	473	592	710	828	946	1065	1183	1301	1420	1538	1656	1775	1893	2011	2130	2248	2366	2484
	E22	320	480	639	799	959	1119	1279	1439	1599	1759	1918	2078	2238	2398	2558	2718	2876	3038	3197	3357
1015	E12	241	362	483	603	724	845	965	1086	1207	1327	1448	1569	1689	1810	1931	2051	2172	2293	2413	2534
	E22	332	498	664	830	996	1162	1328	1494	1659	1825	1991	2157	2323	2489	2655	2821	2987	3153	3319	3485

#### E23 & E33 - 260mm depth

Case Height (mm)	Emitter Type	Case Width (mm)																			
		500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
		Output Watts $\Delta t$ 50°C																			
815	E23	393	589	785	981	1178	1374	1570	1766	1963	2159	2355	2552	2748	2944	3140	3337	3533	3729	3925	4122
915	E23	422	633	844	1055	1266	1477	1688	1899	2110	2321	2532	2743	2954	3165	3376	3587	3798	4008	4219	4430
	E33	464	696	928	1160	1392	1625	1857	2089	2321	2553	2785	3017	3249	3481	3713	3945	4177	4409	4641	4874
1015	E23	448	672	896	1120	1343	1567	1791	2015	2239	2463	2687	2911	3135	3359	3583	3806	4030	4254	4478	4702
	E33	493	739	985	1231	1478	1724	1970	2217	2463	2709	2956	3202	3448	3694	3941	4187	4433	4680	4926	5172

# Ambiguard Style D with finned element emitter Overview

The Ambiguard Style D is a floor standing vertical LST with front facing bottom inlet and top outlet grilles. The casing is manufactured from 1.2mm steel and is supplied in RAL 9010 Warm White (semi-matt) as standard, with 11 other preferred colours available at an additional cost. The Ambiguard casing is supplied with rounded corners, a lockable access panel, pencil proof grilles and a heat reflective backplate. The front panel is supplied with decorative grooves as standard, with a flat fronted option available on request. This model houses a finned tube element, which has 8 bar maximum working pressure with 15mm TBOE connections and an automatic air vent. The Ambiguard LST carries a 5-year guarantee against manufacturing defects. The Ambiguard LST can be provided with optional Internal or External TRV valve sets, and pipework cut-outs at additional cost to be specified with order. (See page 114 for additional information.)

## Features

- Models - E22 & E23
- Material - Steel (1.2mm) casing  
Emitters are of aluminum/copper finned construction
- Finish - RAL 9010 Warm White (semi-matt)  
Other colours available on request
- Heights - 1500-2400mm
- Widths - 500-1200mm
- Depths - Types E22 Emitter: 161mm  
- Types E23 Emitter: 260mm
- Sizes - 160
- Outputs - 367-2854 watts
- Pressure - 8 bar (10.5 bar test)
- Warranty - 5 years



Image shown with optional external valve fitted

# Ambiguard Style D

## with finned element emitter

### Technical



#### E22 - 161mm depth

	Case Height (mm)									
	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
<b>Emitter Type</b>	E22									
<b>Case Width (mm)</b>	Output Watts $\Delta t$ 50°C									
<b>500</b>	367	369	371	374	378	382	387	392	398	404
<b>600</b>	550	553	557	562	567	574	581	589	597	606
<b>700</b>	734	737	742	749	756	765	774	785	796	808
<b>800</b>	917	922	928	936	945	956	968	981	995	1010
<b>900</b>	1100	1106	1114	1123	1134	1147	1161	1177	1194	1212
<b>1000</b>	1284	1290	1299	1310	1323	1338	1355	1373	1393	1414
<b>1100</b>	1467	1475	1485	1497	1512	1529	1549	1569	1592	1617
<b>1200</b>	1651	1659	1670	1685	1701	1721	1742	1766	1791	1819

#### E23 - 260mm depth

	Case Height (mm)									
	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400
<b>Emitter Type</b>	E22									
<b>Case Width (mm)</b>	Output Watts $\Delta t$ 50°C									
<b>500</b>	540	555	568	580	591	601	610	619	627	634
<b>600</b>	811	832	852	870	886	902	916	929	940	951
<b>700</b>	1081	1109	1136	1160	1182	1202	1221	1238	1254	1268
<b>800</b>	1351	1387	1420	1450	1477	1503	1526	1548	1567	1585
<b>900</b>	1621	1664	1704	1740	1773	1803	1831	1857	1881	1902
<b>1000</b>	1891	1942	1988	2030	2068	2104	2136	2167	2194	2219
<b>1100</b>	2162	2219	2271	2320	2364	2404	2442	2476	2508	2536
<b>1200</b>	2432	2496	2555	2610	2659	2705	2747	2786	2821	2854

# Secureguard Style B Overview

All Secureguard LST radiators are supplied complete with a panel radiator, with a choice of a Type 11 (120mm depth casing), a Type 22 (180mm depth) or a Type 33 (240mm depth). All the radiators have a maximum working pressure of 10 bar (13 bar test).

## Features

- Anti-ligature.
- Low surface temperature (LST).
- Robust and tamper resistant 2mm thick fully welded Zintec steel casing.
- Finished in RAL 9016 (Traffic White) antimicrobial paint (other colours available on request at additional cost).
- Easy-fit 2 piece supply (frame and front cover).
- Flat rear edge for sealing the frame to the wall with an anti-pick mastic (supply by others).
- Kick bar at the bottom of the frame, securable to the floor along the length for rigidity.
- Removable front cover for cleaning access. Front cover is interlocking with frame to prevent upwards removal.
- Bull-nose corners on top front edges and 27mm radius edges provide robustness and minimise impact trauma.
- All casing joins visible on the front or top to minimise opportunity for concealment.
- 2.5mm outlet holes on a 4.6mm triangular pitch for ligature resistance with optimum performance to maintain LST criteria.
- 2mm outlet holes on a 4mm triangular pitch to comply with Home Office Police Buildings Design Guide - Custody section PD3.02.14 Grilles (July 2009) are available. N.B. While the majority of the cover is below 43°C, restricted size apertures elevate the grille temperature above the LST criteria.
- Front facing key locks (tamper resistant security screws available on request).
- Choice of internal or external valve options including a unique, slim-fitting anti-ligature external TRV control.
- Bespoke options such as square edges, corner units and continuous casings available upon request.



## Casings

All casings are constructed from 2mm thick fully welded Zintec steel, painted in RAL9016 (Traffic White) with an antimicrobial finish. Other colours are available at additional cost. As standard, the grilles are perforated with 2.5mm diameter holes at 4.6mm centres, in a triangular pitch formation. Each case is also supplied with a removable front cover and 2 front facing key locks, allowing easy access for venting, cleaning and maintenance.

**Style B** cases have a top outlet grille and front facing inlet grille.

## Test and working pressures

All radiators are suitable for maximum test pressure of 13 bar and maximum working pressure of 10 bar.

## Panel radiators

**Type 11** is a single panel single convector. To be installed in 120mm deep casing.

**Type 22** is a double panel double convector. To be installed in 180mm deep casing.

**Type 33** is a triple panel triple convector. To be installed in a 240mm deep casing.

# Secureguard Style B Technical



## Style B Type 11 (Case depth 120mm)

Case Height (mm)	Case Width (mm)																
	700	800	900	1000	1100	1200	1300	1400	1500	1700	1900	2100	2300	2500	2700	2900	3100
	Output Watts $\Delta t$ 50°C																
625	212	266	319	372	425	479	532	585	639	745	852	958	1065	1172	1278	1384	1491
725	256	320	384	448	512	576	641	705	769	897	1026	1154	1283	1411	1539	1668	1796
825	298	373	448	522	597	672	747	821	896	1045	1195	1344	1494	1643	1792	1942	2092
925	337	422	507	591	676	760	-	929	1014	1183	1352	1521	1691	1860	2028	2198	2367
1125	414	517	621	724	828	932	1036	-	1243	1450	1657	1864	2072	2279	2486	2693	2900

## Style B Type 22 (Case depth 180mm)

Case Height (mm)	Case Width (mm)																		
	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2100	2300	2500	2700	2900	3100
	Output Watts $\Delta t$ 50°C																		
625	396	496	595	694	793	892	992	1092	1191	1290	1389	1488	1588	1786	1985	2184	2382	2580	2779
725	477	597	716	836	956	1075	1195	1314	1433	1553	1672	1792	1912	2151	2390	2628	2868	3107	3346
825	556	695	833	972	1112	1251	1390	1528	1668	1807	1946	2085	2224	2502	2780	3058	3336	3614	3892
925	631	789	947	1104	1263	1420	1579	1736	1894	2052	2210	2368	2526	2842	3158	3473	3789	4105	4421
1125	776	971	1165	1360	1554	1748	1943	2136	2331	2525	2720	2914	3108	3497	3886	4274	4663	5052	5440

## Style B Type 33 (Case depth 240mm)

Case Height (mm)	Case Width (mm)																		
	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2100	2300	2500	2700	2900	3100
	Output Watts $\Delta t$ 50°C																		
625	-	-	849	-	1132	-	1416	-	1699	1840	1982	2124	2265	2548	2832	3115	3398	3681	3964
725	-	-	1022	1192	1363	1533	1704	1875	2045	2216	2386	2556	2727	3068	3409	3750	4091	4432	4772
825	-	-	1186	1384	1581	1779	1977	2175	2372	2570	2768	2966	3164	3559	3955	4350	4745	5141	5536
925	894	1117	1341	1564	1788	2012	2236	2459	2683	2906	3130	3353	3577	4024	4472	4919	5366	-	-
1125	1085	1357	1628	1900	2172	2443	2715	2986	3257	3529	3800	4072	4344	4887	5430	-	-	-	-



# Secureguard Style T

## Overview

All Secureguard LST radiators are supplied complete with a panel radiator, with a choice of a Type 11 (120mm depth casing), a Type 22 (180mm depth) or a Type 33 (240mm depth). All the radiators have a maximum working pressure of 10 bar (13 bar test).

## Features

- Anti-ligature.
- Low surface temperature (LST).
- Robust and tamper resistant 2mm thick fully welded Zintec steel casing.
- Finished in RAL 9016 (Traffic White) antimicrobial paint (other colours available on request at additional cost).
- Easy-fit 2 piece supply (frame and front cover).
- Flat rear edge for sealing the frame to the wall with an anti-pick mastic (supply by others).
- Kick bar at the bottom of the frame, securable to the floor along the length for rigidity.
- Removable front cover for cleaning access. Front cover is interlocking with frame to prevent upwards removal.
- Bull-nose corners on top front edges and 27mm radius edges provide robustness and minimise impact trauma.
- All casing joins visible on the front or top to minimise opportunity for concealment.
- 2.5mm outlet holes on a 4.6mm triangular pitch for ligature resistance with optimum performance to maintain LST criteria.
- 2mm outlet holes on a 4mm triangular pitch to comply with Home Office Police Buildings Design Guide - Custody section PD3.02.14 Grilles (July 2009) are available. N.B. While the majority of the cover is below 43°C, restricted size apertures elevate the grille temperature above the LST criteria.
- Front facing key locks (tamper resistant security screws available on request).
- Choice of internal or external valve options including a unique, slim-fitting anti-ligature external TRV control.
- Bespoke options such as square edges, corner units and continuous casings available upon request.



## Casings

All casings are constructed from 2mm thick fully welded Zintec steel, painted in RAL9016 (Traffic White) with an antimicrobial finish. Other colours are available at additional cost. As standard, the grilles are perforated with 2.5mm diameter holes at 4.6mm centres, in a triangular pitch formation. Each case is also supplied with a removable front cover and 2 front facing key locks, allowing easy access for venting, cleaning and maintenance.

**Style T** cases have a solid top with front facing outlet and inlet grilles.

## Test and working pressures

All radiators are suitable for maximum test pressure of 13 bar and maximum working pressure of 10 bar.

## Panel radiators

**Type 11** is a single panel single convactor. To be installed in 120mm deep casing.

**Type 22** is a double panel double convactor. To be installed in 180mm deep casing.

**Type 33** is a triple panel triple convactor. To be installed in a 240mm deep casing.

# Secureguard Style T

## Technical



### Style T Type 11 (Case depth 120mm)

Case Height (mm)	Case Width (mm)																
	700	800	900	1000	1100	1200	1300	1400	1500	1700	1900	2100	2300	2500	2700	2900	3100
	Output Watts $\Delta t$ 50°C																
725	212	266	319	372	425	479	532	585	639	745	852	958	1065	1172	1278	1384	1491
825	256	320	384	448	512	576	641	705	769	897	1026	1154	1283	1411	1539	1668	1796
925	298	373	448	522	597	672	747	821	896	1045	1195	1344	1494	1643	1792	1942	2092
1025	337	422	507	591	676	760	-	929	1014	1183	1352	1521	1691	1860	2028	2198	2367
1225	414	517	621	724	828	932	1036	-	1243	1450	1657	1864	2072	2279	2486	2693	2900

### Style T Type 22 (Case depth 180mm)

Case Height (mm)	Case Width (mm)																		
	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2100	2300	2500	2700	2900	3100
	Output Watts $\Delta t$ 50°C																		
625	-	-	468	-	624	-	780	-	936	1013	1092	1169	1248	1404	1560	1716	1872	2028	2184
725	396	496	595	694	793	892	992	1092	1191	1290	1389	1488	1588	1786	1985	2184	2382	2580	2779
825	477	597	716	836	956	1075	1195	1314	1433	1553	1672	1792	1912	2151	2390	2628	2868	3107	3346
925	556	695	833	972	1112	1251	1390	1528	1668	1807	1946	2085	2224	2502	2780	3058	3336	3614	3892
1025	631	789	947	1104	1263	1420	1579	1736	1894	2052	2210	2368	2526	2842	3158	3473	3789	4105	4421
1225	776	971	1165	1360	1554	1748	1943	2136	2331	2525	2720	2914	3108	3497	3886	4274	4663	5052	5440

### Style T Type 33 (Case depth 240mm)

Case Height (mm)	Case Width (mm)																		
	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2100	2300	2500	2700	2900	3100
	Output Watts $\Delta t$ 50°C																		
625	-	-	664	-	886	-	1108	-	1330	1440	1552	1663	1773	1995	2217	2439	2660	2882	3104
725	-	-	849	-	1132	-	1416	-	1699	1840	1982	2124	2265	2548	2832	3115	3398	3681	3964
825	-	-	1022	1192	1363	1533	1704	1875	2045	2216	2386	2556	2727	3068	3409	3750	4091	4432	4772
925	-	-	1186	1384	1581	1779	1977	2175	2372	2570	2768	2966	3164	3559	3955	4350	4745	5141	5536
1025	894	1117	1341	1564	1788	2012	2236	2459	2683	2906	3130	3353	3577	4024	4472	4919	5366	-	-
1225	1085	1357	1628	1900	2172	2443	2715	2986	3257	3529	3800	4072	4344	4887	5430	-	-	-	-

Visit [www.tuscanfoundry.com](http://www.tuscanfoundry.com) for full details

# Ambiair Fan Convector Overview

Ambiair fan convectors are available in three models; MH/F (Floor Mounted), MH/W (Wall Mounted) and MH/S (Ceiling Mounted). The Ambiair casing is manufactured from 1.2mm steel and is supplied in RAL 9010 Warm White 30% gloss, with pencil proof grilles. (The MH/F floor unit is supplied with a 100mm plinth finished in polyester powder black 10% gloss). Each Ambiair houses a finned tube element with 3/4"

BSPF (female) connections and a manual air vent. The EC fan motor requires a 240 volt supply. All units have a washable G2 (EU2 Filter), with on/off and low/medium fan speed thermostats as well as an adjustable low temperature cut-out thermostat. The Ambiair fan convector has a maximum working pressure of 7 bar (10.5 bar test) and carries a 2-year guarantee against manufacturing defects.

## Heat outputs - all models

Style MH/F Style MH/W Style MH/S	Airflow (l/s)	Output kW	LAT (°C)	Hydraulic Resistance (kPa)	Airflow (l/s)	Output kW	LAT (°C)	Hydraulic Resistance (kPa)	Airflow (l/s)	Output kW	LAT (°C)	Hydraulic Resistance (kPa)
<b>Size</b>	400				600				1000			
<b>Low speed</b>	105	4.3	52	1.86	130	5.2	51	1.31	210	8.6	52	1.45
<b>Medium speed</b>	150	5.9	51	3.37	220	8.5	50	1.25	280	11.1	51	2.35
<b>Weight Kg</b>	45				55				65			
<b>Water Content Litres</b>	0.77				1.03				1.25			
<b>Sound Data Approx NR level at low speed</b>	29				30				40			

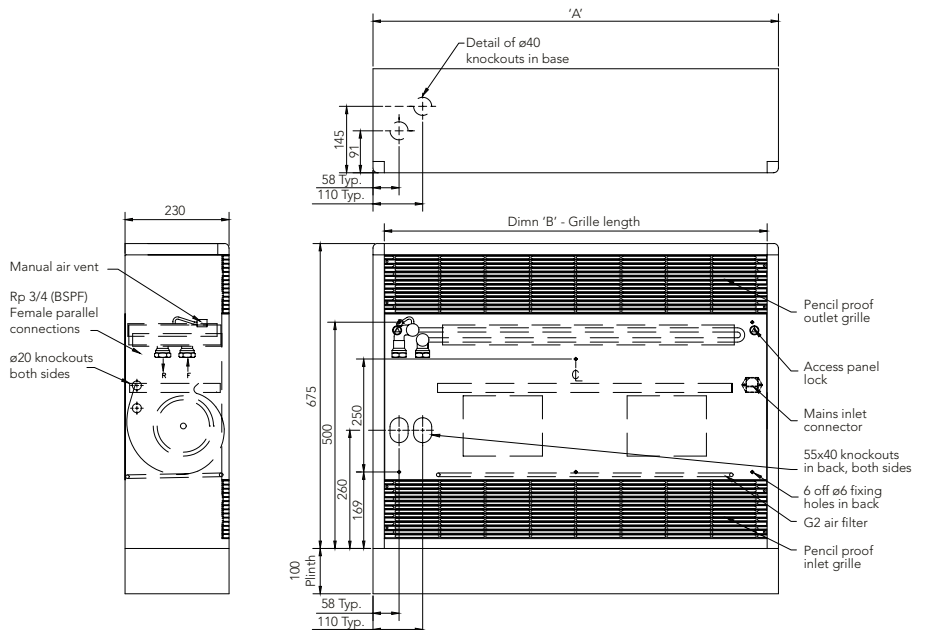
Outputs are based on LPHW 80/70°C and entering air temperature (EAT) 18°C

Leaving air temperatures (LAT) are based on LPHW 80/70°C and entering air temperature (EAT) 18°C

Hydraulic resistance (Hyd Res) is water pressure drop across coil w/o isolating or control valves

## MH/F Floor Mounted Model

Model	A	B
<b>MH/F400</b>	895	843
<b>MH/F600</b>	1195	1143
<b>MH/F1000</b>	1495	1443

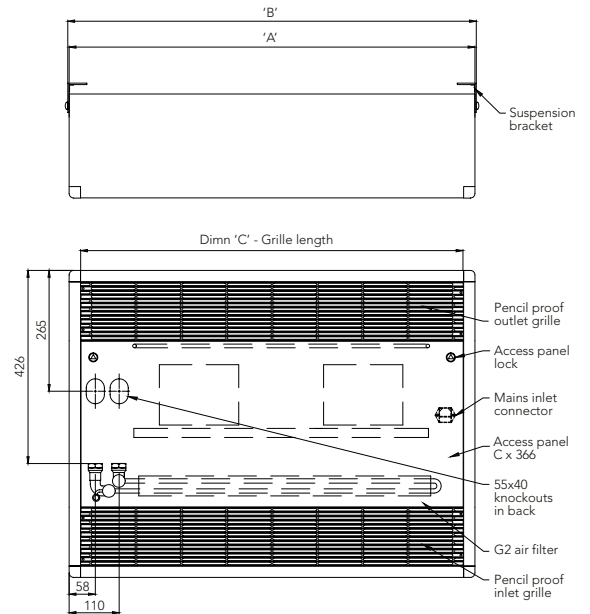
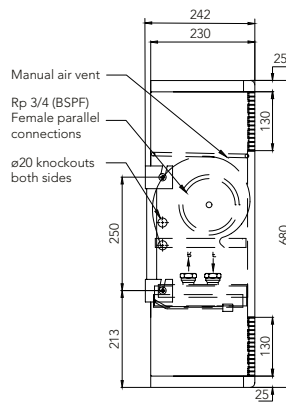


# Ambiair Fan Convectors Technical



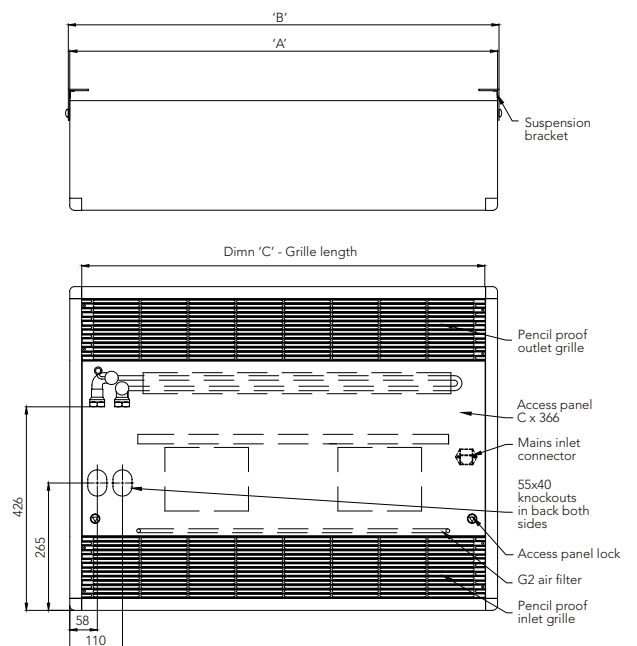
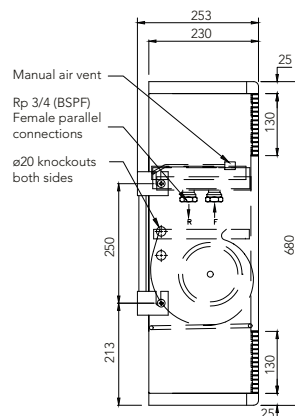
## MH/W Wall Mounted Model

Model	A	B	C
MH/W400	895	902	842
MH/W600	1195	1202	1142
MH/W1000	1495	1502	1442



## MH/S Ceiling Mounted Unit

Model	A	B	C
MH/S400	895	902	842
MH/S600	1195	1202	1142
MH/S1000	1495	1502	1442



# Ambiair Fan Convectors

## Technical

Approximate heat outputs at various mean water temperatures, entering air temperatures and water temperature drops across the coil (refer to page 115 for correction factors).

		Water temperature drop across coil								
		5k		10k		15k		20k		
Model 400	Mean Water (°C)	Entering air temp (°C)	Low Speed	Medium Speed	Low Speed	Medium Speed	Low Speed	Medium Speed	Low Speed	Medium Speed
	Outputs kW									
60	0		4.6	6.4	4.5	6.1	-	-	-	-
	18		3.2	4.4	3.0	4.1	-	-	-	-
	20		3.1	4.2	2.8	3.9	-	-	-	-
65	0		5.1	7.0	4.9	6.7	4.7	6.5	-	-
	18		3.6	5.0	3.4	4.7	3.2	4.4	-	-
	20		3.4	4.7	3.3	4.5	3.0	4.1	-	-
70	0		5.5	7.5	5.3	7.3	5.2	7.1	5.0	6.8
	18		4.0	5.5	3.9	5.3	3.7	5.0	3.5	4.8
	20		3.9	5.3	3.7	5.1	3.5	4.8	3.3	4.5
75	0		5.9	8.1	5.8	7.9	5.6	7.7	5.4	7.4
	18		4.4	6.1	4.3	5.9	4.1	5.7	3.9	5.3
	20		4.3	5.8	4.1	5.7	4.0	5.5	3.7	5.1

		Water temperature drop across coil								
		5k		10k		15k		20k		
Model 600	Mean Water (°C)	Entering air temp (°C)	Low Speed	Medium Speed	Low Speed	Medium Speed	Low Speed	Medium Speed	Low Speed	Medium Speed
	Outputs kW									
60	0		5.6	9.2	5.4	8.8	-	-	-	-
	18		3.9	6.4	3.6	6.0	-	-	-	-
	20		3.7	6.0	3.4	5.6	-	-	-	-
65	0		6.1	10.0	5.9	9.7	5.7	9.4	-	-
	18		4.4	7.1	4.2	6.8	3.8	6.3	-	-
	20		4.2	6.8	4.0	6.5	3.6	6.0	-	-
70	0		6.6	10.8	6.4	10.5	6.2	10.2	6.0	9.9
	18		4.9	8.0	4.7	7.7	4.4	7.2	4.2	6.9
	20		4.7	7.7	4.5	7.3	4.2	6.9	4.0	6.5
75	0		7.1	11.6	7.0	11.4	6.8	11.1	6.6	10.7
	18		5.4	8.8	5.2	8.5	5.0	8.2	4.7	7.7
	20		5.1	8.4	5.0	8.2	4.8	7.9	4.5	7.3

# Ambiair Fan Convectors Technical



Approximate heat outputs at various mean water temperatures, entering air temperatures and water temperature drops across the coil (refer to page 115 for correction factors).

		Water temperature drop across coil								
		5k		10k		15k		20k		
Model 1000	Mean Water (°C)	Entering air temp (°C)	Low Speed	Medium Speed	Low Speed	Medium Speed	Low Speed	Medium Speed	Low Speed	Medium Speed
	Outputs kW									
60	0		9.3	12.0	8.9	11.5	-		-	-
	18		6.5	8.3	6.0	7.8	-		-	-
	20		6.1	7.9	5.7	7.3	-		-	-
65	0		10.1	13.1	9.8	12.7	9.5	12.2	-	-
	18		7.2	9.3	6.9	8.9	6.4	8.2	-	-
	20		6.9	8.9	6.6	8.5	6.0	7.8	-	-
70	0		10.9	14.1	10.7	13.8	10.3	13.3	10.0	12.9
	18		8.1	10.4	7.7	10.0	7.3	9.4	7.0	9.0
	20		7.7	10.0	7.4	9.5	7.0	9.0	6.5	8.4
75	0		11.8	15.2	11.5	14.9	11.3	14.5	10.8	14.0
	18		8.9	11.4	8.6	11.1	8.3	10.7	7.7	10.0
	20		8.5	11.0	8.3	10.7	8.0	10.3	7.4	9.5

## Ambiair Accessories



Remote surface mount on/off switch single switch; can be used with fitted or remote on/off thermostat

Code: ZXMH-02



Remote surface mount manual/off/automatic switch; can be used to override on/off and LTC thermostats

Code: ZXMH-03



Remote surface mount manual/off/automatic and low/medium switch can be used with on/off and low/medium speed thermostats

Code: ZXMH-04



Isolating valves (pair)

Code: ZXMH-01

# Moduline Lightweight Radiant Panels - Overview

Moduline radiant panels are manufactured from aluminium sheet with an extruded aluminium channel bonded to the upper surface. The panels are powder coated in a durable RAL 9010 satin finish. Copper tube is mechanically located with steel spring clips fitted to the rear of the panels. Insulation is fitted to the upper side of the panel with 50mm mineral wool, fully encapsulated in aluminium foil, factory fitted and rated as a Class 0 material. All Moduline radiant panels have a 7 bar maximum working pressure, tested to 12 bar.

**Moduline MCG** - panels can be fitted into a suspended 600mm T-Bar ceiling grid application, (supplied by others) positioned in place of tiles. With 15mm copper upward facing same end connections. Drop rods or wire (supplied by others).

**Moduline MCS** - panels can be fitted directly on to the underside of a ceiling slab or soffit application. Supplied complete with end plates, end brackets and spacer brackets and 15mm copper same end connections. All lengths are nominal - to obtain actual panel length, allow 135mm at each end for end plates and add 80mm for connected panels over 3000mm length.

**Moduline MFS** - panels are for freely suspended application on drop rods or wire (supplied by others) from secondary steelwork. Supplied complete with end plates, end brackets and spacer brackets and 15mm copper same end connections. All lengths are nominal - to obtain actual panel length, allow 135mm at each end for end plates and add 80mm for connected panels over 3000mm length.

**Moduline MWS** - panels are designed for fixing direct on the wall. (Note, if you require a cornice or angled fixture to the wall, this would be priced on application. Full details in writing of fixing would be required prior to pricing). Supplied complete with end plates, end brackets and spacer brackets and 15mm copper same end connections. All lengths are nominal - to obtain actual panel length, allow 135mm at each end for end plates and add 80mm for connected panels over 3000mm length.

**Important Note - ALL** Moduline Panels in excess of 3000mm will be supplied in modules for on-site joining by others. Panels will be supplied with pipe coupling's connectors to join pipe-work, panel joint strips and panel joint clips.

## Features

- Models - Type MCG, MCS, MWS & MFS
- Material - Aluminium
- Finish - RAL 9010 (Satin)
- Panel widths - 590mm
- Nominal lengths - 600, 1200, 1800, 2400, 3000, 3600, 4200, 4800, 5400 & 6000mm
- Nominal outputs - 268-281 watts per linear metre
- Pressure - 7 bar working (12 bar test)
- Warranty - 5 years



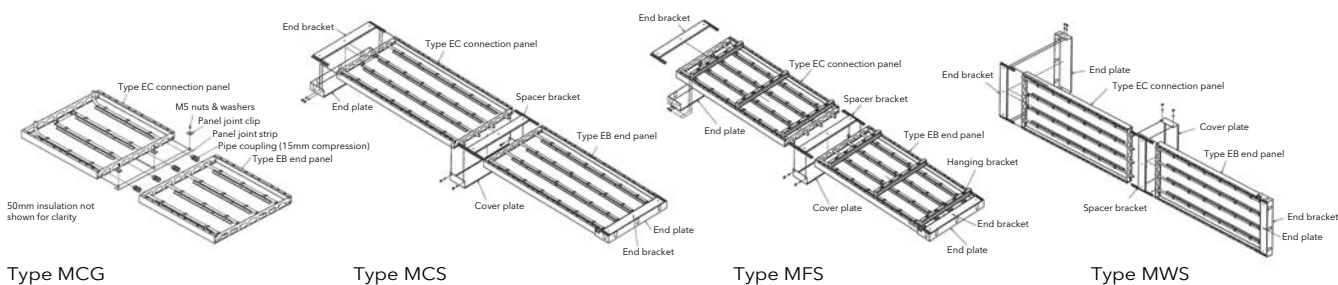
Visit [www.tuscanfoundry.com](http://www.tuscanfoundry.com) for full details

# Moduline Lightweight Radiant Panels - Technical



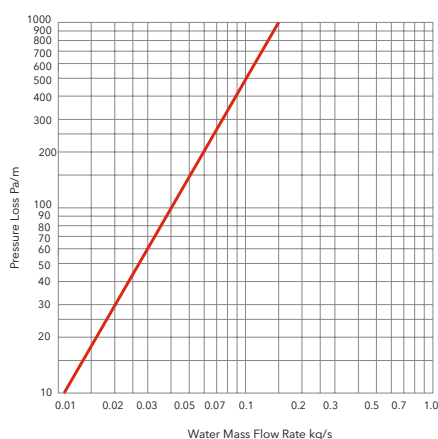
## Technical data

Panel Nominal Length (mm)	Type MCG 4 Tube		Type MCS 4 Tube		Type MFS 4 Tube		Type MWS 4 Tube	
	Watts $\Delta t$ 50°C	Dry Mass kg	Watts $\Delta t$ 50°C	Dry Mass kg	Watts $\Delta t$ 50°C	Dry Mass kg	Watts $\Delta t$ 50°C	Dry Mass kg
600	161	4.3	161	5.8	161	5.8	169	5.8
1200	322	8.5	322	11.5	322	11.5	337	11.5
1800	482	12.8	482	17.3	482	17.3	506	17.3
2400	643	17.0	643	23.0	643	23.0	674	23.0
3000	804	21.3	804	28.8	804	28.8	843	28.8
3600	964	25.6	964	34.6	964	34.6	1012	34.6
4200	1125	29.8	1125	40.3	1125	40.3	1180	40.3
4800	1286	34.1	1286	46.1	1286	46.1	1349	46.1
5400	1447	38.3	1447	51.8	1447	51.8	1517	51.8
6000	1608	42.6	1608	57.6	1608	57.6	1686	57.6



## Hydraulic resistance

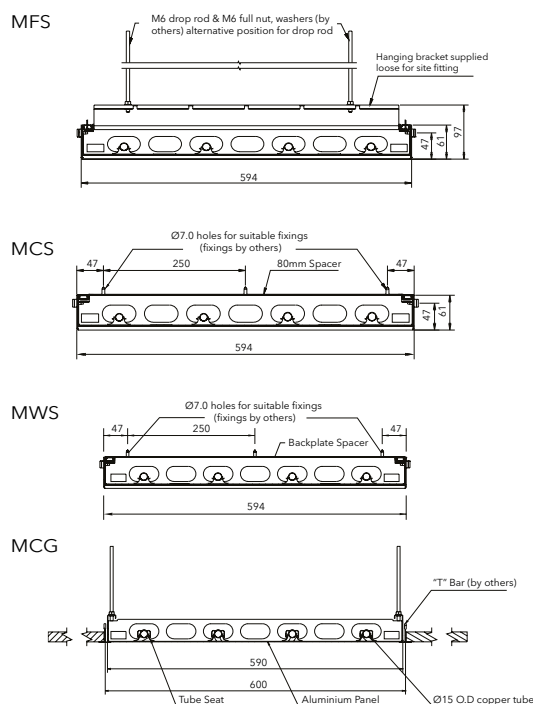
Hydraulic resistance of moduline pipework. Note that water mass flow rates apply for each circuit in the system.



## Notes:

- Thermal outputs are rated as defined in the relevant standard and are both radiant and convective.
- Types MCG, MCS and MFS, ~ 60% of total output is radiant; Style MWS, ~ 53% of total output is radiant.
- Outputs for types MCG, MCS & MFS are rated to BS EN 14037 Parts 1, 2 & 3, BS EN 14037 applies to horizontal mounted panels only.
- Outputs for MWS are rated to BS EN 442 Part 2.
- Dry masses exclude additional angle brackets used on MWS wall mounted applications

## Installation details





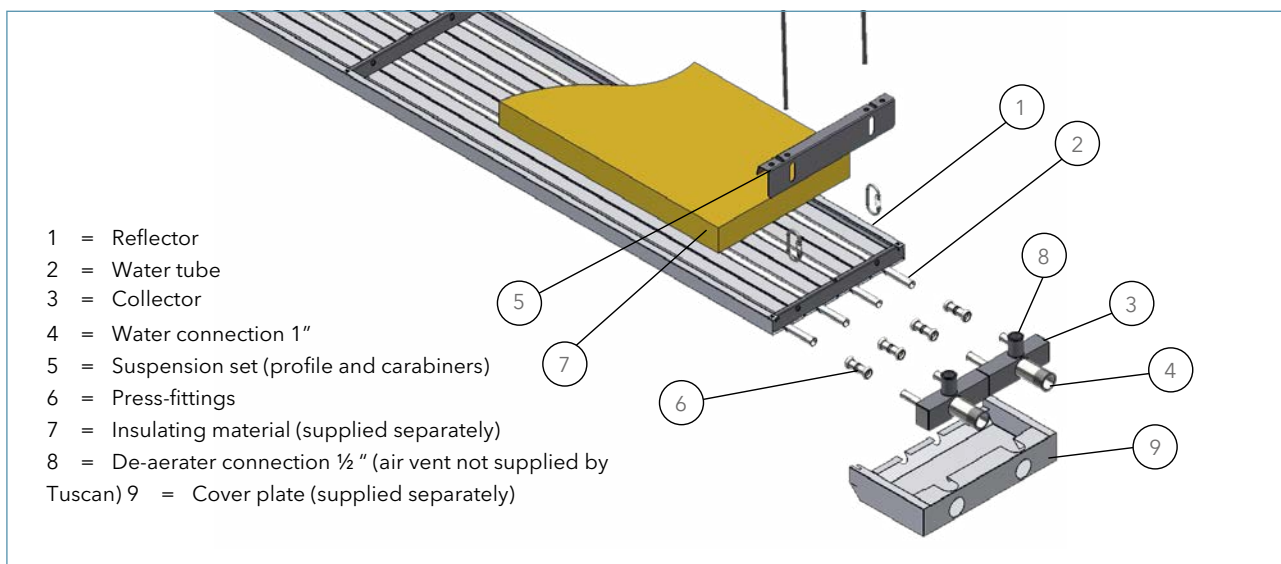
# Aqua Line Radiant Panel - Overview

Aqua Line radiant heating panels are manufactured from 0.75mm cold rolled steel plate with profiled panels. All panels are powder coated in RAL 9010 matt, with other colours available on request. The Aqua Line is a modular system, with 4 panel widths and single lengths of 4m and 6m that can be connected to form lengths up to 80m. The Aqua Line radiant panels are pressure tested for a system pressure of up to 8 bar.

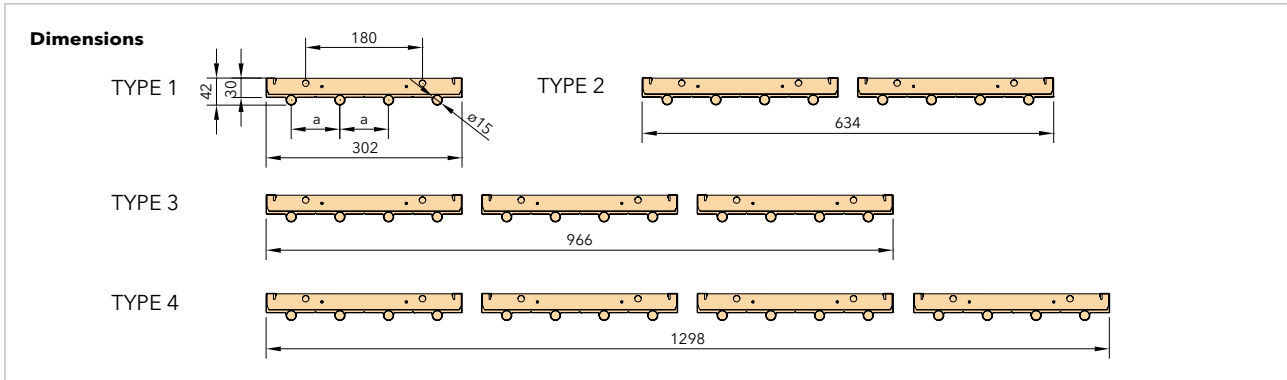
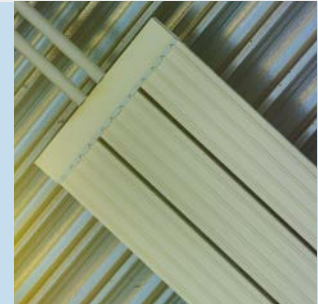


## Features

- Material - Steel (0.75mm)
- Finish - RAL 9010 (matt)  
Other colours available on request
- Panel widths - Up to 1300mm
- Panel lengths - 4000mm and 6000mm
- Fire class Insulation - A2-S1
- Pressure - Tested for up to 8 bar working
- Warranty - 5 years



# Aqua Line Radiant Panel - Technical



Aqua Line		Type 1	Type 2	Type 3	Type 4
Operating weight with water content and insulation (4m)	kg	12.4	24.8	37.2	50
Operating weight with water content and insulation (6m)	kg	18.5	37	55.5	74

Heat output table for panels in watts/m in accordance with EN 14037 1-3



Delta T (Δt) [K]	Type 1	Type 2	Type 3	Type 4
70	264	209	793	1058
69	260	202	780	1040
68	256	195	767	1022
67	251	188	753	1004
66	247	181	740	987
65	242	174	727	969
64	238	167	714	951
63	233	160	700	934
62	229	153	687	916
61	225	146	674	899
60	220	139	661	881
59	216	132	648	864
58	212	125	635	847
57	207	118	622	830
56	203	111	609	812
55	199	104	596	795
54	195	97	584	778
53	190	90	571	761
52	186	83	558	744
51	182	76	545	727
50	178	69	533	710
49	173	62	520	694
48	169	55	508	677
47	165	48	495	660
46	161	41	483	644
45	157	34	470	627
44	153	27	458	611
43	149	20	446	594
42	144	13	433	578
41	140	6	421	562
40	136	-1	409	546
39	132	-8	397	529
38	128	-15	385	513
37	124	-22	373	497
36	120	-29	361	482
35	116	-36	349	466
30	97	-63	291	388
25	78	-90	235	313

Heat output table per two collectors in watts/unit in accordance with EN 14037 1-3



Delta T (Δt) [K]	Type 1	Type 2	Type 3	Type 4
70	90	180	270	360
69	88	177	265	353
68	87	174	260	347
67	85	170	256	341
66	84	167	251	335
65	82	164	246	329
64	81	161	242	322
63	79	158	237	316
62	78	155	233	310
61	76	152	228	304
60	74	149	223	298
59	73	146	219	292
58	71	143	214	286
57	70	140	210	280
56	68	137	205	274
55	67	134	201	268
54	66	131	197	262
53	64	128	192	256
52	63	125	188	250
51	61	122	183	244
50	60	119	179	239
49	58	116	175	233
48	57	113	170	227
47	55	111	166	221
46	54	108	162	215
45	52	105	157	210
44	51	102	153	204
43	50	99	149	198
42	48	96	145	193
41	47	94	140	187
40	45	91	136	182
39	44	88	132	176
38	43	85	128	171
37	41	83	124	165
36	40	80	120	160
35	39	77	116	154
30	32	64	96	128
25	26	51	77	102

Values at a mass flow of 0.04 litres per second / pipe.

# Multisecc

## Introduction





# Multisec

## Overview

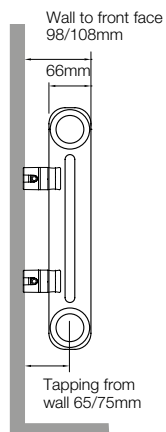
The Multisec radiator is made from 25mm diameter, 1.2mm steel tubes with 1.5mm headers. It is finished in RAL 9016 Traffic White as standard, with other colours available on request. The Multisec can be supplied as a wall mounted radiator, or a floor standing radiator with the option of slip-on, welded or cast feet. Capable of operating up to 10 bar (tested to 13 bar), each Multisec radiator has ½"bsp-f connections, with BBOE as the standard configuration. Alternative configurations and connections are also available (some at extra cost), although these must be specified with each order (see main Multisec sales brochure for more information). The Multisec radiator carries a 5-year guarantee against manufacturing defects.

## Features

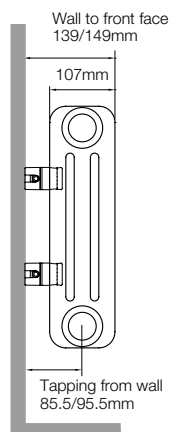
- Types - 2, 3, 4, 5 & 6 Column
- Material - Steel
- Finish - RAL 9016 Traffic White  
Other colours available on request
- Heights - 207-2500mm
- Lengths - Modular (46mm per section)
- Curved models also available
- Bespoke connection options
- Pressure - 10 bar (13 bar test)
- Warranty - 5 years



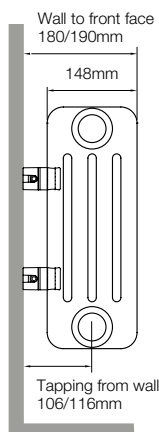
2 Column



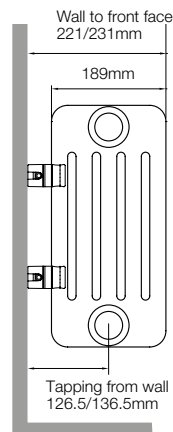
3 Column



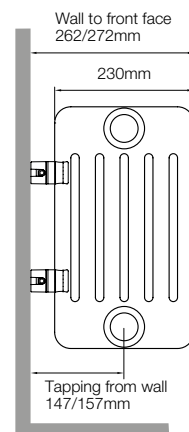
4 Column



5 Column



6 Column



# Multisec Technical



## Technical data per section (46mm width)

### 2 Column - 66mm depth (per section data)

Height mm (H)	Weight (kg)	Water cont. (ltrs)	Max no of sections	Output (W) $\Delta t$ 50°C
207	0.35	0.29	50	17.50
300	0.49	0.37	50	25.60
400	0.63	0.45	50	33.00
500	0.77	0.53	50	40.10
600	0.91	0.61	50	47.10
656	0.99	0.66	50	51.00
750	1.12	0.73	50	57.60
900	1.33	0.85	40	68.10
1000	1.48	0.93	40	75.20
1200	1.76	1.09	35	89.50
1500	2.18	1.33	35	111.40
1800	2.60	1.58	20	134.10
2000	2.89	1.74	20	149.80
2200	3.17	1.90	20	165.90
2500	3.59	2.14	20	190.90

### 5 Column - 189mm depth (per section data)

Height mm (H)	Weight (kg)	Water cont. (ltrs)	Max no of sections	Output (W) $\Delta t$ 50°C
207	0.89	0.70	50	39.70
300	1.24	0.90	50	56.50
400	1.59	1.10	50	72.40
500	1.95	1.30	50	87.70
600	2.30	1.50	50	102.70
656	2.50	1.61	50	111.00
750	2.83	1.80	50	124.80
900	3.36	2.10	28	146.40
1000	3.71	2.30	20	160.60
1200	4.41	2.70	15	188.80
1500	5.47	3.30	15	230.40
1800	6.53	3.91	12	271.60
2000	7.23	4.31	12	299.00
2200	7.94	4.71	12	326.40
2500	9.00	5.31	12	367.40

### 3 Column - 107mm depth (per section data)

Height mm (H)	Weight (kg)	Water cont. (ltrs)	Max no of sections	Output (W) $\Delta t$ 50°C
207	0.53	0.42	50	24.80
300	0.74	0.54	50	34.70
400	0.95	0.66	50	45.10
500	1.16	0.79	50	55.20
600	1.37	0.91	50	65.20
656	1.49	0.97	50	70.80
750	1.69	1.09	50	80.00
900	2.01	1.27	35	94.60
1000	2.22	1.39	35	104.30
1200	2.64	1.63	35	123.50
1500	3.28	1.99	25	151.90
1800	3.91	2.35	20	180.20
2000	4.33	2.59	20	199.00
2200	4.76	2.83	18	217.80
2500	5.39	3.19	18	245.90

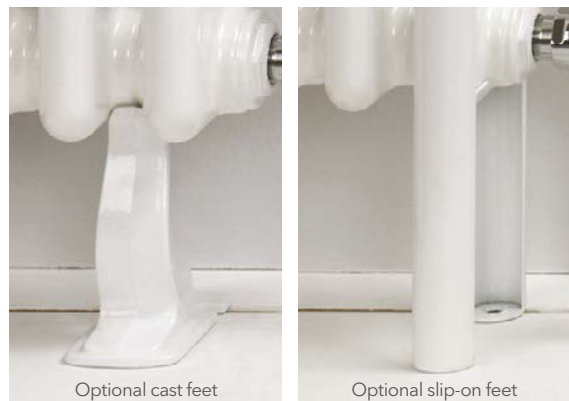
### 6 Column - 230mm depth (per section data)

Height mm (H)	Weight (kg)	Water cont. (ltrs)	Max no of sections	Output (W) $\Delta t$ 50°C
207	1.07	0.80	50	48.70
300	1.49	1.10	50	67.70
400	1.92	1.30	50	87.30
500	2.34	1.60	50	106.20
600	2.76	1.80	50	124.50
656	3.00	1.90	50	134.50
750	3.40	2.20	50	150.90
900	4.03	2.50	23	176.40
1000	4.46	2.80	20	192.90
1200	5.30	3.20	15	224.70
1500	6.57	4.00	15	270.00
1800	7.84	4.70	10	312.70
2000	8.69	5.20	10	339.80
2200	9.53	5.60	10	366.00
2500	10.80	6.40	10	403.40

### 4 Column - 148mm depth (per section data)

Height mm (H)	Weight (kg)	Water cont. (ltrs)	Max no of sections	Output (W) $\Delta t$ 50°C
207	0.71	0.56	50	32.00
300	0.99	0.72	50	46.80
400	1.27	0.88	50	59.80
500	1.55	1.04	50	72.40
600	1.84	1.20	50	84.70
656	1.99	1.29	50	91.60
750	2.26	1.44	50	102.90
900	2.68	1.68	35	120.80
1000	2.96	1.84	35	132.70
1200	3.53	2.17	25	156.20
1500	4.37	2.65	20	191.40
1800	5.22	3.13	20	226.60
2000	5.78	3.45	15	250.30
2200	6.35	3.77	15	274.10
2500	7.19	4.25	15	310.20

### Optional feet



**Note** - Add 100mm to height for models with welded feet.  
Manufacturing Tolerance of +/-0.2mm per section.

Visit [www.tuscanfoundry.com](http://www.tuscanfoundry.com) for full details

# Decoral 97

## Overview

The aluminium Decoral 97 is finished in RAL 9010 Warm White and can operate up to 6 bar maximum working pressure (tested to 8 bar) as standard. A high pressure version that can operate up to 10 bar (13 bar test) is available on request. Radiators are supplied complete with wall brackets and ½" bsp-f connections, with end panels available as an optional extra. The Decoral 97 carries a 10-year guarantee against manufacturing defects.



## Features

- Material - 100% recycled/recyclable aluminium
- Finish - RAL 9010 Warm White  
Other colours available on request
- Heights - 407-757mm
- Widths - 260-2020mm
- Outputs - 277-4063 watts
- Pressure - 6 bar (8 bar test)  
10 bar (13 bar test) available on request
- Warranty - 10 years



# Decoral 97

## Technical

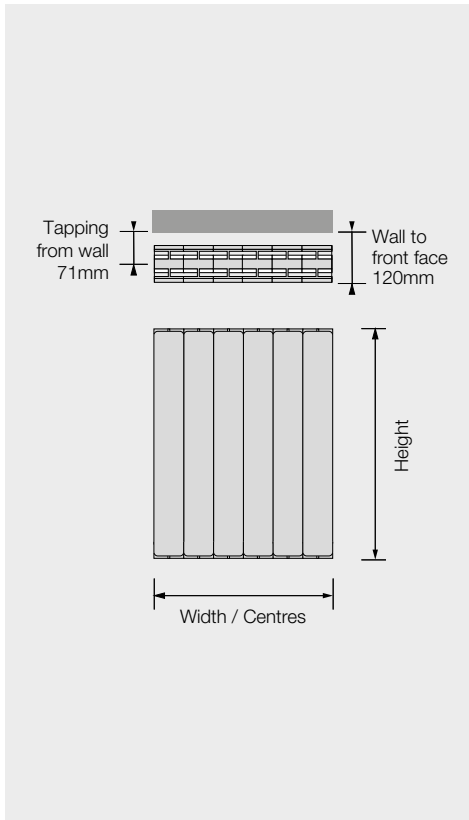


**Technical data per section & linear metre**

	Height (mm)							
	407		557		657		757	
	Per Sec	Per Metre	Per Sec	Per Metre	Per Sec	Per Metre	Per Sec	Per Metre
<b>Weight kg</b>	1.12	14.00	1.34	16.75	1.51	18.88	1.92	24.00
<b>Water cont. litre</b>	0.27	3.38	0.33	4.13	0.36	4.50	0.41	5.13

**Size/model availability**

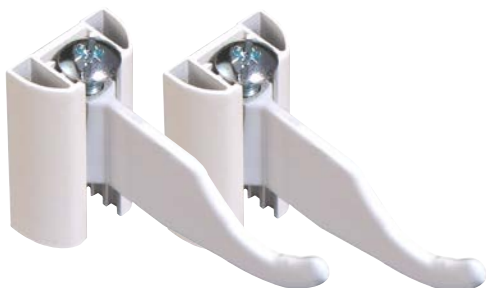
Width (mm) excluding bushes	Sections	Height (mm)			
		407	557	657	757
		Output Watts Δt 50°C			
260	3	277	359	431	488
340	4	370	478	574	650
420	5	462	598	718	813
500	6	554	717	861	975
580	7	647	837	1005	1138
660	8	739	956	1148	1300
740	9	832	1076	1292	1463
820	10	924	1195	1435	1625
900	11	1016	1315	1579	1788
980	12	1109	1434	1722	1950
1060	13	1201	1554	1866	2113
1140	14	1294	1673	2009	2275
1220	15	1386	1793	2153	2438
1300	16	1478	1912	2296	2600
1380	17	1571	2032	2440	2763
1460	18	1663	2151	2583	2925
1540	19	1756	2271	2727	3088
1620	20	1848	2390	2870	3250
1700	21	1940	2510	3014	3413
1780	22	2033	2629	3157	3575
1860	23	2125	2749	3301	3738
1940	24	2218	2868	3444	3900
2020	25	2310	2988	3588	4063



■ Outputs in red are available with 10 bar working pressure 13 bar test on special request/order at additional cost.

**Standard Wall Bracket**

(Horizontal & Vertical models)



Visit [www.tuscanfoundry.com](http://www.tuscanfoundry.com) for full details



# Decoral Vertical Overview

The aluminium Decoral Vertical radiator is finished in RAL 9010 Warm White. The Decoral Vertical radiators have a 10 bar maximum working pressure (13 bar test) and are supplied with wall brackets, plug, air vent and 1/2" bsp-f connections. The Decoral Vertical carries a 10-year guarantee against manufacturing defects.

## Features

- Material - 100% recycled/recyclable aluminium
- Finish - RAL 9010 Warm White  
Other colours available on request.
- Heights - 966-2066mm
- Widths - 260-660mm
- Outputs - 546-2592 watts
- Pressure - 10 bar (13 bar test)
- Warranty - 10 years

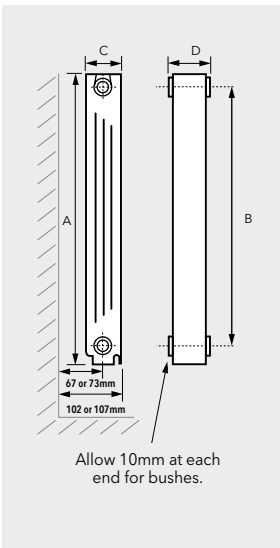


# Decoral Vertical Technical



### Size/model availability

Width (mm)	260	340	420	500	580	660
Sections	3	4	5	6	7	8
Height (mm)	Output Watts Δt 50°C					
966	546	728	910	1092	1274	1456
1066	585	780	975	1170	1365	1560
1266	669	892	1115	1338	1561	1784
1466	750	1000	1250	1500	1750	2000
1666	825	1100	1375	1650	1925	2200
1866	900	1200	1500	1800	2100	2400
2066	972	1296	1620	1944	2268	2592



	Height (mm)						
	966	1066	1266	1466	1666	1866	2066
<b>Height A</b>	966	1066	1266	1466	1666	1866	2066
<b>Centres B</b>	900	1000	1200	1400	1600	1800	2000
<b>Depth C</b>	90	90	90	90	90	90	90
<b>Width D</b>	80	80	80	80	80	80	80
<b>Max Factory Length</b>	8	8	8	8	8	8	8
<b>Max Working Pressure</b>	10	10	10	10	10	10	10
<b>Max Test Pressure</b>	13	13	13	13	13	13	13

# Tuscan 25 Single Overview

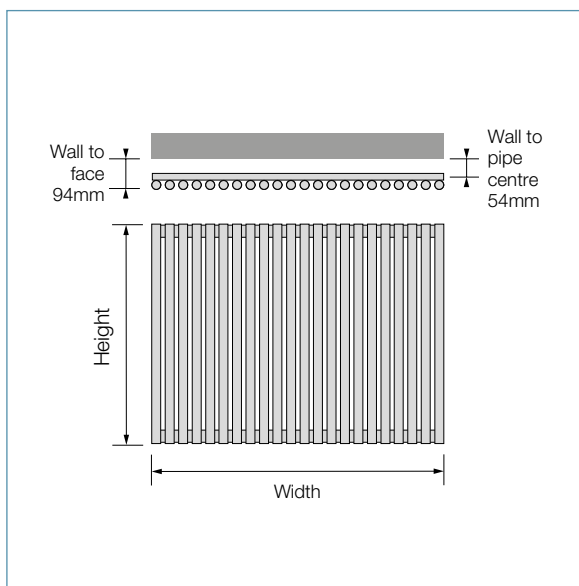
Individual 25mm vertical tubes make this radiator extremely versatile, with tall models perfect for narrow wall spaces, while low versions fit perfectly under windows.

## Features

- Material - Steel
- Finish - RAL 9016 Traffic White  
Other colours available on request
- Heights - 400-2500mm
- Widths - 224-2384mm
- Sizes - 315
- Outputs - 131-4607 watts
- Pressure - 6 bar (10 bar test)
- Warranty - 5 years



Shown here with connection 'B'

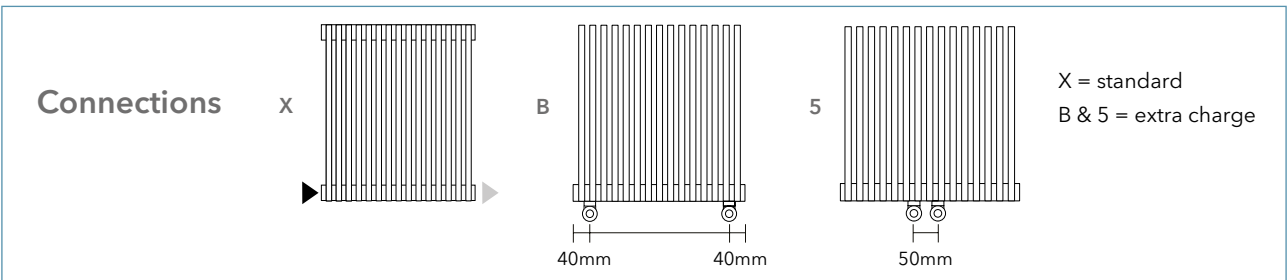


# TUS 25 Single Technical



Size/model availability

Width (mm)	Tubes	Height (mm)									
		400	500	600	800	1000	1200	1500	1800	2000	2500
Output Watts Δt 50°C											
224	6	131	159	187	242	296	350	419	481	530	672
296	8	175	212	250	322	395	467	558	641	706	896
368	10	219	265	312	403	494	584	698	801	883	1120
440	12	263	318	374	484	593	701	838	961	1060	1344
512	14	307	371	437	564	692	818	977	1121	1236	1568
584	16	350	424	499	645	790	934	1117	1282	1413	1792
656	18	394	477	562	725	889	1051	1256	1442	1589	2016
728	20	438	530	624	806	988	1168	1396	1602	1766	2240
800	22	482	583	686	887	1087	1285	1536	1762	1943	2464
872	24	526	636	749	967	1186	1402	1675	1922	2119	2688
944	26	569	689	811	1048	1284	1518	1815	2083	2296	2912
1016	28	613	742	874	1128	1383	1635	1954	2243	2472	3136
1088	30	657	795	936	1209	1482	1752	2094	2403	2649	3360
1160	32	701	848	998	1290	1581	1869	2234	2563	2826	3584
1232	34	745	901	1061	1370	1680	1986	2373	-	-	-
1304	36	788	954	1123	1451	1778	2102	2513	-	-	-
1376	38	832	1007	1186	1531	1877	2219	2652	-	-	-
1448	40	876	1060	1248	1612	1976	2336	2792	-	-	-
1520	42	920	1113	1310	1693	2075	2453	2932	-	-	-
1592	44	964	1166	1373	1773	2174	2570	3071	-	-	-
1664	46	1007	1219	1435	1854	2272	2686	3211	-	-	-
1736	48	1051	1272	1498	1934	2371	2803	3350	-	-	-
1808	50	1095	1325	1560	2015	2470	2920	3490	-	-	-
1880	51	1117	1352	1591	2055	2519	2978	3560	-	-	-
1880	52	1139	1378	1622	2096	2569	3037	3630	-	-	-
1916	53	1161	1405	1654	2136	2618	3095	3699	-	-	-
1952	54	1183	1431	1685	2176	2668	3154	3769	-	-	-
1988	55	1205	1458	1716	2217	2717	3212	3839	-	-	-
2024	56	1226	1484	1747	2257	2766	3270	3909	-	-	-
2060	57	1248	1511	1778	2297	2816	3329	3979	-	-	-
2096	58	1270	1537	1810	2337	2865	3387	4048	-	-	-
2132	59	1292	1564	1841	2378	2915	3446	4118	-	-	-
2168	60	1314	1590	1872	2418	2964	3504	4188	-	-	-
2204	61	1336	1617	1903	2458	3013	3562	4258	-	-	-
2240	62	1358	1643	1934	2499	3063	3621	4328	-	-	-
2276	63	1380	1670	1966	2539	3112	3679	4397	-	-	-
2312	64	1402	1696	1997	2579	3162	3738	4467	-	-	-
2348	65	1424	1723	2028	2620	3211	3796	4537	-	-	-
2384	66	1445	1749	2059	2660	3260	3854	4607	-	-	-
<b>Water content per tube (litres)</b>		0.217	0.257	0.296	0.376	0.455	0.535	0.654	0.773	0.853	1.051

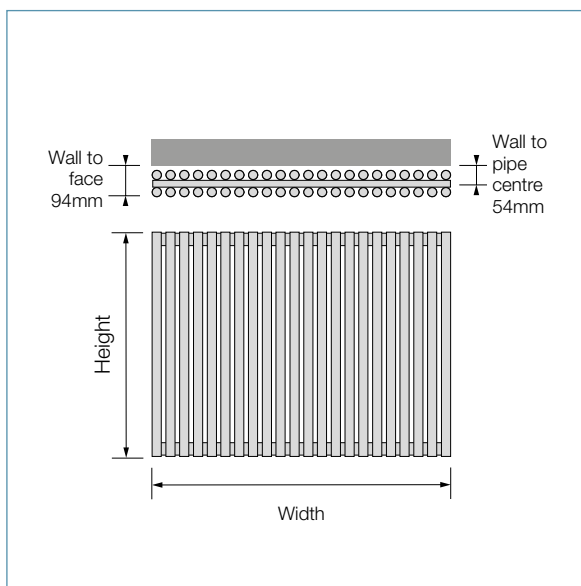


# TUS 25 Double Overview

With double the number of vertical tubes, this powerful radiator offers extra output while still delivering a modern design that is suitable for a range of commercial projects.

## Features

- Material - Steel
- Finish - RAL 9016 Traffic White  
Other colours available on request
- Heights - 400-2500mm
- Lengths - 224-2384mm
- Sizes - 228
- Outputs - 202-4943 watts
- Pressure - 6 bar (10 bar test)
- Warranty - 5 years

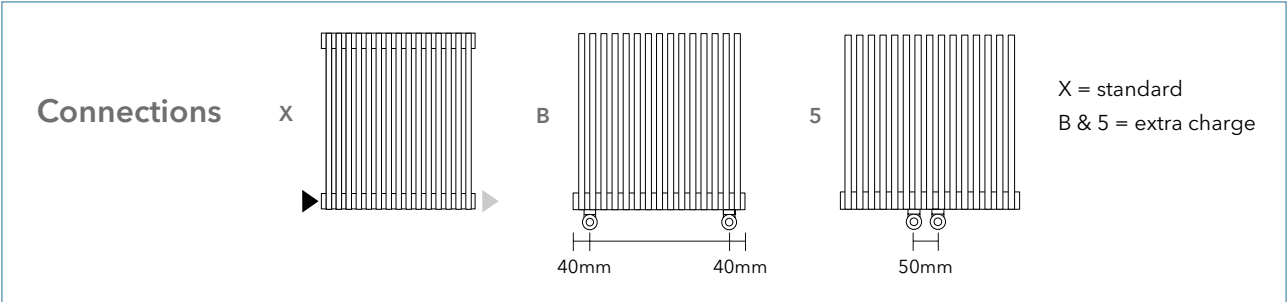


# TUS 25 Double Technical



Size/model availability

Width (mm)	Tubes	Height (mm)									
		400	500	600	800	1000	1200	1500	1800	2000	2500
		Output Watts Δt 50°C									
224	6	202	250	292	372	449	524	633	755	806	970
296	8	269	333	389	496	599	699	844	1006	1074	1293
368	10	336	416	486	620	749	874	1055	1258	1343	1616
440	12	403	499	583	744	899	1049	1266	1510	1612	1939
512	14	470	582	680	868	1049	1224	1477	1761	1880	2262
584	16	538	666	778	992	1198	1398	1688	2013	2149	2586
656	18	605	749	875	1116	1348	1573	1899	2264	2417	2909
728	20	672	832	972	1240	1498	1748	2110	2516	2686	3232
800	22	739	915	1069	1364	1648	1923	2321	2768	2955	3555
872	24	806	998	1166	1488	1798	2098	2532	3019	3223	3878
944	26	874	1082	1264	1612	1947	2272	2743	3271	3492	4202
1016	28	941	1165	1361	1736	2097	2447	2954	-	-	-
1088	30	1008	1248	1458	1860	2247	2622	3165	-	-	-
1160	32	1075	1331	1555	1984	2397	2797	3376	-	-	-
1232	34	1142	1414	1652	2108	2547	2972	3587	-	-	-
1304	36	1210	1498	1750	2232	2696	3146	3798	-	-	-
1376	38	1277	1581	1847	2356	2846	3321	4009	-	-	-
1448	40	1344	1664	1944	2480	2996	3496	4220	-	-	-
1520	42	1411	1747	2041	2604	3146	3671	4431	-	-	-
1592	44	1478	1830	2138	2728	3296	3846	4642	-	-	-
1664	46	1546	1914	2236	2852	3445	-	-	-	-	-
1736	48	1613	1997	2333	2976	3595	-	-	-	-	-
1808	50	1680	2080	2430	3100	3745	-	-	-	-	-
1880	52	1747	2163	2527	3224	3895	-	-	-	-	-
1952	54	1814	2246	2624	3348	4045	-	-	-	-	-
2024	56	1882	2330	2722	3472	4194	-	-	-	-	-
2096	58	1949	2413	2819	3596	4344	-	-	-	-	-
2168	60	2016	2496	2916	3720	4494	-	-	-	-	-
2240	62	2083	2579	3013	3844	4644	-	-	-	-	-
2312	64	2150	2662	3110	3968	4794	-	-	-	-	-
2384	66	2218	2746	3208	4092	4943	-	-	-	-	-
<b>Water content per tube (litres)</b>		0.376	0.455	0.535	0.694	0.853	1.012	1.250	1.489	1.648	2.045

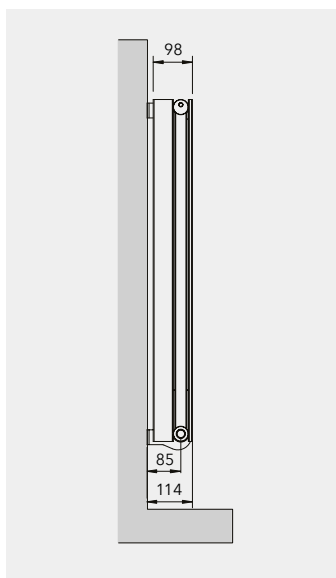


# Energia Overview

With a unique patented design consisting of 50mm tubes, this robust and versatile radiator delivers extremely high outputs.

## Features

- Material - Steel
- Finish - RAL 9016 Traffic White  
Other colours available on request
- Heights - 390-2000mm
- Lengths - 274-1786mm
- Sizes - 144
- Outputs - 347-3858 watts
- Pressure - 5 bar (6.5 bar test)
- Warranty - 5 years



# Energia Technical



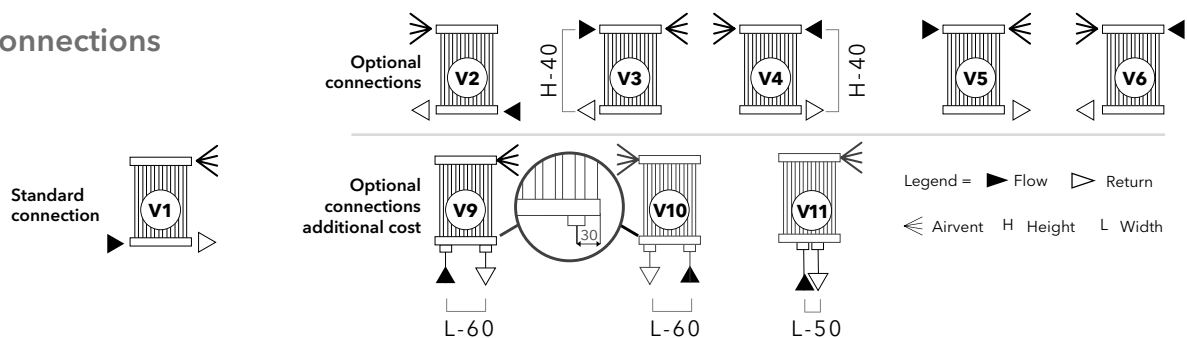
## Technical info per section

	Height (mm)						
	390	540	640	840	940	1800	2000
Dry weight per tube (kg)	1393	1882	2207	2859	3185	5987	6639
Water content per tube (litres)	0.535	0.698	0.806	1.023	1.132	2.065	2.282

## Size/model availability

Tubes	Width (mm)	Height (mm)						
		390	540	640	840	940	1800	2000
		Output Watts Δt 50°C						
5	274	347	443	507	653	699	1250	1378
6	330	417	532	609	784	839	1500	1653
7	386	486	621	710	914	979	1750	1929
8	442	556	709	812	1045	1119	2000	2205
9	498	625	798	913	1175	1259	2250	2480
10	554	695	887	1015	1306	1399	2500	2756
11	610	764	975	1116	1437	1539	2750	3031
12	666	833	1064	1218	1567	1678	3000	3307
13	722	903	1153	1319	1698	1818	3250	3582
14	778	972	1241	1420	1828	1958	3500	3858
15	834	1042	1330	1522	1959	2098	-	-
16	890	1111	1419	1623	2090	2238	-	-
17	946	1181	1507	1725	2220	2378	-	-
18	1002	1250	1596	1826	2351	2518	-	-
19	1058	1320	1684	1928	2481	2657	-	-
20	1114	1389	1773	2029	2612	2797	-	-
21	1170	1459	1862	2131	2743	2937	-	-
22	1226	1528	1950	2232	2873	3077	-	-
23	1282	1597	2039	2334	3004	3217	-	-
24	1338	1667	2128	2435	3134	3357	-	-
25	1394	1736	2216	2536	-	-	-	-
26	1450	1806	2305	2638	-	-	-	-
27	1506	1875	2394	2739	-	-	-	-
28	1562	1945	2482	2841	-	-	-	-
29	1618	2014	2571	2942	-	-	-	-
30	1674	2084	2660	3044	-	-	-	-
31	1730	2153	2748	3145	-	-	-	-
32	1786	2222	2837	3247	-	-	-	-

## Connections





# Galeria

## Overview

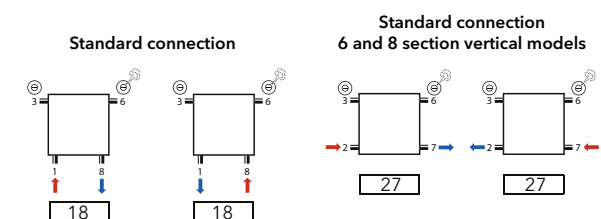
The Galeria is made from 1.5mm steel in the form of 57.5 x 10mm tubes, produced in RAL 9016 Traffic White as standard, with other finishes available on request. This radiator has a 4 bar maximum working pressure (mwp) (tested to 5.2 bar) as standard, while a high pressure version with 10 bar mwp (tested to 13 bar) is also available at additional cost. All Galeria radiators are supplied complete with wall brackets. There are 2 x 1/2" bsp-f downward facing connections (detail 1 and 8) for most models, excluding the 6 and 8 section radiators, which have side connections 2 and 7 as standard unless otherwise specified. The Galeria radiator carries a 10-year guarantee against manufacturing defects.

## Features

- Material - Steel (1.5mm)
- Finish - RAL 9016 Traffic White  
Other colours available on request
- Heights - 400-3000mm
- Widths - 270-3060mm
- Sizes - 480
- Outputs - 330-5510 watts
- Pressure - 4 bar (5.2 bar test)  
10 bar (13 bar test) available on request
- Warranty - 10 years



## Connections



Unless otherwise specified the standard connections are 18 on all models excluding 6 and 8 section radiators which will have connection detail 27

# Galeria Technical



## Galeria Horizontal

Height (mm)	Type	Watts $\Delta t$ 50°C	Weight kg	Water content litres
		Per metre	Per metre	Per metre
400	Single	611	15.78	4.89
	Double	1057	26.89	8.22
500	Single	733	18.89	5.56
	Double	1263	33.33	9.56
600	Single	852	22.00	6.44
	Double	1463	39.78	11.11
700	Single	969	25.11	7.33
	Double	1657	46.22	12.67
800	Single	1087	28.22	8.22
	Double	1852	52.67	14.00
900	Single	1206	31.33	8.89
	Double	2043	58.44	15.56

### Galeria Horizontal lengths

Except for where noted, all models are available in the following lengths (mm):  
540,630,720,810,900,990,1080,1170,1260,1440,1620,1800,1980,2160,2340,2520,2700\*,2880\* and 3060\*

800mm High Double Tube is not available in lengths 2880 and 3060mm

900mm High Double Tube is not available in lengths 2700, 2880 and 3060mm

## Galeria Vertical

Height (mm)	Type	Watts $\Delta t$ 50°C	Weight kg	Water content litres
		Per metre	Per metre	Per metre
1000	Single	1322	34.44	9.78
	Double	2233	65.33	16.89
1200	Single	1563	40.67	11.11
	Double	2611	77.78	20.00
1400	Single	1807	46.89	12.67
	Double	2993	90.00	23.11
1600	Single	2063	52.00	14.00
	Double	3374	102.44	26.22
1800	Single	2322	58.44	16.00
	Double	3759	114.44	30.00
2000	Single	2593	64.89	17.78
	Double	4152	126.67	33.78
2200	Single	2870	71.11	19.78
	Double	4552	138.89	37.33
2400	Single	3141	77.56	21.56
	Double	4944	151.11	41.11
2600	Single	3411	84.00	23.33
	Double	5337	163.33	44.89
2800	Single	3681	90.44	25.33
	Double	5730	175.33	48.67
3000	Single	3952	96.89	27.11
	Double	6122	187.56	52.44

### Galeria Vertical lengths

Except for where noted, all models are available in the following lengths (mm):

270,360,450,540,630,720,810,900,990\*,1080\*,1170\*1260\*

2000mm High Double Tube is not available in lengths 1260mm

2200mm High Double Tube is not available in lengths 1170 and 1260mm

2400 and 2600mm High Double Tube is not available in lengths 1080, 1170 and 1260mm

2800 and 3000mm High Double Tube is not available in lengths 990, 1080, 1170 and 1260mm

Visit [www.tuscanfoundry.com](http://www.tuscanfoundry.com) for full details

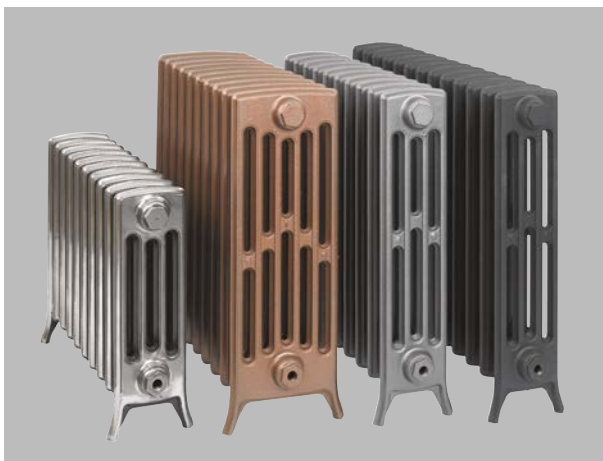
# Cast Iron



Ionic in Polished finish



Ionic in Bronze finish



Ionic



Burlington in Dark Old Penny finish



Blenheim in Light Old Penny finish



Clasico in Gun Metal finish



Liberty in Pewter finish



Liberty in Pewter finish



Burlington in Dark Old Penny finish



Blenheim in Light Old Penny finish

# Ionic Overview

The Ionic is a cast iron radiator supplied in Umber Grey Primer as standard that requires over painting, with painted finishes available on request. The Ionic radiator has a maximum working pressure of 6 bar (7.8 bar test). Integral feet and wall ties are supplied as standard, while a wall mounted version can also be specified at no additional cost. All radiators are supplied with 1/2" bsp-f

(BBOE) connections, 3/4" or 1" connections, while TBOE or TBSE connections are also available (to be specified at time of order). The Ionic radiator carries a 10-year guarantee against manufacturing defects.

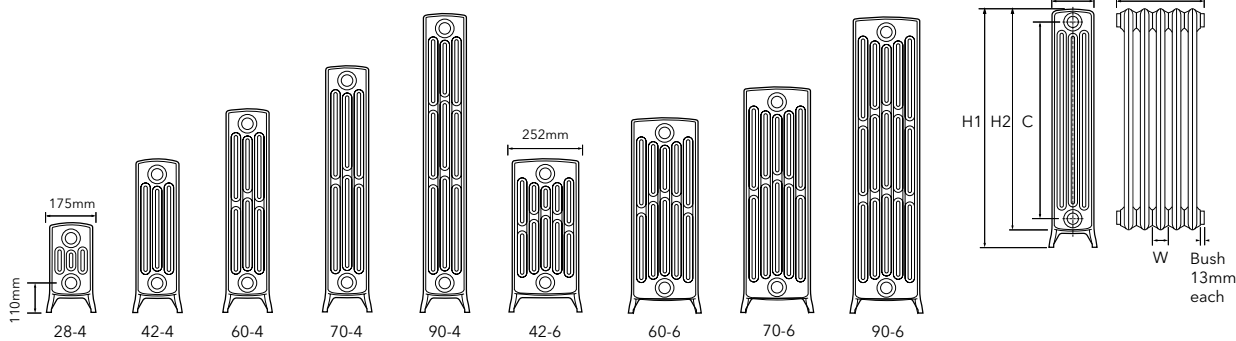
## Features

- Types - 4 & 6 Column
- Material - Cast iron
- Finish - Primer (Umber Grey)
- Heights - 357-960mm
- Widths - Modular
- Depths - 4 Column: 144mm  
6 Column: 221mm
- Pressure - 6 bar (7.8 bar test)
- Warranty - 10 years



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

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



# Ionic Technical



## Technical info per section

	Model 28/4	Model 42/4	Model 60/4	Model 70/4	Model 90/4	Model 42/6	Model 60/6	Model 70/6	Model 90/6
Height with foot (mm)	357	475	660	760	960	485	660	760	960
Height without foot (mm)	300	415	600	700	900	425	600	700	900
Columns deep	4	4	4	4	4	6	6	6	6
Watts $\Delta t$ 50°C	43.6	65.1	93.0	107.8	138.7	95.5	133.0	151	197
Weight (kg)	2.40	3.50	5.30	5.90	7.50	5.80	7.74	9.92	13.92
Water content (litres)	0.35	0.51	0.85	0.97	1.10	0.85	1.20	1.4	1.5
Maximum factory built sections #	20	20	17	17	17	17	17	15	10

# A joining tool is required for on-site assembly for longer lengths than the factory maximum number of sections.

## Size/model availability

Sections	Width (mm) excluding bushes	Model 28/4	Model 42/4	Model 60/4	Model 70/4	Model 90/4	Model 42/6	Model 60/6	Model 70/6	Model 90/6
		Output Watts $\Delta t$ 50°C								
3	180	131	195	279	323	416	287	399	453	591
4	240	174	260	372	431	555	382	532	604	788
5	300	218	326	465	539	694	478	665	755	985
6	360	262	391	558	647	832	573	798	906	1182
7	420	305	456	651	755	971	669	931	1057	1379
8	480	349	521	744	862	1110	764	1064	1208	1576
9	540	392	586	837	970	1248	860	1197	1359	1773
10	600	436	651	930	1078	1387	955	1330	1510	1970
11	660	480	716	1023	1186	1526	1051	1463	1661	2167
12	720	523	781	1116	1294	1664	1146	1596	1812	2364
13	780	567	846	1209	1401	1803	1242	1729	1963	2561
14	840	610	911	1302	1509	1942	1337	1862	2114	2758
15	900	654	977	1395	1617	2081	1433	1995	2265	2955
16	960	698	1042	1488	1725	2219	1528	2128	2416	3152
17	1020	741	1107	1581	1833	2358	1624	2261	2567	3349
18	1080	785	1172	1674	1940	2497	1719	2394	2718	3546
19	1140	828	1237	1767	2048	2635	1815	2527	2869	3743
20	1200	872	1302	1860	2156	2774	1910	2660	3020	3940
21	1260	916	1367	1953	2264	2913	2006	2793	3171	4137
22	1320	959	1432	2046	2372	3051	2101	2926	3322	4334
23	1380	1003	1497	2139	2479	3190	2197	3059	3473	4531
24	1440	1046	1562	2232	2587	3329	2292	3192	3624	4728
25	1500	1090	1628	2325	2695	3468	2388	3325	3775	4925
26	1560	1134	1693	2418	2803	3606	2483	3458	3926	5122
27	1620	1177	1758	2511	2911	3745	2579	3591	4077	5319
28	1680	1221	1823	2604	3018	3884	2674	3724	4228	5516
29	1740	1264	1888	2697	3126	4022	2770	3857	4379	5713
30	1800	1308	1953	2790	3234	4161	2865	3990	4530	5910
31	1860	1352	2018	2883	3342	4300	2961	4123	4681	6107
32	1920	1395	2083	2976	3450	4438	3056	4256	4832	6304
33	1980	1439	2148	3069	3557	4577	3152	4389	4983	6501
34	2040	1482	2213	3162	3665	4716	3247	4522	5134	6698
35	2100	1526	2279	3255	3773	4855	3343	4655	5285	6895
36	2160	1570	2344	3348	3881	4993	3438	4788	5436	7092
37	2220	1613	2409	3441	3989	5132	3534	4921	5587	7289
38	2280	1657	2474	3534	4096	5271	3629	5054	5738	7486
39	2340	1700	2539	3627	4204	5409	3725	5187	5889	7683
40	2400	1744	2604	3720	4312	5548	3820	5320	6040	7880

# Victorian Overview

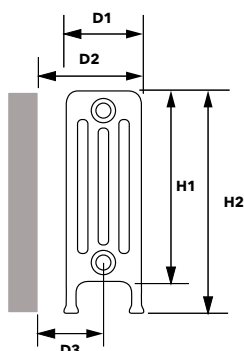
The Victorian is made from cast iron and supplied in white primer as standard that requires over painting, while painted finishes are available on request. The Victorian radiator has a maximum working pressure of 6 bar (7.8 bar test). Feet and wall ties are supplied as standard, while a wall mounted version can also be specified at no additional cost. All radiators are supplied with 1/2" bsp-f (BBOE) connections - 3/4" connections and TBOE or TBSE configurations are also available (to be specified at the time of order). The Victorian radiator carries a 10-year guarantee against manufacturing defects.

Victorian is supplied as standard with integrated feet and all fixing/ties included in the price. Should you require the loose feet or wall mounted version this must be stated when ordering. Valves are not included and must be ordered separately.



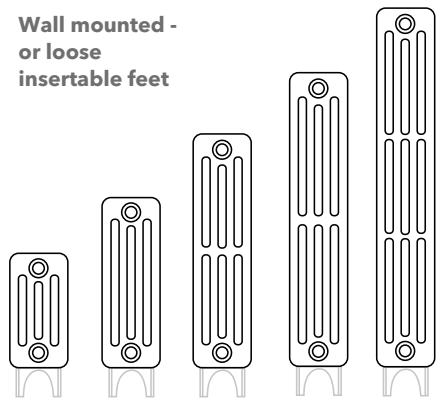
## Features

- Types - 4 Column
- Material - Cast iron
- Finish - Primer (White)
- Heights - 353-935mm
- Lengths - Modular
- Depth - 140mm
- Pressure - 6 bar (7.8 bar test)
- Warranty - 10 years

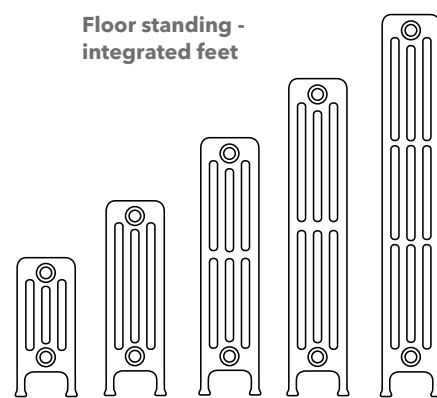


All information is per section

Wall mounted - or loose insertable feet



Floor standing - integrated feet



Model / Code	C33/4-B	C46/4-B	C61/4-B	C80/4-B	C95/4-B	C33/4/F	C46/4/F	C61/4/F	C80/4/F	C95/4/F
Height - (mm) - H1	288	420	570	720	870	353	485	635	785	935
Height With Optional Feet (mm) - H2	353	485	635	785	935	-	-	-	-	-
Depth (mm) - D1	140	140	140	140	140	140	140	140	140	140
Depth (Wall To Face) (mm) - D2	172 or 182	172 or 182	172 or 182	172 or 182	172 or 182	172 or 182	172 or 182	172 or 182	172 or 182	172 or 182
Pipe Centres From Wall (mm) - D3	102 or 112	102 or 112	102 or 112	102 or 112	102 or 112	102 or 112	102 or 112	102 or 112	102 or 112	102 or 112

# Victorian Technical



## Technical info per section

	Model V33/4	Model V46/4	Model V61/4	Model V80/4	Model V95/4
Height with foot (mm)	353	485	636	785	935
Height without foot (mm)	288	420	570	720	870
Columns deep	4	4	4	4	4
Section width (mm)	50	50	50	55	55
Watts $\Delta t$ 50°C	40.8	58.2	75.4	98.3	116.4
Weight (kg)	2.58	3.19	4.19	5.17	6.54
Water content (litres)	0.40	0.49	0.60	0.85	0.97
Maximum factory built sections #	20	20	20	20	17
Maximum number of sections	28	40	40	40	40

# A joining tool is required for on-site assembly for longer lengths than the factory maximum number of sections.

## Size/model availability

Sections	Width (mm) excluding bushes	Model V33/4	Model V46/4	Model V61/4
		Output Watts $\Delta t$ 50°C		
3	150	122	175	226
4	200	163	233	302
5	250	204	291	377
6	300	245	349	452
7	350	286	407	528
8	400	326	466	603
9	450	367	524	679
10	500	408	582	754
11	550	449	640	829
12	600	490	698	905
13	650	530	757	980
14	700	571	815	1056
15	750	612	873	1131
16	800	653	931	1206
17	850	694	989	1282
18	900	734	1048	1357
19	950	775	1106	1433
20	1000	816	1164	1508
21	1050	857	1222	1583
22	1100	898	1280	1659
23	1150	938	1339	1734
24	1200	979	1397	1810
25	1250	1020	1455	1885
26	1300	1061	1513	1960
27	1350	1102	1571	2036
28	1400	1142	1630	2111
29	1450	-	1688	2187
30	1500	-	1746	2262
31	1550	-	1804	2337
32	1600	-	1862	2413
33	1650	-	1921	2488
34	1700	-	1979	2564
35	1750	-	2037	2639
36	1800	-	2095	2714
37	1850	-	2153	2790
38	1900	-	2212	2865
39	1950	-	2270	2941
40	2000	-	2328	3016

Width (mm) excluding bushes	Model V80/4	Model V95/4
	Output Watts $\Delta t$ 50°C	
165	295	349
220	393	466
275	492	582
330	590	698
385	688	815
440	786	931
495	885	1048
550	983	1164
605	1081	1280
660	1180	1397
715	1278	1513
770	1376	1630
825	1475	1746
880	1573	1862
935	1671	1979
990	1769	2095
1045	1868	2212
1100	1966	2328
1155	2064	2444
1210	2163	2561
1265	2261	2677
1320	2359	2794
1375	2458	2910
1430	2556	3026
1485	2654	3143
1540	2752	3259
1595	2851	3376
1650	2949	3492
1705	3047	3608
1760	3146	3725
1815	3244	3841
1870	3342	3958
1925	3441	4074
1980	3539	4190
2035	3637	4307
2090	3735	4423
2145	3834	4540
2200	3932	4656



# Nouveau Overview

The Nouveau is made from cast iron and supplied in Umber Grey Primer as standard that requires over painting, with painted finishes available on request. The Nouveau radiator has a maximum working pressure of 6 bar (7.8 bar test). Feet and wall ties are supplied as standard.

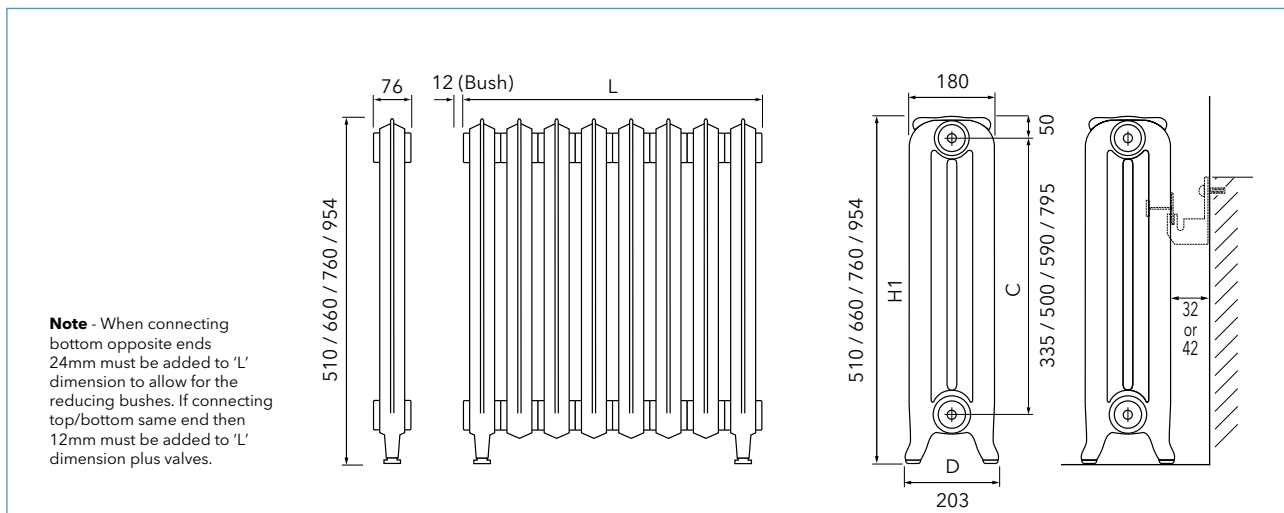
All radiators are supplied with 1/2" bsp-f (BBOE) connections, 3/4" or 1" connections, while TBOE or TBSE connections are also available (to be specified at time of order). The Liberty radiator carries a 10-year guarantee against manufacturing defects.

## Features

- Types - 2 Column
- Material - Cast iron
- Finish - Primer (Umber Grey)
- Heights - 540-954mm
- Widths - Modular
- Depths - 203mm
- Pressure - 6 bar (7.8 bar test)
- Warranty - 10 years



Shown here in Pewter finish with Kentwell chrome thermostatic valves and chrome pipe sleeves.



# Nouveau Technical



## Technical info per section

	Model LIB 510	Model LIB 660	Model LIB 760	Model LIB 954
Height with foot (mm)	510	660	760	954
Watts $\Delta t$ 50°C	74	111	121	151
Weight (kg)	6.60	10.20	11.00	13.70
Water content (litres)	1.83	2.30	2.60	3.30
Maximum factory built sections #	15	15	15	15

# A joining tool is required for on-site assembly for longer lengths than the factory maximum number of sections.

## Size/model availability

Sections	Width (mm) excluding bushes	Model LIB 510	Model LIB 660	Model LIB 760	Model LIB 954
		Output Watts $\Delta t$ 50°C			
3	228	222	333	363	453
4	304	296	444	484	604
5	380	370	555	605	755
6	456	444	666	726	906
7	532	518	777	847	1057
8	608	592	888	968	1208
9	684	666	999	1089	1359
10	760	740	1110	1210	1510
11	836	814	1221	1331	1661
12	912	888	1332	1452	1812
13	988	962	1443	1573	1963
14	1064	1036	1554	1694	2114
15	1140	1110	1665	1815	2265
16	1216	1184	1776	1936	2416
17	1292	1258	1887	2057	2567
18	1368	1332	1998	2178	2718
19	1444	1406	2109	2299	2869
20	1520	1480	2220	2420	3020
21	1596	1554	2331	2541	3171
22	1672	1628	2442	2662	3322
23	1748	1702	2553	2783	3473
24	1824	1776	2664	2904	3624
25	1900	1850	2775	3025	3775
26	1976	1924	2886	3146	3926
27	2052	1998	2997	3267	4077
28	2128	2072	3108	3388	4228
29	2204	2146	3219	3509	4379
30	2280	2220	3330	3630	4530
31	2356	2294	3441	3751	4681
32	2432	2368	3552	3872	4832
33	2508	2442	3663	3993	4983
34	2584	2516	3774	4114	5134
35	2660	2590	3885	4235	5285
36	2736	2664	3996	4356	5436
37	2812	2738	4107	4477	5587
38	2888	2812	4218	4598	5738
39	2964	2886	4329	4719	5889
40	3040	2960	4440	4840	6040

# Blenheim

## Overview

The Blenheim is made from cast iron and supplied in Umber Grey Primer as standard that requires over painting, with painted finishes available on request. The Blenheim radiator has a maximum working pressure of 6 bar (7.8 bar test). Feet and wall ties are supplied as standard. All radiators are supplied with 1/2" bsp-f

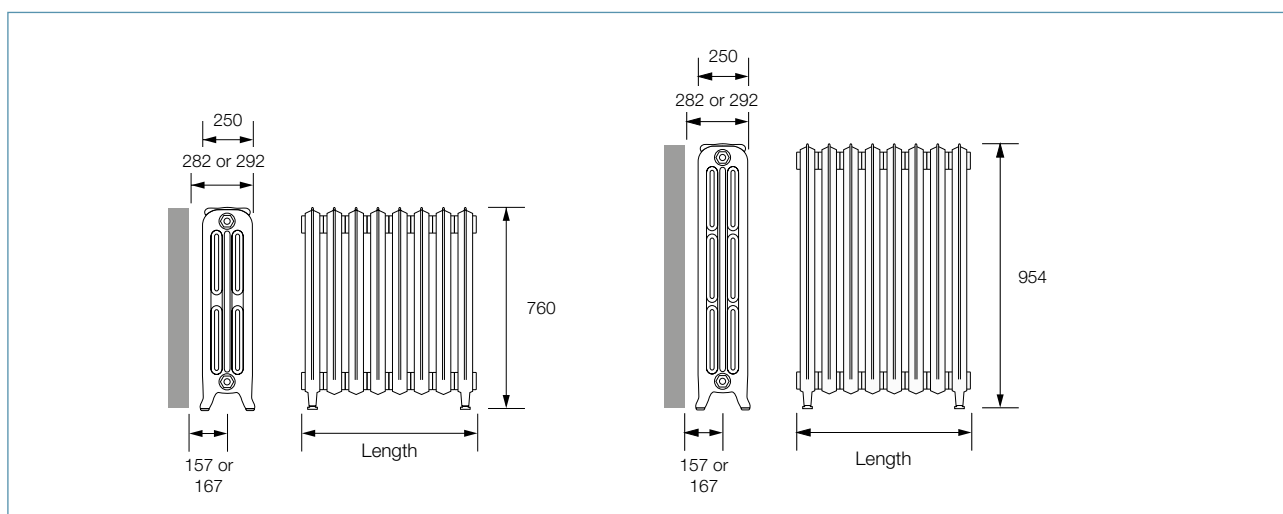
(BBOE) connections, 3/4" or 1" connections, while TBOE or TBSE connections are also available (to be specified at time of order). The Blenheim radiator carries a 10-year guarantee against manufacturing defects.

## Features

- Types - 3 Column
- Material - Cast iron
- Finish - Primer (Umber Grey)
- Heights - 760 & 954mm
- Widths - Modular
- Depths - 250mm
- Pressure - 6 bar (7.8 bar test)
- Warranty - 10 years



760mm high model shown here in Light Old Penny finish with Nostalgia brass thermostatic valves and traditional brass pipe sleeves.



# Blenheim

## Technical



### Technical info per section

	Scrolled Model BLS 760	Scrolled Model BLS 954
Height with foot (mm)	760	954
Watts $\Delta t$ 50°C	180	219
Weight (kg)	12.50	16.50
Water content (litres)	3.00	3.50
Maximum factory built sections #	15	10

# A joining tool is required for on-site assembly for longer lengths than the factory maximum number of sections.

### Size/model availability

Sections	Width (mm) excluding bushes	Scrolled Model BLS 760	Scrolled Model BLS 954
		Output Watts $\Delta t$ 50°C	
3	234	540	657
4	312	720	876
5	390	900	1095
6	468	1080	1314
7	546	1260	1533
8	624	1440	1752
9	702	1620	1971
10	780	1800	2190
11	858	1980	2409
12	936	2160	2628
13	1014	2340	2847
14	1092	2520	3066
15	1170	2700	3285
16	1248	2880	3504
17	1326	3060	3723
18	1404	3240	3942
19	1482	3420	4161
20	1560	3600	4380
21	1638	3780	4599
22	1716	3960	4818
23	1794	4140	5037
24	1872	4320	5256
25	1950	4500	5475
26	2028	4680	5694
27	2106	4860	5913
28	2184	5040	6132
29	2262	5220	6351
30	2340	5400	6570
31	2418	5580	6789
32	2496	5760	7008
33	2574	5940	7227
34	2652	6120	7446
35	2730	6300	7665
36	2808	6480	7884
37	2886	6660	8103
38	2964	6840	8322
39	3042	7020	8541
40	3120	7200	8760

# Burlington Overview

The Burlington is made from cast iron and supplied in Black Primer finish as standard, while painted finishes are also available at additional cost. The Burlington radiator has a maximum working pressure of 6 bar (7.8 bar test). Integral feet and wall ties are supplied as standard. All radiators are supplied with ½" bsp-f (BBOE) connections, ¾" or 1" connections, while TBOE or TBSE

connections are also available (to be specified at time of order). The Burlington carries a 10-year guarantee against manufacturing defects.

## Features

- Types - 2 Column
- Material - Cast iron
- Finish - Primer (Black)
- Heights - 838mm
- Lengths - Modular
- Depths - 214mm
- Pressure - 6 bar (7.8 bar test)
- Warranty - 10 years



Shown here in Dark Old Penny finish with Chartwell brass thermostatic valves and traditional brass pipe sleeves.

# Burlington Technical



## Size/model availability

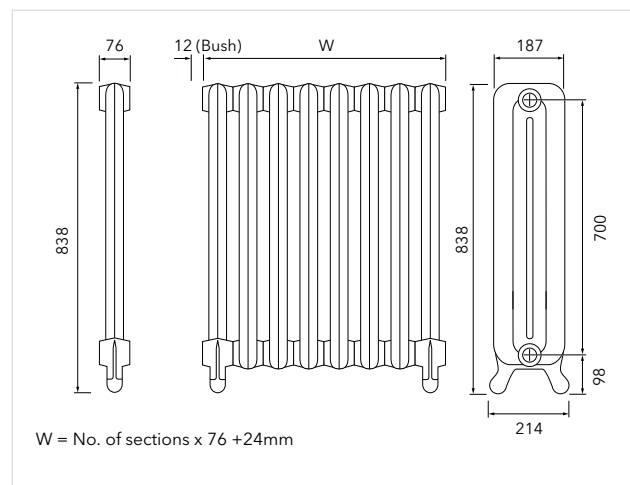
Sections	Width (mm) excluding bushes	Output Watts $\Delta t$ 50°C
3	228	408
4	304	544
5	380	681
6	456	817
7	532	953
8	608	1089
9	684	1225
10	760	1361
11	836	1497
12	912	1633
13	988	1769
14	1064	1905
15	1140	2042
16	1216	2178
17	1292	2314
18	1368	2450
19	1444	2586
20	1520	2722
21	1596	2858

Sections	Width (mm) excluding bushes	Output Watts $\Delta t$ 50°C
22	1672	2994
23	1748	3130
24	1824	3266
25	1900	3403
26	1976	3539
27	2052	3675
28	2128	3811
29	2204	3947
30	2280	4083
31	2356	4219
32	2432	4355
33	2508	4491
34	2584	4627
35	2660	4764
36	2736	4900
37	2812	5036
38	2888	5172
39	2964	5308
40	3040	5444

## Technical info per section

	Model BUR 838
Height with foot (mm)	838
Watts $\Delta t$ 50°C	136.1
Weight (kg)	12.20
Water content (litres)	2.90
Maximum factory built sections #	15

# A joining tool is required for on-site assembly for longer lengths than the factory maximum number of sections.



# Space Bow Fronted Overview

## Features

- Types - Central Heating, Dual Fuel & Electric
- Material - 22mm mild steel tubing
- Finishes - RAL 9016 Traffic White or Chrome
- Heights - 800, 1000, 1200, 1600 & 1800mm
- Widths - 300, 400, 500 & 600mm
- Depths - 85-105mm wall to face
- Outputs - 222-1094 watts
- Pressure - 6 bar (10 bar test)
- Warranty - 5 years

The Space Bow towel rail is made from steel. It is available in either chrome plated or RAL 9016 Traffic White finish and comes complete with wall brackets, plug and air vent. The Space has a 6 bar maximum working pressure (tested to 10 bar), is supplied with 1/2" bsp-f connections and carries a 5 year warranty against manufacturing defects.

Space Dual Fuel models are supplied with an electric element (loose) with two chrome tee pieces to provide symmetrical connections with either a standard IP64 rated or Smart IP44 rated element as specified. Elements carry a 2-year guarantee against manufacturing defects which requires a 240V single phase connection.

Space Electric models are supplied factory filled and tested, with the element fitted to the right hand side, unless otherwise specified. Towel rails are fitted with either a standard IP64 rated element or a Smart IP44 rated element, depending on the specification. Elements carry a 2-year guarantee against manufacturing defects which requires a 240V single phase connection.

### Tuscan Smart timer thermostatic element

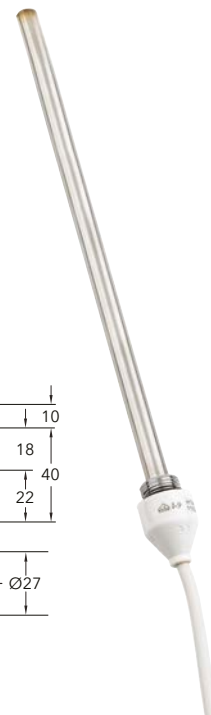
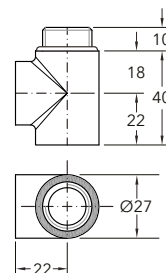
The Tuscan thermostatically adjustable control is available in chrome. Modes of comfort: Boost, Standby/Antifreeze, Timer 12, Timer 24. Tuscan Smart Control is compliant with the Eco-Design directive for energy using products 2005/32/EC.



### Standard element

The Standard IP64 rated element. These elements are also available/sold separately if required.

#### T-Piece



Refer to page 98 for tube configuration

# Space Bow Fronted Technical



## Space Bow White



Details						Electric elements	
Height (mm)	Width (mm)	Centres (mm)	Weight (kg)	Water content litres	Watts $\Delta t$ 50°C	Standard matching	Smart matching
800	300	255	3.10	2.49	316	250	300
1000	300	255	3.70	3.00	377	350	300
1200	300	255	4.50	3.66	459	350	400
1600	300	255	5.90	4.83	606	450	600
800	400	355	3.71	2.95	363	250	300
1000	400	355	4.40	3.52	433	350	400
1200	400	355	5.37	4.31	527	450	400
1600	400	355	7.03	5.68	697	600	600
800	500	455	4.32	3.40	430	350	400
1000	500	455	5.09	4.05	509	450	400
1200	500	455	6.23	4.97	621	450	600
1600	500	455	8.15	6.53	821	600	600
1800	500	455	9.49	7.59	943	600	600
800	600	555	4.92	3.86	499	350	400
1000	600	555	5.78	4.57	589	450	600
1200	600	555	7.10	5.62	721	600	600
1600	600	555	9.28	7.38	952	600	600
1800	600	555	10.83	8.60	1094	600	600

## Space Bow Chrome



Details						Electric elements	
Height (mm)	Width (mm)	Centres (mm)	Weight (kg)	Water content litres	Watts $\Delta t$ 50°C	Standard matching	Smart matching
800	300	255	3.10	2.49	222	150	200
1000	300	255	3.70	3.00	264	250	200
1200	300	255	4.50	3.66	322	250	300
1600	300	255	5.90	4.83	425	350	400
800	400	355	3.71	2.95	255	250	200
1000	400	355	4.40	3.52	304	250	300
1200	400	355	5.37	4.31	370	250	300
1600	400	355	7.03	5.68	489	350	400
800	500	455	4.32	3.40	302	250	300
1000	500	455	5.09	4.05	357	250	300
1200	500	455	6.23	4.97	436	350	400
1600	500	455	8.15	6.53	576	450	600
1800	500	455	9.49	7.59	662	600	600
800	600	555	4.92	3.86	350	250	300
1000	600	555	5.78	4.57	413	350	400
1200	600	555	7.10	5.62	506	450	600
1600	600	555	9.28	7.38	668	600	600
1800	600	555	10.83	8.60	768	600	600

Visit [www.tuscanfoundry.com](http://www.tuscanfoundry.com) for full details



# Space Straight Overview

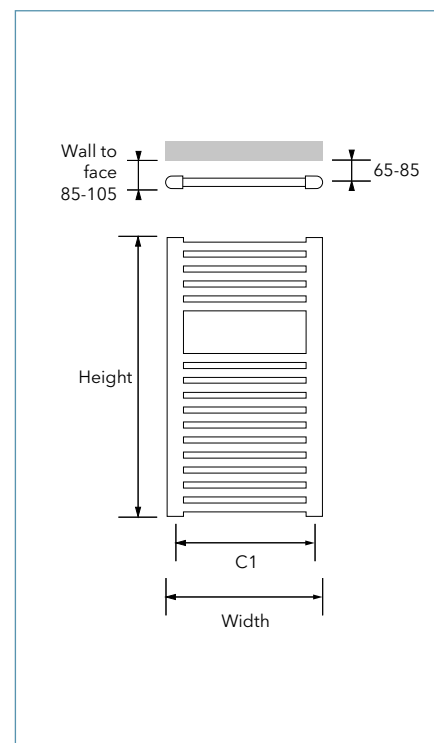
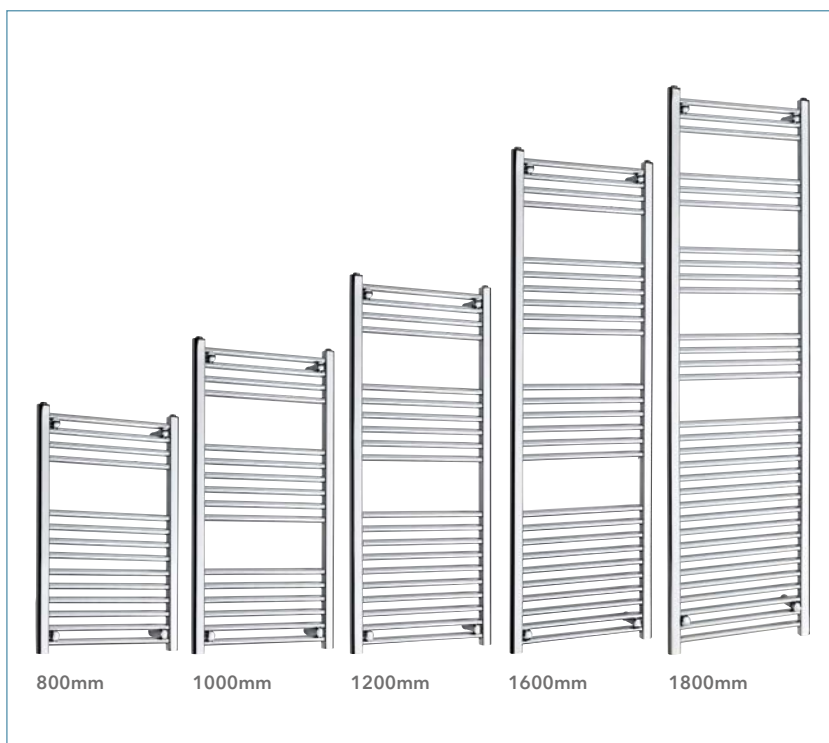
## Features

- Types - Central Heating, Dual Fuel & Electric
- Material - 22mm mild steel tubing
- Finishes - RAL 9016 Traffic White or Chrome
- Heights - 800, 1000, 1200, 1600 & 1800mm
- Widths - 300, 400, 500 & 600mm
- Depths - 85-105mm wall to face
- Outputs - 222-1094 watts
- Pressure - 6 bar (10 bar test)
- Warranty - 5 years

The Space Straight towel rail is made from steel. It is available in either chrome plated or RAL 9016 Traffic White finish and comes complete with wall brackets, plug and air vent. The Space has a 6 bar maximum working pressure (tested to 10 bar), is supplied with 1/2" bsp-f connections and carries a 5 year warranty against manufacturing defects.

Space Dual Fuel models are supplied with an electric element (loose) with two chrome tee pieces to provide symmetrical connections with either a standard IP64 rated or Smart IP44 rated element as specified. Elements carry a 2-year guarantee against manufacturing defects which requires a 240V single phase connection.

Space Electric models are supplied factory filled and tested, with the element fitted to the right hand side, unless otherwise specified. Towel rails are fitted with either a standard IP64 rated element or a Smart IP44 rated element, depending on the specification. Elements carry a 2-year guarantee against manufacturing defects which requires a 240V single phase connection.



Refer to page 96 for additional information on dual fuel and electric options

# Space Straight Technical



## Space Straight White



Details						Electric elements	
Height (mm)	Width (mm)	Centres (mm)	Weight (kg)	Water content litres	Watts $\Delta t$ 50°C	Standard matching	Smart matching
800	300	255	3.09	2.48	316	250	300
1000	300	255	3.69	2.99	377	350	300
1200	300	255	4.48	3.64	459	350	400
1600	300	255	5.88	4.81	606	450	600
800	400	355	3.69	2.93	363	250	300
1000	400	355	4.38	3.51	433	350	400
1200	400	355	5.35	4.30	527	450	400
1600	400	355	7.00	5.66	697	600	600
800	500	455	4.30	3.39	430	350	400
1000	500	455	5.07	4.03	509	450	400
1200	500	455	6.21	4.95	621	450	600
1600	500	455	8.13	6.51	821	600	600
1800	500	455	9.45	7.56	943	600	600
800	600	555	4.91	3.85	499	350	400
1000	600	555	5.76	4.56	589	450	600
1200	600	555	7.08	5.60	721	600	600
1600	600	555	9.25	7.36	952	600	600
1800	600	555	10.80	8.57	1094	600	600

## Space Straight Chrome



Details						Electric elements	
Height (mm)	Width (mm)	Centres (mm)	Weight (kg)	Water content litres	Watts $\Delta t$ 50°C	Standard matching	Smart matching
800	300	255	3.09	2.48	222	150	200
1000	300	255	3.69	2.99	264	250	200
1200	300	255	4.48	3.64	322	250	300
1600	300	255	5.88	4.81	425	350	400
800	400	355	3.69	2.93	255	250	200
1000	400	355	4.38	3.51	304	250	300
1200	400	355	5.35	4.30	370	250	300
1600	400	355	7.00	5.66	489	350	400
800	500	455	4.30	3.39	302	250	300
1000	500	455	5.07	4.03	357	250	300
1200	500	455	6.21	4.95	436	350	400
1600	500	455	8.13	6.51	576	450	600
1800	500	455	9.45	7.56	662	600	600
800	600	555	4.91	3.85	350	250	300
1000	600	555	5.76	4.56	413	350	400
1200	600	555	7.08	5.60	506	450	600
1600	600	555	9.25	7.36	668	600	600
1800	600	555	10.80	8.57	768	600	600

Visit [www.tuscanfoundry.com](http://www.tuscanfoundry.com) for full details

# Alara - Straight / Curved - Overview

The Alara is made from stainless steel and available in straight or curved variants, each with a polished finish. Supplied complete with wall brackets, plug and air vent, this radiator has ½" bsp-f connections and a maximum working pressure of 6 bar. The Alara radiator carries a 10-year guarantee against manufacturing defects. Alara Dual Fuel models are supplied with an electric element (loose) and two chrome tee pieces to provide symmetrical connections with a standard IP64-rated element. Elements carry a 2-year guarantee against manufacturing defects. Please note, a 240V single phase connection is required. Alara Electric models are supplied factory filled and tested with a standard IP64-rated element fitted to the right hand side, unless otherwise specified. Elements carry a 2-year guarantee against manufacturing defects. Please note, a 240V single phase connection is required.

## Features

- Models - Straight & Curved
- Types - Central Heating, Dual Fuel & Electric
- Material - Stainless steel
- Finish - Polished
- Heights - 430-1500mm
- Widths - 350\*, 500 & 600mm  
(\* Straight model only)
- Depths - Straight: 70 - 100mm wall to face  
Curved: 80 - 110mm wall to face
- Outputs - 180-699 watts
- Pressure - 6 bar working pressure
- Warranty - 10 years



Alara Curved

# Alara - Straight / Curved - Technical



## Alara Straight

Height (mm)	Width (mm)	Watts $\Delta t$ 50°C	Dry weight kg	Water content litres	Matching electric elements	
					Dual Fuel Watts	Electric Watts
430	500	180	3.00	1.00	100	100
430	600	207	3.50	1.10	100	100
720	350	251	3.10	1.45	100	100
720	500	360	3.80	1.80	150	150
720	600	389	4.35	2.00	150	150
1200	350	444	4.75	2.40	150	150
1200	500	495	6.00	2.90	250	250
1200	600	593	6.80	3.20	250	250
1500	350	522	6.00	3.00	250	250
1500	500	660	7.40	3.60	250	250
1500	600	699	8.35	4.10	250	250

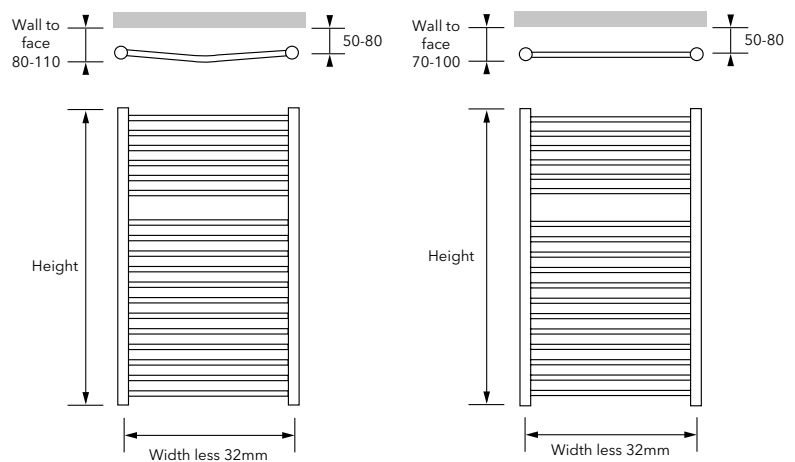
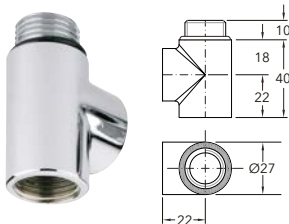
## Alara Curved

Height (mm)	Width (mm)	Watts $\Delta t$ 50°C	Dry weight kg	Water content litres	Matching electric elements	
					Dual Fuel Watts	Electric Watts
430	500	181	3.00	1.00	100	100
720	500	360	3.80	1.80	100	100
720	600	389	4.35	2.00	150	150
1200	500	495	6.00	2.90	250	250
1200	600	593	6.80	3.20	250	250
1500	500	660	7.40	3.60	250	250

### Standard element

The Standard IP64 rated element. These elements are also available/sold separately if required.

### T-Piece



# Java

## Overview

The Java is made from stainless steel and available in a polished finish. Supplied complete with wall brackets, plug and air vent, this radiator has ½" bsp-f connections and a maximum working pressure of 6 bar. The Java radiator carries a 10-year guarantee against manufacturing defects. Java Dual Fuel models are supplied with an electric element (loose) and two chrome tee pieces to provide symmetrical connections with a standard IP64-rated element. Elements carry a 2-year guarantee against manufacturing defects. Please note, a 240V single phase connection is required. Java Electric models are supplied factory filled and tested with a standard IP64-rated element fitted to the right hand side, unless otherwise specified. Elements carry a 2-year guarantee against manufacturing defects. Please note, a 240V single phase connection is required.

## Features

- Types - Central Heating, Dual Fuel & Electric
- Material - Stainless steel
- Finish - Polished
- Heights - 800, 1200 & 1600mm
- Widths - 350, 500 & 600mm
- Depths - 85mm wall to face
- Outputs - 274-764 watts
- Pressure - 6 bar working pressure
- Warranty - 10 years

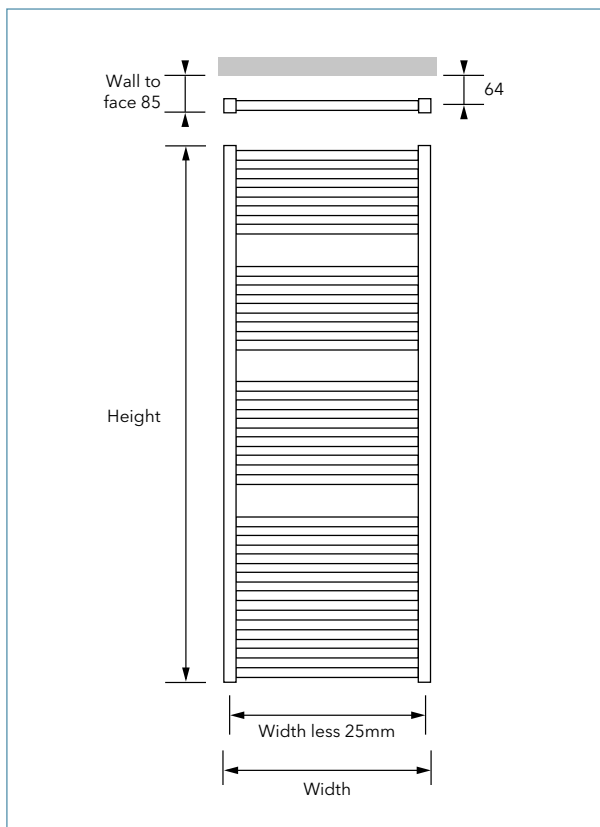


# Java

## Technical



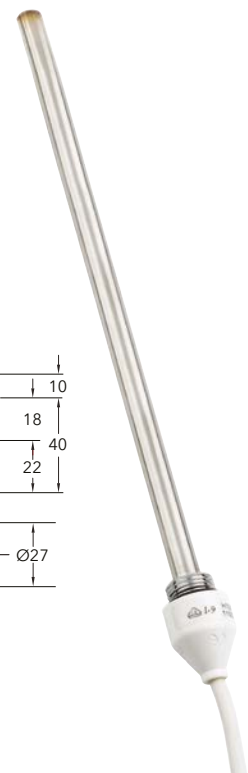
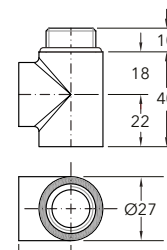
Height (mm)	Width (mm)	Watts $\Delta t$ 50°C	Dry weight kg	Water content litres	Matching electric elements	
					Dual Fuel Watts	Electric Watts
800	350	274	3.4	1.6	150	150
800	500	394	4.2	2.0	150	150
800	600	426	4.8	2.2	250	250
1200	350	455	4.75	2.4	350	350
1200	500	507	6.0	2.9	350	350
1200	600	607	6.8	3.2	450	450
1600	500	721	7.9	3.8	450	450
1600	600	764	8.9	4.3	450	450



### Standard element

The Standard IP64 rated element. These elements are also available/sold separately if required.

#### T-Piece



# Decoral Electric Overview/Technical



- Aluminium alloy body with low thermal inertia, complete with integrated aluminium side panels
- LCD backlit control system with easy-to reach buttons and digital display
- Detachable humidifier fitted in the left side of the radiator
- IP24 protection rated with class II insulation and NTC temperature probe
- Electronic temperature regulation via PI controller
- Daily and weekly programming options
- Multiple operating modes, including: Programming/Comfort/Night/Freeze protection/Holiday/Boost/Eco/Stand-by
- Supplied with 3-pin UK plug
- Open window detection function



## Features

- Material - Aluminium
- Finish - RAL 9010 Warm White
- Models - 5
- Outputs - 600, 1000, 1200, 1500 and 1800 watts
- Warranty - 2 years

## Size/Model Availability

Height (mm)	Width (mm)	Depth (mm)	Output Watts	Weight kg
578	560	80	600	13.0
578	640	80	1000	14.5
578	880	80	1200	20.0
578	960	80	1500	22.0
578	1120	80	1800	26.0



# Decoral Electric Eco Overview/Technical



- Aluminium alloy body with low thermal inertia
- IP24 protection rated with class II insulation and NTC temperature probe
- Electronic temperature regulation via PI controller
- Operating modes: Comfort/Reduced temperature/Antifreeze/Stand-by/Pilot wire mode



## Features

- Aluminium alloy body with low thermal inertia
- IP24 protection rated with class II insulation and NTC temperature probe
- Electronic temperature regulation
- Open window detection function
- Operating modes: Comfort/Reduced temperature/Antifreeze/Stand-by/Pilot wire mode
- Widths - 365mm-1280mm
- Available in outputs from 700 watts to 2kW
- Heights - 427mm & 578mm
- Hourly and weekly programmable time frame
- Displayed consumption
- Child safety lock
- Warranty - 2 years

## Size/Model Availability

Height (mm)	Width (mm)	Depth (mm)	Output Watts	Weight kg	Sections
427	605	97	1000	10.5	7
427	1005	97	1500	17.2	12
427	1085	97	1800	18.5	13
578	365	80	700	7.2	4
578	525	80	1000	10.7	6
578	765	80	1200	16.0	9
578	845	80	1500	17.6	10
578	1120	80	1800	21.0	12
578	1280	80	2000	24.2	14



# Voltec Overview



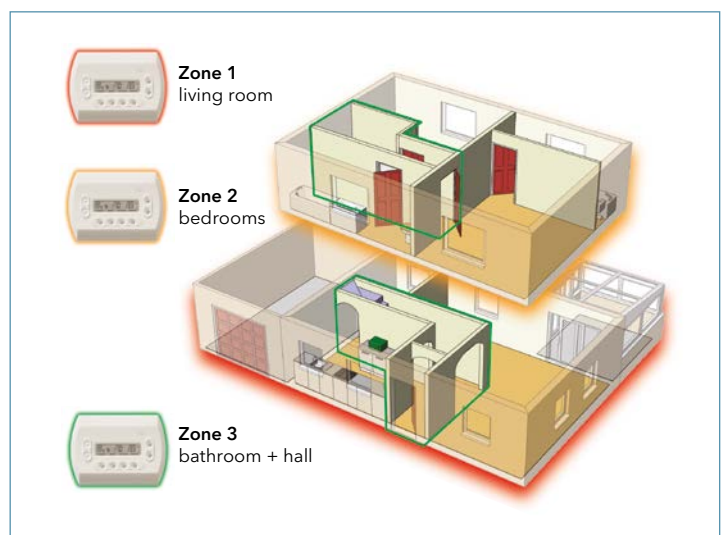
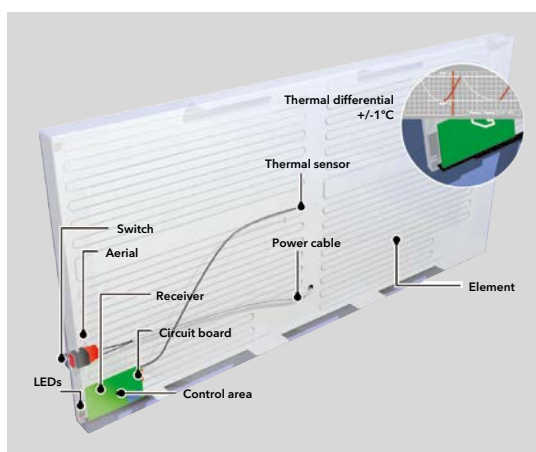
Voltec slimline flat panel electric radiant panels are supplied with on/off switch with radio frequency control compatibility (controller supplied separately, powered by 2 x 1.5V alkaline batteries).

Powder coated in RAL 9016 Traffic White, Voltec can be fitted either horizontally or vertically, while a low surface temperature option is also available (if specified). The Voltec radiator carries a 2-year guarantee against manufacturing defects and requires a 240V single phase connection.

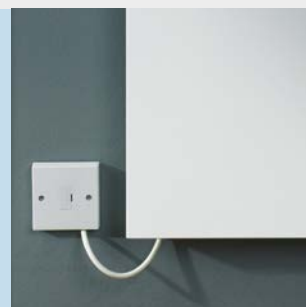


## Features

- Efficient, convenient low energy zonal heating
- Wirelessly controlled, maintenance free sealed units
- Multi-zone control (each zone requires separate controller)
- Types - Domestic & LST Healthcare versions
- Models - Position vertically or horizontally
- Finish - RAL 9016 Traffic White  
Other colours available on request
- Heights - 250, 500, 750, 1000, 1500 & 2000mm
- Widths - 250, 500, 750, 1000, 1500 & 2000mm
- Depths - 50mm wall to face
- Outputs - 400-1600 watts
- IP44 protection rating
- Warranty - 2 years



# Voltec Technical



## Standard model technical info

Height (mm)	Width (mm)	Element (Watts)	Output (Watts)
250	1000	500	400
250	1500	750	600
250	2000	1000	800
500	500	500	400
500	750	750	600
500	1000	1000	800
500	1500	1500	1200
500	2000	2000	1600

## LST model technical info

Height (mm)	Width (mm)	Element (Watts)	Output (Watts)
250	1000	250	148
250	1500	500	222
250	2000	500	295
500	500	250	148
500	750	500	222
500	1000	500	295
500	1500	1000	443
500	2000	1000	590

## Controllers

WCT100TX Wireless Controller, suitable for LST Voltec radiators. 30m range.

WCT500TX Wireless Controller, suitable for non-LST Voltec radiators. 30m range.



1



Measure bracket height, ensuring it is level

4



Hang radiator on to brackets, ensuring it is secure

2



Mark where the holes for the brackets need to be drilled

5



Connect fused spur (or plug into 13A socket)

3



Drill marked holes and fasten brackets to wall

6



Turn radiator on and easily synchronise with wireless controller

# Valves

## Radius Valves

Combining high quality engineering with a sleek and elegant style, these beautifully smooth valves provide the perfect finishing touch to any radiator. Available in an array of stunning finishes, with a choice of angled, corner or straight versions, Radius valves offer superior heating control while complementing and enhancing a radiator's design.

Radius manual  
Chrome straight



Radius angled manual - Chrome

Radius manual  
Satin straight



Radius angled manual - Satin



Radius angled manual - Black  
Also available as a straight valve.



Radius angled  
TRV - Chrome. Also  
available as a straight  
or corner valve.



Radius angled  
TRV - Satin. Also  
available as a straight  
or corner valve.



Radius angled TRV -  
White. Also available  
as a corner valve.



Radius angled TRV -  
Black. Also available  
as a straight or  
corner valve.



Radius angled TRV -  
Antique Brass.  
Also available as a  
corner valve.



Radius angled TRV  
- Antique Copper.  
Also available as a  
corner valve.

# Valves

## Radius Corner Valves



Radius corner manual - Chrome



Radius corner TRV - Chrome

Radius corner TRV - Satin



Radius corner TRV - White

Radius corner TRV - Black



Radius corner TRV - Antique Brass

Radius corner TRV - Copper

## Studio Valves

The dynamic Studio Valve represents unrivalled aesthetics and value, combining gleaming futuristic sophistication and engineered precision.



Studio angled manual valves

Also available as a straight valve



Studio angled TRV (15mm)



Studio angled TRV (1/2" BSP)

# Valves

## Stratford Corner, Double Angle Valves

This dynamic corner/double angle valve set is the perfect solution to tidy pipework for your towel rails. Optional TRV heads available.



## Sterling Valve

The Sterling contract TRV is a simple, value engineered valve suitable for most general applications. Available in angle or straight versions.



## Finchley Angled TRV



# Valves

## Nostalgia Manual



## Nostalgia TRV

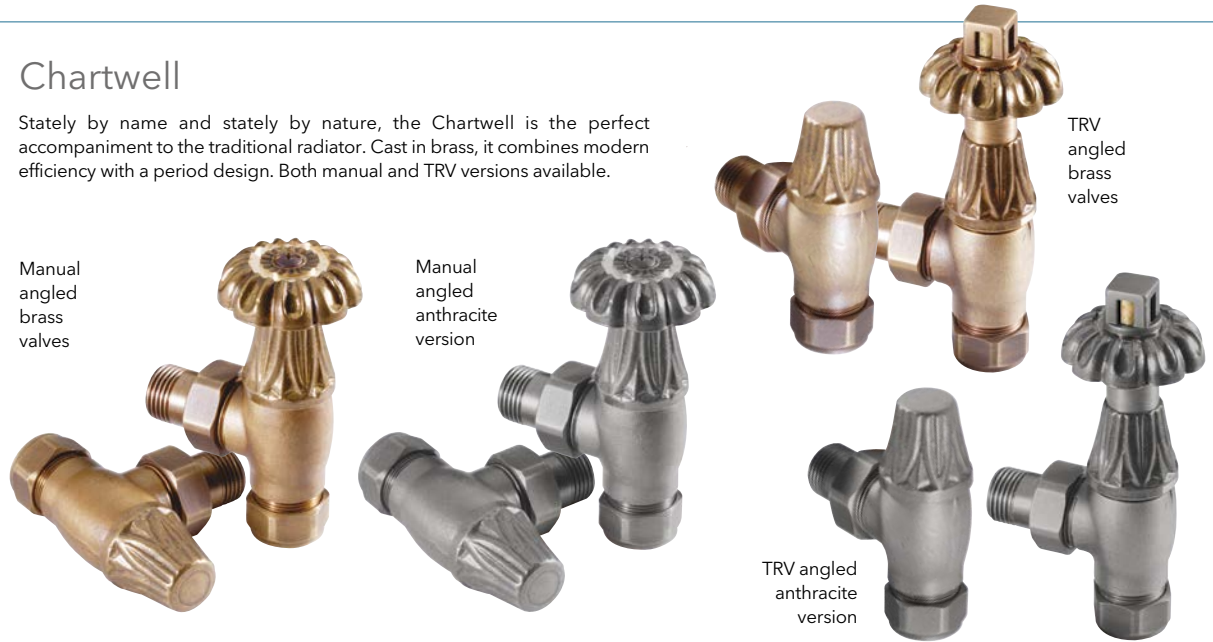


## Temple



## Chartwell

Stately by name and stately by nature, the Chartwell is the perfect accompaniment to the traditional radiator. Cast in brass, it combines modern efficiency with a period design. Both manual and TRV versions available.



# Valves

## Kentwell angled

The solid brass Kentwell valve has an elegant wooden handwheel and is available as a manual or TRV version.



## Kentwell corner



## Sleeving kits



# Valves

## Gyro

This ever popular range will suit most applications and provide a fantastic finishing touch.



Angled valve with chrome TRV head

Angled manual valve

## Belgravia

A timeless design, the Belgravia is a real chameleon, equally at home on a futuristic towel radiator or a cast iron column retro model.



Angled valves

## Twin Valve (Note: not suitable for Planatherm range of radiators)

The dynamic Twin Valve represents unrivalled aesthetics with gleaming futuristic sophistication and engineered precision. Also available as a manual version. Connection centres = 50mm.



Straight valve with Standard chrome TRV head


Manual angled valve

Straight valve with Tuscan chrome TRV head

Angled valve with Tuscan chrome TRV head

## Variocon Valve

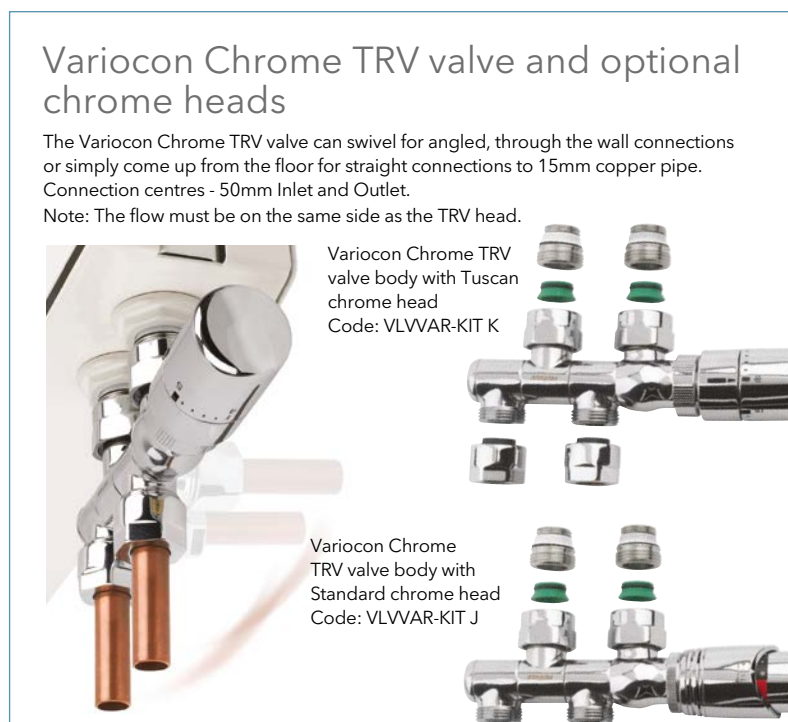
The versatile Variocon valve set is a straight /angled valve all-in-one, allowing connections through the wall or up from the floor.



## Variocon Chrome TRV valve and optional chrome heads

The Variocon Chrome TRV valve can swivel for angled, through the wall connections or simply come up from the floor for straight connections to 15mm copper pipe. Connection centres - 50mm Inlet and Outlet.

Note: The flow must be on the same side as the TRV head.



Variocon Chrome TRV valve body with Tuscan chrome head  
Code: VLVVAR-KIT K

Variocon Chrome TRV valve body with Standard chrome head  
Code: VLVVAR-KIT J



# Valves

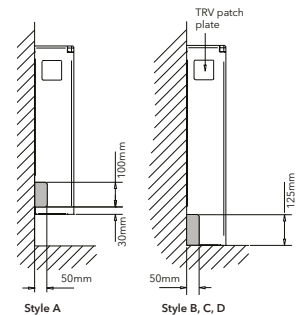
## Ambiguard Internal Valve

(Code: AG-VLVTRV-INTERN)

The Ambiguard Internal Valve kit is an internal control and consists of a 1/2" angle TRV and LSV pattern valve body, remote sensing phial and TRV head.



Pipe cut-outs (optional)



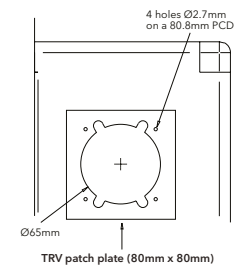
## Ambiguard External Valve

(Code: AG-VLVTRV-EXTERN)

The Ambiguard External Valve kit is an external control and consists of a 1/2" angle TRV and LSV pattern valve body, remote transmitter sensor and TRV head.



TRV preparation



**Note:** All Ambiguard valves are for use on two pipe systems. The TRVs provided are not bi-directional and must always be connected to the flow pipework. All kits are provided with 15mm copper adaptors to provide the connection to both the inlet and outlet of the valve to either 1/2" BSP or 15mm connection.

### Angled:

Use these for radiators where the pipework is 'from the floor' and the connection on the rad is horizontal. These can also be used on towel rails when the pipework is through the wall.



### Straight:

Use the Straight type when the pipework is 'from the floor' and the connection on the radiator is vertical.

### Manual:

Use for any application.



### TRV:

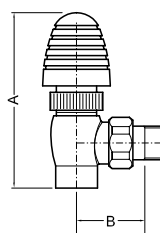
Use adjustable to automatically control the final temperature of the room.

## Typical valve dimensions

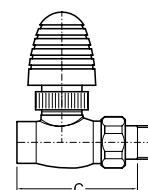
The following notation has been used for dimensions:

Valves		A	B	C
<b>Belgravia</b>	Belgravia Angle	106	42	-
<b>Chartwell</b>	Chartwell Angle Manual	107	44	-
	Chartwell Angle TRV	139	44	-
	Chartwell 1/2" BSP Angle	93	53	-
	Chartwell 3/4" BSP Angle	95	53	-
<b>Finchley</b>	Angled TRV	125	42	-
<b>Gyro</b>	Angled Manual	86	43	-
	Angled TRV	135	43	-
	Straight Manual/TRV	-	-	72
<b>Kentwell</b>	Angled/Corner Manual	100	46	-
	Angled/Corner TRV	110	46	-
<b>Nostalgia</b>	Angled Manual	107	53	-
	Angled TRV	139	53	-
	1/2" BSP Angled Manual	93	53	-
	3/4" BSP Angled Manual	95	53	-
	1/2" BSP Angled TRV	125	53	-
	3/4" BSP Angled TRV	127	53	-
<b>Radius</b>	Angled Manual	77	41	-
	Straight Manual/TRV	-	-	67
	Angled TRV	126	41	-
	Corner Manual	54	41	-
	Corner TRV	110	41	-
<b>Sterling</b>	Angled TRV	120	48	-

Valves		A	B	C
<b>Sterling</b>	Straight TRV	-	-	77
	1/2" BSP Angled TRV	120	48	-
	1/2" BSP Straight TRV	-	-	77
<b>Stratford Corner</b>	Corner TRV	110	41	-
<b>Studio</b>	Angled Manual	60	40	-
	Straight Manual	-	-	77
	Angled TRV	130	40	-
	1/2" BSP Angled TRV	130	40	-
<b>Temple</b>	Angled Manual	100	43	-
	Angled TRV	135	43	-



Angled Valve



Straight Valve

### Important Note:

All dimensions are given in good faith however it is always advisable to await delivery of your radiator and valves before setting the pipework in its final positions. Tuscan cannot accept any liability for pre delivery installed pipework not matching up with the final item.

All Tuscan valves are suitable for connection to 15mm copper pipe only (except where stated)

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

# Correction factor tables

## Correction factor table

The outputs shown within this brochure are based on BS EN442, 75-65-20°C operating conditions, giving a  $\Delta t$  of 50°C, for  $\Delta t$ 's other than this, a correction factor must be applied.

### Example:

Output required @ 82-71-21°C  $\Delta t$  55.5 the CF = 1.145, therefore multiply the listed output by the correction factor to give actual radiator output under these operating conditions. (Excluding Ambiair Fan Convectors, see correction factor table below.)

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

## Correction factor table for Ambiair fan convectors

### Hydraulic resistance

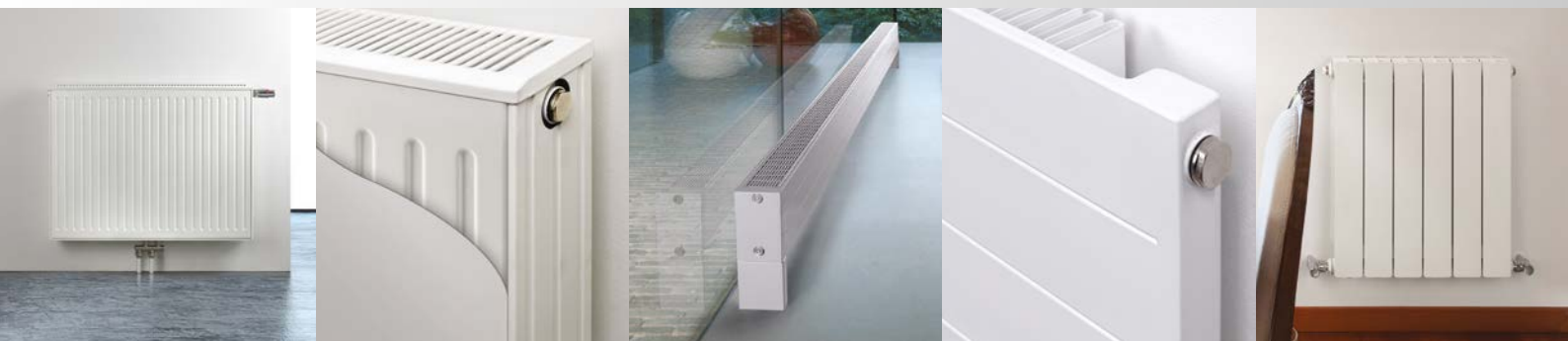
Approximate factors for heat outputs at various mean water temperatures, entering air temperatures and water temperature drops across the coil.

Mean Water (°C)	Entering air temp (°C)	Water temperature drop across coil							
		5k		10k		15k		20k	
		Correction Factor	Hydraulic Resistance	Correction Factor	Hydraulic Resistance	Correction Factor	Hydraulic Resistance	Correction Factor	Hydraulic Resistance
60	0	1.08	4.68	1.04	1.09	-	-	-	-
	18	0.75	2.23	0.70	0.49	-	-	-	-
	20	0.71	2.05	0.66	0.44	-	-	-	-
65	0	1.18	5.53	1.14	1.30	1.10	0.54	-	-
	18	0.84	2.83	0.80	0.65	0.74	0.24	-	-
	20	0.80	2.59	0.77	0.59	0.70	0.22	-	-
70	0	1.27	6.44	1.24	1.54	1.20	0.64	1.16	0.37
	18	0.94	3.51	0.90	0.81	0.85	0.32	0.81	0.14
	20	0.90	3.23	0.86	0.75	0.81	0.29	0.76	0.12
75	0	1.37	7.47	1.34	1.78	1.31	0.76	1.26	0.40
	18	1.03	4.25	1.00	1.00	0.96	0.41	0.90	0.20
	20	0.99	3.95	0.96	0.93	0.93	0.38	0.86	0.18

**Water treatment:** These products are for use on closed heating systems only; they are not suitable for installation on secondary HWS circuits. On completion of the installation the entire system **MUST** be thoroughly cleaned and flushed to remove debris/flux residues etc. If a chemical cleanser is used, it must be thoroughly flushed from the system. Following this, the system **MUST** be dosed with a good eminence water treatment to prevent corrosion. System design, flushing and dosing must be in accordance with BS 5449: 1990, BS EN 12828: 2003 and BS 7593: 1992

**IMPORTANT: Failure to observe these requirements will render the guarantee on the product void.**

Corrosion inhibitor must be used in accordance with the manufacturer's instructions and recommendations and should take into account the particular metals within the system.



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