

# *Merriott*

DESIGN RADIATORS

*Horizontal Flat Panel Radiators Technical Information*





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# Horizontal Flat Panel Radiators

## Merriott Radiators

With its slim profile and refined styling based on a market-leading 25mm pitch, the Merriott Horizontal Flat Panel radiator sets new standards in design, high performance and class-leading efficiency. With a choice of 128 different radiators, this gives a wide range of heat outputs and sizes to suit almost any application. The grille and side panels are factory fitted for a perfect robust finish, making it a beautifully-finished radiator that is at home anywhere. All connections and pipes are integrated behind the casing and its smooth flat front adds an elegant minimalist feel to any interior.

### SPECIFICATIONS & DIMENSIONS

#### Product Range

The Merriott Horizontal Flat Panel range comprises of single and double convector radiators supplied with factory fitted grilles and side panels in a choice of five heights with lengths from 400mm to 2000mm.

#### Outputs

All Merriott Radiators are manufactured and tested in accordance with BS EN 442 and the NF quality mark requirements in its state of the art BS EN ISO 9001:2008 accredited manufacturing facility in Newport, Wales.

#### Finish

Every Merriott Horizontal Flat Panel radiator undergoes an intensive pre-treatment process to protect against rust. The radiators are then finished with Epoxy Polyester Powder paint similar to RAL 9016 which may be over painted if required.

#### Packaging

Every radiator is protected top and bottom over the whole length and height with heavy cardboard box ends and packed in shrink wrapped polythene.

#### Connections

Each Horizontal Flat Panel radiator is manufactured with four 1/2" BSP TBOE connections.

#### Testing

All radiators are individually pressure tested to 10.5 bar and are suited for a working pressure up to 8 bar.

#### Warranty

Merriott Horizontal Flat Panel radiators are guaranteed for a period of ten years in respect of defective materials and workmanship. In order for the warranty to be valid, designers and installers must observe and adhere to **BS EN 12828:2003**. Heating systems in buildings – design for water based heating systems and installers must adhere to **BS EN 14336:2004**. Heating system in buildings – installation and commissioning of water based heating systems. In addition Merriott Radiators recommends that designers and installers observe and adhere to the British Standard code of practice for the treatment of water in domestic hot water central heating systems and **BS 7593:2006**, the use of corrosion inhibitor is recommended for all applications, failure to observe this may result in the invalidation of warranty.

#### Brackets

All radiators in the range are supplied with two or more brackets depending on the length.

#### Bracket Lugs

Two pairs of lugs are fitted on radiators up to and including 1600mm long. A third pair of lugs is fitted centrally on radiators 1800mm long and over.

#### Tapping-To-Tapping Dimensions

All tapping-to-tapping dimensions may be obtained by subtracting 5mm (1/4") from the nominal radiator length (accurate to  $\pm 2$ mm).

#### Materials

Merriott Horizontal Flat Panel radiators are manufactured from high quality cold-rolled steel with a nominal thickness of 1.2mm.

#### Installation

For indirect systems or closed circuits only at a working pressure not exceeding 8 bar.



# Merriott Horizontal Flat Panel Radiators

## Heat Outputs to BS EN442 Certification

Outputs based on a mean radiator temperature of 70°C (158°F) and a room temperature of 20°C (68°F)

Nominal Height	Length mm	Single Convector		Double Panel +		Double Convector		Triple Convector	
		Code	Watts $\Delta T50$	Code	Watts $\Delta T50$	Code	Watts $\Delta T50$	Code	Watts $\Delta T50$
400 mm	400	Q11404PL	279	–	–	–	–	–	–
	600	Q11406PL	418	Q21406PL	595	Q22406PL	818	Q33406PL	1167
	800	Q11408PL	558	Q21408PL	793	Q22408PL	1090	Q33408PL	1556
	1000	Q11410PL	697	Q21410PL	991	Q22410PL	1363	Q33410PL	1945
	1200	Q11412PL	836	Q21412PL	1189	Q22412PL	1636	Q33412PL	2334
	1400	Q11414PL	976	Q21414PL	1387	Q22414PL	1908	Q33414PL	2723
	1600	Q11416PL	1115	Q21416PL	1586	Q22416PL	2181	Q33416PL	3112
	1800	Q11418PL	1255	Q21418PL	1784	Q22418PL	2453	Q33418PL	3501
500 mm	2000	Q11420PL	1394	Q21420PL	1982	Q22420PL	2726	Q33420PL	3890
	400	Q11504PL	338	Q21504PL	474	Q22504PL	651	–	–
	600	Q11506PL	507	Q21506PL	711	Q22506PL	976	Q33506PL	1393
	800	Q11508PL	676	Q21508PL	948	Q22508PL	1302	Q33508PL	1858
	1000	Q11510PL	845	Q21510PL	1185	Q22510PL	1627	Q33510PL	2322
	1200	Q11512PL	1014	Q21512PL	1422	Q22512PL	1952	Q33512PL	2786
	1400	Q11514PL	1183	Q21514PL	1659	Q22514PL	2278	Q33514PL	3251
	1600	Q11516PL	1352	Q21516PL	1896	Q22516PL	2603	Q33516PL	3715
600 mm	1800	Q11518PL	1512	Q21518PL	2133	Q22518PL	2929	Q33518PL	4180
	2000	Q11520PL	1690	Q21520PL	2370	Q22520PL	3254	Q33520PL	4644
	400	Q11604PL	392	Q21604PL	545	Q22604PL	747	–	–
	600	Q11606PL	589	Q21606PL	818	Q22606PL	1120	Q33606PL	1600
	800	Q11608PL	785	Q21608PL	1090	Q22608PL	1494	Q33608PL	2134
	1000	Q11610PL	981	Q21610PL	1363	Q22610PL	1867	Q33610PL	2667
	1200	Q11612PL	1177	Q21612PL	1636	Q22612PL	2240	Q33612PL	2300
	1400	Q11614PL	1373	Q21614PL	1908	Q22614PL	2614	Q33614PL	3734
700 mm	1600	Q11616PL	1570	Q21616PL	2181	Q22616PL	2987	Q33616PL	4267
	1800	Q11618PL	1766	Q21618PL	2453	Q22618PL	3361	Q33618PL	4801
	2000	Q11620PL	1962	Q21620PL	2726	Q22620PL	3734	Q33620PL	5334
	400	Q11704PL	411	Q21704PL	609	Q22704PL	834	–	–
	600	Q11706PL	662	Q21706PL	914	Q22706PL	1251	Q33706PL	1793
	800	Q11708PL	882	Q21708PL	1218	Q22708PL	1668	Q33708PL	2390
	1000	Q11710PL	1103	Q21710PL	1523	Q22710PL	2085	Q33710PL	2988
	1200	Q11712PL	1324	Q21712PL	1828	Q22712PL	2502	Q33712PL	3586
900 mm	1400	Q11714PL	1544	Q21714PL	2132	Q22714PL	2919	Q33714PL	4183
	1600	Q11716PL	1765	Q21716PL	2437	Q22716PL	3336	–	–
	500	Q11905PL	654	Q11905PL	898	Q11905PL	1231	Q11905PL	1764
	600	Q11906PL	784	Q21906PL	1078	Q22906PL	1477	Q33906PL	2116
	700	Q11907PL	915	Q21907PL	1257	Q22907PL	1723	Q33907PL	2469
	800	Q11908PL	1046	Q21908PL	1437	Q22908PL	1969	Q33908PL	2822
	900	Q11909PL	1176	Q21909PL	1616	Q22909PL	2215	Q33909PL	3174
	1000	Q11910PL	1307	Q21910PL	1796	Q22910PL	2461	Q33910PL	3527
900 mm	1100	Q11911PL	1438	Q21911PL	1976	Q22911PL	2707	Q33911PL	3880
	1200	Q11912PL	1568	Q21912PL	2155	Q22912PL	2953	Q33912PL	4232
	1400	Q11914PL	1830	Q21914PL	2514	Q22914PL	3445	Q33914PL	4938

# Merriott Radiators

## Conversion Information

The outputs quoted in this publication are based on a Delta T of 50°C.

To calculate other operating conditions, the following example should be applied:

**EXAMPLE:**

Add flow water temperature (75°C) and the return water temperature (65°C) together (140°C), divide by two (70°C) and then subtract the room temperature (20°C). This will give you a Delta T factor of 50°C.

Degrees Centigrade						
<b>Delta T factors in °C and °F other than 50°C (122°F), Exponent n = 1.3</b>	5°C	0.0501	30°C	0.5148	55°C	1.1319
	10°C	0.1234	35°C	0.6290	60°C	1.2675
	15°C	0.2091	40°C	0.7482	65°C	1.4065
	20°C	0.3039	45°C	0.8720	70°C	1.5487
	25°C	0.4061	50°C	1.0000	75°C	1.6940

Degrees Fahrenheit						
<b>Delta T factors in °C and °F other than 50°C (122°F), Exponent n = 1.3</b>	10°F	0.0387	60°F	0.3975	110°F	0.8741
	20°F	0.0953	70°F	0.4857	120°F	0.9787
	30°F	0.1614	80°F	0.5778	130°F	1.0861
	40°F	0.2346	90°F	0.6734	140°F	1.1959
	50°F	0.3136	100°F	0.7722	150°F	1.3081

# Merriott Radiators

## Water Contents & Dry Weights

To calculate, take the water content or dry weight per metre, divide by 1,000 and multiply it by the length of the radiator shown in the catalogue.

### Horizontal Flat Panel Radiators

Horizontal Flat Panel - Radiator Water Content					
Height	400mm (16")	500mm (20")	600mm (24")	700mm (28")	900mm (36")
<i>Kg/M</i>					
<b>Single Convector</b>	2.240	2.670	3.100	3.530	4.400
<b>Double Panel Plus</b>	4.470	5.330	6.200	7.070	8.800
<b>Double Convector</b>	4.370	5.230	6.100	7.000	8.800
<b>Triple Convector</b>	6.600	7.800	9.000	10.380	13.140

Horizontal Flat Panel - Radiator Dry Weight					
Height	400mm (16")	500mm (20")	600mm (24")	700mm (28")	900mm (36")
<i>Kg/M</i>					
<b>Single Convector</b>	16.98	21.00	25.04	29.06	37.22
<b>Double Panel Plus</b>	24.48	30.31	36.24	42.06	53.82
<b>Double Convector</b>	28.28	35.41	42.44	49.56	63.72
<b>Triple Convector</b>	39.58	49.71	59.84	70.06	90.32

# How to Order

## Merriott Radiators Ireland

Derrylin, Co. Fermanagh, Northern Ireland, BT92 9AU

For contact numbers please see below.

Email : [sales@merriott-radiators.com](mailto:sales@merriott-radiators.com)

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# Notes



## **Merriott Radiators Ireland**

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