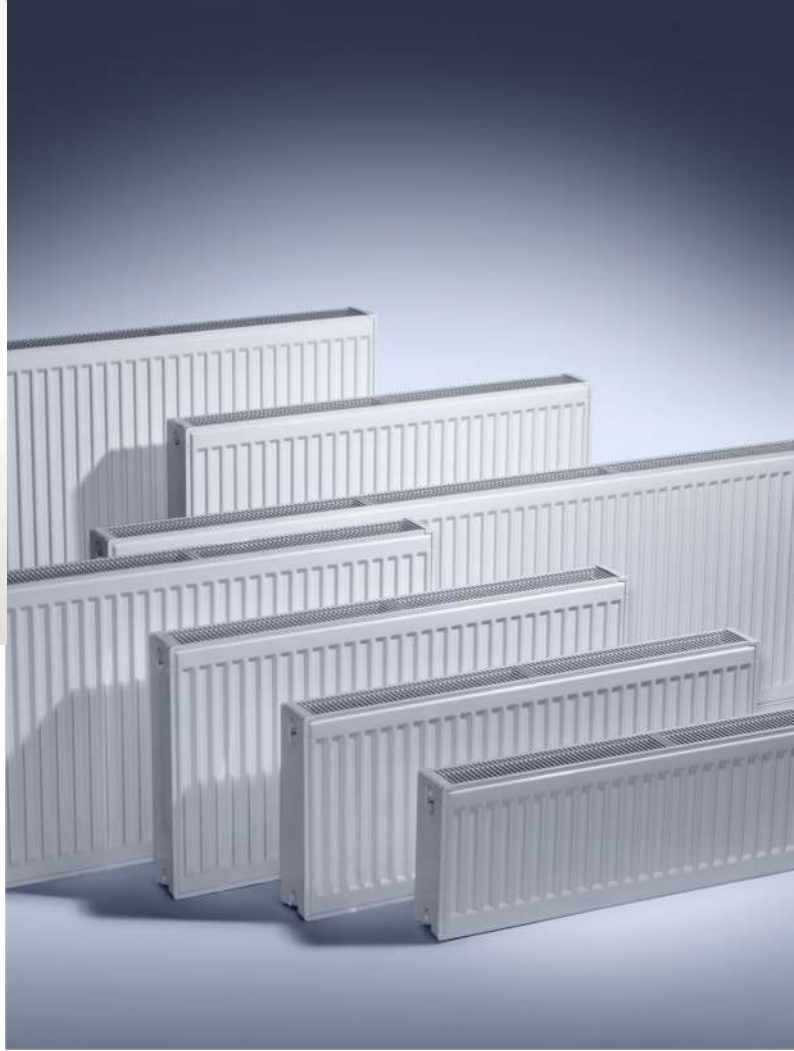


FIREFLY

SINGLE, DOUBLE & TRIPLE PANEL CONVECTOR RADIATORS

- 🔥 Compact Design
- 🔥 Factory Fitted Grills and Side Panels
- 🔥 Low Water Content - Rapid Response
- 🔥 Available in Single, Double and Triple Convector Panel Formats
- 🔥 Wide Range of Heights and Widths Available
- 🔥 1/2" TBOE Connections as Standard
- 🔥 Made and Tested in Accordance with BS EN442
- 🔥 Durable Powder Coat RAL 9016 Finish
- 🔥 10 Year Conditional Warranty





FIREFLY

The radiators are manufactured to all international standards including BS EN 442 and the designs as depicted here incorporate the following features:-
Top grills and side covers included at no extra cost.

Chrome air vents, end plugs incorporating rubber O rings and wall brackets are included in the packaging.

All radiators are double PVC wrapped over their whole length to ensure maximum protection.

Low water content combined with modern welding technology and maximum metal gauge material creates a highly efficient product with the capability of a fast heat up time.

The Radiator range is available in the following heights: 200mm (8"), 300mm (12"), 400mm (16"), 500mm (20"), 600mm (24"), 750mm (28") and 900mm (36") and varying lengths up to 3000mm (120").

All radiators are tested to 13 bar which exceeds the maximum possible operating pressure of 12 bar.

Anti-corrosion treatment is applied to the external surfaces of the radiators during the manufacturing process and prior to primer paint application. Finally a hard baked powder paint coating is applied which ensures a long lasting finish.

Guarantee Radiators carry a 10 year no quibble guarantee. This is conditional that standard installation procedures are adhered to including the use of a propriety brand of corrosion inhibitor being introduced into the system in which the radiators are installed. We strongly recommend that on completion of any installation; the system is flushed clean in accordance with the British Standard Code of Practice for the treatment of water in domestic central heating systems BS7593.

Connections 1/2" Top and Bottom opposite end connections are standard.

Emission Characteristics Heat outputs conform to BS EN442 certification and are detailed, together with wall mounting instructions, on the back page. Heat outputs are based on a delta T of 62°C, mean water temperature of 80°C and room temperature of 18°C.

Firefly Radiators are manufactured under an EN ISO 9001:2008 approved quality system and are fully certified and CE marked.

Suitable for use with both Direct and Indirect (Open and Closed) Central Heating Systems.

Included with each radiator is a pair of mounting brackets, a multi directional air vent and a blanking plug. As the air vent and plug feature an EPDM O Ring, neither requires the use of thread sealants when being fitted. The air vent may be operated with either a standard Vent Key of Flat Screwdriver

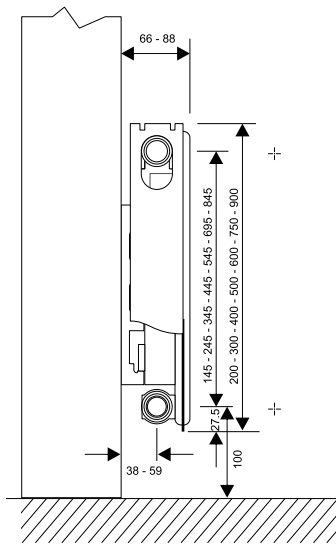


The radiators are manufactured to all international standards including BS EN 442

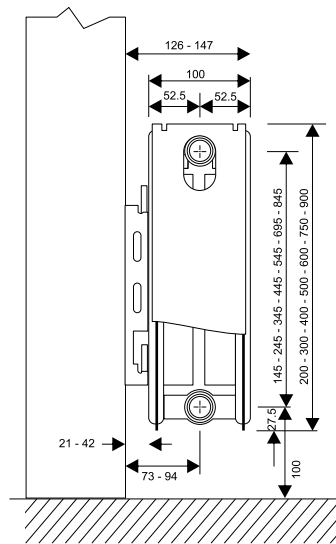
Dimensional and Technical Data

All dimensions are in mm

L	A		B		C mm	D mm	Row of Brackets
	Type 11 mm	Type 22 mm	Type 11 mm	Type 22 mm			
400	167	133	116.5	133.3	80	105	2
500	267	233	116.5	133.3	80	105	2
600	367	333	116.5	133.3	80	105	2
700	467	433	116.5	133.3	80	105	2
800	567	533	116.5	133.3	80	105	2
900	667	633	116.5	133.3	80	105	2
1000	767	733	116.5	133.3	80	105	2
1100	867	833	116.5	133.3	80	105	2
1200	967	933	116.5	133.3	80	105	2
1400	1167	1133	116.5	133.3	80	105	2
1600	1367	1333	116.5	133.3	80	105	2
1800	767/800	767/767	116.5	133.3	80	105	3
2000	867/900	867/867	116.5	133.3	80	105	3



Type 11 - Installation



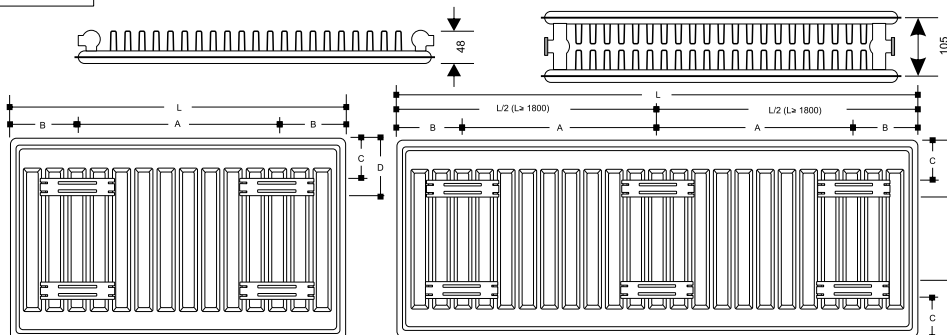
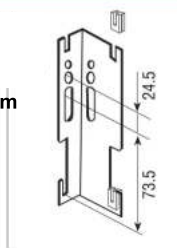
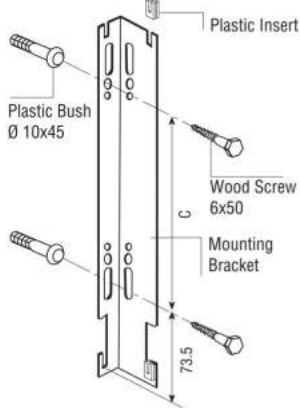
Type 22 - Installation

MOUNTING BRACKET DIMENSIONS

300mm Height Radiator.

Depending on installation requirements; the mounting bracket can be installed either on the wide or the narrow side.

400mm, 500mm, 600mm, 750mm, 900mm



Radiator Height	Centres Fixing Dimension
400mm	92.5mm
500mm	192.5mm
600mm	292.5mm
750mm	442.5mm
900mm	592.5mm

Water Content LT/M

Type	Length	200mm	300mm	400mm	500mm	600mm	750mm	900mm
11	1.67	1.93	2.22	2.51	2.80	3.60	4.13	
22	3.03	3.60	4.37	5.13	5.90	6.80	7.90	

Weight KG/M

Type	Length	200mm	300mm	400mm	500mm	600mm	750mm	900mm
11	6.6	9.0	12.3	14.9	18.2	22.0	26.0	
22	12.1	16.5	22.9	28.0	34.3	41.2	49.6	

Heating factors according to room temperature - based on a mean water temperature difference of 80°C.

Room Temperature	10°C	12°C	15°C	18°C	20°C	22°C	24°C	26°C
Emissivity correction factor	0.81	0.85	0.90	1.00	1.05	1.10	1.15	1.20

Rule of thumb method to size radiators for a wet central heating system.

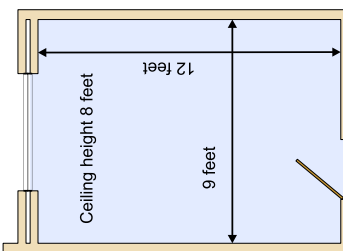
Measure the room in cubic feet i.e., the Width x Length x Height and multiply this value by relevant factor in the adjacent table. This will provide the output in Btu's (British Thermal Units). **Note:** that the following factors must also be observed -

- If the outside wall of the room faces North, add 15%
- If the room has French Doors, add 20%
- If the room has double glazing, subtract 10%

Example: Calculate the size of a suitable radiator for a sitting room 12ft x 9ft x 8ft high. The outside wall faces North and has double glazing.

➔ $12 \times 9 \times 8 \times 5 = 4,320 + 15\% = 4,968 - 10\% = 4,471 \text{ Btu's}$

Room	Ideal Temp. °C	Multiplication Factor
Sitting	21	5
Dining	21	5
Kitchen	16	3
Bedroom	16	4
Common Area	18	3



FIREFLY



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