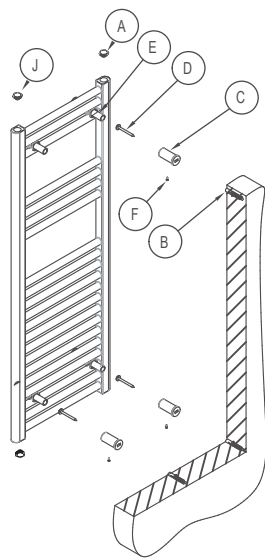


## Assembly Instructions



- Symbol
- A Airvent ½"
  - B Wall Plug
  - C Wall Mounting Bracket
  - D Screw (Ø5,2 x 50)
  - E Sliding Bracket
  - F Screw (M6 x 6)
  - G Fixing Bracket
  - H Screw (M6 x 35)
  - I Decorative cap1
  - J Blind plug ½"

- Pcs
- 1
  - 4
  - 4
  - 4
  - 4
  - 4
  - 4
  - 4
  - 4
  - 2

Gently pull the radiator out of its box and cover.

Sufficient PTFE tape must be applied to valve-tail threads prior to their installation.

Using the radiator and a spirit level, mark the position of the brackets according to where the radiator is to be fixed.

Mark the centres of the brackets [C] on the wall. Drill four holes to a minimum depth of 60mm & insert wall plugs [B].

Screw brackets [C] into wall plugs [B] with 5,5 mm diameter x 50mm screws [D].

Install the sliding bracket into the wall bracket [C].

Level the radiator at equal distances on both sides of the brackets.

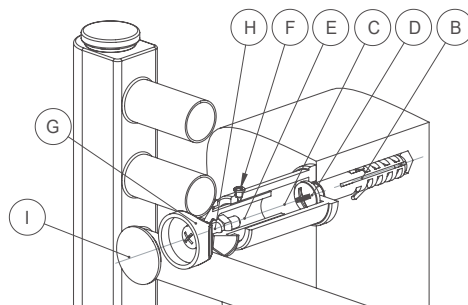
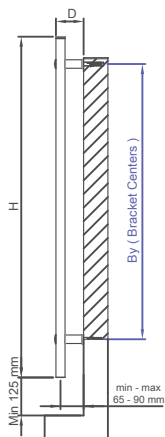
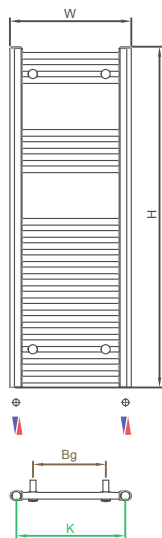
Screw the fixing bracket [G].

Lock the caps [I].

Check the radiator is mounted perfect, otherwise slide the radiator from mounting brackets.

Install the radiator minimum 60 cm. above the ground.

Plump the radiator to the heating circuit. (for dual fuel system)



Width W (mm)	Height H (mm)	Depth min - max D (mm)	Pipe Center (Valve)	Bracket Centers		Tube Quantity (pcs)	Weight (kg)	HEAT CAPACITY					
			K (mm)	Bg Max (mm)	By Max (mm)			Coloured			Chrome		
450	688	80-105	410	310	476	14	5.1	334	388	1328	214	248	849
500	688	80-105	460	360	476	14	5.5	368	426	1459	236	274	938
600	688	80-105	560	460	476	14	6.5	433	502	1718	280	324	1110
450	1118	80-105	410	310	906	21	7.8	501	581	1988	322	374	1279
500	1118	80-105	460	360	906	21	8.3	551	639	2186	356	412	1411
600	1118	80-105	560	460	906	21	9.9	649	753	2578	423	491	1681
450	1760	80-105	410	310	1548	33	12.8	809	938	3211	517	599	2052
500	1760	80-105	460	360	1548	33	13.6	888	1031	3527	572	664	2273
600	1760	80-105	560	460	1548	33	15.9	1045	1213	4150	682	791	2706

## THESE INSTRUCTIONS SHOULD BE READ CAREFULLY AND RETAINED FOR FUTURE REFERENCE

DO NOT CONNECT THE TOWEL WARMER TO NETWORK BEFORE HAVING READ AND UNDERSTAND THE FOLLOWING INSTRUCTIONS.

Towel warmer must be installed only by expert technicians and installation must be compliant with all applicable rules, and national safety regulations and laws in force in the country where the product is installed.

This appliance is not intended for use by persons (including children) with reduced physical sensory and mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of this appliance by a person responsible for their safety.

Children must be supervised to make sure that they do not play with the towel warmer

In order to be effective the towel rail will get hot, however momentary contact with any part of it should not cause injury.

If the towel rail is to be installed in a place used by the public, a warning notice should be placed adjacent to the rail advising that the surface can be hot.

In order to avoid a hazard for very young children, this appliance should be installed so that the lowest heated rail is at least 600mm above the floor.

The electrical towel rail is intended only for dry towels washed in water. Any other use is forbidden.

Precautions should be taken to ensure that prolonged contact with the towel rail cannot occur.

In case of accidental over-heating and/or improper use, the circuit of the heater might be interrupted. THE HEATER IS NO LONGER USABLE AND MUST BE REPLACED.

Do not cut the supply cord. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

The towel warmer is to be installed so that switches and other controls cannot be touched by a person in the bath or shower

Towel warmer is not located immediately below a socket-outlet

**Before using the towel warmer please check the correspondence between the system's voltage and the heaters nominal tension. Electrical safety is guaranteed only and exclusively when the towel warmer is connected to a properly earthed electrical system, as requested by the current safety standards (only CL1 version).**

**This appliance must be earthed and only be on A.C. mains supply of 230/240 VAC. - 50Hz.**



## SAFETY PRECAUTIONS

Any contact between parts of heaters and chemical products or alcohol (including the water inside the towel rail) must be avoided.

**Do not install heaters into a towel rail fitted in ZONE 0 or ZONE 1.**

Always disconnect the electricity supply from the mains during installation and maintenance. It is recommended that the fuse is withdrawn or circuit breaker switched off at the distribution board while work is in progress (turning off the switch is not sufficient).

Verify that the rated voltage of heater is the same as the supply voltage.

Check that the electricity supply system is connected through an MCB (Magnetothermic Circuit Breaker) and RCCB (Residual Current Circuit Breaker) devices.

## INSTALLATION

Heaters are a class I appliance and are protected against water ingress according to its IP X4 degree of protection. The towel rail where heaters are fitted, must be mounted inside the zone of the bathroom according to its IP degree of protection and electrical legislation in force. In case of doubt about the correct installation zone, refer to the relevant public institution.

Switch the mains off before any installation, de-installation or maintenance operation on heaters.

### ZONE 0

Inside the bath or shower. Any fitting used here must be SELV (Separated Extra Low Voltage - max. 12Volts) and a minimum of IPX7 (protected against immersion in water).

### ZONE 1

Above the bath or shower to a height 2.25m. A minimum rating of IPX4 is required\* [see Note 1]

### ZONE 2

The area stretching to 0.6m outside the bath or shower and above the bath or shower. An IP rating of at least IPX4 is required [see Note 1]

### Outside Zones

Anywhere outside Zones 0,1 & 2. Where water jets are not to be used for cleaning purposes, the general rules EN 60335-1 [see Note 1]

### Notes:

1. in Zones 1 & 2. If there is a likelihood of water jets being used for cleaning purposes, a minimum of IPX5 is required.

2. The information contained on this page is for guidance only. Always refer to the current IEE regulations or a qualified electrician to ensure that you are guided by the latest regulations and code of practice.

**MAIN RECOMMENDATION ON ELECTRICAL TOWEL RAIL**  
(Applicable standard EN 60335-2-43)

In 'Electric only' heater installation, the towel rail MUST have a sufficient air gap to allow for water expansion. It is recommended to fill the towel rail approximately 90% with water; making sure that the heating element is completely immersed in water. Addition of glycol and possibly an inhibitor is recommended, as part of this percentage mix.

In 'Dual-fuel' installation with central heating and heater, at least one of the rail valves must always be left open, when the electrical element is switched on.

For all other aspects, refer to EN 60335-1 and EN 60335-2-43.

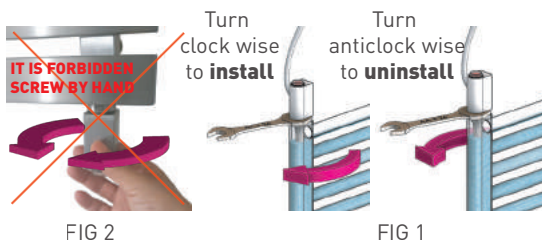
This heating element incorporates a bi-metal thermostat to measure the water temperature and a thermal fuse. It is complete with an ON-OFF rocker switch with a silicone isolation cap.

It senses the water temperature around the area where the bi-metal is located and is not intended to create a uniform thermal distribution over the whole electrical towel rail surface.

According to the geometry, treatment, construction material and liquid (water or water and glycol) of a specific electrified towel rail with the heater, the thermal distribution can be significantly different.

The wires in the mains lead are coloured in accordance with the following code:

**BLUE - NEUTRAL**  
**BROWN / BLACK - LIVE**  
**GREEN / YELLOW - EARTH**



As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured GREEN and YELLOW must be connected to the terminal in the plug which is marked with the letter **E** or by the earth symbol ⊕ or coloured green or green and yellow. The wire which is coloured BLUE must be connected to the terminal which is marked with the letter **N** or coloured black.

The wire which is coloured BROWN must be connected to the terminal which is marked with the letter **L** or coloured red.

## OPERATING (ELECTRICAL)

Heat will be distributed along each of the rails.

Some variation in the temperature across the surface of the rail is normal. When the appliance is covered the heating pattern of the rail may alter, and generally temperatures at the upper part of that rail will rise

The towel rail may be switched on and off at the isolating wall switch which must be positioned outside the bathroom.

## TECHNICAL SPECIFICATION TABLE

Operating voltage	230V ±10% AC 50 Hz
Insulation class	Class I
IP Degree of protection	IPX4
Operating Temperature	0-50°C
Storage Temperature	-20 ÷ 70°C

## ELECTRIC ONLY INSTALLATION

- Reverse the empty towel rail carefully leaning it on a soft cloth / surface and fill it properly.
- Take the heater from the package, handling with care.
- Insert the heating element all the way.
- When mounting the heater, do not use your hands if not for the first turn of the screw and then employ a suitable 26 mm spanner. (pls see fig. 1). IT IS FORBIDDEN TO SCREW THE SWITCH-BOX BY HAND (pls see fig. 2). Line up the switch and the rail through a max half turn rotation (clockwise or counter clockwise). The box is fitted with an anti-rotation lock: once you have reached the lock DO NOT FORCE, but rotate in the reverse sense till you get the lining up.
- Then using a 26 mm spanner screw the heating element until the last nipple thread turn and if necessary continue in order to have the regulating box facing forward.
- Make sure that the heater gasket is fully sealed to the female thread of the towel rail.
- Install properly the electrified towel rail with the heater into the wall according to the assembly instructions (see last page). Make sure that the towel rail has the heater bottom side.
- Verify that no water leakages occur and re-tighten joints as necessary. Make sure that heater parts are completely dry before proceeding with the installation.
- Make sure that the socket-outlet (models with plugs only) and the power lines are appropriate for the load required.
- The socket-outlet must be compatible with the heater plug (models with plug only).
- Connect the heater cable to the mains power according to current wiring regulations in force in the country where the product is installed.
- Switch on the heater pressing the button, in this position the lights is on. In the opposite position the light goes out and heater is switched off.

## UNINSTALL

- ELECTRIC ONLY UNINSTALLATION
- Disconnect the cable from the mains power.
- Remove the electrical towel rail from the wall and reverse it carefully leaning it on a soft cloth/surface.
- Using a 26 mm spanner unscrew the heater, rotating it anticlockwise until the heater thread is completely off from towel rail ½" GAS female thread.
- Remove the heater from the towel rail.
- AFTER DISCONNECTING, THE HEATER CANNOT BE REUSED. REPLACE THE PRODUCT WITH A NEW ONE.

## CARE AND MAINTENANCE

- In case of damage the switch-box can be replaced. The replacement can be made only and exclusively by the manufacturer.
- There are no user serviceable parts on the towel rail
- The rail is filled with a precise quantity of special liquid and should never need draining or refilling. Repairs requiring the opening of the liquid-tight seal must only be made by the manufacturer's Service Agent / distributor. Any leakage must be reported to the manufacturer's Service agent / distributor
- To clean the product, use a slightly wetted piece of cloth.
- DO NOT use harsh chemicals, cleaning solvents, bleaches or strong detergents.
- DO NOT use in open air environments and where the air temperature is below 0°C or above 95°C. When the water within the radiator freezes it may cause problems.
- The product is reliable for maximum working pressure of 6 bar. DO NOT use the product above this maximum limit. (For dual fuel system)
- Ph value of the water used in the system should be between 6 and 9. (For dual fuel system)
- Once completed, systems should be properly flushed and filled in order to remove debris, sludge and to clean solid particles and chemical residues, which may cause corrosion and damage within

the systems. A good water treatment inhibitor should be used within the systems to avoid corrosion and sludge. (For dual fuel system)

- When the air is trapped within the radiator it may cause inefficient warming. (For dual fuel system)
- Draining the water content in the radiator may cause corrosion. DO NOT drain the water from the radiator during repairs or when the product is not in use (summer seasons etc.) In order to keep the water within the radiator, close both valves. (For dual fuel system)
- Storage area should be clean, dry, closed and away from chemical solvents. Solvent filled Electric Radiators should be stored above 0° degrees.
- This appliance should only be used to dry fabrics washed in water using commonly available detergents. The rail, although hot to the touch is not hot enough to scorch or burn fabrics. However, soap and detergents remaining in articles after washing can cause discoloration. Therefore care should be taken to thoroughly rinse articles before airing.
- Although there is no direct contact, usage of cleaning solvents, chemicals (strong acids) or bleaches in the same area with radiators may cause corrosion by the evaporation of these chemicals to air and condensation back to radiator surface. This results in damaging the plating. Guarantee is not valid for such cases.
- When connecting pipes of various materials, their difference in electrode potential may cause galvanic corrosion and serious damage of pipes, valves and other equipment in the system. To avoid galvanic corrosion, it is highly recommended to use the same materials, or materials with similar electric potential, throughout loop.
- Radiators are heavy items and should be securely fastened to the wall. Special care should be taken into consideration including the fixing method used to secure the radiator to the wall, the type and the condition of the wall itself, and any additional potential forces or weights, prior to finalising installation. The wall plugs supplied with your radiator may not be suitable for your wall type. The appropriate wall plugs should be used by your installer. In all cases, it is strongly recommended that a suitably qualified professional installer carries out the installation.

## GUARANTEE

- The guarantee is not valid in case of improper use or installation.
- Producer offers 5 (five) years guarantee for MILD STEEL RADIATORS when installed on \*CLOSED SYSTEMS. There is no guarantee when installed on \*\*OPEN & \*\*\*SANITARY SYSTEMS.
- Producer offers 1(one) year guarantee for Cartridge Heaters and Dry CableHeating Elements.
- Producer shall not be liable for any infringement to intellectual property rights of the Goods and the compliance of the Goods with rules and regulations of the countries, where the Goods are sold.

\* CLOSED HEATING SYSTEM: Water circulates within the radiators and towelwarmers (independently) in a closed - loop system with no access for.

\*\* OPEN HEATING SYSTEM: Water circulates within the radiators and towelwarmers connected to an open expansion tank.

\*\*\* SANITARY HOT WATER SYSTEM: Domestic hot water is used for domestic purposes and to heat the radiators and towel warmers.

## AFTER SALES SERVICES