

ELECTRICAL WORK SHOULD ONLY EVER BE ATTEMPTED BY A QUALIFIED PROFESSIONAL OR OTHER FULLY COMPETENT PERSON

Electric Towel Rail – General Fault Finding

The entire towel rail doesn't get hot at all.

Fluid level (if liquid filled) should be checked; it should be approximately 90% full.

Electrics should be checked.

Standard element should be turned on for at least 4 hours.

Thermostatic element should be set to maximum temperature and turned on for at least 24 hours.

If there is still no heat whatsoever then the element or electrical installation may be faulty.

The entire towel rail gets warm but not hot enough.

Fluid level (if liquid filled) should be checked; it should be approximately 90% full.

Electrics should be checked.

Standard element should be turned on for at least 4 hours.

Thermostatic element should be set to maximum temperature and turned on for at least 24 hours.

If the towel rail is still not hot to touch the element is probably undersized (there may not be an alternative because the next size up may be too big).

Some of the towel rail doesn't get hot enough.

(Usually bottom, top and opposite side to the element)

Fluid level (if liquid filled) should be checked; it should be approximately 90% full.

When an electrical element is used to heat a liquid filled towel rail or radiator you will not get identical performance as you would with it connected to a central heating system. There is no circulation and it will therefore take longer to heat up and will be noticeably hotter nearer the element. Dry element towel rails have a much better spread of heat.

After a few hours continuous use the heat would have spread but there will still be temperature variances across the surface but this is not a fault.

The towel rail gets too hot.

Fluid level (if liquid filled) should be checked; it should be approximately 90% full.

Check that the correct size element is fitted because oversizing can cause the surface temperature to get too high.

Towel rails feel very hot to the touch; especially chrome plated ones because they conduct heat very well. We aim to achieve a maximum surface temperature of 65°C on chrome towel rails and 83°C on painted towel rails. If the towel rail gets hotter than the temperatures stated the element might be oversized or faulty.

ELECTRICAL WORK SHOULD ONLY EVER BE ATTEMPTED BY A QUALIFIED PROFESSIONAL OR OTHER FULLY COMPETENT PERSON

Electric Towel Rail – Electrical Fault Finding

All products are checked in the factory to ensure that they do not exceed 1mA leakage of residual current.

Residual Current Devices (RCD) can be a problem even with perfectly good products.

Is the RCD or electrical installation the problem?

Firstly the RCD should be 30mA maximum and should be of good quality. There are many low cost & low quality ones in the market, which can cause problems without any reason.

Secondly, the RCD can trip when the Earth circuit of the building is not good enough. There is always a difference of potential difference (residual current) between Neutral and Earth coming from the Earth. This value increases with humidity and many other reasons. If the Earth connection is not good enough this will be added to the residual current generated by the electrical appliance and will often trip the RCD.

Thirdly, every single electrical appliance is a source of residual current that normally flows from the Earth connection. If the RCD is already charged close to its tripping value (30mA), It will trip when the additional residual current is added, exceeding the tripping value. To detect this, the residual current before plugging-in the appliance should be measured to see how this is close to the limit value of the RCD.

Is the towel rail the problem?

The first potential defect is wrong connection of the Neutral and the Earth. This is easy to check and detect with a multimeter.

The second potential defect is damage of the insulation material so that the live can come in contact with the body. This is easy to check and detect with a multimeter.

The third and final potential defect is that the insulation can be damaged but not touching the body but very close. This can increase the residual current above the admissible limit and the RCD will trip. This is easy to check and detect with a multimeter.