

A modern bathroom with a white sink on a grey vanity, a mirror, and a towel rack with white towels. The background is a light-colored wall with a subtle pattern.

The Complete Guide to Heated Towel Rails

Because warmth and comfort should be easy, cost-effective and beautiful



Heated Towel Rails are no longer a luxury, but are now becoming even more commonly seen as an inexpensive way to transform the bathroom experience. Used as both a design feature and a practical addition to the bathroom, they are easy to install and allow you to enjoy a warm towel every day.

With an ever-expanding range of Towel Rails available there is sure to be something that suits your size requirements, style, colour and budget. Heated Towel Rails are energy efficient so are an extremely affordable option for every bathroom.

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This helpful guide has been compiled by Thermogroup. For all enquires, specifying and quoting please contact us.

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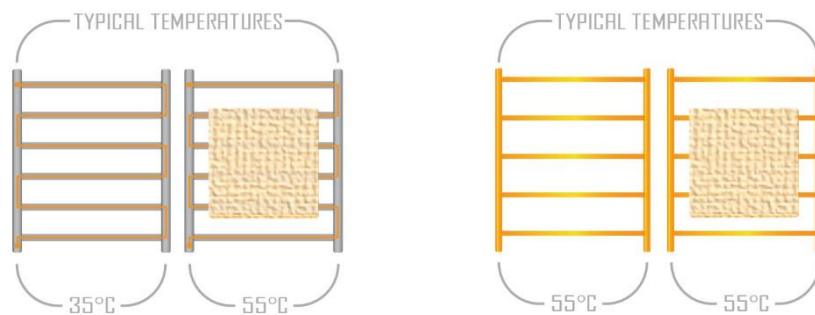
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Electric, Liquid Filled & Hydronic Rails

Electric Towel Rails will add some warmth to the room, however are designed as a towel warmer only and won't heat the entire room. Electric rails heat up quickly, starting to get warm in about 5 minutes and reaching optimum temperature in approximately 30 minutes. Running costs are minimal, with a standard Thermostatic dry element rail costing as little as 1 cent per hour to run. This can be further reduced by adding a timer to provide optimum control over running times.

With the efficient dry electric heating element there is no need to worry about plumbing or having to fill the rails. They simply connect directly to the existing electricity circuit and can be controlled with a timer or a boost switch for added energy efficiency and convenience. Heated towel rails are designed to run on the lowest wattage possible without compromising comfort, generally heating up to around 35 degrees. When a towel is placed over the bars the towel insulates the rail and absorbs the heat, meaning that beneath the towel the temperature will rise to between 50 - 55 degrees.



Electric Heated Towel Rail

Hydronic / Liquid Filled Heated Towel Rail

Hydronic Rails are not only designed to heat your towels but will also add warmth to the room. They are connected to a hydronic heating system in the house which heats the rail by pumping hot water through it. This requires a boiler and is usually only viable if hydronic heating is used throughout the rest of the home. The heat up time of a Hydronic rail is dependent on if the boiler is already running and the water is hot.

Liquid Filled Rails are similar to hydronic rails however they use an electric element to heat the liquid inside the rail. The rails are supplied pre-filled with anti-corrosion fluid and sealed, ready to plug into a power point or to be hardwired to a switch. A liquid filled rail takes close to an hour to reach optimum temperature.

Both Hydronic and Liquid Filled rails will heat up to around 55 degrees, and act as an additional heat source in the room. As the rail is heating the water not the air, covering the rail with a towel will not cause the rail to get any hotter.

Installation

When installing Heated Towel Rails there are a number of important aspects to consider.

The first step in a suitable installation is to ensure the towel rail is being installed in the correct zone in the bathroom. Once you have selected the correct area to mount the towel rail you need to ensure that you allow suitable mounting fixtures before the wall is sheeted.

Some towel rails have mandatory or optional wall mounting kits which have to be installed before the wall is sheeted. There is a range of different systems available which provide a fixing point for the wired leg. It is important to check if your towel rail requires an in wall mounting system and if so follow the instructions set out by the manufacturer.

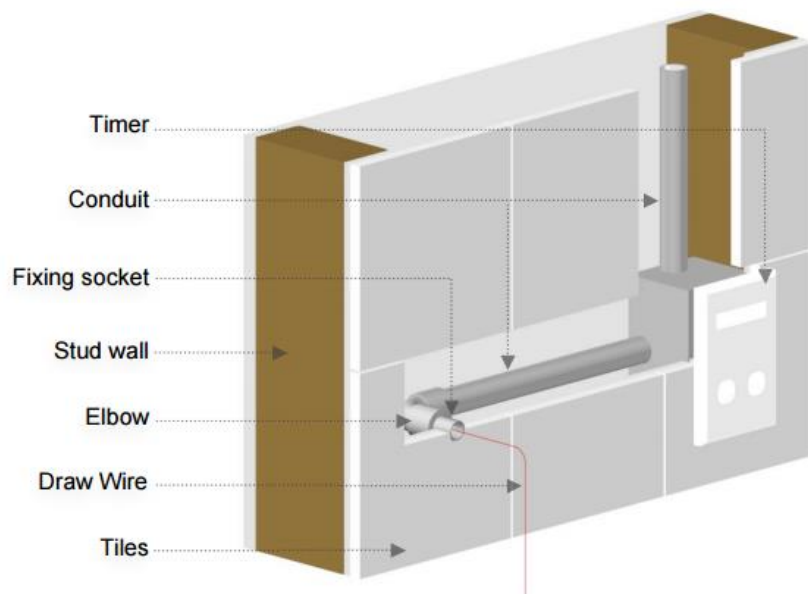
The next step is to ensure you have power at the rail location or that a draw wire is supplied to accommodate the wiring. The most common scenario is to run a draw wire into the roof to a connection point or to a timer or switch location where the towel rail will be connected to power. It is always recommended that the electrical connection is made where it can be accessed at a later date if required.

Always ensure that the wiring is going to the correct leg on the towel rail unless your rail comes with universal wiring which allows connection at any leg.

Once the wall is complete the towel rail can be mounted using the mounts and mounting method supplied by the supplier. It is recommended that you do not attempt to drill the holes before you have the towel rail as most suppliers have a manufacturing tolerance, meaning your holes may be in the wrong location.

The most common way of positioning the holes in the correct location is to install all the legs on the towel rail and then hold the rail against the wall, ensuring it is level before circling around the legs to mark the wall. This will ensure you have the correct locations for your holes.

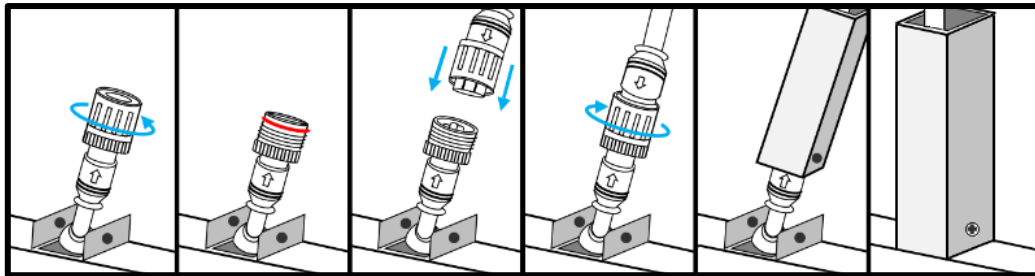
The mounting of the towel rail can be done by any competent person including the builder, home owner or electrician. The electrical connection must be completed by a qualified electrician in accordance with relevant electrical regulations, unless you are plugging it into a power point (however this is not an option with all rails).



Wiring

In addition to the information regarding the towel rail installation it is important to check the wiring details of the towel rail and ensure you comply with all safety regulations. It is also recommended that you refer to 'Where can towel rails be installed?' on page 7.

Some towel rails will come with a fixed lead out of the towel rail leg. More advanced towel rails will come with a connection clip which then allows you to wire in the lead prior to the towel rail installation. When the rail is ready for installation, the wiring is simply connected by unscrewing a plug and screwing the lead on as shown in the below diagram.



The other consideration is which point on the rail the wiring connection is located. This is important for when you are ordering the rail and when running the supply cable for the rail. Some rails will have a fixed leg for the wiring while more advanced rails have universal wiring which allow the connection to be located at either the top or bottom or the rail on either the left or right hand side all as standard.

If the rail is a 12V rail it is important to ensure you have a suitable transformer for the rail. Where there is multiple 12V single rails it is important to ensure the total wattage does not exceed that of the transformer you are using. The transformer must not be located more than two metres away from the rail and it is important that the transformer is in an accessible spot such as behind a switch plate or in the roof with adequate ventilation.

Controlling Your Rail

Most heated towel rails are safe to be left running continuously, however generally it is preferable to have the ability to control when your heated towel rail is on, thus saving you energy. The majority of the range available on the market don't have a switch on the unit but can simply be wired to a standard switch. Alternatively, the rail can be wired to a timer that can be programmed to automatically turn on and off to suit your lifestyle, thus ensuring the towel rail is warm when you require it to be.

Stainless Steel Vs Chrome

When it comes to buying a heated towel rail, you may find yourself faced with a lot of choices: different sizes, shapes and styles, as well as a choice between chrome and stainless steel. While a stainless steel and chrome heated towel rail are similar in appearance, they each have their own unique differences.

Stainless Steel is the coming together of two (sometimes three) parties, involving steel, chromium and nickel. While it may not be a 100% stain-proof (as the name may suggest), it is relatively easy to keep clean, with an added bonus of being resistant to corrosion, tarnish and scratches – the perfect solution for an area where moisture is generally present. Stainless steel is extremely hygienic with no known health risks.

Chrome (short for Chromium) generally refers to a chromium overlay or plating. The lustrous, hard, steel grey metallic material is electroplated onto the outside of a plastic or metal product as a thin layer. Chromium plating looks great when used decoratively as a thin corrosion free veneer to bathroom accessories such as your toilet holder or towel rail. Although this material has a functional value, used to strengthen the object which it covers, once this material scratches it can start to flake, exposing the product below to possible rust.

Stainless Steel

More Durable than Chrome
Not as shiny as chrome, easier to clean
Marginally more expensive than chrome
Metal alloy without any plating/veneer
Rust Free
Inner core same as outer surface
100% Recyclable
Does not collect bacteria or algae build up
Surface scratches can be polished out

Chrome or Chromium Plating

Less durable than Stainless Steel
Polished, Shiny surface
Slightly less expensive than Stainless Steel
Metal or plastic core with a chromium overlay
Doesn't rust, but can appear dull when damaged
Inner metal core can rust if the outer surface is damaged
Partially Recyclable
If not dried frequently may get lime scale
Surface scratches can cause peeling

Warranty

When investing in heated towel rails, you want to be sure you get value for your money. Many trusted manufacturers produce rails that are designed and built to last, using only the highest quality materials such as 304 Grade Stainless Steel, giving the rails a premium quality finish. When purchasing a heated towel rail, choose a good quality product with a long warranty so you can have peace of mind that your rail will last for years to come.

Where can Towel Rails be Installed?

A range of towel rails are available to allow full flexibility with your bathroom design.

12 Volt towel rails are safe for use in wet areas, due to the low voltage. This allows interior design freedom, as your wet areas do not hinder you from installing your towel rail. The 12V range can be installed in Zone 1, seen in the below diagram. The transformer needs to be installed outside Zone 1, no further than two metres from the rail. This can be installed in the ceiling or wall cavity. It must be well ventilated and located behind a switch plate or timer for easy access.

A 12V Heated towel rail will get as warm and dry your towels as efficiently as the standard 240V rails. This is because the amount of heat output is related to the wattage of the rail, rather than the voltage. Therefore, a 12 Volt rail will put out the same amount of heat as a 240 Volt rail with the same wattage.



Other freestanding and ladder rails that are 240 Volts are safe for use in Zone 2 and the outside zones. Some ranges of heated towel rails (excluding the 12V range) have the option to be exposed wired, allowing the heated towel rail to be easily mounted to your wall in an existing bathroom and plugged into a nearby power point, meaning that no wiring is required in the wall or roof cavity.

It is always recommended to consult the electrician who will be wiring up the towel rail to gain advice and the most up to date and specific regulations for your install in your state.

Confused about IP Ratings?

Electrical fixtures in bathrooms are certified using an IP (Ingress Protection) rating. This rating uses 2 numbers and refers to the level of protection against the ingress of foreign bodies (1st number) and protection against the ingress of liquids (2nd number). The higher the second number is the greater protection the item has from water ingress. Many heated towel rails have an IP55 Protection Rating, making them safe for use in bathrooms.

