

DCS

FLOOR TO CEILING

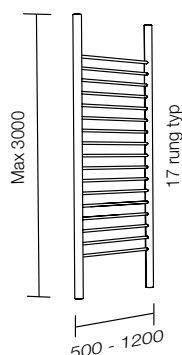


Table 1.0

FEATURES	
Customised to suit	Made to specifications
Easy install	Wiring in ceiling cavity
Tube profile options	Standard or large, round or square tube
Ecotimer	Ecotimer included
SPECIFICATIONS	
Recommended use	Residential and Commercial
Materials	Stainless steel 304 grade
Finish	Mirror polish (chrome appearance)
Technology	Dry element (no leaks)
Element	Replaceable
Options	Heated or Non heated
Power entry	*Top left or right
Voltage	*230-240V AC or 24V DC (SELV)
Wattage	*Varies depending on size and specs
Standards	AS/NZS:60335.2.43
Safety rating	*IPX5 230-240V *IPX7 24V SELV *(below ceiling once installed)



To see the complete DCS range see www.dcshort.com

CLEANING RECOMMENDATIONS

This bathroom product should not be cleaned with abrasive materials eg. steel wool/scourers. Do not use any corrosive or abrasive cleaning agents containing acids or scouring agents. Bleaches can also discolour products and therefore should not be used.

Use a soft cloth moistened with warm soapy water or a silicone based household wax/polish such as SC Johnson 'Pledge' for general polishing and cleaning of the appliance. Fine scratching can be removed using the correct metal polish. Recommended brands are 'Autosol' and 'Brasso Paste', both available in tubes from supermarkets and car care outlets.

Damage caused by any improper treatment is not covered by the product warranty- refer to Warranty Conditions on the last page.

Disclaimer: Products in this specification manual must by regulation be installed by licensed and registered trade people. The manufacturer/distributor reserves the right to vary specifications or delete models from their range without prior notification. Dimensions and set-outs listed are correct at time of publication however the manufacturer/distributor takes no responsibility for printing errors.

Tech Page Version 3.1

DCS

FLOOR TO CEILING

INSTALLATION INSTRUCTIONS

SAFETY

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

WARNING: In order to avoid a hazard for very young children, children should be supervised to ensure that they do not play with the appliance. This appliance should be installed so that the lowest heated rail is at least 600 mm above the floor.

ELECTRICAL (230-240V models)

- Must be installed by a registered electrician and must be earthed.
- The towel rail may be installed in wet area electrical zones 2 & 3 as specified in AS/NZS 3000:2000.
- An isolating switch must be positioned near the towel rail.
- If the supply cord is damaged the entire towel rail must be returned for repair.
- Minimum 50 mm clearance to surrounding surfaces.
- IPX5 rating (under ceiling once installed)

ELECTRICAL (24V low voltage models)

- Must be installed by a registered electrician.
- The towel rail may be installed in wet area electrical zones 1, 2 & 3 as specified in AS/NZS 3000:2000.
- The 24V 'safety isolating' transformer supplied must be located in a dry accessible location (do not cover with insulation).
- The waterproof wirenut connectors provide an IPX7 rating
- Distance from transformer to towel rail must be less than 2 metres. see *FAQ's
- Typical locations include:
 - ceiling cavity
 - wall cavity (behind switch plate)
 - cupboard

GENERAL ELECTRICAL (all models)

- Means for disconnection must be incorporated in the fixed wiring in accordance with wiring guidelines AS/NZS 3000:2000.
- Manufactured and tested to AS/NZS 60335.2.43
- Minimum 50 mm clearance to surrounding surfaces.

1. PREPARATION AND INSTALLATION

- The top of the rail is supported by timber blocking in the ceiling 150x50 or similar and 55mm holes need to be drilled to accept the towel rail. Typical installation see Fig 1.0.
- To support the bottom of the rail 2 polycarbonate bushes are fixed to the floor. The position of the bushes must match the holes drilled for the top rails so the rail is perpendicular to the floor once secured. See Fig 2.0
- Trial fit the towel rail by pushing the towel rail into the holes in the ceiling then place the rail on the bushes fixed to the floor.

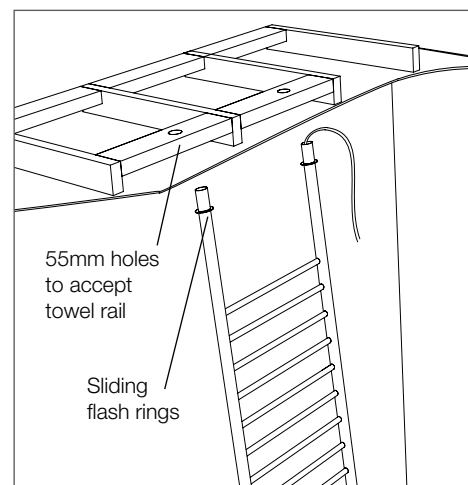


Fig 1.0

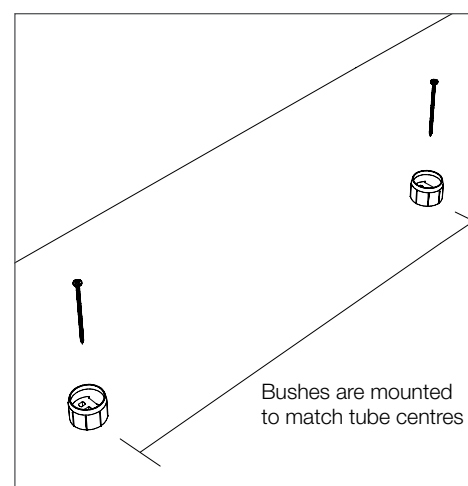


Fig 2.0

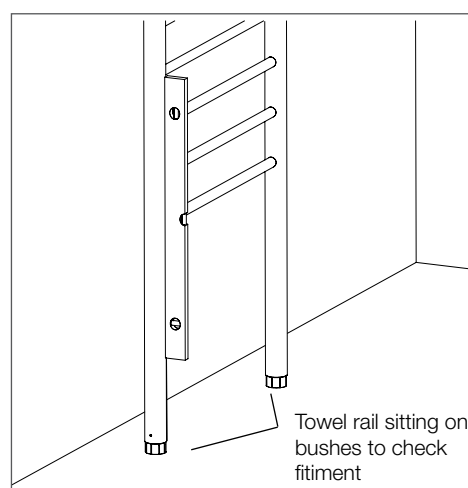


Fig 3.0

Electricians, please ensure a copy of the installation instructions is left with the end user for future reference

DCS

FLOOR TO CEILING

2. PREPARATION AND INSTALLATION - CONTINUED.

- Use a level and check if the rail is plumb. The bushes allow some lateral adjustment. See Fig 3.0.
- Once aligned lower the towel rail over the bushes and secure using the countersunk stainless steel screws provided, through the tube wall into the bushes. See Fig 4.0 & 5.0
- Note: Drilling a 2mm pilot hole makes it much easier to screw in the self tapping screws. The bushes are moulded from glass reinforced polycarbonate and are very hard.
- The top of the towel rail is secured using construction adhesive, sparingly, in the 55mm hole around the tube.
- Once the adhesive has set slide the flash rings up to the ceiling, they are a tight sliding fit.

4. TIMER AND SWITCH

- The towel rail must have a switch in the bathroom that can be identified as the towel rail switch. This is typically a separate switch mechanism on the light switch plate for the bathroom. eg. 3 gang switch plate - lights - extractor - towel rail
- The supplied 'ECOTIMER' is a 230 - 240V device that should be installed behind the switchplate between the switch and the towel rail (230-240V models). For 24V models the Ecotimer should be installed between the switch and the transformer. See Fig 6.0

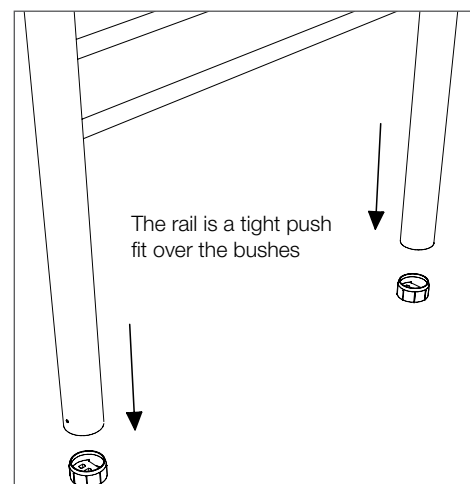


Fig 4.0

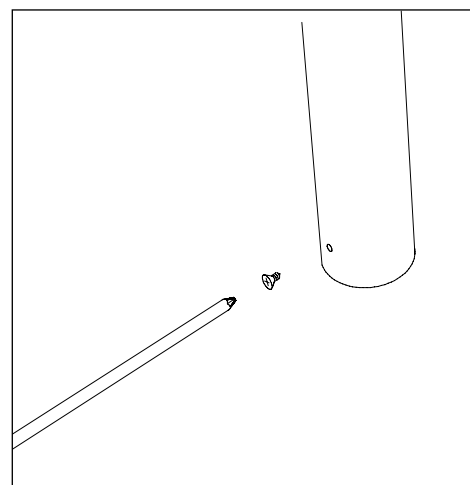


Fig 5.0

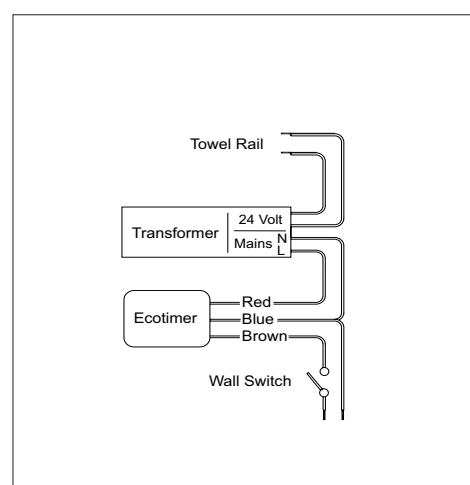


Fig 6.0 (For 24V only)

DCS

FLOOR TO CEILING

COMPONENT LIST

- 2 x Polycarbonate bushes
- 2 x Large zinc plated self tapping screws, pan head 10g x 50mm
- 2 x Stainless steel grub screws, 4g x 1/4" countersunk head
- 2 x Stainless steel flash rings
- 2 x Waterproof wirenuts* (24V models only)
- 1 x Ecotimer *(230-240V models only)

TRANSFORMER KIT FOR 24V RAILS

(*TO BE ORDERED SEPARATELY)

- 1 x Ecotimer
- 1 x Electronic transformer
- 2 x 3m lengths appliance wire 90 deg C

CORRECT USE OF WATERPROOF WIRENUTS (*24V rails)

- Strip wires 12.7mm (1/2").
- Align any frayed strands or conductors.
- Pre-twisting unnecessary. Place stripped wires together with ends of insulation even.
- Twist connector onto wires pushing firmly until hand tight. Do not over torque.
- Wipe sealant in and around conductors and connector opening while tightening. DO NOT REUSE

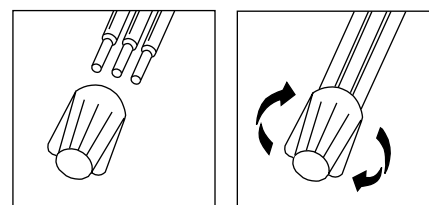


Fig 7.0

FAQ's

Q. Can I place the towel rail more than 2 metres from the transformer? (24V models only)

- A.** The main reason for the limit is NOT voltage drop, as this may be overcome with larger wire. Modern electronic transformers operate at very high frequencies and extending the length of low voltage wiring will cause unacceptable levels of radio frequency interference (buzzing on AM radios). This may not just affect your own home, but potentially neighbours as well, and should be taken seriously. Old technology 'iron core' transformers do not have this problem and may be used to extend longer than 2 metres, provided that larger cable is used to counteract voltage drop. Electricians may contact DC Short Ltd for further technical advice if needed.

Q. Is my towel rail operating at the correct temperature?

- A.** Towel rails will not feel as hot on cold winter days as they do on hot summer days as they are not thermostatically controlled. The towel rail contains no moving parts or electrical contacts, this ensures a long life. A quick test to determine if the rail is functioning correctly follows:
1. Turn the towel rail on and leave for one hour with no towels.
 2. After one hour each bar of the towel rail should be a similar temperature, but no more than warm.
 3. Cover each bar of the towel rail with a DRY FOLDED towel, three towels (a double layer of towelling on each bar). Leave the towel rail on for another hour.
 4. After one hour check that the temperature underneath the towelling on each bar is HOT to the touch. The exposed surfaces should remain warm only.

Q. I have tested the transformer with a multimeter prior to installation and detect no voltage? (24V models only)

- A.** Electronic transformers operate at high frequencies, above the sampling frequency of a standard multimeter. It is unlikely that a multimeter will detect any voltage. It should also be noted that electronic transformers will not start without a load connected. If you need to test that the transformer is functioning correctly, EITHER connect the transformer to the towel rail to see if it gets warm, OR temporarily connect a 50W 24V halogen lamp to the transformer to see if it lights up.

DCS

FLOOR TO CEILING



DCS PRODUCT QUALITY GUARANTEE

You have purchased a quality product from DC SHORT LTD ("DCS"). This product is covered by a 7 year replacement product warranty and a 12 month warranty over spare parts and labour.

7 YEAR WARRANTY – DOMESTIC USE

This warranty covers faults in the product construction, material and assembly. Products which are within 7 years from the date of purchase, found upon inspection by DCS, to be defective in construction, material or assembly, will be repaired or exchanged with an equivalent product free of charge. Replaced items become DCS property. All replacement products will be available for collection without charge to the customer at the nearest DCS retailer to the customer's location, or elsewhere as agreed between the customer and DCS.

Labour and Spare Parts

The labour for the replacement of products and spare parts to which this warranty applies will be supplied by DCS or relevant supplier using licensed tradesmen engaged by DCS or relevant supplier within 1 year from the date of purchase. Spare parts which are within 1 year from the date of purchase found upon inspection by DCS to be defective in construction, material or assembly, will be replaced free of charge.

Manufacturer's Provisions

The following spare parts are covered by a 3 year warranty:

- Heating Elements
- Transformer
- Timer

Warranty Conditions

This warranty will apply only under all of the following conditions:

- The item has been installed by a qualified tradesman
- The item has been installed for and subjected to domestic residential use only
- Failure is due to a fault in the manufacture of the product
- Proof of purchase (including the date of purchase) is provided
- The installation of the product is in accordance with the instructions provided

This warranty does not cover products purchased as an ex-display without being fully checked and tested for sale by the manufacturer.

This warranty does not include faults caused by:

- Unsuitable or improper use
- Incorrect installation or installation not in accordance with the instructions provided
- Installation or part installation by the purchaser or any person other than a qualified tradesman
- Normal wear and tear
- Inadequate or complete lack of maintenance
- Chemical, electrochemical or electrical influences
- Harsh detergents or abrasive cleaners used on product finishes

1 YEAR WARRANTY – COMMERCIAL USE

'Commercial' use is all use other than for normal domestic residential purposes, including use in non-business places as in public buildings, schools, sports centres and in establishments that contain private bathrooms with high frequency of use by many individuals, such as hotels, motels, retirement villages and hospitals.

The Commercial warranty covers this product against manufacturing faults in the construction, material and assembly of both the finished products and any spare parts for a period of 1 year from the date of purchase. Products and spare parts which are found upon inspection by DCS to be defective in construction, material or assembly will be repaired or exchanged free of charge. Replaced items become DCS property. The labour for the replacement of products and spare parts to which this warranty applies will be supplied by DCS or relevant supplier using licensed tradesmen engaged by DCS or relevant supplier. The Warranty Conditions and exclusions which apply to the noncommercial warranty also apply to this commercial warranty.

EXCLUSIONS

To the fullest extent permitted by law, DCS excludes all liability for damage or injury to any person, damage to any property, and any indirect consequential or other loss or damage.

CLAIM PROCEDURE

For all warranty queries customers are to contact the branch where the product was purchased. These details can be found on your purchase invoice.

Our goods come with guarantees that cannot be excluded under the New Zealand and Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.