

# StickyMat System

## Overview

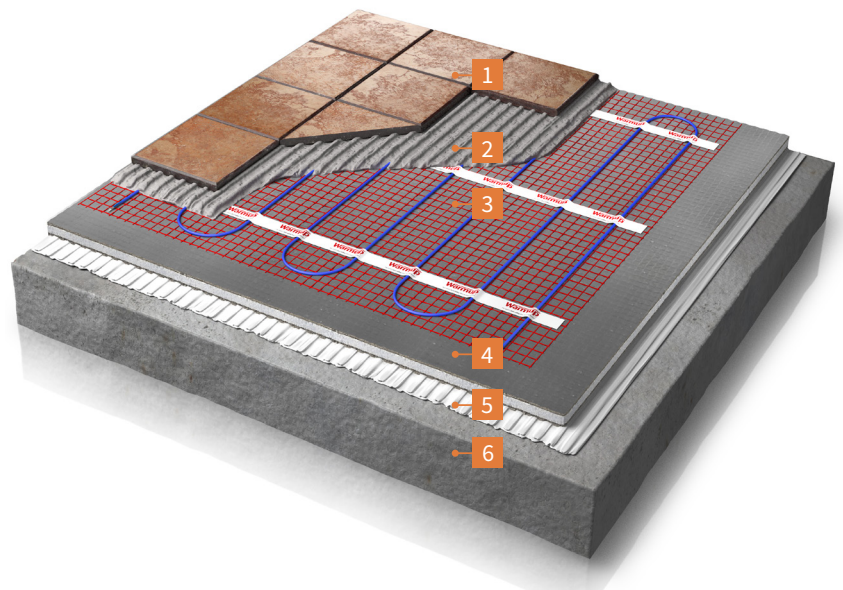
The Warmup StickyMat System is designed for use within the adhesive layer under tiles or within a levelling compound under other floor finishes. The fixed spacing and self-adhesive mat makes installation of regularly shaped rooms quick and easy whilst ensuring precision is maintained. The pressure sensitive adhesive securely binds the mats to the floor, keeping them flat and ensuring the application of tile adhesive is snag free whilst allowing the mats to be easily repositioned as needed.

The ultra-thin, 2mm multistrand, dual core heating cable, is double insulated with an advanced fluoropolymer making it exceptionally tough and easy to tile over.

For floors using a vinyl, carpet, timber or other UFH compatible floor finishes including tiles the system can be covered with a levelling compound to provide a flat and level floor surface. StickyMats are available in both 150W/m<sup>2</sup> and 200W/m<sup>2</sup> variants making them ideal for use as the primary heat source within modern homes and most older properties.

### FLOOR CONSTRUCTION

- 1 Floor finish
- 2 Tile adhesive or levelling compound
- 3 Warmup StickyMat
- 4 Warmup Coated Insulation Board
- 5 Flexible Tile Adhesive
- 6 Subfloor



**Electric**  
Heating System

0345 345 2288

uk@warmup.com  
www.warmup.co.uk

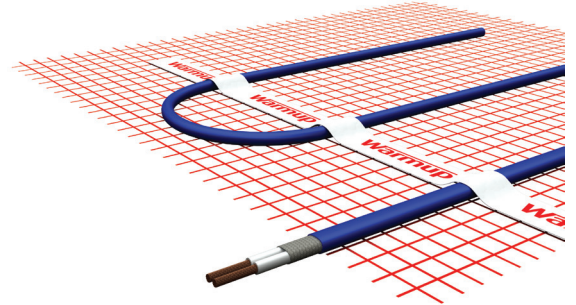
**Warmup**

The world's best-selling floor heating brand™

# Technical Data

## TECHNICAL DATA - StickyMat

|                        |  |
|------------------------|--|
| OPERATING VOLTAGE      | 220 - 240v: 50Hz                           |
| IP RATING              | IPX7                                       |
| WIDTH                  | 500mm                                      |
| MAT THICKNESS          | 3mm  |
| CABLE THICKNESS        | 1.8mm                                      |
| OUTPUT RATING          | 150W/m <sup>2</sup><br>200W/m <sup>2</sup> |
| INNER INSULATION       | ETFE                                       |
| OUTER INSULATION       | ETFE                                       |
| MIN. INSTALLATION TEMP | 5°C  |
| CONNECTION             | 3m LONG "COLDTAIL" CONNECTION              |



## Features

- StickyMats are available in both 150W/m<sup>2</sup> and 200W/m<sup>2</sup> variants
- Ultra-thin, 1.8mm cable multistrand, dual core heating cable is double insulated with an advanced fluoropolymer making it exceptionally tough and easy to tile over
- Ideal for regular shaped rooms, where the 0.5m wide mats can be rolled out across the floor in parallel runs.
- Pressure sensitive adhesive securely binds the mats to the floor keeping them flat for fast and secure installation
- BEAB Approved and CE marked meeting the highest safety standards for ultimate piece of mind
- Lifetime Warranty & SafetyNet Installation Guarantee



# Technical Data

| PRODUCT CODE | AREA TO BE HEATED (m <sup>2</sup> ) | SPM 150W/m <sup>2</sup> |          |                |                      |
|--------------|-------------------------------------|-------------------------|----------|----------------|----------------------|
|              |                                     | POWER (W)               | LOAD (A) | RESISTANCE (Ω) | RESISTANCE BANDS (Ω) |
| SPM 1        | 1                                   | 150                     | 0.65     | 353            | 335.4 - 370.7        |
| SPM 1.5      | 1.5                                 | 225                     | 0.98     | 235            | 223.3 - 246.8        |
| SPM 2        | 2                                   | 300                     | 1.30     | 176            | 167.2 - 184.8        |
| SPM2.5       | 2.5                                 | 375                     | 1.63     | 141            | 134.0 - 148.1        |
| SPM 3        | 3                                   | 450                     | 1.96     | 118            | 112.1 - 123.9        |
| SPM 3.5      | 3.5                                 | 525                     | 2.28     | 101            | 96.0 - 106.1         |
| SPM 4        | 4                                   | 600                     | 2.61     | 88             | 83.6 - 92.4          |
| SPM 4.5      | 4.5                                 | 675                     | 2.93     | 78             | 74.1 - 81.9          |
| SPM 5        | 5                                   | 750                     | 3.26     | 71             | 67.5 - 74.6          |
| SPM 6        | 6                                   | 900                     | 3.91     | 59             | 56.1 - 62.0          |
| SPM 7        | 7                                   | 1050                    | 4.57     | 50             | 47.5 - 52.5          |
| SPM 8        | 8                                   | 1200                    | 5.22     | 44             | 41.8 - 46.2          |
| SPM 9        | 9                                   | 1350                    | 5.87     | 39             | 37.1 - 41.0          |
| SPM 10       | 10                                  | 1500                    | 6.52     | 35             | 33.3 - 36.8          |
| SPM 11       | 11                                  | 1650                    | 7.17     | 32             | 30.4 - 33.6          |
| SPM 12       | 12                                  | 1800                    | 7.83     | 29             | 27.6 - 30.5          |
| SPM 15       | 15                                  | 2250                    | 9.78     | 24             | 22.8 - 25.2          |

| PRODUCT CODE | AREA TO BE HEATED (m <sup>2</sup> ) | 2SPM 200W/m <sup>2</sup> |          |                |                      |
|--------------|-------------------------------------|--------------------------|----------|----------------|----------------------|
|              |                                     | POWER (W)                | LOAD (A) | RESISTANCE (Ω) | RESISTANCE BANDS (Ω) |
| 2SPM 0.5     | 0.5                                 | 100                      | 0.44     | 529            | 502.6 - 555.5        |
| 2SPM 1       | 1                                   | 200                      | 0.87     | 265            | 251.8 - 278.3        |
| 2SPM 1.5     | 1.5                                 | 300                      | 1.30     | 176            | 167.2 - 184.8        |
| 2SPM 2       | 2                                   | 400                      | 1.74     | 132            | 125.4 - 138.6        |
| 2SPM 2.5     | 2.5                                 | 500                      | 2.17     | 106            | 100.7 - 111.3        |
| 2SPM 3       | 3                                   | 600                      | 2.61     | 88             | 83.6 - 92.4          |
| 2SPM 3.5     | 3.5                                 | 700                      | 3.04     | 76             | 72.2 - 79.8          |
| 2SPM 4       | 4                                   | 800                      | 3.48     | 66             | 62.7 - 69.3          |
| 2SPM 4.5     | 4.5                                 | 900                      | 3.91     | 59             | 56.1 - 62.0          |
| 2SPM 5       | 5                                   | 1000                     | 4.35     | 53             | 50.4 - 55.7          |
| 2SPM 6       | 6                                   | 1200                     | 5.22     | 44             | 41.8 - 46.2          |
| 2SPM 7       | 7                                   | 1400                     | 6.09     | 38             | 36.1 - 39.9          |
| 2SPM 8       | 8                                   | 1600                     | 6.96     | 33             | 31.4 - 34.7          |
| 2SPM 9       | 9                                   | 1800                     | 7.83     | 29             | 27.6 - 30.5          |
| 2SPM 10      | 10                                  | 2000                     | 8.70     | 26             | 24.7 - 27.3          |
| 2SPM 15      | 15                                  | 3000                     | 13.04    | 18             | 16.7 - 18.5          |

NOTE: To cover larger areas, several kits should be used together.

# WARMUP COMPONENTS

## Insulation Boards

Warmup® Insulation Boards are a water resistant, insulated tile backer board made of extruded polystyrene, faced on both sides with a fibreglass mesh embedded into a thin cement polymer mortar.

They have high thermal insulation properties for energy efficiency and an added benefit of sound absorption.

### INSBOARD - TECHNICAL SPECIFICATIONS

| MODEL         | THICKNESS (mm) | WIDTH (mm) | LENGTH (mm) | WEIGHT (kg) | R VALUE (m <sup>2</sup> .K/W) |
|---------------|----------------|------------|-------------|-------------|-------------------------------|
| INSBOARD6MM   | 6              | 600        | 1250        | 1.95        | 0.16                          |
| INSBOARD(PK1) | 10             | 600        | 1250        | 2.22        | 0.28                          |
| INSBOARD20MM  | 20             | 600        | 1250        | 2.48        | 0.58                          |
| INSBOARD50MM  | 50             | 600        | 1250        | 3.26        | 1.50                          |



**Warmup Insulation Boards have zero Ozone Depletion Potential (ODP) and a Global Warming Potential (GWP) of less than 5**

## Thermostat



### 4iE® SMART WIFI THERMOSTAT

For Central Heating and Underfloor Heating Systems

Connected to the internet by WiFi, it can be controlled from a smart phone, tablet or computer as well as its own touchscreen interface. It learns how homeowners use their heating and the unique way each zone reacts. It uses this knowledge to suggest ways to save energy, such as what temperature should be set when the area is not in use and when the heating can be turned off earlier with no noticeable impact on comfort.

Personalise your 4iE with uploadable photo backgrounds and changeable, textured overlays.



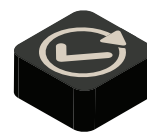
#### SmartGeo™

Always at the right temperature automatically, and up to 25% lower energy usage. Just like magic.



#### EasySwitch™

Always on the best tariff, automatically. Saving on average £210.



#### Easy to use

Simple and secure set up using WiFi, with 24/7 technical support.

# Cement Coated Insulation Boards

## Overview

Warmup Insulation Boards are manufactured from water resistant extruded polystyrene, finished on both faces with a thin layer of fibreglass reinforced cement. They are available in a range of thicknesses, from 6mm to 50mm, to individual project requirements.

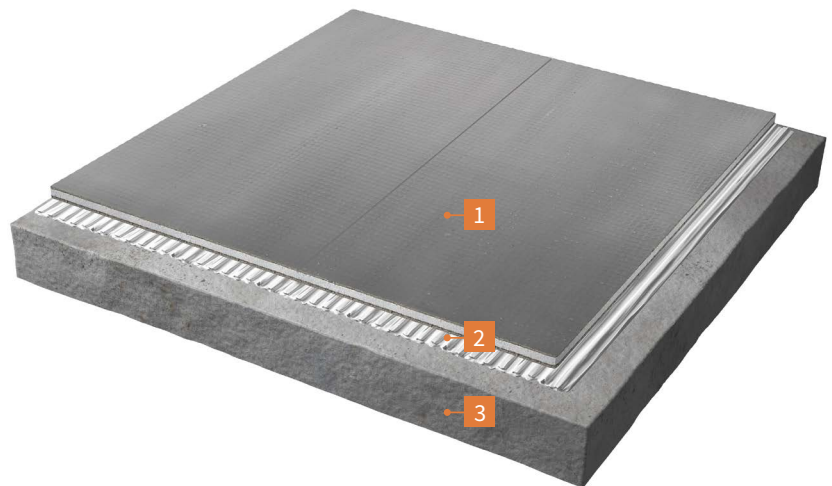
They are ideal for tile backing applications on both walls and floors, with the internal layer of insulation capable of supporting 30 tonnes per square metre. The 0.5mm thick cement coating provides an excellent surface for tile adhesive, plaster and smoothing/levelling compounds, with no priming required.

The low thermal conductivity of the insulation enhances the efficiency of underfloor heating systems, even when used over pre insulated sub floors. This is because they reduce the thermal mass of the floor, significantly reducing the amount of heat absorbed by the subfloor. This allows the underfloor heating system to warm the floor and the room up faster and ensures the floor cools down faster after use. By reducing the amount of time the room takes to warm up and cool down, the room can spend longer at its cooler set back temperature, reducing its heat loss.

The waterproof insulation panels are suitable for bathrooms and showers as well as dry rooms, allowing the same construction to be used throughout

### FLOOR CONSTRUCTION

- 1 Warmup Coated Insulation Board
- 2 Flexible Tile Adhesive
- 3 Subfloor



**Electric**  
Heating System

0345 345 2288

uk@warmup.com  
www.warmup.co.uk

**Warmup**<sup>®</sup>

The world's best-selling floor heating brand™

# Technical Data

| TECHNICAL DATA - Insulation Boards                               |           |               |            |            |            |            |
|--|-----------|---------------|------------|------------|------------|------------|
| PRODUCT CODE   | INSBOARD6 | INSBOARD(PK1) | INSBOARD20 | INSBOARD30 | INSBOARD40 | INSBOARD50 |
| THICKNESS - mm   | 6 mm      | 10 mm         | 20 mm      | 30 mm      | 40 mm      | 50 mm      |
| WIDTH - mm   | 600       |               |            |            |            |            |
| LENGTH - mm  | 1250      |               |            |            |            |            |
| AREA - m <sup>2</sup>  | 0.75      |               |            |            |            |            |
| WEIGHT - kg (kg/m <sup>2</sup> )                                 | 2.2 (2.9) | 2.3 (3.1)     | 2.5 (3.4)  | 2.8 (3.7)  | 3.0 (4.0)  | 3.2 (4.3)  |
| THERMAL CONDUCTIVITY - W/mK                                      | 0.033     |               |            |            |            |            |
| THERMAL RESISTANCE - m <sup>2</sup> K/W                          | 0.12      | 0.24          | 0.55       | 0.85       | 1.15       | 1.45       |
| COMPRESSIVE STRENGTH - kPa                                       | 300       |               |            |            |            |            |
| BOND STRENGTH - kPa  | 220       |               |            |            |            |            |
| SHEAR BOND STRENGTH - kPa  | 325       |               |            |            |            |            |
| MAXIMUM TILE WEIGHT (for Walls) - kg/m <sup>2</sup>              | 60        |               |            |            |            |            |
| THERMAL EXPANSION COEFFICIENT (FOAM CORE ONLY) - mm/m per °C     | ≤0.07     |               |            |            |            |            |
| WATER ABSORPTION (2 DAY IMMERSION)(FOAM CORE ONLY) - % by volume | ≤1.5      |               |            |            |            |            |
| FIRE RATING - Euroclass  | E         |               |            |            |            |            |
| OZONE DEPLETION POTENTIAL - ODP                                  | 0         |               |            |            |            |            |
| GLOBAL WARMING POTENTIAL - GWP                                   | <5        |               |            |            |            |            |



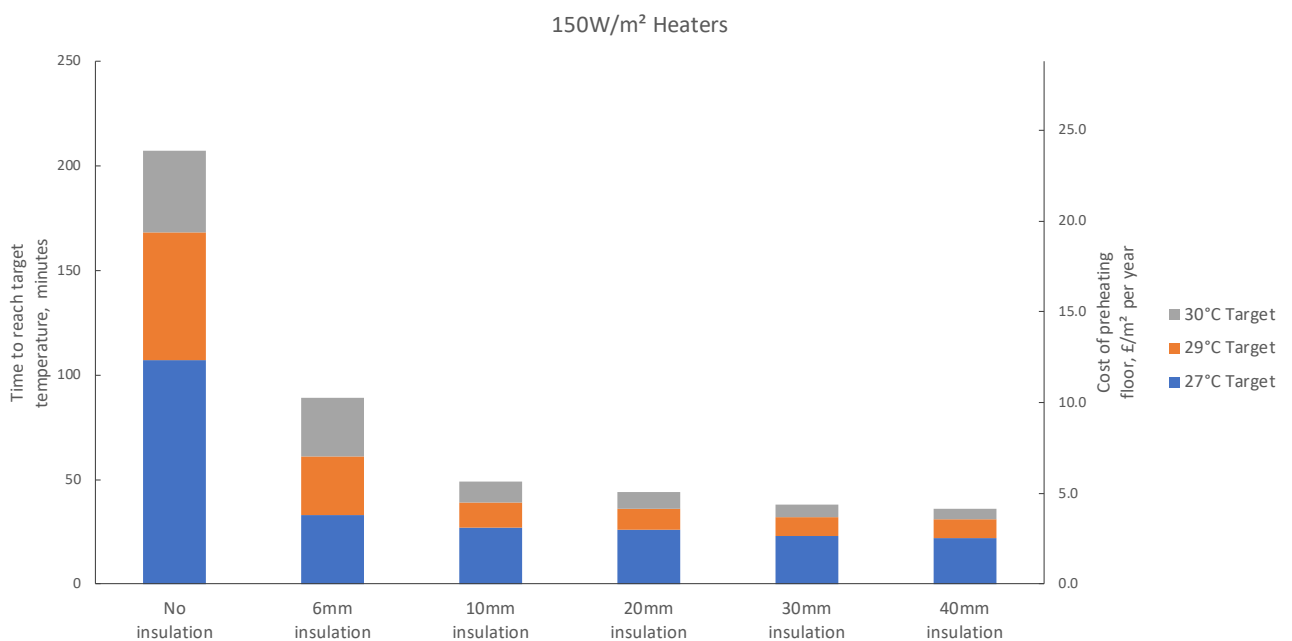
# Features

- Easy to cut and shape around fixtures with a knife or saw
- Comes in a range of thicknesses to suit floor and wall applications
- Can be fixed to solid or stud walls
- Excellent as internal wall insulation especially when compared to standard cement building boards and plaster boards
- Reduces heat loss and improves the underfloor heating systems response time
- **CE** marked for ultimate peace of mind
- Can be used to easily create a waterproof floors and walls in wet rooms, just by adding silicone sealant to the edges of the board before butting them tightly together
- High resistance to rot due to very low absorption rate

## INSULATION BOARD EFFECT ON PREHEATING TIMES

Warmup has conducted extensive testing of its electric underfloor heating systems when used in combination with its range of Cement Coated Insulation Boards. The tests consisted of a 75mm screed subfloor, heated with a 150W/m<sup>2</sup> under tile heating system. The range of Warmup Cement Coated Insulation Boards were each installed between the sub floor and the heated tiles with a reference construction that had none.

The chart below shows the response times and the resulting costs of preheating the floors from 18°C to three different temperature settings. Even just a 6mm board makes a significant improvement to system performance and provides savings that will quickly recover their initial purchase price.



\*Cost assumptions: 12.66p/kWh - system on twice a day, for 6 months (182 days) of the year.

# 3iE™ Energy-Monitor Thermostat



## Overview

The world's first fully interactive, touch technology, energy-monitor thermostat features an easy-to-use interface, eliminating complicated instruction manuals. The display shows recorded energy consumption usage, so

that users know the exact underfloor heating costs. Up to 10 programmable periods can be set each day to maximise energy efficiency.

### Innovative

First thermostat with a 2.4" full colour screen and integrated touch technology – patents pending.

Beautifully crafted fashion colour fascia with chrome edging are perfectly in tune with the modern home environment.

### Interactive

Clear graphical display makes any adjustment quick and easy.

Choose the display style that suits you best – wide choice of screen themes.

### Intelligent

Proportional Adaptive Function ensures the room does not over-heat, reducing wasted energy whilst also protecting the components inside. The Early Start algorithm learns how long it takes to warm the room and activates the heating so it's up to temperature at the right time.

### Installation

The 3iE™ Energy-Monitor Thermostat should be installed by a certified electrician only, using Warmup's installation instructions.

### Energy Efficient

Unrivalled accurate floor temperature control means no wasted energy - reducing the costs associated with over-heating.

Graphical energy monitor shows exactly how much energy is being used and when.

AEM™ prompts you to choose the best and most efficient temperature for each room, maximising energy efficiency.

0345 345 2288

uk@warmup.com  
www.warmup.co.uk

**Warmup**

The world's best-selling floor heating brand™



# Features

- Active Energy Management™ prompts user to save up to 10% on utility bills
- Easy-to-use interface eliminates complicated manuals
- Unrivalled accurate floor temperature control of +/- 0.5°C, significantly reduces energy wastage
- 10 programmable periods per day for efficient energy usage
- Stylish range of colours to suit any decor
- BEAB Approved and CE marked meeting the highest safety standards for ultimate piece of mind
- 3yr Warranty with option to upgrade to Lifetime Warranty



# Technical Specifications

| 3iE - TECHNICAL SPECIFICATIONS |  |
|--------------------------------|--|
| INPUT VOLTAGE                  | 230V +/- 15% at 50Hz                             |
| MAX LOAD                       | 16A (3680W)                                      |
| DIMENSIONS                     | (H/W/D): 90 x 113 x 19mm (from wall)             |
| SENSORS                        | AIR & FLOOR (AMBIENT)                            |
| SENSOR TYPE                    | NTC10K 3m LONG (CAN BE EXTENDED TO 50m)          |
| IP RATING                      | IP20/(IP 32 WITH OPTIONAL GASKET)                |
| INSTALLATION DEPTH             | 35mm BACK BOX                                    |
| DISPLAY SIZE                   | 2.4" FULL COLOUR                                 |
| COMPATIBILITY                  | IDEAL FOR ELECTRIC & HYDRONIC UNDERFLOOR HEATING |
| Er-P CLASS                     | IV   |



# Heated Towel Rails



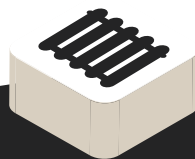
## Overview

Warmup electric heated towel rails are an excellent, energy efficient solution to provide an additional source of heat for your bathroom as well as year round towel drying and warming. The rails use dry heating technology meaning they are maintenance free with no risk of leaks.

The rails are available in both single bar and ladder models with a variety of finishes to suit any bathroom style. They are manufactured using high quality stainless steel (SS304) making them resistant to staining and corrosion, ideal for bathroom environments.

Installation is straightforward as the rails can either be connected into the rooms lighting circuit, enabling the towel rail when the lights are switched on or alternatively they can be controlled by an independent controller that provides power on demand.

Warmup heated towel rails are available in a wide range sizes and wattages to suit all bathrooms.



**Bathroom**  
Heating

0345 345 2288

uk@warmup.com  
www.warmup.co.uk

**Warmup**<sup>®</sup>

The world's best-selling floor heating brand™

# Features

- Provides an excellent, energy efficient solution to provide an additional source of heat for your bathroom as well as year round towel drying and warming.
- Uses dry heating technology meaning they are maintenance free with no risk of leaks.
- Manufactured using high quality stainless steel (SS304) making them resistant to staining and corrosion, ideal for bathroom environments.
- Can connect to existing lighting circuit for automatic operation when light is switched or controlled by an independent controller that provides power on demand.
- CE Marked with 5 year warranty

# Technical Data

| SINGLE BAR RAIL - ROUND   |   |              | SINGLE BAR RAIL - SQUARE   |           |        |          |                         |
|---|---|--------------|--|-----------|--------|----------|-------------------------|
|   |   |              |   |           |        |          |                         |
|    |   |              |    |           |        |          |                         |
| PRODUCT CODE  | SIZE (mm)   | CONNECTION   | VOLTAGE  | POWER (W) | BTU/hr | LOAD (A) | RESISTANCE +/- 10 % (Ω) |
| HTR-1ROBR   | <b>Single Bar - Round Brushed</b><br>32(h) x 650(l) x 100(d) mm   | 3 m coldtail | 230 V AC:<br>50 Hz   | 19        | 64.8   | 0.08     | 2800                    |
| HTR-1ROBL   | <b>Single Bar - Round Black</b><br>32(h) x 650(l) x 100(d) mm     | 3 m coldtail | 230 V AC:<br>50 Hz   | 19        | 64.8   | 0.08     | 2800                    |
| HTR-1ROPO   | <b>Single Bar - Round Polished</b><br>32(h) x 650(l) x 100(d) mm  | 3 m coldtail | 230 V AC:<br>50 Hz   | 19        | 64.8   | 0.08     | 2800                    |
| HTR-1SQBR   | <b>Single Bar - Square Brushed</b><br>40(h) x 650(l) x 100(d) mm  | 3 m coldtail | 230 V AC:<br>50 Hz   | 19        | 64.8   | 0.08     | 2800                    |
| HTR-1SQBL   | <b>Single Bar - Square Black</b><br>40(h) x 650(l) x 100(d) mm    | 3 m coldtail | 230 V AC:<br>50 Hz   | 19        | 64.8   | 0.08     | 2800                    |
| HTR-1SQPO   | <b>Single Bar - Square Polished</b><br>40(h) x 650(l) x 100(d) mm | 3 m coldtail | 230 V AC:<br>50 Hz   | 19        | 64.8   | 0.08     | 2800                    |

### 4 BAR LADDER RAIL - ROUND



CE  IP55

### 4 BAR LADDER RAIL - SQUARE



CE  IP55

| PRODUCT CODE | SIZE (mm)  | CONNECTION   | VOLTAGE            | POWER (W) | BTU/hr | LOAD (A) | RESISTANCE +/- 10 % (Ω) |
|--------------|--|--------------|--------------------|-----------|--------|----------|-------------------------|
| HTR-4ROPO    | <b>4 Bar Ladder - Round Polished</b><br>520(h) x 500(l) x 120(d) mm  | 3 m coldtail | 230 V AC:<br>50 Hz | 52        | 177.4  | 0.23     | 1017                    |
| HTR-4SQPO    | <b>4 Bar Ladder - Square Polished</b><br>435(h) x 525(l) x 120(d) mm | 3 m coldtail | 230 V AC:<br>50 Hz | 52        | 177.4  | 0.23     | 1017                    |

### 6 BAR LADDER RAIL - ROUND



CE  IP55

### 6 BAR LADDER RAIL - SQUARE



CE  IP55

| PRODUCT CODE | SIZE (mm)  | CONNECTION   | VOLTAGE            | POWER (W) | BTU/hr | LOAD (A) | RESISTANCE +/- 10 % (Ω) |
|--------------|--|--------------|--------------------|-----------|--------|----------|-------------------------|
| HTR-6ROPO    | <b>6 Bar Ladder - Round Polished</b><br>600(h) x 650(l) x 120(d) mm  | 3 m coldtail | 230 V AC:<br>50 Hz | 90        | 307.1  | 0.39     | 588                     |
| HTR-6SQPO    | <b>6 Bar Ladder - Square Polished</b><br>600(h) x 650(l) x 120(d) mm | 3 m coldtail | 230 V AC:<br>50 Hz | 95        | 324.1  | 0.41     | 557                     |

### 8 BAR LADDER RAIL - ROUND



CE  IP55

### 8 BAR LADDER RAIL - SQUARE



CE  IP55

| PRODUCT CODE | SIZE (mm)  | CONNECTION   | VOLTAGE            | POWER (W) | BTU/hr | LOAD (A) | RESISTANCE +/- 10 % (Ω) |
|--------------|--|--------------|--------------------|-----------|--------|----------|-------------------------|
| HTR-8ROPO    | <b>8 Bar Ladder - Round Polished</b><br>800(h) x 530(l) x 135(d) mm  | 3 m coldtail | 230 V AC:<br>50 Hz | 100       | 341.2  | 0.43     | 529                     |
| HTR-8SQPO    | <b>8 Bar Ladder - Square Polished</b><br>912(h) x 620(l) x 120(d) mm | 3 m coldtail | 230 V AC:<br>50 Hz | 115       | 392.4  | 0.50     | 460                     |