

### Wall Heating Mats

### Standard and custom specifications to suit your project

The use of wall heating systems is increasing and Heat Mat's wall heating mats have been specified and installed at numerous projects over the last decade.

In some circumstances the use of heated towel rails is not desirable and heating the wall behind the rail is a very efficient alternative. This is an increasingly popular application in new build hotels and apartment buildings along with a suite of other applications such as:

- Keeping tiled walls warm where people will be sitting against them
- To enable fast drying of walls in wet rooms and showers
- Providing additional ambient heating to rooms where other heat sources are not practical

#### **Available Sizes**

You can pick from a wide variety of standard mat sizes held in stock or use our bespoke service, which offers custom sized units with options such as extended coldtails manufactured with a very short lead time.

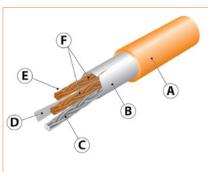
Standard and bespoke mats are 17<sup>th</sup> edition compliant and are fully earthed for safety.

All Heat Mat wall heating mats are manufactured in our BEAB Approved factory in Denmark.

The mats are also covered by our Lifetime Warranty for peace of mind.

#### **Wall Heating Mats**

- Dry towels or heat the room with no hot-to-touch surfaces
- 100% earth shield and IPX7 rating included for safety and compliance with BS7671:2008
- Pre-spaced heating cable to ensure an even heat profile
- · Straightforward and quick to install behind tiles
- Wall heating mats can be used to demist large mirrors
- Temperature control can be easily included when required
- Most applications can be satisfied directly from stock
- Bespoke wall heating systems can be supplied with very short lead times



- A. Robust PVC (Y) outer insulation.
- B. 100% aluminium earth shield for safety.
- C. High load earth drain wire.
- D. Fiberglass reinforcement cable for tensile strength.
- E. Teflon insulation rated to 200°C.
- F. Litzer style twin spiral wound resistance wires.

The construction of a wall mat heating cable.

# **Heat Mat**Underfloor Heating

Call 01444 247020 to find out more or visit our website at www.heatmat.co.uk

### Wall Heating Mat Features:

- Invisible towel drying with no hot-to-touch surfaces
- Ideal for small bathrooms or en-suites
- Often used in hotel developments
- A wide range of standard sizes available from stock
- Bespoke sizes and extended coldtails manufactured with short lead times
- 100% earthed heating cable for safety and compliance with BS7671:2008
- Pre-spaced heating cable for speedy installation and uniform heat output
- Ultra-thin fluoropolymer insulated cable ensuring minimum build height
- Made in Denmark in our BEAB Approved factory
- Covered by a lifetime warranty





**Heat Mat** 

Bespoke



#### **Wide Variety of Standard Sizes**

We can supply three outputs and more than 30 sizes of wall heating mat direct from stock. Where required, the heating mats can be manipulated on site to allow their dimensions to be altered.

For particularly complicated installations in small areas or on curved surfaces a loose heating cable may be more suitable and we can provide advice on this option if required.

#### **Installation Materials.**

When installing the heating mats they must always be totally encased in a flexible tile adhesive suitable for use on walls, and a flexible grout should be used between the tiles. Additional securing of the heater to the wall can be achieved with staples (on the mesh only, not the cable) or with a hot glue gun on the mesh and cable.

#### Moisture Penetration

If the room on the reverse of the wall to be heated is very damp the heater increases the risk of moisture penetrating through the wall. In these circumstances we recommend installing Heat Mat thermal insulation boards or a waterproof membrane behind the heating mat to prevent moisture ingress; a 12.5mm board can be supplied to replace plasterboard.

Thermal insulation boards can also be used to prevent heat penetrating the wall and they will enable the system to run more efficiently.

#### **Installation Considerations**

BS7671:2008 - S753 Floor and Ceiling Heating Systems specifically excludes wall heating systems from its advice, therefore 522.6.6 to 522.6.8 relating to concealed cables must be considered (along with all other applicable electrical regulations covering the installation). Heat Mat's heating mats and 3mm cables all contain a 100% aluminium earth shield as required by 522.6.6, and we additionally recommend the heating system should also be protected by a suitable dedicated 30mA RCD.

We advise that heating mats in walls are always kept at least 10mm away from conductive parts where practicable, and there should be at least a 20mm distance between heating cables. Details of the location of any wall heating systems should be retained with the electrical documentation for the property.

#### **Specification Service**

We offer a full specification service and technical support throughout the process, from concept development to installation. Call our technical team on 01444 247020 to discuss bespoke systems or project requirements.

# **Technical Specification**

Supply Voltage 230V +/- 10 80W-200Wsqm Power output 80W-250W Output range Maximum load 20W/metre Standard range 0.6m<sup>2</sup>-11.6m<sup>2</sup> Mat dimensions 0.5m wide x 1.2m to 23.2m Standard coldtail lead 4m double insulated cable Wire thickness 27mm - 32mm Cable flexibility minimum radius 18mm **IP Rating** IPX7 Fluoropolymer (FEP Y7) 200°C Inner insulation Outer insulation PVC(Y)90°C Earth protection 100% aluminium earth shield Cable reinforcement Fibreglass strands Reinforcement mesh Fibreglass mesh Fixing materials 4 rows of double-sided tape Compliant with Part L, 17th Edition IEE Wiring Regulations

#### Wiring

Wall heating mats should usually be controlled by a suitable electric underfloor heating thermostat set to external temperature limitation using a 'floor' temperature sensor embedded in the wall. Heat Mat thermostats are rated to 16 Amps, and if a system exceeds this loading a suitably rated contactor should be used. The circuit must be protected by a dedicated 30mA RCD and suitably rated fuse or circuit breaker.













#### **About Heat Mat**

With more than 1.400.000m<sup>2</sup> of underfloor heating installed, 22 years' experience of the UK underfloor heating market and a wealth of knowledge on Scandinavian ice and snow melting systems, you can rely on Heat Mat to understand your needs and supply the products to satisfy your requirements.

This is why we are the Professionals' Choice, the number one supplier of electric underfloor heating and ice and snow melting systems to the UK's professional installation market.









product selector

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## **Heat Mat Underfloor Heating**



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