

# INSCREED HEATING

Enhance the natural beauty and practicality of tiles with the comfort, safety, and efficiency of a tried, tested, and proven heating system.

## Product Description

WARMUP Inscreed Heating is a system of low-temperature electric radiant elements laid directly under the floor covering, delivering extremely luxurious, efficient and effective heating.

The WARMUP Inscreed Heating element comprises of double insulated multi-stranded resistance wires, incorporating a copper braided earth. The element has a total diameter of 6.00mm.

The heating element is laid (evenly spaced) directly on top of the floor to be tiled and then covered with a specially formulated protective thermal screed. The screed is designed to cope with for the thermal expansion and contraction that occurs with floor heating. It offers a perfect substrate for tiles and, when used in conjunction with a flexible tile adhesive, will remain stable under tiles over virtually any substrate (including wooden floors) for years to come.

Our installation will add approximately 8.00mm to your floor height. Connection to power is made via cold tails bought up from floor surface, hidden within the wall cavity, to the point of control. Proximity to the tiled surface results in significantly increased response time in comparison with other in-floor heating systems. As such, maximum efficiency can be achieved by control with a floor sensing thermostat.

Inscreed heating can be used as either background heating to remove the chill of tiles, or in conjunction with carpet heating (or other forms of heating) as a primary heat source for homes.

## Technical Specifications

<b>Conductors:</b>	Multi-strand resistive core.
<b>Primary Insulation:</b>	“Teflon®” (ETFE) polymer resin.
<b>Earth Screen:</b>	Braided copper wire with an aggregate cross-sectional area of 0.4mm <sup>2</sup> , minimum 75 coverage.
<b>Outer Jacket:</b>	PVC.
<b>Joints:</b>	Resistive core and cold tail joined with crimped tinned-copper butt connector, insulated with high-temperature adhesive lined heatshrink sleeving.
<b>Cold tails:</b>	Purpose-made, PVC insulated, 2 - core flexible cord - 3m in length.
<b>Packaging:</b>	All cables supplied on disposable cardboard reels, with both ends of the cold tails exposed for testing prior to installation.
<b>Overall diameter</b>	6.00mm
<b>Protective coatings:</b>	Cement based 2 part latex enhanced protective screed.

## Running Costs

Because the WARMUP cable is free running, it can be laid exactly where required. This flexibility enables us to not only heat the most oddly shaped room, but also to reduce energy wastage by heating only where heating is required. Typical response time from startup is between 60 to 90 minutes (depending upon the substrate, tile, and adhesive used). WARMUP Undertile Heating is controlled by timers, thermostats or a combination of both for further control of energy usage.

Heating cable spacing on the floor ranges from 50mm to 120mm dependent upon the heating requirements and floor covering. Typical cable spacing is between 80mm and 95mm.

The power drawing will vary between 80 and 200 watts per square meter with the average installation at 150 watts per square meter.

Actual maximum running costs per hour can be calculated at the time of quotation and will vary due to differing power charges nationwide. Reductions in running costs per hour will be achieved with the use of thermostats. Typically, however, a temperature setting on a radiant heated floor can be set to run at 2-3°C lower than conventional air circulating systems without causing any reduction in comfort levels.

## **Installation**

Where applicable, WARMUP Inscreed Heating follows the recommendations of the BRANZ "Good Tiling Practice" book for the preparation and tiling of floors.

WARMUP Inscreed Heating is specifically designed for use under ceramic tiles, marble, or granite. Slate tiles and wooden floors such as Parquet can be heated however due to their conductive properties and thickness of grouting/adhesive, the response time and heat loading will vary. Care must be taken in the preparation and installation of wooden floor coverings, and the recommendations of the wooden floor specialist strictly adhered to.

### **Preparation required**

- 1) Supply of circuit wiring from distribution board to recommended control point for each heated floor zone.
- 2) Supply of a draw wire from control point down to floor level directly below, to enable our cold tails to be pulled through in the wall cavity.
- 3) Floor preparation including waterproofing, if required, should be completed prior to heating installation.

### **Once correctly prepared...**

- 4) WARMUP Inscreed Heating can be installed by an approved specialist.

### **Then...**

- 5) Tiler completes tiling once heating protective coatings have fully cured (typically 24 however possibly up to 48hrs dependent upon the substrate and drying conditions)
- 6) WARMUP cold tails and controller are connected to power source and commissioned by a registered electrician.

**NOTE:** In accordance with Australian Safety Standards all installations in wet areas should have a R.C.D. (Residual Current Device) fitted either as a wall mounted unit or at the distribution board.

- 7) Initial commissioning of the heating system should be in compliance with either tiling compound, and/or heating manufacturer's recommendations - whichever is the most conservative.
- 8) Set controls and enjoy.

## **Guarantee**

In conjunction with the Consumer Guarantee Act 1995 WARMUP Australia guarantees their installations for a period of 120 months (10 years) from the date of installation for repair or refund against any fault caused by a manufacturing defect applicable to the heating cable.