# **Loose Wire System**

## Overview

The Warmup Loose Wire System is designed for use within the adhesive layer under tiles or within a levelling compound under other floor finishes. The variable spacing of the cable available during design and installation allows the system power to be tailored to the properties requirements.

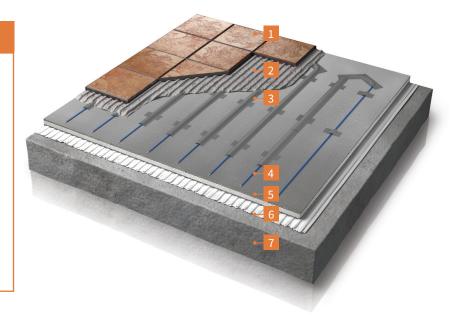
The Loose Wire System is ideal for installation within small or irregularly shaped areas. In a bathroom the cable can be easily installed around the fixtures and within rooms with curved features it can easily follow the contours.

The variable spacing of the cable also allows the heat output to be matched to requirements. For regularly shaped rooms the Sticky Mat system offers a quick and precise installation alternative to the Loose Wire System.

Alternatively, for floor finishes other than tiles the Foil Heater System offers utilises a completely dry construction that does not require a levelling compound.

#### **FLOOR CONSTRUCTION**

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







www.warmup.co.uk

## Technical Data

| TECHNICAL DATA - Loose Wire |                               |  |  |  |
|-----------------------------|-------------------------------|--|--|--|
| OPERATING VOLTAGE           | 220 - 240v: 50Hz              |  |  |  |
| IP RATING                   | IPX7                          |  |  |  |
| CABLE THICKNESS             | 1.8mm                         |  |  |  |
| AVERAGE OUTPUT<br>RATING    | 150W/m²                       |  |  |  |
| INNER INSULATION            | ETFE                          |  |  |  |
| OUTER INSULATION            | ETFE                          |  |  |  |
| MIN. INSTALLATION TEMP      | 5°C                           |  |  |  |
| MAX. OPERATING TEMP         | 80°C                          |  |  |  |
| CONNECTION                  | 3m LONG "COLDTAIL" CONNECTION |  |  |  |

## **Features**

- Exceptionally quick response time with system installed directly beneath the tile floor finish
- 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 irregular shaped rooms such as bathrooms where the cable can be easily installed around the fixtures
- By warming up and cooling down faster, before and after you use the room, the room is cooler when not in use, losing less heat and saving energy
- BEAB Approved and CE marked meeting the highest safety standards for ultimate piece of mind  $oldsymbol{C}$   $oldsymbol{C}$







# Technical Data

PRODUCT CODE

DWS300

DWS400

DWS600

DWS800

| LOOSE WIRE SYSTEM (DWS) |                  |              |             |                   |                            |  |  |  |  |
|-------------------------|------------------|--------------|-------------|-------------------|----------------------------|--|--|--|--|
| COLOUR                  | HEATER<br>LENGTH | POWER<br>(W) | LOAD<br>(A) | RESISTANCE<br>(Ω) | RESISTANCE<br>BANDS<br>(Ω) |  |  |  |  |
| BLUE                    | 22               | 300          | 1.30        | 177               | 168.2 - 185.9              |  |  |  |  |
| NEUTRAL                 | 32               | 400          | 1.80        | 128               | 121.6 - 134.4              |  |  |  |  |
| GREY                    | 44               | 600          | 2.60        | 88                | 83.6 - 92.4                |  |  |  |  |
| RED                     | 64               | 800          | 3.60        | 64                | 60.8 - 67.2                |  |  |  |  |

| ADEA TO DE UEATED      | LOOSE WIRE SYSTEM (DWS)            |                 |  |  |  |  |
|------------------------|------------------------------------|-----------------|--|--|--|--|
| AREA TO BE HEATED (m²) | HEATERS REQUIRED<br>(PRODUCT CODE) | SPACING<br>(mm) |  |  |  |  |
| 1.5 - 1.8              | DWS300                             | 70              |  |  |  |  |
| 1.9 - 2.4              | DWS300                             | 90              |  |  |  |  |
| 2.5 - 2.7              | DWS400                             | 70              |  |  |  |  |
| 2.8 - 3.0              | DWS400                             | 80              |  |  |  |  |
| 3.1 - 3.4              | DWS400                             | 90              |  |  |  |  |
| 3.5 - 3.8              | DWS600                             | 70              |  |  |  |  |
| 3.9 - 4.1              | DWS600                             | 80              |  |  |  |  |
| 4.2 - 4.4              | DWS600                             | 90              |  |  |  |  |
| 4.5 - 5.0              | DWS800                             | 70              |  |  |  |  |
| 5.1 - 5.6              | DWS800                             | 80              |  |  |  |  |
| 5.7 - 5.9              | DWS800                             | 90              |  |  |  |  |
| 6.0 - 6.4              | DWS400 + DWS600                    | 80              |  |  |  |  |
| 6.5 - 6.9              | DWS400 + DWS600                    | 90              |  |  |  |  |
| 7.0 - 7.7              | 2 x DWS600                         | 80              |  |  |  |  |
| 7.8 - 8.4              | 2 x DWS600                         | 90              |  |  |  |  |
| 8.5 - 9.2              | DWS600 + DWS800                    | 80              |  |  |  |  |
| 9.3 - 9.9              | DWS600 + DWS800                    | 90              |  |  |  |  |
| 10.0 - 11.1            | 2 x DWS800                         | 80              |  |  |  |  |
| 11.2 - 11.4            | 2 x DWS800                         | 90              |  |  |  |  |
| 11.5 - 12.2            | DWS400 + DWS600 + DWS800           | 80              |  |  |  |  |
| 12.3 - 12.9            | DWS400 + DWS600 + DWS800           | 90              |  |  |  |  |
| 13.0 - 13.7            | 2 x DWS800 + DWS400                | 80              |  |  |  |  |
| 13.8 - 14.4            | 2 x DWS800 + DWS400                | 90              |  |  |  |  |
| 14.5 - 15.2            | 2 x DWS800 + DWS600                | 80              |  |  |  |  |
| 15.3 - 15.9            | 2 x DWS800 + DWS600                | 90              |  |  |  |  |
| 16.0 - 16.7            | 3 x DWS800                         | 80              |  |  |  |  |
| 16.8 - 17.4            | 3 x DWS800                         | 90              |  |  |  |  |
| 17.5 - 18.9            | 2 x DWS800 + DWS600 + DWS400       | 90              |  |  |  |  |
| 19.0 - 19.7            | 3 x DWS800 + DWS400                | 80              |  |  |  |  |
| 19.8 - 20.4            | 3 x DWS800 + DWS400                | 90              |  |  |  |  |
| 20.5 - 21.2            | 3 x DWS800 + DWS600                | 80              |  |  |  |  |
| 21.3 - 21.9            | 3 x DWS800 + DWS600                | 90              |  |  |  |  |
| 22.0 - 22.3            | 4 x DWS800                         | 80              |  |  |  |  |
| 22.4 - 24.6            | 4 x DWS800                         | 90              |  |  |  |  |
| 24.7 - 25.0            | 4 x DWS800                         | 100             |  |  |  |  |

## **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<br>(mm) | LENGTH<br>(mm) | WEIGHT<br>(kg) | R VALUE<br>(m².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

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



#### Easy to use

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