

# Foil Heater System

## Overview

The Warmup Foil Heater is an electric underfloor heating system for laminate, engineered wood and other floating floor finishes. The Foil heater is fitted between the insulating layer and the floating floor deck, adding negligible height to the installation.

Glued parquet flooring, carpets, vinyls and other resilient floor finishes can be laid over the Warmup Foil Heater by using our Dual Overlay system to create a thin floating floor deck.

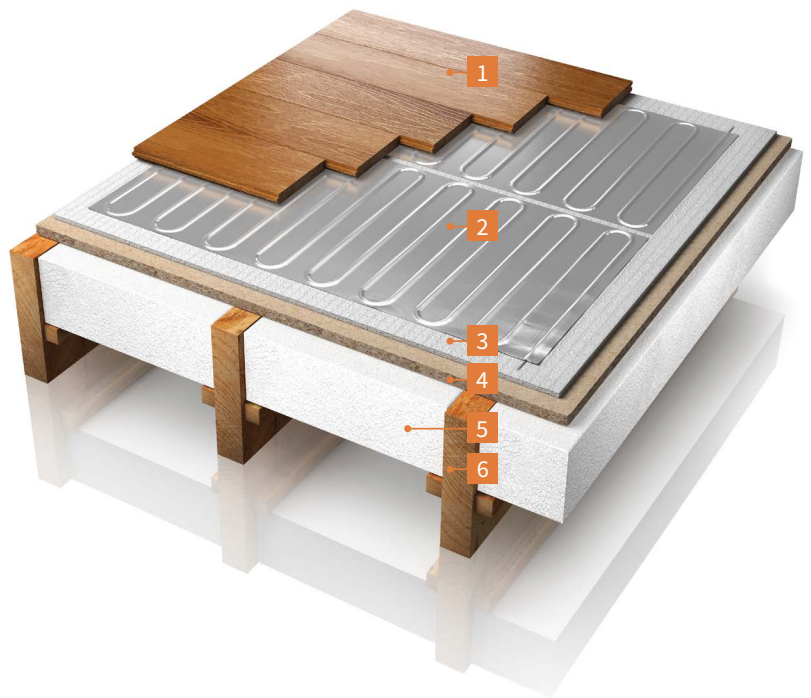
If homeowners wish to refurbish their rooms in the future, the floating floor finish installed over the foil heater can be easily lifted and replaced with a new finish if desired.

The Foil heater is made up of a fibre reinforced foil wrapped around a thin multi strand, dual core heating cable that is insulated with an advanced fluoropolymer. The foil provides a continuous earth layer within the floor construction whilst diffusing the heat away from the heating cable.

### FLOOR CONSTRUCTION

- 1 Floor finish
- 2 Warmup Foil Heater
- 3 Warmup Insulated Underlay
- 4 Floor Deck
- 5 Insulation
- 6 Joists

**NOTE:** MUST be used with Warmup Insulated Underlay  
MUST be used with Warmup Dual Overlay when laying vinyl or carpet  
ALWAYS check compatibility of flooring with electric underfloor heating



Electric  
Heating System

Warmup Ireland  
Web: [www.warmup.ie](http://www.warmup.ie)  
Email: [ie@warmup.com](mailto:ie@warmup.com)  
Telephone: 1 800 937 429

**Warmup**

The world's best-selling floor heating brand™

# Technical Data

## TECHNICAL DATA - Foil Heater

|                        |                               |
|------------------------|-------------------------------|
| OPERATING VOLTAGE      | 220 - 240v: 50Hz              |
| IP RATING              | IPX7                          |
| WIDTH                  | 500mm                         |
| MAT THICKNESS          | 3mm                           |
| CABLE THICKNESS        | 1.8mm                         |
| OUTPUT RATING          | 140W/m <sup>2</sup>           |
| INSULATION             | ETFE                          |
| MIN. INSTALLATION TEMP | 5°C                           |
| CONNECTION             | 3m LONG "COLDTAIL" CONNECTION |



## Features

- Foil layer acts a continuous earth layer within the floor construction whilst also diffusing the heat evenly
- Installed directly under the floor finish; no self levelling required
- Ideal for regular shaped rooms, where the 0.5m wide mats can be rolled out across the floor in parallel runs.
- Ideal for heating under laminate, engineered wood and other floating floor finishes
- BEAB Approved and CE marked meeting the highest safety standards for ultimate peace of mind
- 15 Year Warranty & SafetyNet Installation Guarantee



# Technical Data

| PRODUCT CODE   | Foil Heater (WLFH-140W)             |           |          |                |                      |
|----------------|-------------------------------------|-----------|----------|----------------|----------------------|
|                | AREA TO BE HEATED (m <sup>2</sup> ) | POWER (W) | LOAD (A) | RESISTANCE (Ω) | RESISTANCE BANDS (Ω) |
| WLFH-140W/140  | 1                                   | 140       | 0.61     | 377.86         | 359.0 - 396.8        |
| WLFH-140W/210  | 1.5                                 | 210       | 0.91     | 251.90         | 240.2 - 263.7        |
| WLFH-140W/280  | 2                                   | 280       | 1.22     | 188.93         | 179.5 - 198.4        |
| WLFH-140W/420  | 3                                   | 420       | 1.83     | 125.95         | 119.7 - 132.3        |
| WLFH-140W/560  | 4                                   | 560       | 2.43     | 94.46          | 89.8 - 99.2          |
| WLFH-140W/700  | 5                                   | 700       | 3.04     | 75.57          | 71.8 - 78.4          |
| WLFH-140W/840  | 6                                   | 840       | 3.65     | 62.98          | 59.9 - 66.2          |
| WLFH-140W/980  | 7                                   | 980       | 4.26     | 53.98          | 51.3 - 56.7          |
| WLFH-140W/1120 | 8                                   | 1120      | 4.87     | 47.23          | 44.8 - 49.6          |
| WLFH-140W/1260 | 9                                   | 1260      | 5.48     | 41.98          | 39.9 - 44.1          |
| WLFH-140W/1400 | 10                                  | 1400      | 6.09     | 37.79          | 35.9 - 39.7          |
| WLFH-140W/1680 | 12                                  | 1680      | 7.30     | 31.49          | 29.9 - 33.1          |

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

## WARMUP COMPONENTS

### Insulated Underlay

Warmup® Insulated Underlay is a thin polystyrene insulation barrier with effective acoustic properties to reduce contact noise.

The insulated underlay sits between the subfloor and the Foil heater, reflecting the heat upwards making the system even more efficient.

#### INSULATED UNDERLAY - TECHNICAL SPECIFICATIONS

|  |   |
|--|---|
| SIZE                                   | WIDTH - 1200mm<br>COVERAGE/PACK - 2.5sqm, 5.0sqm, 10sqm, 25sqm                    |
| THICKNESS                              | 6mm +/- 0.5   |
| COMPOSITION                            | TOP LAYER: GROOVED POLYSTYRENE<br>BOTTOM LAYER: SILVER FOIL WITH ADHESIVE OVERLAP |
| Rm VALUE                               | 0.19m <sup>2</sup> K/W  |
| CONTACT SOUND REDUCTION*               | 25dB ΔLw WHEN USED IN CONJUNCTION WITH WARMUP® DUAL OVERLAY                       |
| TEMPERATURE REACH                      | -30 °C up to +70°C  |
| THERMAL CONDUCTIVITY (W/m.K)           | 0.036   |
| DENSITY (kg/m <sup>3</sup> )           | 18  |
| FIRE CLASS EN13501                     | E <sub>fl</sub>   |
| WATER VAPOUR DIFFUSION RESISTANCE (SD) | > 100   |



# Dual Overlay

Warmup® Dual Overlay is a free-floating subfloor offering a smooth and seamless finish for carpet, vinyl and linoleum. The two layers protect the heating wire from sharp and heavy point loads and provides even heat distribution. Installation is dry, clean and quick. Both the Insulated Underlay and Dual Overlay are designed to work together with Warmup Foil Heaters.

## DUAL OVERLAY - TECHNICAL SPECIFICATIONS

|  |   |
|--|---|
| CONTENTS   | 4 BASE AND 4 TOP BOARDS (COVERS 2.88 <sup>2</sup> )                                   |
| SIZE   | 1200mm x 600mm  |
| THICKNESS  | TOP BOARD: 4mm<br>BASE BOARD: 3mm<br>TOTAL THICKNESS: 7mm<br>TOLERANCE: +/- 0.2mm/7mm |
| COMPOSITION  | MDF, FITTED WITH AN INTERACTIVE ADHESIVE  |
| DENSITY (kg/m <sup>3</sup> )                           | 770   |
| BENDING STRENGTH kg/cm <sup>2</sup>                    | >40   |
| HUMIDITY (%)   | 4-10  |
| THERMAL Rm VALUE [m <sup>2</sup> .K.W. <sup>-1</sup> ] | 0.047   |
| FIRE CLASS, DIN4102                                    | B2  |



# 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.



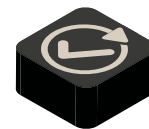
### SmartGeo™

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.