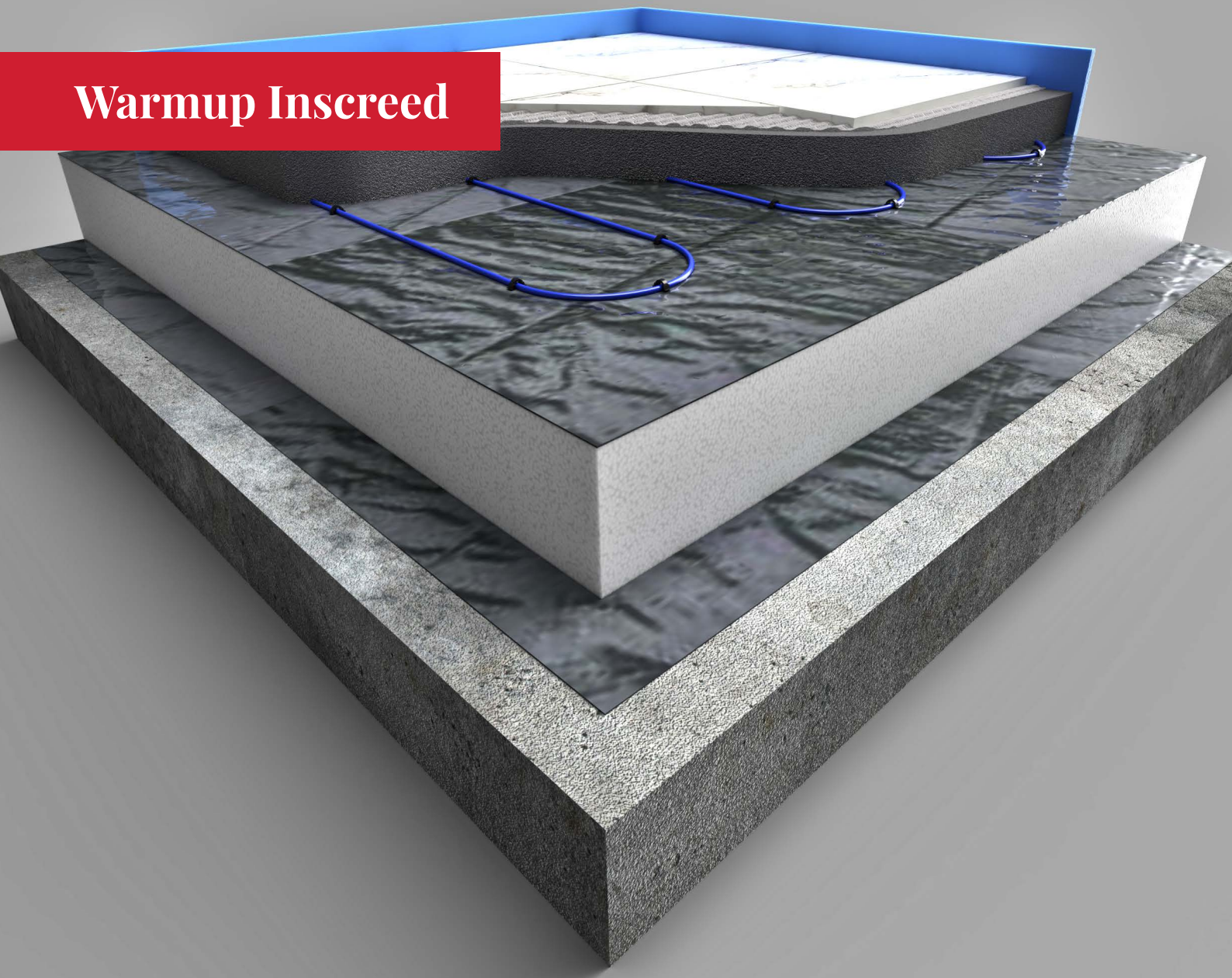
Warmup Inscreed



For a Variety of Floor Finishes
Suitable for any underfloor heating compatible floor finish, which can be easily replaced as desired for user flexibility.

No Change in Floor Build-Ups
The Inscreed Cable simply fixes to an insulation layer for laying a screed.

Optimal Output Potential
The Inscreed Systems variable cable spacings allow the heat input into a floor to be tailored to match its required heat load.

Steady Heat Output
The slower heat up and cool down time of the Inscreed System makes it particularly suited to the creation of a storage heating system.

SAFETY Net™ Installation-Guarantee

LIFETIME Warmup

Overview

Warmup Inscreed Cable is an electric underfloor heating system designed for use within a screeded floor construction. The variable spacing of the cable available during design and installation allows the system power to be tailored to the properties requirements.

Screeded heating systems such as Warmup Inscreed have slower heat up and cool down times due to the screed depths used. The system will heat the screed but then release heat slowly into the room making it an ideal system for rooms which are in constant use.

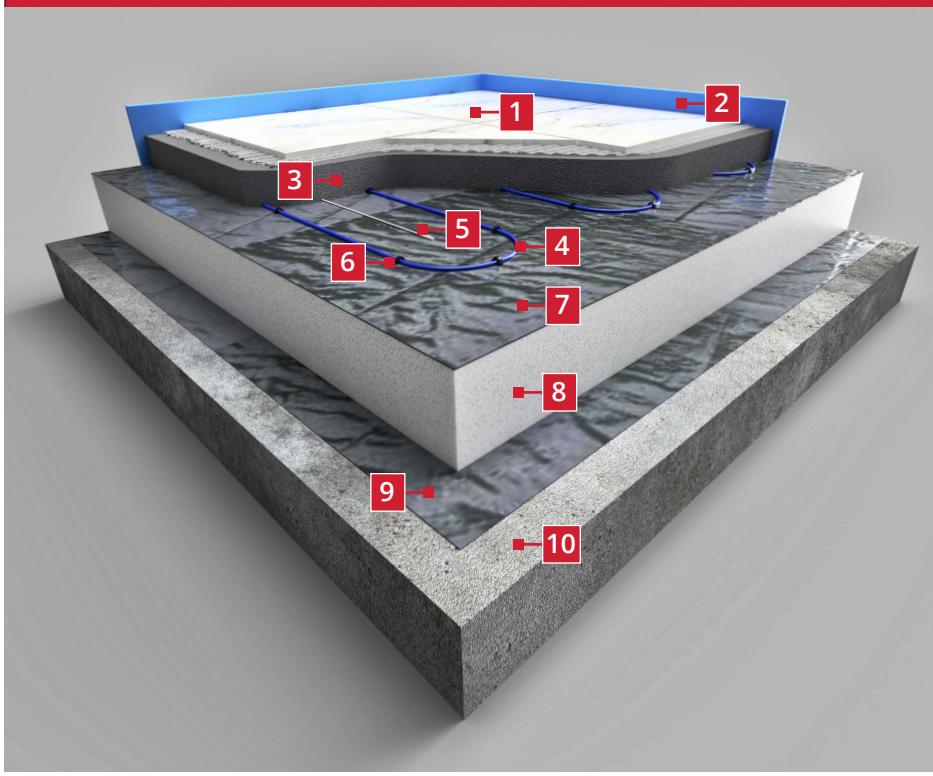
The screed can be used as a form of storage heating, making use of its longer heat retention, for an efficient and cost effective solution.

The Inscreed heating system is suitable for almost any flooring finish and in particular where the flooring may be replaced from time to time. This is because the system is safely embedded in screed therefore there is less risk of damaging the heating cable if the floor covering is changed giving the user more flexibility.

Warmup®

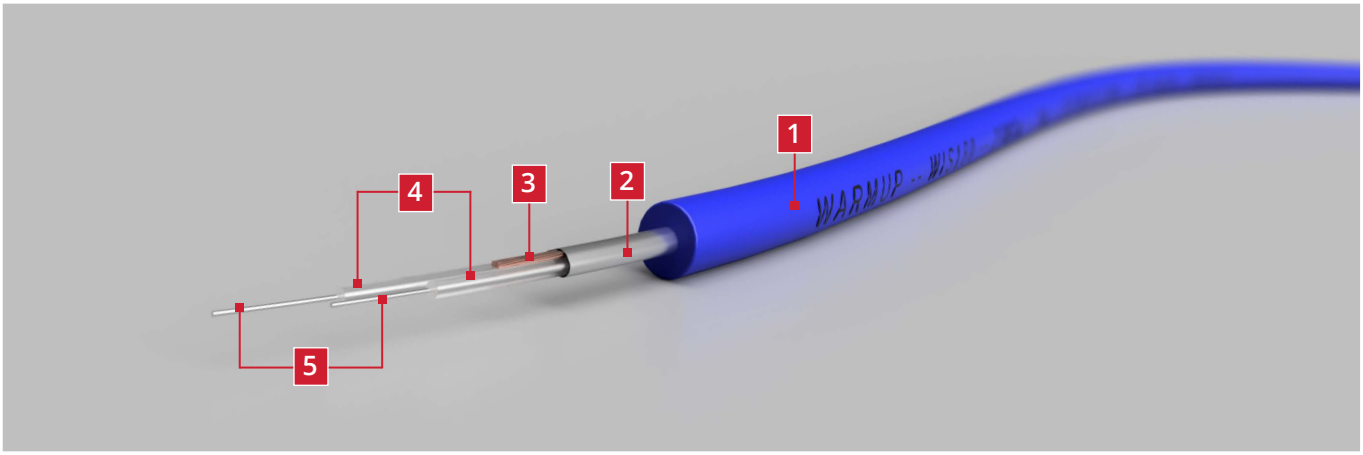
Typical Floor Build-Up

All Floor Finishes



1	**Floor Finish**
2	**Perimeter Strip** *To allow for differential movement between finished floor level and walls*
3	**Screed Layer**
4	**Warmup Inscreed Cable** *DO NOT cut at any stage!*
5	**Floor Sensor** *Tab tape the sensor to the subfloor. Do not tape over the sensor tip!*
6	**Warmup Clips**
7	**Vapour Control Layer (VCL)** *To prevent water ingress*
8	**Insulation Layer**
9	**Damp Proof Membrane** *To prevent water ingress*
10	**Concrete Subfloor**

Cable Section



1	Polyolefin
2	Aluminium mylar tape
3	Copper drain wire
4	Fluoropolymer
5	Dual core, single-strand heating element

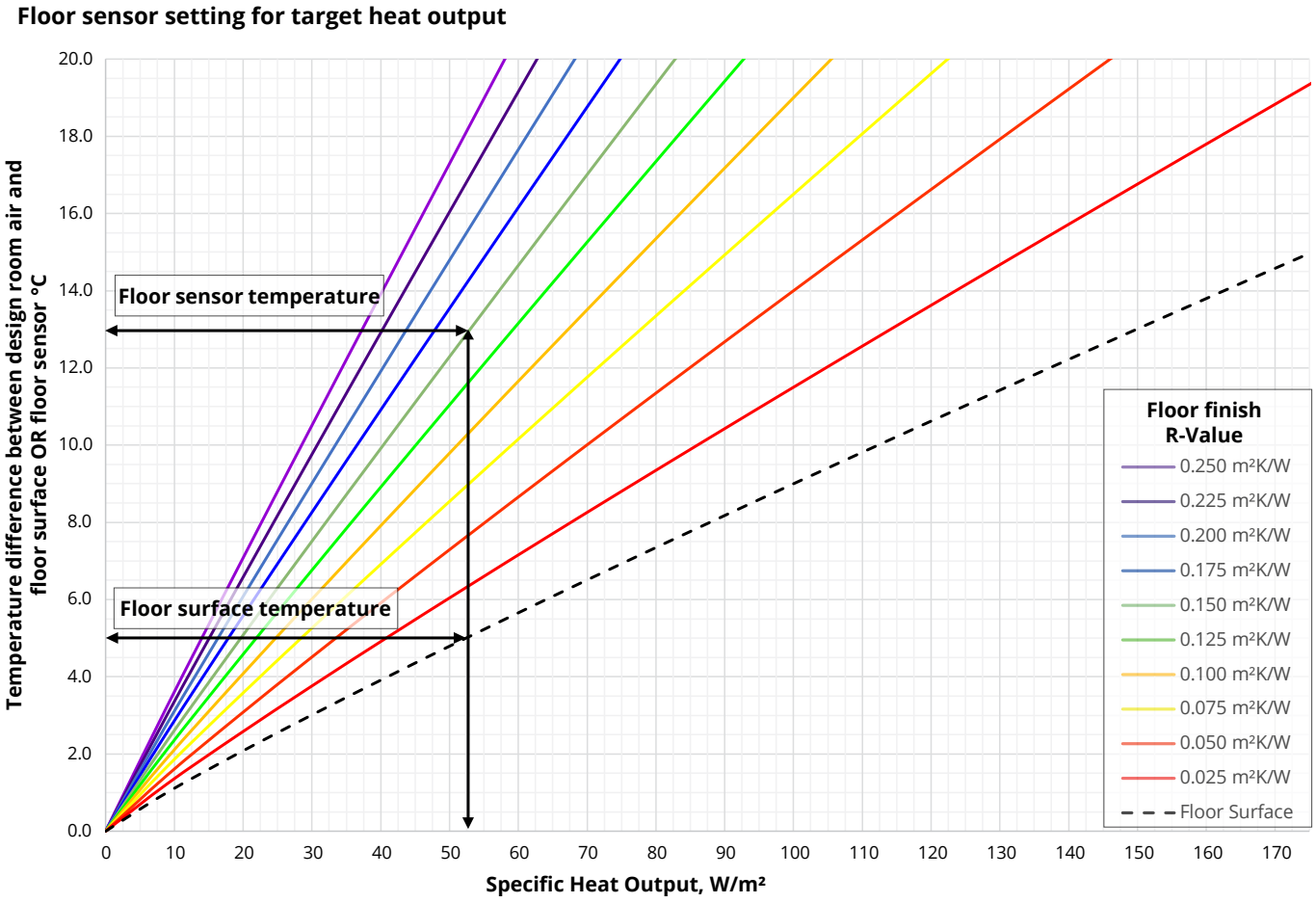
Technical Specification

Warmup Inscreed cable			
Product Code	*WISXXX* *XXX = Total wattage*	**Cable sheath**	Blue
Connection	1.5 mm², 2.50 m long coldtail	**IP rating**	X7
Operating Voltage	230 V AC: 50 Hz	**Inner / Outer Insulation**	Fluoropolymer / Polyolefin
Output rating	200 W/m² / 150 W/m² / 100 W/m²	**Earth protection**	Aluminium mylar tape with copper drain wire
Heating cores	Dual core, single-strand heating element	**Minimum installation temperature**	-10 °C
Cable Diameter	5.30 mm	**Spacing**	100 mm (200 W/m²) / 133 mm (150 W/m²) / 200 mm (100 W/m²)

Warmup Inscreed Cable

						Heated Area, m²		
						100 W/m²	150 W/m²	200 W/m²
Product code	**Cable length (m)**	**Power (W)**	**Current (A)**	**Resistance (Ω)**	**Resistance Band (Ω)**	200 mm	133 mm	100 mm
WIS180	9.0	180	0.8	287.5	273.1 - 301.9	1.8	1.2	0.9
WIS280	14.0	280	1.2	193.2	183.5 - 202.9	2.8	1.9	1.4
WIS390	19.5	390	1.7	138.0	131.1 - 144.9	3.9	2.6	2.0
WIS500	25.0	500	2.2	107.4	102.0 - 112.8	5.0	3.3	2.5
WIS650	32.5	650	2.8	81.6	77.5 - 85.7	6.5	4.3	3.3
WIS760	38.0	760	3.3	69.8	66.3 - 73.3	7.6	5.1	3.8
WIS1000	50.0	1000	4.4	53.7	51.0 - 56.4	10.0	6.7	5.0
WIS1200	60.0	1200	5.2	44.2	42.0 - 46.4	12.0	8.0	6.0
WIS1460	73.0	1460	6.4	36.2	34.4 - 38.0	14.6	9.7	7.3
WIS1550	77.5	1550	6.7	34.1	32.4 - 35.8	15.5	10.3	7.8
WIS1770	88.5	1770	7.7	29.9	28.4 - 31.4	17.7	11.8	8.9
WIS2070	103.5	2070	9.0	25.6	24.3 - 26.9	20.7	13.8	10.4
WIS2600	130.0	2600	11.3	20.3	19.3 - 21.3	26.0	17.3	13.0
WIS3140	157.0	3140	13.7	16.8	16.0 17.6	31.4	20.9	15.7
WIS3370	168.5	3370	14.7	15.7	14.9 16.5	33.7	22.5	16.9

System Performance



Using the graph above it is possible to get the specific heat output of an eUFH system based on the temperature difference between the design room air temperature and the floor surface or floor sensor temperature by floor finish.

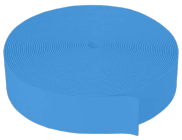
The example above shows that for a design room air temperature of 20°C and floor surface temperature of 25°C. Based on the temperature difference of 5°C the resulting heat output would be 52.5 W/m². Based on a 0.150 m²K/W (1.5 Tog) floor finish the floor sensor would have to be set to 33°C to achieve this heat output.

- The design floor surface temperature difference should not be more than 9 °C in occupied areas, 15 °C in unoccupied areas.
- Heat output is limited by the floor finish resistance combined with the maximum probe setting of 40 °C.
- Temperature limits of the floor finish or its adhesive may adversely limit the design heat output.

Components

Warmup 6iE - 6iE-01-OB-DC / 6iE-01-BP-LC
The world's first UFH thermostat with a smartphone touchscreen providing effortless control at your fingertips. Connected to the internet by WiFi, it can be controlled from a smart phone, tablet or computer as well as its own touchscreen interface. Working automatically; it learns your routines and location through background communication with your smartphone. Using this knowledge it suggests ways to save energy.

Warmup Element - RSW-01-WH-RG (ELM-01-WH-RG) / RSW-01-OB-DC (ELM-01-OB-DC)
Warmup's Element WiFi Thermostat has been designed with simplicity and stylish functionality in mind. It brings energy-efficient heating control to all Warmup floor heaters. Combining smart technology with simple, contemporary design, the Element WiFi Thermostat is the perfect all-rounder to control Warmup heating systems.



Warmup perimeter strip - WHS-X-EDGE50
High quality foam perimeter strip, to allow for differential movement between finished floor level and walls when layer the screed over the Inscreed system.

Warmup Clips - CLIP-26
The clips are used to securely hold the heating cable in place on the insulation layer below. This ensures minimal movement and maintains the intended cable spacing once the screed layer is applied on top of the system.

Clip gun - CLIP26-GUN
Used to install the CLIP26 clips into insulation layer for a faster installation.

Contact

Warmup plc
www.warmup.co.uk **T:** 0345 345 2288
uk@warmup.com **F:** 0345 345 2299

Warmup plc ■ 704 Tudor Estate ■ Abbey Road ■ London ■ NW10 7UW ■ UK
Warmup GmbH ■ Ottostraße 3 ■ 27793 Wildeshausen ■ DE