# **Inscreed Cable System**

### Overview

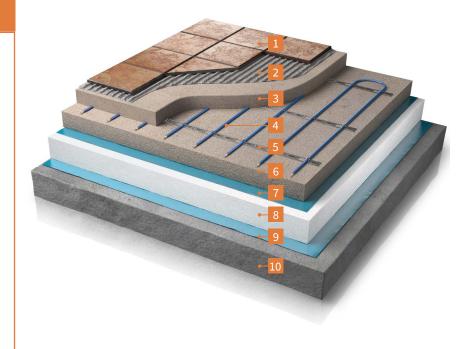
The Warmup Inscreed Cable System is designed for use within a screeded floor construction. The variable spacing of the cable available during design and installation allows the system power to be tailored to the properties requirements.

The Inscreed Cable system is extremely versatile. Its spacing can be varied to tailor the heat input into a floor to match its required heat load. This makes it ideal for screeds as thin as 50mm laid over insulation when a responsive system is required, as well as thicker, bonded screeds where the floor construction is to be used as a storage heater.

For retrofit installations where the subfloor is already in place, it is recommended that one of the other Warmup Electric UFH Systems is selected based on requirements. They can all be installed directly between an insulation layer and the floor finish layer to create a system with a very quick response to heating demands.

#### **FLOOR CONSTRUCTION**

- 1 Floor finish
- 2 Tile adhesive or levelling compound
- 3 ≥ 30mm Bonded Screed
- 4 Warmup Inscreed Cable
- 5 Warmup Inscreed Rails
- 6 Screed/Concrete Slab
- 7 Moisture Control Layer
- 8 Rigid Insulation
- 9 DPM
- 10 Subfloor







## Technical Data

TECHNICAL DATA - Inscreed Cable		
OPERATING VOLTAGE	220 - 240v: 50Hz	
IP RATING	IPX7	
CABLE THICKNESS	6mm	
AVERAGE OUTPUT RATING	100 to 210W/m <sup>2</sup>	
INNER INSULATION	ETFE	
OUTER INSULATION	PVC	
MIN. INSTALLATION TEMP	5°C	
CONNECTION	3m LONG "COLDTAIL" CONNECTION	



## **Features**

- Once installed within a screed, this system is suitable for any underfloor heating compatible floor finish, which can be easily lifted and replaced as desired without any risk of damaging the heating system.
- The slower heat up and cool down time of the Inscreed Cable System makes it particularly suited to the creation of a storage heating system.
- Can be installed directly on top of the Warmup Cement Coated Insulation boards covered with minimum 50mm screed
- VDE Approved and CE marked meeting the highest safety standards for ultimate piece of mind  $\bigcup$



10 Year Warranty & SafetyNet Installation Guarantee SAFETY Net



## Technical Data

PRODUCT CODE		
WIS180		
WIS280		
WIS390		
WIS500		
WIS650		
WIS760		
WIS1000		
WIS1200		
WIS1460		
WIS1550		
WIS1770		
WIS2070		
WIS2600		
WIS3140		
WIS3370		

Inscreed Heater (WIS)							
SPACING 200mm 100W/m²	SPACING 133mm 150W/m²	SPACING 100mm 200W/m²	HEATER LENGTH	POWER (W)	LOAD (A)	RESISTANCE (Ω)	RESISTANCE BANDS (Ω)
Н	EATED AREA (r	n²)					(=-)
1.8	1.2	0.9	9.0	180	0.78	293.9	279.2 - 308.6
2.8	1.9	1.4	14.0	280	1.22	188.9	179.5 - 198.3
3.9	2.6	2.0	19.5	390	1.70	135.6	128.8 - 142.4
5.0	3.3	2.5	25.0	500	2.17	105.8	100.5 - 111.1
6.5	4.3	3.3	32.5	650	2.83	81.4	77.3 - 85.5
7.6	5.1	3.8	38.0	760	3.30	69.6	66.1 - 73.1
10.0	6.7	5.0	50.0	1000	4.35	52.9	50.3 - 55.6
12.0	8.0	6.0	60.0	1200	5.22	44.1	41.9 - 46.3
14.6	9.7	7.3	73.0	1460	6.35	36.2	34.4 - 38.0
15.5	10.3	7.8	77.5	1550	6.74	34.1	32.4 - 35.8
17.7	11.8	8.9	88.5	1770	7.70	29.9	28.4 - 31.4
20.7	13.8	10.4	103.5	2070	9.00	25.6	24.3 - 26.9
26.0	17.3	13.0	130.0	2600	11.30	20.3	19.3 - 21.3
31.4	20.9	15.7	157.0	3140	13.65	16.8	16.0 - 17.6
33.7	22.5	16.9	168.5	3370	14.65	15.7	14.9 - 16.5

**NOTE:** All spacings have been based on square areas for calculation purposes. Therefore actual spacing will vary according to the shape of the area to be heated. All spacings should be measured from the centre of the wire.

## **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 (mm)	LENGTH (mm)	WEIGHT (kg)	R VALUE (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

## **Fixing Rails**

The fixing rails are suitable for the inscreed heater only. They are secured to the insulation board or the concrete subfloor using fixing nails or adhesive and should be evenly spread across the floor at 0.75m intervals.

The fixing rails hold the cable in place at set spacings depending on the wattage/m² required.

TECHNICAL DATA		
COMPOSITION	GLAVANIZED STEEL	
ZINC COATING	185GSM	
THICKNESS	0.4mm	
WIDTH	21mm	
LENGTH	25m	
CLIP SPACING - CABLE TO CABLE	25mm	



### **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.

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#### 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.