Inscreed Cable System

Overview

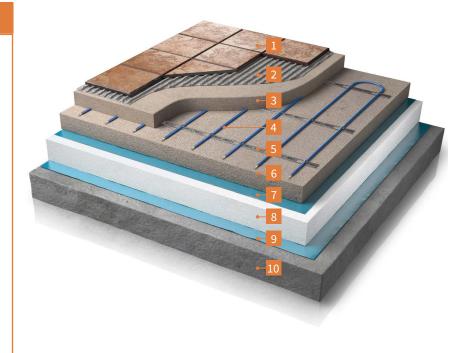
The Warmup Inscreed Cable System is designed for use within a screeded floor construction. The variable spacing of the cable available during design and installation allows the system power to be tailored to the properties requirements.

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	230 V: 50Hz	
IP RATING	IPX7	
CABLE THICKNESS	5.3 mm	
AVERAGE OUTPUT RATING	100 to 210W/m ²	
INNER INSULATION	ETFE	
OUTER INSULATION	PVC	
MIN. INSTALLATION TEMP	5°C	
CONNECTION	2.5 m 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
- FIMKO Approved and CE marked meeting the highest safety standards for ultimate peace of mind



Lifetime* Warranty & SafetyNet Installation Guarantee SAFETY Net



^{*} Lifetime Warranty applies for residential domestic use only.

25 Year Warranty applies if the final floor finish is concrete / polish concrete.

10 Year Warranty applies for commercial use / projects.

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

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.