# **DCM-PRO System**

## Overview

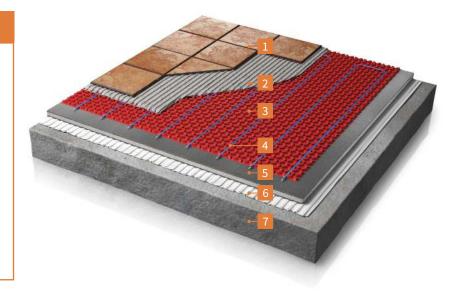
The Warmup DCM-PRO System is designed for use over a subfloor prepared for tiling. The mat has a strong selfadhesive layer to secure it directly to Warmup insulation boards. Alternatively it can be affixed to a clean dry subfloor, which has been primed using an SBR primer (ratio 1:4). The mat is available in 1m² sheets or 15m x 1m rolls, which makes installation quick and easy whilst ensuring precision is maintained. The mat can be easily trimmed using a utility knife.

The 4.5mm multi-strand, dual core heating cable, is insulated with an advanced fluoropolymer making it exceptionally tough and easy to tile over. It is easily clipped into the DCM-PRO mat by gently pressing it in between the castellations. The cable can be spaced at 60mm, 90mm & 120mm depending on power requirements.

The DCM-PRO system can be used as a waterproofing layer through the addition of the DCM-PRO Waterproofing tape, for installations such as wetrooms or where there will be significant exposure to water.

#### **FLOOR CONSTRUCTION**

- 1 Floor finish
- 2 Tile adhesive or levelling compound
- 3 Warmup DCM-PRO Mat
- 4 Warmup DCM-PRO Cable
- 5 Warmup Coated Insulation Board
- 6 Flexible Tile Adhesive
- 7 Subfloor









## Technical Data

TECHNICAL DATA - DCM-PRO Cable				
OPERATING VOLTAGE	220 - 240v: 50Hz			
IP RATING	IPX7			
COLOUR	BLUE			
THICKNESS	4.5mm (± 0.2mm)			
OUTPUT RATING	150w/m² (3 Castellations - 90mm)			
INNER INSULATION	ADVANCED FLUOROPOLYMER (ETFE)			
OUTER INSULATION	PVC			
MIN. INSTALLATION TEMP	5°C			
CONNECTION	3m LONG "COLDTAIL" CONNECTION			

TECHNICAL DATA - DCM-PRO Mat					
THICKNESS	5.5mm				
COMPOSITION	POLYPROPYLENE MEMBRANE WITH SELF-ADHESIVE BACKING				
COLOUR	RED				
SPACING	60mm, 90mm & 120mm				
SIZING	1m² sheet / 15m x 1m roll				

## **Features**

- 4.5mm cable multi-strand, dual core heating cable with an advanced fluoropolymer inner insulation making it exceptionally tough and easy to tile over
- Reduced installation costs, by comparison to similar products
- Pressure sensitive adhesive securely binds the mats to the floor keeping them flat for fast and secure installation
- BEAB Approved and CE marked meeting the highest safety standards for ultimate peace of mind ( E (BEAB)



Lifetime Warranty & SafetyNet Installation Guarantee



# Technical Data

PRODUCT CODE DCM-M-1 DCM-M-15

DCM-PRO MAT SIZES					
FORMAT	LENGTH (mm)	WIDTH (mm)	AREA COVERED (m²)		
Sheet	1,040	980	1		
Roll	15,300	980	15		

		DCM-PRO CABLE			
PRODUCT CODE	POWER (W)	LOAD (A)	RESISTANCE (Ω)	RESISTANCE BANDS (Ω)	
DCM-C-1	150	0.6	352.7	335.0 - 370.3	
DCM-C-1.5	225	0.9	235.1	223.3 - 246.9	
DCM-C-2	300	1.3	176.3	167.5 - 185.1	
DCM-C-2.5	375	1.6	141.1	134.1 - 148.2	
DCM-C-3	450	1.9	117.6	111.7 - 123.5	
DCM-C-3.5	525	2.2	100.8	95.8 - 105.8	
DCM-C-4	600	2.5	88.2	83.8 - 92.6	
DCM-C-4.5	675	2.8	78.4	74.5 - 82.3	
DCM-C-5	750	3.2	70.5	67.0 - 74.0	
DCM-C-6	900	3.8	58.8	55.9 - 61.7	
DCM-C-7	1050	4.4	50.4	48.0 - 52.9	
DCM-C-8	1200	5.0	44.1	42.0 - 46.3	
DCM-C-9	1350	5.7	39.2	37.2 - 41.2	
DCM-C-10	1500	6.3	35.3	33.5 - 37.1	
DCM-C-12	1800	7.6	29.4	27.9 - 30.9	
DCM-C-14	2100	8.8	25.2	23.9 - 26.5	
DCM-C-16	2400	10.1	22.0	20.9 - 23.1	

HEATED AREA AT DIFFERENT SPACINGS, m <sup>2</sup>							
CABLE	60mm	60/90mm	90mm	90/120mm	120mm		
LENGTH (m)	230W/m <sup>2</sup>	~190W/m²	150W/m <sup>2</sup>	~130W/m²	115W/m <sup>2</sup>		
11.1	0.7	0.8	1.0	1.2	1.3		
16.6	1.0	1.3	1.5	1.8	2.0		
22.2	1.3	1.7	2.0	2.3	2.7		
27.7	1.7	2.1	2.5	2.9	3.3		
33.3	2.0	2.5	3.0	3.5	4.0		
38.8	2.3	2.9	3.5	4.1	4.7		
44.4	2.7	3.3	4.0	4.7	5.3		
50.0	3.0	3.8	4.5	5.3	6.0		
55.5	3.3	4.2	5.0	5.8	6.7		
66.6	4.0	5.0	6.0	7.0	8.0		
77.7	4.7	5.8	7.0	8.2	9.3		
88.8	5.3	6.7	8.0	9.3	10.7		
100.0	6.0	7.5	9.0	10.5	12.0		
111.1	6.7	8.3	10.0	11.7	13.3		
133.3	8.0	10.0	12.0	14.0	16.0		
155.5	9.3	11.7	14.0	16.3	18.7		
177.1	10.7	13.3	16.0	18.7	21.3		

**Note:** To heat larger areas, two or more cables should be used. i.e. To heat a  $23m^2$  room at  $150W/m^2$ , use a DCM-C-14 and a DCM-C-9

PRODUCT CODE DCM-E-25 DCM-T-10 DCM-R-I DCM-R-E

DCM-PRO ADDITIONAL COMPONENTS				
PRODUCT DESCRIPTION				
PERIMETER STRIP				
WATERPROOFING TAPE				
INTERNAL CORNER				
EXTERNAL CORNER				

FORMAT	LENGTH (Varies)	WIDTH (mm)	HEIGHT (mm)	THICKNESS (mm)
Roll	25m	-	30	10
Roll	10m	-	120	1
Corner	120mm	120	60	1
Corner	120mm	120	60	1

## **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

### **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 £210.



#### Easy to use

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