


Technical Data Sheet of Underfloor Heating Mat

Product Specification:

Product Description	Floor Heating membrane
Material	PE film top; PP nonwoven bottom
Roll Size	Width: 1m, Length: 20m (per roll)
Weight	1000g/sqm
Thickness	5.6mm
Film thick:	0.45mm
Wire cable diameter	3.6-4.2mm
Installation Temperature	5°C to 40°C, but limited by tile adhesive specification
Storage Temperature	Max. 45°C
Melting	160°C
Steam Resistance	160m Equivalent air layer
Air gap volume	2.8 litre/m ²
Filling volume of the studs	2.3 litre/m ²
Distance of the studs	4.0 mm
Crack bridging	0.32mm
Tensile Strength	73N/CM
Waterproof	yes
Packing	wrapped in plastic film
Color	Blue, red and other

Estimation of power may achieve from different cable distribution:	@64mm spacing 214Watts per square meter. @96mm spacing 142w/m2 @128mm spacing 100w/m2
Illustration	

The Factory Inhouse Inspection Report

Reference: GB18173.1-2012			
No.	Test Items	Requirements	Result
1	Tensile Strength (N/cm)	≥40N/cm	81.7N/cm
2	Breaking Elongation (%)	≥25%	91.1%
3	Compressive Strength (kPa)	≥100kPa	868.1kPa
4	Shell Appearance after 50% High Compression	No Breakage	No Breakage
5	Drainage Area (cm ³)	≥30cm ³	/
6	Hot-air Aging (80°C×168h) Tensile Strength Retention Rate(%)	≥80%	117.50%
7	Hot-air Aging (80°C×168h) Tensile Elongation Retention Rate (%)	≥70%	87.3%
8	Alkali Resistance [Saturated Ca(OH) ₂ Solution 23°C×168h] Tensile Strength Retention Rate (%)	≥80%	110.2%
9	Alkali Resistance [Saturated Ca(OH) ₂ Solution 23°C×168h] Tensile Elongation Retention Rate (%)	≥80%	117.3%

Warranty

Item	Details
Product Name	Underfloor Heating Mat UM605
Warranty Period	5 years from purchase date
Coverage	Replacement due to manufacturing defects (waterproofing, crack isolation, etc.)
Warranty Terms	1. Applies only under normal usage conditions.
	2. Does not cover installation errors, misuse, or physical damage.
	3. Warranty void if not installed as per instructions.
Claim Procedure	Submit proof of purchase and defect report. Upon inspection, we will provide a replacement or refund.
Exclusions	Excludes damage from external forces, accidents, or natural disasters.