

Wolfin M

High-polymer, bitumen-compatible synthetic roofing and waterproofing membrane with a central reinforcement. The membrane is produced by extrusion method.

TYPES AND APPLICATION AREAS		
Wolfin M	With central glass grid reinforcement, entirely homogeneous (no different top, middle and under layer)	
Membrane width	1,100 mm / 1,620 mm	
Nominal thickness	1.5 mm / 2.0 mm	
Colour	Black, grey	
New buildings and refurbishments	<ul style="list-style-type: none"> ▪ Loose-laid under ballast ▪ Mechanically fixed ▪ Waterproofing of buildings 	
Wolfin M is certified, approved and classified according to	<ul style="list-style-type: none"> ▪ EN 13956 (CE-certificate N° 1213-CPR-012) ▪ EN 13967 (CE-certificate N° 1213-CPR-015) ▪ Fulfils all German requirements (DIN standards) for waterproofing of roofs ▪ Fulfils UK requirements according to BBA (certificate 14/5143) 	<ul style="list-style-type: none"> ▪ EN 13501-1 (Class E) ▪ CEN/TS 1187 ▪ EN 13501-5 B_{roof}(t1) ▪ LEED v4 (Leadership in Energy and Environmental Design) ▪ ISO 14025 / EN 15804 Environmental Product Declaration (EPD)
Characteristics of Wolfin M	<ul style="list-style-type: none"> ▪ Content of high polymer substances more than 94% ▪ Reinforced with integrated glass grid ▪ Equipped with homogeneous membrane edge ex-works ▪ More than 55 years of practical experience with Wolfin membranes ▪ More than 25 years of practical experience with glass grid reinforcement ▪ Permeable to water vapour diffusion ▪ My-value ≤ 10,000 (+/- 3,000) 	<ul style="list-style-type: none"> ▪ Dry-out process of wet roof structures is proven by the Fraunhofer Institut Holzkirchen ▪ Free of toxic heavy metals ▪ Free of flame retardants ▪ Ozone and UV resistant ▪ Low filler load ▪ High chemical resistance ▪ Chemical resistance to all insulation material ▪ Resistant to plant roots and rhizome according to FLL test method
System parts and accessories	<ul style="list-style-type: none"> ▪ Membrane strips ▪ Internal and external corners ▪ Homogeneous material (Wolfin IB) ▪ Coated metal sheets (plates/coils) 	<ul style="list-style-type: none"> ▪ Lightning protection and fastening elements ▪ Stainless-steel drainage and ventilation elements ▪ System adhesives (Teroson AD 914, Teroson AD Adhesive Spray)



TECHNICAL DATA

Product information according to EN 13956

- Exposed application (mechanically fixed)
- Under ballast (gravel, green roof, traffic areas or similar ...)

EN 13967



- Damp-proof sheets
- Basement tanking sheets

Characteristic	Testing standard	Unit	Result* 1.5 mm	Result* 2.0 mm
Visible defects	EN 1850-2	-	passed	passed
Length	EN 1848-2	m	15	10
Width	EN 1848-2	m	1,10 / 1,62	1,10 / 1,62
Straightness	EN 1848-2	mm	≤ 50	≤ 50
Flatness	EN 1848-2	mm	≤ 10	≤ 10
Mass per unit area	EN 1849-2	kg/m ²	1,9	2,5
Effective thickness	EN 1849-2	mm	1,5	2,0
Watertightness	EN 1928 Method B	kPa	passed	passed
External fire performance	CEN/TS 1187	-	B _{Roof} (t1) (EN 13501-5)**	
Reaction to fire	EN 13501-1	-	Class E	Class E
Joint peel resistance	EN 12316-2	N/50 mm	≥ 300	≥ 300
Joint shear resistance	EN 12317-2	N/50 mm	≥ 800	≥ 800
Tensile strength longitudinal and transversal	EN 12311-2	N/50 mm	≥ 800	≥ 800
Elongation longitudinal and transversal	EN 12311-2	%	≥ 2	≥ 2
Resistance to impact Method A	EN 12691	mm	≥ 600	≥ 750
Method B	EN 12691	mm	≥ 600	≥ 750
Resistance to static load	EN 12730 Method A	kg	≥ 20	≥ 20
Durability of watertightness against ageing	EN 1296 EN 1928	-	passed	passed
Durability of watertightness against chemicals	EN 1847 EN 1928	-	passed	passed
Resistance to nail tear	EN 12310-1	N	≥ 400	≥ 400
Tear resistance longitudinal and transversal,	EN 12310-2	N	≥ 200	≥ 200
Resistance to root penetration	EN 13948	-	passed	passed
Dimensional stability longitudinal and transversal	EN 1107-2	%	≤ 1	≤ 1
Foldability at low temperature	EN 495-5	°C	≤ -20	≤ -20
UV exposure	EN 1297	visual	passed	passed
Hail resistance	EN 13583	m/s	≥ 25	≥ 25
Water vapour permeability	EN 1931	μ	10.000 ± 3.000	
Bitumen compatibility (90 days / 70°C)	EN 1548	-	passed	passed

* Values in new condition

** Valid for the respective proofed roof structure

SUSTAINABILITY INFORMATION WOLFIN M

EPD declaration number	EPD-BMI-2020-0174-IBB1-DE, specific EPD Wolfin M	 
	Wolfin M declaration data is stored with the IBU, in the oekobaudat database and in the DGNB Navigator. Wolfin M membranes are, among other things, suitable for certified buildings in accordance with DGNB, BNB and Leed v4.	
Manufacturer declarations	<ul style="list-style-type: none">▪ REACH: Product does not contain any substances that meet the REACH criteria for substances of very high concern▪ Heavy metals Lead, cadmium and organotin compounds: <0.1 % (DGNB ENV 1.2 quality level 1-4 / BNB 1.1.1-1.1.5 quality level 1-5)▪ SVHC phthalates (plasticisers): <0.1 % (DGNB quality level 1-4)▪ SVHC: Product contains no substances of very high concern (BNB 1.1.1-1.1.5 quality level 1-5)▪ VOC content: < 0.1 %	
Postconsumer recycled content	0 %	
Preconsumer recycled content	Internally recycled raw materials: Wolfin M 1,5 mm: 15 % Wolfin M 2,0 mm: 9%	
Recycling & disposal	<ul style="list-style-type: none">▪ Wolfin M membranes can be thermally recycled or recycled via the RoofCollect system (DGNB TEC 1.6)▪ EU waste codes<ul style="list-style-type: none">▪ Transport packaging: 15 01 02, 15 01 03▪ Product packaging: 15 01 02▪ Product end of life: 17 09 04▪ Interseroh number: 210284	

Date: 05/2021. This technical data sheet was produced according to the latest technical knowledge and standards. Technical changes due to further developments are possible.

You can find the declarations of performance on our website www.bmigroup.de/Downloads.

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