## Technical Information WOLFIN® M



WOLFIN M is a high-polymer, entirely homogeneous synthetic roofing and waterproofing membrane (no different top, middle and under layer) with a central reinforcement. The membrane is produced by extrusion method.

### **WOLIN M** is certified, approved and classified according to:

- EN 13956 CE- Waterproofing of Roofs
- EN 13967 CE- Waterproofing of Buildings
- Fulfills all German requirements (DIN standards) for waterproofing of roofs and buildings
- Fulfills UK requirements according BBA (certificate 14/5143)
- EN 13501-1 (Class E)
- ENV 1187 / EN 13501-5
- External fire = B<sub>ROOF</sub> (t1), B<sub>ROOF</sub> (t4) valid for the respective proofed roof structure
- LEED v4 (Leadership in Energy and Environmental Design)
- EN 15804 Environmental Product Declaration (EPD)

### **Characteristics of WOLFIN M:**

- Content of high polymer substances more than 94%
- · Reinforced with integrated glass grid
- Factory-finished equipped with homogeneous membrane edge
- More than 50 years long-term and practical experiences with WOLFIN membranes
- More than 20 years long-term and practical experiences with glass grid reinforcement
- Permeable to water vapour diffusion
- My-value ≤ 10.000 (+/- 3.000)
- Dry-out process of moisturized roofs is proven by the Fraunhofer Institut Holzkirchen
- Free of toxic heavy metals
- · Free of flame retardants

- Ozone and UV resistant
- Low filler load
- Unique chemical resistance:
  - Resistant to bitumen, flux oils, mineral oils, fatty acid, kerosene
  - Proof of the resistance to sulphurous acid and lactic acid (85%)
  - Further resistance according to WHG (German water resources act) media group 3
- Chemical resistance to all insulation material
- Resistant to plant roots and rhizomes according to FLL-test method

Types and application areas:				
WOLFIN M:	with central glass grid reinforcement			
Membrane width:	1.100 mm / 1.620 mm			
Nominal thickness:	1,5 mm / 2,0 mm			
New building and refurbishment	Loose laid under ballast or mechanically fixed			
Colour:	Black, grey			

### **System parts and accessories:**

- Membrane strips
- Internal and External Corners
- Homogeneous material (WOLFIN IB)
- Coated Metal Sheets (Plates/Coils)

- Lightning protection and fastening elements
- Stainless steel drainage and ventilation elements
- System adhesives (Teroson AD 914, Teroson AD Adhesive Spray)

Technical support: +49 6053 708-5141

Part of **BMI Group** 

# **Technical Information WOLFIN® M**



## Product information according EN 13956 and EN 13967

### EN 13956

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

### EN 13967

Damp proof sheets Basement tanking sheets

Characteristic	Test standard	Unity	Details	Result* 1,5 mm	Result* 2,0 mm
Visible defects	EN 1850-2	-	passed	passed	
Length		m	MDV	15 10	
Width	EN 1848-2	m	MDV	1,1 / 1,62	
Straightness	LIV 1040 Z	mm	MLV	≤ 50 ≤ 10	
Flatness		mm	MLV		
Mass per unit area	EN 1849-2	kg/m²	MDV	1,9	2,5
Effective thickness		mm	MDV	1,5	2,0
Water tightness	EN 1928 B	kPa	MLV	passed	
External fire protection	ENV 1187	-	Annex E	$B_{Roof}(t1) + B_{Roof}(t4)$	
Reaction to fire	EN 13501-1	-	s. 5.2.5.2	Class E	
Joint peel resistance	EN 12316-2	N/50 mm	MLV	≥ 300	
Joint shear resistance	EN 12317-2	N/50 mm	MLV	≥ 800	
Tensile strength	EN 12311-2	N/50 mm	MLV	≥ 800 ≥ 2	
Elongation		%	MLV		
Resistance to impact Method A Method B	EN 12691 EN 12691	mm mm	MLV MLV	600 600	750 750
Resistance to static load	EN 12730 Method B	kg	MLV	≥ 20	
Durability of water tightness against aging	EN 1296 EN 1928	-	passed	passed	
Durability of water tightness against chemicals	EN 1847 EN 1928	-	passed	passed	
Resistance to nail tear	EN 12310-1	N	MLV	≥ 400	
Tear resistance	EN 12310-2	N	MLV	≥ 200	
Resistance to root penetration	EN 13948	-	passed	passed	
Dimensional stability	EN 1107-2	%	MLV	≤1	
Foldability at low temperature	EN 495-5	°C	MLV	≤ -20	
UV exposure	EN 1297	visual	passed	passed	
Hail resistance	EN 13583	m/s	MLV	≥ 25	
Water vapour permeability	EN 1931	-	$\mu = MDV \text{ or} $ 15.000	10.000 ± 3.000	
Bitumen compatibility	EN 1548	-	passed	passed	

Explanation:

MDV = Manufacturer's declared value MLV = Manufacturer's limiting value \* Values in new conditions



1213-CPR-015 1213-CPR-015 EN 13956 EN 13967

You can find the declarations of performance on our website www.wolfin.com / Downloads.

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