

# Technical Information

## COSMOFIN FG R

COSMOFIN FG R is a monomer plasticised PVC waterproofing membrane with integrated polyester fabric reinforcement and additional fire protection equipment. COSMOFIN FG R membrane is produced by extrusion method. The membrane is certified and approved according to FM Global.

### COSMOFIN FG R is certified, approved and classified according to:

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| <ul style="list-style-type: none"><li>• EN 13956 CE-Waterproofing of Roofs</li><li>• Fulfills all German requirements (DIN standards) for waterproofing of roofs and buildings</li></ul> | <ul style="list-style-type: none"><li>• EN 13501-1 (Class E)</li><li>• ENV 1187 / EN 13501-5</li><li>• External fire = B<sub>ROOF</sub> (t1) valid for the respective proofed roof structure</li></ul> |
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### Characteristics of COSMOFIN FG R:

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| <ul style="list-style-type: none"><li>• Polyester fabric reinforcement</li><li>• High tensile strength</li><li>• Ozone- and UV-resistant</li><li>• Suited for hot air and solvent welding</li><li>• Resistant to plant roots according to FLL testing and EN 13948</li></ul> | <ul style="list-style-type: none"><li>• Mouldable when warm (COSMOFIN F)</li><li>• Cold resistant</li><li>• Recyclable</li><li>• Free of cadmium and lead stabilizers</li></ul> |
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### Membrane type and application areas:

COSMOFIN FG R:	with central reinforcement
Membrane width:	1.060 mm / 1.650 mm
Nominal thickness:	1,5 mm / 1,8 mm / 2,0 mm
New building and refurbishment:	Mechanically fixed, loose laid under ballast
Colour:	grey, further colours on request

### System parts and accessories:

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| <ul style="list-style-type: none"><li>• Internal and external corners</li><li>• Homogeneous material for detail forming</li><li>• Coated metal sheets (Plates / coils)</li><li>• Stainless steel drainage and ventilation elements</li><li>• Lightning Rod Protection Tubes</li></ul> | <ul style="list-style-type: none"><li>• WITEC Walkway, membrane for maintenance paths</li><li>• WITEC KV pro, protection fleece for the installation under ballast</li><li>• Joint adhesives (Teroson AD 914, Teroson AD Adhesive Spray)</li></ul> |
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**Technical support: +49 6053 708-5141**

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This technical data sheet was produced according to the latest technical knowledge and standards of WOLFIN Bautechnik, Am Rosengarten 5, D-63607 Wächtersbach. Technical changes due to further developments are possible.

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### Product information according to EN 13956

#### EN 13956

Exposed application (mechanically fixed)  
Under ballast (gravel, green roof, ...)

Characteristic	Testing standard	Unity	Details	Result* 1,5 mm	Result * 1,8 mm	Result * 2.0 mm
Visible defects	EN 1850-2	-	passed	passed		
Length	EN 1848-2	m	MDV	20	17,5	15
Width		m	MDV	1,06 / 1,65		
Straightness		mm	MLV	≤ 50		
Flatness		mm	MLV	≤ 10		
Mass per unit area	EN 1849-2	kg/m <sup>2</sup>	MDV	1,9	2,3	2,5
Water tightness	EN 1928 B	kPa	MLV	passed		
External fire performance	EN V 1187	-	Annex E	B <sub>Roof</sub> (t1)		
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	≥ 1000 / ≥ 900		
Elongation		%	MLV	≥ 10		
Resistance to impact Method A	EN 12691	mm	MLV	≥ 600	≥ 700	750
Method B	EN 12691	mm	MLV	≥ 600	≥ 700	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		
Nail tear resistance	EN 12310-1	N	MLV	≥ 400		
Tear resistance	EN 12310-2	N	MLV	≥ 250		
Resistance to root penetration	EN 13948 / FLL	-	passed	Passed (in test)		
Dimensional stability	EN 1107-2	%	MLV	≤ 1.0		
Foldability at low temperature	EN 495-5	°C	MLV	≤ -25		
UV exposure	EN 1297	visual	passed	passed		
Hail resistance	EN 13583	m/s	MLV	≥ 25		
Water vapour permeability	EN 1931	-	μ = MDV or 15.000	25.000 ±5.000		

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



1213-CPR-012  
EN 13956

You can find the declarations of performance on our website [www.wolfin.com](http://www.wolfin.com) / [Downloads](#)

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