

# Cosmofin FG LL

MONOMER-PLASTICISED, HIGH UV STABILISED (LL) PVC ROOFING MEMBRANE WITH A CENTRAL POLYESTER FABRIC REINFORCEMENT.

## TYPES AND APPLICATION AREAS

Cosmofin FG LL	With a central polyester fabric reinforcement
Membrane width	1,060 mm / 1,650 mm
Nominal thickness	1.5 mm / 1.8 mm / 2.0 mm
Colour	Grey
New buildings and refurbishments	<ul style="list-style-type: none"><li>• Mechanically fixed</li><li>• Loose-laid under ballast</li></ul>



Cosmofin FG LL is certified, approved and classified according to	<ul style="list-style-type: none"><li>• EN 13956 CE Waterproofing of Roofs</li><li>• Fulfils all German requirements (DIN standards) for waterproofing of roofs</li><li>• EN 13501-1 (Class E)</li><li>• CEN/TS 1187</li></ul>	
Characteristics of Cosmofin FG LL	<ul style="list-style-type: none"><li>• Polyester fabric reinforcement</li><li>• High tensile strength</li><li>• Ozone and UV resistant</li><li>• Suitable for hot-air and solvent welding</li><li>• Thermoplastic deformable (Cosmofin F)</li></ul>	<ul style="list-style-type: none"><li>• Root resistant according FLL test method and EN 13948</li><li>• Cold resistant</li><li>• Recyclable</li><li>• Free of cadmium and lead stabilisers</li></ul>
System parts and accessories	<ul style="list-style-type: none"><li>• Homogeneous material for detail forming (Cosmofin F)</li><li>• Internal and external corners</li><li>• Coated metal sheets (plates/coils)</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>• System adhesives (Teroson AD 914, Teroson AD Adhesive Spray)</li></ul>

## TECHNICAL DATA

Product information according to  
**EN 13956**

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

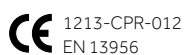
Characteristic	Testing standard	Unit	Details	Result* 1.5 mm	Result* 1.8 mm	Result* 2.0 mm
Visible defects	EN 1850-2	-	passed	passed	passed	passed
Length	EN 1848-2	m	MDV	20	17,5	20
Width	EN 1848-2	m	MDV	1.06 / 1.62	1,62	1,62
Straightness	EN 1848-2	mm	MLV	≤ 50	≤ 50	≤ 50
Flatness	EN 1848-2	mm	MLV	≤ 10	≤ 10	≤ 10
Mass per unit area	EN 1849-2	kg/m <sup>2</sup>	MDV	1,9	2,3	2,5
Watertightness	EN 1928 Method B	kPa	MLV	passed	passed	passed
External fire performance	ENV 1187	-	Annex E		B <sub>Roof</sub> (t1)**	
Reaction to fire	EN 13501-1	-	see 5.2.5.2	Class E	Class E	Class E
Joint peel resistance	EN 12316-2	N/50 mm	MLV	≥ 300	≥ 300	≥ 300
Joint shear resistance	EN 12317-2	N/50 mm	MLV	≥ 800 (tear-off outside the joint)		
Tensile strength longitudinal and transversal	EN 12311-2	N/50 mm	MLV	≥ 1.000 / ≥ 900		
Elongation longitudinal and transversal	EN 12311-2	%	MLV	≥ 10	≥ 10	≥ 10
Resistance to impact Method A	EN 12691	mm	MLV	≥ 600	≥ 700	≥ 750
Method B	EN 12691	mm	MLV	≥ 1.000	≥ 700	≥ 750
Resistance to static load	EN 12730 Method A	kg	MLV	≥ 20	≥ 20	≥ 20
Durability of watertightness against ageing	EN 1296 EN 1928	-	passed	passed	passed	passed
Durability of watertightness against chemicals	EN 1847 EN 1928	-	passed	passed	passed	passed
Nail tear resistance	EN 12310-1	N	MLV	≥ 400	≥ 400	≥ 400
Tear resistance longitudinal and transversal	EN 12310-2	N	MLV	≥ 250	≥ 250	≥ 250
Resistance to root penetration	EN 13948	-	fulfilled	fulfilled	fulfilled	fulfilled
Dimensional stability longitudinal and transversal	EN 1107-2	%	MLV	≤ 1,0	≤ 1,0	≤ 1,0
Foldability at low temperature	EN 495-5	°C	MLV	≤ -25	≤ -25	≤ -25
UV exposure	EN 1297	visual	passed	passed	passed	passed
Hail resistance Hard/soft ground	EN 13583	m/s	MLV	≥ 25	≥ 25	≥ 25
Water vapour permeability	EN 1931	μ	MDV or 15,000	25.000 ± 5.000		

MDV = manufacturer's declared value

MLV = manufacturer's limiting value

\* Values in new condition \*\* Valid for the respective proofed roof structure

Date: 01.2020. This technical data sheet was produced according to the latest technical knowledge and standards. Technical changes due to further developments are possible.



**Technical support**

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