

**SINTOFOIL RC/FR FM**

## Description

Synthetic waterproofing membrane obtained by coextrusion of a polypropylene elastomerised polyolefin (FPA = Flexible Polypropylene Alloy), with special non-toxic substances which give the finished product specific fire resistance characteristics, resistant to ultraviolet rays, reinforced by a composite reinforcement in polyester / glass fibers which makes it dimensionally stable.

The membrane is made with contrasting colors between the upper and lower sides (signal layer) to allow visual control of the surface integrity of the same during and after the laying phase. Available in the color White Reflecta, with high reflectance, with SRI = 102%.

## Certifications

Sintofoil membranes are manufactured in compliance with ISO 9001 standards; it is equipped with FM Approval and complies with CE marking requirements, where required.

## Fields of application

### Specific use

Creation of waterproofing layers applied with “mechanical fixing” for exposed roofing.

**Note:** Given the versatility and reliability of SINTOFOIL membranes, other particular uses can be examined by requesting assistance from the Technical Office of Imper Italia srl - Rubberfuse Division.

## Application

Sintofoil membranes are installed in compliance with the specifications and details described in the technical manual as published by Imper Italia Synthetic Division.

Roofing and waterproofing systems using Sintofoil membranes are only installed by applicators trained, approved and monitored by the Technical Department of Imper Italia Synthetic Division.

### TECHNICAL FEATURES <sup>(1)</sup>

Features	Standards	U.M.	Tolerance	Values			
Standard thickness	EN 1849-2	mm	(-5/+10%)	1,2	1,5	1,8	2,0
Standard colours <sup>(2)</sup>	-	-		Grey-Black			
<b>Tensile properties</b>							
• Tensile strength L/T	EN 12311-2	N / 50 mm	≥	1100 / 1100			
• Elongation at break L/T	EN 12311-2	%	≥	25 / 25			
Dimensional stability	EN 1107-2	%	≤	0,1			
Cold flexibility	EN 495/5	°C	≤	-40 <sup>(3)</sup>			
Tear resistance L/T	EN 12310/1	N		600 / 550			
Water vapour permeability (μ)	EN 1931	-		50.000			
Resistance to static loading	EN 12730/B	-	≥	L 25			
Resistance to impact	EN 12691/B	mm	≥	1200			
Hail resistance	FM Approval Standard Nr. 4470	-		pass the test (SH - severe hail)			
Watertightness (60 kPa)	EN 1928			Absolute			
<b>Welded seam resistance</b>							
• Tensile	EN 12317-2	-		Pass (fails outside seam area)			
• Peel	EN 12316-2	N / 50 mm	≥	290			
<b>Durability</b>							
• UV resistance	EN 1297-5000 h			No surface damage or significant changes in cold flexibility as per EN 495/5			
<b>Heat aging in air</b>							
• Tensile strength	EN 12311-2	Δ%	≤	-5			
• Elongation at break	EN 12311-2	Δ%	≤	-5			
<b>Wind uplift resistance</b>							
• Mechanical Fixing system	FM Approval Standard Nr. 4470			meet 1-105 FM Wind Classification			
Fire resistance	FM Approval Standard Nr. 4470			meet ASTM E 108 Class A - ¼ in 12			
	EN 13501-1			B <sub>ROOF</sub> (t3)			
Resistance to algae and microorganisms	ISO 846 level 2		-	pass the test			
Root resistance	EN 13948		-	pass the test			

**Notes:** (1) Tolerances as per EN 13956 and/or UEAtc Directives

(2) Top ply colour: Bottom ply always black. White, lead grey and other colours available on special order.

(3) Not tested at lower temperatures.

### PRODUCTION STANDARDS

Width	m	1,50 / 2,10
Length <sup>(*)</sup>	m	30 / 25
Colour		Grey / Black

(\*) Different thicknesses and lengths are available on demand and for minimum quantities.

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Considerando le diverse situazioni d'impiego dei prodotti e l'intervento di fattori da noi non dipendenti (supporti, condizioni di esercizio, in osservanza delle prescrizioni, ecc.), non è possibile alla IMPER ITALIA srl assumere responsabilità in merito ai risultati ottenuti. Il progresso unito alla costante ricerca dei massimi livelli prestazionali possono apportare - nel tempo - modificazioni alle informazioni contenute in questo stampato, senza che la IMPER ITALIA srl debba darne preavviso a tutti gli interessati.



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