

**SINTOFOIL FB****Description**

Synthetic waterproofing membrane produced by co-extruding a uniform UV resistant elastomerised TPO/FPA thermoplastic olefin and flexible polypropylene alloy, bonded on the lower face to a nonwoven polyester fabric reinforcing mat. The membrane features contrasting colours on its upper and lower faces, providing a signal layer so that any damage occurring during or after installation will be immediately apparent. Available in BIANCO REFLECTA version, manufactured with the upper side of the membrane (top) in WHITE REFLECTA colour, by means of a treatment developed in mass in the entire layer that covers the top of the reinforcement. This process enhances the reflectance and emission features giving the roof a Solar Reflectance Index (SRI) value that reach 102%. SINTOFOIL FB membranes comply with CE marking requirements, if applicable.

**System certifications**

QMS certification according to ISO 9001.

**Product certifications**

Regulation CPR 305/2011/EU.

UBATC, EELAB, BBA, CSTB, SK-Z certifications.

This product can contribute to acquiring points in terms of LEED accreditation.

**Fields of application****Specific use**

- Adhesive bonded waterproofing on exposed roofing, applied with specific FB/SF ADHESIVE.
- Refurbishment of waterproof bitumen covering materials.
- Waterproofing layers applied independently under heavy-duty fixed or movable protection for:
  - roofing exposed to foot traffic and roof gardens.
- Mechanically retained waterproofing on exposed roofs.

**Note:** Given the versatility and reliability of SINTOFOIL membranes, other applications can be developed with the assistance of the IMPER ITALIA srl – Technical Services.

**Application**

Sintofoil membranes are designed for easy bonding with a hot air gun, as no adhesives or other materials of any kind are required. Design solutions and application methods are illustrated in the technical manual published by the Synthetic Division. Waterproofing systems employing SINTOFOIL membranes should be laid by installers authorised by Imper Italia Technical Services.

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

Features	EN Standards	U.M.	Tolerance	Values			
Standard thickness	1849-2	mm	(-5/+10%)	1,2	1,5	1,8	2,0
<b>Tensile properties</b>							
• Tensile strength L/T	12311-2	N/mm <sup>2</sup>		16 / 15			
• Elongation at break L/T	12311-2	%		700 / 700			
Dimensional stability	1107-2	%		≤ 0.5			
Cold flexibility	495/5	°C		≤ -40 <sup>(2)</sup>			
Tear resistance L/T <sup>(*)</sup>	12310/1	N		450/400 <sup>(*)</sup>	650/600 <sup>(*)</sup>	800/750 <sup>(*)</sup>	900/850 <sup>(*)</sup>
Water vapour permeability (resistance factor μ)	1931			90.000			
Resistance to static loading <sup>(*)</sup>	12730/B	kg		≥ 25 <sup>(*)</sup>			
Resistance to impact <sup>(*)</sup>	12691/B	mm		≥ 1800 <sup>(*)</sup>			
Hail resistance	13583	m/s		≥ 30 <sup>(3)</sup>			
Water tightness (60 kPa)	1928			Absolute			
<b>Joint strength</b>							
• Tensile strength	12317-2	N/cm		Compliant (specimen fails outside bond area)			
• Peeling	12316-2	N/cm		≥ 58			
<b>Durability</b>							
• Resistance to artificial UV light	1297-5000 h			No surface damage or significant changes in cold flexibility as per EN 495/5			
<b>Heat aging in area</b>							
• Change in tensile strength	12311-2	Δ%		-5			
• Change in elongation at break	12311-2	Δ%		-5			
Reaction to fire	13501-1			Class F			
Resistance to algae and microorganisms	ISO 846 Level 2			Compliant			
Root resistance	13948			Passes the test			

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

(\*) The values indicated refer to the TPO / FPA membrane without nonwoven polyester fabric backing, except for the values marked with an asterisk (\*), that refer to the finished product.

(2) Not tested at lower temperatures.

(3) Not tested at higher speeds.

## PRODUCTION STANDARDS

Thickness <sup>(**)</sup>	mm	1,2	1,5	1,8	2,0
Width	m	2,10	2,10	2,10	2,10
Length <sup>(**)</sup>	m	25	25	20	20
Standard colour <sup>(**)</sup>		Grey / Black			

(\*\*) Different thicknesses, lengths and colours 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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