

**SINTOFOIL ST****Description**

Synthetic waterproofing membrane produced by co-extruding a uniform UV resistant elastomerised TPO/FPA thermoplastic olefin and flexible polypropylene alloy. 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. SINTOFOIL RT membranes comply with CE marking requirements, if applicable.

**System certifications**

QMS (Quality Management System) certification according to ISO 9001.

**Product certifications**

Regulation CPR 305/2011/EU.

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

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

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

- Waterproofing layers loose laid 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 – Rubberfuse Division Technical Services.

**Application**

Sintofoil membranes are applied through hot air gun on their overlapping joints, 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 RUBBERFUSE Division. Waterproofing systems employing SINTOFOIL membranes should be laid by installers authorised by RUBBERFUSE Division Technical Services.

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

Features	EN Standards	U.M.	Tolerance	Values			
<b>Standard thickness</b>	1849-2	mm	(-5/+10%)	1,2	1,5	1,8	2,0
<b>Density</b>	1849-2	kg/m <sup>2</sup>	(-5/+10%)	1,08	1,35	1,62	1,8
<b>Tensile properties</b>							
• <i>Tensile strength L/T</i>	12311-2	N/mm <sup>2</sup>		16/15			
• <i>Elongation at break L/T</i>	12311-2	%		700/700			
<b>Dimensional stability</b>	1107-2	%		≤ 0.5			
<b>Cold flexibility</b>	495/5	°C		≤ -40 <sup>(2)</sup>			
<b>Tear resistance L/T</b>	12310/1	N		330/240	450/400	550/500	650/600
<b>Water vapour permeability (resistance factor μ)</b>	1931			90.000			
<b>Resistance to static loading</b>	12730/B	kg		≥ 25			
<b>Resistance to impact</b>	12691/B	mm		≥ 1000			
<b>Hail resistance</b>	13583	m/s		≥ 30 <sup>(*)</sup>			
<b>Water tightness (60kPa)</b>	1928			Absolute			
<b>Joint strength</b>							
• <i>Tensile strength</i>	12317-2	N/cm		Compliant (specimen fails outside bond area)			
• <i>Peeling</i>	12316-2	N/cm		≥ 58			
<b>Durability</b>							
• <i>Resistance to artificial UV light</i>	1297-5000 h			No surface damage or significant changes in cold flexibility as per EN 495/5			
<b>Heat aging in area</b>							
• <i>Change in tensile strength</i>	12311-2	Δ%		-5			
• <i>Change in elongation at break</i>	12311-2	Δ%		-5			
<b>Wind load resistance (wind suction test) (UEAtc)</b>							
• <i>Mechanically retained system</i>	Pa			≥ 5500			
<b>Reaction to fire</b>	13501-1			Class E <sup>(3)</sup>			
<b>Resistance to algae and microorganisms</b>	ISO 846 Level 2			Compliant			
<b>Root resistance</b>	13948			Passes the test			
<b>Contact with drinking water (DW)</b>	Italian Ministerial Decree 26-04-93 n. 220 - O.J. no. 162 / 13-07-1993 and subsequent amendments			Suitable			

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

(2) Not tested at lower temperatures.

(3) Based on Warringtonfiregent – Classification Report for roofs/roof coverings exposed to external fire Nr 13561B.

(\*) Not tested at higher speeds.

## PRODUCTION STANDARDS

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

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

Rev. 00 (11-15)

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ISO 14001  
OHSAS 18001  
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Certification



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