



## SINTOFOIL ST

Non-reinforced TPO/FPA membrane for single ply waterproofing of exposed flat roofs bonded on the lower face with nonwoven polyester fabric.

### DESCRIPTION:

Synthetic waterproofing membrane produced by co-extruding a uniform UV resistant elastomeric TPO/FPA thermoplastic olefin and flexible polypropylene alloy.

The membrane features contrasting colors on its upper and lower faces, providing a signal layer so that any damage occurring during or after installation will be immediately apparent. SINTOFOIL ST membranes comply with CE marking requirements, if applicable.

### APPLICATION:

SINTOFOIL TPO/FPA membranes are installed by mechanical fastening in seam overlaps area. Overlap seams are welded by hot air welding equipment, such as manual or automatic hot air welding machines with temperature control.

The installation should be carried out in accordance with the [Manual for installation of single ply polymer roofing and waterproofing membranes](#).



### FIELDS OF APPLICATION:

- SINTOFOIL ST is designed for corners reinforcing and sealing of connections between different roof elements such as piping, funnels, aerators and other protruding objects.

### TECHNICAL FEATURES:

Properties	Test Method	Performance <sup>(1)</sup>			
Standard thickness, mm	EN 1849-2	1.2	1.5	1.8	2.0
Tensile strength L/T, N/mm <sup>2</sup>	EN 12311-2	16 / 15			
Elongation at break L/T, %	EN 12311-2	700 / 700			
Dimensional stability, %	EN 1107-2	≤ 0.5			
Cold flexibility, °C	EN 495/5	≤ -40 <sup>(2)</sup>			
Tear resistance L/T, N	EN 12310/1	330 / 240	450 / 400	550 / 500	650 / 600
Water vapour permeability (resistance factor μ)	EN 1931	90.000			
Resistance to static loading, kg	EN 12730/B	≥ 25			
Resistance to impact, mm	EN 12691/B	≥ 1000			
Hail resistance, m/s	EN 13583	≥ 30 <sup>(3)</sup>			
Water tightness (60 kPa)	EN 1928	Absolute			
Joint strength: Tensile strength, N/cm	EN 12317-2	Compliant (specimen fails outside bond area)			
Joint strength: Peeling, N/cm	EN 12316-2	≥ 58			
Resistance to artificial UV light	EN 1297-5000 h	No surface damage or significant changes in cold flexibility as per EN 495/5			
Change in tensile strength, Δ%	EN 12311-2	-5			
Change in elongation at break, Δ%	EN 12311-2	-5			
Reaction to fire	EN 13501-1	Class E			
Resistance to algae and microorganisms	ISO 846 Level 2	Compliant			
Root resistance	EN 13948	Passes the test			
Contact with drinking water (DW)	Contact with drinking water Italian Ministerial Decree 26-04-93 n. 220 - O.J. no. 162 / 13-07-1993 and subsequent amendments	Suitable			

<sup>(1)</sup> Tolerances as per EN 13956 and/or UEAtc Directives.

<sup>(2)</sup> Not tested at lower temperatures.

<sup>(3)</sup> Not tested at higher speeds.

**PRODUCTION STANDARDS**

Thickness (*)	mm	1.2	1.5	1.8	2.0
Width	m	2.10	2.10	2.10	2.10
Length (*)	m	25	25	20	20
Standard color (*)	Grey / Black				

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