



SINTOFOIL RG

Fiberglass reinforced TPO/FPA membrane for single ply waterproofing of exposed flat roofs

DESCRIPTION:

Synthetic waterproofing membrane produced by co-extruding a UV resistant elastomerised TPO/FPA thermoplastic olefin and flexible polypropylene alloy with a fiberglass reinforcing mat that makes it dimensionally stable. 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.

Available in BIANCO REFLECTA version, manufactured with the upper side of the membrane (top) in WHITE REFLECTA color, 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%. Also available in the fire resistant versions:

- Sintofoil RG/FR1 – Behaviour to external fire (ENV 13501-5) Broof (t1).
- Sintofoil RG/FR2 – Behaviour to external fire (ENV 13501-5) Broof (t2).
- Sintofoil RG/FR3 – Behaviour to external fire (ENV 13501-5) Broof (t3).
- Sintofoil RG/FR4 – Behaviour to external fire (ENV 13501-5) Broof (t4).

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.

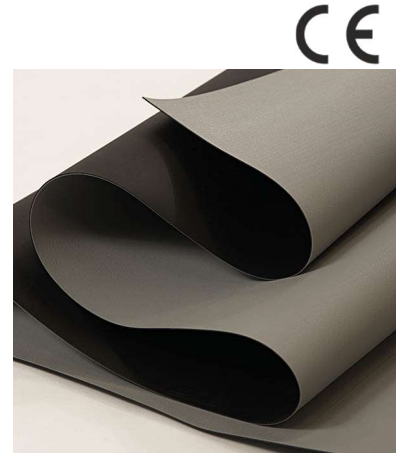
The installation should be carried out in accordance with the [Manual for installation of single ply polymer roofing and waterproofing membranes](#).

FIELDS OF APPLICATION:

- Waterproofing of ballasted roofs.
- Waterproofing layers applied independently under heavy-duty fixed or movable protection for: roofing exposed to foot traffic, roof gardens.

TECHNICAL FEATURES:

Properties	Test Method	Performance ⁽¹⁾			
		1.2	1.5	1.8	2.0
Standard thickness, mm	EN 1849-2	1.2	1.5	1.8	2.0
SRI – Solar Reflectance Index, %	ASTM Standard E1980	102 ⁽²⁾			
Tensile strength L/T, N/50 mm	EN 12311-2	600 / 550	650 / 600	750 / 750	800 / 800
Elongation at break L/T, %	EN 12311-2	700 / 700			
Dimensional stability, %	EN 1107-2	≤ 0.1			
Cold flexibility, °C	EN 495/5	≤ -40 ⁽³⁾			
Tear resistance L/T, N	EN 12310/1	390 / 290	450 / 400	500 / 450	600 / 550
Water vapour permeability (resistance factor μ)	EN 1931	50.000			
Resistance to static loading, kg	EN 12730/B	≥ 25			
Resistance to impact, mm	EN 12691/B	≥ 1000			
Hail resistance, m/s	EN 13583	≥ 30 ⁽⁴⁾			
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			
Reaction to fire	EN 13501-1	Class E			
Behaviour to external fire	EN 13501-5	Broof ⁽⁵⁾			
Resistance to algae and microorganisms	ISO 846 Level 2	Compliant			



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

(2) Reflecta White version.

(3) Not tested at lower temperatures.

(4) Not tested at higher speeds.

(5) Also available in the fire resistant versions (external fire behaviour), in Broad class according to EN 13501-5: SINTOFOIL RG/FR 1, SINTOFOIL RG/FR 2, SINTOFOIL RG/FR3, SINTOFOIL RG/FR4 (consult the specific data sheet - SINTOFOIL RG/FR).

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 colour (*)		Grey / Black			

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