



SINTOFOIL ST WPS ST

FPO/TPA synthetic waterproofing membrane with structured surface for two-layer underground waterproofing systems.

DESCRIPTION:

Non-reinforced synthetic waterproofing membrane produced by co-extruding a uniform highly flexible elastomerised polyolefin alloy.

It is used for waterproofing tunnels, foundations, underground parts of buildings and structures as a second layer in double-layer waterproofing systems with vacuum quality control. A specially textured surface of the material prevents two membranes of a double-layer waterproofing system from sticking together during the vacuum quality control. It is not UV resistant.

SINTOFOIL ST WPS ST membranes comply with CE marking requirements, if applicable ⁽¹⁾.

Notes: ⁽¹⁾ The membrane is equipped with specific accessories, to be requested explicitly.

APPLICATION:

SINTOFOIL TPO/FPA membranes 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 membranes for underground waterproofing](#).

FIELDS OF APPLICATION:

- SINTOFOIL ST WPS ST membrane is designed for application as a second layer in two-layer waterproofing systems of tunnels, foundations, retaining walls.

TECHNICAL FEATURES:

Properties	Test Method	Performance ⁽²⁾
Standard thickness, mm	EN 1849-2	2.0
Appearance of upper surface		Structured
Density, kg/m ²	EN 1849-2	1.80
Tensile strength L/T, N/mm ²	12311-2/ISO 527	15 / 15
Elongation at break L/T, %	12311-2/ISO 527	600 / 600
Dimensional stability, %	EN 1107-2	≤ 0.5
Cold flexibility, °C	EN 495/5	≤ -40 ⁽³⁾
Tear resistance L/T, N	EN 12310/1	650 / 600
Resistance to static loading, kg	EN 12730/B	≥ 25
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
Durability: Waterproofing after thermal ageing	EN 1926 EN 1928	Passes the test at 60 kPa
Resistance to algae and microorganisms	ISO 846 Level 2	Compliant
Root resistance	EN 13948	Passes the test

⁽²⁾ Tolerances as per EN 13967.

⁽³⁾ Not tested at lower temperatures.

PRODUCTION STANDARDS

Thickness (*)	mm	2.0
Width	m	2.10
Length (*)	m	20
Standard color (*)		Black

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

