

Protan FPO/TPO 1.5

Product Description

Protan FPO/TPO 1.5 is a flexible roofing membrane based on polyolefins and reinforced with a polyester textile. This product is designed for mechanical fastening on flat and low-sloped roofs. It can be used both as an exposed roofing membrane system or protected system for extensive green roofs. It is weldable using hot air and designed to perform well in various climatic conditions.

Protan FPO/TPO 1.5 is particularly well-suited for solar roofs, green roofs, and cool roofs due to its resistance to environmental, chemical, and biological impacts.

Product Properties

- Superior weather and environmental resistance.
- Resistant to UV radiation.
- Wind load resistant.
- Strong joints achieved through hot air welding.
- Compatible with bitumen-based membranes.
- The product is recyclable and has a low carbon footprint.

Essential characteristics	Performance	EN 13956
Thickness	MDV 1.5 mm	EN 1849-2
Mass per unit area	MDV 1.9 kg/m ²	EN 1849-2
External Fire performance	B _{ROOF} (t1, t2, t3)	EN 13501-5
Reaction to fire	Class E	EN 13501-1
Water tightness (10kPa)	Pass	EN 1928 (A)
Tensile strength L/T	MLV ≥ 1050 N/50 mm	EN 12311-2 (A)
Elongation L/T	MLV ≥ 15 %	EN 12311-2 (A)
Resistance to impact	MLV ≥ 600 mm	EN 12691 (A)
Resistance to static load	MLV ≥ 20 kg	EN 12730 (C)
Tear resistance L/T	MLV ≥ 400 N	EN 12310-2
Joint peel resistance	MLV ≥ 600 N/50 mm	EN 12316-2
Joint shear resistance	MLV ≥ 800 N/50 mm	EN 12317-2
Foldability at low temp.	MLV ≤ -25°C	EN 495-5
Exposure to UV	Pass > 5000 h	EN 1297
Radon gas resistance	3.5 · 10 ⁸ s/m	SP-method 3873
Water vapour resistance	Sd-value 320 m	EN ISO 12572
Dangerous substances	None	

MDV = Manufacturer's declared value; MLV = Manufacturer's limiting value

Dimensions

- Width: 1.60 m
- Length: 20 m
- Roll: 32 m² / 61 kg + core
- Pallet: 14 Rolls / 448 m² / 851 kg + core and pallet.

Colours

Colour	White	Grey White	Light Grey	Silver Grey	Dark Grey
Protan code	F01	F05	F91	F93	F94
~RAL code	9016	9003	7040	7001	7012
Samples					

Declarations/Certificates

- CE-marking and declaration of performance according EN 13956.
- Fire classification: B_{ROOF}(t1, t2, t3) according to EN 13501-5.

Health, Environment, and Safety

There is no requirement for a material safety data sheet according to EC-regulation 1907/2006, article 31. The product does not harm the environment when used as specified.

Protan FPO/TPO 1.5 contains no substances which are listed on REACH/ECHA's (European Chemicals Agency) candidate list. The membrane contains no priority environmental pollutants or other relevant substances in quantities considered to be hazardous to health and the environment.

Storage

- Shelf life: 5 years from production date.
- The product must be stored in dry conditions and protected from direct sunlight.
- Store the product horizontally on a pallet. Please avoid placing pallets of rolls on top of one another or beneath pallets that hold different materials when transporting or storing them.

Installation details

The product may only be used by experienced professionals. The membrane is welded using hot air and shall be installed according to the Protan Technical Installation Manual and associated Protan Technical Information Sheets.

Protan Legal Notice

The details provided in this document, especially the recommended application and utilisation for the products and their system accessories, are based on Protan's current knowledge and experience of the products when properly stored, handled and installed under normal conditions according to Protan's recommendations. A warranty in respect of merchantability or of fitness for a particular utilisation, nor any liability arising out of any legal relationship whatsoever, cannot be inferred either from this information, or from any written or verbal recommendations, due to the differences in materials, substrates and actual site conditions in practice. The user of the product is responsible for the product's suitability for the intended application. Protan reserves the right to change product specifications without notice. Additionally, Protan's current sales and delivery terms are valid and applicable for all orders. It is necessary for the user to always refer to the latest version of the relevant Product Data Sheet, which can be requested directly from Protan. All information provided, as well as technical and drawing data, complies with current technical standards and is based on Protan's knowledge and experience. In addition, national standards and regulations must be observed where appropriate.

