



PROTAN SE-B 1,5

Product Description:

Protan SE-B1.5 is a high quality polyester reinforced thermoplastic waterproofing membrane with high tensile and tear strength. The membrane satisfies BASTA's requirements for the selection of raw materials. Protan SE-B1,5 contains stabilizers, which makes the product resistant to high and low temperatures, UV-resistant and flame retardant.

Application Areas:

Protan SE-B 1.5 is used on exposed roof surfaces. The membrane can be mechanically fastened to the load bearing substrate or installed in a Protan vacuum roof system. The membrane can be used on roofs of all shapes and sizes – whether flat, sloped or curved. The membrane is used on warm/compact roof constructions as well as cold/ventilated constructions.

Characteristics / Benefits:

- The membrane has a textured surface which provides increased friction and an aesthetic finish. Compared with membranes without a texture, this represents a significant safety factor for both during installation and maintenance.
- The membrane is welded together using hot air which provides a homogenous joint.
- Installation is safe without the use of an open flame.
- Weather independent installation.
- Protan membrane can be recycled and has a low carbon footprint.

Table 1: Product properties

PROPERTY	VALUE	UNIT	EN 13956 - TEST METHOD
Thickness	1,5 (-5/+10%)	mm	EN1849-2
Tensile strength L/T	≥ 1100/1050	N/50mm	EN12311-2(A)
Elongation L/T	≥ 15/15	%	EN12311-2(A)
Tear resistance- trapezoidal	≥ 210	N	EN12310-2
Dimensional stability	± 0.5	%	1107-2:2001
Foldability at low temperature	≤ -30	°C	EN495-5
Resistance to static load	≥ 20	Kg	EN12730(C)
Resistance to impact	≥ 500	mm	EN12691(A)
Joint shear resistance	≥ 1000	N/50mm	EN12317-2
Shear resistance of joints- maximum	≥ 200	N/50mm	EN12316-2:2000
Water vapour resistance	20,5	m	ISO 12572:2001
Exposure to UV	Pass>5000h		EN 1297
Dangerous substances	None		
Hail resistance:			
Hard substrate	≥ 22	m/s	EN13583
Soft substrate	≥ 50	m/s	EN13583
Reaction to fire	Class E		EN13501-1
External fire performance	$B_{ROOF}(t2)$ *)		EN13501-5

**) External documentation for fire classification according to ENV 1187 part 2, for the most relevant substrates are available on request.*

Colours and Protan colour codes:

UPPER SURFACE: *Protan colour code*)*	Dark grey, *F94*	*Other colours can be made to order.*
UNDERSIDE	Dark grey	

Protan AS
P. O. Box 420 Brakerøya, N-3002 Drammen, Norway
Phone: +47 32 22 16 00 Fax: +47 32 22 17 00

Health, Environment & 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.

Environment:

Protan SE contains no substances which are listed on REACH/ ECHA's (European Chemicals Agency) candidate list and BASTA requirements.
The membrane contains no priority environmental pollutants or other relevant substances in quantities considered to be hazardous to health and the environment.
Leaching from the product is assessed to not adversely affect soil, ground water or drinking water.

Installation details:

Installation must be carried out by a Protan Authorised Roofing Contractor. The membrane is welded using hot air and shall be installed according to the Protan Technical Installation Manual and associated Protan Technical Information Sheets.

Storage:

Protan membrane should be kept dry with the rolls placed on pallets and protected at the building site with tarpaulins or similar.

Approvals:

CE BASTA

Protan AS SINTEF Certification

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.

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