

Protan SE membrane

Protan SE PVC single-ply membranes are designed for installation in the Protan Standard Overlap, Protan Prefabricated and Protan Vacuum systems in warm and cold roof constructions

Protan SE membranes are manufactured from pliable PVC reinforced with knitted polyester. The PVC contains stabilisers, which make the membranes resistant to both high and low temperatures; UV-stable; and fire-resistant.

The membranes are suitable for new-build and refurbishment projects on flat, pitched and barrelled roofs.

THICKNESS	1.2MM	1.6MM	1.8MM
ROLL LENGTH	20m	20m	15m
ROLL WIDTH	1m/2m	1m/2m	1m/2m
WEIGHT	1.4kg/m ²	1.8kg/m ²	2.1kg/m ²
WEIGHT OF POLYESTER	80g/m ²	80g/m ²	80g/m ²

PREFABRICATION

Protan SE membranes can be prefabricated by welding together two 2m-wide rolls of Protan SE membrane in a factory. This allows large areas of Protan SE membrane to be installed quickly on simple roof plans by reducing on-site hot-air welding by up to six-fold.

130mm-wide secret-fix strips are factory-welded to the reverse side of the prefabricated membrane at regular centres, through which it is mechanically fixed. The standard number of secret-fix strips is four, although this can be changed to account for higher or lower wind uplift pressures.

The standard width of prefabricated Protan SE membrane is 3.96m – with a standard length of 12.5m – although bespoke widths and lengths are available for individual projects. Please contact us for further information.

DURABILITY

Accelerated weathering tests and performance in service confirm that satisfactory retention of physical properties is achieved. All available evidence suggests that Protan SE mechanically fastened PVC roofing membranes should have a life in excess of 30 years.

Refer to BBA certificate 98/3459.

COLOURS

Protan SE membranes are available as standard in dark grey (RAL 7012) and light grey (RAL 7040).

STORAGE

Protan SE membranes must be stored dry. At the building site, it is important that rolls are stored on pallets (raised above the ground) and covered with a tarpaulin.

ENVIRONMENT

Protan SE membranes can be recycled at the end of their working lives.

Prefabricated Protan SE membranes can be manufactured bespoke for individual projects, thereby allowing for a zero-waste solution.

ECOLOGY, HEALTH AND SAFETY INFORMATION

A Safety Data Sheet following EC-Regulation 1907/2006, Article 31 is not needed to bring this product to the market, to transport or to use it. The product does not damage the environment when used as specified.

REACH EUROPEAN COMMUNITY REGULATION ON CHEMICALS AND THEIR SAFE USE: EC 1907/2006

This product is an article within the meaning of Regulation (EC) No 1907/2006 (REACH). It contains no substances which are intended to be released from the article under normal or reasonably foreseeable conditions of use.

There are no registration requirements for substances in articles within the meaning of Article 7.1 of the Regulation.

Based on our current knowledge, this product does not contain SVHC (substances of very high concern) from the candidate list published by the European Chemicals Agency in concentrations above 0.1 % (w/w).

REFERENCES

For further technical information, please refer to:

- Protan (UK) Ltd Standard Overlap System Technical Data Sheet
- Protan (UK) Ltd Prefabricated System Technical Data Sheet
- Protan (UK) Ltd Vacuum System Technical Data Sheet
- BBA Certificate 98/3459

All of the above documents are available from Protan (UK) Ltd.

DECLARED PERFORMANCE

ESSENTIAL CHARACTERISTICS	PROTAN SE 1.2MM	PROTAN SE 1.6MM	PROTAN SE 1.8MM	EN 13956:2012
External fire performance	F _{ROOF} (t*)	F _{ROOF} (t*)	F _{ROOF} (t*)	EN 13501-5
Reaction to fire	Class E	Class E	Class E	EN 13501-1
Water tightness (10kPa)	Pass	Pass	Pass	EN 1928(A)
Tensile strength L/T	MLV ≥1,100/1,050 N/50mm	MLV ≥1,100 N/50mm	MLV ≥1,100 N/50mm	EN 12311-2(A)
Elongation L/T	MLV ≥15%	MLV ≥15%	MLV ≥15%	EN 12311-2(A)
Resistance to impact	MLV ≥450mm	MLV ≥750mm	MLV ≥800mm	EN 12691(A)
Resistance to static load	MLV ≥20kg	MLV ≥20kg	MLV ≥20kg	EN 12730(A)
Tear resistance L/T	MLV ≥210 N/50mm	MLV ≥210 N/50mm	MLV ≥210 N/50mm	EN 12310-2
Joint peel resistance	MLV ≥150 N/50mm	MLV ≥150 N/50mm	MLV ≥150 N/50mm	EN 12316-2
Joint shear resistance	MLV ≥1,000 N/50mm	MLV ≥1,000 N/50mm	MLV ≥1,000 N/50mm	EN 12317-2
Foldability at low temperatures	MLV ≤-30°C	MLV ≤-30°C	MLV ≤-25°C	EN 495-5
Exposure to UV	Pass >5000h	Pass >5000h	Pass >5000h	EN 1297
Dangerous substances	None	None	None	

* = The external fire performance of a roof is dominated by the build-up and components not delivered by Protan (UK) Ltd. Due to this, the external fire performance cannot be declared in this Declaration of Performance. Protan has tested build-ups according to ENV1187 and provides fire classifications on several actual build ups according to EN 13501-5, details of which are available from Protan (UK) Ltd.

