

Data Sheet

Protan's unique PROGREEN membrane is for use on all PROGREEN Extensive, Biodiverse and Turf roof systems.

Protan PROGREEN membrane is manufactured from pliable PVC reinforced with glass fibre. The PVC contains stabilisers which make the product resistant to both high and low temperatures, UV-stable, and a fungicide for added protection against microbe attack.

Protan PROGREEN membrane is FLL approved.

Protan PROGREEN Membrane	
Thickness	1.5 mm
Roll Length	15 m
Roll Width	2m
Weight	1.9 kg/m ²
Weight of glass fibre core	50 g/m ²

PROGREEN membrane can either be loose laid or mechanically fixed. This allows for extra security and a superior performance on light weight and pitched applications. In addition, once mechanically fixed, the membrane can be left exposed for a limited period before the green roof is installed. This period is project specific and is determined by Protan Technical Services.

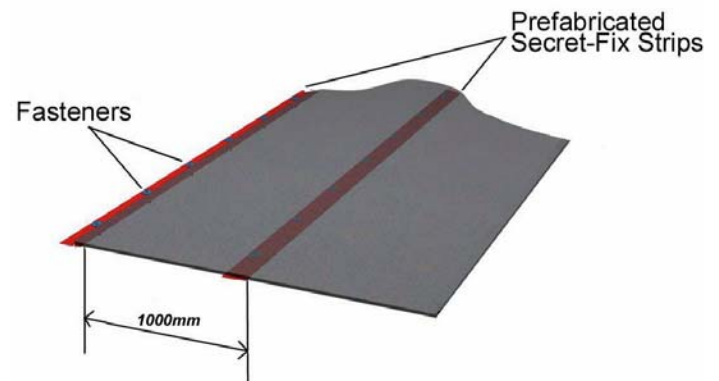
The system is designed with secret-fix strips factory welded to the reverse side of the membrane. This allows for the imitation of a 1m standard overlap system, but with only half the welding necessary. The backing strips are made of a technical textile which they can be mechanically fixed to the substrate.

On metal deck roofs the rolls must be laid perpendicular with the decking as the strips spread the load across the crowns.

The Secret-Fix strips have a higher performance than the membrane as detailed below:

Properties	Protan Secret-Fix Strip
Tensile strength EN 12311-2:2000(A)	≥ 2500 N/50 mm
Elongation EN 12311-2:2000(A)	≥ 15%
Tear resistance EN 13210-2:2000	≥ 500N

The type of fastener used depends on the substrate requirements and they are located within the strips at regular intervals.



Fire Resistance

When tested in accordance with BS 476-3: 2004, a loose-laid and ballasted specification including a minimum depth of 50mm aggregate or paving should be deemed to satisfy BS 476-3: 2004.

Storage

PROGREEN membranes must be stored dry. At the building site, it is important that rolls are stored on pallets (raised from the floor) and that they are covered with a tarpaulin.

Durability

Accelerated weathering tests and performance in service confirm that satisfactory retention of physical properties is achieved. All available evidence indicates that Protan G membranes (PROGREEN membrane) should have a life in excess of 30 years. Refer to BBA Certificate No. 00/3755. Protan's oldest roof is 36 years old, and continues to perform well.

Environment

By using the PROGREEN membrane the use of adhesives to fasten the membrane are avoided. This ensures that the green roof system will have high environmental credentials and can be fully recycled at the end of its working life.

References

For further technical information please refer to:

- BBA Certificate 00/3755
- SINTEF NBI Approval 2008
- FLL Approval

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