

Data Sheet

Protan's unique Secret-Fix System may be specified on projects where wind uplift and/or installation timescales are a significant factor.

Protan Secret-Fix offers a fast and safe way of covering large areas with no or few penetrations in the membrane. It also has the capacity for very high wind uplift performance and can accommodate profiled metal decking with wide crowns or large spacing between crown centres. The system achieves an I-120 performance under the FM Approval, and uniquely provides welding savings compared to the 1m lap system and bar & cover strip systems.

The system is designed to optimise fastener density by spreading the attachment across the width of the roll. This can substantially reduce the number of fasteners required to conventional side overlap systems.



On metal deck roofs the Secret-Fix rolls must be laid in line with the decking as the strips spread the load across the crowns.

The Protan Secret-Fix System uses 2m wide Protan SE membrane with 130mm wide strips factory-welded using high frequency welding technologies to the underside at regular centres. These strips are located transverse to the roll length with centres varying from 400mm to 1200mm. Side overlaps are 100mm and a 40mm weld is required being produced on site using a semi-automatic hot air welding machine.

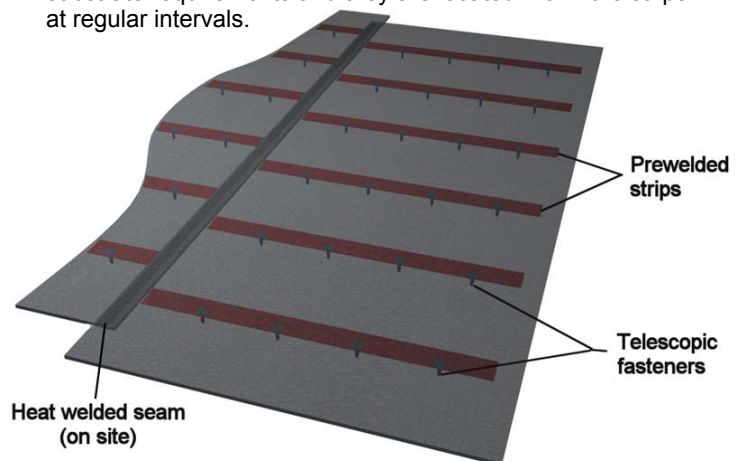
The Secret-Fix strips have a higher performance than the membrane as detailed below:

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

A wind uplift calculation is carried out to determine the quantity of fasteners required per m² with regards to corners, perimeters and field zones. Protan Secret-Fix strip centres are calculated to accommodate the quantity of fasteners required per m². The maximum amount of fasteners in any one strip is seven with a minimum of three.



Protan Secret-Fix membrane is produced to order and is made with the first 2 strips welded on the reverse edge to allow for accurate setting out. The membrane is unrolled exposing the strips which are then fixed as they would be on an overlap roof. The type of fastener used depends on the substrate requirements and they are located within the strips at regular intervals.



Storage

Protan SE 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.

Environment

Protan SE membrane can be recycled after its working life. For more environmental details please see the Protan SE membrane datasheet and environmental product declaration. Protan membranes can be produced to tailor made designs allowing for a zero waste solution.

References

For further technical information please refer to:

- BBA Certificate 98/3459
- IAB Certificate 06/0262
- Protan SE Membrane Datasheet
- FM Approval

The above document is available from Protan (UK) Ltd.