

## Roofing Underlays

### Vapour Permeable Underlays

#### Protect VP300

Protect VP300 is a highly vapour permeable roof underlay, produced in the UK. A 'Type LR' underlay, it offers low vapour resistance to exceed BS 5250 requirements whilst remaining completely airtight. Protect VP300 is CE marked and independently approved by BM TRADA, with a Q Mark certification and is suitable for use in all pitched roofs.

The roof underlay should have a polymeric composition, comprising of two layers of spun bond non-woven polypropylene fabric and micro porous film interlayer. The underlay should be grey on the upper surface and white/grey on the under surface, with print on the upper surface (as installed). The membrane should provide a satisfactory underlay in tiled and slated pitched roofs constructed in accordance with BS 5534:2018. It should be able to be installed on new or existing buildings, being flexible at low temperatures with resistance to tearing by nails and to damage from handling on site. The underlay should be used as a secondary weather resistant layer for protection against wind driven rain and snow, tile wind-uplift and dust ingress.

The mass of the underlay should be 125g/m<sup>2</sup> with a thickness of 0.60mm, in roll sizes of 1m x 50m or 1.5m x 50m. Water vapour transmission resistance to be: 0.17MN/g (0.022 S<sub>d</sub>) to BS EN ISO 12572 to meet permeability requirements recommended by TRADA and NHBC. Resistance to wind uplift: Zones 1-3 in accordance with BS 5534:2018. With a batten gauge of ≤345mm, the underlay should have a resistance to wind pressure of 1198 Pa. Underlay to be laid in accordance with BS 5534, BS8000: Part 6 and manufacturer's instructions. The product's resistance to water penetration to BS EN 1928 with mods should be Pass, Class W1. The underlay should have a hydrostatic head of water resistance of >2.0m. Nail tear strength should be 140 (MD along roll) and 198 (CD across roll) to BS EN 12310-1 with mods and tensile strength should be 225 (MD along roll) and 160 (CD across roll) to BS EN 12311-1 with mods.

In warm roofs, condensation should be controlled using Type LR underlays with no additional ventilation, provided the ceiling is well sealed as defined in BS 5250. To ensure the integrity of a well-sealed ceiling, a separate vapour control layer should also be used on the warm side of the insulation. In cold roofs, condensation in dwelling sized roofs should be controlled by the use of a Type LR roofing underlay and a reduced level of ventilation required when compared to an impermeable underlay. Typically this would be either 3,000mm<sup>2</sup>/m at eaves or low level, or 5,000mm<sup>2</sup>/m at ridge or high level.



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Type LR roofing underlay needs to be independently approved by BM TRADA and carry a Q Mark certification.

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Product Reference: Protect VP300 Type LR Roofing Underlay, with wind uplift use in Zones 1-3 at 345mm batten gauge.

### Accessories

#### **Protect Fulmetal RediRoll ventilated dry ridge/hip roll system:**

Protect Fulmetal RediRoll is a universal dry fixed ventilated ridge and hip system, produced in the UK. Manufactured from aluminium, the product overcomes the durability and weathering issues associated with fabric based systems. This product should be used with Protect VP300 as part of a cold roof system to provide a ventilation area equivalent to 5,000mm<sup>2</sup>/m to ensure adequate ventilation to conform to BS 5250.

#### **Protect OFV Eaves Skirt:**

The Protect OFV Eaves Skirt replaces both the underlay into the gutter and the traditional tilting fillet. Used to avoid sagging and ponding of the underlay behind the fascia and ensure correct water discharge into the gutter. Manufactured from robust PVC-U construction, this resists impact and UV degradation over time and will not rot in the gutter unlike bitumen derivatives.

