

Roofing Underlays

Vapour Permeable Underlays

Protect VP400 Plus LR

Protect VP400 Plus LR 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 VP400 PLUS LR 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 a micro porous polypropylene film with a non-woven layer laminated onto each surface. The underlay should be grey on the upper surface and black 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 can 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 170g/m² with a thickness of 0.78mm, in roll sizes of 1m x 50m or 1.5m x 50m. Water vapour transmission resistance to be: 0.08MNs/g (0.016 S_d) to BS EN ISO 12572 to meet permeability requirements recommended by TRADA and NHBC. Resistance to wind uplift: unrestricted use across the UK and Ireland (Zones 1-5) in accordance with BS 5534:2018. With a batten gauge of ≤345mm, the underlay should have a resistance to wind pressure of 1676 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 >7.0m. Nail tear strength should be 248 (MD along roll) and 294 (CD across roll) to BS EN 12310-1 with mods and tensile strength should be 325 (MD along roll) and 305 (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 3,000mm²/m at eaves or low level, or 5,000mm²/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 VP400 Plus LR Type LR Roofing Underlay, with unrestricted wind uplift use (Zones 1-5) 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 VP400 Plus LR as part of a cold roof system to provide a ventilation area equivalent to 5,000mm²/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.

