

# VP400 PLUS<sup>LR</sup> TYPE LR ROOFING UNDERLAY

**P**rotect VP400 PLUS<sup>LR</sup> is a highly vapour permeable roof underlay. It offers the lowest vapour resistance of any Type LR roofing underlay in its class, and yet it remains completely airtight. It is suitable for use in all pitched roofs. Protect VP400 PLUS<sup>LR</sup> is both CE marked and BM TRADA certified.

As the airtightness of buildings and dwellings continues to improve due to better workmanship and new practices, it is ill advised to allow uncontrolled air movement within the structure, including through an underlay in roofs with no vapour control or air barrier layers.

One of the primary functions of roof underlays is to help manage the wind load pressures on the roof. In order to achieve this, the underlay should have sufficient mechanical properties to be able to deflect the wind load pressures safely over the structure, as well as being water and air tight. Air leaky or air permeable underlays allow air to penetrate the membrane making it much more difficult to withstand the maximum wind load pressures and driving rain without other surface treatments.



## BENEFITS

- Highly vapour permeable, but completely airtight.\*
- Completely watertight with >7.0m water resistance.
- Strongest underlay in its class and weight range.
- UV and heat resistant.
- Tough and durable.
- Can be used as temporary roof covering.
- Has 'unrestricted' use for wind uplift in all exposure conditions in the UK and Ireland (BS 5534, zones 1 to 5 at 345mm batten gauge).
- BM TRADA Independently certified.
- Helps to avoid condensation risk in the roof space in accordance with BS 5250 and NHBC requirements.

\*through the body of the material at 2,500Pa pressure







## PRODUCT DESCRIPTION

### Size

Roll width: 1.0 or 1.5m  
 Roll length: 50m  
 Roll total area: 50 or 75m<sup>2</sup>  
 Roll weight: 9.68 or 14.81kg

### Appearance

Embossed grey upper and lower surface.  
 Printed with product branding for ease of identification.

### Compatibility

As with all vapour-permeable underlays, do not lay in direct contact with undried timber preservatives (whether water or solvent based). Protect OFV Eaves Skirt should be used at all gutter details.

### Specification clause

Roofing underlay to be Protect VP400 PLUS<sup>LR</sup> supplied by Protect Membranes, 2 Brooklands Road, Sale, Cheshire M33 3SS. Tel: 0161 905 5700, Fax: 0161 905 2085. Email: [info@protectmembranes.com](mailto:info@protectmembranes.com)  
 Underlay to be of triple ply construction, 170gsm with waterproof and vapour permeable core laminated and protected between two layers of non-woven spun-bonded polypropylene, to achieve a hydrostatic head resistance of >7.0m. Water vapour transmission resistance: 0.08MNs/g. Resistance to wind uplift: unrestricted use. Underlay to be laid in accordance with BS 5534 and manufacturer's instructions.

## PERFORMANCE

	MD	CD
Nail tear strength (N) to EN 12310-1 with mods	248	294
Unaged tensile strength (N/50mm) to EN 12311 with mods	325	305
Aged tensile strength (N/50mm) to EN 12311 with mods	290	295
Weight	170gsm	
Flexibility at low temperature	-40°C	
Water vapour resistance to EN ISO 12572	0.08 MNs/g / 0.016S <sub>d</sub>	
Watertightness	Pass	Class W1 >7.0m hydrostatic head resistance
Wind uplift resistance unrestricted at 345mm batten gauge and 600mm rafter centres		

MD = machine direction (along roll), CD = cross direction (across roll).  
 UV and heat ageing conditions: UVA lamps at 50°C for 336 hours followed by heat ageing at 70°C for 90 days.

## Related products

Protect Fulmetal Rediroll: [www.protectmembranes.com/rediroll](http://www.protectmembranes.com/rediroll)  
 Protect OFV Eaves Skirt: [www.protectmembranes.com/eavesskirt](http://www.protectmembranes.com/eavesskirt)

Stockist's stamp



## PROTECT MEMBRANES

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Protect Membranes maintains a policy of continuous development and reserves the right to amend product specifications without notice.



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