

PROTECT VP400 PLUS LR FOR COLD OR WARM ROOFS

GENERAL

- Protect VP400 PLUS LR vapour permeable underlay may be used for cold roofs with ventilated or unventilated loft spaces (see Figs 1 and 2) or warm roofs with insulation between and or above rafters (see Figs 3 and 4).
- In accordance with good building practice, this product should be covered as soon as possible after installation and preferably not more than one month after initial exposure. Within this period, when correctly installed VP400 PLUS LR will provide temporary protection against rain prior to installation of slates or tiling. If the exposure period exceeds one month then advice must be sought from the Protect technical department.
- Do not lay Protect VP400 PLUS LR in contact with any un-dried timber preservative (whether water or solvent based).
- Store rolls on a flat dry surface, protected from the weather.
- Fix Protect VP400 PLUS LR using extra large clout nails of copper, aluminium alloy or galvanised steel, 20mm x 3.5mm.
- Protect VP400 PLUS LR can be easily cut with a sharp knife and remains flexible at all normal working temperatures.
- Lay Protect VP400 PLUS LR with minimum laps shown in table below.

Roof pitch	Horizontal lap	Vertical lap
12.5° - 14°	225mm	100mm
15° - 34°	150mm	100mm
35° and over	100mm	100mm

COLD ROOFS

If a ceiling is well sealed, as defined in BS 5250, condensation in dwelling sized roofs can be controlled by the use of Protect VP400 PLUS LR and a reduced level of ventilation from that required with impermeable or Type HR underlays. This should be either 3,000mm² per metre at eaves or low level or 5,000mm² per metre at ridge or high level. In larger than dwelling sized roofs the ventilation should be 5,000mm² per metre at eaves or low level and 5,000mm² per metre should be provided at ridge or high level.

If the ceiling is not well sealed (as is likely in re-roofing situations) then the ventilation should be increased to 10,000mm² per metre at low level and 5,000mm² per metre at high level in accordance with BS 5250.

This can be achieved with Glidevale Fascia/ Soffit vents at low level and Protect Rediroll/ Glidevale Tile/Slate Ventilators at high level. (see Fig 1)

WARM ROOFS

If the ceiling is well sealed, as defined in BS 5250, condensation can be controlled by the use of Protect VP400 PLUS LR with no additional ventilation. Protect VP400 PLUS LR can be laid draped

unsupported (see Fig 3) or fully supported on insulation (see Fig 4). To ensure the integrity of a well sealed ceiling, a separate vapour control layer such as Protect VC Foil Ultra must also be used on the warm side of the insulation.

If there is any doubt about the ability to provide and maintain an effectively sealed vapour control layer then ventilation should be provided beneath the underlay of 25,000mm² per metre at eaves or low level and 5,000mm² per metre at ridge or high level. This can be achieved with Glidevale Fascia/ Soffit vents at low level and Protect Rediroll/ Glidevale Tile/Slate Ventilators at high level.

BATTEN SPACES

Where vapour permeable underlays such as Protect VP400 PLUS LR are used to contribute to condensation control they do so by allowing water vapour to escape to atmosphere via the roof covering. Most concrete and clay tiles are sufficiently air open but if a tight roof covering is installed, e.g. fibre cement slates and metal tiles etc, it is necessary to ventilate the batten space.

In this case, 25mm counterbattens must be used above the underlay and ventilation provided – 25,000mm² per metre at eaves or low level and 5,000mm² per metre at ridge or high level (see Fig 2).

LAYING

Main roof areas

When laying Protect VP400 PLUS LR over counterbattens or rafters, allow shallow valleys (max. 10mm deep). This is to allow any moisture on the upper surface of the underlay to drain away safely under the tiling/slating battens preventing ponding or wetting.

Eaves

Fit a Protect UV-resistant eaves skirt over or under ventilator depending on type of installation method at eaves. Lap the first roll of Protect VP400 PLUS LR over the eaves skirt.

Verges

Lap underlay 25 - 50mm onto the outer skin of masonry, or on to the flying rafter for an overhanging verge.

Ridges

For over underlay ventilation installation, lap Protect VP400 PLUS LR at least 150mm down each side of the ridge.

For under underlay ventilation installation where dry ventilated ridge systems are used, stop Protect VP400 PLUS LR 5mm short of apex on each side.

Valleys

Lay a strip of VP400 PLUS LR not less than 600mm wide up valleys, lapped under the main roof underlay.

Hips

Lay a strip of VP400 PLUS LR not less than 600mm wide up hips, lapped over the main roof underlay.

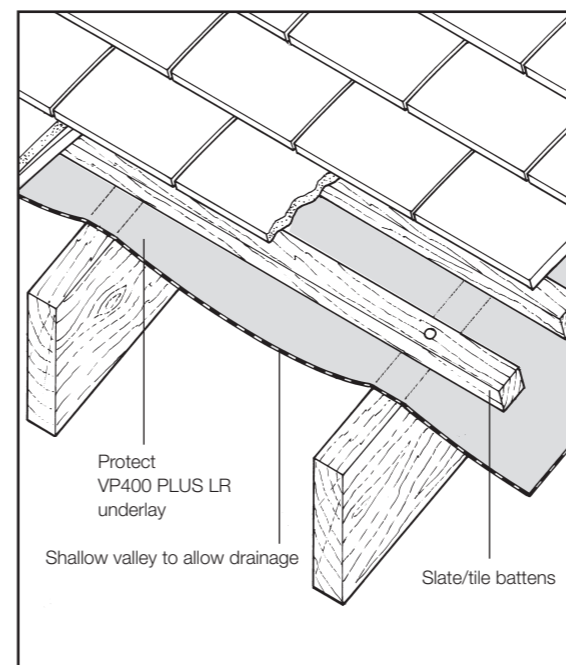


Fig 1

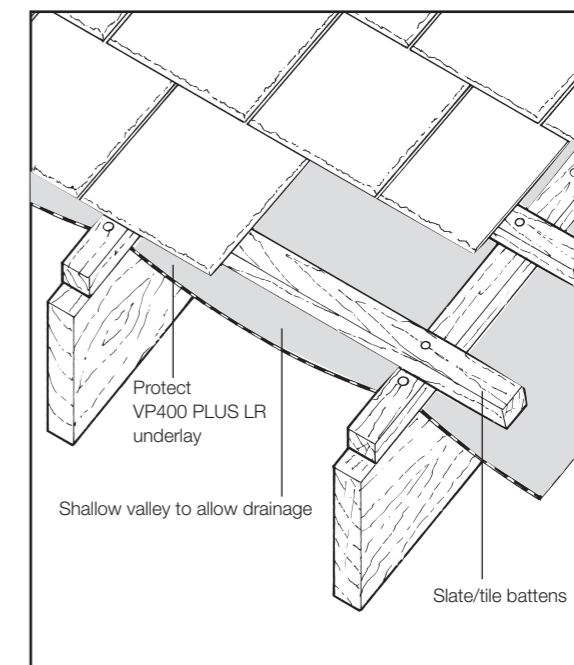


Fig 2

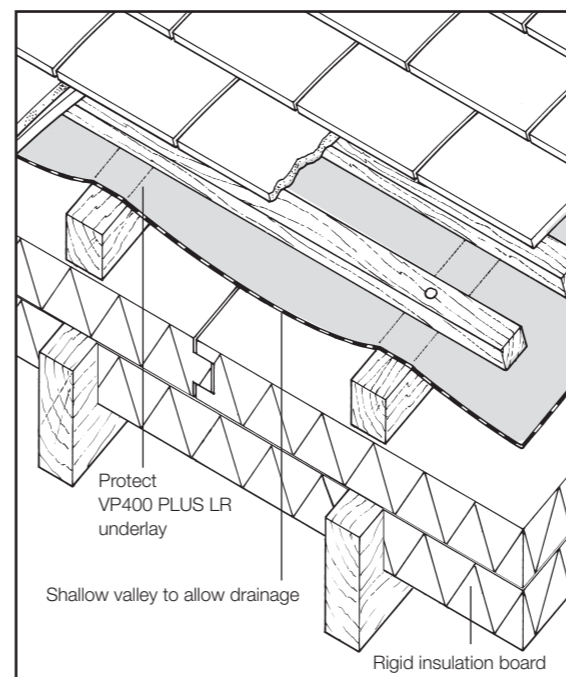


Fig 3

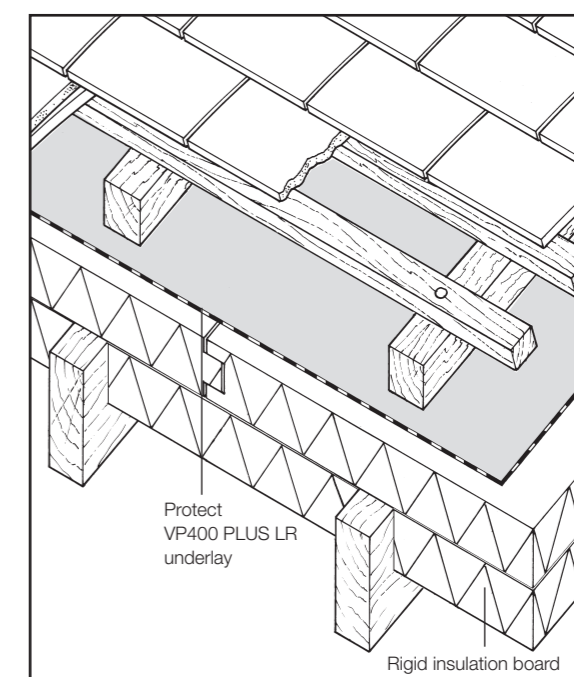


Fig 4

Other products purchased with this roof underlay:
Protect Eaves Skirt, Universal Dry Verge System for tiles, Universal Dry Verge System for slates, Fulmetal Rediroll Ventilated Ridge & Hip System, Univalley 125, Universal Dry Fix Valley Trough, Solar Inlet Terminal for tiles, Solar Inlet Terminal for slates, AluFlash lead alternative flashing.