

PHS Roof 180 Membrane

The PHS Roof 180 breather membrane is the Next Generation of High-Performance vapour permeable Underlay.

With an impressive range of characteristics such as high Vapour Permeability, Extreme Watertightness, High Nail Tear Resistance and Thermostability. PHS Roof 180 offers superior protection against condensation risk and extreme resistance against pelting rain. PHS Roof 180 is a Diffusion-Open vapour permeable membrane. When sealed at the overlaps and other appropriate building components, the PHS Roof 180 membrane provides a windtight environment underneath resulting in optimum thermal performance of the insulation.

Installation Instructions

Installation of the PHS Roof/Dach range of membrane can be carried out in all conditions normal to pitched roofing work. In roof construction it is important to remember that the underlay is the second line of defence in excluding water penetrating through the roof. Local roofing requirements shall take precedence over these instructions!



- Installation commences by unrolling the underlay horizontally across the rafters, starting at the eaves and working towards the ridges of the roof. The upper (as installed) surface is marked with the product name and overlap lines, and the unmarked surface should face the rafters on unrolling.
- When tacking roof underlay to the rafters it is recommended that a 3mm diameter x 20mm long extra large head clout/felt nails of copper, aluminium alloy or galvanised steel be used. The underlay should be tacked at the head of the sheet only, at centres not exceeding 1200mm. It is important that all tacking nails be covered by the overlap of the next underlay course.
- Overlaps of the underlay should be 200mm for <25 pitch roof and 150mm for ≥26 pitches. PHS Wolfy joining tape should be used to create a wind-tight environment under the membrane.
- Where underlay overlaps do not coincide with a batten, consideration should be given to either including an extra batten at the overlap or increasing the underlay overlap to coincide with the next batten.
- Batten gauges should not exceed that recommended by the tile/slate manufacturer for the particular tile/slate being used. Moisture content of battens at time of fixing should not exceed 22%.
- Where timbers on roofs are to be treated with wood preservative, it is essential that manufacturer's guidance be sought in relation to possible chemical attack on the roofing underlay.
- The PHS Roof Membrane range has adequate resistance to tearing but is not designed to withstand the weight of operatives or tiles being loaded out. Battens must therefore be installed as work progresses from eaves to ridge for achieving support for feet and avoiding damage to the underlay surface. No materials or implements should be rested on the underlay. Where pressure on the underlay over a rafter is unavoidable, it should be noted that although the membrane has a high coefficient of friction when dry, it does not offer substantial grip, particularly at overlaps or when wet.
- Where the underlay has become damaged for whatever reason, overlaying the damaged area with an additional layer of material ensuring a 150mm overlaps all round the damaged section. Ensuring that the up-slope side is overlapped by the next higher horizontal run of underlay, and secured under a batten.