

### In all cases we recommend that;

Before installing the breather membrane and on the roof you should ensure that

- ✓ The ventilation requirements have been met.
- ✓ The top of the brickwork cavities are closed.
- ✓ The Insulation must be correctly installed at the wall plate in order to avoid a thermal bridge.
- ✓ The eaves guard is correctly installed.

During the installation you should ensure that;

When walking on the roof always step on the battens at the point where it is nailed to the rafter. As with all membranes avoid undue pressure on the laid breather felt. Moving the felt under the battens can stretch a hole in the felt around the nail. Although this does not affect the purpose or performance of the membrane this can cause a leak around the nails if it rains heavily before the roof is fully covered in. If it is critical to avoid this rare occurrence we recommend that 'Tactape' is first applied to the underside of a counter batten that is then nailed and adhered up each rafter.

Each roll has detailed fitting instructions included. The breather membrane must be installed with the writing on the outside of the building. When laid directly over the rafters Permavent should not be pulled taught but allowed to naturally sag a little (2-5mm) in order to allow moisture to run under the battens.

## Breather Membranes

**Care should always be taken when working at height. The safety of all working in construction is critical, above and below.**

### Overlaps and joins

Permavent has standard hatching that indicates a 100mm overlap. Overlaps should be increased on lower pitches up to as much as 200mm on shallow pitches below 20 degrees. Valleys and hips should be overlapped by at least 300mm.



**Taping the overlaps and joins** using Tactape on the breather felt will virtually eliminate the problems caused by wind uplift. It will also eliminate the rare occasions when

**Wind driven rain** can be forced under the overlaps if the roof is not yet covered in during a storm. Large volumes of rain will course down the membrane in sheets and capillary action can draw the rain between the un-taped overlaps. These laps can then blow open and the rain can enter the roof space.

### Fixing

Permavent can be nailed or stapled above the overlap marking line at the top of the membrane. This will then be covered by the overlap of the next run of membrane that is joined and held in place using Tactape. Roofing battens will hold the membrane in place and allow the installer to work up the roof.

## Exposure

Permavent is a high performance and technically advanced membrane that has been designed to combat condensation. The slate or tile covering is the protection against weather and Permavent should not be used a final roof covering. Although Permavent has special additives in order to protect it against the harmful effects of the sun, you should keep exposure to the sunlight to a minimum and limit exposure to not more than 3 months. Permavent should not be allowed to drape into the gutter but should be started just behind the fascia line.



## Counter battens

should be used for two reasons.

Firstly; if the roof is fully boarded using sarking or insulation boards in conjunction with traditional horizontal battens then a counter batten of minimum 10mm should be first laid vertically. This would allow any moisture (that would get trapped) to run under these battens and out into the gutter.

Secondly; if the space between the membrane and the roof covering requires ventilation then a counter batten of minimum 25mm when combined with a traditional 25mm batten will allow 50mm of free air space.

## Insulation between the rafters

If do not want to use counter battens when designing a warm room that has insulation between the rafters you should ensure that a 10mm gap is left at the top of the insulation. This will allow the membrane to sag between the rafters (i.e max 90mm insulation fitted between 100mm rafters) and the insulation requirements can be fully met by completely insulating across the underside of the rafters.

**Scottish Practice.** This membrane is suitable for the Scottish practice of applying the slates directly onto the membrane that is laid without battens over a fully sarked (or boarded) roof. Sarking boards should incorporate a 2mm gap between each board. Some specially treated plywoods such as plastic coated or bitumen impregnated boards do allow vapour to pass through them and are therefore not suitable for the non ventilated use of breather membranes.

