

# PERMAVENT AP EX

Air  
Permeable  
Extra  
Breather  
Membrane

**180**  
grams



**1.0x50m (50m<sup>2</sup>)**  
**9.3kg**

## BREATHER MEMBRANE TECHNICAL DATA

- ✓ Air and Vapour permeable
- ✓ Integrated double tape system
- ✓ Eliminates the need for any ventilation

Permavent membranes are suitable for use in all applications as described in BS 5534.

For use on all types of domestic and commercial roofing and walling applications, including:

- ✓ COLD NON-VENTED
- ✓ COLD VENTED
- ✓ WARM
- ✓ TRADITIONAL HYBRID
- ✓ SCOTTISH AND FULLY BOARDED APPLICATION

PROPERTY	STANDARD	RESULT
Weight, g/m <sup>2</sup>	EN 1849-2	180
Reaction to fire, class	EN 11925-2	E
Water vapour transmission Sd	EN 12572	0.01
Air permeability, m <sup>3</sup> /m <sup>2</sup> h50Pa	EN 12114	>36.72
Water tightness, class	EN 1928	W1
Maximum tensile force (MD), N/50mm	EN 12311-1	358
Maximum tensile force (CD), N/50mm	EN 12311-1	304
Elongation at max. tensile force (MD), %	EN 12311-1	70
Elongation at max. tensile force (CD), %	EN 12311-1	72
Resistance to tearing MD (nail shank), N	EN 12310-1	214
Resistance to tearing CD (nail shank), N	EN 123101-1	218



UK Wind Zones  
**1-5** taped lap      **1-3** battened lap

NHBC  
ACCEPTED

UK  
CA

For installation guides on all our products, please visit our website  
**PERMAVENT.CO.UK**

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Permavent breathable membranes must be installed in accordance to BS 5534 Code of Practice. The installer must ensure compliance with the relevant building regulations.

Our membranes are designed as a secondary barrier to wind driven rain / snow and should not be considered a primary waterproofing layer. Whilst they can withstand UV exposure for up to 3 months, it is best practice to install the primary waterproofing finish (e.g. slates, tiles etc) as soon as possible.

Permavent membranes must be installed the correct way up, with the Permavent logo printed side uppermost.

For tile and slate roof applications the membrane should be laid horizontally across the rafters starting at the eaves and securing with either batten or membrane tape at the laps.

The minimum horizontal laps for membranes, in accordance to BS 5534, are:

Rafter Pitch	Not Fully Supported	Fully Supported
12.5° - 14°	225mm	150mm
15° - 34°	100mm	100mm
35° and above	100mm	100mm

### Permavent APEX membrane can be installed with 100mm lap when taped.

An eaves carrier tray (EPS or tilting fillet) should always be installed where the felt runs over the fascia and into the gutter.

Permavent membranes should be installed at least 75mm up any wall or abutment and sealed in place using tape. Vent pipes, roof lights and apertures on the roof should also be sealed with tape and any nail tears or damage must be repaired.

### Cold roof installation

Place an eaves carrier tray over a fascia ensuring that each carrier laps the next one by at least 75mm and sealed together using tape/sealant.

Permavent APEX should be dressed into the gutter or laid over an eaves carrier tray.

Unroll Permavent APEX along the line of the eaves with the bottom of the roll covering the eaves carrier tray about 50-100mm up from the back of the fascia.

When in position, feel back the protective film off the integrated tape of APEX and secure to the eaves tray.

When installed over the rafters the membrane should slightly dip (about 5-10mm) to allow sufficient drainage beneath the roof batten.

Clout nail the very top of the membrane and fix the battens at your required spacing.

Lap the next course of the membrane along the printed line, and securing all horizontal laps with the integrated tape following the application process shown to the right.

Repeat the process up the roof as necessary.

#### Detail installation:

Valley section: a strip of membrane at least 600mm wide should now be installed up any valley section.

Ridge section: Permavent APEX membrane should overlap both sides of the roof ridge by a minimum of 150mm on each side.

### Warm roof installation

Install an eaves carrier tray and Permavent APEX as you would on a cold roof application.

For insulation between the rafters, the insulation should be 10mm below the line of the top of the rafter.

If the insulation is flush or on top of the rafter, then a counter batten of at least 10mm must be laid up and on top of the rafters. This counter batten will allow any rain or moisture to run under the normal roofing battens and off the roof.

In accordance with Building Regulations, the dwelling below the roof space must be ventilated. Extractor fans should be installed in spaces of high humidity, cold water tanks covered when in loft spaces and all pipework lagged. Any penetrations into the loft space must be sealed, alongside draught free loft hatches.

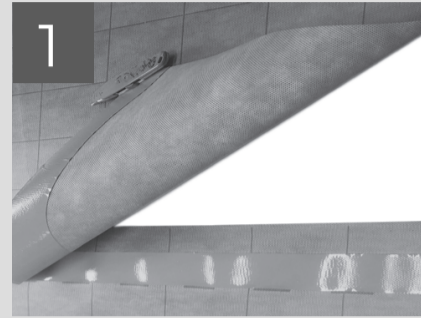
Tightly fitting coverings may trap this vapour causing interstitial condensation that can adversely affect the covering as well as prematurely ageing the battens. Ventilation should therefore be used over the fascia and at the ridge to clear it. The designer should check the advice of the slate or roof covering manufacturer before you proceed without ventilation.

#### Specification Clause

Roofing underlay to be Permavent APEX (with integral tape) supplied by Permavent Ltd. 11 Cumberland Drive, Granby Industrial Estate, Weymouth, Dorset DT4 9TB. Email: enquiries@permavent.co.uk. Telephone: 01305 76670.

Underlay to be of triple ply construction, 180gsm with waterproof and air-permeable core laminated and protected between two layers of non-woven spun-bonded polypropylene. Resistance to wind uplift: unrestricted use at 345mm batten gauge zones 1 to 5, with an air permeability rate of  $m^3/m^2@50pa > 36.72$ . Underlay to be laid unsupported or fully supported in accordance with BS5534:2014+A2:2018 and to manufacturer's instructions.

## Integrated tape application



When the membranes have been laid horizontally across the roof and overlaid on the lap line, pull back the top membrane's corner to reveal both strips of integrated tape.



Peel off the tape's protective film on the top membrane approx. 150mm across.



Peel off the tapes protective film on the bottom membrane to the same length as the top membrane.



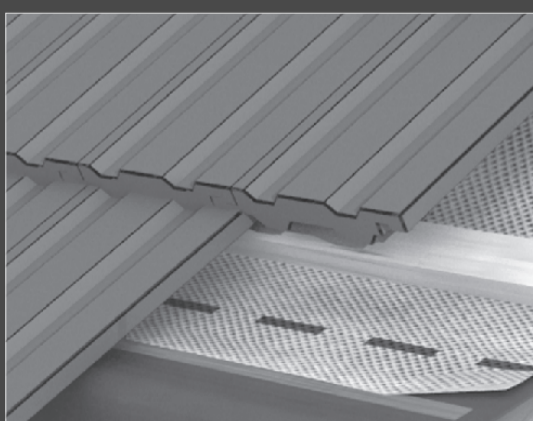
Seal together the membranes with the two integrated tape strips and hold both strips of protective film in one hand. It is important to remove both tape strips at the same time.



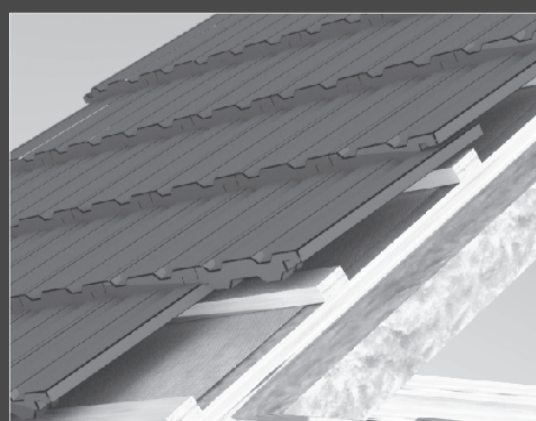
With the other hand hold the membrane down and pull away both strips of film from intergated tapes.



Ensuring the two membranes are smoothly bonding together, continue across the roof until the end of the membrane.



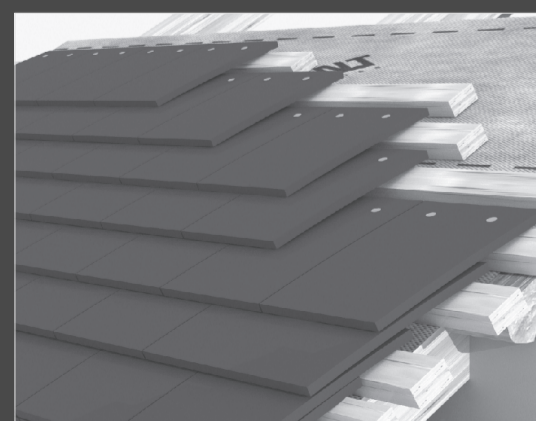
Conventional cold vented roof



Habitable room (hybrid)



Warm deck roof



Conventional non-vented roof