



APEX

Air Permeable Extra
Breather Membrane

PERM^AVENT



PERMAVENT

INNOVATIVE ROOFING PRODUCTS

Permavent APEX is a 3 layer breather membrane. APEX is both air and vapour permeable providing unique condensation control which eliminates the need for low or high level ventilation. APEX also provides a secondary barrier to water ingress.

Permavent APEX is fully compliant with BS5534 and an integrated double tape system allows APEX to be installed in all UK wind zones.

An untaped option is also available.

PERM^AVENTAPEX

Air Permeable Extra

- ✓ Air and Vapour permeable
- ✓ Integrated double tape system (25% less membrane usage)
- ✓ Eliminates the need for additional ventilation
- ✓ For use on any type of roofing/walling applications



Fully Air Permeable

Permavent APEX air permeability allows moisture to escape through the roof via the movement of air, which eliminates interstitial condensation in pitched roofs. This can be particularly important during the drying out period of a new build.

Vapour Permeable

Permavent APEX vapour permeability helps to reduce the condensation within the roof structure, whilst protecting it from the rain and wind outside. Permavent APEX has Sd value 0.01m.

Water Resistance

Permavent APEX is highly water resistant with W1 rating (EN 13859).

NHBC Acceptance

Permavent APEX has been endorsed by NHBC for use as an unsupported roof underlay without the need to provide any ventilation at either high or low level.

Compliant with BS5534 : 2014

Permavent APEX is fully compliant with BS5534 and can be used in all UK wind zones without the need for high and low level ventilation.

Integrated Double Tape System

Permavent APEX comes with a unique integrated double tape system. This ensures that the laps of the membrane are restrained in any weather condition using a 100mm head lap and meet the BS5534 standard. Reduces membrane usage by up to 25%.

Declared Performance

PROPERTY	STANDARD	RESULT
Weight, g/m ²	EN 1849-2	180
Reaction to fire, class	EN 11925-2	E
Water vapour transmission Sd	EN 12572	0.01
Air permeability, m ³ /m ² 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 12310-1	218
Roll size		1m x 50m

Wind Uplift Resistance

BATTEN GAUGE	WIND UPLIFT PRESSURE (Pa)	UK WIND ZONES
≤345mm	1177	1 - 5
≤250mm	2745	1 - 5
≤345mm (battened lap)	2351	1 - 3



Why Use an Air-Open Membrane?

The latest building regulations have seen the introduction of air testing of modern buildings alongside building design changes, in order to improve energy efficiency.

The energy efficient cold non-vented roof style can only be undertaken using breather membrane technology. By eliminating the drafts that are part of a traditional roof space the heat loss of the home can be reduced by up to 25%.

Almost all of the problems with new homes are related to condensation and have come about through bad practice. It is critical that breather membranes are used correctly.

The correct use of Permavent APEX breather membrane will drastically improve the impact of condensation in the home.

Building Regulations

The NHBC operate their own technical standards, in parallel to national building regulations. Their clause (7.2) to BS5250 Code of Practice states that any vapour permeable underlay requires high level ventilation regardless of any third party accreditation. However, there is an exception to this clause when the underlay has third party accreditation for both air and vapour permeability. This means that Permavent APEX can be specified without the need for high or low level ventilation.

The NFRC align themselves with the NHBC regarding best practices and recommendations when installing roof underlays (NFRC Technical Bulletin 6, 2012). Being both air and vapour permeable, Permavent APEX is again exempt from the recommendation of high level ventilation.

What UK wind zones is Permavent APEX suitable for?

Permavent APEX is suitable for use in zones 1-5 (taped lap).

What is the Air Permeability value for APEX?

Permavent APEX air permeability value is $>36.72 \text{ m}^3/\text{m}^2\text{h50Pa}$.

Can I use Permavent APEX on a cold/warm roof application?

Yes. For more complex roofs please speak with our technical team.

Can I use Permavent APEX without any ventilation?

Permavent APEX complies with NHBC requirements for cold/warm roof constructions without the need for any ventilation under the NHBC warranty.

Can Permavent APEX be left exposed before roof slates/tiles are installed?

Yes, it can. Permavent APEX is UV stable for up to 3 months.

Do I need to install a VCL when using Permavent APEX?

A VCL is not required for non-ventilated cold roof installation.

What is the minimum recommended lap for Permavent APEX?

The majority of breather membrane manufacturers recommend installing their membranes with a 150mm lap. Permavent APEX has been tested and approved for installation with 100mm membrane lap.

What is the drying out period?

The drying out period is the period when all the moisture in the building is drying out, including moisture in building materials and any moisture that find its way in. The air and vapour permeable properties of Permavent APEX helps with the condensation during this period.

Is Permavent APEX cost effective?

Permavent APEX is cost effective.

The reduced lap (100mm) will decrease the membrane usage. The integrated double tape system will save time and labour, as well as eliminating the need for restraint battens.



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