





# Klober's most breathable air-open roof membrane.

Part of The Specialist membrane range, Permo Air 160 is Klober's most breathable membrane and best-selling roof underlay.

Permo Air 160 is a low resistance air-open roof underlay, suitable for pitched roofs. It is the ideal solution where there is a high risk of condensation forming in the roofspace; particularly during the drying out period of a building.

This makes it the perfect solution for new-builds. Permo Air 160 roof membrane is BBA approved and NHBC accepted without the need for additional ventilation, saving time and cost. Permo Air 160 can be installed in both unsupported and fully supported applications.





## Technical guidance

Material: Spunbond polyolefin with a high performance meltblown layer.

Colour	Dark blue		
BBA Certificate Number	07/4435		
<b>Weight g/m²</b> EN 1849-2	160		
<b>Water vapour transmission</b> (SD value) EN 12 <i>57</i> 2	0.009m		
Resistance to water penetration EN 1928	W1		
Tensile strength MD/CD (N/50mm) EN 12311-1	280/200		
Nail tear strength MD/CD (N) EN 12310-1	140/130		
Elongation MD/CD (%) EN 12311-1	50/70		
Fire rating EN 13501-1 EN 11925-2	Е		
Resistance to temperature	-40°C to +80°C		

### Features and benefits

- Minimises the risk of condensation forming, particularly during the drying out period of a building, such as new-build properties.
- BBA & NHBC approved as needing no additional ventilation, making it a time and cost effective solution.
- A strong 3-layer membrane suitable for both cold and warm roof applications.

## **Area of application**

- Suitable for Cold and Warm Roofs.
- Wind zones 1-3 with battened headlap.
- All wind zones with taped headlap. (wind zones shown are for a 345mm batten gauge, in accordance with BS 5534).



- Underlay Support Tray KP973910
- Permo Tape KU0121-1
- Tacto Tape KU0111

### Approvals and certifications

- BBA approved (cold non-vented and warm non-vented)
- CE/UKCA.
- Manufacturered to BS EN 13859-1:2010.
- All products supplied by Klober Ltd are covered by a 10 year guarantee against manufacturing defect.







## **Product information**

Product code	Width m	Length m	m²	Weight Per Roll kg	Pallet quantity
KU0045-1	1	50	50	8	20
KU0045-15	1.5		75	12	20

PLEASE NOTE: The Underlay can be used to provide temporary weather protection; however an exposed underlay will be subjected to UV light which may lead to premature failure; therefore, the exposure period should be kept to a minimum. An underlay is not a total waterproof barrier and if used as a temporary waterproof covering, some rain penetration may occur. in certain conditions, particularly if there is persistent heavy rainfall combined with subsequent severe freeze/thaw conditions, an underlay should not be exposed for more that a few days. (BBA)

Please refer to the Membrane Installation guide for further guidance.

Klober is certified to ISO 9001:2015 for Quality Management and ISO 14001:2015 for Environmental Management. All Klober products comply fully with all relevant Building Regulations and British Standards.