

## Technical Data Sheet Permate™ Ultra-R

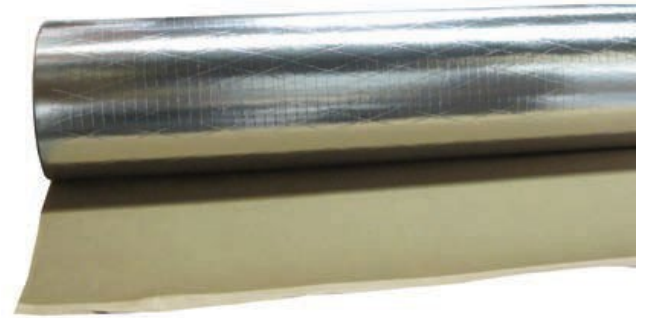
### Product Description / Use:

Permate™ Ultra-R is a bi-laminate consisting of aluminium poly-laminated foil and high strength kraft paper, reinforced with a tri-directional glass fibre scrim.

The layer of aluminum provides excellent resistance to moisture vapour transmission and the glass reinforced kraft provides a tear resistant, protective wearing surface compatible with bitumen and most adhesives.

#### Use:

- Designed for use in conventional low slope roof systems.
- Ideal for use in buildings with high internal humidity located in colder climatic regions.



### Features & Benefits:

**Ultra-High Moisture Protection** - provides exceptional protection from the damaging effects of internal vapour passing into the roof assembly.

**Full Reinforcement** - to better resist wind uplift forces and accidental tearing during construction.

**Resistant to Bitumen** - will not deteriorate when in contact with bitumen.

**Excellent Adhesion** - adheres well to bitumen and most insulation adhesives.

**Works with mechanically fastened insulation** - Performance is not significantly impaired by mechanically fastened insulation or membrane.

### Approvals & Compliances:



CAN/CGSB-51.33-M89, Type I.

### Technical Properties:

Properties	Typical Results
MVTR (Unaged)	2.4 ng/Pa•s•m <sup>2</sup> (0.04 Perms)
MVTR (Aged) (ASTM E-96, Proc. A)	3.6 ng/Pa•s•m <sup>2</sup> (0.06 Perms)
Tensile Strength XD	10.2 kg / cm (57.0 lbs / in)
Tensile Strength MD	7.1 kg / cm (40.0 lbs / in)
Shrinkage	Negligible
Flexibility @ 15°C (5°F)	Excellent
Weight	0.170 kg / m <sup>2</sup>
Roll Sizes	1.27 m (wide) x 146.3 m (long)
Moisture resistance factor	538,900 μ
Vapour resistance	542 MN.s/g
Water vapour diffusion - equivalent air layer thickness Sd	108 m





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### Limitations:

Though used in fire-rated assemblies, Permate Ultra-R™ is flammable. Keep torch flames away from Permate Ultra-R™.

Permate Ultra-R™ should be kept dry during construction. The adhesive characteristics of the membrane surface will be impaired if it is wet.

### Installation Instructions:

When applying to a profiled steel deck, Permate Ultra-R™ must be installed parallel to the corrugations, with all side laps centered over an upper crown. Side laps must be lapped a minimum of 50 mm, end laps a minimum of 150 mm.

**Loose Laid Application:** Unroll the first roll and immediately install the (ballasted or mechanically fastened) roof insulation over top, leaving at least 300 mm of vapour barrier exposed on all sides. Apply minimum 25mm wide MOY double-sided high-tack scrim tape to the upper surface of the side and end laps.

Unroll the next roll, overlapping the previous roll the required distance to form the seams. After rolling the seam area to ensure a good seal, continue positioning insulation over the lap and onto the adjacent Permate Ultra-R™ rolls.

Repeat this procedure for the remaining area to be covered.

**Flashing:** At perimeters, carry the Permate™ Ultra-R up to the top of the roof insulation and adhere it to the underside of the roof membrane with MOY double-sided scrim tape. Use good flashing practices to ensure a moisture and air tight seal.

**Delivery form:** Roll.

### Storage:

Permate Ultra-R™ should be kept dry with the rolls placed on pallets and protected at the building site with tarpaulins or similar.

### Shelf life:

They can be stored for up to 12 months in cool, dry conditions.

### Disposal:

Information for this product is given in the Safety Data Sheet.