

VAPOUR PERMEABLE PRODUCT COMPARISON

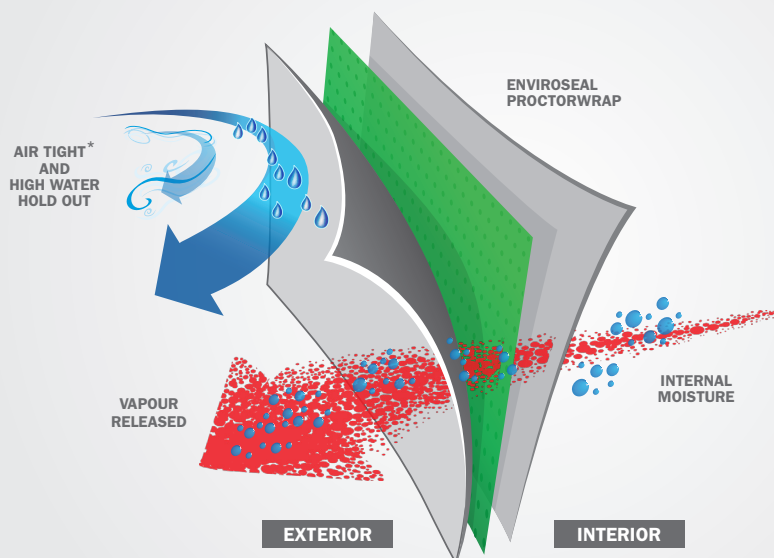
High permeability equals performance

Unlike traditional foil faced sarking materials, the high vapour permeability of the Bradford Enviroseal ProctorWrap range of vapour permeable membranes allow for the controlled escape of moisture from within a building structure whilst restricting the ingress of liquid water and dust from the outside environment.

Controlling condensation is not necessarily about stopping condensation formation on cold surfaces, it's about controlling where on the building envelope it forms. Ideally condensation should form on the outside of the building structure but as insulation becomes more effective at keeping the warmth inside the building envelope, the position of this condensation surface changes. Positioned on the external side of the building frame, with the cladding spaced from the membrane to allow a drainage path for moisture, Enviroseal ProctorWrap membranes position the condensation surface beyond the building frame and insulation. With exceptionally high levels of vapour permeability combined with high water hold-out when joints are taped and lapped, the Enviroseal ProctorWrap range allows moisture inside the building to escape without compromising airtight designs. Compare the vapour permeability performance of the Enviroseal ProctorWrap wall wrap products overleaf.

CONDENSATION CONTROL

Enviroseal ProctorWrap membranes allow moisture to pass outward from inside the building whilst preventing the ingress of water and dust from the outside environment.



*All joints and penetrations must be lapped & taped.

BENEFITS DURING CONSTRUCTION

- Protects the frame and roof structure from the elements prior to the application of external cladding.
- Improves on-site work flow efficiency by allowing internal trades to commence work before the external cladding is applied.

BENEFITS AFTER CONSTRUCTION

- Forms a condensation management surface beyond the building frame, reducing the risk of moisture and mould related issues compromising the structural integrity and health of the occupants. Satisfies the BCA Part 2.2 objective.
- Improves air tightness which in turn improves energy efficiency, but still allows vapour to escape without condensing on the inside of the building frame.
- Protects the interior of the building from moisture and dust ingress from the outside environment.

PRODUCT COMPARISON TABLE

| CRITERIA | REFERENCE | | ENVIROSEAL PROCTORWRAP RW | ENVIROSEAL PROCTORWRAP CW | TYVEK HOMEWRAP | THERMOSEAL WALL BREATHER |
|--|----------------------------|--------|---------------------------|---------------------------|----------------|--------------------------|
| Duty Classification | Table 1 AS/NZS 4200.1:1994 | | Light* | Light* | Light* | Light* |
| Vapour Permeability** (Higher is more permeable) | ASTM E96 | µg/N.s | 4.5 | 4.2 | 1.1 | 0.24 |
| Vapour Resistance** (Lower is more permeable) | ASTM E96 | MN.s/g | 0.22 | 0.24 | 0.91 | 4.17 |
| Vapour Barrier Classification | ASTM E96 | | Low | Low | Low | Unclassified |
| Emittance | AS/NZS 4201.5 | | Non-reflective | Non-reflective | Non-reflective | <0.05 |
| Water Barrier | AS/NZS 4201.4 | | High | High | High | Unclassified |
| Burst Strength | AS2001.2.19 | N | 222 | 294 | 225 | - |
| Flammability Index | AS/NZ 1530 Part 2 | | ≤ 5 | ≤ 5 | ≤ 5 | ≤ 5 |
| Allowable UV exposure prior to completion of cladding | | | 4 weeks | 2 months | 2 months | 2 weeks |
| Shrinkage | AS/NZ 4201.3 | | <0.5% | <0.5% | <0.5% | <0.5% |
| Tensile Strength | | | | | | |
| - Machine Direction (kN/m) | AS 1301.448 | kN/m | 4.3 | 6.1 | 4.6 | 7.5 |
| - Lateral Direction (kN/m) | AS 1301.448 | kN/m | 2.4 | 3.6 | 5.2 | 4.5 |
| Edge Tear Resistance | | | | | | |
| - Machine Direction (N) | TAPPI T470 | N | 220 | 295 | 225 | <45 |
| - Lateral Direction (N) | TAPPI T470 | N | 126 | 175 | 226 | <45 |

* Classified as light duty in accordance with the value specified for bursting strength and therefore does not meet the deemed-to-satisfy provisions for use in roof applications.
 ** Testing conducted at 23°C and 50% relative humidity in accordance with AS4200.1 to suit Australian conditions.

TECHNICAL SUPPORT

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For more information please contact CSR Bradford on **1300 850 305** or visit www.bradfordinsulation.com.au



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