



WINNER HIA WA
PRODUCT INNOVATION AWARD



Permishield®

breathable insulation membrane

AIR-CELL® Insulation, Australia's premier insulation innovators, introduces Permishield® (Patent No. 2006203389), a revolutionary breathable vapour barrier and insulation wrapped up in a single product.

Permishield® is designed specifically for steel-framed wall applications for use behind lightweight cladding materials that require vapour permeance.

Manufactured with a patented closed-cell structure sandwiched by highly reflective foil surfaces and pierced with tiny, evenly-spaced breather holes, Permishield® allows building professionals to do away with the traditional sarking-plus-batts combination in order to achieve thermal compliance as well as satisfy vapour permeance.

Benefits

- **Three products in one**
Acts as an insulation, thermal break and vapour permeable sarking.
- **Advanced thermal performance**
Helps achieve a 5 Star house energy rating.
- **Fibre-free, non-allergenic, non-itchy**
Poses no health and safety risk and is non-asthmatic.
- **Quick and easy to install**
Saves time and helps reduce labour costs compared to conventional bulk insulation.
- **Tough, strong, durable**
Rated Extra Heavy Duty.
- **Water-resistant and unaffected by moisture**
Ideal in humid climates and protects against water damage.
- **Anti-bacterial and anti-fungal**
Will not promote the growth of fungi or bacteria.
- **Rodent and insect resistant**
Does not provide a nesting medium for rodents and insects.
- **Compliant with Australian Standards**
Complies with AS/NZS 4859.1



Thermal Performance

Cladded stud-framed walls	Heat flow In	Heat flow Out
Permishield® 65	R _T 1.6	R _T 1.8
Permishield® 80	R _T 1.7	R _T 1.9

The R-values shown are Total R-values for the building element as required by the Energy Provisions of the Building Code of Australia. AIR-CELL® products are manufactured, tested and packaged in conformance with AS/NZS 4859.1:2002 - Amdt 1. The contribution of the product Total R-values depends on installation and environmental conditions. The R-value will be reduced in the event of the accumulation of dust on the upward facing surfaces and in those cavities that are ventilated.

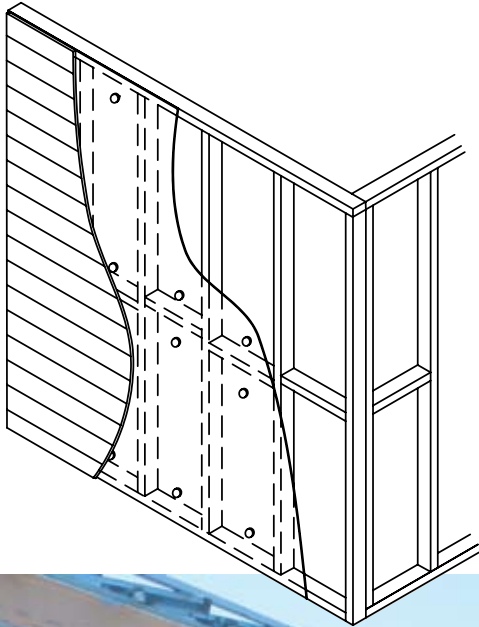


AIR-CELL
INNOVATIVE INSULATION

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1300 AIR-CELL (1300 247 235) www.air-cell.com.au

Permishield®



Please check with the cladding manufacturer for appropriate fixing methods.



Offsetting emissions with
carbonneutral.com.au



Product Specifications

Product Thickness	6.5mm	8mm
	Permishield® 65	Permishield® 80
Thermal Break	R0.2	R0.25
Roll Diameter	455mm	500mm
Roll Weight	9.5kg	10kg
Roll Size	1350mm x 22.25m (30m ²)	

Reflectance

Anti-Glare Face	95%
Reflective Face	97%

Emittance

Anti-Glare Face	E0.05
Reflective Face	E0.03

Product Testing

Corrosion Resistance	AS/NZS 4859.1 Appendix I	Pass
Flammability	AS 1530.2	Low
Ignitability		
Flame Spread		
Heat Release	AS 1530.3	0/0/0/0-1
Smoke Release		
Cone Calorimeter	AS/NZS 3837	Group I
Thermal Resistance	ASTMC518	R0.2 (6.5mm) R0.25 (8mm)
Emittance	ASTM-E408	Reflective E0.03 Anti-Glare E0.05
Vapour Transmission	ASTM-E96	Medium
Dry Delamination	AS/NZS 4201.1	Pass
Wet Delamination	AS/NZS 4201.2	Pass
Shrinkage	AS/NZS 4201.3	≤ 0.5%
Water Penetration	AS/NZS 4201.4	High Resistance
Water Absorbency	AS/NZS 4201.6	Unclassified
Duty	AS 4200.1 6.1.4	Extra Heavy