



# Permishield®

breathable insulation membrane

AIR-CELL® Insulation, Australia's premier insulation innovators, introduces Permishield®, a revolutionary breathable reflective insulation and thermal break wrapped up in a single product. 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. Permishield® is available as Permishield® 65 (6.5mm thick) or Permishield® 80 (8mm thick).

## 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

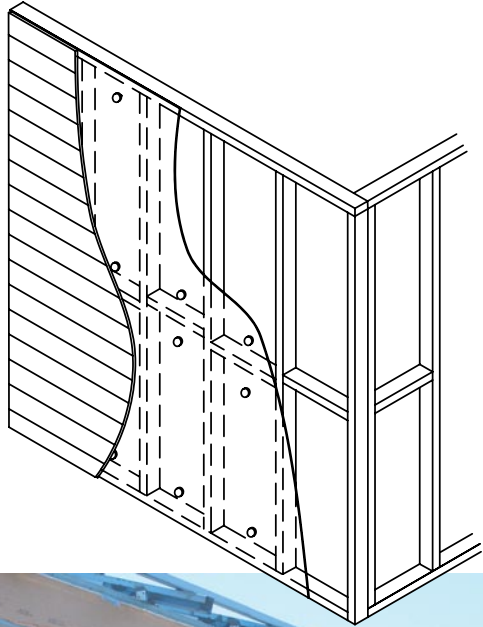
Cladded stud-framed walls	Heat flow In/Out
Permishield® 65	R <sub>T</sub> 1.8
Permishield® 80	R <sub>T</sub> 1.9

The R-Values shown are Total R-Values for the building system based on independent computations using proven data. Values are based on product in in-service condition in accordance with AS/NZS 4859.1:2002.



**AIR-CELL**  
INNOVATIVE INSULATION

# Permishield<sup>®</sup>



## Product Specifications

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

## Reflectance

Anti-Glare Face	92%
Reflective Face	97%

## Emittance

Anti-Glare Face	E0.08
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 0.03 Anti-Glare 0.08
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

