



AIR-CELL Retroshield™

THERMO REFLECTIVE INSULATION



- Advanced thermal performance
- Reflects up to 97% of radiant heat
- 3-in-1 Insulation, vapour barrier and radiant barrier
- Fibre-free, non-allergenic, non-irritant
- Quick and easy to install
- Strong, tough, durable
- Water-resistant and unaffected by moisture
- Anti-bacterial and anti-fungal
- Rodent and insect resistant
- Compliant with AS/NZS 4859.1/Amdt 1/2006
- ISO 9001 Quality Standards



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Product Description

Kingspan **AIR-CELL** Retroshield™ has been developed with a unique reflective anti-tear surface, as both a vapour barrier and a high performance insulation. *Kingspan* **AIR-CELL**™ products are designed to combat heat gain and heat loss in all three forms (radiation, convection and conduction), resulting in thermal performance superior to many conventional insulations. Most importantly, *Kingspan* **AIR-CELL** Retroshield™ is non-allergenic, non-irritant and has none of the health and safety warnings associated with using many conventional bulk insulations.

Product Data	
Product Code	WA003
Reflectance	97%
Emittance	E0.03
Roll Size	1350 mm x 22.25 m (30 m ²)
Roll Diameter	440 mm
Product Thickness	7 mm
Roll Weight	11 kg
Duty	Extra Heavy
Max Span	2.4 m without support mesh
Material R-value	R0.14

Thermal Performance

Application	<i>Kingspan</i> AIR-CELL Retroshield™
Commercial Office Roof	R _t 3.3
Warehouse Roof	R _t 2.1
Residential Tile Roof (Ventilated)	R _t 2.2
Residential Metal Roof (Ventilated)	R _t 2.8

The above Total R-Values are for heat flow-in and have been calculated by a chartered professional engineer and verified by a recognised laboratory in accordance with AS/NZS 4859.1/Amdt 1/2006. The contribution of the product Total R-value 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.

Product Testing

Test	Test Method	Result
Corrosion Resistance	AS/NZS 4859.1/Amdt 1/2006 Appendix 1	Pass
Flammability	AS 1530.2	Low (Index ≤ 5)
Ignitability	AS 1530.3	0/0/0/0-1
Flame Spread		
Heat Release		
Smoke Release		
Thermal Resistance	ASTMC518	R0.14
Emittance	ASTM-E408	E0.03
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	High
Edge Tear	AS 4200.1 6.1.3	Lateral >90 N Machine >90 N
Duty	AS 4200.1	Extra Heavy
Burst Force	AS 3706.4	1400 N
Impact Resistance	AS/NZS 4040.4 (Modified)	Pass
Acoustics	Bassett Acoustics Report MA0221j02	6 db (A) noise reduction

