



# AIR-CELL Retrosshield™

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

Fibre-free  
Core



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## Product Description

*Kingspan AIR-CELL Retrosshield™* 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 Retrosshield™* 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 <sup>2</sup> )
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 AIR-CELL Retrosshield™</i>
Commercial Office Roof	R <sub>r</sub> 3.3
Warehouse Roof	R <sub>r</sub> 2.1
Residential Tile Roof (Ventilated)	R <sub>r</sub> 2.2
Residential Metal Roof (Ventilated)	R <sub>r</sub> 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		
Flame Spread	AS 1530.3	0/0/0/0-1
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

