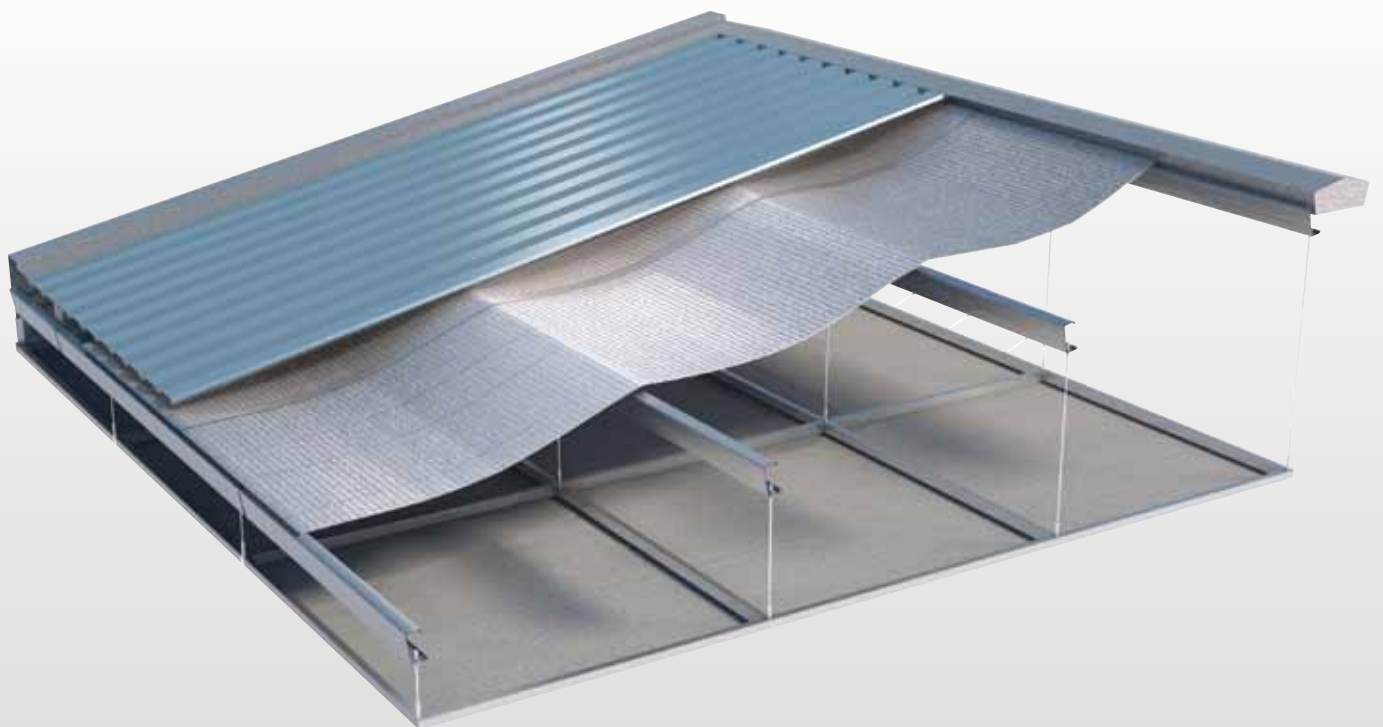




# AIR-CELL Insulbreak™ FR

THERMO REFLECTIVE INSULATION



- 3-in-1 insulation, thermal break and vapour barrier
- Class 0 fire rating
- 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
- ISO 9001 Quality Standards



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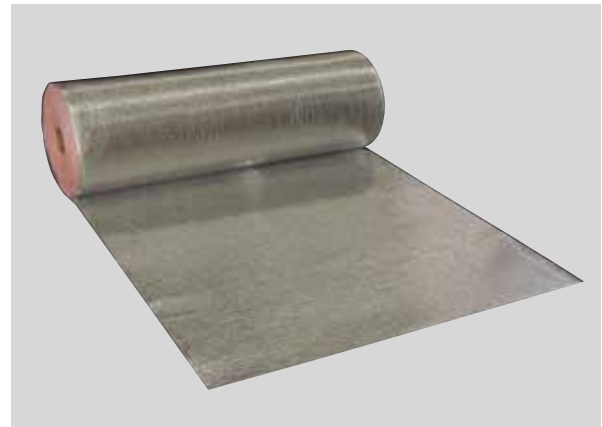
## Product Description

**Kingspan AIR-CELL Insulbreak™ FR** is an all-in-one insulation, vapour barrier and radiant barrier solution reflecting up to 97% of radiant heat.

The 8 mm thick **Kingspan AIR-CELL Insulbreak™ 80FR** also acts as a thermal break, which significantly reduces conductive heat transfer, or thermal bridging, across steel building elements.

**Kingspan AIR-CELL Insulbreak™ FR** is manufactured with a patented cross-linked, closed-cell foam structure sandwiched by highly reflective foil surfaces.

Product Data	<b>Kingspan AIR-CELL Insulbreak™ 40FR</b>	<b>Kingspan AIR-CELL Insulbreak™ 80FR</b>
Product Code	TB040FR	TB080FR
Product Thickness	4 mm	8 mm
Product R-value	R0.13	R0.25
Roll Diameter	470 mm	500 mm
Roll Weight	10 kg	10 kg
Roll Size	1300 mm x 34.62 m (45 m <sup>2</sup> )	1300 mm x 23.08 m (30 m <sup>2</sup> )
Reflectance	97%	
Emittance	E0.03	
Max. Span	2.4 m without support mesh	



## Thermal Performance

Application	<b>Kingspan AIR-CELL Insulbreak™ 40FR</b>	<b>Kingspan AIR-CELL Insulbreak™ 80FR</b>
Commercial Office Roof	R <sub>T</sub> 3.3	R <sub>T</sub> 3.4
Warehouse Roof	R <sub>T</sub> 2.0	R <sub>T</sub> 2.2
Residential Tile Roof (Ventilated)	R <sub>T</sub> 2.2	R <sub>T</sub> 2.3
Residential Metal Roof (Ventilated)	R <sub>T</sub> 2.7	R <sub>T</sub> 2.9

*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. 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 Specifications

Characteristic	Test Method / Standard	Specification
Fire Propagation	BS 476 Part 6	Class 0
Surface Spread of Flame	BS 476 Part 7	
Flammability Index	AS 1530.2	≤5
Material Thermal Resistance	ASTM C518	0.13 m <sup>2</sup> ·K/W (4 mm) 0.25 m <sup>2</sup> ·K/W (8 mm)
Emittance	ASTM E408	E0.03
Duty Rating (Burst Force)	AS 3706.4	1.0 kN - equivalent to Extra Heavy Duty
Vapour Barrier	ASTM E96	Medium Resistance
Shrinkage	AS/NZS 4201.3	< 0.5%
Dry Delamination	AS/NZS 4201.1	Pass
Wet Delamination	AS/NZS 4201.2	Pass
Water Barrier	AS/NZS 4201.4	Pass
Water Absorbency	AS/NZS 4201.6	Unclassified
Corrosion Resistance	AS/NZS 4859.1 Appendix I	Pass