

AIR-CELL Insulbreak®

Product Description

Kingspan AIR-CELL Insulbreak® is a 3-in-1 insulation, vapour barrier and thermal break solution for steel-framed construction. In steel-framed buildings *Kingspan AIR-CELL Insulbreak®* delivers the R0.2 thermal break required for BCA compliance*, reducing thermal bridging and conductivity between building elements.

Kingspan AIR-CELL Insulbreak® is also commonly used in non-steel framed applications such as brick veneer walls and timber framed roofs.

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

* Refer BCA Vol. 1 Section J 1.3(d), 1.5(e); Vol. 2 3.12.1.2(c), 3.12.1.4(d)

Product Data		
Product Thickness	6.5mm	8mm
	AIR-CELL Insulbreak® 65	AIR-CELL Insulbreak® 80
Thermal Break	R0.2	R0.25
Roll Diameter	455 mm	500 mm
Roll Weight	9.5 kg	10 kg
Roll Size	1350mm x 22.25 m (30 m ²)	
Reflectance		
Anti-Glare Face	95%	
Reflective Face	97%	
Emittance		
Anti-Glare Face	E0.05	
Reflective Face	E0.03	

Thermal Performance

Application	Heat Flow In	Heat Flow Out
Steel stud-framed walls		
AIR-CELL Insulbreak® 65	R _T 1.6	R _T 1.8
AIR-CELL Insulbreak® 80	R _T 1.7	R _T 1.9
Commercial office roof[^]		
AIR-CELL Insulbreak® 65	R _T 3.2	R _T 1.4
Brick veneer walls		
AIR-CELL Insulbreak® 65	R _T 1.9	R _T 2.2

[^] Suspended ceiling at 100mm-1200mm depth.

The R-values shown are Total R-values for the building element as required by the Energy Provisions of the Building Code of Australia. Kingspan 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.

Product Testing

Test	Test Method	Result
Corrosion Resistance	AS/NZS 4859.1 Appendix I	Pass
Flammability	AS 1530.2	Low (Index ≤ 5)
Ignitability		
Flame Spread	AS 1530.3	0/0/0/0-1
Heat Release		
Smoke Release		
Cone Calorimeter	AS/NZS 3837	Group 1
Thermal Resistance	ASTMC518	R0.2 (6.5 mm) R0.25 (8 mm)
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%
Duty	AS 4200.1 6.1.4	Extra Heavy

