

Insulation



AIR-CELL® Retrosshield™

Technical Data Sheet
Reflective Insulation for Pitched Roof and Walls



- Thermal resistance as high as $0.13\text{m}^2\text{K/W}$ at 23°C mean temperature (ASTM C518-17)
- Surface emittance as low as 0.04 (ASTM C1371-15) - reflect up to 96% of radiant heat
- Vapour barrier and radiant barrier
- Fibre-free
- Quick and easy to install
- Water-resistant and unaffected by moisture
- Singapore Green Building Product Certified (Excellent) (SGBP 5105)

Fibre-free
Core


Kingspan®

Product Information

Product Description

Kingspan AIR-CELL Retrosshield is a vapour barrier and radiant barrier solution comprising of a 7mm air bubble core faced on both sides with an aluminium foil. This product is designed to combat the heat gain or heat loss due to radiation, convection, and conduction. AIR-CELL Retrosshield is designed for use within both pitched roof and wall application. It is suitable for both new build and refurbishment projects.

Standards and Approvals

Standard	System
ISO 9001:2015	Quality Management
ISO 14001:2015	Environmental Management
ISO 45001:2018	Occupational Health and Safety Management

Handling and Storage

Kingspan AIR-CELL insulation products must be transported and stored in its protective packaging and kept clean and dry. Standing rolls on end reduces risk of damage should moisture be present in the packaging. Surfaces must be kept free of contaminants such as dust and grease, and must not be stored with foil surfaces in contact with alkaline materials i.e. wet cement, lime, etc.

Singapore Green Building Product

The SGBP certification scheme is one of the standards and benchmarks for building products in the building and construction industry. Products and materials certified by the SGBP are recognised under the Green Mark Scheme, Singapore's national green building rating tool, administered by the Building and Construction Authority (BCA).



The scheme allows certified products to accrue points that count towards a project's Green Mark rating. Higher rated products under the SGBP Scheme (i.e., achieving more ticks), are awarded more points towards Green Mark ratings.

The SGBP is also accepted by regional green building rating tools for its coverage of products' sustainability performance. Examples include GreenRE in Malaysia, and LOTUS, Vietnam Green Building Council's rating tool.

Source: Singapore Green Building Council

Further details of the SGBP listing for "Air-Cell Retrosshield" are published on the Singapore Green Building Council's website at:

<https://web.sgbc.online/public/product/search>

To view the listing, search keyword "Retrosshield". Contact us for clarifications.

Safety Information

- Please refer to the Safety Data Sheet (SDS)
- For more information contact Kingspan Insulation.

Technical Specifications

Property	Value	Test Standard
Product Thickness (mm)	7	
Roll Size	1350 (mm) x 22.25 (m) (30 m ²)	
Roll Diameter (mm)	440	
Roll Weight (kg)	11	
Maximum Span (m)	2.4 (without support mesh)	
Flammability Index	≤5	AS 1530.2: 1993
Thermal Resistance at 23°C (m ² K/W)	0.13	ASTM C518-17
Surface Emittance	0.04	ASTM C1371-15
Edge Tearing Resistance (N)	Machine Direction: >900 Lateral Direction: >800	AS/NZS 4200.1: 2017 Clause 5.3.2.3
Resistance to Water Penetration	Pass	AS/NZS 4201.4: 1994
Water Vapour Transmission (µg/(N.s))	<0.020	ASTM E96-16 Part B
Surface Water Absorbency (g/m ²)	<160	AS/NZS 4201.6: 1994
Moisture Shrinkage (%)	≤0.5	AS/NZS 4201.3: 1994
Dry Delamination	Pass	AS/NZS 4201.1: 1994
Wet Delamination	Pass	AS/NZS 4201.2: 1994
Corrosion Resistance	Pass	AS/NZS 4859.1: 2018 Appendix E

Contact Details

Asia Region

Kingspan Insulation Pte Ltd

1 Commonwealth Lane | #07-26/27 | Singapore 149544

T: (+61) 448 392 336

E: info@kingspaninsulation.asia

<https://www.kingspan.com/sg/en/business-groups/kingspan-insulation/>

© Kingspan and the Lion Device are Registered Trademarks of the Kingspan Group plc in Singapore, Malaysia, Vietnam, Thailand, the Philippines, and other countries. All rights reserved.

© AIR-CELL is a Registered Trademark of the Kingspan Group plc in Singapore, Indonesia, China, Philippines, Malaysia and other countries.

™ Retrosshield is a Trademark of the Kingspan Group plc.

No rights can be derived from this document. Changes, typesetting and printing errors reserved.
This version replaces all previous versions.

Kingspan Insulation Pte Ltd reserves the right to amend product specifications without prior notice. The information, technical details and fixing instructions etc. included in this literature are given in good faith and apply to uses described. Recommendations for use should be verified as to the suitability and compliance with actual requirements, specifications and any applicable laws and regulations. For other applications or conditions of use, Kingspan Insulation offers a Technical Advisory Service the advice of which should be sought for uses of Kingspan Insulation products that are not specifically described herein.

To ensure you are viewing the most recent and accurate product information, please visit this link:
www.kingspan.com/sg/en/products/building-insulation/roof-insulation/air-cell-retrosshield

