



AIR-CELL Glareshield®

THERMO REFLECTIVE ANTI-GLARE INSULATION



- 3-in-1 Insulation, vapour barrier and reflective 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 4859.1:2018
- CodeMark-certified for NCC compliance
- Made in Australia



Product Details

Product Description

Australian-made *Kingspan AIR-CELL Glareshield*[®] is a thermo reflective anti-glare 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. In addition, *Kingspan AIR-CELL Glareshield*[®] is non-allergenic, non-irritant and has none of the health and safety warnings associated with using many conventional bulk insulations.

| Product Data | |
|--------------------------|--|
| Product Thickness (nom.) | 7 mm |
| Product R-value at 23°C | R0.14 m ² .K/W |
| Roll Diameter (nom.) | 440 mm |
| Roll Weight (nom.) | 11 kg |
| Roll Size | 1350 mm x 22.25 m (30 m ²) |
| Reflectance | Reflective Face 97% Anti-Glare Face 95% |
| Emittance | Reflective Face E0.03 Anti-Glare Face E0.05 |
| Max. Span | 2.4 m without support mesh |

Product Specifications

| Property | Test Method/Standard | Specification | Classification |
|--------------------------|---------------------------------------|--|--------------------------------|
| Flammability Index | AS 1530.2 | ≤ 5 | Low |
| Material R-value | ASTM C518 at 23°C | 0.14 m ² .K/W | - |
| IR Emittance | AS/NZS 4201.5 | Reflective Face: 0.03 Anti-Glare Face: 0.05 | IR Reflective IR Reflective |
| IR Emittance | - | - | Category RR |
| Burst Strength | AS 3706.4 (CBR) | 1.4 kN | - |
| Tensile Strength | AS/NZS 4200.1/AS 1301.448s | MD >19.0 kN/m LD >16 kN/m | Extra Heavy Duty |
| Edge Tear | AS/NZS 4200.1/TAPPI T470 | MD > 900 N LD > 900 N | Extra Heavy Duty |
| Duty Rating | AS/NZS 4200.1:2017 | - | Extra Heavy Duty |
| Vapour Control | ASTM E96 | Vapour Barrier < 0.020 µg/N.s | Class 2 |
| Water Control | AS/NZS 4201.4 | Pass | Water Barrier |
| Moisture Shrinkage | AS/NZS 4201.3 | < 0.5% | - |
| Dry Delamination | AS/NZS 4201.1 | Pass | - |
| Wet Delamination | AS/NZS 4201.2 | Pass | - |
| Surface Water Absorbency | AS/NZS 4201.6 | < 100g/m ² | Low |
| Corrosion Resistance | AS/NZS 4859.1:2018 App. E | Pass | - |
| Electrical Conductivity | AS/NZS 200.1:2017 - c.5.3.1.2 | ≤ 10 MΩ | Electrically Conductive |
| Acoustics | Bassett Acoustics Report MA0221j02 | 6 db(A) noise reduction through an attic roof | - |

Management Standards

| Standard | Management System |
|----------------|--------------------------|
| ISO 9001:2015 | Quality Management |
| ISO 14001:2015 | Environmental Management |

Environmental Data

| Aspect | Characteristic |
|----------------------------|--|
| Recyclability | Waste not recyclable Roll width to suit most applications to minimise on site waste |
| Re-usability | Re-usable if removed with care (long term of service expected) |
| Water Use | No water used in Kingspan Insulation's manufacturing process |
| Ozone Depleting Substances | None present in the finished product or in Kingspan Insulation's manufacturing process |
| Packaging | Packaging 100% recyclable |
| Embodied Energy | 43 MJ/m ² approximately |

Installation Instructions

Metal Roof (over battens)

1. Roll out the Kingspan AIR-CELL Glareshield® product from the ridge to gutter, over and perpendicular to the roof battens.
2. Ensure a max. 25 mm overlap into the gutter and a nominal 40 mm sag between battens is achieved.
3. Allow 150 mm overlap at joins (50 mm is adequate when joins are to be taped).
4. End joins should be overlapped by 600 mm if not taped.
5. Staple or tape to battens to hold in place until roofing is fixed.

Under Batten Installation

Apply as per Residential Tiled Roof installation instructions.

Tiled Roof

1. Starting at the gutter, roll out the Kingspan AIR-CELL Glareshield® product across the rafters with the antiglare side up, and ensuring a max. 25 mm overlap into the gutter is achieved.
2. Fix to rafters.
3. Allow 150 mm minimum overlap for joins (or 50 mm is adequate if joins are to be taped).
4. End joins should be overlapped by rafter spacing if not taped.
5. Fix battens as per roof cover requirements and applicable standards.

General Requirements

1. Fit *Kingspan AIR-CELL*® neatly around doors, windows, and any penetrations, and tape if necessary to prevent air leakage.
2. When taping a plastic squeegee or blade must be used to apply appropriate pressure to the tape. Surfaces must be dry and free from dust, oil or grease prior to taping (please refer to brochure 'Kingspan Insulation Tape' for further information).
3. Leave minimum 100 mm clearance around heat producing flues or light fittings (refer to light fitting manufacturer).

The instructions in this document are guidelines only and should be interpreted with consideration for the specific building design. The installation of *Kingspan AIR-CELL*® should be in conformance with the applicable clauses from AS 3999 and AS/NZS 4200.2 unless otherwise specified.

Kingspan AIR-CELL® can be damaged by intense heat above 105° C and contact with sparks and flame from blow torches, welders, cutting tools, etc. must be avoided.

The installer must make due provision for safety when installing *Kingspan AIR-CELL*® in any application.

Safety Information

- Non-hazardous/non-toxic.
- No personal protective equipment required.
- UV protective sunglasses and screen should be used when installing in direct sunlight.
- Ensure at least 100 mm clearance from hot flues and light fittings (check for safe distance with lighting supplier).
- **Foil facings are conductive to electricity - avoid contact with un-insulated electrical cables and fittings.**

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.

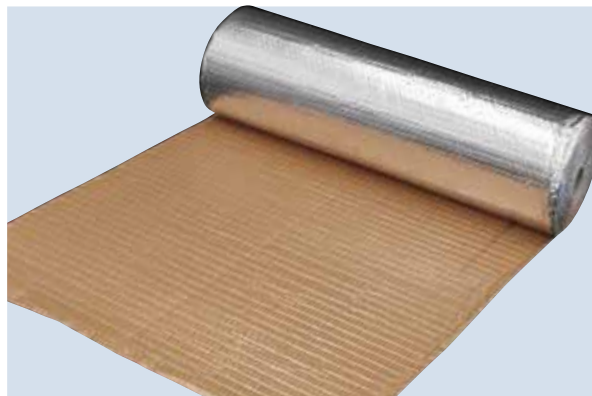


Figure 1 Thermo reflective of *Kingspan AIR-CELL* Glareshield®

Contact Details

General Enquiries

Tel: 1300 247 235

Email: info@kingspaninsulation.com.au

Kingspan Insulation Pty. 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. Please check that your copy of the literature is current by contacting us or visiting www.kingspaninsulation.com.au



Tel: 1300 247 235

Email: info@kingspaninsulation.com.au

www.kingspaninsulation.com.au