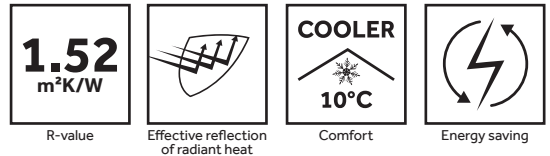


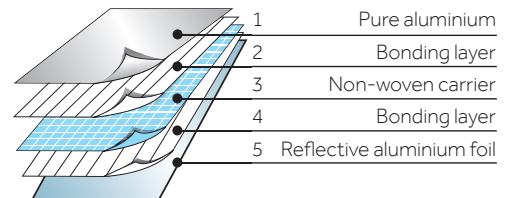
RadenShield™ Ecosential

RadenShield™ Ecosential radiant barrier is a high-performance reflective insulation to enhance energy efficiency and thermal comfort. It helps reduce heat gain in summer and heat loss in winter, improving overall indoor comfort and contributes to lower energy bills. It minimises dust and adds an extra layer of protection against wind-driven rain. Featuring an E-s3, d0 reaction to fire rating, it complies with SANS 53501-1 and adheres to strict fire safety standards. It is suitable for single story residential and low-cost housing applications.



TECHNICAL DATA

Material	PP A1 Double aluminium sides
Size (linear metres)	30 x 1.5
Roll Coverage (m²)	45
Effective Coverage (m²)	40.5
Weight (g/m²)	127
Mass (kg)	6.3
Thickness (mm)	0.2-0.24
Tensile Strength	MD N/50 mm; CD N/50 mm; EN12311-1
Average Nail Tear Strength	MD 250 N; CD 270 N; EN12310-1
Reaction to fire Rating	E-s3 d0 (SANS 53501-1)*
Rsys-value (m²K/W)	1.87**



PACKAGING

Number of roles per pallet	72
----------------------------	----

* BMI Coverland (PTY) Limited assumes no responsibility or liability for any damages, injuries, or losses arising from the installation, use, or performance of this product. By purchasing and using this product, the buyer agrees that the buyer is responsible for ensuring that this product is suitable for the intended application, understands the installation requirements and complies with all local, provincial and national building codes and regulations. BMI Coverland (Pty) Limited is not responsible for non-compliance issues and adherence to SANS 10400-T:2024. **System R-value calculation: $1.52 + 0.35 = 1.87 \text{ m}^2\text{K/W}$ where 0.35 $\text{m}^2\text{K/W}$ represents the roof tiles and standard plasterboard. The system r-value is a guide and should be professionally verified based on the actual roof application process.



Coverland

INSTALLATION SPECIFICATIONS

Ensure proper installation for health and safety. The expansion and contraction of building materials due to temperature fluctuations, or environmental factors like wind or rain can cause unusual attic noise. It is therefore important that overlaps of the insulation material are sealed with aluminium tape to prevent flapping noises and safeguard against fire spread and smoke. We recommend the bottom edge of the product at the eaves is folded over for about 2 cm and then taped down.

STRUCTURAL AND ENGINEER SPECIFICATIONS

The most important environment factor which affects the satisfactory performance of roofs is wind gusting. During short-term wind gusts, pressure differences occur between the roof space (loft) and the outside of the roof covering. The result is a wind force that causes the total or partial removal of the roof covering allowing further damage by natural elements. Roof pitches below 30° results in suction on both the windward and leeward sides of the roof. This suction or lifting force, particularly on a low pitched roof, is often the most severe wind load experienced by any part of a building. Under strong wind gusts the uplift on the roof covering may be far in excess of the dead mass of these coverings, requiring both the roof covering and the total roof structure to be securely fixed to prevent the roof and/or covering from being lifted and torn from the building.

Wind tunnel tests and practical evidence have shown that the satisfactory performance of a roof, and a tiled roof in particular, depends on the complementary function of the roof covering and the undertile membrane.

The working performance of the roofing undertile membrane substantially reduces the lifting forces on the roof covering. In addition the undertile membrane brings definite advantages to the building. In essence an undertile membrane is an essential component of a pitched roof and should be considered an investment and an insurance for a weather-tight roof. If a roof structure is fitted with an undertile membrane of suitable quality and is tiled according to the required specifications, it will withstand excessive wind speeds.

A suitable roofing undertile membrane will afford:

- An increase in thermal insulation resulting in energy savings during winter and summer.
- Reduced dust contamination in the loft space, hence allowing it to be utilised as a storage area.
- Minimised water ingress and damage resulting from hailstones melting in valleys, concealed gutters, etc.
- Protection against roof leaks in the event of damage to the roof covering.

SECURE YOUR ROOF

Coverland offers storm clips and non-corrodible clout nails that are quick and easy to install. The nails are designed to penetrate the battens to two-thirds of their depth, ensuring a secure and professional fixing of concrete tiles. Our storm clips are precisely engineered to match each tile profile, offering reliable and long-lasting protection against wind uplift and tile slippage—fully aligned with SABS codes of practice and regional fixing specifications. Additionally, these fittings provide an added layer of security against unauthorised roof access.

See our Technical Guide for your area's specifications.

INTENSE PRODUCT TESTING

Our roofing products are tested in a wind tunnel unique to the industry, simulating wind and rain conditions found in a wide range of climate zones worldwide, including situations which typically arise only every 50 years. BMI only releases the new roofing materials when all trials as well as several hardness and long-term ageing tests have been successful.

#itsneverjustarroof