

MONIER

Radenshield®

AL+ SE



Part of **BMI**

Monier RadenShield® AL+ SE, Creating a Cooler Living Environment

Monier RadenShield® is a radiant barrier made of highly reflective aluminium or metalized surface. Its carrier material is a synthetic and non-porous woven fabric that ensures high tensile strength, high tear-resistance and durability even in damp and humid conditions. It also acts as an effective moisture barrier that prevents leakages from a damaged roof.



3 IN 1

- Provide a protective insulation barrier, radiant barrier and waterproofing membrane



**HIGH LEVEL OF
TEAR RESISTANCE**

- Highest quality premium woven carrier
- Withstands rough handling



**AFFORDABLE WITHOUT
COMPROMISING
QUALITY**

- Made with high-quality materials that ensure long-lasting protection
- Designed to provide long-term value

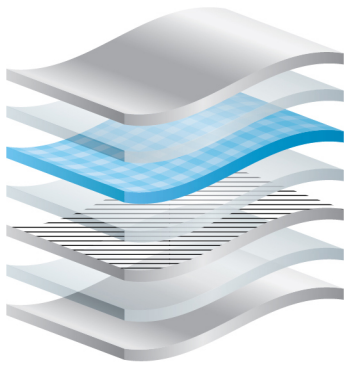


- Certified to: MS 2095:2022
Certificate no: PC 000983

RADENSHIELD® AL+ SE

W228AA FR-S

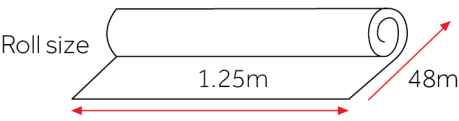
- Superior cooling performance of your home.
- Reflects up to 97% radiant heat with highly reflective pure aluminium.
- **Certified Class 'O' by Malaysian Fire and Rescue Department (BOMBA) which complies to BS476 Part 6:1989 and BS476 Part 7:1997.**
- Suitable for both residential and commercial buildings.
- Complying to **MS 2095:2022** Radiant Barrier Building Materials.



- 1 Pure Aluminium Foil
- 2 FR Polymer Bonding
- 3 HDPE Woven Fabric
- 4 FR Polymer Bonding
- 5 Clear Protection Film
- 6 FR Polymer Bonding
- 7 Pure Aluminium Foil

WOVEN SERIES

Coverage 60.0m² per roll



product sample

SPECIFICATIONS

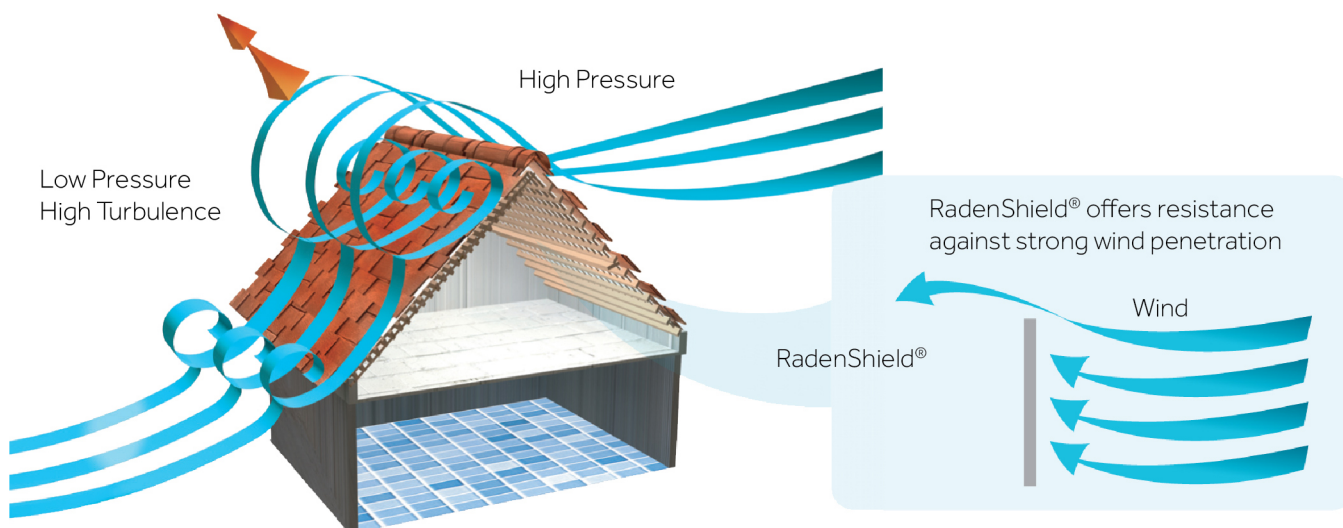
Double sided highly reflective aluminium surface with fire retardant.
Up to 97% reflectivity with additional fire retardant.

In view of innovation, the specifications are subject to change without any prior notice and in the event of such changes, Monier shall ensure that the new specifications are equivalent if not better.

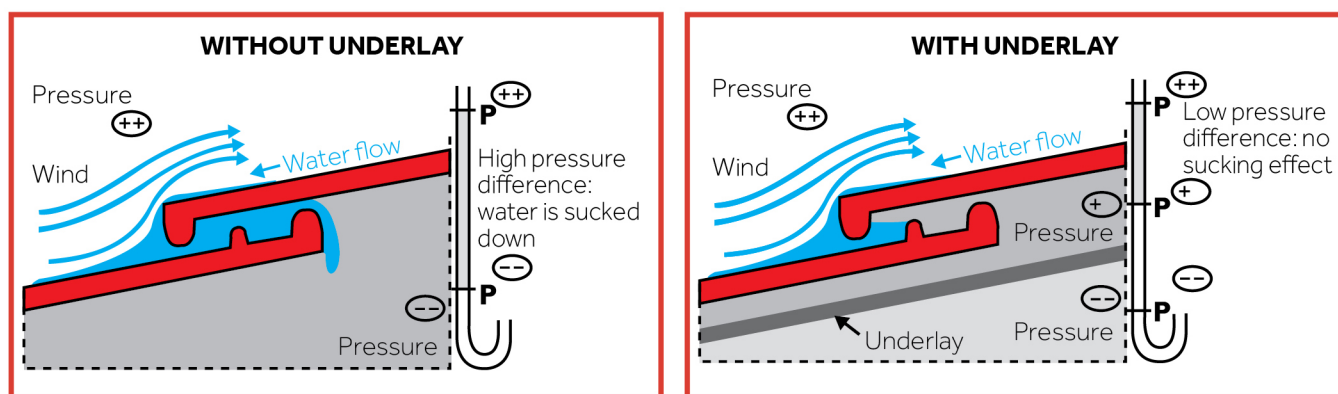
PROPERTY	TEST METHOD	UNIT	SPECIFICATION
Grammage	BS EN ISO 9864	g/m ²	150 ± 15
Thickness	In-House	mm	0.14 ± 0.02
Tensile Strength MD	AS/NZS 1301.448s	kN/m	≥ 10.7
Tensile Strength CD	AS/NZS 1301.448s	kN/m	≥ 11.2
Edge Tear Resistance MD	TAPPI T470	N	≥ 333
Edge Tear Resistance CD	TAPPI T470	N	≥ 341
Emittance of Surface (Alu)	ASTM C 1371	%	≤ 0.04
Reflectivity of Surface (Alu)	ASTM C 1371	%	≥ 0.97
Resistance to Dry Lamination	AS/NZS 4201.1	-	Pass
Resistance to Wet Lamination	AS/NZS 4201.2	-	Pass
Shrinkage MD	AS/NZS 4201.3	%	Pass
Shrinkage CD	AS/NZS 4201.3	%	Pass
Water Vapour Transmission Rate	ASTM E 96	µg/N.s	≤ 0.09
Thermal Resistance	ISO 8301	m ² K/w	≥ 2.420
Fire Propagation Sub-Index, 1,	BS 476 Part 6	Index	4.8
Overall Performance Index	BS 476 Part 6	Index	5.4
Surface Spread of Flame Test	BS 476 Part 7	Class	1
Fire Classification	BS 476 Part 6 & 7	Class	Class O

INCREASED ROOF PERFORMANCE - WITH RADENSHIELD®, ROOF TILES ARE MORE SECURED

RadenShield® reduces pressure difference and decreases the possibility of tiles take off during windy conditions.

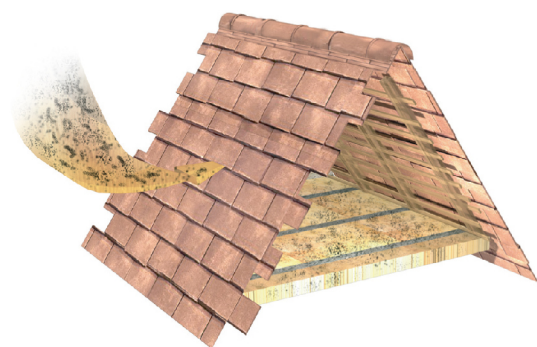


INCREASED WATER-TIGHTNESS



ENHANCED PROTECTION

Against dust, sand, pollen and insects

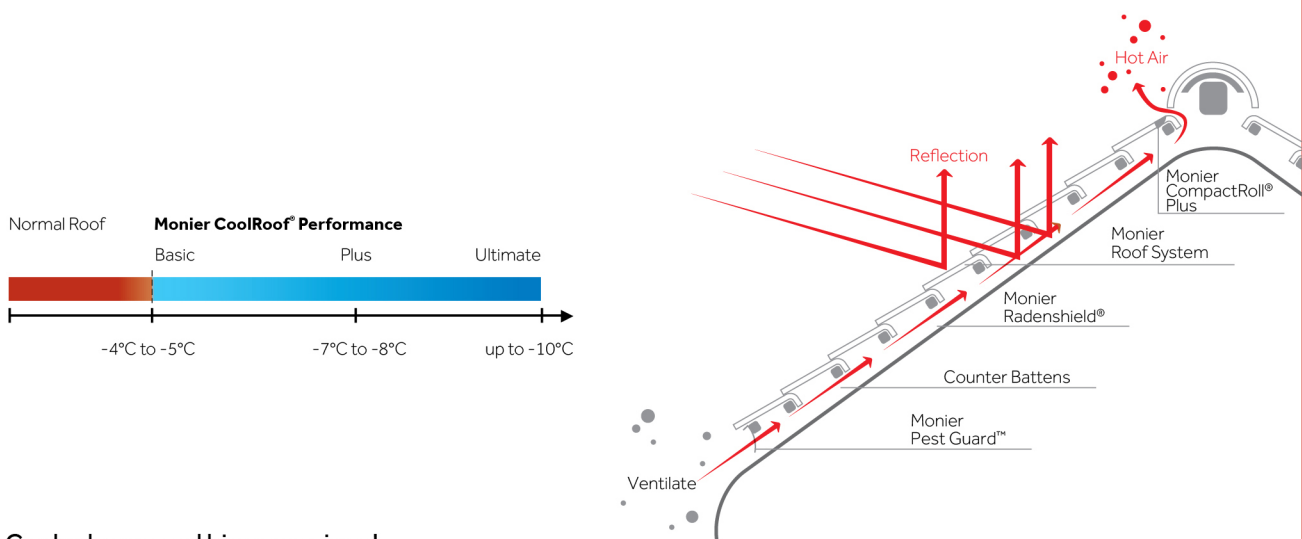


MONIER COOLROOF®

Monier Radenshield® is a range of high performance radiant barrier. It is one of the key components in our Energy Efficient Roofing Solutions where it minimises energy consumption and maximises comfort while having a low impact on the environment.

Monier CoolRoof® creates a natural airflow and heat barrier that limits heat transfers through the roof to provide a cool and comfortable home. It is a sustainable system to save energy, reduce electricity costs and protect the environment.

From decades of global experience in roofing industry, our R&D team in Malaysia and Europe have developed state-of-the-art roof simulation software called BMI Roof Physics. The software capability is acknowledged by the committee of Journal of Building Physics and US Department of Energy Laboratory. Through the software, our experts concluded that Monier CoolRoof® system reduces the living space temperature of your home up to 10°C* compared to conventional roof in Malaysia.



Cooler home and bigger savings!

- Up to 10°C* cooler inside
- Reduce up to 60% of air conditioning usage*
- Reduce up to 30% of electricity bills*
- Less than 2 years payback period

**Data validated by BMI Technical Centre in Europe for tropical weather, in collaboration with Oak Ridge National Laboratory and Lawrence Berkeley National Laboratory in U.S.A.*



MONIER



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BMI Malaysia



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ABOUT BMI GROUP

BMI Group was born out of a recognition that customers now expect a single point of expertise to help them find their ideal roof. Bringing together some of the industries most trusted brands to become the largest supplier of both flat and pitched roofing and waterproofing solutions throughout Europe, BMI Group has over 173 years of experience and innovation to offer its clients.

As a **Standard Industries** company, BMI Group, headquartered in London, has the support, reach and resources of a global enterprise. With over 120 production facilities across Europe, Africa and Asia, and more than 9,500 employees worldwide, the business is well positioned to provide an unparalleled level of service to homeowners, specifiers, contractors, property owners and developers.

Find out more at www.bmigroup.com