

# ThermalFoil™ Series



**BMI** MONIER

Creating a Cooler  
Living Environment

# BMI Monier® Bubble Series, Creating a Cooler Living Environment

With the hot and humid tropical climate and while high air conditioning consumption is considered a norm in today's lifestyle, our bubble foil series is designed with excellent reflective surface on both sides to reduce the excessive incoming heat energy. While reflecting the heat energy and creating comfortable living environment, bubble foil also helps to reduce energy consumption need from air conditioning usage. The bubble layer is made from polyethylene to ensure durability in our hot and damp condition. It acts as an additional barrier to slow down heat transfer to your living space; providing you with indubitably comfort. It also acts as an effective moisture barrier that limits moisture transfer and prevents leakages from damaged roof covering.



## COMFORT

- Made from materials with highest heat reflectivity
- Additional conductive and convective thermal insulation
- Cooler indoor environment



## HIGH LEVEL OF TEAR RESISTANCE

- Highest quality premium woven carrier
- Withstands rough handling
- Minimises wastage during installation process



## LOW NOISE

- Quieter indoor environment
- Superior acoustic performance in rainy conditions



## ENERGY & COST SAVING

- A cooler interior helps reduce the use of air-conditioners and other cooling appliances



## OFFICIALLY TESTED & PROVEN

- Complying to MS 2095:2014 Radiant Barrier Building Materials

## THERMALFOIL™ SERIES

- Superior cooling performance to lower the temperature of your home.
- Reflects up to 97% of radiant heat with highly reflective aluminium surface.
- Ultimate combination of high reflectivity with additional conductive and convective thermal insulation.
- Fibre-free material that is non-asthmatic, non-allergenic and non-irritant to both installer and homeowners.
- **Certified Class 'O' by Malaysian Fire and Rescue Department (BOMBA) which complies to BS476 Part 6:1989 and BS476 Part 7:1997.**
- Complying to **MS 2095:2014** Radiant Barrier Building Materials.

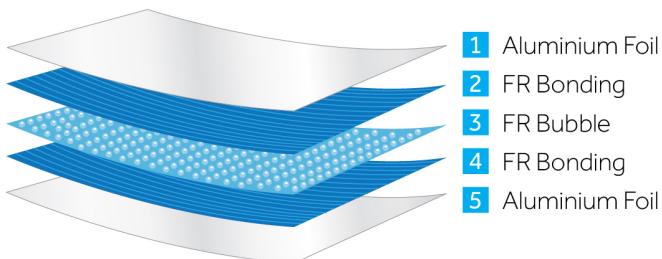
### SPECIFICATIONS

Double sided highly reflective aluminium surface with in-between **thermal-resistant fire retardant air bubble**.

**Up to 97% reflectivity with additional fire retardant.**

## THERMALFOIL™ DELUXE BF

SB228AA-20mm



### BUBBLE SERIES

Coverage 24.4m<sup>2</sup> per roll

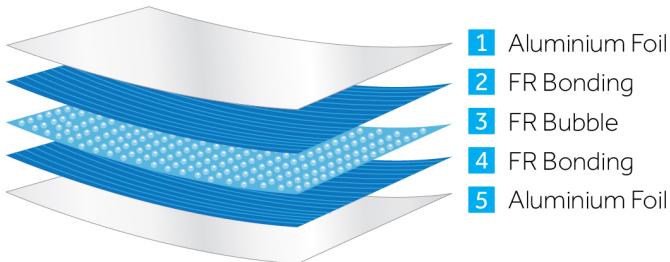


product sample

PROPERTY	TEST METHOD	UNIT	SPECIFICATION
Grammage	BS EN ISO 9864	g/m <sup>2</sup>	300 ± 50
Thickness	In-House	mm	8 ± 4
Tensile Strength MD	AS/NZS 1301.448s	kN/m	≥ 2.3
Tensile Strength CD	AS/NZS 1301.448s	kN/m	≥ 2.0
Edge Tear Resistance MD	TAPPI T470	N	≥ 72.5
Edge Tear Resistance CD	TAPPI T470	N	≥ 67.3
Emittance of Surface (Alu)	ASTM C 1371	%	≤ 0.05
Reflectivity of Surface (Alu)	ASTM C 1371	%	≥ 99
Resistance to Dry Lamination	AS/NZS 4201.1	-	Pass
Resistance to Wet Lamination	AS/NZS 4201.2	-	Pass
Shrinkage MD	AS/NZS 4201.3	%	≤ 0.00
Shrinkage CD	AS/NZS 4201.3	%	≤ 0.1
Water Vapour Transmission Rate	ASTM E 96	µg/N.s	≤ 0.0423
Fire Propagation	BS 476 Part 6	Index	2.2
Sub-Index, 1, Overall Performance Index	BS 476 Part 6	Index	4.6
Surface Spread of Flame Test	BS 476 Part 7	Class	1
Fire Classification	BS 476 Part 6 & 7	Class	Class O

## THERMALFOIL™ BF

B228AA-10mm-FR



- 1 Aluminium Foil
- 2 FR Bonding
- 3 FR Bubble
- 4 FR Bonding
- 5 Aluminium Foil

### BUBBLE SERIES

Coverage 48.8m<sup>2</sup> per roll



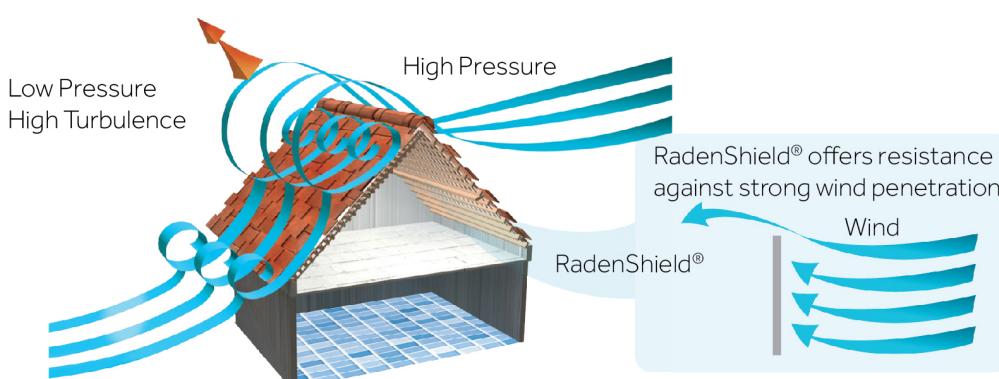
product sample

PROPERTY	TEST METHOD	UNIT	SPECIFICATION
Grammage	BS EN ISO 9864	g/m <sup>2</sup>	230 ± 20
Thickness	In-House	mm	4 ± 1
Tensile Strength MD	AS/NZS 1301.448s	kN/m	≥ 2.0
Tensile Strength CD	AS/NZS 1301.448s	kN/m	≥ 1.8
Edge Tear Resistance MD	TAPPI T470	N	≥ 59
Edge Tear Resistance CD	TAPPI T470	N	≥ 58
Emittance of Surface (Alu)	ASTM C 1371	%	≤ 0.04
Reflectivity of Surface (Alu)	ASTM C 1371	%	≥ 99
Resistance to Dry Lamination	AS/NZS 4201.1	-	Pass
Resistance to Wet Lamination	AS/NZS 4201.2	-	Pass
Shrinkage MD	AS/NZS 4201.3	%	≤ 0.2
Shrinkage CD	AS/NZS 4201.3	%	≤ 0.2
Water Vapour Transmission Rate	ASTM E 96	µg/N.s	≤ 0.0112
Fire Propagation	BS 476 Part 6	Index	3.5
Sub-Index, 1, Overall Performance Index	BS 476 Part 6	Index	8.0
Surface Spread of Flame Test	BS 476 Part 7	Class	1
Fire Classification	BS 476 Part 6 & 7	Class	Class O

CIDB PPS Registration No: 1140408SL0001

### 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.

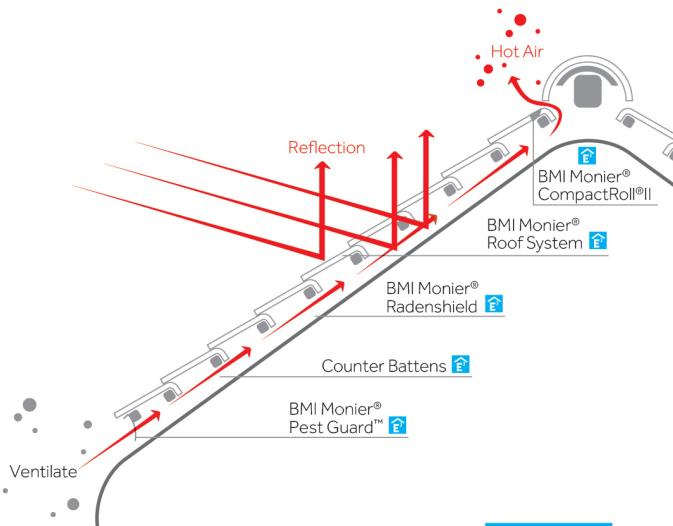
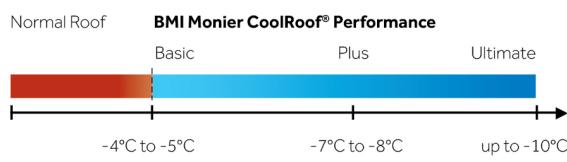


# BMI MONIER® ENERGY EFFICIENT ROOFING SOLUTION (E3) - BMI MONIER COOLROOF®

BMI Monier® ThermalFoil™ 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.

BMI 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 Monier® 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 BMI 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 MONIER® Technical Centre in Europe for tropical weather, in collaboration with Oak Ridge National Laboratory and Lawrence Berkeley National Laboratory in U.S.A.





# MONIER



The Best Brands in Roof Systems  
by The BrandLaureate Awards for  
6 Consecutive Years 2008, 2009  
2010, 2011, 2012 and 2015



Recognized for our CSR  
efforts, Monier was honoured  
with an Asia Responsible  
Entrepreneur Award 2011



Member of the Malaysia Green  
Building Confederation



Scan QR Code for  
Showroom & Sales  
office location



CERTIFIED TO: MS ISO 2095:2014  
Certificate No: PC 002518



## 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 165 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](http://www.bmigroup.com)

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