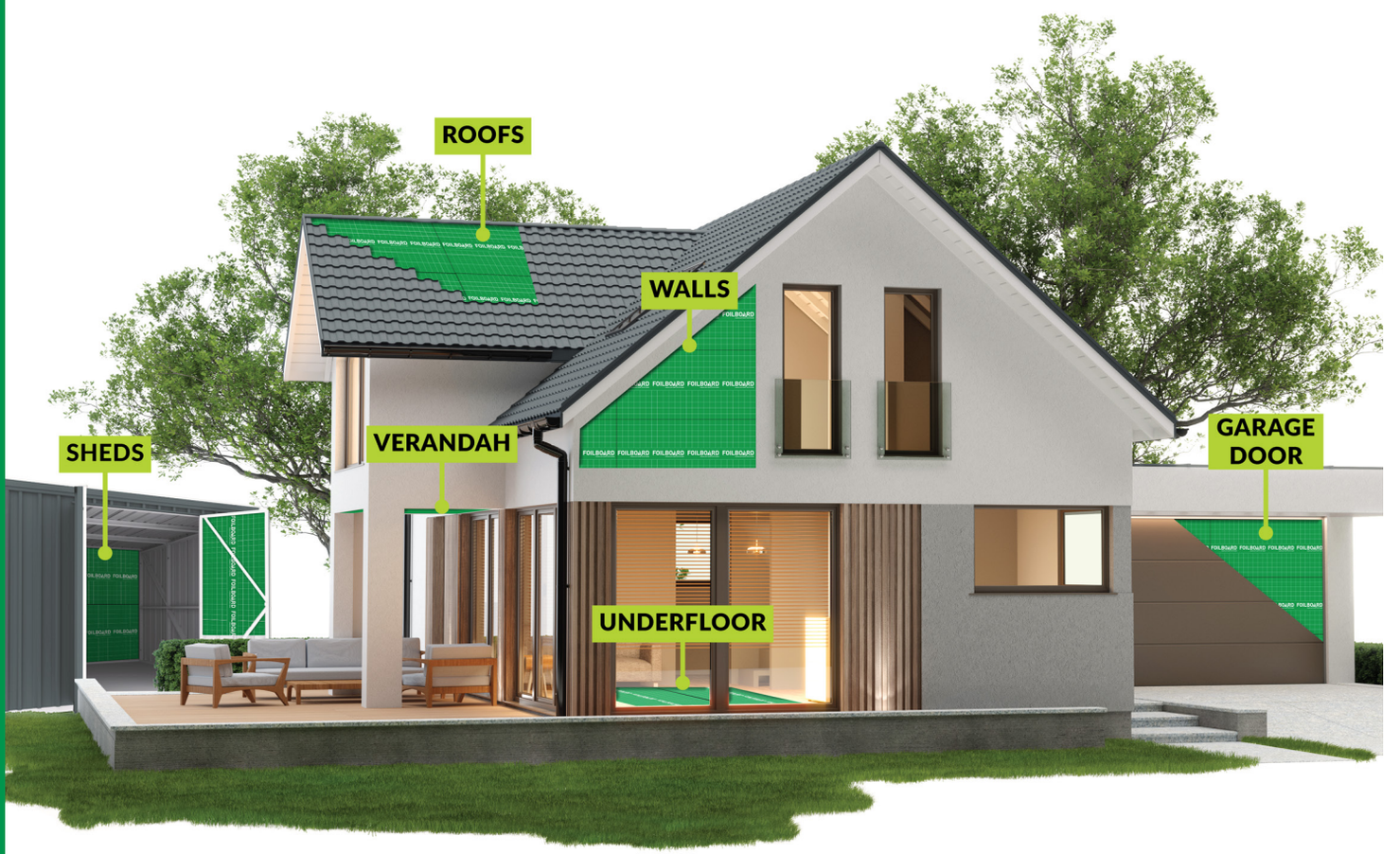
TECHNICAL DATA & DESIGN GUIDE

FOILBOARD®
INSULATION SYSTEMS



FOILBOARD® INSULATION

THE SMARTER WAY TO INSULATE

Australia's most versatile rigid insulation panels for sheds, underfloors, roofs, walls and more.

AUSTRALIAN MADE AND OWNED

www.foilboard.com.au

The Foilboard Difference

Foilboard GREEN Performance Guarantee*

- Will maintain the same thermal performance (R value) for the life of panel
- Will not sag
- Will not delaminate
- Impervious to moisture

Foilboard GREEN is backed with a 25 year performance guarantee*

Manufactured to Australian Standards, the Foilboard GREEN insulation panel is the premium insulation product in its market, both in manufactured quality and product performance and that is why it is backed by a 25 year performance guarantee.

Foilboard Insulation panel is manufactured from fire retardant expanded polystyrene with pure aluminum foil laminated to both sides, an anti-glare ink is applied to one side that is designed to not impede with the reflectiveness of the foil.

This durable rigid panel is specifically designed to achieve exceptionally high thermal values with the use of the reflective airspaces, making it the ideal product.

Unlike traditional bulk insulation and blankets, Foilboard GREEN insulation panel will not shrink, sag or be affected by moisture, ensuring that the building performs to its optimal thermal performance, from 1 year to 25 years and beyond.

Did you know a 4% void in insulated BATTS as a result of sagging, improper installation or stapling can increase heat loss by 15-50%**

*Foilboard® guarantee is only applicable when product is installed in accordance with the Foilboard® warranty policy.
**Information provided is independently sourced from the (ASHRAE) Fundamentals Handbook.

FOILBOARD INSULATION SYSTEMS

CONTENTS

Foilboard GREEN

- Fire retardant
- Formaldehyde free
- CFC & HCFC free
- No dangerous fibrous airborne particles
- Installed without thermal bridging
- Lightweight and fast to install
- Impervious to moisture
- 100% Australian Made

FOILBOARD INSULATION SYSTEMS

Application - Walls

SYSTEM R VALUES

Concrete Wall - Single Reflective Airspace

FOILBOARD PANEL	HEAT FLOW OUT WINTER	HEAT FLOW IN SUMMER	ADDED INSULATION R VALUE (WINTER)	ADDED INSULATION R VALUE (SUMMER)
GREEN 50	Rt2.2	Rt2.1	R1.9	R1.8
GREEN 40	Rt2.0	Rt1.9	R1.7	R1.6
GREEN 30	Rt1.7	Rt1.7	R1.5	R1.4
GREEN 25	Rt1.6	Rt1.6	R1.4	R1.3
GREEN 20	Rt1.5	Rt1.4	R1.2	R1.2

System Description: 150mm concrete (k=1.44), Foilboard panel, steel furring channel, 28mm x 38mm x 0.55 BMT at 600mm c/c, 10mm plasterboard lining. Calculated per AS/NZS 4859, Part 1&2 2:2018. Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system pathway. If elements of construction vary from that described, this may produce a difference thermal resistance result.

Concrete Wall - Dual Reflective Airspace

FOILBOARD PANEL	HEAT FLOW OUT WINTER	HEAT FLOW IN SUMMER	ADDED INSULATION R VALUE (WINTER)	ADDED INSULATION R VALUE (SUMMER)
GREEN 50	Rt2.8	Rt2.7	R2.5	R2.4
GREEN 40	Rt2.6	Rt2.5	R2.3	R2.2
GREEN 30	Rt2.3	Rt2.3	R2.0	R2.0
GREEN 20	Rt2.1	Rt2.0	R1.8	R1.8
GREEN 10	Rt1.8	Rt1.8	R1.6	R1.5

System Description: 150mm concrete (k=1.44), Foilboard panel, 20mm spacer blocks, steel furring channel. 28mm x 38mm x 0.55 BMT at 600mm c/c, 10mm plasterboard lining. Calculated per AS/NZS 4859, Part 1&2 2:2018. Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system pathway. If elements of construction vary from that described, this may produce a difference thermal resistance result.

Double Brick Cavity Walls

FOILBOARD PANEL	CAVITY WIDTH	HEAT FLOW OUT WINTER	HEAT FLOW IN SUMMER	ADDED INSULATION R VALUE (WINTER)	ADDED INSULATION R VALUE (SUMMER)
GREEN 50	90mm	Rt2.9	Rt2.8	R2.5	R2.4
GREEN 30	70mm	Rt2.5	Rt2.4	R2.1	R2.0
GREEN 25	65mm	Rt2.4	Rt2.3	R2.0	R1.9
GREEN 20	60mm	Rt2.3	Rt2.2	R1.8	R1.8
GREEN 15	50mm	Rt2.0	Rt2.0	R1.6	R1.5
GREEN 10	50mm	Rt1.6	Rt1.6	R1.2	R1.1

System Description GREEN 50 - 15: 110mm brickwork (k=0.78), Foilboard panel placed center of cavity. Reflective airspace each side of the Foilboard, 110mm brickwork (k=0.78).

System Description GREEN 10: 110mm brickwork (k=0.78), 35mm reflective airspace, 10mm Foilboard panel, 5mm reflective airspace, 10mm brickwork (k=0.78). Calculated per AS/NZS 4859, Part 1&2 2:2018.

Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system pathway. If elements of construction vary from that described, this may produce a difference thermal resistance result.

Where applicable, Foilboard GREEN should be installed per the National Construction Code (NCC), state building legislations and/or a performance solution.

FOILBOARD INSULATION SYSTEMS

Application - Walls

SYSTEM R VALUES

Brick Veneer

FOILBOARD PANEL	HEAT FLOW OUT WINTER	HEAT FLOW IN SUMMER	ADDED INSULATION R VALUE (WINTER)	ADDED INSULATION R VALUE (SUMMER)
GREEN 50	Rt2.9	Rt2.8	R2.5	R2.4
GREEN 30	Rt2.4	Rt2.4	R2.1	R2.0
GREEN 25	Rt2.3	Rt2.3	R2.0	R1.9
GREEN 20	Rt2.2	Rt2.1	R1.8	R1.8
GREEN 15	Rt2.1	Rt2.0	R1.7	R1.6

System Description: 110mm brickwork (k=0.78), > 20mm reflective airspace, Foilboard panel, 90mm x 35mm timber frame, 600mm stud spacing, 10mm plasterboard lining. Calculated per AS/NZS 4859, Part 1&2 2:2018. Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system pathway. If elements of construction vary from that described, this may produce a difference thermal resistance result.

Cladded Walls

FOILBOARD PANEL	HEAT FLOW OUT WINTER	HEAT FLOW IN SUMMER	ADDED INSULATION R VALUE (WINTER)	ADDED INSULATION R VALUE (SUMMER)
GREEN 50	Rt2.8	Rt2.7	R2.5	R2.4
GREEN 30	Rt2.3	Rt2.2	R2.1	R2.0
GREEN 20	Rt2.1	Rt2.0	R1.8	R1.8
GREEN 15	Rt2.0	Rt1.9	R1.7	R1.6
GREEN 10	Rt1.8	Rt1.8	R1.6	R1.5

System Description: 9mm fibre cement cladding (k=0.04), 20mm reflective airspace, 20mm x 35mm softwood batten, Foilboard panel, 90mm x 35mm timber frame, 600mm stud spacing, 10mm plasterboard lining. Calculated per AS/NZS 4859, Part 1&2 2:2018. Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system pathway. If elements of construction vary from that described, this may produce a difference thermal resistance result.

Higher R Value Systems

FOILBOARD PANEL	HEAT FLOW OUT WINTER	HEAT FLOW IN SUMMER	ADDED INSULATION R VALUE (WINTER)	ADDED INSULATION R VALUE (SUMMER)
GREEN 25	Rt4.5	Rt4.3	R4.7	R4.5
GREEN 20	Rt4.4	Rt4.2	R4.6	R4.4
GREEN 15	Rt4.2	Rt4.1	R4.4	R4.2
GREEN 10	Rt4.1	Rt3.9	R4.3	R4.1

System Description: 9mm fibre cement cladding (k=0.04), 19mm reflective airspace, Foilboard, 19mm x 35mm softwood batten, non-reflective wall wrap, 90mm x 35mm timber frame, 600mm stud spacing, 90mm R2.7 glass wool batt insulation, 10mm plasterboard lining. Calculated per AS/NZS 4859, Part 1&2 2:2018. Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system pathway. If elements of construction vary from that described, this may produce a difference thermal resistance result.

FOILBOARD PANEL	HEAT FLOW OUT WINTER	HEAT FLOW IN SUMMER	ADDED INSULATION R VALUE (WINTER)	ADDED INSULATION R VALUE (SUMMER)
GREEN 25	Rt4.7	Rt4.5	R4.7	R4.5
GREEN 20	Rt4.6	Rt4.4	R4.6	R4.4
GREEN 15	Rt4.5	Rt4.3	R4.5	R4.2
GREEN 10	Rt4.3	Rt4.2	R4.3	R4.1

System Description: 110mm brickwork (k=0.76), > 20mm reflective airspace, Foilboard, 19mm reflective airspace, 19mm x 35mm softwood batten, non-reflective wall wrap, Foilboard panel, 90mm x 35mm timber frame, 600mm stud spacing, 90mm R2.7 glass wool batt insulation, 10mm plasterboard lining. Calculated per AS/NZS 4859, Part 1&2 2:2018. Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system pathway.
If elements of construction vary from that described, this may produce a difference thermal resistance result.

Where applicable, Foilboard GREEN should be installed per the National Construction Code (NCC), state building legislations and/or a performance solution.

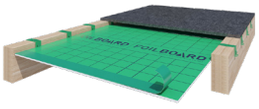
FOILBOARD INSULATION SYSTEMS

Application - Underfloor

140mm Timber Joist

SYSTEM R VALUES

Saddles



FOILBOARD PANEL	REFLECTIVE AIRSPACE ABOVE FOILBOARD	HEAT FLOW DOWN	HEAT FLOW UP	ADDED INSULATION R VALUE HEAT FLOW DOWN	ADDED INSULATION R VALUE HEAT FLOW UP
GREEN 20	20mm	Rt2.8	Rt2.0	R1.8	R1.0
GREEN 15	25mm	Rt2.7	Rt1.9	R1.8	R0.9
GREEN 10	30mm	Rt2.7	Rt1.8	R1.7	R0.8

System Description: Suspended timber floor, sealed airspace, Foilboard panel, enclosed subfloor, 19mm tongue and groove flooring. 140mm x 45mm timber joist at 450mm c/c, 300mm x 50mm pine bearer at 3600mm c/c. Ground thermal resistance based on sub floor ventilation area per perimeter length 6000mm^2/m = R0.58 heat flow out and R0.56 heat flow in. Foilboard installed anti-glare side up. Fully sealed airspace assumes no dust cover on upward facing surfaces. Enclosed cavity to prevent air ingress. Calculated per AS/NZS 4859, Part 1&2 2:2018. *Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system less non-reflective enclosed sub floor air film. If elements of construction vary from that described, this may produce a difference thermal resistance result.

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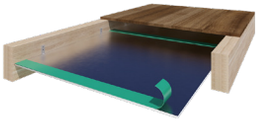
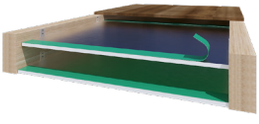


FOILBOARD PANEL	REFLECTIVE AIRSPACE ABOVE FOILBOARD	HEAT FLOW DOWN	HEAT FLOW UP	ADDED INSULATION R VALUE HEAT FLOW DOWN	ADDED INSULATION R VALUE HEAT FLOW UP
GREEN 50	90mm	Rt4.1	Rt2.6	R3.4	R1.7
GREEN 30	110mm	Rt3.8	Rt2.2	R3.1	R1.3
GREEN 20	120mm	Rt3.7	Rt2.0	R2.9	R1.1
GREEN 15	125mm	Rt3.6	Rt1.9	R2.8	R0.9

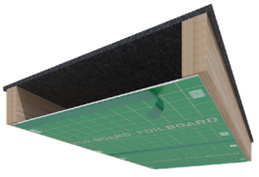
System Description: Suspended timber floor, sealed airspace above Foilboard, enclosed subfloor, 19mm tongue and groove flooring, 140mm x 45mm timber joist at 450mm c/c, 300mm x 50mm pine bearer at 3600mm c/c. Ground thermal resistance based on sub floor ventilation area per perimeter length 6000mm^2/m = R0.58 heat flow out and R0.56 heat flow in. Foilboard installed anti-glare side down. Fully sealed airspace assumes no dust cover on upward facing surfaces. Enclosed cavity to prevent air ingress. Calculated per AS/NZS 4859, Part 1&2 2:2018. Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system less non-reflective enclosed sub floor air film. If elements of construction vary from that described, this may produce a difference thermal resistance result.



FOILBOARD PANEL	REFLECTIVE AIRSPACE ABOVE/BETWEEN FOILBOARD	HEAT FLOW DOWN	HEAT FLOW UP	ADDED INSULATION R VALUE HEAT FLOW DOWN	ADDED INSULATION R VALUE HEAT FLOW UP
GREEN 20 Dual Layer	50mm/50mm	Rt4.8	Rt2.9	R4.5	R2.1
GREEN 15 Dual Layer	55mm/55mm	Rt4.7	Rt2.7	R4.4	R1.8

System Description: Suspended timber floor, sealed airspace above Foilboard, sealed airspace between Foilboard layers, enclosed subfloor, 19mm tongue and groove flooring, 140mm x 45mm timber pine joist at 450mm c/c, 300mm x 50mm pine bearer at 3600mm c/c. Ground thermal resistance based on sub floor ventilation area per perimeter length 6000mm^2/m = R0.58 heat flow out and R0.56 heat flow in. Foilboard installed anti-glare side down. Fully sealed airspace assumes no dust cover on upward facing surfaces. Enclosed cavity to prevent air ingress. Calculated per AS/NZS 4859, Part 1&2 2:2018. Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system less non-reflective enclosed sub floor air film. If elements of construction vary from that described, this may produce a difference thermal resistance result.

Retrofit



FOILBOARD PANEL	REFLECTIVE AIRSPACE ABOVE FOILBOARD	HEAT FLOW DOWN	HEAT FLOW UP	ADDED INSULATION R VALUE HEAT FLOW DOWN	ADDED INSULATION R VALUE HEAT FLOW UP
GREEN 50	140mm	Rt4.6	Rt2.7	R3.6	R1.7
GREEN 25	140mm	Rt4.1	Rt2.2	R3.1	R1.2
GREEN 15	140mm	Rt3.8	Rt1.9	R2.8	R0.9

System Description: Suspended timber floor, sealed airspace above Foilboard, Foilboard installed to bottom of joist, enclosed subfloor, 19mm tongue and groove flooring. 140mm x 45mm timber joist at 450mm c/c, 300mm x 50mm pine bearer at 3600mm c/c. Ground thermal resistance based on sub floor ventilation area per perimeter length 6000mm^2/m = R0.58 heat flow out and R0.56 heat flow in. Foilboard installed anti-glare side up. Fully sealed airspace assumes no dust cover on upward facing surfaces. Enclosed cavity to prevent air ingress. Calculated per AS/NZS 4859, Part 1&2 2:2018. Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system less non-reflective enclosed sub floor air film. If elements of construction vary from that described, this may produce a difference thermal resistance result.

Where applicable, Foilboard GREEN should be installed per the National Construction Code (NCC), state building legislations and/or a performance solution.

FOILBOARD INSULATION SYSTEMS

Application - Underfloor

90mm Timber Joist

SYSTEM R VALUES

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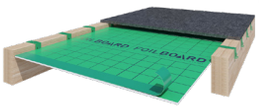

FOILBOARD PANEL	REFLECTIVE AIRSPACE ABOVE FOILBOARD	HEAT FLOW DOWN	HEAT FLOW UP	ADDED INSULATION R VALUE HEAT FLOW DOWN	ADDED INSULATION R VALUE HEAT FLOW UP
GREEN 20	20mm	Rt2.7	Rt1.9	R1.8	R1.0
GREEN 15	25mm	Rt2.7	Rt1.8	R1.8	R0.9
GREEN 10	30mm	Rt2.6	Rt1.7	R1.7	R0.8

System Description: Suspended timber floor, sealed airspace, Foilboard panel, enclosed subfloor, 19mm tongue and groove flooring. 90mm x 45mm timber joist at 450mm c/c, 300mm x 50mm pine bearer at 3600mm c/c. Ground thermal resistance based on sub floor ventilation area per perimeter length 6000mm^2/m = R0.58 heat flow out and R0.56 heat flow in. Foilboard installed anti-glare side up. Fully sealed airspace assumes no dust cover on upward facing surfaces. Enclosed cavity to prevent air ingress. Calculated per AS/NZS 4859, Part 1&2 2:2018. *Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system less non-reflective enclosed sub floor air film. If elements of construction vary from that described, this may produce a difference thermal resistance result.

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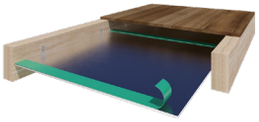
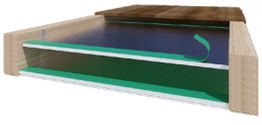


FOILBOARD PANEL	REFLECTIVE AIRSPACE ABOVE FOILBOARD	HEAT FLOW DOWN	HEAT FLOW UP	ADDED INSULATION R VALUE HEAT FLOW DOWN	ADDED INSULATION R VALUE HEAT FLOW UP
GREEN 50	40mm	Rt3.5	Rt2.5	R2.8	R1.7
GREEN 30	60mm	Rt3.4	Rt2.1	R2.8	R1.3
GREEN 20	70mm	Rt3.3	Rt1.9	R2.6	R1.1
GREEN 15	75mm	Rt3.2	Rt1.8	R2.5	R0.9

System Description: Suspended timber floor, sealed airspace above Foilboard, enclosed subfloor, 19mm tongue and groove flooring, 90mm x 45mm timber joist at 450mm c/c, 300mm x 50mm pine bearer at 3600mm c/c. Ground thermal resistance based on sub floor ventilation area per perimeter length 6000mm^2/m = R0.58 heat flow out and R0.56 heat flow in. Foilboard installed anti-glare side down. Fully sealed airspace assumes no dust cover on upward facing surfaces. Enclosed cavity to prevent air ingress. Calculated per AS/NZS 4859, Part 1&2 2:2018. Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system less non-reflective enclosed sub floor air film. If elements of construction vary from that described, this may produce a difference thermal resistance result.



FOILBOARD PANEL	REFLECTIVE AIRSPACE ABOVE/BETWEEN FOILBOARD	HEAT FLOW DOWN	HEAT FLOW UP	ADDED INSULATION R VALUE HEAT FLOW DOWN	ADDED INSULATION R VALUE HEAT FLOW UP
GREEN 20 Dual Layer - Flexi	25mm/25mm	Rt3.7	Rt2.8	R3.2	R2.1
GREEN 40 Dual Layer - Flexi/Retro	20mm/30mm	Rt5.0	Rt3.8	R4.2	R3.7

System Description: Suspended timber floor, sealed airspace above Foilboard, sealed airspace between Foilboard layers, enclosed subfloor, 19mm tongue and groove flooring, 90mm x 45mm timber pine joist at 450mm c/c, 300mm x 50mm pine bearer at 3600mm c/c. Ground thermal resistance based on sub floor ventilation area per perimeter length 6000mm^2/m = R0.58 heat flow out and R0.56 heat flow in. Foilboard installed anti-glare side down. Fully sealed airspace assumes no dust cover on upward facing surfaces. Enclosed cavity to prevent air ingress. Calculated per AS/NZS 4859, Part 1&2 2:2018. Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system less non-reflective enclosed sub floor air film. If elements of construction vary from that described, this may produce a difference thermal resistance result.

Retrofit

FOILBOARD PANEL	REFLECTIVE AIRSPACE ABOVE FOILBOARD	HEAT FLOW DOWN	HEAT FLOW UP	ADDED INSULATION R VALUE HEAT FLOW DOWN	ADDED INSULATION R VALUE HEAT FLOW UP
GREEN 50	90mm	Rt4.4	Rt2.7	R3.4	R1.7
GREEN 25	90mm	Rt3.8	Rt2.2	R2.9	R1.2
GREEN 15	90mm	Rt3.5	Rt1.9	R2.6	R0.9

System Description: Suspended timber floor, sealed airspace above Foilboard, Foilboard installed to bottom of joist, enclosed subfloor, 19mm tongue and groove flooring. 90mm x 45mm timber joist at 450mm c/c, 300mm x 50mm pine bearer at 3600mm c/c. Ground thermal resistance based on sub floor ventilation area per perimeter length 6000mm^2/m = R0.58 heat flow out and R0.56 heat flow in. Foilboard installed anti-glare side up. Fully sealed airspace assumes no dust cover on upward facing surfaces. Enclosed cavity to prevent air ingress. Calculated per AS/NZS 4859, Part 1&2 2:2018. Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system less non-reflective enclosed sub floor air film. If elements of construction vary from that described, this may produce a difference thermal resistance result.

Where applicable, Foilboard GREEN should be installed per the National Construction Code (NCC), state building legislations and/or a performance solution.

FOILBOARD INSULATION SYSTEMS

Application - Underfloor

150mm Steel Joist

SYSTEM R VALUES

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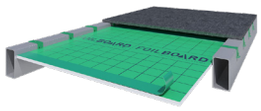

FOILBOARD PANEL	REFLECTIVE AIRSPACE ABOVE FOILBOARD	HEAT FLOW DOWN	HEAT FLOW UP	ADDED INSULATION R VALUE HEAT FLOW DOWN	ADDED INSULATION R VALUE HEAT FLOW UP
GREEN 20	20mm	Rt2.2	Rt1.7	R1.8	R1.1
GREEN 15	25mm	Rt2.2	Rt1.6	R1.8	R0.9
GREEN 10	30mm	Rt2.2	Rt1.6	R1.7	R0.8

System Description: Suspended timber floor, sealed airspace above Foilboard, enclosed subfloor, 19mm tongue and groove flooring. 150mm x 50mm x 1.9mm steel joist at 450mm c/c, 250mm x 50mm steel bearer at 5600mm c/c. Ground thermal resistance based on sub floor ventilation area per perimeter length 6000mm^2/m = R0.58 heat flow out and R0.56 heat flow in. Foilboard installed anti-glare side up. Fully sealed airspace assumes no dust cover on upward facing surfaces. Enclosed cavity to prevent air ingress. Calculated per AS/NZS 4859, Part 1&2 2:2018. *Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system less non-reflective enclosed sub floor air film. If elements of construction vary from that described, this may produce a difference thermal resistance result.

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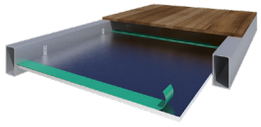
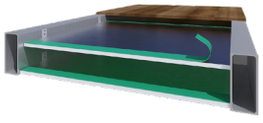


FOILBOARD PANEL	REFLECTIVE AIRSPACE ABOVE FOILBOARD	HEAT FLOW DOWN	HEAT FLOW UP	ADDED INSULATION R VALUE HEAT FLOW DOWN	ADDED INSULATION R VALUE HEAT FLOW UP
GREEN 50	100mm	Rt2.7	Rt2.0	R3.5	R1.7
GREEN 30	120mm	Rt2.7	Rt1.8	R3.1	R1.3
GREEN 20	130mm	Rt2.6	Rt1.7	R2.9	R1.1
GREEN 15	135mm	Rt2.6	Rt1.6	R2.8	R0.9

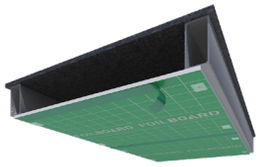
System Description: Suspended timber floor, sealed airspace above Foilboard, enclosed subfloor, 19mm tongue and groove flooring, 150mm x 50mm x 1.9mm steel joist at 450mm c/c, 250mm x 5600mm. Ground thermal resistance based on sub floor ventilation area per perimeter length 6000mm^2/m = R0.58 heat flow out and R0.56 heat flow in. Foilboard installed anti-glare side down. Fully sealed airspace assumes no dust cover on upward facing surfaces. Enclosed cavity to prevent air ingress. Calculated per AS/NZS 4859, Part 1&2 2:2018. Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system less non-reflective enclosed sub floor air film. If elements of construction vary from that described, this may produce a difference thermal resistance result.



FOILBOARD PANEL	REFLECTIVE AIRSPACE ABOVE/BETWEEN FOILBOARD	HEAT FLOW DOWN	HEAT FLOW UP	ADDED INSULATION R VALUE HEAT FLOW DOWN	ADDED INSULATION R VALUE HEAT FLOW UP
GREEN 15 Dual Layer	60mm/60mm	Rt3.0	Rt2.1	R4.6	R1.8
GREEN 15 Dual Layer Flexi / Retro	55mm/80mm	Rt4.5	Rt2.5	R4.7	R1.8

System Description: Suspended timber floor, sealed airspace above Foilboard panel, sealed airspace between Foilboard layers, enclosed subfloor, 19mm tongue and groove flooring, 150mm x 50mm x 1.9mm steel joist at 450mm c/c, 250mm x 50mm steel bearer at 5600mm c/c. Ground thermal resistance based on sub floor ventilation area per perimeter length 6000mm^2/m = R0.58 heat flow out and R0.56 heat flow in. Foilboard installed anti-glare side down. Fully sealed airspace assumes no dust cover on upward facing surfaces. Enclosed cavity to prevent air ingress. Calculated per AS/NZS 4859, Part 1&2 2:2018. Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system less non-reflective enclosed sub floor air film. If elements of construction vary from that described, this may produce a difference thermal resistance result.

Retrofit



FOILBOARD PANEL	REFLECTIVE AIRSPACE ABOVE FOILBOARD	HEAT FLOW DOWN	HEAT FLOW UP	ADDED INSULATION R VALUE HEAT FLOW DOWN	ADDED INSULATION R VALUE HEAT FLOW UP
GREEN 50	150mm	Rt4.2	Rt2.5	R3.7	R1.7
GREEN 25	150mm	Rt3.6	Rt2.0	R3.1	R1.2
GREEN 15	150mm	Rt3.4	Rt1.8	R2.9	R0.9

System Description: Suspended timber floor, sealed airspace above Foilboard, Foilboard installed to bottom of joist, enclosed subfloor, 19mm tongue and groove flooring. 150mm x 50mm x 1.9mm steel joist at 450mm c/c, 250mm x 50mm steel bearer at 5600mm c/c. Ground thermal resistance based on sub floor ventilation area per perimeter length 6000mm^2/m = R0.58 heat flow out and R0.56 heat flow in. Foilboard installed anti-glare side up. Fully sealed airspace assumes no dust cover on upward facing surfaces. Enclosed cavity to prevent air ingress. Calculated per AS/NZS 4859, Part 1&2 2:2018. Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system less non-reflective enclosed sub floor air film. If elements of construction vary from that described, this may produce a difference thermal resistance result.

Where applicable, Foilboard GREEN should be installed per the National Construction Code (NCC), state building legislations and/or a performance solution.

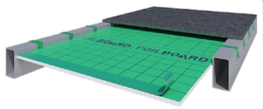
FOILBOARD INSULATION SYSTEMS

Application - Underfloor

100mm Steel Joist

SYSTEM R VALUES

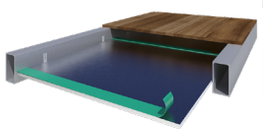
Saddles



FOILBOARD PANEL	REFLECTIVE AIRSPACE ABOVE FOILBOARD	HEAT FLOW DOWN	HEAT FLOW UP	ADDED INSULATION R VALUE HEAT FLOW DOWN	ADDED INSULATION R VALUE HEAT FLOW UP
GREEN 20	20mm	Rt2.1	Rt1.7	R1.8	R1.1
GREEN 15	25mm	Rt2.1	Rt1.6	R1.8	R0.9
GREEN 10	30mm	Rt2.1	Rt1.5	R1.7	R0.8

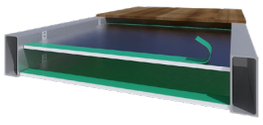
System Description: Suspended timber floor, sealed airspace above Foilboard, enclosed subfloor, 19mm tongue and groove flooring. 100mm x 50mm x 1.9mm steel joist at 450mm c/c, 250mm x 50mm steel bearer at 5600mm c/c. Ground thermal resistance based on sub floor ventilation area per perimeter length 6000mm^2/m = R0.58 heat flow out and R0.56 heat flow in. Foilboard installed anti-glare side up. Fully sealed airspace assumes no dust cover on upward facing surfaces. Enclosed cavity to prevent air ingress. Calculated per AS/NZS 4859, Part 1&2 2:2018. *Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system less non-reflective enclosed sub floor air film. If elements of construction vary from that described, this may produce a difference thermal resistance result.

Flexifast



FOILBOARD PANEL	REFLECTIVE AIRSPACE ABOVE FOILBOARD	HEAT FLOW DOWN	HEAT FLOW UP	ADDED INSULATION R VALUE HEAT FLOW DOWN	ADDED INSULATION R VALUE HEAT FLOW UP
GREEN 50	50mm	Rt2.5	Rt1.9	R3.0	R1.7
GREEN 30	70mm	Rt2.5	Rt1.8	R2.9	R1.3
GREEN 20	80mm	Rt2.4	Rt1.7	R2.7	R1.1
GREEN 15	85mm	Rt2.4	Rt1.6	R2.6	R0.9

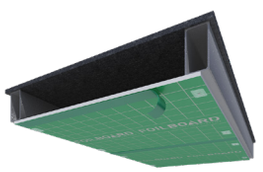
System Description: Suspended timber floor, sealed airspace above Foilboard, enclosed subfloor, 19mm tongue and groove flooring, 100mm x 50mm x 1.9mm steel joist at 450mm c/c, 250mm x 5600mm. Ground thermal resistance based on sub floor ventilation area per perimeter length 6000mm^2/m = R0.58 heat flow out and R0.56 heat flow in. Foilboard installed anti-glare side down. Fully sealed airspace assumes no dust cover on upward facing surfaces. Enclosed cavity to prevent air ingress. Calculated per AS/NZS 4859, Part 1&2 2:2018. Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system less non-reflective enclosed sub floor air film. If elements of construction vary from that described, this may produce a difference thermal resistance result.



FOILBOARD PANEL	REFLECTIVE AIRSPACE ABOVE/BETWEEN FOILBOARD	HEAT FLOW DOWN	HEAT FLOW UP	ADDED INSULATION R VALUE HEAT FLOW DOWN	ADDED INSULATION R VALUE HEAT FLOW UP
GREEN 15 Dual Layer	35mm/35mm	Rt2.6	Rt2.0	R3.5	R1.8
GREEN 20 Dual Layer Flexi / Retro	30mm/50mm	Rt4.2	Rt2.7	R4.0	R2.1

System Description: Suspended timber floor, sealed airspace above Foilboard panel, sealed airspace between Foilboard layers, enclosed subfloor, 19mm tongue and groove flooring, 100mm x 50mm x 1.9mm steel joist at 450mm c/c, 250mm x 50mm steel bearer at 5600mm c/c. Ground thermal resistance based on sub floor ventilation area per perimeter length 6000mm^2/m = R0.58 heat flow out and R0.56 heat flow in. Foilboard installed anti-glare side down. Fully sealed airspace assumes no dust cover on upward facing surfaces. Enclosed cavity to prevent air ingress. Calculated per AS/NZS 4859, Part 1&2 2:2018. Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system less non-reflective enclosed sub floor air film. If elements of construction vary from that described, this may produce a difference thermal resistance result.

Retrofit



FOILBOARD PANEL	REFLECTIVE AIRSPACE ABOVE FOILBOARD	HEAT FLOW DOWN	HEAT FLOW UP	ADDED INSULATION R VALUE HEAT FLOW DOWN	ADDED INSULATION R VALUE HEAT FLOW UP
GREEN 50	100mm	Rt4.0	Rt2.5	R3.5	R1.7
GREEN 25	100mm	Rt3.5	Rt2.0	R2.9	R1.2
GREEN 15	100mm	Rt3.2	Rt1.8	R2.7	R0.9

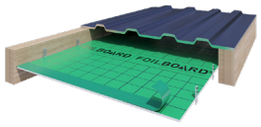
System Description: Suspended timber floor, sealed airspace above Foilboard, Foilboard installed to bottom of joist, enclosed subfloor, 19mm tongue and groove flooring. 100mm x 50mm x 1.9mm steel joist at 450mm c/c, 250mm x 50mm steel bearer at 5600mm c/c. Ground thermal resistance based on sub floor ventilation area per perimeter length 6000mm^2/m = R0.58 heat flow out and R0.56 heat flow in. Foilboard installed anti-glare side up. Fully sealed airspace assumes no dust cover on upward facing surfaces. Enclosed cavity to prevent air ingress. Calculated per AS/NZS 4859, Part 1&2 2:2018. Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system less non-reflective enclosed sub floor air film. If elements of construction vary from that described, this may produce a difference thermal resistance result.

Where applicable, Foilboard GREEN should be installed per the National Construction Code (NCC), state building legislations and/or a performance solution.

Application - Roof & Ceilings

SYSTEM R VALUES

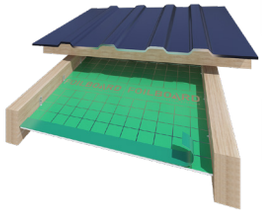
Cathedral or Skillion Ceiling (22.5º Slope)



FOILBOARD PANEL	HEAT FLOW UP	HEAT FLOW DOWN	ADDED INSULATION R VALUE HEAT FLOW UP	ADDED INSULATION R VALUE HEAT FLOW DOWN
GREEN 50	Rt2.2	Rt2.7	R2.1	R2.7
GREEN 25	Rt1.7	Rt2.2	R1.5	R2.2

System Description: 22.5 degree pitched metal roof, layer of reflective sarking (E0.03 facing down), Foilboard panel between rafters, 70mm x 35mm timber battens at 600mm spacing, 140mm x 35mm rafters at 600mm spacing. Foilboard under battens anti-glare side up. Ceiling batten 28mm x 38mm x 0.55 BMT, 10mm plasterboard ceiling. Assumed airspaces are fully sealed and have been designed specifically to prevent air ingress. Calculation based on slight dust cover. Calculated per AS/NZS 4859, Part 1&2 2:2018. Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system pathway. If elements of construction vary from that described, this may produce a difference thermal resistance result.

High R Value Cathedral or Skillion Ceiling



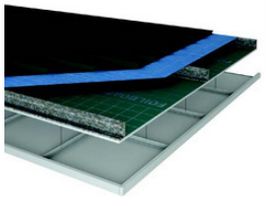
FOILBOARD PANEL	HEAT FLOW UP	HEAT FLOW DOWN	ADDED INSULATION R VALUE HEAT FLOW UP	ADDED INSULATION R VALUE HEAT FLOW DOWN
GREEN 50 (dual)	Rt3.9	Rt5.3	R3.8	R5.0
GREEN 25 (dual)	Rt3.0	Rt4.7	R2.8	R4.3
GREEN 25 (dual with blanket)	Rt4.1	Rt4.9	R4.0	R5.1
GREEN 50 (dual with blanket)	Rt5.0	Rt5.1	R5.0	R5.7

System Description Dual: 22.5 degree pitched metal roof, reflective sarking (E0.03 facing down), Foilboard under battens / 35mm reflective airspace above adjusted for sag in sarking / 18mm below. Foilboard between rafters reflective airspace below. 70mm x 35mm timber battens at 600mm spacing, 140mm x 35mm rafters at 600mm spacing. Foilboard between rafters anti-glare side up, ceiling batten (28mm x 38mm x 0.55 BMT) bottom of rafter, 10mm plasterboard ceiling. Assumed airspaces are fully sealed and have been designed specifically to prevent air ingress. Calculation based on slight dust cover.

System Description Dual with Blanket: 22.5 degree pitched metal roof, 60mm insulation blanket R1.3, (E0.03 facing down), Foilboard between rafters, 70mm x 35mm timber battens at 600mm spacing, 140mm x 35mm rafters at 600mm spacing. Foilboard between rafters anti-glare side up, ceiling batten (28mm x 38mm x 0.55 BMT), 10mm plasterboard ceiling. Assumed airspaces are fully sealed and have been designed specifically to prevent air ingress. Calculation based on slight dust cover. Calculated per AS/NZS 4859, Part 1&2 2:2018.

Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system pathway. If elements of construction vary from that described, this may produce a difference thermal resistance result.

Suspended Ceiling



FOILBOARD PANEL	HEAT FLOW UP	HEAT FLOW DOWN	ADDED INSULATION R VALUE HEAT FLOW UP	ADDED INSULATION R VALUE HEAT FLOW DOWN
GREEN 50	Rt1.9	Rt3.2	R2.1	R4.8
GREEN 40	Rt1.8	Rt3.1	R1.9	R4.6
GREEN 25	Rt1.6	Rt3.0	R1.6	R4.3

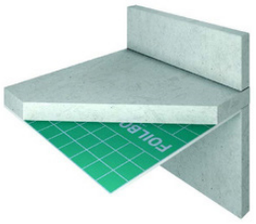
System Description: Flat metal roof, layer of reflective sarking (E0.03 facing down), Foilboard between C purlins, 250mm x 76mm x 1.9mm BMT C Purlins at 1200mm spacing, Foilboard anti-glare up, 10mm suspended plasterboard ceiling tiles. Assumed airspaces are fully sealed and have been designed specifically to prevent air ingress. Calculation based on slight dust cover. Calculated per AS/NZS 4859, Part 1&2 2:2018. Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system pathway. If elements of construction vary from that described, this may produce a difference thermal resistance result.

Where applicable, Foilboard GREEN should be installed per the National Construction Code (NCC), state building legislations and/or a performance solution.

Application - Suspended Slab

SYSTEM R VALUES

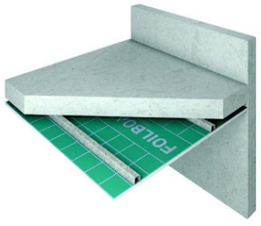
Suspended Slab - Underfloor Direct Fix



FOILBOARD PANEL	HEAT FLOW DOWN	HEAT FLOW UP	ADDED INSULATION R VALUE HEAT FLOW DOWN	ADDED INSULATION R VALUE HEAT FLOW UP
GREEN 50	Rt2.9	Rt2.2	R1.9	R1.3
GREEN 40	Rt2.7	Rt2.0	R1.7	R1.1
GREEN 20	Rt2.2	Rt1.6	R1.2	R0.7

System Description: 180mm concrete slab (k=1.44), direct fix Foilboard panel to underside of slab, enclosed subfloor 500mm. Ground thermal resistance based on sub floor ventilation area per perimeter length 6000mm^2/m = R0.58 heat flow out and R0.56 heat flow in. Foilboard installed anti-glare side up. Fully sealed airspace assumes no dust cover on upward facing surfaces. Enclosed cavity to prevent air ingress. Calculated per AS/NZS 4859, Part 1&2 2:2018. Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system pathway less non-reflective enclosed sub floor air film. If elements of construction vary from that described, this may produce a difference thermal resistance result.

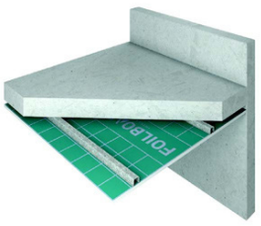
Suspended Slab - Underfloor Batten Fixing



FOILBOARD PANEL	REFLECTIVE AIRSPACE ABOVE FOILBOARD	HEAT FLOW DOWN	HEAT FLOW UP	ADDED INSULATION R VALUE HEAT FLOW DOWN	ADDED INSULATION R VALUE HEAT FLOW UP
GREEN 50	28mm	Rt3.6	Rt2.6	R2.6	R1.7
GREEN 40	28mm	Rt3.4	Rt2.4	R2.4	R1.5
GREEN 20	28mm	Rt2.9	Rt1.9	R1.9	R1.1

System Description: 180mm concrete slab (k=1.44), 28mm x 38mm x 0.55 BMT space 600mm c/c, Foilboard insulation to underside of battens, anti-glare facing up, enclosed subfloor 500mm. Ground thermal resistance based on sub floor ventilation area per perimeter length 6000mm^2/m = R0.58 heat flow out and R0.56 heat flow in. Foilboard installed anti-glare side up. Fully sealed airspace assumes no dust cover on upward facing surfaces. Enclosed cavity to prevent air ingress. Calculated per AS/NZS 4859, Part 1&2 2:2018. Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system pathway less non-reflective enclosed sub floor air film. If elements of construction vary from that described, this may produce a difference thermal resistance result.

Suspended Slab - Ceiling



FOILBOARD PANEL	REFLECTIVE AIRSPACE ABOVE/BELOW FOILBOARD	HEAT FLOW UP	HEAT FLOW DOWN	ADDED INSULATION R VALUE HEAT FLOW UP	ADDED INSULATION R VALUE HEAT FLOW DOWN
GREEN 50	20mm/28mm	Rt2.4	Rt2.9	R2.1	R2.6
GREEN 25	20mm/28mm	Rt1.9	Rt2.4	R1.5	R2.1
GREEN 15	20mm/28mm	Rt1.6	Rt2.2	R1.3	R1.9

System Description: 200mm suspended concrete ceiling. 20mm reflective sealed airspace above Foilboard, Foilboard installed anti-glare side up, 28mm reflective sealed airspace, Foilboard, 28mm x 38mm x 0.55 BMT battens spaced 600mm c/c, 10mm plasterboard. Fully sealed airspace assumes no dust cover on upward facing surfaces. Enclosed cavity to prevent air ingress. Calculated per AS/NZS 4859, Part 1&2 2:2018. Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system pathway non-reflective enclosed sub floor air film. If elements of construction vary from that described, this may produce a difference thermal resistance result.

Where applicable, Foilboard GREEN should be installed per the National Construction Code (NCC), state building legislations and/or a performance solution.

Application - Sheds Large Structures

SYSTEM R VALUES

Walls - Installed Directly to Walls

FOILBOARD PANEL	HEAT FLOW WINTER	HEAT FLOW SUMMER	ADDED INSULATION R VALUE HEAT FLOW WINTER	ADDED INSULATION R VALUE HEAT FLOW SUMMER
GREEN 50	Rt2.7	Rt2.6	R2.5	R2.4
GREEN 40	Rt2.5	Rt2.4	R2.3	R2.2
GREEN 25	Rt2.2	Rt2.1	R2.0	R1.9
GREEN 20	Rt2.0	Rt2.0	R1.8	R1.8

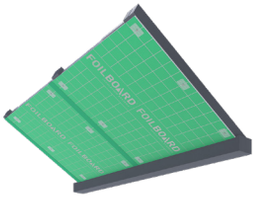
System Description: Metal cladding, steel top-hat grits 64mm x 34mm x 1.0mm at 1200mm c/c, Foilboard installed to top-hats. Steel columns 150mm x 50mm x 1.5mm 400mm c/c, 19mm x 35mm pine battens spaced 600mm c/c, 10mm plasterboard lining. Calculated per AS/NZS 4859, Part 1&2 2:2018. Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system. If elements of construction vary from that described, this may produce a difference thermal resistance result.

Walls - Compression Fit

FOILBOARD PANEL	HEAT FLOW WINTER	HEAT FLOW SUMMER	ADDED INSULATION R VALUE HEAT FLOW WINTER	ADDED INSULATION R VALUE HEAT FLOW SUMMER
GREEN 50	Rt2.4	Rt2.3	R2.4	R2.3
GREEN 40	Rt2.3	Rt2.2	R2.3	R2.2
GREEN 25	Rt2.0	Rt2.0	R2.0	R1.9
GREEN 20	Rt1.9	Rt1.9	R1.8	R1.8

System Description: Metal cladding, steel top-hat girts 64mm x 34mm x 1.0mm at 1200mm c/c, Foilboard installed between top-hats. Steel columns 150mm x 50mm x 1.5mm 400mm c/c, 19mm x 35mm pine battens spaced 600mm c/c, 10mm plasterboard lining. Calculated per AS/NZS 4859, Part 1&2 2:2018. Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system pathway. If elements of construction vary from that described, this may produce a difference thermal resistance result.

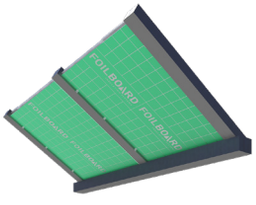
Roof - Installed to Underside of Purlins



FOILBOARD PANEL	HEAT FLOW UP	HEAT FLOW DOWN	ADDED INSULATION R VALUE HEAT FLOW UP	ADDED INSULATION R VALUE HEAT FLOW DOWN
GREEN 50	Rt2.1	Rt2.9	R2.1	R3.4
GREEN 25	Rt1.6	Rt2.6	R1.6	R2.9
GREEN 20	Rt1.5	Rt2.5	R1.5	R2.8

System Description: Metal cladding roof. Foilboard installed to top-hats. Steel columns 150mm x 50mm x 1.5mm at 4000mm c/c. 10 degrees pitched roof, steel top-hat girts 64mmx34mmx1.0mm at 1200 mm c/c. 19mmx35mm pine timber battens at 600mm c/c, 10mm plasterboard lining. Calculated per AS/NZS 4859, Part 1&2 2:2018. Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system pathway. I If elements of construction vary from that described, this may produce a difference thermal resistance result.

Roof - Installed Between Purlins



FOILBOARD PANEL	HEAT FLOW UP	HEAT FLOW DOWN	ADDED INSULATION R VALUE HEAT FLOW UP	ADDED INSULATION R VALUE HEAT FLOW DOWN
GREEN 50	Rt2.0	Rt2.5	R2.1	R2.9
GREEN 25	Rt1.6	Rt2.4	R1.6	R2.8
GREEN 20	Rt1.5	Rt2.4	R1.5	R2.7

System Description: Metal cladding roof. Foilboard installed between top-hats. Steel columns 150mm x 50mm x 1.5mm at 4000mm c/c. 10 degrees pitched roof, steel top-hat girts 64mmx34mmx1.0mm at 1200 mm c/c. 19mmx35mm pine timber battens at 600mm c/c, 10mm plasterboard lining. Calculated per AS/NZS 4859, Part 1&2 2:2018. Added insulation R value includes the material insulation R value and the R values of the associated reflective airspaces within the insulation system pathway. If elements of construction vary from that described, this may produce a difference thermal resistance result.

Where applicable, Foilboard GREEN should be installed per the National Construction Code (NCC), state building legislations and/or a performance solution.

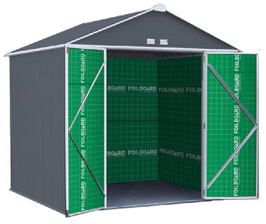
Applications - Other

Garage Doors

By installing Foilboard Insulation on a panel lift garage door, it will reduce the radiant heat entering your garage and decrease energy costs of the home. Insulating the garage door will improve the comfort of the garage for other uses such as home gym, providing an additional living or workspace.

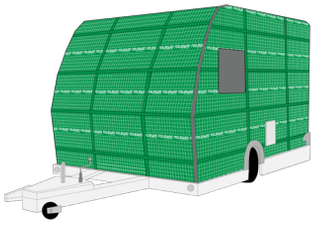
- Total System R Values of over Rt1.5 can be achieved.

Garden Shed



Foilboard is a great choice for garden sheds, providing a lightweight, durable and easy to install solution. It's rigid panel design allows for quick installation making it perfect for D.I.Y enthusiasts looking to enhance their shed's thermal efficiency.

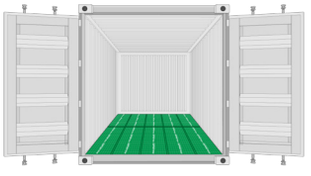
Caravans & Motor Homes



Foilboard is ideal for use in van and motor-home projects. It is easy to handle, won't absorb moisture and has a radiant heat barrier that aids in preventing radiant heat from entering your vehicle.

It is perfect for use in the walls and the roof with its slimline design, that allows you to maximise your living space within your motor home.

Shipping Containers



Foilboard insulation will provide superior thermal resistance for the ceiling, walls and floor.

Foilboard is retrofitted inside the shipping container to the ceiling, walls and floor to create a complete thermal and moisture barrier to withstand the external elements.

Where applicable, Foilboard GREEN should be installed per the National Construction Code (NCC), state building legislations and/or a performance solution.

Design Services

Ensuring Optimal Performance

Foilboard Insulation offers a valuable design service to aid in the design and construction stages of every project.

From commercial projects, to the humble renovation or D.I.Y project, our technical team is always happy to provide advice and guidance for any project.

- Design Assistance
- Installation Guidance
- Technical Data
- Thermal Calculations

A Better Product Improves Your Performance

Unlike traditional bulk insulation, Foilboard insulation panels slimline profile makes for an ideal thermal break and vapor barrier, and with its superior thermal performance, it ensures a continuous “esky” effect in the building year round.

- **Manufactured to Australian Standards**
- **NCC Compliant**
- **Fire retardant**
- **Formaldehyde free**
- **CFC & HCFC free**
- **No dangerous airborne particles**
- **Achieves high R-values without the need for re-engineering the building’s design**
- **Installed without thermal bridging**
- **Lightweight and fast to install**
- **Impervious to moisture**
- **100% Australian Made & Owned**

FOILBOARD
INSULATION SYSTEMS

Foilboard Accessories

STANDARD FASTENERS

30mm nail with blank plate 50mm(W) x 35mm(D)

Used to fix Foilboard panels GREEN 10 & 15 to timber wall frames, battens and underfloor.

CODE: FB041
QTY: 250
COVERAGE: 15x FOILBOARD PANELS PER BOX

ULTRA FASTENERS

40mm nail with blank plate 50mm(W) x 35mm(D)

Used to fix Foilboard panels GREEN 20 & 25 to timber wall frames, roof, battens and underfloor

CODE: FB042
QTY: 250
COVERAGE: 15x FOILBOARD PANELS PER BOX

BLANK FASTENERS

blank plate 50mm(W) x 35mm(D)

Used to fix Foilboard panels using non-standard screws & nails to wall frames and underfloor.

CODE: FB043
QTY: 250
COVERAGE: 15x FOILBOARD PANELS PER BOX

METAL FASTENERS

30mm screw with blank plate 50mm(W) x 35mm(D)

Used to fix Foilboard panels GREEN 10 & 15 to steel wall frames, underfloor and purlins.

CODE: FB044
QTY: 250
COVERAGE: 15x FOILBOARD PANELS PER BOX

METAL ULTRA FASTENERS

40mm screw with blank plate 50mm(W) x 35mm(D)

Used to fix Foilboard panels GREEN 20 & 25 to steel wall frames, underfloor and purlins.

CODE: FB045
QTY: 250
COVERAGE: 15x FOILBOARD PANELS PER BOX

FLOOR SADDLES

suits timber or metal, 50mm (W) x 40mm(D)

Sits on top of joists to hold Foilboard panels GREEN 10,15 & 20 in place before laying floor in new builds and renovations.

CODE: FB051
QTY: 200
COVERAGE: 15x FOILBOARD PANELS PER BOX

STANDARD FASTENERS

25mm(W) x 90mm(D)

Used to fix Foilboard panels GREEN 10 - 50 between framework. joists, purlins or rafters.

CODE: FB054
QTY: 400
COVERAGE: 15x FOILBOARD PANELS PER BOX

JOINING TAPE

green & silver types

Used to cover butt joints of Foilboard panels.

CODE: FB061 & FB062
QTY: 1

SPACER BLOCKS

60mm(W) x 60mm(L) x 20mm(D)

Used to create an airspace with Foilboard panels

CODE: FB071
QTY: 100
COVERAGE: 15 - 25M²

NEED HELP SELECTING THE RIGHT ACCESSORIES?
Contact our team info@foilboard.com.au

Environment

Foilboard and the Environment

Designed with sustainability in mind, Foilboard Insulation Panels will last the life of the building.

It is one of very few products on the market that creates a true thermal break, meaning the long term benefits of Foilboard Insulation Panel far outweigh any other insulation material.

The material's ability to create a more consistent ambient temperature means you are not reliant on inefficient artificial heating and cooling.
This reduces energy use and the production of greenhouse gases creating a more sustainable future for all, and saves you money.

There is no solid waste generated during the EPS manufacturing process. Waste and off-cuts are easily put back into the production process.

The pure aluminum that is directly laminated to both sides of the Foilboard Insulation Panel is also 100% recyclable.

Foilboard GREEN

- NCC compliant
- Environmentally safe
- No harmful "itchy" fibres
- Fire retardant rigid panel
- Lightweight & durable

Foilboard GREEN insulation panel ensures optimum performance by creating a thermal barrier around your building or home reducing your energy consumption costs and carbon footprint making for a healthier, greener environment.

Designed, tested and manufactured in Australia for over 30 years, Foilboard GREEN insulation panel was the first panel of its kind in the Australian market.

Frequently Asked Questions

WHY IS FOILBOARD AN EFFECTIVE SOLUTION FOR YOUR INSULATION REQUIREMENTS?

Foilboard is a high-performance, rigid panel insulation system designed to deliver exceptional thermal performance across a wide range of building applications. It effectively combats all three forms of heat transfer, radiation, conduction, and convection. With the ability to reflect up to 97% of radiant heat, Foilboard helps maintain stable indoor temperatures throughout the year. Its continuous insulation layer eliminates thermal bridging, ensuring energy efficiency across walls, floors, roofs, and more. Lightweight, easy to handle, and moisture-resistant, Foilboard is quick to install and engineered to retain its integrity for the lifetime of the building, without sagging, shrinking, or deteriorating over time.

WHAT IS THE DIFFERENCE BETWEEN THE GREEN AND SILVER SIDES OF FOILBOARD?

The green side of the Foilboard panel features an anti-glare coating, designed to reduce sun glare during installation and improve on-site safety and comfort. While there is a slight technical variation between the two sides, both contribute effectively to the panel's overall thermal performance.

HOW DOES FOILBOARD CONTRIBUTE TO ACHIEVING A HIGHER TOTAL SYSTEM R-VALUE?

Total System R-Value includes the combined effect of insulation, air gaps, and construction materials. Foilboard enhances this by providing a continuous thermal barrier (preventing heat loss through gaps or compressed insulation). Reflective surfaces will improve performance of the system when installed with adjacent air spaces.

CAN FOILBOARD BE USED IN BOTH HOT AND COLD CLIMATES?

Yes! Foilboard is designed to work in all climate zones. Its reflective properties help keep homes cooler in summer by reflecting heat away, while in winter, it helps retain warmth inside the building. This adaptability makes it an excellent choice for Australian homes and commercial buildings.

HOW DOES FOILBOARD IMPROVE ENERGY EFFICIENCY IN HOMES & COMMERCIAL SPACES?

By reducing thermal bridging and reflecting radiant heat, Foilboard helps maintain stable indoor temperatures, reducing the reliance on heating and cooling systems. This leads to lower energy bills for homeowners and businesses, reduced carbon footprint due to less energy consumption and improved comfort levels by preventing heat loss in winter and heat gain in summer.

FOILBOARD COMPLIANT WITH AUSTRALIAN BUILDING CODES AND BASIX ENERGY EFFICIENCY REQUIREMENTS

Yes, Foilboard Insulation complies with Australian building codes and is manufactured to meet relevant energy efficiency standards. It supports BASIX (Building Sustainability Index) compliance by improving the thermal performance of buildings. Final compliance depends on the overall building design, so it's important to ensure all elements, including insulation meet current regulatory requirements.

Technical Data

	GREEN 10	GREEN 15	GREEN 20	GREEN 25	GREEN 30	GREEN 40	GREEN 50
R Value (K.m²/W)	R0.30	R0.43	R0.55	R0.67	R0.77	R1.0	R1.2
Thickness (mm)	10	15	20	25	30	40	50
Declared Thermal Conductivity (W/m.K)	0.033	0.035	0.036	0.038	0.039	0.040	0.041
Sheet Size (mm)	2400x 1200 2700 x 1200	2400x 1200 2700 x 1200	2400x 1200	2400x 1200	2400x 1200	2400x 1200	2400x 1200
Weight (g)	767 848	995 1100	1233	1467	1622	2170	2500
Density (kg/m³)	13.5						
Core	Fire retardant SL grade EPS 70 kPa at 10% compression						
Surface	100% pure reflective aluminium						
Antiglare	Metal etching UV stabilised green ink						
Adhesive	Contact adhesive proprietary formula						

EMITTANCE	
Silver Face	E0.03
Antiglare Face	E0.06

OZONE DEPLETING SUBSTANCES	
Content	0
Manufacture	0

VOC (VOLATILE ORGANIC COMPOUNDS)	
Content	0
Manufacture	0
Rate of vapour transmission (max) (ug/m²s)	0

PRODUCT TESTING & COMPLIANCE	
Thermal performance	AS/NZS 4859.1
Surface corrosion & wet delamination resistance	AS/NZS 4859.1 Appendix E
Thermal resistance AS/NZ4859.1 2018	ASTM-C 518
Emittance	AS/NZS 4201-5-1994 ASTM E408
Ignitability	AS 1530.3
Flame spread	AS 1530.3
Heat evolved	AS 1530.3
Smoke developed	AS 1530.3
Rigid cellular polystyrene – moulded	AS 1366.3
Nominal density	AS 1366.3
Water barrier	AS/NZS 4201.4
Shrinkage	AS/NZS 4201.3
Vapour Transmission	AS 2498.5
Dry Delamination	AS/NZS 4201.1

COMPARATIVE TESTING OF SOME MATERIALS TO AS 1530.3 EARLY FIRE HAZARD TEST

	Ignitability index (0-20)	Spread of flame index (0-10)	Heat evolved index (0-10)	Smoke developed index (0-10)
Foilboard	0	0	0	0-1
EPS	12	0	3	5
Australian Softboard	16	9	7	3
Oregon	13	6	5	3

SOURCE
EBS Notes on the Science of Building NSB66 Foilboard® Australia Pty

MANUFACTURING PLANT
Foilboard insulation panel is manufactured in Pakenham, Victoria and made from Australian sourced materials.

NEED MORE INFORMATION?
Email your project details to info@foilboard.com.au

FOILBOARD®
INSULATION SYSTEMS

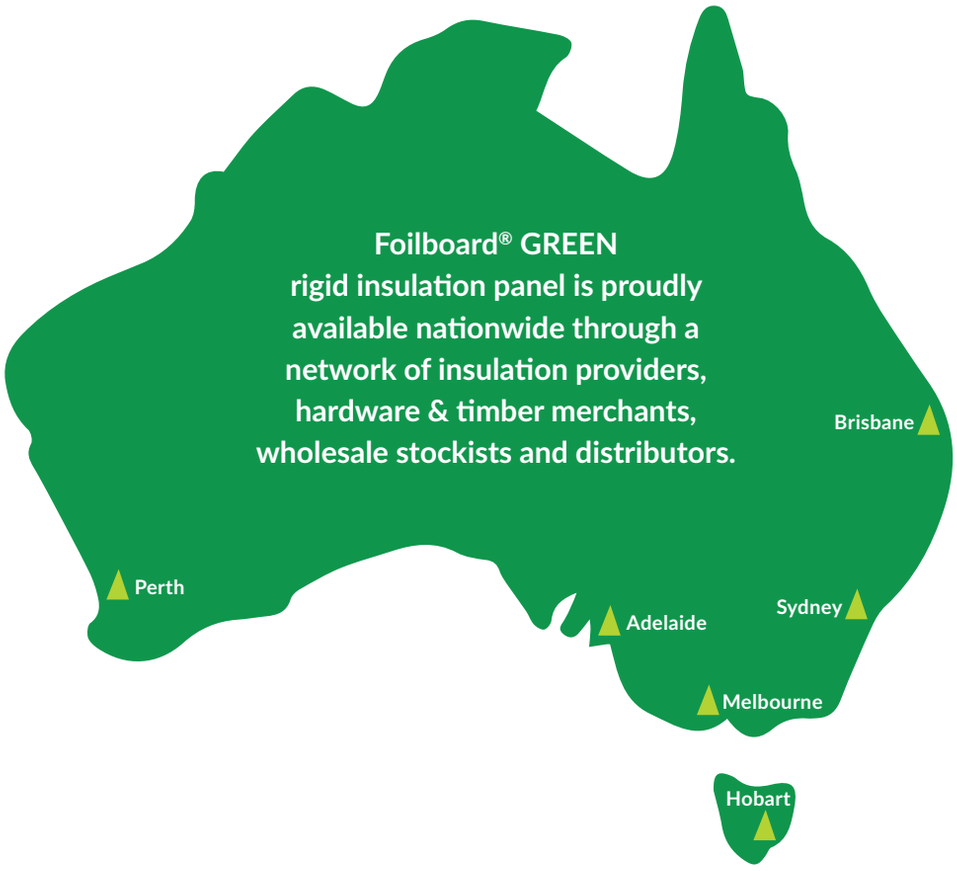
THE SMARTER WAY TO INSULATE

Australia's most versatile rigid insulation panels for sheds, underfloors, roofs, walls and more.

Foilboard is a leading insulation manufacturer and supplier of energy saving, sustainable building insulation products.

Foilboard panels achieve high thermal resistance, reduce airflow and increase energy savings.

Foilboard GREEN has been engineered and designed to ensure a quick and easy installation as a non-itchy, fibre free rigid insulation panel that will provide continuous thermal performance for the life of the building.



NEED AN INSTALLATION GUIDE?
Email info@foilboard.com.au

FOILBOARD®
INSULATION SYSTEMS

THE SMARTER WAY TO INSULATE

Australia's most versatile rigid insulation panels
for sheds, underfloors, roofs, walls and more.

ENQUIRIES

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