

SILVERBATTS™

WaveCoreMAX

DOUBLE SIDED REFLECTIVE MULTI-LAYER EXPANDABLE INSULATION



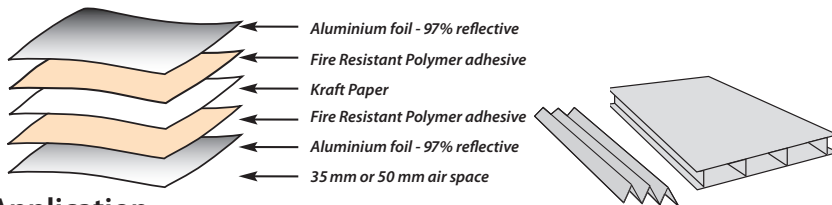
Product: WCM-4501200 | WCM-6001200

SILVERBATTS™ WaveCoreMAX™ is an expandable 97% reflective insulation, designed for use in roofs and walls in residential and commercial buildings. Double-sided reflective panelling creates a reflective air space in your wall or roof structure, significantly increasing the R-value of your building system.

- ✓ 97% Reflective
- ✓ Fibre-free & non-allergenic
- ✓ Moisture resistant
- ✓ Easy to install

Construction

SILVERBATTS™ WaveCoreMAX™ is manufactured with sheets of five-layer aluminium foil laminate, composed of kraft paper with aluminium foil bonded to both sides with a fire-resistant polymer adhesive. Two sheets of foil laminate are assembled together, separated by a vertical webbing of the same material, to create the panel. A flange at each side allows multiple panels to interlock.



Application

SILVERBATTS™ WaveCoreMAX™ is designed for use in ceilings and walls in residential, commercial and industrial applications.

SILVERBATTS™ WaveCoreMAX™ can be manufactured to custom sizes for large orders; a semi-transparent anti-glare finish may be specified in any colour including flat white.

Insulation

SILVERBATTS™ WaveCoreMAX™ can be used in a range of systems. R-values vary depending on direction of heat flow and the thickness of reflective air spaces created. Reports on system R-values, calculated in accordance with AS/NZS 4859.1:2002 by an accredited thermal engineering consultant, are available for each application of this product.

Installation

SILVERBATTS™ WaveCoreMAX™ is sold flat and expanded on site, where the WaveCore interior pieces are inserted between the panels to maintain its shape. SILVERBATTS™ WaveCoreMAX™ is placed across the top of the roof joints, suspended between rafters, in cavities or between studs in walls.

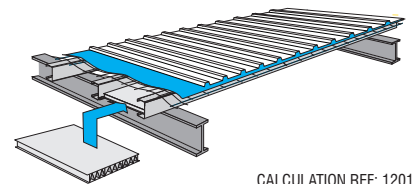
SILVERBATTS™ WaveCoreMAX™ is non-toxic, non-allergenic, non-irritant and not classified as hazardous according to WorkSafe Australia criteria. No protective clothing or breathing filters are required. It is recommended that a dust mask and eye protection be worn to protect the installer from any disturbed dust.

Manufacturer's approval or independent advice should be sought for any proposed usage outside of the recommended application.

DECLARED TOTAL SYSTEM R-VALUES*

COMMERCIAL METAL DECK ROOF

1° - 5° pitched metal roof with one layer of SILVER**SARK® xR** and one layer of SILVERBATTS™ WaveCoreMax™ installed between purlins, no ceiling.

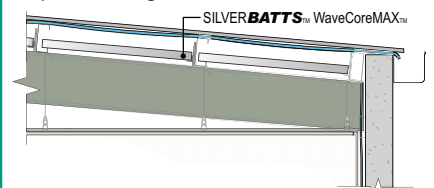


CALCULATION REF: 12019

WINTER R_T1.9 SUMMER R_T5.5

COMMERCIAL METAL DECK ROOF

1° - 5° pitched metal roof with one layer of Ametalin ThermalBreak 8™ and one layer of SILVERBATTS™ WaveCoreMax™ installed in between purlins, suspended ceiling.

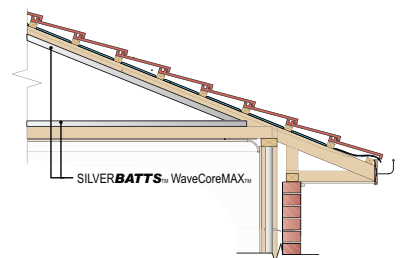


CALCULATION REF: 12287

WINTER R_T2.5 SUMMER R_T8.7

TILE ROOF / METAL ROOF

22° pitched tile roof or metal roof, unventilated attic, plasterboard ceiling, with one layer of SILVER**SARK® xR** and one layer of SILVERBATTS™ WaveCoreMax™ installed across ceiling joists or in between rafters.



CALCULATION REF: 12328

WINTER R_T1.9 SUMMER R_T3.8



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* The contribution of this product to the total R-value depends on installation and environmental conditions. The R-value will be reduced in the event of the accumulation of dust on upward facing surfaces and in those cavities that are ventilated.

Classification

SILVERBATTS™ WaveCoreMAX™ classifications under AS/NZS 4200.1:1994:

PRODUCT		SILVERBATTS™ WaveCoreMAX™			
		HEAT FACTOR	SPREAD FACTOR	IGNITABILITY	SMOKE DEVELOPED
FIRE PERFORMANCE	AS 1530.3:1993	0	0	0	0
EMITTANCE	AS/NZS 4201.5:1994	SIDE A: 0.03	SIDE B: 0.03		
REFLECTIVITY		SIDE A: 97%	SIDE B: 97%		
RESISTANCE TO DRY DELAMINATION	AS/NZS 4201.1:1994	Pass			
RESISTANCE TO WET DELAMINATION	AS/NZS 4201.2:1994	Pass			
SHRINKAGE	AS/NZS 4201.3:1994	< 0.5%			

NOTE: These are the minimum performance figures when tested in accordance with AS/NZS 4200.1:1994. They are not production specifications.

NCC/BCA Compliant

SILVERBATTS™ WaveCoreMAX™ complies with AS/NZS 4200.1:1994 and AS/NZS 4859.1:2002 and therefore satisfies all requirements of the National Construction Code and Building Code of Australia.

Durability

Weather

SILVERBATTS™ WaveCoreMAX™ is generally installed from within a building. It is not designed to withstand prolonged exposure to weather and should not be stored outside.

Corrosion

Under normal use in residential or commercial conditions, SILVERBATTS™ WaveCoreMAX™ is not subject to significant degradation except in the immediate coastal vicinity, where external upward facing foil can be corroded by salt. However, corrosion has minimal effect on thermal performance, as the thermal properties depend primarily on the downward facing surfaces. The foil surface on SILVERBATTS™ WaveCoreMAX™ can also be corroded if exposed to substances which are alkaline or acidic.

Dust Accumulation

SILVERBATTS™ WaveCoreMAX™ systems installed horizontally and exposed to dust accumulation may have reduced reflectivity of up to 50% over time. Initial performance will therefore generally be higher than stated performance.

Fire Performance

The Building Code of Australia calls for fire performance to be tested under AS/NZS 1530.3: 1999, *Methods for fire tests on building materials, components and structures*. When tested under this standard by the Building Research Association of New Zealand, SILVERBATTS™ WaveCoreMAX™ returned a four-zero rating, the best possible.

Electrical

Ametalin stresses the importance of safe installation practices for foil-based insulation as critical to installer and consumer safety. Aluminium Foil Insulation Association Inc. (AFIA) has prepared Work Method Statements and Hazard Management forms to

assist contractors and installers in safe installation of reflective insulation products. These documents are available under 2009 AFIA WMS & Hazard Management, at www.afia.com.au/news/health-and-safety/.

Unlike bulk insulation, which can contain heat around wiring, electrical equipment and heating flues, SILVERBATTS™ WaveCoreMAX™ does not create a fire hazard. This means that standard grades of wiring can be used around SILVERBATTS™ WaveCoreMAX™, rather than the heavier grade wiring required for bulk insulation. SILVERBATTS™ WaveCoreMAX™, like all foil insulation, is specifically excluded from AS/NZS 3008.1:2009, clause 3.4.3, which covers the de-rating of wiring used in conjunction with bulk insulation. Single insulated conductors such as switches and sockets should be treated in accordance with AS/NZS 3000:2007, clause 5.7.3.7, e.g. by clipping wiring together with a cable tie. Shrouds are not required.

Moisture Absorption

A build-up of moisture within bulk insulation can lead to corrosion of steel building members and rotting of timber, particularly in humid areas and where buildings are continuously air conditioned for much of the year. Vapour barriers are commonly specified to eliminate this risk. As SILVERBATTS™ WaveCoreMAX™ does not absorb moisture, no separate vapour barrier is required. Research by CSIRO has demonstrated that foil membranes in walls in climates as cold as Canberra will not condense moisture when correctly installed.

Dimensions

SILVERBATTS™ WaveCoreMAX™ is sold in sizes:
 450 mm x 1200 mm x 50 mm
 600 mm x 1200 mm x 50 mm
 Corrugated Core: 150 mm x 1200 mm

Specification Notes

When specifying, state the following:

Product Name: Trade Select™ SILVERBATTS™ WaveCoreMAX™

The insulation to be installed shall be SILVERBATTS™ WaveCoreMAX™ multi-layer expandable double-sided reflective insulation, emittance bright sides 0.03. Product is manufactured by Ametalin.

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