

PLEATED SILVERBATTS™

DOUBLE SIDED REFLECTIVE EXPANDABLE WALL INSULATION



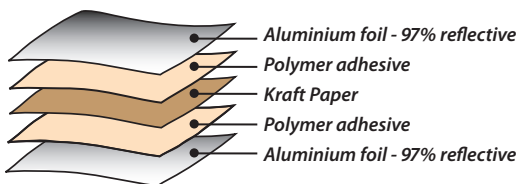
Product Code: PB-4501200 | PB-6001200 | I/N: 0810225, 0810226

PLEATED SILVERBATTS™ are a double-sided reflective expandable wall insulation, designed for use in all wall systems. The material is folded into accordion pleats and expanded into spaces between studs, joists and other framing members. The double-sided reflective surfaces contribute extra R-value to your wall system by creating a reflective air space. Use multiple PLEATED SILVERBATTS™, or use in conjunction with a double-sided reflective wall wrap like SilverSark xR, to create additional reflective air spaces and increased R-value.

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

Construction

PLEATED SILVERBATTS™ are manufactured in sheets of five-layer aluminium foil laminate, composed of kraft paper with 97% aluminium foil bonded to both sides with a highly durable, fire-resistant polymer adhesive. They are folded into pleats and expanded within the wall system.



Insulation

PLEATED SILVERBATTS™ are used in a range of systems. R-values vary depending on the 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.

Application

PLEATED SILVERBATTS™ are designed for use in walls in residential, commercial and industrial applications in all regions of Australia. They can be measured and cut as required to fit any wall space, and will not compact over time.

Unlike bulk insulation which fills up the framing cavity, PLEATED SILVERBATTS™ create a reflective air gap that provides extra R-value and improves thermal performance.

Installation

Staple fully expanded PLEATED SILVERBATTS™ between timber studs, leaving a 30-40 mm gap between the PLEATED SILVERBATTS™ and plasterboard. Ensure batts are flattened as much as possible. To install in steel framing, apply double sided tape to studs and affix in place.

To ensure optimal thermal performance and satisfactory durability, a minimum 25 mm air space adjacent to each side of the product is recommended.

PLEATED SILVERBATTS™ are 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.

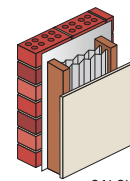
Manufacturer's approval or independent advice should be sought for any proposed usage outside of the recommended application.

* 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.

DECLARED TOTAL SYSTEM R-VALUES*

BRICK VENEER

with one layer of SILVER**SARK**® xR + two layers of PLEATED SILVERBATTS™



CALCULATION REF: 299w32

WINTER R_T 3.9 SUMMER R_T 3.5

BRICK VENEER

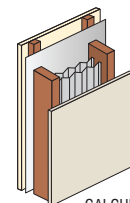
with one layer of SILVER**SARK**® or SILVER**WRAP**™ + two layers of PLEATED SILVERBATTS™

CALCULATION REF: 299w3225b

WINTER R_T 3.4 SUMMER R_T 3.0

LIGHT WEIGHT CLADDING (FIXED TO BATTENS)

with one layer of SILVER**SARK**® xR + two layers of PLEATED SILVERBATTS™

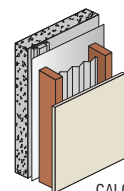


CALCULATION REF: 12009

WINTER R_T 3.8 SUMMER R_T 3.3

LIGHT WEIGHT CLADDING

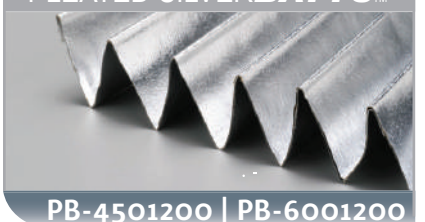
(75mm AERATED CONCRETE PANEL FIXED TO BATTENS) with one layer of SILVER**SARK**® xR + one layer of PLEATED SILVERBATTS™



CALCULATION REF: 12344

WINTER R_T 3.5 SUMMER R_T 3.2

PLEATED SILVERBATTS™



PB-4501200 | PB-6001200



PLEATED SILVERBATTS™

Classification

DOUBLE SIDED REFLECTIVE EXPANDABLE WALL INSULATION

PLEATED SILVERBATTS™ classifications in accordance with AS/NZS 4200.1:1994

PRODUCT		PLEATED SILVERBATTS™ AS/NZS 4200.1:1994			
		HEAT FACTOR	SPREAD FACTOR	IGNITABILITY	SMOKE DEVELOPED
FIRE PERFORMANCE	AS 1530.3-1999	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.

Durability

Weather

PLEATED SILVERBATTS™ are generally installed from within a building. They are not designed to withstand prolonged exposure to weather and should not be stored outside.

Corrosion

In use under normal residential or commercial conditions, PLEATED SILVERBATTS™ are not subject to significant degradation except in the immediate coastal vicinity, where foil facing can be corroded by airborne salt. The foil coating on PLEATED SILVERBATTS™ can also be corroded if exposed to substances which are alkaline or acidic.

Dust Accumulation

PLEATED SILVERBATTS™ 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 National Construction Code/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, PLEATED SILVERBATTS™ 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, PLEATED SILVERBATTS™

do not create a fire hazard. This means that standard grades of wiring can be used around PLEATED SILVERBATTS™, rather than the heavier grade wiring required for bulk insulation. PLEATED SILVERBATTS™, like all foil insulation, are 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 PLEATED SILVERBATTS™ do 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.

NCC/BCA Compliant

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

Dimensions

PLEATED SILVERBATTS™ are sold in sizes:
450 mm x 1200 mm (8.6 m²) 600 mm x 1200 mm (11.5 m²)

Specification Notes

When specifying state the following:

Product Name: PLEATED SILVERBATTS™

The insulation to be installed shall be PLEATED SILVERBATTS™ fibre free, double-sided reflective insulation, comprising of kraft paper sandwiched between foil facing to both sides, manufactured by Ametalin.

Emittance to both faces: 0.03

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AUSTRALIAN DESIGNED, AUSTRALIAN OWNED.

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ametalin

raising the standard