

Skillion Roof Insulation


Mammoth skillion sections are designed to promote high thermal performance in modern skillion roof or flat roof designs.

Mammoth® high density, moisture-resistant sections are made from 100% polyester with a controlled loft to ensure the required 25mm air ventilation gap to the roof is always maintained.

Mammoth products contain recycled polyester fibres. Mammoth ceiling skillion section insulation uses up to 9,300 recycled PET plastic bottles per 100sqm*.

They are Red List Free and allow a smooth crease-free friction-fit to enhance thermal performance.

For ceilings with sufficient roof space there is the option of our [Ceiling Blanket Insulation](#) and for skillion and truss roofs we have [Ceiling Batten Insulation](#).

PRODUCT RANGE	PACK SIZES							
		Airley / Card	Density (kg/m3)	R-Value	Nominal thickness (mm)	Dimensions (mm)	Pieces per pack	Area per pack (m2)
Skillion Sections	✓	Airley	32.87	R 2.9	115	560 x 1200	3	2.02
Skillion Sections	✓	Airley	32.87	R 2.9	115	860 x 1200	5	5.16
Skillion Sections	✓	Airley	15.15	R 3.2	165	570 x 1200	5	3.42
Skillion Sections	✓	Airley	15.15	R 3.2	165	870 x 1200	4	4.18
Skillion Sections	✓	Airley	19.39	R 3.6	165	870 x 570	6	2.98
Skillion Sections	✓	Card	25.71	R 3.6	140	870 x 570	6	2.98
Ceiling Blanket		Card	9.79	R 4.1	210	870 x 5750	2	10
Skillion Sections		Card	17.67	R 5.0	215	870 x 570	8	3.97
Batten Blanket		Card	16.67	R 1.0	45	580 x 12930	2	15
Batten Sections		Airley	47.10	R 1.0	35	540 x 1200	10	6.48
Batten Sections		Airley	42.22	R 1.3	45	360 x 2400	9	7.78
Batten Sections		Airley	42.22	R 1.3	45	560 x 2400	6	8.06

Double Layering - Mammoth Skillion sections can be double layered. For example: R 3.6 x 2 layers = R 7.2 (280mm nominal thickness). Double the quantity of product is required. For instance, a 100m2 area requires 200m2 of product to achieve a double layer.

KEY FEATURES

- High performance semi-rigid 100% polyester sections.
- Controlled loft to provided assured air-space to roof lining.
- Self-supporting for a smooth friction fit without creases, folds or tucks.
- Provides thermal and acoustic benefits for residential and commercial applications.
- Mammoth products contain recycled polyester fibres. Mammoth ceiling skillion insulation uses up to 9,300 recycled PET plastic bottles per 100sqm*.
- Easy and safe to install - simply squeezes between joists with no need for staples.
- Safe and easy to work with, sections can easily be cut using wide blade craft knives or specialised insulation saws.
- Mammoth sections come in pre-cut sections of varying widths and lengths.
- Mammoth is moisture, mould and mildew resistant.
- Red List Free - no formaldehyde or pesticides added.
- Heat bonded - no glues or binders that can break down so it won't sag or settle over time.
- Unaffected by moisture, Mammoth insulation will continue to perform once dried out.
- Safe, non-itch, odourless and non-toxic - no precautions are required for handling the product.

- Most Mammoth skillion sections are BRANZ Appraised 797.
- NZ Green Building Council approved.
- Mammoth products are made in a zero waste production process and are fully recyclable.
- Recycling plastic protects the environment by keeping the carbon content locked up in the polyester fibre and reducing landfill waste.
- Mammoth skillion roof insulation products have an ODP of zero.
- Long lasting, Mammoth insulation is performance warranted for 90 years (T&Cs apply)

**Calculations are based on 500ml PET Bottles (16.2g).*

TECHNICAL DETAILS

Technical Attributes	Standard	Test Result
New Zealand Building Code		
✓ Durability	Clause B2.3.1 (a) (b) Clause B2.3.2	Ref: BRANZ Appraisal No 797 ¹
✓ Internal Moisture	Clause E3.3.1	Ref: BRANZ Appraisal No 797 ¹
✓ Hazardous Building Materials	Clause F2.3.1	Ref: BRANZ Appraisal No 797 ¹
✓ Energy Efficiency	Clause H1.3.1(a) Clause H1.3.2 E	Ref: BRANZ Appraisal No 797 ¹
Product Safety		
✓ Non Toxic	OSH Health and Safety Guidelines ²	Polyester products are 'non-toxic'
✓ Non Irritant	OSH Health and Safety Guidelines ²	Polyester products are 'non-irritant'
✓ Respiratory Safe		Polyester fibres are non-respirable
✓ Fire Test ³	ISO9705	Group1S (R3.2 sections only)
	AS/NZS60695.2.11	Passed - Glow wire flammability test
	AS/NZS60695.11.5	Passed - Test flames (Needle-flame test)
✓ VOC Emission Safe ⁴	Total VOC ≤ 0.5mg/m ⁴	< 0.005mg/m ⁴ - level below detection ⁵
	Formaldehyde ≤ 0.06mg/m ⁴	< 0.009mg/m ⁴ - level below detection
✓ Glue Free		Free from all glues
Other		
✓ Thermal Performance	AS/NZS4859.1	Only applies to products with declared R-values
✓ Non Corrosive		Materials composed entirely of polyester are regarded as non-corrosive and are exempt from testing. Alkalinity of pH 7.8
✓ Vermin Resistant		Not a food source for vermin (and not treated)
✓ Odourless		Mammoth is odourless and will not absorb odours
✓ Moisture Resistant ⁶	ASTM C1104	Absorption rate of less than 0.2% by weight

(1) Meet or contribute to these provisions when designed, used, installed and maintained in accordance with BRANZ Appraisal 797 or 801.

(2) Occupational Safety and Health Service. Health and Safety Guidelines for the Selection and Safe Handling of Synthetic Mineral Fibres, Dept of Labour, 1994.

(3) Can safely cover IC-rated downlights. If luminaire rating is unknown, minimum clearance of 100mm to any insulation is required.

(4) Mammoth has been tested under ASTM D5116. Based on test results for a product with similar nominal weight.

(5) All individual VOCs were less than their threshold limit values. Carcinogens and reproductive toxins were not identified as part of the VOCs.

(6) If the products should become wet the full thermal performance will be restored once the product is dried completely.

INSTALLATION & WARRANTY

Installation

Mammoth Skillion Ceiling Insulation Sections must be installed according to the manufacturer's guidelines and in accordance with NZS 4246 (Energy Efficiency - Installing Insulation in Residential Buildings). Installation Instructions for Mammoth Skillion Ceiling Sections can be found at www.mammoth.co.nz/downloads. Contact us on 0800 MAMMOTH for more details.

90 Year Warranty

InZone Industries Holdings Ltd (InZone) manufactures Mammoth® 100% polyester insulation products in New Zealand which are designed to provide long-lasting, durable thermal and acoustic insulation. InZone warrant that, provided the polyester insulation is installed correctly and remains adequately protected, Mammoth will perform for 90 years in the building in which it is installed. This 90 Year Manufacturer's Warranty covers insulation material durability when installed in accordance with the manufacturers installation instructions and NZ4246: Energy Efficiency - Installing insulation in residential buildings. Download our Mammoth Insulation Warranty [here](#).

BRANZ Appraised

Mammoth Skillion Roof Sections have been tested by, and is covered by BRANZ Appraisal 797.

Correct as at 07 June 2026