


# 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 plastic bottles per 100sqm\*.

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

PRODUCT RANGE					PACK SIZES			
		Airley / Card	Density (kg/m3)	R-Value	Nominal thickness (mm)	Dimensions	Pieces per pack	Area per pack (m2)
Skillion Sections	✓	Airley	32.87	R 2.9	115	560mm x 1.2m	3	2.02
	✓	Airley	32.87	R 2.9	115	860mm x 1.2m	5	5.16
	✓	Airley	15.15	R 3.2	165	570mm x 1.2m	5	3.42
	✓	Airley	15.15	R 3.2	165	870mm x 1.2m	4	4.18
			Airley	19.39	R 3.6	165	870mm x 570mm	6

## 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 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 50 years (T&Cs apply).
- Manufactured by InZone Industries Ltd, NZ's first and only Toitū net carbonzero certified insulation manufacturing organisation.

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

# TECHNICAL DETAILS

Technical Attributes	Standard	Test Result
<b>New Zealand Building Code</b>		
✓ Durability	Clause B2.3.1 a) 15 years Clause B2.3.1 b) 50 years	Ref: BRANZ Appraisal No 797 <sup>1</sup>
✓ Internal Moisture	Clause E3.3.1	Ref: BRANZ Appraisal No 797 <sup>1</sup>
✓ Hazardous Building Materials	Clause F2.3.1	Ref: BRANZ Appraisal No 797 <sup>1</sup>
✓ Energy Efficiency	Clause H1.3.1(a) Clause H1.3.2 E	Ref: BRANZ Appraisal No 797 <sup>1</sup>
<b>Product Safety</b>		
✓ Non Toxic	OSH Health and Safety Guidelines <sup>2</sup>	Polyester products are 'non-toxic'
✓ Non Irritant	OSH Health and Safety Guidelines <sup>2</sup>	Polyester products are 'non-irritant'
✓ Respiratory Safe	n/a	Polyester fibres are non-respirable
✓ Fire Test	ISO9705 AS/NZS60695.2.11 AS/NZS60695.11.5	Group1S (R3.2 sections only) Passed - Glow wire flammability test Passed - Test flames (Needle-flame test)
✓ VOC Emission Safe <sup>3</sup>	Total VOC ≤ 0.5mg/m <sup>3</sup> Formaldehyde ≤ 0.06mg/m <sup>3</sup>	< 0.005mg/m <sup>3</sup> - level below detection <sup>4</sup> < 0.009mg/m <sup>3</sup> - level below detection
✓ Glue Free		Free from all glues
<b>Other</b>		
✓ Non Corrosive	AS/NZS4859.1	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)

<sup>1</sup> Meet or contribute to meeting these provisions when designed, used, installed and maintained in accordance with the statements and conditions of BRANZ Appraisal 797.

<sup>2</sup> Occupational Safety and Health Service. Health and Safety Guidelines for the Selection and Safe Handling of Synthetic Mineral Fibres, Dept, of Labour, 1994.

<sup>3</sup> Mammoth has been tested under ASTM D5116. Based on test results for a product with similar nominal weight.

<sup>4</sup> All individual VOCs were less than their threshold limit values. Carcinogens and reproductive toxins were not identified as part of the VOCs.

## 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](http://www.mammoth.co.nz/downloads). Contact us on 0800 MAMMOTH for more details.

### 50 Year Warranty

Mammoth Insulation has a 50 year warranty. Our product warranty covers that - so long as the insulation is installed correctly and remains adequately protected - Mammoth insulation will perform for 50 years. The warranty applies only to 100% polyester insulation products manufactured by InZone Industries Ltd and not to other composite products manufactured by InZone Industries Ltd. Read the full warranty at [www.mammoth.co.nz](http://www.mammoth.co.nz) for full terms and conditions.

### BRANZ Appraised

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



Correct as at 10 August 2022