

# Carpark Insulation Panel

Mammoth carpark panel insulation is designed to improve the thermal performance of concrete carpark ceilings where there are residential and commercial buildings above.

Designed to be fitted to concrete soffits/slabs, Mammoth® carpark panel insulation enhances the comfort and energy efficiency of buildings above carparks.

Mammoth carpark panels contour over uneven textures which are common place in concrete form work. The airlay manufacture of Mammoth Carpark Panels helps the insulation achieve a seamless fit that supports higher thermal performance across the system by preventing air movement between the insulation panel and the substrate.

Mammoth carpark panel insulation complies with provisions of the New Zealand Building Code (NZBC): AS/NZS 4859.1 for thermal performance and ISO 9705 for the material Group Number 1S for fire performance.

PRODUCT RANGE	PACK SIZES							
	Colour	Density (kg/m <sup>3</sup> )	NRC	R-Value	Nominal Thickness (mm)	Dimensions	Pieces per pack	Area per pack (m <sup>2</sup> )
Carpark Panel	Mottled Grey	28.57	0.85	R 1.7	70	2.4m x 1.2m	4	11.52
	Mottled Grey	32.00		R 2.5*	100	2.4m x 1.2m	3	8.64

\*Minimum order quantities (MOQs) apply.

- Note: Carpark Panel is designed for thermal application and colour contrasts are designed to blend in with the varying natural hues in concrete, as a result, the surface may have differing textures.
- Mammoth Carpark Panel is compliant with the Building Code of Australia C1.1 (AS ISO 9705) and the New Zealand Building Code C/VM (ISO 9705) as a surface lining material.

## KEY FEATURES

- Mammoth Carpark panels are semi-rigid, airlay polyester insulation panels for concrete soffits and slabs.
- 100% heat bonded polyester with thermal and acoustic benefits.
- Suitable for commercial and residential construction.
- Group Number 1-S for fire performance.
- Mottled grey in colour.
- Can easily be cut using wide blade craft knives or specialised insulation saws.
- Designed to be fitted only between concrete Ts (they are not designed to wrap the Ts).
- Mammoth Carpark Panels also assists in absorbing noise to create a quieter environment.
- Supports a seamless installation with high thermal performance across the system.
- Safe, non-itch, odourless and non-toxic - no precautions are required for handling the product.
- Unaffected by moisture, Mammoth insulation will continue to perform once dried out.
- 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.
- NZ Green Building Council approved.
- Mammoth Carpark insulation panels are BRANZ tested.
- Long lasting, Mammoth insulation is performance warranted for 50 years (T&Cs apply).
- 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 100% insulation products manufactured from 100% polyester have an Ozone Depleting Potential (ODP) of zero.
- Manufactured by InZone Industries Ltd, NZ's first and only Toitū net carbonzero certified insulation manufacturing organisation.

## TECHNICAL DETAILS

Technical Attributes	Standard	Test Result
<b>Performance</b>		
✓ Thermal Performance	ASTM C518	As shown on Product Range Table
✓ Acoustic Performance	ISO 354	As shown on Product Range Table
<b>Product Safety</b>		
✓ Non Toxic	OSH Health and Safety Guidelines <sup>1</sup>	Polyester products are 'non-toxic'
✓ Non Irritant	OSH Health and Safety Guidelines <sup>1</sup>	Polyester products are 'non-irritant'
✓ Respiratory Safe	n/a	Polyester fibres are non-respirable
✓ Fire Test	ISO9705	Group 1S
	AS/NZS60695.2.11	Passed - Glow wire flammability test
	AS/NZS60695.11.5	Passed - Test flames (Needle-flame test)
✓ VOC Emission Safe <sup>2</sup>	Total VOC ≤ 0.5mg/m <sup>3</sup>	< 0.005mg/m <sup>3</sup> - level below detection <sup>4</sup>
	Formaldehyde ≤ 0.06mg/m <sup>3</sup>	< 0.009mg/m <sup>3</sup> - level below detection
✓ Glue Free		Free from all glues and chemical binders
<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> Occupational Safety and Health Service. Health and Safety Guidelines for the Selection and Safe Handling of Synthetic Mineral Fibres. Dept, of Labour, 1994, p18.

<sup>2</sup> Another Mammoth product with a similar nominal weight and fibre composition was tested to ASTM D5116 and classed as low VOC emitting.

<sup>3</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 Carpark Panel must be installed according to the manufacturer's guidelines. Installation Instructions for 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 terms and conditions.



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