

# **Underfloor Insulation Sections**

Mammoth underfloor insulation are self-supporting medium density pads that squeeze into place between joists without staples or other fixings.

Cut to a variety of widths, Mammoth® polyester underfloor insulation sections are moisture resistant, high performance options that are safer to install than stapled solutions. Our insulation sections have a range of R-values of up to R3.8 (when double layered). Mammoth products contain recycled polyester fibres. Mammoth underfloor section insulation uses up to 7,800 recycled plastic bottles per 100sqm\*.

PRODUCT RANGE					1	PACK SIZES		
	Eco <sup>a</sup> Choice Aotearoa	BRANZ Appraised	Density (kg/m3)	R-Value	Nominal thickness (mm)	Dimensions (mm)	Pieces per pack	Area per pack (m2)
Underfloor Sections	✓	✓	16.67	R 1.9	90	370 x 1140	16	6.75
	$\checkmark$	$\checkmark$	16.67	R 1.9	90	425 x 1140	16	7.75
	$\checkmark$	$\checkmark$	16.67	R 1.9	90	475 x 1140	14	7.58
	$\checkmark$	$\checkmark$	16.67	R 1.9	90	580 x 1140	12	7.93
	$\checkmark$		15	R 2.8	140	370 x 1140	10	4.21
	$\checkmark$		15	R 2.8	140	425 x 1140	10	4.84
	$\checkmark$		15	R 2.8	140	475 x 1140	10	5.41
	$\checkmark$		15	R 2.8	140	580 x 1140	8	5.28
			35.7	R 3.4	140	370 x 1140	10	4.21
			35.7	R 3.4	140	425 x 1140	10	4.84
			35.7	R 3.4	140	475 x 1140	10	5.41
			35.7	R 3.4	140	580 x 1140	8	5.28
Double Layer - R1.9 x 2	$\checkmark$		16.67	R 3.8	180	370 x 1140	16	6.75*
	$\checkmark$		16.67	R 3.8	180	425 x 1140	16	7.75*
	$\checkmark$		16.67	R 3.8	180	475 x 1140	14	7.58*
	$\checkmark$		16.67	R 3.8	180	580 x 1140	12	7.93*

- For any system single or double layered the joist depth must be greater than the insulation thickness.
- \* For Double Layering 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 airlay sections.
- Self-supporting for a smooth friction fit without creases, folds or tucks.
- Easy and safe to install simply squeezes between joists with no need for staples.
- Mammoth underfloor section insulation uses up to 7,800 recycled plastic bottles per 100sqm. \*
- Mammoth sections come in pre-cut lightweight sections of varying widths and lengths that can be easily cut.
- Unaffected by moisture, Mammoth insulation will continue to perform once dried out.
- Assists in absorbing noise to create a quieter environment.
- Non-corrosive will not affect electrical wiring underfloor.
- Heat bonded no glues or binders that can break down so it won't sag or settle over time.
- Red List Free no formaldehyde or pesticides added.
- Safe, non-itch, odourless and non-toxic no precautions are required for handling the product.
- Mammoth underfloor sections are BRANZ 802 appraised and have Environmental Choice certification. NZ Green Building Council approved.

- Long lasting, Mammoth insulation is performance warranted for 50 years (T&Cs apply).
- Mammoth underfloor insulation products have an Ozone Depleting Potential (ODP) of zero.
- Mammoth products are made in a zero waste production process and are fully recyclable.

<sup>\*</sup> Based on 500ml PET Bottles (16.2g).

# **TECHNICAL DETAILS**

Technical Attributes	Standard	Test Result			
New Zealand Building Code					
✓ Durability	Clause B2.3.1 a) 15 years Clause B2.3.1 b) 50 years	Ref: BRANZ Appraisal No 802 <sup>1</sup>			
✓ Internal Moisture	Clause E3.3.1	Ref: BRANZ Appraisal No 802 <sup>1</sup>			
✓ Hazardous Building Materials	Clause F2.3.1	Ref: BRANZ Appraisal No 802 <sup>1</sup>			
✓ Energy Efficiency	Clause H1.3.1(a) Clause H1.3.2 E	Ref: BRANZ Appraisal No 802 <sup>1</sup>			
Product Safety		·			
✓ 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	Group1S (Excludes R3.4)			
	AS/NZS60695.2.11	Passed - Glow wire flammability test			
	AS/NZS60695.11.5	Passed - Test flames (Needle-flame test)			
✓ VOC Emission Safe <sup>3</sup>	Total VOC ≤ 0.5mg/m <sup>3</sup>	$< 0.005  \text{mg/m}^3$ - level below detection $^4$			
	Formaldehyde ≤ 0.06mg/m <sup>3</sup>	< 0.009mg/m <sup>3</sup> - level below detection			
✓ Glue Free		Free from all glues			
✓ 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 these provisions when designed, used, installed and maintained in accordance with BRANZ Appraisal 802.

# **INSTALLATION & WARRANTY**

#### Installation

Mammoth Underfloor 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 Underfloor Insulation Sections can be found at <a href="https://www.mammoth.co.nz/downloads">www.mammoth.co.nz/downloads</a> 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 <a href="https://www.mammoth.co.nz/downloads">www.mammoth.co.nz/downloads</a> for terms and conditions.

#### **BRANZ** Appraised

Mammoth Underfloor Insulation Sections have been tested by, and is covered by BRANZ Appraisal 802.



Correct as at 03 May 2024



<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, p18.

<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.