

HIGH PERFORMANCE
**SUSTAINABLE
INSULATION**

RESIDENTIAL

COMMERCIAL

THERMAL

ACOUSTIC



RESIDENTIAL & COMMERCIAL INSULATION

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WHY MAMMOTH INSULATION?

REASONS TO INSULATE WITH MAMMOTH

■ SUSTAINABLE CHOICE

Mammoth® polyester insulation is made from fibres from recycled PET plastic bottles. Everything from the plastic packaging to product is recyclable. Offcuts can be reused and recycled at our branches as part of our TakeBack scheme. See mammoth.co.nz for more details.

■ NZ MADE

NZ owned and operated, Mammoth insulation is made in our NZ manufacturing plant.

■ NON-ITCH, SAFE TO USE

Mammoth won't irritate your skin when you touch it - in fact it is made from the same material that you find in many pillows and duvets so no precautions are required for handling the product.

■ NON-TOXIC

Mammoth polyester fibres are heat-bonded together, removing the requirement for chemical binders such as glues or resins found in other insulation products.

■ EASY TO HANDLE

Blankets can easily be torn by hand across the width of the product and our segments can simply be cut with an insulation hand saw.

■ NON CORROSIVE

Will not affect electrical wiring underfloor. No conduit is needed on wiring unlike some other insulation products.

■ FRICTION FITTED

Our unique Mammoth friction fit segments offer an unrivaled professional finish. Our self supporting insulation provides a smooth friction fit without gaps, creases or folds. Our dimensionally true friction fit segments simply squeeze between floor joists, rafters and wall framing with no need for staples or strapping.

■ VARIOUS SIZES

Mammoth insulation is available in varying widths and lengths to suit most applications. See mammoth.co.nz for more details.

■ MOISTURE RESISTANT

Mammoth insulation will continue to perform once dried out, and is moisture, mould and mildew resistant.

■ ENERGY EFFICIENCY

Mammoth polyester insulation helps create a more energy efficient building, costing less to heat and cool. Mammoth insulation will not slump over time.

■ INSTALLER NETWORK

Mammoth insulation has a network of qualified installers nationwide. See mammoth.co.nz for more details.

■ THERMAL PERFORMANCE MAXIMISED

Due to the manufacturing and design process, the installed product typically offers higher installed performance (construction R-values) over traditional insulation, achieved with Mammoth's unrivaled friction fit products.

(*) applies only to 100% polyester products manufactured by InZone and not composite products which incorporate InZone polyester products

■ A QUIETER SPACE

Our superior acoustic insulation will also help to reduce noise transfer, along with our exposed acoustic panel products which can be used to improve the reverberation time, creating a quieter, indoor environment.

■ MADE TO LAST

If installed correctly and adequately protected Mammoth Insulation will last for the lifetime* of the building it was installed in giving you confidence in your home or building's ongoing energy efficiency & health.

■ BRANZ APPRAISED

Most of Mammoth's thermal insulation and acoustic products are BRANZ tested and appraised.

■ NZ GREEN BUILDING COUNCIL

Mammoth insulation contributes points to the material requirements for the Greenstar and Homestar rating tools.

■ HIGH PERFORMER BUILDING

Mammoth are members of High Performer Building who provide quality products for new constructions.





FROM WASTE TO WARMTH



Mammoth's thermal and acoustic insulation takes fibre made from recycled PET plastic bottles, which would otherwise be waste, and manufacture the fibre from the PET plastic bottles into insulation that creates warmer, healthier homes and buildings.

Mammoth 100% polyester insulation uses up to 15,600 recycled PET plastic bottles per 100 sqm*.



* The calculations are based on 500ml PET bottles (16.2g).



MAMMOTH® PRODUCT RANGE

	Product Range			Airly / Card	R-Value	Nominal Thickness (mm)	Width (mm)	Length (mm)	Pieces per Pack	Area per pack (m2)
CEILING	Ceiling Blankets	✓	✓	Card	R 1.8	115	870	11495	2	20.00
		✓	✓	Card	R 2.9	185	870	8620	2	15.00
		✓	✓	Card	R 3.2	200	870	8620	2	15.00
		✓	✓	Card	R 3.3	210	870	8620	2	15.00
		✓	✓	Card	R 3.6	225	870	7470	2	13.00
		✓	✓	Card	R 4.0	240	870	5750	2	10.00
	Double Layer - R 2.9 x 2	✓		Card	R 5.8	370	870	8620	2	15*
	Double Layer - R 3.2 x 2	✓		Card	R 6.4	400	870	8620	2	15*
	Double Layer - R 3.3 x 2	✓		Card	R 6.6	420	870	8620	2	15*
	Double Layer - R 3.6 x 2	✓		Card	R 7.2	450	870	7470	2	13*
	Double Layer - R 4.0 x 2	✓		Card	R 8.0	480	870	5750	2	10*
	Skillion Sections	✓	✓	Airly	R 2.9	115	560	1200	3	2.02
		✓	✓	Airly	R 2.9	115	860	1200	5	5.16
		✓	✓	Airly	R 3.2	165	570	1200	5	3.42
		✓	✓	Airly	R 3.2	165	870	1200	4	4.18
		✓	✓	Airly	R 3.6	165	870	570	6	2.98
		✓	✓	Card	R 3.6	140	870	570	6	2.98
	Ceiling Batten Blankets			Card	R 1.0	45	580	12930	2	15.00
	Ceiling Batten Sections			Airly	R 1.0	35	540	1200	10	6.48
	Ceiling Batten Sections			Airly	R 1.3	45	360	2400	9	7.78
Ceiling Batten Sections			Airly	R 1.3	45	560	2400	6	8.06	


	Product Range			Airly / Card	R-Value	Nominal Thickness (mm)	Width (mm)	Length (mm)	Pieces per Pack	Area per pack (m2)
WALL	Wall Sections	✓	✓	Airly	R 1.9	90	360	760	9	2.46
		✓	✓	Airly	R 1.9	90	560	760	6	2.55
		✓	✓	Airly	R 2.0	70	360	760	12	3.28
		✓	✓	Airly	R 2.0	70	560	760	8	3.40
		✓	✓	Airly	R 2.0	90	360	760	9	2.46
		✓	✓	Airly	R 2.0	90	560	760	6	2.55
		✓	✓	Airly	R 2.2	90	360	760	9	2.46
		✓	✓	Airly	R 2.2	90	560	760	6	2.55
		✓	✓	Airly	R 2.5	90	360	760	9	2.46
		✓	✓	Airly	R 2.5	90	560	760	6	2.55
		✓	✓	Airly	R 2.8	140	360	760	18	4.92
		✓	✓	Airly	R 2.8	140	560	760	12	5.10
		✓	✓	Airly	R 3.2	140	360	760	18	4.92
		✓	✓	Airly	R 3.2	140	560	760	12	5.10
		✓	✓	Card	R 3.6	140	360	760	18	4.92
		✓	✓	Card	R 3.6	140	560	760	12	5.10
	Wall Blankets	✓	✓	Card	R 2.2	90	360	9870	2	7.11
		✓	✓	Card	R 2.2	90	560	10800	1	6.05
		✓	✓	Card	R 2.6	140	380	8550	4	13.00
		✓	✓	Card	R 2.6	140	580	7470	3	13.00
	Masonry Wall Blankets			Card	R 1.0	45	580	12930	2	15.00
	Masonry Wall Sections	✓		Airly	R 1.3	45	360	2400	9	7.78
	Masonry Wall Sections	✓		Airly	R 1.3	45	560	2400	6	8.06

MAMMOTH® PRODUCT RANGE

	Product Range			Airloy / Card	R-Value	Nominal Thickness (mm)	Width (mm)	Length (mm)	Pieces per Pack	Area per pack (m2)
UNDERFLOOR	Underfloor Sections	✓	✓	Airloy	R 1.9	90	370	1140	16	6.75
		✓	✓	Airloy	R 1.9	90	425	1140	16	7.75
		✓	✓	Airloy	R 1.9	90	475	1140	14	7.58
		✓	✓	Airloy	R 1.9	90	580	1140	12	7.93
		✓	✓	Airloy	R 2.8	140	370	1140	10	4.21
		✓	✓	Airloy	R 2.8	140	425	1140	10	4.84
		✓	✓	Airloy	R 2.8	140	475	1140	10	5.41
		✓	✓	Airloy	R 2.8	140	580	1140	8	5.28
		✓	✓	Airloy	R 3.2	140	370	1140	10	4.21
		✓	✓	Airloy	R 3.2	140	425	1140	10	4.84
		✓	✓	Airloy	R 3.4	140	370	1140	10	4.21
		✓	✓	Airloy	R 3.4	140	425	1140	10	4.84
		✓	✓	Airloy	R 3.4	140	475	1140	10	5.41
		✓	✓	Airloy	R 3.4	140	580	1140	8	5.28
	Double Layer - R 1.9 x 2	✓	✓	Airloy	R 3.8	180	370	1140	16	6.75*
	Double Layer - R 1.9 x 2	✓	✓	Airloy	R 3.8	180	425	1140	16	7.75*
	Double Layer - R 1.9 x 2	✓	✓	Airloy	R 3.8	180	475	1140	14	7.58*
	Double Layer - R 1.9 x 2	✓	✓	Airloy	R 3.8	180	580	1140	12	7.93*
	Underfloor Blankets	✓	✓	Card	R 1.5	100	450	11110	4	20
		✓	✓	Card	R 1.5	100	510	9804	4	20
		✓	✓	Card	R 1.5	100	600	11110	3	20
		✓	✓	Card	R 1.5	100	650	10256	3	20
		✓	✓	Card	R 1.8	115	450	11110	4	20
		✓	✓	Card	R 1.8	115	510	9804	3	20
		✓	✓	Card	R 1.8	115	600	11110	3	20
		✓	✓	Card	R 1.8	115	650	10256	3	20
		✓	✓	Card	R 2.0	115	450	11110	4	20
		✓	✓	Card	R 2.0	115	510	9804	4	20
	✓	✓	Card	R 2.0	115	600	11110	3	20	
	✓	✓	Card	R 2.0	115	650	10255	3	20	
Carpark Panels (NRC 0.85)			Airloy	R 1.7	70	1200	2400	4	11.52	
			Airloy	R 2.5	100	1200	2400	3	8.64	

	Product Range			Airloy / Card	R-Value	Nominal Thickness (mm)	Width (mm)	Length (mm)	Pieces per Pack	Area per pack (m2)
ACOUSTIC SECTIONS	Acoustic Sections									
	- Mammoth 1000 (NRC 0.90)			Card		80	560	760	7	2.98
	- Acoustic R 1.9	✓	✓	Airloy	R 1.9	90	360	760	9	2.46
	- Acoustic R 1.9	✓	✓	Airloy	R 1.9	90	560	760	6	2.55
	- Acoustic R 2.0	✓	✓	Airloy	R 2.0	90	360	760	9	2.46
	- Acoustic R 2.0	✓	✓	Airloy	R 2.0	90	560	760	6	2.55
	- Acoustic R 2.2	✓	✓	Airloy	R 2.2	90	360	760	9	2.46
	- Acoustic R 2.2	✓	✓	Airloy	R 2.2	90	560	760	6	2.55
	- Acoustic R 2.5	✓	✓	Airloy	R 2.5	90	360	760	9	2.46
	- Acoustic R 2.5	✓	✓	Airloy	R 2.5	90	560	760	6	2.55
	- Acoustic R 2.8	✓	✓	Airloy	R 2.8	140	360	760	18	4.92
	- Acoustic R 2.8	✓	✓	Airloy	R 2.8	140	560	760	12	5.10
	- Acoustic R 3.2	✓	✓	Airloy	R 3.2	140	360	760	18	4.92
	- Acoustic R 3.2	✓	✓	Airloy	R 3.2	140	560	760	12	5.10
	- Acoustic R 3.6	✓	✓	Airloy	R 3.6	140	360	760	18	5.10
	- Acoustic R 3.6	✓	✓	Airloy	R 3.6	140	560	760	12	5.10

MAMMOTH® PRODUCT RANGE

Product Range			GSM	Airly / Card	R-Value	Nominal Thickness (mm)	Width (mm)	Length (mm)	Pieces per Pack	Area per pack (m2)
ACOUSTIC BLANKETS	Acoustic Blankets									
	- Acoustic 580	✓	580	Card	R 1.0	60	600	2500	2	30.00
	- Acoustic 735	✓	735	Card		50	600	11110	3	20.00
	- Acoustic 750	✓	750	Card	R 1.1	60	600	11110	3	20.00
	- Acoustic 900	✓	900	Card	R 1.6	90	580	11495	2	13.33
	- Acoustic 900	✓	900	Card	R 1.6	90	600	11110	3	20.00
	- Acoustic 1000	✓	1000	Card		90	600	11110	3	20.00
	- Acoustic 1100	✓	1100	Card	R 1.8	90	600	11110	3	20.00
	- Acoustic 1150	✓	1150	Card	R 1.7	75	600	11110	3	20.00
Bafflestack			1000	Card		100	600	11110	3	20.00

Product Range		Density - Thickness (mm)	Airly / Card	R-Value	NRC	MOQ (m2)	Width (mm)	Length (mm)	Pieces per Pack	Pieces per Pack
ACOUSTIC PANEL ABSORBER	Acoustic Panel Absorbers									
	- White Unfaced	35 - 25	Card		0.7	500	1200	2400	12	12
	- White Unfaced	35 - 50	Card		0.9	No MOQ	1200	2400	6	6
	- White Unfaced	35 - 75	Airly		0.95	500	1200	2400	4	4
	- White Unfaced	20 - 100	Airly		1.05	500	1200	2400	3	3
	- White Unfaced	40 - 100	Airly		1.05	500	1200	2400	3	3
	- White with Black Face	35 - 25	Card	R 0.7	0.7	No MOQ	1200	2400	12	12
	- White with Black Face	35 - 50	Card	R 1.4	0.9	No MOQ	1200	2400	6	6
	- White with Black Face	35 - 75	Airly	R 2.0	0.95	250	1200	2400	4	4
	- White with Black Face	20 - 100	Airly		1.05	250	1200	2400	3	3
	- White with Black Face	40 - 100	Airly		1.05	250	1200	2400	3	3
	- Black with Black Face	35 - 25	Airly		0.7	250	1200	2400	12	12
	- Black with Black Face	35 - 50	Airly		0.9	No MOQ	1200	2400	6	6
	- Black with Black Face	35 - 75	Airly		0.95	250	1200	2400	4	4
	- Black with Black Face	20 - 100	Airly		1.05	500	1200	2400	3	3
	- Black with Black Face	40 - 100	Airly		1.05	500	1200	2400	3	3
	- Grey Unfaced	35 - 25	Card		0.7	250	1200	2400	12	12
	- Grey Unfaced	35 - 50	Card		0.9	250	1200	2400	6	6
	- Grey Unfaced	35 - 75	Airly		0.95	250	1200	2400	4	4
	- Grey Unfaced	20 - 100	Airly		1.05	250	1200	2400	3	3

For more Mammoth information, please call 0800 626 688 or visit mammoth.co.nz

ROOF & CEILING INSULATION

IN TRUSS ROOFS AND ROOFS WITH CEILING VOIDS

We all know heat rises and it's estimated that 30-35% of heat loss from an uninsulated house is through the ceiling. So the roof cavity is the best place to start adding insulation in the building, helping keep the warmth in in winter but also cooler in summer.

TRUSS ROOF BUILD UPS

Our range of Mammoth insulation for truss roofs offered are in the table (right). Typical truss roof build-ups will be a double layer of product, however a single layer will work in some scenarios depending on if for a new build, alteration, retrofit, glazing percentage, or whether consent is required.

The benefit of the Mammoth double layer ceiling system is you can fit the first layer between the truss bottom chord/timber joist with the second layer being typically installed from above. This means the installer perfectly installs the product while looking down at it to make sure all the truss bottom chords/timber joists have been covered to eliminate thermal bridging. Many single layer spill over products are being installed from the bottom with no checks from installers nor auditors that the framing has been covered on the top side.

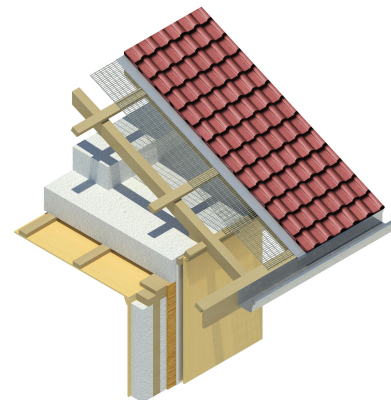
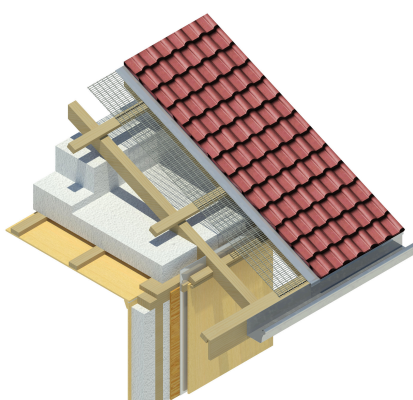
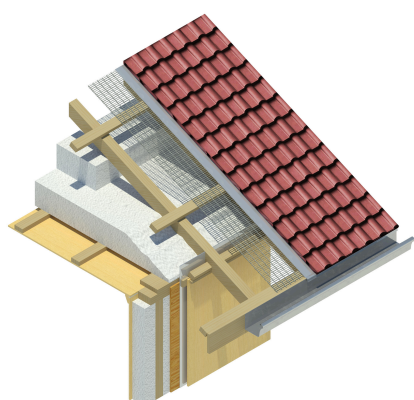
A double layer of Mammoth R3.6 blanket typically offers approx. R7.2-R7.3 as a construction R-value.

Different combinations of insulation based on thickness, restrictions and desired construction R-value will determine what combination of product is selected. Typically, a double layer with the insulation at the roof edge feathered down to fit, this works well.

For queries around H1 compliance, calculations and construction R-values, email info@mammoth.co.nz or call 0800 MAMMOTH.

Build-ups for truss roofs are not limited to the products shown, as other Mammoth insulation such as wall or skillion sections (also called pads or segments) can be used in certain truss scenarios. For instance at the roof edge for low clearance areas where a staggered build-up of product is preferred, rather than a blanket feathered down. For example. R3.6 140mm skillion segments may be used at a roof edge if required.

	R-Value	Nominal thickness (mm)
Ceiling Blanket	R 1.8	115
	R 2.9	185
	R 3.2	200
	R 3.3	210
	R 3.6	225
	R 4.0	240
Double Layer - R 2.9 x 2	R 5.8	370
Double Layer - R 3.2 x 2	R 6.4	400
Double Layer - R 3.3 x 2	R 6.6	420
Double Layer - R 3.6 x 2	R 7.2	450
Double Layer - R 4.0 x 2	R 8.0	480



ROOF & CEILING INSULATION

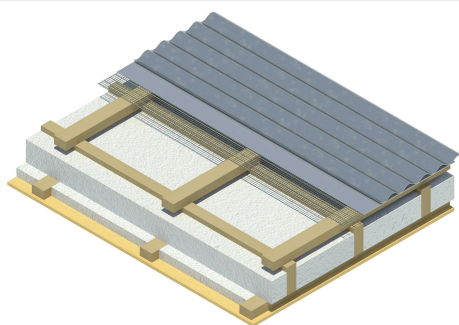
IN SKILLION ROOFS

SKILLION ROOFS

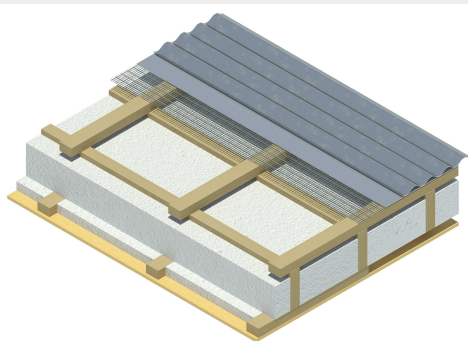
Mammoth offer a range of insulation build ups for skillion (also known as rafter) roofs. Build-ups depend on many factors such as desired construction R-value, new build or retrofit not requiring consent or H1 compliance, or space constraints.

Specific insulation build-up such as ply on top of rafters, rafters with purlins, rafters with vented batten then purlins and other varying factors, will dictate what product is used. It is best to contact Mammoth for technical advice on the best solution. Some examples below:

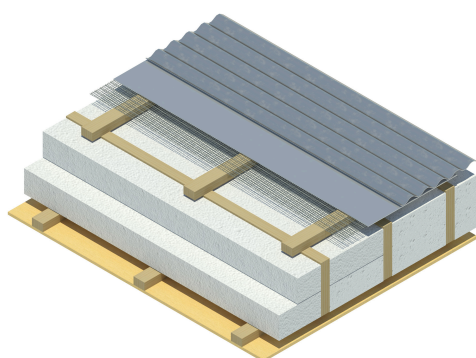
140mm Rafters - Mammoth R2.9 115mm + R1.3 45mm batten insulation or R1.0 35mm batten insulation.



190mm Rafters - Mammoth R3.6 165mm + R1.3 45mm batten insulation or R1.0 35mm batten insulation.



290/300mm Rafters - Mammoth R7.2 280mm (R3.6 140mm x double layer).



CEILING BATTEN INSULATION

Ceiling Batten Insulation is designed to reduce thermal bridging in skillion and truss roofs by insulating the batten space.

Mammoth friction fit sections to ceiling battens are typically used with 35 or 45mm timber battens. If rondo is used, this must be hung so 45mm blanket can be laid over the top.

	R-Value	Nominal thickness (mm)
Skillion Sections	R 2.9	115
	R 3.2	165
	R 3.6	140
	R 3.6	165
Skillion Section Double Layer - R3.6 x 2	R 7.2	280
Ceiling Batten Blanket	R 1.0	45
Ceiling Batten Section	R 1.0	35
Ceiling Batten Section	R 1.3	45

ROOF & CEILING INSULATION

IN SUSPENDED CEILINGS & PURLIN ROOFS

SUSPENDED CEILINGS

Mammoth insulation blanket products are suitable for suspended ceiling applications in commercial buildings and residential environments.

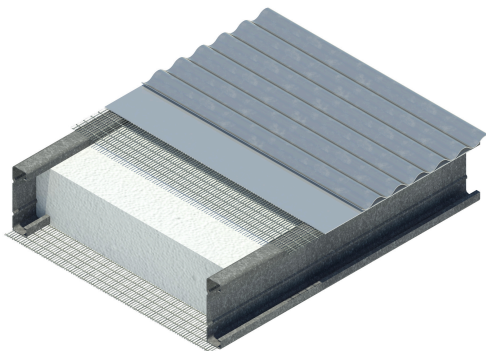
Mammoth insulation installed to a suspended ceiling is cost effective and quick to install. The Mammoth polyester blanket can be rolled out on the suspended ceiling, a grid, and rondo. Assuming the desired construction R-value can be met, Mammoth can also be installed between steel purlins which are typically laid on mesh.

In some cases, commercial clients may wish to go for a semi visual finish such as an exposed ceiling in their building. A respectable (semi-visual) finish can be achieved with the Mammoth section products, such as skillion sections, carpark liner or panel absorber. Custom runs can be done changing size, colour or finish.

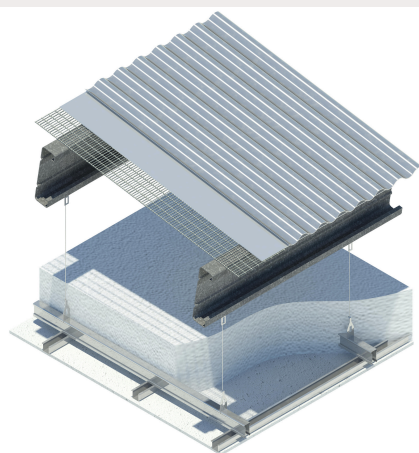
Visual finishes are great for those looking for an exposed high ceiling look and do not wish to use a suspended ceiling. Thermal performance along with acoustic values can be achieved. The exposed Mammoth product will reduce the reverberation time in the space as well as add thermal performance.

For advice on visual installs or custom runs, please contact us at mammoth.co.nz or 0800 MAMMOTH. There are a number of variables to consider.

Installation of blanket to purlins



Installation of blanket on suspended ceiling



PURLIN ROOFS

Mammoth blanket insulation can be laid between steel purlins.



VISUAL FINISH

Mammoth friction fit section, custom run, in white in steel purlins.



SKILLION

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

ROOF & CEILING INSULATION

ACOUSTIC PERFORMANCE IN CEILINGS

ACOUSTIC BLANKETS

Mammoth's polyester acoustic insulation creates quieter environments in commercial & retail buildings, individual and multi-dwelling homes as well as improving the thermal energy efficiency of the space.

Mammoth acoustic blanket and section products are available in a range of thicknesses and densities depending on the acoustic requirement and where the product is installed (timber, steel stud etc).

Residential buildings, typically apartments, may use acoustic blanket insulation on the suspended ceiling between levels to reduce disruption from noise. Mammoth can also be fitted to midfloors (which may be viewed as ceiling product) which is addressed under Underfloor Insulation on page 11.

For commercial buildings, Mammoth blanket products are suitable for installation on suspended ceilings and ceiling grids.

Mammoth products are approved in some GIB systems. Find out more at mammoth.co.nz or check the GIB information for using polyester in acoustic & firewalls.

BAFFLESTACK

Mammoth Bafflestack insulation is designed to be stacked and compressed within the plenum space above partition walls, to the roof or floor above. This reduces sound transfer between rooms, without the need for construction of walls within the plenum space.

Bafflestack improves the CAC above the walls. For info on compression, layers, and expected CAC, see the Bafflestack Installation Instructions on mammoth.co.nz

PANEL ABSORBER

Mammoth Panel Absorber is designed to be used as an acoustic panel typically found on ceilings, behind perforated linings, installed between purlins and more. The panel absorber is a cost effective way to improve the reverberation time in a space.

Panel Absorber has a Group 1S fire rating under the ISO 9705 Fire test and is suitable to be exposed. The product is also commonly used in HVAC ducting and for insulating garage doors.

Acoustic Panel Absorber	Density/Thickness (mm)	Dimensions (mm)
White	25, 50, 75, 100	1200 x 2400
White with Black Face	25, 50, 75, 100	1200 x 2400
Black with Black Face	25, 50, 75, 100	1200 x 2400
Grey	25, 50, 75, 100	1200 x 2400

Please see mammoth.co.nz for a full list of Acoustic Panel Absorber products and sizes.



ACOUSTIC BLANKET

Ideal for commercial buildings, office fit-outs, apartments, residential environments.



BAFFLESTACK

To improve privacy and noise control between rooms.



PANEL ABSORBER

A high-performance acoustic panel to control noise reverberation.

Acoustic Blanket	Density (kg/m ³)	Nominal thickness (mm)
580	9.67	60
735	14.7	50
750	12.5	60
900	10	90
1000	11.11	90
1100	12.22	90
1150	15.33	75

WALL INSULATION

MAXIMISE THE THERMAL & ACOUSTIC ENVELOPE

WALL SECTIONS

Designed to work in conjunction with the building systems of existing and new buildings, Mammoth wall sections are semi-rigid polyester insulation that are friction fitted into the wall cavity.

Creating a seamless, smooth fit without tucks, creases or gaps, Mammoth wall sections provide both thermal and acoustic benefits for homes and buildings.

Mammoth thermal sections can be used for acoustic as they not only offer an R-value but also offer acoustic performance. Mammoth R1.9 90mm is a good all round choice for inter-tenancy walls. For advice on product selection, contact Mammoth.

MASONRY WALLS

Mammoth masonry wall insulation products are designed for small cavities, such as 45mm timber strapping to fit between timber battens.

WALL BLANKETS

Mammoth offer some thermal wall blanket products, however most wall blankets used are typically found on commercial jobs with steel studs, such as inter-tenancy walls.

The acoustic blankets are suitable for timber, but work particularly well with steel studs as they are cut to suit 600mm studs. This is great for commercial fit-outs as one drape of an acoustic blanket can be used in a steel stud bay.

Mammoth products are approved in many GIB systems. Find out more at mammoth.co.nz or check the GIB information for using polyester in acoustic & firewalls.

Wall Sections	Density (kg/m ³)	R-Value	Nominal thickness (mm)
Acoustic & Thermal	16.67	R 1.9	90
Acoustic & Thermal	60	R 2.0	70
Acoustic & Thermal	22.22	R 2.0	90
Acoustic & Thermal	26.67	R 2.2	90
Acoustic & Thermal	40	R 2.5	90
Acoustic & Thermal	15	R 2.8	140
Acoustic & Thermal	20.70	R 3.2	140
Acoustic & Thermal	25.71	R 3.6	140



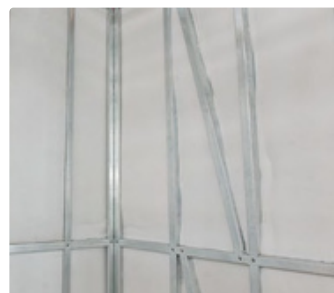
WALL SECTIONS

A high performance, semi-rigid polyester insulation that is self-supporting between studs without gaps, creases or folds.



MASONRY WALL

Thermal wall insulation for strapped and lined masonry walls.



WALL BLANKET

A polyester blanket designed to be draped between steel studs and be fitted to timber framing.

Masonry Wall	Density (kg/m ³)	R-Value	Nominal thickness (mm)
Blanket	16.67	R 1.0	45
Section	42.22	R 1.3	45

Wall Blanket	Density (kg/m ³)	R-Value	Nominal thickness (mm)
Acoustic 580, 735, 750, 900, 1000, 1100, 1150	9.67 - 15.33-	R 1.0 - R 1.8-	50-90
Thermal	21.67	R 2.2	90
Thermal	10.71	R 2.6	140

Please see page _ for a full list of Mammoth Wall Blanket products.

UNDERFLOOR INSULATION

THERMAL AND ACOUSTIC BENEFITS

UNDERFLOOR SECTIONS AND BLANKETS

Mammoth offer a range of underfloor friction fit sections and blankets providing thermal performance. Made from 100% polyester fibres, Mammoth insulation does not deteriorate, is moisture resistant and won't affect electrical wiring (does not need a conduit like some insulation products).

Mammoth underfloor sections are a semi rigid friction fit so they have some "give" in them conforming to any deviations in timber, meaning no gaps, creases, folds or areas where performance is reduced.

The friction fit sections can be fitted from above before the floor is laid.

The friction fit sections are also suitable for areas with an exposed perimeter as they are far less likely to be affected by any air movement under the building (known as wind wash).

Mammoth blankets are in a soft, roll-form thermal insulation for underfloors and midfloors. Blanket insulation is only recommended for under floors where there is a fully enclosed perimeter to protect it from windwash.

Blanket products such as our acoustic blankets can be laid on the ceiling and/or stapled between midfloor joists. See page 9 for the Acoustic Blanket table.

CARPARK PANELS

Mammoth carpark panels are typically used in commercial suspended floors. The panels are mechanically fixed or glue fixed to the underside of the slab. This provides thermal performance along with offering acoustic NRC value which is good for reducing sounds bouncing around such as in a carpark space. The Mammoth carpark panel can also be used in some residential suspended slab scenarios.

Underfloor Sections	Density (kg/m ³)	R-Value	Nominal thickness (mm)
	16.67	R 1.9	90
	15	R 2.8	140
	20.7	R 3.2	140
	35.7	R 3.4	140
Double Layer - R1.9 x 2	16.67	R 3.8	180



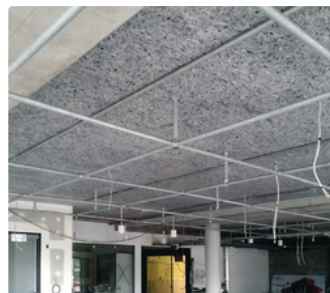
SECTIONS

Medium density self-supporting insulation sections that don't need staples or straps. Sections can be double layered to meet the Building Code.



BLANKETS

A cost-effective thermal and acoustic option for mid floors and suspended wooden floors.



CARPARK PANELS

Designed to improve the thermal performance of concrete carpark ceilings where there are residential and commercial buildings above.

Underfloor Blanket	Density (kg/m ³)	R-Value	Nominal thickness (mm)
	7.5	R 1.5	100
	7.83	R 1.8	115
	10	R 2.0	115

Carpark Panel	Density (kg/m ³)	R-Value	Nominal thickness (mm)
	28.57	R 1.7	70
	32.00	R 2.5	100

H1 CALCULATIONS

MEETING THE NZ BUILDING CODE

OUR FREE H1 CALCULATION SERVICE

Mammoth offer a free H1 calculation service using the modelling and calculation methods. All you need to do is send a set of your plans through and we will take care of the rest.

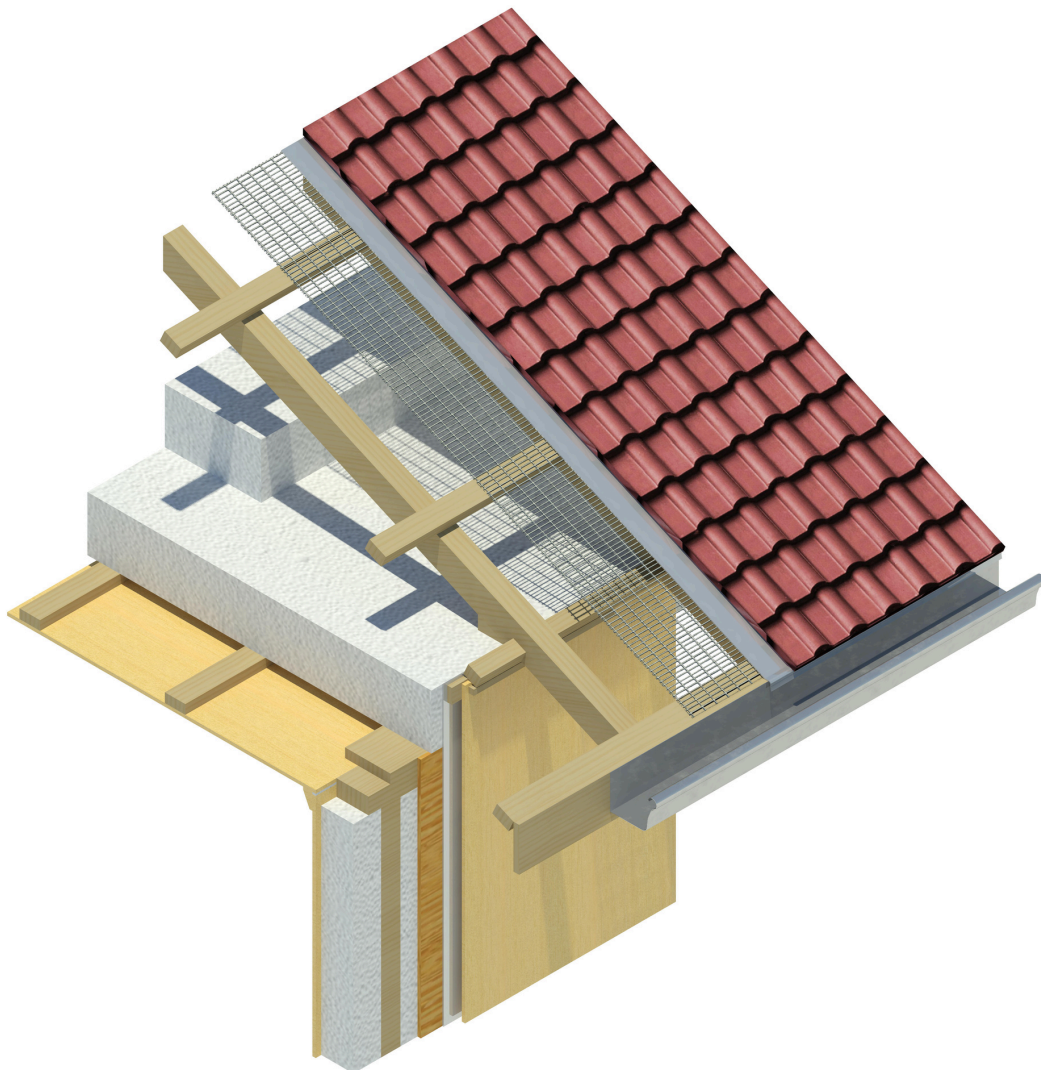
We'll measure up and calculate what is required, considering build-ups, limitations and what's realistic to work with on your site. We will provide the optimal solution for you, taking into account cost, logic of install, installed performance and where compromises can be made. In preparing your plans we can also suggest combinations of insulation products that deliver on your H1 requirements.

So contact us today for our free H1 calculation service - simply contact your Mammoth representative or email us at info@mammoth.co.nz



H1 CALCULATIONS

Ask us today for your free H1 thermal calculation service.



THE MAMMOTH ADVANTAGE

PEACE OF MIND WHEN BUILDING

WHY MAMMOTH SEGMENTS EXCEED EXPECTATIONS

It is understood that friction fit polyester insulation products lend themselves to superior thermal performance. InZone Industries Ltd has an Airlay insulation manufacturing plant in Auckland producing medium and high density thermal and acoustic insulation.

The Mammoth® wall insulation produced on the Airlay plant is different to traditional carded polyester or fibreglass insulation. The springy nature of Airlay medium density insulation means it squeezes into wall cavities to be self-supporting, uncompressed and gap-minimising. It performs exceptionally well in wall and underfloor systems.

Mammoth's friction fitted, insulation is made using a unique manufacturing process "airlay" whereby the fibres are completely randomised rather than the traditional carded (layered) method. This provides for differing structural properties of the product, enabling it to support itself within a cavity by simply squeezing it in place. It is suitable for floors, walls and ceiling spaces.

MAMMOTH'S AIRLAY INSULATION V CARDED INSULATION



AIRLAY INSULATION

Randomised fibres.



CARDED INSULATION

Traditional layering.

In July 2014, Mammoth's airlay wall insulation was independently tested and outperformed construction (system) R-values in the BRANZ House Insulation Guide. New Zealand's leading building research laboratory was commissioned to undertake comprehensive independent insitu testing. The results are below:

PEACE OF MIND - when performing H1 calculations, specify Mammoth Airlay wall insulation with confidence, knowing that the wall construction R-value will outperform the calculated averages for equivalent systems.

System R-values: **90mm TIMBER FRAMED** - cavity, 14.5% ratio of frame to total area

Insulation R-value	Mammoth Airlay		R1.8	BRANZ House Insulation Guide			
	R1.9	R2.0		R2.0	R2.2	R2.4	R2.6
Construction R-value							
- Brick Veneer Cladding	2.25	2.25	1.7	1.9	2.0	2.1	2.2
- Weatherboard Cladding	2.15	2.20	1.9	2.0	2.1	2.2	2.3
- Plywood Cladding	1.95	2.05	1.7	1.8	1.9	2.0	2.1

System R-values: **140mm TIMBER FRAMED** - cavity, 14.5% ratio of frame to total area

Insulation R-value	Mammoth Airlay	R2.6	BRANZ House Insulation Guide		
	R2.8		R2.9	R3.2	R3.5
Construction R-value					
Brick Veneer Cladding	3.05	2.4	2.6	2.8	3.0
Weatherboard Cladding	2.85	2.6	2.8	2.9	3.1
Plywood Cladding	2.75	2.4	2.6	2.7	2.9

A SUSTAINABLE CHOICE

MAMMOTH ENVIRONMENTAL CREDENTIALS

Our business is underpinned by a philosophy of creating better environments which extends to more than just the products we manufacture.

Our commitment to sustainability is incorporated in the way we operate the business, our manufacturing processes and the way we help our customers create warmer, healthier, more energy efficient environments - all while protecting the largest environment of all, our planet.

We feel it is important to consider the environment in all facets of our business and so measuring and monitoring our impact is the only way to understand how we can improve. Our measured carbon emissions will be offset, monitored and continually reduced through a variety of smarter business practices.



Mammoth® polyester Insulation is manufactured by InZone Industries Ltd, who have been awarded Toitu's Envirocare carbonreduce accreditation.



All of our Mammoth polyester insulation products are Red List Free which means no formaldehyde or pesticides are added.



Mammoth's thermal and acoustic insulation is made from 100% polyester and uses up to 15,600 recycled PET plastic bottles per 100 sqm*.

* The calculations for the number of bottles per 100sqm are based on 500ml PET bottles (16.2g).



Most of our Mammoth insulation products are Eco Choice Aotearoa (formerly Environmental Choice NZ) certified.



Mammoth's TakeBack scheme reduces waste by taking clean offcuts back from the market and recycling them back into product.



Mammoth is a member of the NZ Green Building Council demonstrating commitment to green building practices in NZ.



Mammoth products are made in a zero waste production process - everything from packaging to product is recyclable at the end of its life.



Mammoth 100% polyester insulation products have an ODP of zero which means no ozone depleting substances are present in the product or used in the direct manufacture of the product.



TO VIEW OUR ENTIRE PRODUCT RANGE, INCLUDING OUR CEILING, WALL AND UNDERFLOOR THERMAL AND ACOUSTIC PRODUCTS, PLEASE VISIT MAMMOTH.CO.NZ

CONTACT US

- Product range
- Sales
- Technical Support
- Architect and Specifier requirements
- New Build requirements
- Lifetime warranty information

Contact us on **0800 626 668**
or email info@mammoth.co.nz
or visit mammoth.co.nz

LIFETIME WARRANTY

Mammoth
MODERN INSULATION



Mammoth® is a registered trade mark of InZone Industries Limited.

Current at Sep 2024.