



# DUCT INSULATION LINING

## APPLICATION



Mammoth™ NOVAhush Duct Liner is designed to absorb noise and thermally insulate the duct. This ensures the reduction of sound transfer along the duct and that air of the desired temperature is delivered at the outlets. Mammoth NOVAhush Duct Liner comes in a plain white sheet or a white sheet with a black face.

Mammoth NOVAhush Duct Liner is a lightweight flexible insulation made in New Zealand from 100% thermally bonded polyester fibres. The polyester conjugate fibre used is crimped giving excellent durability.

## FEATURES & BENEFITS

- NOVAhush Duct Liner is supplied plain and can have perforated foil or plain foil applied.
- Independent testing shows that NOVAhush Duct Liner gives exceptional performance at the low end frequencies (125 - 500 Hertz).
- Absorbs fan drumming noise and reduces speech transference from room to room between air conditioning outlets.
- The thermal qualities eliminates the need to insulate the exterior of the ducting.
- NOVAhush Duct Liner will not shed particles (fibre fall-out) or delaminate under high air flow velocities - ensuring the airstream remains clean.
- The product is not conducive to fungal bacteria growth.
- When installed to the manufacturer's instructions it will remain in place ensuring the thermal effectiveness of the installed system.
- NOVAhush Duct Liner is safe and easy to work with. No precautions are required for handling the product.
- It will not cause irritation when touched and gives off no fumes or odours.
- Backed by a 50 year manufacturer's warranty.
- Manufactured in New Zealand by a carboNZero certified organisation.

## PRODUCT RANGE

PRODUCT RANGE	 	NRC	PRODUCT R-VALUE	NOMINAL THICKNESS (MM)	DIMENSIONS (MM)	PIECES PER PACK	TOTAL AREA (M2)
NOVAhush Duct Liner							
35-13		0.70		35 - 13	2400 x 1200	24	69.12
35 - 25		0.70		35 - 25	2400 x 1200	12	34.56
35 - 50		0.90		35 - 50	2400 x 1200	6	17.28
35 - 75		1.05		35 - 75	2400 x 1200	4	11.52
20 - 100		0.95		20 - 100	2400 x 1200	3	8.64
40 - 400		1.05		40 - 100	2400 x 1200	3	8.64

Custom widths available on request - minimum order quantities apply.

# TECHNICAL DETAILS

Technical Attributes	Standard	Test Result
<b>Thermal Conductivity</b>		
✓ Conductivity at 10° C mean	ASTM C518-91 25 mm samples	0.0396 W/m.k
✓ Conductivity at 20° C mean		0.0421 W/m.k
✓ Conductivity at 30° C mean		0.0447 W/m.k
<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	ISO 9705: 1993 and AS ISO 9705:2003	Australia Group Number: 1 AS ISO 9705: 2003 SMOGRARC: Less than 100 m <sup>2</sup> /s <sup>2</sup> New Zealand Group Number: 1S Smoke Production Rate: Less than 5.0 m <sup>2</sup> /s <sup>2</sup>
	EN13501-1: 2007	B - s2 - d0
✓ VOC Emission Safe <sup>2</sup>	Total VOC ≤ 0.5mg/m <sup>3</sup>	< 0.005mg/m <sup>3</sup> - 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
<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)
✓ Odourless	n/a	Mammoth™ is odourless and will not absorb odours
✓ Water Vapour Sorption	ASTM C1104	0.3% - Water Vapour Sorption by weight
✓ Antifungal Efficacy	ASTM G21-96 All samples incubated at 30 C for 28 day	Growth rate: 0 (Scale 0-4)

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

*2 Mammoth™ has been tested under ASTM D5116. Based on test results for a product with similar nominal weight.*

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

## SPECIFICATION & INSTALLATION

### Installation

For NOVAhush Duct Liner specification advice contact an Mammoth representative.

Unless specifically required NOVAhush Duct Liner should be fixed in close contact with the duct surfaces. Edges should overlap and be sealed to prevent air gaps. Depending on duct size, NOVAhush Duct Liner may require fixing using mechanical or adhesive methods. Where a vapour barrier is required, NOVAhush Duct Liner should be completely sealed with 75mm aluminium tape or a suitable contact adhesive on all joints, and on penetrations such as mechanical fixings or control equipment. Installation methods outside these guidelines must be approved by the specifying engineer

### 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 InsulPro and not to other composite products manufactured by InsulPro. Terms & conditions apply. Read the full warranty at [www.mammoth.co.nz](http://www.mammoth.co.nz)

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