

# NOVAhush



## Duct Liner Insulation

### APPLICATION

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.

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 white sheet with a black face. Mammoth™ NOVAhush Duct Liner is supplied plain and can have perforated foil or plain foil applied.

Independent testing shows that Mammoth™ NOVAhush Duct Liner gives exceptional performance at the low end frequencies (125 - 500 Hertz).

### PRODUCT FEATURES AND BENEFITS

- Mammoth™ NOVAhush Duct Liner contains polyester fibre made using recycled plastic bottles.
- Mammoth™ NOVAhush Duct Liner absorbs fan drumming noise and reduces speech transference from room to room between air-conditioning outlets.
- The thermal qualities of Mammoth™ NOVAhush Duct Liner eliminates the need to insulate the exterior of the ducting.
- Mammoth™ 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.
- Mammoth™ 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.
- InsulPro manufacture Mammoth™ NOVAhush Duct Liner in New Zealand and is backed by a 50 year manufacturer's warranty.



PRODUCT RANGE	BALE PACK SIZES								
	Density/ Thickness	NRC	Length (mm)	Width (mm)	Total Coverage (m <sup>2</sup> )	Number of sheets	White	Black	White with Black face
<b>Duct Liner Sheets</b>	35 - 13	0.70	2400	1200	69.12	24	✓		✓
	35 - 25	0.70	2400	1200	34.56	12	✓	✓	✓
	35 - 50	0.90	2400	1200	17.28	6	✓	✓	✓
	35 - 75	1.05	2400	1200	11.52	4	✓		✓
	20 - 100	0.95	2400	1200	8.64	3	✓		✓
	40 - 100	1.05	2400	1200	8.64	3	✓		✓

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 25mm 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 'non-toxic' and 'non-irritant'
✓ 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 SMOGRARC: Less than 100 m2/s2 New Zealand Group Number: 1S Smoke Production Rate: Less than 5.0 m2/s2
	EN13501-1: 2007	B - s2 - d0
✓ VOC Emission Safe <sup>2</sup>	Total VOC ≤ 0.5mg/m <sup>3</sup> Formaldehyde ≤ 0.06mg/m <sup>3</sup>	level below detection level below detection
<b>Other</b>		
✓ Non Corrosive	NZS 4222	Alkalinity of pH 7.8
✓ Vermin Resistant	n/a	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 Health and Safety Service. Health and Safety Guidelines for the Selection and Safe Handling of Synthetic Mineral Fibres. Department of Labour, 1994, p18.

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

## SPECIFICATION AND INSTALLATION

Unless specifically required Mammoth™ 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, Mammoth™ NOVAhush Duct Liner may require fixing using mechanical or adhesive methods. Where a vapour barrier is required, Mammoth™ 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.

## A SUSTAINABLE CHOICE

- All Mammoth™ products are Red List Free - International Living Future Institute.
- Manufactured within a carboNZero certified organisation.
- Mammoth™ products contain recycled polyester fibres. The recycled fibre used by Mammoth™ comes from recycled plastic bottles.
- Recycling plastic protects the environment by keeping the carbon content locked up in the polyester fibre and reducing landfill waste.
- Mammoth™ products are made in a near zero waste production process and are fully recyclable.

