

ISOBRANE

Mass Loaded Vinyl Flexible Noise Barrier

Isobrane® is a high performance, flexible, mass-loaded, polymer noise barrier offering superior acoustic transmission loss. Isobrane® represents latest alternative noise barrier technology using recycled polymers that are halogen-free. It was developed to meet market noise reduction requirements for the domestic, commercial, industrial and automotive markets.

This high performing product was engineered by Nankarrow to achieve a self-extinguishing, low smoke emission, thin, strong and flexible product. These properties give Isobrane® added strength, high transmission loss and improved fire rating.

Stiff lightweight panel constructions, such as plasterboard, drywall, plywood, AAC and hollow core walls, typically have coincidence dip resonance which allows noise to transmit through a construction. The coincidence dip is dependent on the material's stiffness and thickness and occurs at the point where the sound transmitted through the structure matches the natural frequency of the panel.

Isobrane® shifts the coincidence dip to frequencies limiting its impact, thereby maintaining the performance of the product.

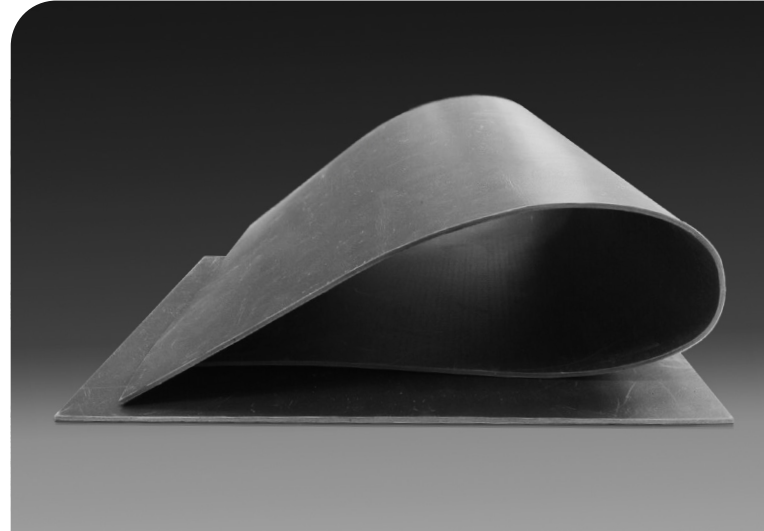
The thin, dense mass barrier reflects and absorbs the transmission of sound through walls, ceilings and floors, reducing the critical frequencies generated from mechanical equipment, engine noise and electronic audio technologies such as radio and television.

VOC STATEMENT

Isobrane® contains no ozone-depleting substances and comply with American, European and Australian standards for Volatile Organic Compound emissions.

SPECIFICATIONS

Colour	Black
Available	<p>Standard Roll Sizes: 1m x 1 m 1m x 5 m</p> <p>Custom rolls or sheets available depending on MOQ</p>



applications

- Inside cavities or over lightweight wall, ceiling and floor constructions. Ideal for theatres, office partitions, meeting rooms and high privacy areas.
- Between the plenum chamber of a floor slab, roof and adjoining partition walls
- Acoustic doors to increase transmission loss
- Automotive cabin application to reduce engine and road noise transmitting through the structure
- Can be laminated onto lightweight structures to dampen and reduce airborne noise
- Usable where moulded parts or components are required

features

- No ozone-depleting substances generated during manufacture
- Free from lead, odour-producing oils, halogens and bitumen
- Easy to cut, tape and mechanically fasten into position
- Self-extinguishes upon removal of flame, does not drip
- Resistant to water, oil and natural weather conditions
- Tear-resistant with high tensile strength
- Thermo-formable into different shapes
- Available in various weights, widths and roll lengths
- Available with various laminates such as fabrics, foams and polyester fibre

PRODUCT SPECIFICATIONS

Barrier weight	Thickness (mm)	Standard roll size	Standard roll weight	'K' value (Wm ⁻¹ K ⁻¹)	Operating temp. range (°C)
2.5 kg/m ²	1.25 mm	1m x 10m	2.5 kg	0.49 (Report No.09/1182)	-20 to 70 (Continuous) -20 to 90 (Intermittent)
5 kg/m ²	2.5 mm	1m x 1m	5 kg		
10 kg/m ²	5 mm	1m x 1m	10 kg		

Tolerances: Length: ±1%, Width: -0/+5 mm (0.2 in), Thickness: ±3 mm (0.12 in), Weight: ±0.5 kg/m² (0.1 lb/ft²)

Additional barrier weights available depending on MOQ

*Supplied untrimmed - means some surface coverings may overhang the ordered useable width

MATERIAL PROPERTIES

Test method	Index	Report no.	Description	Result
FMVSS-302	Burn Rate - mm/min	20613JY	Automotive burn rate test. Complies	Self Extinguishing
UL 94	After flame time ≤ 2 seconds	20613JY1	Horizontal burn test for foam materials. Complies	HF2

ACOUSTIC PERFORMANCE

Frequency (Hz)	2.5 kg/m ²	5 kg/m ²	10 kg/m ²
100	3.8	6.7	13.3
125	6.4	10.8	16.2
160	10.2	14.7	22.6
200	9.8	14.1	20.5
250	12.0	16.0	22.3
315	13.2	17.9	23.2
400	14.8	19.7	25.0
500	15.8	20.6	26.0
630	17.8	22.6	28.6
800	20.0	25.0	30.1
1000	21.7	26.6	32.7
1250	22.7	27.6	33.4
1600	23.9	28.5	34.1
2000	25.6	30.4	35.9
2500	27.7	32.1	37.6
3150	29.9	34.3	39.7
4000	32.2	36.7	42.1
5000	34.6	39.0	45.0
R _w	21	25	31
STC	21	26	31

Tested to ISO 15186-1:2003 & 10140-4:2010 at University of Canterbury, New Zealand
Report Numbers: 261b, 262b & 264b

TRANSMISSION LOSS

