WAVEBAR®

flexible noise barrier

Wavebar® is a high-performance, flexible mass-loaded vinyl noise barrier, offering superior acoustic transmission loss. Designed to meet market requirements, it has been effectively used to reduce noise in building, commercial, industrial and automotive markets, globally.

The engineering team at Pyrotek® developed Wavebar® to be dense, thin, highly-flexible, tear-resistant and strong. These properties give the product high transmission loss throughout the various weight ranges.

Stiff lightweight panel constructions, such as plasterboard, drywall, plywood 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. Wavebar® shifts the coincidence dip to frequencies limiting its impact, thereby maintaining the performance of the product.

The dense core mass layer 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

Wavebar® does not contain any Volatile Organic Compounds (VOC) when evaluated according to definitions as applied under the Australia National Pollutant Inventory, The Council of the European Union, Council Directive 1999/13/EC or the USA EPA regulation 40 CFR 51.100(s).

SPECIFICATIONS

Colour	Black
Available	Width: 1380 mm Length (linear m): 5 to 10 m Weight (kg/m^2): 2, 4, 6, 8, 10
	Custom sizes available depending on MOQ

applications

- Inside cavities, over lightweight wall and ceilings.
- Ideal for home theatre rooms, office partitions, meeting rooms
- Between the plenum chamber of a floor slab, the roof and adjoining partition walls
- Isolate sound on doors for privacy
- Position as a curtain to separate and create an acoustic barrier for open floor plans.
- Automotive cabin application to reduce engine and road noise transmitting through to passengers
- Laminate to lightweight structures
- Acoustic treatment for oil & gas pipelines

features

- Simple to cut and install through obstructions - providing flexibility around pipes, ducts, cables etc.
- Resistant to most chemicals, solvents and petrol
- Free from lead, odour-producing oils and bitumen
- Resistant to weather and UV light
- Tear resistant with high tensile strength. Ability to be suspended in lengths of up to 5 metres
- Available in various weights, widths , roll lengths and sheet sizes
- Available with various laminates such as foil, metallised film, foams and polyesters

PRODUCT SPECIFICATIONS

Barrier weight (kg/m²)	Thickness (mm)	Roll			Ceiling sound transmission test AMA-1-II-1967 (CSTC)	Operating temp. range (°C)
		Width (mm)	Length (linear m)	Weight (kg)		
2	1.2	1380*	10	28	44 (Report No. A-22104-0228)	-40 to 100 (Continuous) -40 to 120 (Intermittent)
4	2.0		5 or 10	28 - 56	48 (Report No. -22107-0228)	
6	3.0		5	42	-	
8	4.0		5	56	50 (Report No. 22114-0228)	
10	4.9		5	70	-	

Tolerances: Length: -0/+50mm; Width: -0/+5mm; Thickness: ± 0.5mm; Barrier Weight: <4.5 kg/m² ±0.2 kg/m²; 4.5-10 kg/m² ±0.4 kg/m²; ≥10 kg/m² ±0.5 kg/m²

**Supplied untrimmed - means some surface coverings such as foils, film or fabric may overhang the ordered useable width*

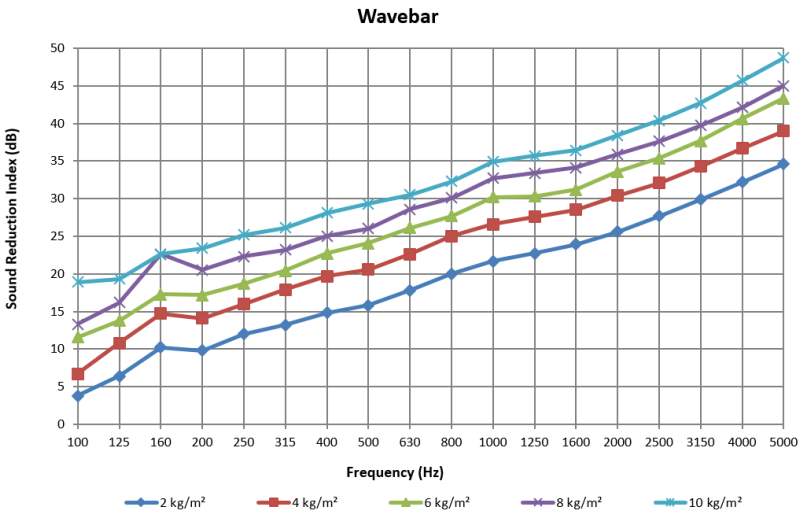
MATERIAL PROPERTIES

Test method	Property	Report no.	Results
AS 5637.1 (AS 3837 / ISO 5660-1)	Fire hazard properties	PR2/5/6/7	Group 3
FMVSS-302	Flammability of interior materials	00813BD	Complies to the requirements of US (DOT) Department of transportation for occupant compartments of motor vehicles
UL94	Flammability of plastic materials	33112BD	HBF

ACOUSTIC PERFORMANCE

Frequency (Hz)	2 kg/m²	4 kg/m²	6 kg/m²	8 kg/m²	10 kg/m²
100	3.8	6.7	11.6	13.3	18.9
125	6.4	10.8	13.8	16.2	19.3
160	10.2	14.7	17.3	22.6	22.6
200	9.8	14.1	17.2	20.5	23.4
250	12.0	16.0	18.7	22.3	25.2
315	13.2	17.9	20.4	23.2	26.1
400	14.8	19.7	22.7	25.0	28.1
500	15.8	20.6	24.1	26.0	29.3
630	17.8	22.6	26.1	28.6	30.5
800	20.0	25.0	27.7	30.1	32.3
1000	21.7	26.6	30.2	32.7	34.9
1250	22.7	27.6	30.3	33.4	35.7
1600	23.9	28.5	31.2	34.1	36.4
2000	25.6	30.4	33.6	35.9	38.4
2500	27.7	32.1	35.4	37.6	40.4
3150	29.9	34.3	37.7	39.7	42.7
4000	32.2	36.7	40.6	42.1	45.7
5000	34.6	39.0	43.3	45.0	48.7
Rw	21	25	28	31	34
STC	21	26	28	31	34

Tested to ISO 15186-1:2003 & 10140-4:2010 at University of Canterbury, New Zealand
Report Numbers: 261a, 262a, 263a, 264a & 265a



ISO 15665 PIPE INSULATION TESTING

Product	Test method	System Assembly	Report no.	Results
Wavebar 6 kg/m²	ISO 15665 (Group 2 Pipe Size)	Available on request	A 3041-1E-RA-002	ISO 15665: Class A2 & B2 NORSOK R-004: Class 6 & Class 7
Wavebar 6 kg/m² & Wavebar 10 kg/m²	ISO 15665 (Group 2 Pipe Size)	Available on request	A 3041-4E-RA-002	ISO 15665: Class B2 & C2 NORSOK R-004: Class 7 & Class 8

For further information and contact details, please visit our website pyroteknc.com