

WAVEBAR®

flexible noise barrier

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

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

Stiff, lightweight panel constructions, such as plasterboard, drywall, plywood and hollow core doors, 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.

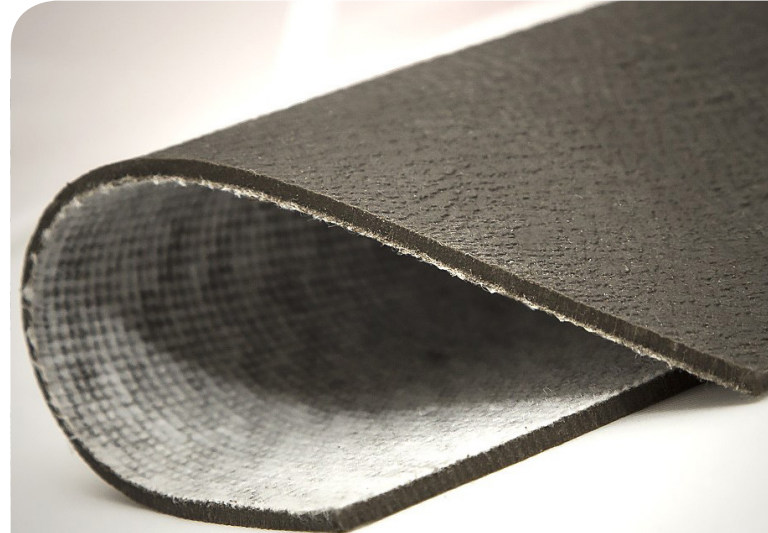
The thin, dense mass barrier reflects and absorbs the energy, resulting in the reduction of transmission of sound through walls, ceilings and floors, therefore reducing the noise generated from sources such as mechanical equipment, engine noise and electronic devices.

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	Standard roll size: 4.6 x 15 to 30 ft
	Barrier weight: 0.5 lb/ft ² , 1 lb/ft ² , 1.5 lb/ft ² , 2 lb/ft ²
	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

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 16.5 ft
- 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	Thickness	Standard Roll Size	Standard Roll Weight	Operating temperature range
0.5 lb/ft ²	0.05 in (1.2 mm)	4.6 ft x 30 ft (1.4 x 9.1 m)	69 lb (31 kg)	Continuous: -40 to 212 °F (-40 to 100 °C) Intermittent: -40 to 248 °F (-40 to 120 °C)
1 lb/ft ²	0.1 in (2.5 mm)	4.6 ft x 30 ft (1.4 x 9.1 m)	138 lb (63 kg)	
1.5 lb/ft ²	0.15 in (3.7 mm)	4.6 ft x 20 ft (1.4 x 6.1 m)	138 lb (63 kg)	
2 lb/ft ²	0.19 in (4.9 mm)	4.6 ft x 15 ft (1.4 x 4.6 m)	138 lb (63 kg)	

Tolerances: Length: -0/+2 in (50 mm), Width: -0/+0.2 in (5 mm), Thickness: ±0.02 in (0.5 mm), Weight: ±10%

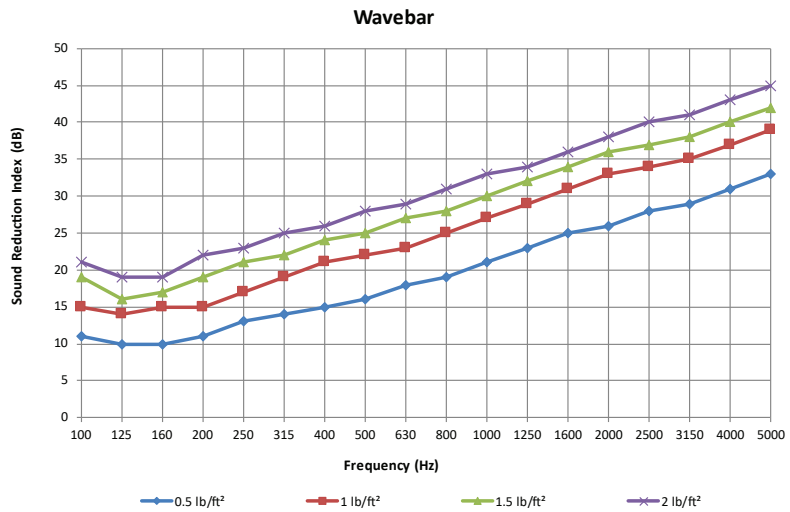
Supplied untrimmed - means some surface coverings such as foils, film or fabric may overhang the ordered useable width

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	17592PC	HBF

ACOUSTIC PERFORMANCE

Frequency (Hz)	0.5 lb/ft ²	1 lb/ft ²	1.5 lb/ft ²	2 lb/ft ²
100	11	15	19	21
125	10	14	16	19
160	10	15	17	19
200	11	15	19	22
250	13	17	21	23
315	14	19	22	25
400	15	21	24	26
500	16	22	25	28
630	18	23	27	29
800	19	25	28	31
1000	21	27	30	33
1250	23	29	32	34
1600	25	31	34	36
2000	26	33	36	38
2500	28	34	37	40
3150	29	35	38	41
4000	31	37	40	43
5000	33	39	42	45
STC	21	26	30	32



Tested to ASTM E90 at Riverbank Acoustical Laboratories, USA
 Report Number: TL18-641, TL18-642, TL18-643 & TL18-644

ISO 15665 PIPE INSULATION TESTING

Product	Test method	System Assembly	Report no.	Results
Wavebar 1 lb/ft ²	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 1 lb/ft ² & Wavebar 2 lb/ft ²	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

Caveats: Specifications are subject to change without notice. The data in this document is typical of average values based on tests by independent laboratories or by the manufacturer and are indicative only. Materials must be tested under intended service conditions to determine their suitability for purpose. The conclusions drawn from acoustic test results are as interpreted by qualified independent testing authorities. Nothing here releases the purchaser/user from responsibility to determine the suitability of the product for their project needs. Always seek the opinion of your acoustic, mechanical and fire engineer on data presented by the manufacturer. Due to the wide variety of individual projects, Pyrotek is not responsible for differing outcomes from using their products. Pyrotek disclaims any liability for damages or consequential loss as a result of reliance solely on the information presented. No warranty is made that the use of this information or of the products, processes or equipment to which this Information Page refers will not infringe any third party's patents or rights. DISCLAIMER: This document is covered by Pyrotek standard Disclaimer, Warranty and © Copyright clauses. See pyroteknc.com/disclaimer.

