

QUADZERO™ dBX

dBX flexible noise barrier with aluminium glass-cloth facing

Quadzero dBX is a high-performance noise control product that exhibits superior transmission loss performance. It features a flexible, mass-loaded noise barrier, laminated with an aluminium foil-covered glass-cloth facing (AGC). It was developed to meet market requirements in marine, rail, domestic, commercial, industrial and automotive industries.

Quadzero dBX is a thin, strong, flexible mass barrier made from recycled polymers that are halogen-free and offered in a range of weights that provide effective acoustic transmission loss performance. The aluminium glass cloth (AGC) face offers a durable flame-retardant surface, complying to IMO FTP Code.

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

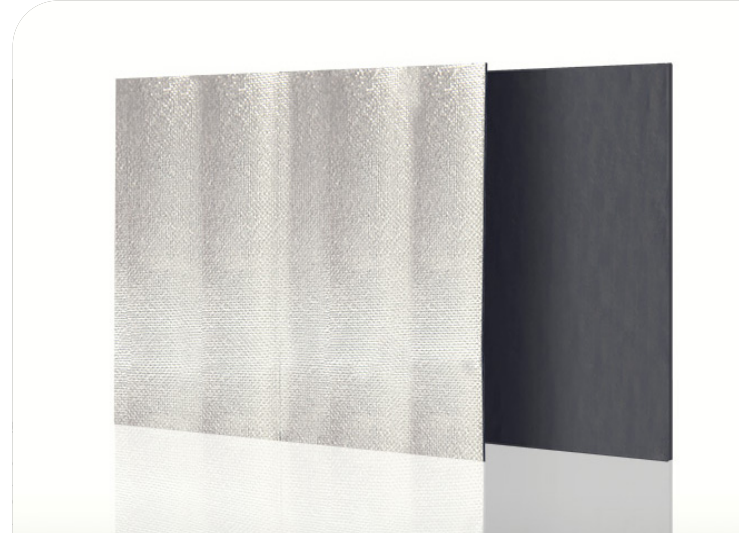
The dense, mass barrier attenuates noise from mechanical equipment, engine, and electronic audio technologies such as radio and television, when transmitted through walls, ceilings and floors.

VOC STATEMENT

Quadzero™ products contain no ozone-depleting substances and comply with European and Australian standards for Volatile Organic Compound emissions.

SPECIFICATIONS

Colour	Silver (Aluminium face)
Available	Standard Roll Sizes: 1.35 x 10 m (4.4 ft x 32.8 ft) 1.35 x 5 m (4.4 ft x 16.4 ft) Custom rolls or sheets available depending on MOQ



applications

- Marine engine rooms and deckheads to reduce noise transmission
- Rail carriages for under-floor insulation to reduce track and braking noise
- Automotive cabin application to reduce engine and road noise transmitting through the structure
- Inside cavities or over lightweight wall, ceiling and floor constructions
- Ideal for theatres, office partitions, meeting rooms and high privacy areas
- Usable where moulded parts or components are required

features

- Complies with IMO FTP (low spread of flame) and EN45545-2 (for rail applications)
- Resistant to water, oil and natural weather conditions
- Free from lead, odour-producing oils, halogens and bitumen
- No ozone-depleting substances generated during manufacture
- Tear-resistant with high tensile strength
- Simple to cut, tape and mechanically fasten into position
- Available with various laminates such as fabrics, foams and polyester fibre

PRODUCT SPECIFICATIONS

Barrier weight	Thickness	Standard roll size	Standard roll weight	Operating temperature range
2 kg/m ² (0.4 lb/ft ²)	1.5 mm (0.059 in)	1.35 x 10 m (4.4 ft x 32.8 ft)	27 kg (60 lb)	Continuous: -20 to 70 °C (-4 to 158 °F) Intermittent: -20 to 90 °C (-4 to 194 °F)
4 kg/m ² (0.8 lb/ft ²)	2.5 mm (0.098 in)	1.35 x 10 m (4.4 ft x 32.8 ft)	54 kg (119 lb)	
8 kg/m ² (1.6 lb/ft ²)	4.5 mm (0.177 in)	1.35 x 5 m (4.4 ft x 16.4 ft)	54 kg (119 lb)	

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)

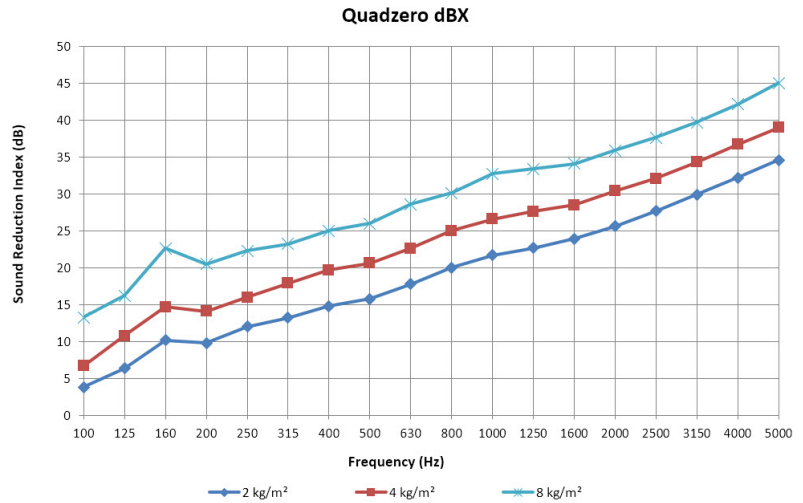
Additional barrier weights available depending on MOQ

MATERIAL PROPERTIES

Test method	Property	Report no.	Result
IMO FTP Annex 1 Part 5	Surface flammability	381223, 377177	Complies for bulkheads, walls or ceiling linings and floors for 5 - 8 kg/m ²
IMO FTP Annex 2	Smoke and toxicity		
MED B	EC Type Certificate (Module B) for Marine Equipment Directive	164.112/1121/EWC MED0439TE	
MED D	EC Type Certificate (Module D) for Marine Equipment Directive	MEDD00000R4	
EN 45545-2 (ISO 5658-2)	Spread of flame	427094	R1 (HL1, HL2, HL3) For 2kg to 8kg products
EN 45545-2 (ISO 5659-2: 50 kWm ⁻²)	Heat release rate by cone calorimeter	427094	
EN 45545-2 (ISO 5660-1: 50 kWm ⁻²)	Smoke generation (optical density)	427094	
ASTM E162	Surface flammability	102087697MID-001Rev2	Complies for US (FRA) Federal railroad administration requirements and requirements of NFPA 130
ASTM E662	Optical density of smoke generated	102087697MID-002Rev2	
ASTM E800 (SMP-800C)	Gases present or generated during fires	102087697MID-003Rev2	Complies for US (DOT) Department of Transportation requirements for acoustic insulation of transit bus and vans (Docket 90A)
Gost 12.1.044-89	Occupational safety standards system. Fire and explosion hazard of substances and materials	001610	Complies

ACOUSTIC PERFORMANCE

Frequency (Hz)	2 kg/m ²	4 kg/m ²	8 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 Number: 261e, 262e, 264e

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 or mechanical 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.
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