

# Sonic-Shield® Presents Pyrotek's Quadzero™ NL

## Quadzero<sup>™</sup> NL

#### Fire-Resistant, Foil Faced Flexible Noise Barrier

Quadzero<sup>™</sup> NL is a high-performance, foil faced massloaded vinyl noise barrier, offering superior acoustic transmission loss and upgraded fire resistance.

With a fire-resistant foil facing, Quadzero<sup>™</sup> NL was developed to meet stringent fire safety requirements in the marine, building and transport sectors. The product achieves the highest fire ratings, complying with International Marine Organization Standards for low spread of flame, as well as British, German, American and Australian building and transportation standards for heat release, toxicity and flame propagation properties.

The upgraded fire safety provided by Quadzero  $^{\rm TM}$  NL is offered without reducing the strength, tear resistance or flexibility.

Stiff panel constructions, such as plasterboard, drywall, plywood and hollow core doors allow noise to transmit through them. The thin, dense mass barrier of Quadzero<sup>™</sup> NL reflects and dissipates the transmission of sound through walls, ceilings and floors, reducing the critical frequencies generated from mechanical equipment, engine noise and electronic devices.

### **VOC Statement**

Quadzero<sup>™</sup> products contain no ozone-depleting substances and comply with European and Australian standards for Volatile Organic Compound (VOC) emissions.

### **Specifications**

Width: 1350 mm Length (linear m): 5-10 m	Length (linear m): 5-10 m	Color	Silver (Aluminum face)
Packaging (Standard)	Packaging (Standard)		
	Weight (kg/m <sup>2</sup> ): 5,8,10	Packaging (Standard)	



### Applications

- Inside cavities or over lightweight wall, ceiling and floor constructions.
- Applied in marine engine rooms & deck heads to reduce noise transmission.
- Railroad carriages for under floor insulation to reduce track and brake noise.
- Around the outside of metal air ducts.
- Wrapped around noisy pipes, i.e. fluid or gas pulsation in chemical, petrochemical and waste water treatment plants.

### Features

- Free from lead, unrefined odor-producing oils and bitumen.
- Complies to IMO FTP 2010 low spread of flame.
- Multiple methods of installation are accepted by USA Coast Guard (USCG).
- Complies to BS476.6 and 7- Class 0.
- Easy to cut, tape and mechanically fasten into position.
- Self-extinguishes upon removal of flame.
- Resistant to water, oil and natural weather conditions.
- Tear resistant with high tensile strength. Ability to be suspended in lengths of up to 5 meters.

For other product information, technical assistance or ordering, please call Sonic-Shield at 888-769-0766 or on-line at www.sonic-shield.com



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### **Product Specifications**

Barrier weight (kg/m²)	Thickness (mm)	ʻk' value (Wm- 1K-1)	Roll Width (mm)	Roll Length (linear m)	Roll Weight (kg)	Ceiling Sound Transmission Test AMA-1-II-1967 (CSTC)	Operating temp. range (°C)	
2	1.2			10	27	44 (Report No. A-22104-0228)		
4	2.0			5 or 10	27-54	48 (Report No. 22107-0228)		
6	3.0	0.49 (Report No. 09/1182) 1350	1350	5	41	-	-40 to 100 (Continuous) -40 to 120 (Intermittent)	
8	4.0		5	54	50 (Report No. 22114-0228)	(		
10	10 4.9			5	68	-	]	

### **Material Properties**

Test Method	Property	Report No.	Results	
IMO FTP Annex 1 Part 5	Surface Flammability	377172		
IMO FTP Annex 2	Smoke and Toxicity	377172	Complies for bulkheads, walls or ceiling linings and floors	
MED B	EC Type Certificate (Module B) for Marine Equipment Directive	164.112/112/EWC MED0361TE		
MED D	EC Type Certificate (Module D) for Marine Equipment Directive	MEDD000000K	Complies	
DNV Type approval	Type approval certificate	F-21140	Complies to DNV GL Offshore Standards, SOLAS & recognized as suitable for use by Transport Canada	
BS476 Part 6	Fire Propagation	377173, 377176	Complies with Class 0 for 6-10 kg	
BS476 Part 7	Surface spread of flame	377175, 377178	Complies with class 0 101 0-10 kg	
TÜV SÜD PSB Approval	Certificate of Conformity	CLS2 15 10 85834 002	Complies	
Qatar Civil Defense approval	Product approval	PAC15004288	Complies as fire rated and retardant materials	
ISO 1716	Heat Combustion	348394	5311 KJ/Kg	
GB8624 (EN 13501)	Fire Classification of construction products and building materials			
GB/T 20284 (EN 03823)	SBI-Single burning item test for building materials & products	GN201312974		
GB/T 8626(ISO 11925-2)	Ignitability of building materials with direct flame impingement	GN201312974	Class B (s2, d0, t0)	
GB/T 20285	Toxic classification of fire effluents hazard for materials			
ASTM E84	Surface Burning Characteristics of Building Materials	01.17786.01.063a	Class A (interior finishes), International Building Code	
GB/T 2406.1-2008	Burning behavior by oxygen index	SZML110704163	31.50%	
TB/T3138-2006	Specification of flame retardant materials for railway vehicle	SZML110704163	Complies	
FMVSS 302	FMVSS 302 Flammability of interior materials		Complies to the requirements of US (DOT) Dept. of Transport for occupant compartments of motor vehicles	

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### **Acoustical 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	39.9	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 Number: 261d,262d,263d,264d & 265d

### ISO 15665 Pipe Insulation Testing

Barrier Weight	Test Method	System Assembly	Report No.	Results
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
6 kg/m² & 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

Testing was conducted using Wavebar®

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