



# VSC Flexible Noise Barrier Materials

## 10NL – RP & 0-10NL-25-RP

VSC flexible noise barrier materials are constructed with a tough, high temperature-fused vinyl, loaded with non-lead fillers, reinforced with high strength fabric and faced with reinforced metalized polyester with the option of an acoustic foam decoupling layer (0-10NL-25-RP). It resists the passage of sound waves and reduces noise transmission. VSC noise barriers are available with a 1.00 lb/ft<sup>2</sup> vinyl layer, or 0.50 to 2.00 lb/ft<sup>2</sup> upon special order. Higher STC levels can be reached using multiple layers which follow the limp-mass law principle of noise transmission.

VSC noise barriers have a low smoke spread rating, have high tear and tensile strengths and will not rot, shrink or cause metal corrosion. The materials are easy to fabricate and install and can be cut with scissors, a knife or be die-cut. VSC noise barriers are safe and non-toxic.



### APPLICATIONS:

VSC flexible noise barrier materials are a first choice of design engineers, architects, and plant engineers for an effective noise barrier solution in industrial, OEM, new construction, and remedial applications such as:

Pipe and Duct Noise Lagging

### ACOUSTIC PROPERTIES:

Barrier Weight Lb/ft <sup>2</sup>	Frequency (Hz)						
	125	250	500	1K	2K	4K	STC
0.50	10	12	16	21	26	32	20
0.75	12	16	20	25	20	34	23
1.00	15	17	21	27	32	36	26
1.50	14	19	25	36	33	37	30
ASTM E90-75	Sound Transmission Loss dB						

### Physical Properties

#### Colour:

- Barrier (1/16") – Black
- Facing – Silver
- Foam (1/4") – Grey (0-10NL-25-RP only)

#### Density:

- Barrier – 1 lb/ft<sup>2</sup>
- Foam – 2lb/ft<sup>3</sup> (0-10NL-25-RP only)

Tensile Strength: 240 lb/in<sup>2</sup> min.  
ASTM D412, DIE 1

Tear Strength: 20 lb/in min. ASTM  
D624, DIE C

Peel Strength: 2.2 lb/in min. ASTM  
D903

Elongation: 120%

Flammability: MVSS 302, SAE J369,  
Formulation to UL-94 V-0 ASTM E84-  
05 Class A and FAR 25.853

Temperature Range: -30°F (-34°C) to  
+200°F (+93°C) continuous – MIL-  
STD-10 at +250°F (+121°C), 7 24 hr.  
Periods – PASS

Cold Crack: MIL-STD-810 at -25°F  
(-32°C), 1in. (25mm) mandrel – PASS

Thermal Conductivity: 0.3 – 0.38  
BTU-in/ft<sup>2</sup>h°F (43 – 55 mW/m<sup>2</sup>K) per  
ASTM C518

### Applications

Pipe and Duct Noise Lagging,  
Machinery Covers, Vehicle Noise  
Reducing Underlays, Ceiling Noise  
Barriers, Cross-Talk Barriers, Wall  
and Door Septums, Noise Panels,  
Rooftop Equipment Barriers,  
Rollaway Curtains, Wall and Floor  
Septums in Rapid Transit Cars, and  
many more...