

EVA Mass Loaded Vinyl

Non-PVC flexible acoustic barrier sheet

Designed to add mass where space is limited. This dense, flexible EVA barrier helps reduce airborne sound transmission when incorporated into a properly designed wall, ceiling, floor, enclosure, or equipment assembly.

EVA MASS-LOADED ACOUSTIC BARRIER



NON-PVC EVA

Mineral-filled EVA formulation for customers seeking a flexible, non-PVC acoustic barrier.

HIGH DENSITY

Typical material density of 1.95 g/cc supports strong mass-law performance.

FLEXIBLE & FABRICABLE

Can be cut, die-cut, adhered, or shallow-draw thermoformed for project-specific integration.

PRODUCT OVERVIEW

EVA Mass Loaded Vinyl is a flexible, high-specific-gravity barrier sheet used to help control noise. Its added mass resists the movement of sound energy and helps reduce transmission through or around an assembly. The material is especially useful where a thin, conformable barrier is preferred over a rigid panel.

KEY CHARACTERISTICS

- Flexible, mineral-filled EVA acoustic barrier
- Non-PVC formulation
- Can be cut on site with standard tools
- Available in sheet or roll formats
- Compatible with water-based and hot-melt adhesives
- Capable of meeting FMVSS 302
- RoHS-compliant solutions are available

HOW IT WORKS

The product follows the basic relationship described by limp mass law: increasing barrier mass generally improves sound reduction, with performance also changing by frequency. The manufacturer reports that SoundX EVA met or exceeded predicted component-level sound reduction calculated by:

$$dB = 20 \times \log (f \times m) - 33$$

where f is frequency in hertz and m is surface mass in lb/ft². This equation is a predictive reference, not an assembly STC rating.

WCSS APPLICATION GUIDANCE

- Use as one layer within a complete sound-control assembly.
- Maintain continuous coverage and carefully seal seams and penetrations.
- Select fastening and adhesive methods compatible with the substrate and project conditions.
- Final field performance depends on the full assembly, detailing, workmanship, and flanking paths.

Important: This sheet summarizes material-level properties. It does not provide an STC, IIC, OITC, or field sound-isolation rating for any specific wall, ceiling, or floor assembly.

Technical Data & Capabilities

Published material information for EVA acoustic barrier sheet

PROPERTY	PUBLISHED VALUE	PROJECT NOTE
Material	Highly mineral-filled, flexible EVA sheet	Non-PVC acoustic barrier formulation
Typical density	1.95 g/cc	Supports high mass in a relatively thin sheet
Basis weight range	0.4 to 2.0 lb/ft²	Select weight based on assembly goals and handling requirements
Gauge capability	0.040 to 0.200 in.	Published manufacturing capability; stocked WCSS sizes may vary
Low-temperature flexibility	Flexible to -20°F around a 1 in. mandrel	Manufacturer-stated material flexibility benchmark
Service temperature	-20°F to 150°F	Confirm suitability for the actual environment
Flammability capability	Capable of meeting FMVSS 302; approx. 50 mm/min burn rate	Transportation test reference; not a building-code fire-resistance rating
Thermoforming	Shallow draw; 210°F to 230°F starting temperature	Processing conditions can affect final properties
Adhesive compatibility	Water-based and hot-melt adhesives	Always verify adhesive/substrate compatibility

FORMAT CAPABILITIES

FORMAT	MINIMUM	MAXIMUM
Sheet width	24 in.	60 in. below 0.150 in. gauge; 54 in. above 0.150 in.
Sheet length	36 in.	130 in.
Roll width	24 in.	60 in. below 0.150 in. gauge; 54 in. above 0.150 in.
Roll length	25 linear ft	400 linear ft below 0.150 in. gauge; 125 linear ft above 0.150 in.

INSTALLATION CONSIDERATIONS

- Plan the layer so coverage remains continuous across the treated area.
- Butt or overlap seams according to the selected assembly detail, then seal with a compatible seam tape or acoustic sealant.
- Avoid unsealed gaps around electrical, plumbing, HVAC, and structural penetrations.
- Support the material adequately during installation; higher basis weights are heavy and may require additional labor.
- Do not rely on MLV alone to correct flanking transmission or structural vibration.

PUBLISHED TARGET APPLICATIONS

The manufacturer identifies transportation and specialty equipment uses, including:

- Automotive sub-flooring and cabin walls
- Agricultural equipment roof pans and sub-flooring
- Marine and RV sub-flooring
- Heavy and medium truck driver/sleeper cabins
- Specialty vehicle dash liners

DATA & USE NOTICE

Values shown are manufacturer-published typical information and manufacturing capabilities, not guaranteed minimum or maximum specifications. Actual properties may vary with formulation, gauge, processing, installation, substrate, temperature, and full-scale assembly design. The purchaser and installer are responsible for verifying product suitability, code compliance, adhesive compatibility, and end-use performance. Contact West Coast Sound Solutions to confirm current stocked dimensions, basis weight, availability, and recommended assembly details.

Product naming: “EVA Mass Loaded Vinyl” is a common market description used by WCSS. Technically, the sheet is an EVA-based, non-PVC mass-loaded acoustic barrier.