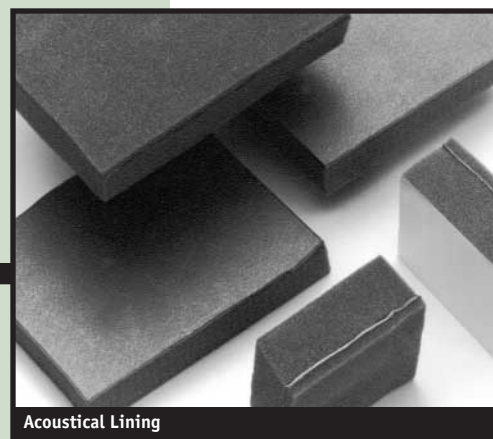


SOUNDSCREEN™ Acoustical Lining

a McGill AirSilence™ Product

Product Bulletin 4242

United McGill® products



Our acoustical lining combines several basic noise control materials into a simple, multi-layered acoustical composite material.

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SOUNDSCREEN Acoustical Lining Provides Absorption and Damping

SOUNDSCREEN Acoustical Lining combines several basic noise control materials into a simple, multi-layered, acoustical composite material. Two basic linings satisfy most applications: absorbing foam plus noise barrier, and absorbing foam plus damping. Acoustical liners convert bare metal and plastic equipment covers into effective noise enclosures by adding the right combination of sound deadening material to the inside surfaces.

Foam/Vinyl/Foam Barrier Lining: This barrier lining is available with 1 lb/sq ft density loaded vinyl and is the same as the inner septum layer. This lining material is excellent for building factory partitions. Adhered to 1/4-inch plywood, the material provides approximately 50 dBA transmission loss at the critical 1000 and 2000Hz frequencies — equivalent to the noise reduction of an 8-inch masonry block wall!

Foam/Damping Lining: Foam/Damping is a sheet of absorbing foam bonded to a layer of 0.062-inch-thick SOUNDSCREEN LD-400 damping material. The material reduces the humming noise associated with vibrating sheet metal, as well as controls the reverberant noise inside cabinets or equipment covers.

As a combination of materials, each layer of the product serves a specific function. The 0.062-inch-thick layer of LD-400 damping material effectively controls radiation noise in metal up to 16-gauge thickness. The damping material is bonded directly to the metal structure for maximum effectiveness. The 1-inch thickness of acoustical foam faces the noise source so that it can absorb reverberant noise.

Installation

Both Foam/Vinyl/Foam and Foam/Damping materials can be cut with standard sheet metal shears. The linings can also be readily supplied as die cut pieces ready for installation into equipment housings.

Barrier linings must be bonded to the structure by their 1/4-inch-thick compliant foam

Acoustical Properties: Absorption Effectiveness

Thickness	Frequency Hz						NRC
	125	250	500	1K	2K	4K	
1"	10%	28%	71%	100%	91%	95%	0.73

Acoustical Properties: Transmission Loss

	Frequency Hz						STC
	125	250	500	1K	2K	4K	
1 lb/sq ft septum	15	19	21	28	33	37	27

Product Availability

Model	Material Composition	Size	Absorbing Foam Cover Type
FVF-P FVF-U	1" Absorbing foam, 1 lb/sq ft vinyl septum, 1/4" foam	54" x 50' roll	uncovered white polyurethane
FD-P1 FD-U2	1" Absorbing foam, 0.062" LD-400 damping sheet	2' x 4' sheet	uncovered white polyurethane
FD-P2 FD-U2	2" Absorbing foam, 0.062" LD-400 damping sheet	2' x 4' sheet	uncovered white polyurethane

See SOUNDSCREEN Acoustical Foam Product Bulletin 4240 for other protective covering options.

layer. A solvent-based contact adhesive is a proven adhesion method.

The preferred adhesive for Foam/Damping linings is a two-part epoxy.

Foam/Damping linings with pressure sensitive backing on the damping sheet is also available. This is not recommended for critical damping applications where service temperature exceeds 150°F or where high humidity or oil mist is present.

Products depicted in this specification sheet were current at the time of publication. As a quality-conscious manufacturer, McGill AirSilence is continually seeking ways to improve its products to better serve its customers. Therefore, all designs, specifications, and product features are subject to change without notice.

McGill AirSilence LLC

An enterprise of United McGill Corporation — Founded in 1951

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