# **SOUNDSCREEN**<sup>™</sup> Acoustical Foam

## a McGill AirSilence<sup>™</sup> Product

Product Bulletin 4240

United McGill® products



As a general rule, 70 percent of noise buildup can be eliminated by covering 50 percent of the exposed side surface.

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.

#### SOUNDSCREEN Acoustical Foam Keeps Reverberant Noise Levels Low

SOUNDSCREEN Acoustical Foam is a 2 lb/cu ft density flexible polyurethane polyester foam. The open cell construction provides an attractive non-reflective surface that absorbs airborne noise. The charcoal gray foam is a safe, non-toxic pleasant handling material that's easily cut with a knife, scissors, or steel rule die.

#### **Product Facing Selection**

**Plain Unfaced Foam (FOA-P):** This basic acoustical grade foam, from which all versions are derived, is excellent for clean, non-abusive applications, such as business machine enclosures.

**Clear Polyester Facing (FOA-C):** The lowest price facing that effectively protects the open cell foam structure from dirt, moisture, lubricants, and similar contaminants. It is recommended for applications where charcoal gray is aesthetically acceptable.

White Polyurethane Facing (FOA-U): A midpriced, slightly tougher facing. Recommended for applications where the aesthetics of a cleanable white surface are as important as the facing's contaminant and abuse resistance properties.

**Perforated Vinyl Facing (FOA-V):** Best suited for applications such as vehicle cabs or equipment enclosures where durability and decorativeness of the black vinyl surface is needed.

#### Installation

Acoustical foam is a light-weight cellular plastic material with high tear and shear strength. The material is easily trimmed to size with a knife or scissors. The most common attachment method is a solvent base contact adhesive. Mechanical pin fastening can make some difficult overhead surface applications easier.

Pressure sensitive adhesive (PSA) backing is available but not recommended for custom projects or low volume useage. A PSA installation system is usually only cost effective when the savings in production line labor exceed the adhesive's premium cost. PSA is not recommended for use where service temperature exceeds 150°F or where high humidity or oil mist is present.

Acoustical Properties: Absorption Effectiveness							
Foam Thickness	Frequency Hz						NPC
	125	250	500	1K	2K	4K	
1″	10%	28%	71%	100%	91%	95%	0.73
2″	30%	66%	92%	99%	100%	100%	1.00
Values are representative for random incidence tests per ASTM C423.							

Effectiveness will vary with facing selected.

Physical Properties of Basic Foam					
Density	Tensile Strength (psi)	Tear Strength (lb/in)	Elongation	Color	
2.0 ±10%	greater than 17.0	greater than 1.6	greater than 130%	charcoal gray	

Product Availability					
Model	Thickness	Size	Type of Foam Facing		
FOA-P1	1″	50′ roll	uncovered	Note:	
FOA-P2	2″	10' sheet	uncovered	All rolls and sheets are a nominal 54"	
FOA-C1	1″	50′ roll	clear polyester	wide. Trimmed and die cut sheets are	
FOA-C2	2″	10′ sheet	clear polyester	available. Please	
FOA-U1	1″	50′ roll	white polyurethane	specity.	
FOA-V1	1″	50′ roll	perforated vinyl		

Flammability Properties of Basic Foam				
Application	Test Method	Classification		
Component Plastics	UL-94	HF-1		
Component Plastics	ASTM D-1692	self-extinguishing		
Motor Vehicle Interiors	MVSS 302	SEO		
Different film facings and adhesive systems will affect this flammability classification of the applied product.				

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### McGill AirSilence LLC

An enterprise of United McGill Corporation — Founded in 1951

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