



CEILING SYSTEMS

Between us, ideas become reality™

SOUNDSOAK®
Acoustical Baffles
BioAcoustic™ & Fiberglass



SOUNDISOAK® Acoustical Baffles

BioAcoustic™ & Fiberglass



Soundsoak Baffles 2' x 4' with Eye Hooks and Square Edges in FR-701 Silver Papier, Blue Plum, and Deep Burgundy fabrics; Custom Soundsoak Walls in Silver Papier Martin Luther King Elementary, Lancaster, PA

Key Selection Attributes

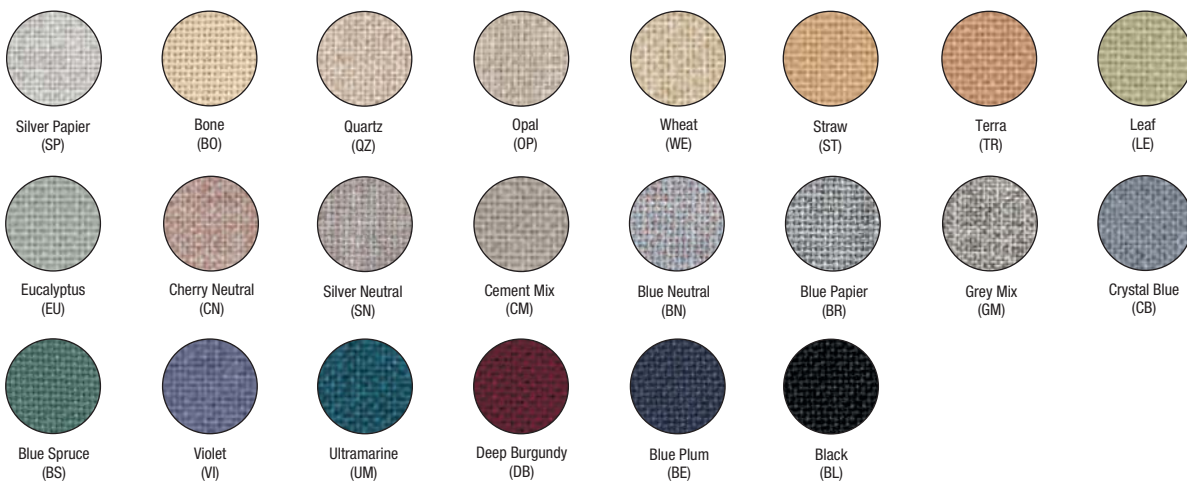


- Soundsoak with BioAcoustic core has a 44% rapidly renewable substrate made from jute, a plant that grows from seed to harvest in 100 days, and can contribute to LEED® credits (Rapidly Renewable and Acoustics)
- 100% post-consumer woven fabrics coordinate with Soundsoak Walls and Diffusers
- On average, one baffle per 40 square feet, or 20% coverage, reduces reverberation time by approximately 50%
- Seismic approved
- Easy to install with sleek, adjustable aircraft cable hanging kit
- Additional colors, sizes, and edge details available as custom options; contact Architectural Specialties at 1 877 ARMSTRONG, select options 1-1-4

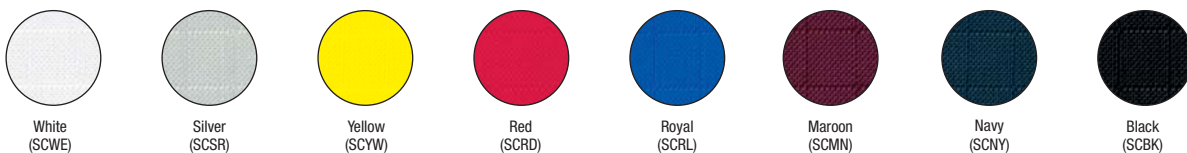


BioAcoustic core used in Soundsoak

Woven Fabric Surface - BioAcoustic & Fiberglass Cores FR-701



Sailcloth Fabric Surface - Fiberglass Core Only



On the cover: Soundsoak Baffles Custom panel sizes in Sailcloth Yellow, Navy Blue, and Silver Northern Rockies Regional Recreation Centre, Fort Nelson, British Columbia

Acoustical Performance

Sound Absorption in Sabin

The Sabin is the unit of total sound absorption provided by an object. This is the preferred metric for “space absorbers” such as clouds, canopies, or baffles installed within an architectural space.

Soundsoak® Baffles provide greater sound absorption than a continuous ceiling of the same surface area because the sound is absorbed from both the front and back surfaces.

The installation of Soundsoak Baffles in a reverberant space can significantly reduce the background noise and reverberation time, enhancing speech intelligibility.

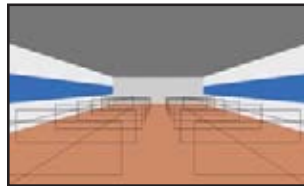
Exposed Structure vs. Partial Coverage with Soundsoak Baffles

5000 SF Exposed Structure
(50' x 100') Space

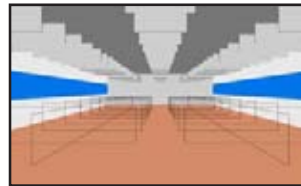
Ceiling Height: 15' to Deck

Drywall Walls, with windows on 2 sides, and commercial carpet

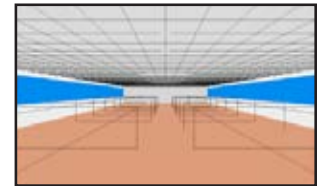
EXPOSED STRUCTURE



125 SOUNDSOAK BAFFLES



FULL OPTIMA® CEILING



CEILING	None Exposed Structure	Exposed Structure with 80% Acoustical Deck Treatment*	20% Soundsoak Fiberglass Baffles Item 6607 (125 - 2' x 4')	20% Soundsoak BioAcoustic™ Baffles Item 6606 (125 - 2' x 4')	50% Soundsoak Fiberglass Baffles Item 6607 (312 - 2' x 4')	50% Soundsoak BioAcoustic Baffles Item 6606 (312 - 2' x 4')	Optima Ceiling Continuous 10' H
Reverberation time(s)	3.4s	2.26s	1.20s	1.67s	0.61s	0.95s	0.49
RT reduction (%)	–	34%	65%	51%	82%	72%	86%
SPL reduction (dB)	–	1.1dB	3.1dB	2.3dB	5.6dB	4.3dB	6.3dB

* Acoustical deck treatment is 1.5" thick with an NRC of 0.55.

Case Study

Project: Martin Luther King Elementary School

Location: Lancaster, PA

Product: Soundsoak Baffles and Walls

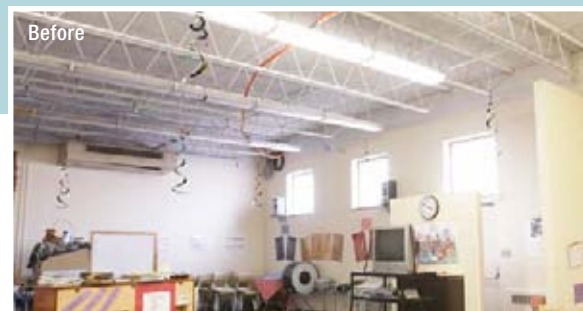
Problem: Classroom suffered acoustically from both high reverberation time and high levels of background noise.

Situation: Exposed structure, cinderblock walls, carpeted floors.

Solution: Installation of fabric-covered Soundsoak Baffles and Walls reduced reverberation time in the space by 27% to 0.56 seconds, which meets the ANSI S12.60-2010 Classroom Standard.

- 16 Soundsoak Baffles
- 96 square feet of Soundsoak wall panels installed five feet from the roof deck on the back and side walls

For more information, visit armstrong.com/baffles.



Soundsoak Baffles 2' x 4' in FR-701 fabrics; Custom Soundsoak Walls 3.5' x 3.5' with Mineral Fiber substrate and Square Edge in FR-701 Silver Papier fabric

SOUNDSOAK® Acoustical Baffles

BioAcoustic™ & Fiberglass

Recycled Content: Up to 52%

armstrong.com/greengenie

LEED® Credits

Energy	Waste Mgmt	Recycled Content	Local Materials	Renewable Materials	Daylight & Views
✓	✓	✓	✓	✓	
Location Dependent					

LEED for Schools

Acoustics	Low Emitting or GHPS
✓	✓

Colors (see page 2)

30 options

Visual Selection

Item No.*	Description	Dimensions Nominal W x L x H	Mounting
Soundsoak Baffles			
6605 _ _	Fabric-wrapped Square Edge with Fiberglass core	2' x 4' x 2"	Eye Hooks
NEW 6606 _ _	Fabric-wrapped Square Edge with BioAcoustic core	2' x 47-1/2" x 1-1/4"	Grommets
6607 _ _ _	Sailcloth Nylon Stitched Sealed Edge with Fiberglass core	2' x 4' x 1-1/2"	Grommets

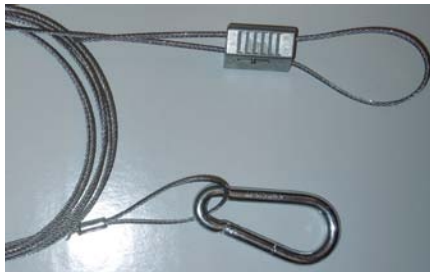
* When specifying or ordering, include 2- or 4-letter color suffix.

Accessories

5670	Baffle Hanging Kit (2 cables, 2 carabiners, and 2 adjusters)	1/16" x 8' (cable)
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Installation Options

Hanging Kit



Eye Hook Mounting



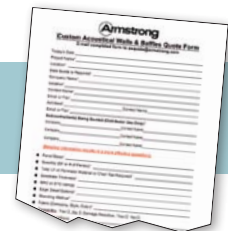
Grommet Mounting



Custom Soundsoak Baffles

- Edge detail (square, beveled, radiused, mitered, stitched)
- Sizes up to 4' x 8' for fiberglass core; for custom BioAcoustic panels, contact the Architectural Specialties project management team at 1 877 ARMSTRONG, select options 1-1-4
- Thickness 1" to 2"
- Customer-specific fabrics can be considered from manufacturers like:
 - Guilford of Maine: www.guilfordofmaine.com
 - Maharam: www.maharam.com
 - Designtex: www.designtex.com
 - Carnegie: www.carnegiefabrics.com
 - Knoll: www.knolltextiles.com
 - Hytex: www.hytex.com

Use our online Custom Selection Form at armstrong.com/baffles, and we will create baffles to your specifications.



Physical Data

Material

Rigid fiberglass core or BioAcoustic core

Surface Finish

Nylon or fabric

Fire Performance

6605 - Tested in accordance with ASTM E84 - 25/200; Composite Class A rating per IBC (fabric, substrate, etc.); Tested to CAN/ULC S102 - 25/250
 6606 - Tested in accordance with ASTM E84 - 25/200. Composite Class A rating per IBC (fabric, substrate, etc.)
 6607 - Tested in accordance with ASTM E84 - 25/200. Composite Class A rating per IBC (fabric, substrate, etc.)

Seismic Installation

These systems have been engineered, tested, and meet the requirements for ceiling applications in Seismic Design Categories D, E, and F

Acoustical Performance

6605 - 1.8 Sabins per square foot
 6606 - 1.14 Sabins per square foot
 6607 - 1.19 Sabins per square foot

Design Considerations

Soundsoak Baffles, as with other architectural features located in the ceiling plane, may obstruct or skew the existing or planned fire sprinkler water distribution pattern, or possibly delay the activation of the fire sprinkler or fire detection system. Designers and installers are advised to consult a fire protection engineer, NFPA 13, and their local codes for guidance on the proper installation techniques where fire detection or suppression systems are present.

Seismic Restraint*

The International Building Code allows architectural components to swing freely as long as they will not be damaged or cause damage. Baffles suspended will swing no more than 18" in any direction for each panel.

* Pendulum reaction information is based on full-scale testing and computer modeling conducted at the Structural Engineering Earthquake Simulation Lab located at the State University of New York at Buffalo.

Installation Consideration

Cutting baffles is not recommended. Do not attach carabiner to BioAcoustic baffle grommet.

Warranty

One (1) year limited warranty.
 Details: armstrong.com/warranty

Weight/Square Feet

Bulk packaged per order
 6605 - 14 lbs. per Baffle
 6606 - 7 lbs. per Baffle
 6607 - 10 lbs. per Baffle