



CONTROLLING NOISE IN EVERY ENVIRONMENT

OEM ACOUSTICAL PRODUCTS



Quilted Fiberglass Absorbers
Noise Barrier & Quilted Fiberglass Absorber Composites
Vibration Damping & Foam Composites

QUILTED FIBERGLASS ABSORBERS

Sound Seal quilted fiberglass absorbers are fire rated, high performance acoustical fiberglass blankets that are used to reduce reverberant (reflected) airborne noise energy in many diverse OEM and industrial applications. They are an excellent alternative to urethane foams since they are fire rated, exhibit low smoke emissions and possess high mechanical strength. Additionally, they have a wide range of facing options, temperature limits, can be cleaned, and are unaffected by moisture, humidity, dust, dirt, oils and most chemicals. Quilted fiberglass absorbers are easily installed, will not degrade and have extremely long service lives.



DIE CUT PARTS

- Die cutting ensures consistent fit
- Easier installation
- Edges are stitch bound



ROLL GOODS

- 25' to 50' length
- Standard 48" wide
- Custom widths available
- Available with finished edges bound & sewn, or with unbound edges



Manufacturers of portable air compressors benefit by specifying quilted fiberglass absorbers in their noise reduction package.

APPLICATIONS

- Machinery housings
- Electrical cabinets
- Engine compartments
- Equipment enclosures
- Firewalls
- Hoods
- Operator cabs

FEATURES

- Excellent low frequency absorption
- Low smoke & flame
- Extremely long service life
- Pressure Sensitive (PSA) backing or mechanical fasteners available
- Lightweight
- Water resistant; washable
- Available combined with noise barrier or damping sheet to combat difficult problems that one material alone cannot handle

Quilted fiberglass absorbers have been used extensively as sound absorbing liners by original equipment manufacturers in almost any place where generated sound energy can build up and a reduction of noise is desirable or required. Original equipment manufacturers of portable generator sets meet and surpass their noise reduction requirements by installing die-cut quilted fiberglass acoustical panels.



Products			Sound Absorption Data Octave Band Frequencies (Hz)							Flammability		
Model	Thickness	Facing	125	250	500	1000	2000	4000	NRC	F.S.	S.D.	Class
QFA-1	1"	VCFC/NPS	.12	.47	.85	.84	.64	.62	.70	17.66	22.75	A
QFA-7	2"	VCFC/NPS	.07	.27	.96	1.13	1.08	.99	.85	17.66	22.75	A
QFA-10	2"	VCFC/VCFC	.19	.99	.96	.80	.57	.33	.85	17.66	22.75	A
QFA-11	2"	SCFS/SCFS	.19	.99	.96	.80	.57	.33	.85	4.95	11.43	A
QFA-14	4"	VCFC/NPS	.21	.89	1.09	1.17	1.13	1.07	1.05	17.66	22.75	A

NPS = Non-woven Porous Scrim
 SCFC = Silicone Coated Fiberglass Cloth
 VCFC = Vinyl Coated Fiberglass Cloth

Acoustical Testing per ASTM
 C423-77, C423-81, C423-84A, C423-90A

FS = Flame Spread
 SD = Smoke Density

FACINGS

Vinyl Coated Fiberglass Cloth (VCFC) Standard

- Breaking Strength (warp & fill): 150 lb./in. & 100 lb./in.
- Tear Strength (warp & fill): 8lb. & 7lb. respectively
- Continuous Service Temperature Limits: -20F to 180 F
- Moisture Permeability: 0.5 Perms
- Color: Gray, White, Tan, Black (special colors available upon request)
- Other: Passes UL-181 Heat Aging Test

Fiberglass Batting

- 1.6 lb./cu. ft. density, 4-6 microns
- Thermal "R" Rating: 1" th. R=4, 2" th R=8
- Thermal "K" Factor: .25

Silicone Coated Fiberglass Cloth (SCFC) – High Temperature

- Breaking Strength (warp & fill): 60 lb./in. and 55 lb./in.
- Tear Strength (warp & fill): 5 lb. respectively
- Continuous Service Temperature Limits: -90F to 450F
- Moisture Permeability: 0.5 Perms
- Color: Gray

Non-Woven Porous Scrim Fabric (NPS) – Backing

- Composition: 100% non-woven nylon
- Fabric Weight: 0.7 oz. per square yard
- Tear Strength (warp & fill): 6 lb. & 5 lb. respectively
- Temperature Limit: Continuous exposure to 400F

Consult factory for decorative fabric facings, optional quilting patterns, laminated facings, special size panels and die cut components.

NOISE BARRIER & QUILTED FIBERGLASS ABSORBER COMPOSITES

Sound Seal mass loaded vinyl noise barrier & quilted fiberglass absorber composites are used for original equipment, industrial, and architectural applications wherever both sound absorption or barriers, alone, are inadequate to satisfy noise reduction objectives. When individual components are configured as a composite, they retain many of their original characteristics, and generally, the resulting product exhibits the best properties of each material.



DIE CUT PARTS

- Die cutting ensures consistent fit
- Easier installation
- Edges are stitch bound



ROLL GOODS

- 25' lengths, custom lengths available
- Standard 48" wide, custom widths available
- Available with finished edges bound & sewn, or with unbound edges

BSC acoustical composites are supplied in roll form and die-cut parts for rail car walls and floors.



APPLICATIONS

- Machinery housings
- Electrical cabinets
- Engine compartments
- Equipment enclosures
- Rail car walls & floors
- Firewalls
- Hoods

FEATURES

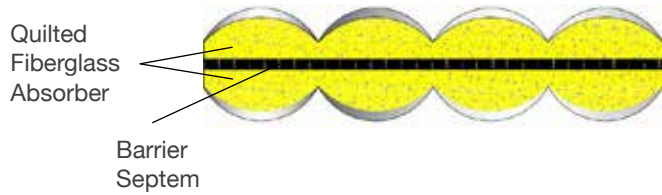
- High STC & NRC
- Low smoke & flame
- Extremely long service life
- Pressure Sensitive (PSA) backing, grommets or mechanical fasteners available

School bus manufacturer insists on BBC-14, in the doghouse, to meet their demanding criteria for both noise reduction and minimal flame and smoke emissions.



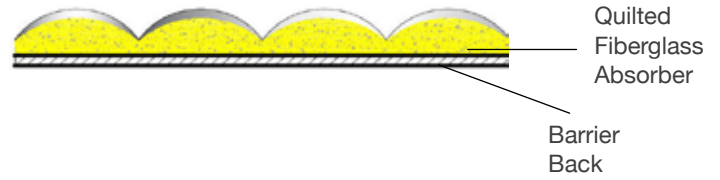
Many motorcoach manufacturers utilize BSC-25 on the firewall, to abate both interior noise levels and federally mandated pass-by requirements

“BSC” STYLE: BARRIER SEPTUM COMPOSITE



BSC composite features a non-reinforced loaded vinyl noise barrier septum (middle) with a quilted fiberglass sound absorber on both sides. Ideally suited as an acoustical liner, the inner layer of quilted fiberglass decouples the barrier from the surface to improve its noise blocking ability while the outer layer adds sound absorption to the treated environment.

“BBC” STYLE: BARRIER BACKED COMPOSITE



BBC composite features a reinforced loaded vinyl noise barrier with a quilted fiberglass sound absorber on one side. The rugged durable exterior barrier is commonly used as a wrap or acoustical jacket due to its ability to conform to any shape. The quilted fiberglass layer adds sound absorption properties and decouples the noise barrier to enhance its acoustical performance.

Products		Weight lb/sf	Sound Transmission Loss Octave Band Frequencies (Hz)							Sound Absorption Data Octave Band Frequencies (Hz)							Flammability	
Model	Noise Barrier & Quilted Fiberglass Absorber Composites		125	250	500	1000	2000	4000	STC	125	250	500	1000	2000	4000	NRC	F.S.	S.D.
BSC-22	<ul style="list-style-type: none"> • 1" VCFC Faced QFA • 1lb PSF non-reinforced barrier septum • 1" NPS Faced QFA 	1.45																
BSC-25	<ul style="list-style-type: none"> • 1" VCFC Faced QFA • 1lb PSF non-reinforced barrier septum • 1" VCFC Faced QFA 		12	16	27	44	44	43	29	.45	.96	.87	.66	.47	.30	.75	22.78	30.56
BSC-26	<ul style="list-style-type: none"> • 1" SCFC Faced QFA • 1lb PSF non-reinforced barrier septum • 1" SCFC Faced QFA 																	
BBC-13	<ul style="list-style-type: none"> • 1lb PSF reinforced barrier • 1" VCFC Faced QFA 	1.22	11	16	24	30	35	35	27	.12	.47	.85	.84	.64	.62	.7	23	30
BBC-14	<ul style="list-style-type: none"> • 1lb PSF reinforced barrier • 1" SCFC Faced QFA 	1.3	11	16	24	30	35	35	27	.12	.47	.85	.84	.64	.62	.7	4	19
BBC-13-2"	<ul style="list-style-type: none"> • 1lb PSF reinforced barrier • 2" VCFC Faced QFA 	1.43	13	20	29	40	50	55	32	.07	.27	.96	1.61	1.08	.99	.85	23	30

NPS = Non-woven Porous Scrim, SCFC = Silicone Coated Fiberglass Cloth
VCFC = Vinyl Coated Fiberglass Cloth, QFA = Quilted Fiberglass Absorber

Acoustical Testing per ASTM, C423 & ASTM E-90

FS = Flame Spread
SD = Smoke Density



Major manufacturers of centrifugal and positive displacement blowers utilize BBC 13-2" as a custom acoustical jacket to dramatically reduce their high noise levels. Hook and loop fasteners allow for quick and easy installation and removal.



Engine cover treated with BSC-26 for Marine application

VIBRATION DAMPING & FOAM COMPOSITES

VBD-10 DAMPING COMPOUND

Sound Seal VBD-10 is a visco elastic damping compound for the treatment of vibrating metal, wood, glass, ceramic and most plastic surfaces. This material imparts vibration damping and a shift in the dominant frequency. The resulting structure borne noise reduction also provides a means of improving the noise transmission loss in many applications.

Sound Seal VBD-10 is especially recommended for new construction and equipment requiring superior flame and smoke resistant materials to meet local codes and ordinances. Ideal for OEM applications including bus, rail and marine.



AVAILABLE IN:

- 5 GALLON PAILS (60 LBS)
- 55 GALLON DRUMS (600 LBS)

Physical Properties: Rec. Max. Service Temp. 325° F		
Flammability	ASTM-E-84 ASTM-E-662 ASTM-E-162	Flame Spread 0 Smoke Index 0 Smoke Index 2 Flame Spread 1
Flash Point	ASTM-D-92 wet none	
Fire Paint	ASTM-D-92 wet none	
Flexibility	Remains tenacious & flexible over a wide range of temperatures	
Storage Temp.	40° F & above	
Shelf Life	Approximately one year in a tightly sealed container	
Colors	Light gray or tan	
Odor	Totally odorless when dry	

APPLICATIONS

- Ships and boats
- Rapid transit cars
- Fan and blower housings
- Metal partitions & roof panels
- Bins, chutes, hoppers & machine guards
- Stadium seating

FEATURES

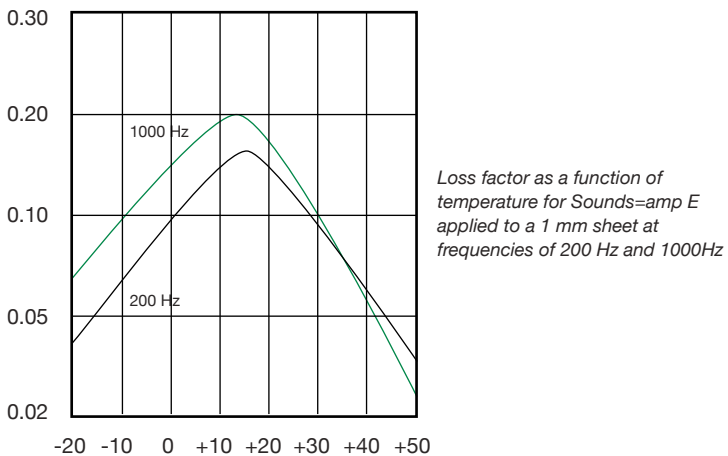
- Low flame spread & smoke development rating per ASTM E-84-91A, ASTM E-162, ASTM E-622
- Meets FMVSS 302
- Non-hazardous, non-toxic
- Improves fatigue life & safety factor of treated surfaces
- Provides dielectric isolation & thermal insulation
- Unaffected by hydrocarbons such as oils
- Resists alkalis, acids, corrosive gases & grease
- Easily troweled, brushed or sprayed on surfaces
- Tough, durable, attractive coating in place of paint

Typical Coverage			
Dry Thickness	Spray	SQ FT/Gallon	
		Brush	Trowel
1/16"	50	35	25
1/8"	40	25	20
3/16"	30	20	15

SOUNDAMP E VIBRATION DAMPING SHEET

Soundamp E is a self-adhesive pad used for sound and vibration damping on metal panels. The adhesive side is smooth, giving complete contact with the underlying surface without air pockets or channels. Soundamp E is odorless, wear-resistant and impregnated to prevent the absorption of water. Both pad material and adhesive can with-stand temperatures between -30° and +120° C (-22° F to + 248° F) and are highly resistant to aging.

LOSS FACTOR



Soundamp E should be cut to the desired size and shape before the backing paper is removed. It may be cut with scissors, knife or die. Remove dust, grease, moisture and other foreign matter from the application surface. Peel off the backing paper. The simplest application technique is to bend the pad slightly and attach it along its shortest edge. The pad is then pressed firmly into place, preferably with a roller for larger pieces. This reduces the risk of leaving air pockets, which reduces the sound damping capacity. The temperature of the pad and application surface should not be below room temperature during fitting.



APPLICATIONS

- Buses & railroad cars
- Ships & boats
- Generator enclosures
- Air compressors
- Off highway equipment
- Bins, chutes, hoppers & machine guards
- Relay cabinets
- Doors, bins & panels

FEATURES

- Non-hazardous, non-toxic
- Meets FMVSS 302 & UL94 HBF
- Improves fatigue life & safety factor of treated surfaces
- Resistant to water & mineral oils
- Temperature range 22° F to 248° F
- High acoustic loss factor

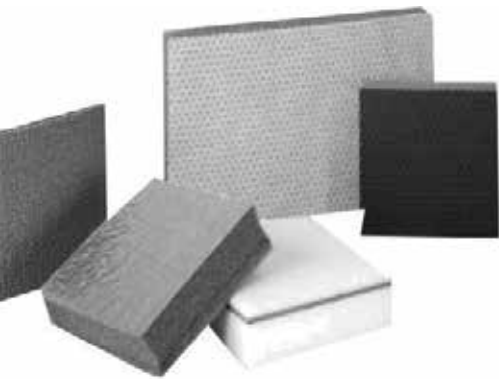
SPECIFICATIONS

- Color: Black
- Thickness: 0.080" oz
- Weight: 6.2/sq ft
- Asphalt saturation: 50% +/-10%
- Temperature range: -30% to +120°C (-22° F to +248° F)
- Chemical resistance: Resistant to water & mineral oils
- Adhesive peel strength: 15n/cm 8.6lbs/on steel sheet at +20°C (86°F)
- Vibration damping: GM Test Method 9232P
- Specification min: NC of 0.025 in 0c to 20c interval
 - at 0c = 0.162
 - at 15c = 0.173
 - at 30c = 0.103
 - at 45c = 0.069
 - at 60c = 0.049
- Flammability: FMVSS 302 6.1 mm/min. UL94 HBF approved
- Sheet size: 54" x 40" die cut parts available
- Storage life: 6 months

VIBRATION DAMPING & FOAM COMPOSITES

POLYURETHANE & MELAMINE FOAM & FOAM COMBINATIONS

Sound Seal acoustical foam composites combine the highly effective sound absorptive properties of foam products with Sound Seal flexible noise barriers. The result is a line of noise control products that combat difficult problems one material alone cannot handle. Polyurethane or melamine foams of various thickness are bonded to any of the Sound Seal barriers in either the barrier backed or barrier septum configurations. Depending on the noise control application, any of the Sound Seal foam products or barriers may be purchased individually. For harsh environmental conditions, all of the foam products and barrier combinations are available with film facings for protection. Foam absorbers and foam/barrier composites are available with pressure sensitive (PSA) adhesive backing.



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APPLICATIONS

- Truck cab floors & headliners
- Compressor & generator engine housings
- Recreational vehicles
- Sheet metal enclosures

FEATURES

- Combines noise barrier, absorber, damper
- Non-shrinking, noncorrosive
- Easy to cut, fit and install
- Die cutting to size available
- Film-faced styles to resist oils, greases, dust and moisture
- Meets UL-94-HF-1, FMVSS 302 flammability ratings

Typical Random Incidence Absorption Coefficients							
Frequency – Cycles per second (Hz)							
Thickness (inches)	125	250	500	1000	2000	4000	NRC
1/4	0.07	0.10	0.20	0.30	0.65	1.00	0.31
1/2	0.09	0.12	0.23	0.65	0.87	0.96	0.47
1	0.23	0.41	0.59	0.98	0.82	0.93	0.70
2	0.50	0.75	0.97	0.93	0.95	0.90	0.90
4	0.69	0.81	0.91	0.92	0.95	0.98	0.90

Explanation: The data is conventional 2 lb./ft. polyurethane foam. We have additional types of acoustical foams available which will improve sound absorption at specific frequencies. Let our engineers discuss your application with you. If another type of foam will improve the product, we will make it available to you.

Flexible Noise Barriers							
Noise Transmission Loss (dB) per Octave Band (Hz)							
Barriers	125	250	500	1000	2000	4000	ST
1 lb PSF	13	17	22	26	32	37	26
3/4 lb PSF	11	16	20	25	30	34	23
1/2 lb PSF	8	13	17	22	27	31	20