Durable Quilted Absorber Panels To Reduce Sound Reverberation From Reflective Walls, Ceilings And Partitions

Outdoor installation shows the use of QAB-200-SM panels to line rooftop enclosure walls around noisy HVAC equipment.

Advantages:

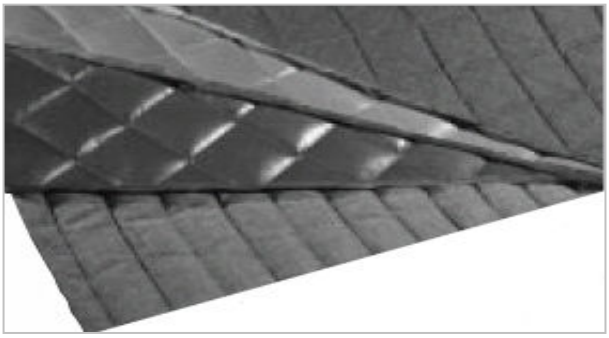
- Durable construction with good oil and chemical resistance
- Washable and steam cleanable
- Available in rolls or custom fabricated sizes
- Fire safe ratings meeting ASTM E-84 class A
- Outdoor and high temperature designs available
- Easy to install without special tools
- Wide variety of facings, fabrics, colors and stitch patterns
- Optimum sound absorption using blankets from 1” to 4” thick rated up to 1.05 NRC
- Available in fiber free construction
- Improve communication and speech intelligibility
- Good combination of thermal and acoustic performance
- Temperature ratings up to 550° F

Applications:

- Treat buildings, rooms, partitions or existing enclosures
- Fire safe alternative to urethane foam absorbers
- Engine compartment liners
- Absorptive liner for OEM housings and enclosures
- Internal duct liner on low and medium velocity HVAC systems
- Operator control rooms and pulpits
- As overhead baffles for manufacturing plants, school gyms and other recreational facilities
- Truck cab liners
- Aircraft liner
- Can be used to fabricate removable thermal insulation blankets
- Test chambers

About BRD HUSH QUILT™ Blankets:

The standard core material is 2 lb. density fiberglass batting with value of R-4 per 1" of thickness. A new fiber free class A rated melamine core material is available as an option. The facings are quilted to the core material using high strength lock stitching thread. The base products are available in 48" wide rolls. Standard roll lengths are 50' for QAB-100 and 25' for QAB-200 and QAB-400 products. Standard rolls are furnished with unbound edges. Models QAB-100-B, 200-B and 400-B are furnished with edges bound and sewn.



HUSH QUILT™ Model QAB quilted absorber blankets offer various combinations of core materials, facings and stitch patterns.

Custom sizes and lengths are also available. Consult BRD for optional facings, decorative fabrics, laminated construction and die cut components.

Design Components:

Core Materials:

- Standard is fiberglass batt
- Fiber free melamine class A foam (Designate with prefix FF-QAB-XXX-XX)

Facings:

- V - Standard is vinyl coated fiberglass cloth rated at -20° F to 180° F
- S - High temperature silicone coated fiberglass cloth rated at -90° F to 550° F
- M - Maintenance scrim rated at maximum 400° F

Threads:

- Standard is polyester
- Nomex thread for high temperature and outdoor installations

Optional components:

- Brass grommets
- Velcro fastening strips
- Laminated facing construction
- Silicone sealing of stitching
- Woven fabric facings
- Special colors
- Needle matt fiberglass core

Product Descriptions:

QAB-100-VM:

- Nominal 1" thick core material, one side faced with vinyl coated facing, opposite side faced with maintenance scrim

QAB-200-VM:

- Nominal 2" thick core material, one side faced with vinyl coated facing, opposite side faced with maintenance scrim

QAB-400-VM:

- Nominal 4" thick core material, one side faced with vinyl coated facing, opposite side faced with maintenance scrim

QAB-100-VV, QAB-200-VV, QAB-400-VV:

- Nominal 1", 2" or 4" thick core material, both sides faced with vinyl coated facing

QAB-100-SM, QAB-200-SM, QAB-400-SM:

- Nominal 1", 2" or 4" thick core material, one side silicone, one side maintenance scrim

QAB-100-SS, QAB-200-SS, QAB-400-SS:

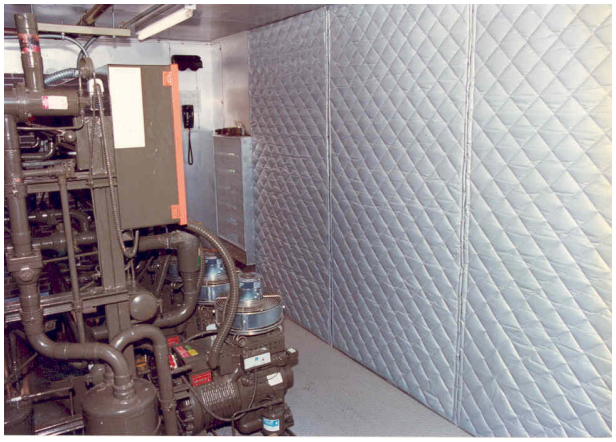
- Nominal 1", 2" or 4" thick core material, both sides faced with silicone facing

Acoustical Performance Data:

Model No.	Nominal Thickness	Random Incident Sound Absorption Octave Band Center Frequencies (Hz)						
		125	250	500	1000	2000	4000	NRC
QAB-100-VM	1 inch	.12	.47	.85	.84	.64	.62	.70
QAB-100-SM	1 inch	.04	.46	.86	.81	.59	.31	.70
QAB-100-VV	1 inch	.17	.30	.83	.82	.59	.37	.65
QAB-200-VM	2 inches	.07	.27	.96	1.13	1.08	.99	.85
QAB-200-VV	2 inches	.19	.99	.96	.80	.57	.33	.85
QAB-400-VM	4 inches	.21	.89	1.09	1.17	1.13	1.07	1.05

Note:
1) Acoustical testing per ASTM C-423-77, C-423-81, C-423-84-A, C-423-90A.
2) Nominal thicknesses are for core material only prior to quilting. Fiber free core material thickness prior to quilting is 1/2" and 1" respectively for the FF-QAB-100 and FF-QAB-200 products.
3) Copies of test reports for these and other HUSH QUILT™ absorber blankets are available upon request.

Model QAB-200-VM panels in a fabrication shop effectively control reflected noise.



OEM machinery enclosure lined with model QAB-100-VM panels.

Installation Recommendations:

1) Above left photograph shows QAB panels supported at the top only hanging on grommets. Hooks/ fasteners for the grommets can be fastened directly to the wall surface or into a furring strip along the top. Use this method where removability may be important.
2) Above right photograph shows QAB panels fastened directly through the blanket into the wall surface (no grommets). Fender washers are recommended. Otherwise the fastener may pull through the panel. Use this method for permanent attachment.
3) Latex based adhesives such as Liquid Nails can also be used especially when attaching to overhead areas. Mechanical fasteners should be utilized as well.
4) Coverage of 50% to 70% of wall surfaces is usually enough to dissipate sound reflections. Wall panels are often times combined with overhead baffles.