

Sound Absorbers/Noise Barrier Composites ABBC-13 (1" Thickness)

Section – Sound Absorbers/Noise Barrier Composites

Part 1-GENERAL

1.1 Summary

- A. This section includes the following:
 - 1. Sound Absorbers/Noise Barrier Composites

1.2 Submittals

- A. Shop drawings: show fabrication and installation details for acoustical curtain panels, including grommet location.
- B. Submittals: Furnish 8 ½"X11" samples, showing manufacturer full range of colors and patterns available.
- C. Product Test Report: From a qualified testing agency indicating Quilted Fiberglass Absorbers comply with requirements.
- D. Product certificates: signed by manufacturer certifying that the products furnished comply with requirements.

1.3 Quality Assurance

- A. Manufacturer Qualification: Manufacturer shall have a minimum of 5 years' experience in production of specified products and shall furnish supporting documentation showing completed jobs of approximately the same size and scope.
- B. Fire test Report: Provide Quilted Fiberglass absorbers with the following surface-burning characteristics as per ASTM E-84.
 - Flame spread index: less than 23.5
 - Smoke Density index: less than 30.5
- C. Acoustical Test Report: provide acoustical test report from a qualified testing agency indicating quilted fiberglass absorber meets a NRC value of at least 0.70 per ASTM C423.
- D. Acoustical test report: provide acoustical test report from a qualified testing agency indicating the Sound Absorber/Noise Barrier Composite meets a STC value of at least 26 per ASTM E-90 & E-413.

1.4 Delivery, storage, and handling

- A. Protect Quilted Fiberglass Absorbers from excessive moisture when shipping, storing, and handling. Deliver in unopened skids and store in a dry place with adequate air circulation. Do not deliver material until all wet-work has been completed.

Part 2-PRODUCTS

2.1 Quilted Fiberglass Absorbers, General

A. Sound Absorbers/Noise barrier Composites shall be nominal 1” thick-1.6 lb per cubic foot density.

1. Products

a. Model # ABBC-13 (1” Thick)

Acoustical Solutions
 2420 Grenoble Road
 Richmond, VA 23294
 PH: 800-782-5742
 AcousticalSolutions.com

2. Facing material: 1 lb psf reinforced mass loaded vinyl barrier intricately bonded to a nominal 1” thick quilted fiberglass absorber with vinyl coated fiberglass cloth facing.

3. Thickness: nominal 1” thick

4. Noise Reduction Coefficient: 0.70

5. Standard Width: 54 inches

6. Length: As indicated, up to 25 feet long.

2.2 Construction

A. The quilted fiberglass absorber shall be supplied in 54” wide panels or rolls with lengths indicated. Manufacturers standard panel construction shall have all edges bound with #4 spur grommets across the top. And mating hook and loop fastener on vertical edges. A polyester thread suitable for exterior applications must be used in the quilting process as well as to apply the matching edge binding.

2.3 Mounting

A. Manufacturers standard accessories for securely mounting the quilted fiberglass absorber panels, of type and size indicated and complying with the following requirements:

1. Grommets shall be installed to facilitate mounting on either the short or long edge of the panel, as indicated on the drawing.

2.4 Acoustical Performance

Sound absorption: Per ASTM C423

Octave Band Center Frequency (Hz)							NRC
125	250	500	1000	2000	4000		
.12	.47	.85	.84	.64	.62	.70	

Sound Transmission Loss: Per ASTM E-90 & E-13

Octave Band Center Frequency (Hz)

<u>125</u>	<u>250</u>	<u>500</u>	<u>1000</u>	<u>2000</u>	<u>4000</u>	<u>STC</u>
11	16	24	30	35	30	27

2.5 Flammability Rating

- A. Material shall have a Class A flammability rating per ASTM E-84:

Part 3-EXECUTION

3.1 Installation

- A. Install quilted fiberglass absorbers in locations indicated. Comply with manufacturers written instructions for installation of panels or rolled goods using type of mounting accessories indicated or, if not indicated, as recommended by the manufacturer.

3.2 Cleaning

- A. After completion of installation of panels or rolled goods, remove dust and other foreign material according to manufacturer's written instructions.
- B. Remove surplus material, rubbish, and debris resulting from quilted fiberglass absorber installation, on completion of work, and leave areas of installation in a neat and clean condition.