

Exterior Grade Sound Curtains - Permanent/Long-Term ABBC-13EXT (2" Thickness)

Part 1-GENERAL

1.1 Summary

A. This section includes the following:

1. Exterior Grade noise control curtains (sound curtains) for permanent or long-term projects

1.2 Related Sections

1.3 References

1.4 Submittals

- A. Shop drawings: show fabrication and installation details for acoustical panels, including grommet location.
- B. Samples: Furnish 18" x 21" samples for quality and general panel construction.
- C. Technical data sheets reflecting construction, panel thickness, weight, and Acoustical data.

1.5 Delivery, storage, and handling

- A. Deliver in unopened skids and store in a dry place with adequate air circulation. Store materials such that they will be free from accidental damage.

Part 2-PRODUCTS

2.1 Sound Curtains, General

A. Sound Curtains shall consist of a nominal 2" thick quilted fiberglass sound absorber bonded to a 1 lb psf reinforced mass loaded vinyl noise barrier

1. Products

- i. Model # ABBC13-EXT (2" Thick)
Acoustical Solutions
2420 Grenoble Road
Richmond, VA 23294
PH: 800-782-5742
AcousticalSolutions.com

2. Noise Barrier: Flexible reinforced mass loaded vinyl barrier material:

- i. Shall weigh a minimum of one pound per square foot
- ii. Shall have a tensile strength of 1470 lb/in² per ASTM D 638
- iii. Shall have a hardness of 85 ± 3, shore "A" per ASTM D2240

- 3. Sound Absorber: Exterior grade facing material:
 - i. Shall be a heavy duty 8 oz/sq. yd. PVC polyester fabric facing
 - ii. Shall be mechanically attached to the fiberglass by a quilting process
- 4. Quilted fiberglass:
 - i. Shall be nominal 2" thick
 - ii. Shall have a nominal density of 1.5-lb/cu. ft.
- 5. Sound Absorption Coefficient of .75
- 6. Sound Transmission class: 33
- 7. Standard Width: 54 inches
- 8. Length: As indicated, up to 25 feet long.

2.2 Construction

- A. The sound absorption layer shall have all edges bound and be sewn to the barrier with a Tenera exterior grade thread.
- B. Sound Curtains shall be supplied in sizes indicated. Manufacturers standard panel construction shall have all edges bound, #4 spur grommets across the top & bottom, and exterior grade mating hook and loop fastener on both vertical edges.
 - 1. On panels over 10' long an additional row of grommets may be installed across the middle of the panel

2.3 Mounting

- A. An appropriate mechanical fastener is to be installed through each grommet in the Sound Curtain securing it to the support structure.
- B. Install the panels so that adjacent panels overlap each other by approximately 2"
 - i. Join panels by pressing the mating hook and loop fasteners together

2.4 Acoustical Performance:

Sound Transmission Loss: Per ASTM E 90

Octave Band Center Frequency (Hz)							
125	250	500	1000	2000	4000	STC	
14	20	32	41	42	41	33	

Sound Absorption: Per ASTM C423

Octave Band Center Frequency (Hz)							
125	250	500	1000	2000	4000	NRC	
.45	.96	.87	.66	.47	.28	.75	

Part 3-EXECUTION

3.1 Installation

- A. Install sound curtain panels in locations indicated. Comply with manufacturer's written instructions for installation by 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.