

OVERVIEW

BBC-EXT-R Sound Curtains

BBC- EXT-R offers the benefits of both a noise barrier and a sound absorber composite in one product for outdoor applications. This barrier-backed product consists of an exterior grade, UV resistant heavy-duty faced quilted fiberglass absorber bonded to a one-pound per sq. ft. reinforced loaded vinyl barrier. The heavy-duty facing is a 10 oz per sq yd vinyl-coated-polyester (VCP) quilted to the sound absorber rather than the standard 4.5 oz. facing. Curtain panels are constructed with grommets across the top and bottom, exterior grade Velcro seals along the vertical edges, and are sewn with Gore Tenara exterior grade thread.

- STC 27 Rating, NRC .70
- Available facing colors on quilt: gray, tan, black, off-white
- Available barrier colors: gray, tan, olive drab or blue

Applications:

Typically used as modular curtain panels on long-term construction projects or permanent outdoor applications such as enclosing HVAC equipment, dust collectors or similar machinery behind a manufacturing plant where UV and abuse resistance as well as maximum durability, longevity and noise reduction is required. Also available with a one-inch thick quilted fiberglass absorber, or with a two-pound per sq. ft. reinforced barrier.



Noise Tent

DETAILS

Description: Vinyl coated fiberglass cloth facing on 2" quilted fiberglass/
1 lb-PSF reinforced loaded vinyl barrier.

Nominal 1.0 inches

thickness:

Temperature -20° to +180° F

range:

Standard width: 54" wide

Weight: 1.2 lb PSF



Acoustical Performance:

Sound Transmission Loss

	OCTAVE BAND FREQUENCIES (Hz)						
	125	250	500	1000	2000	4000	STC
BBC- EXT - R	11	1620	24	30	35	37	27

ASTM E-90 & E 413

Sound Absorption

	OCTAVE BAND FREQUENCIES (Hz)						
	125	250	500	1000	2000	4000	NRC
BBC-EXT-R	.12	.47	.85	.84	.64	.62	.70

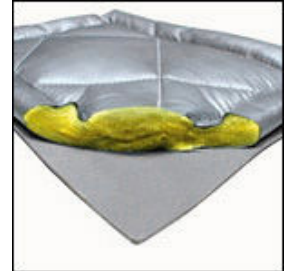
ASTM C 423



OVERVIEW

ABBC 13-2" Noise Barrier/Sound Absorber Composite

Acoustical Solutions' ABBC 13-2" offers the benefits of both a noise barrier and a sound absorber composite. The ABBC 13-2" consists of a two-inch thick vinyl-coated-fiberglass-cloth faced quilted fiberglass that is bonded to a one-pound per sq. ft. reinforced loaded vinyl barrier. Curtain panels are constructed with grommets across the top and Velcro seals along the vertical edges. Rolls are available 54" wide x 25' long and can be supplied with edges bound or unbound. (Note: barrier is 54" wide, quilt is 48" wide and is held 3" in from each vertical edge.)



- Class A (or 1) flammability rated per ASTM E- 84
- Available facing colors on quilt: gray, white, black, or tan

Available barrier colors: gray, tan, or blue

Applications:

Typically used as modular curtain panels in acoustical curtain enclosures where abuse resistance or excellent durability as well as maximum noise reduction is required. Also used as sliding acoustical doors, durable acoustical jacket on fans, or as a **temporary noise barrier on outdoor construction projects.**

Potomac River Generating Station



DETAILS

Description: Vinyl coated fiberglass cloth facing on 2" quilted fiberglass/
1 lb-PSF reinforced loaded vinyl barrier.

Flammability: Flame Spread: 23.0
Smoke density: 30.0

Nominal thickness: 2.0 inches

Temperature range: -20° to +180° F

Standard width: 54" wide

Roll length: 25' long

Weight: 1.5 lb PSF



Acoustical Performance:

Sound Transmission Loss

	OCTAVE BAND FREQUENCIES (Hz)						
	125	250	500	1000	2000	4000	STC
ABBC 13-2"	13	20	29	40	50	55	32

ASTM E-90 & E 413

Sound Absorption

	OCTAVE BAND FREQUENCIES (Hz)						
	125	250	500	1000	2000	4000	NRC
ABBC 13-2"	.07	.27	.96	1.13	1.08	.99	.85

ASTM C 423



OVERVIEW

ABBC- 4" Sound Curtains

ABBC- 4" offers the benefits of both a noise barrier and a sound absorber composite in one product for outdoor applications. This barrier-backed product consists of an exterior grade, UV resistant heavy-duty faced quilted fiberglass absorber bonded to a one-pound per sq. ft. reinforced loaded vinyl barrier. The heavy-duty facing is a 10 oz per sq yd vinyl-coated-polyester (VCP) quilted to the sound absorber rather than the standard 4.5 oz. facing. Curtain panels are constructed with grommets across the top and bottom, exterior grade Velcro seals along the vertical edges, and are sewn with Gore Tenara exterior grade thread.

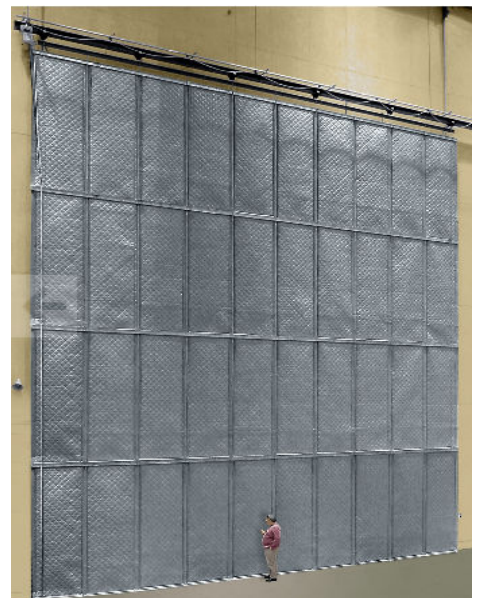


- STC 34 Rating, NRC 1.05
- Available facing colors on quilt: gray, tan, black, off-white, green
- Available barrier colors: gray, tan, olive drab or blue

Applications:

Typically used as modular curtain panels on long-term construction projects or permanent outdoor applications such as enclosing HVAC equipment, dust collectors or similar machinery behind a manufacturing plant where UV and abuse resistance as well as maximum durability, longevity and noise reduction is required. Also available with a two-pound per sq. ft. reinforced barrier.

Temporary noise barrier



DETAILS

Description: Vinyl coated polyester faced 4" quilted fiberglass/
1 lb-PSF reinforced loaded vinyl barrier.

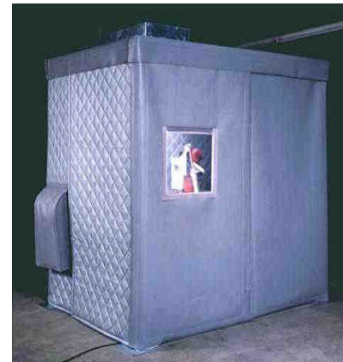
Flammability: Flame Spread: 23.0
Smoke density: 30.0

Nominal thickness: 4.0 inches

Temperature range: -20° to +180° F

Standard width: 54" wide, lengths as required up to 20' high

Weight: 2.0 lbs./PSF



Acoustical Performance:

Sound Transmission Loss

	OCTAVE BAND FREQUENCIES (Hz)						
	125	250	500	1000	2000	4000	STC
ABBC-EXT-R-4"	16	21	30	41	52	56	34

ASTM E-90 & E 413

Sound Absorption

	OCTAVE BAND FREQUENCIES (Hz)						
	125	250	500	1000	2000	4000	NRC
ABBC-EXT-R-4"	0.21	0.89	1.09	1.17	1.13	1.07	1.05

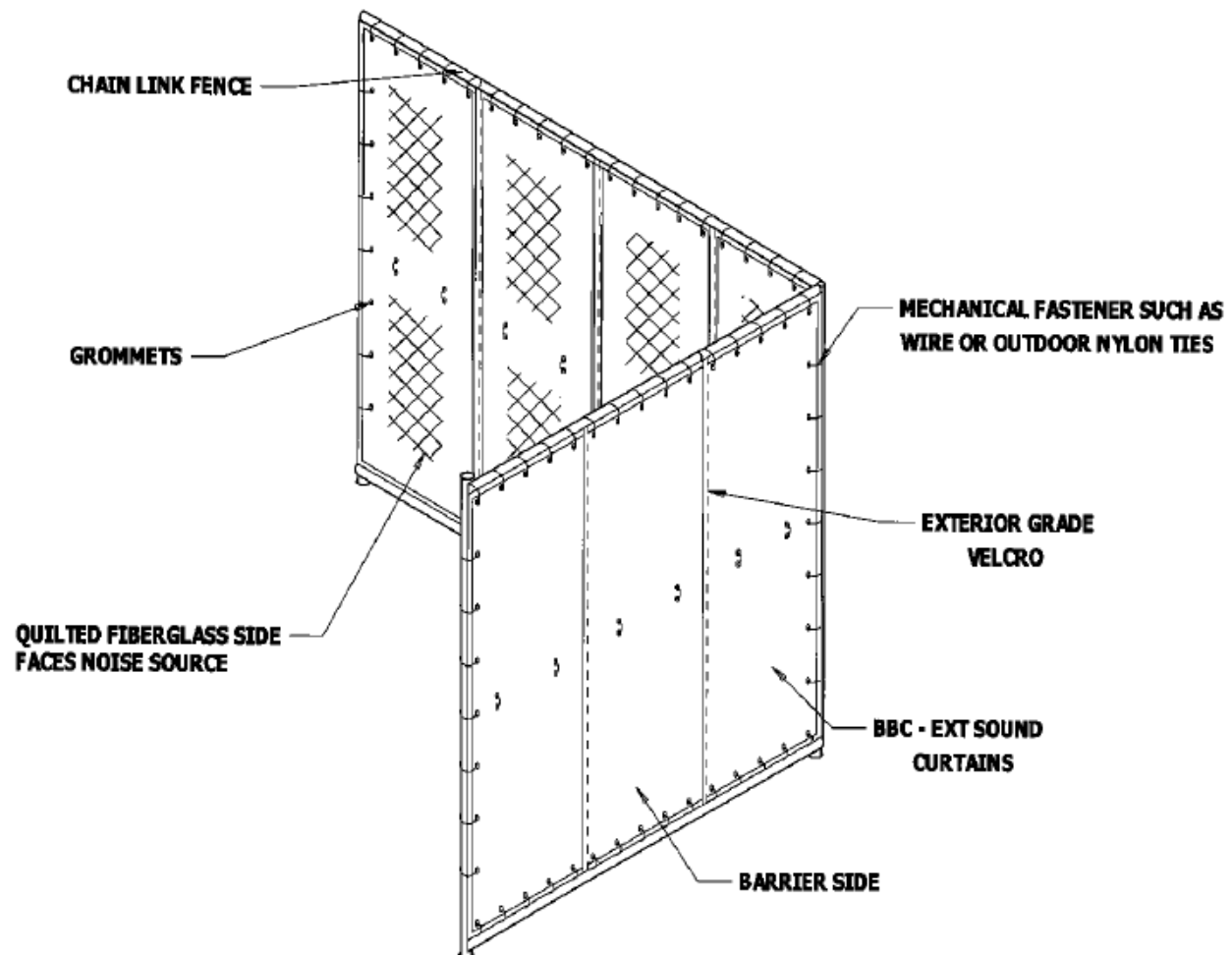
ASTM C 423



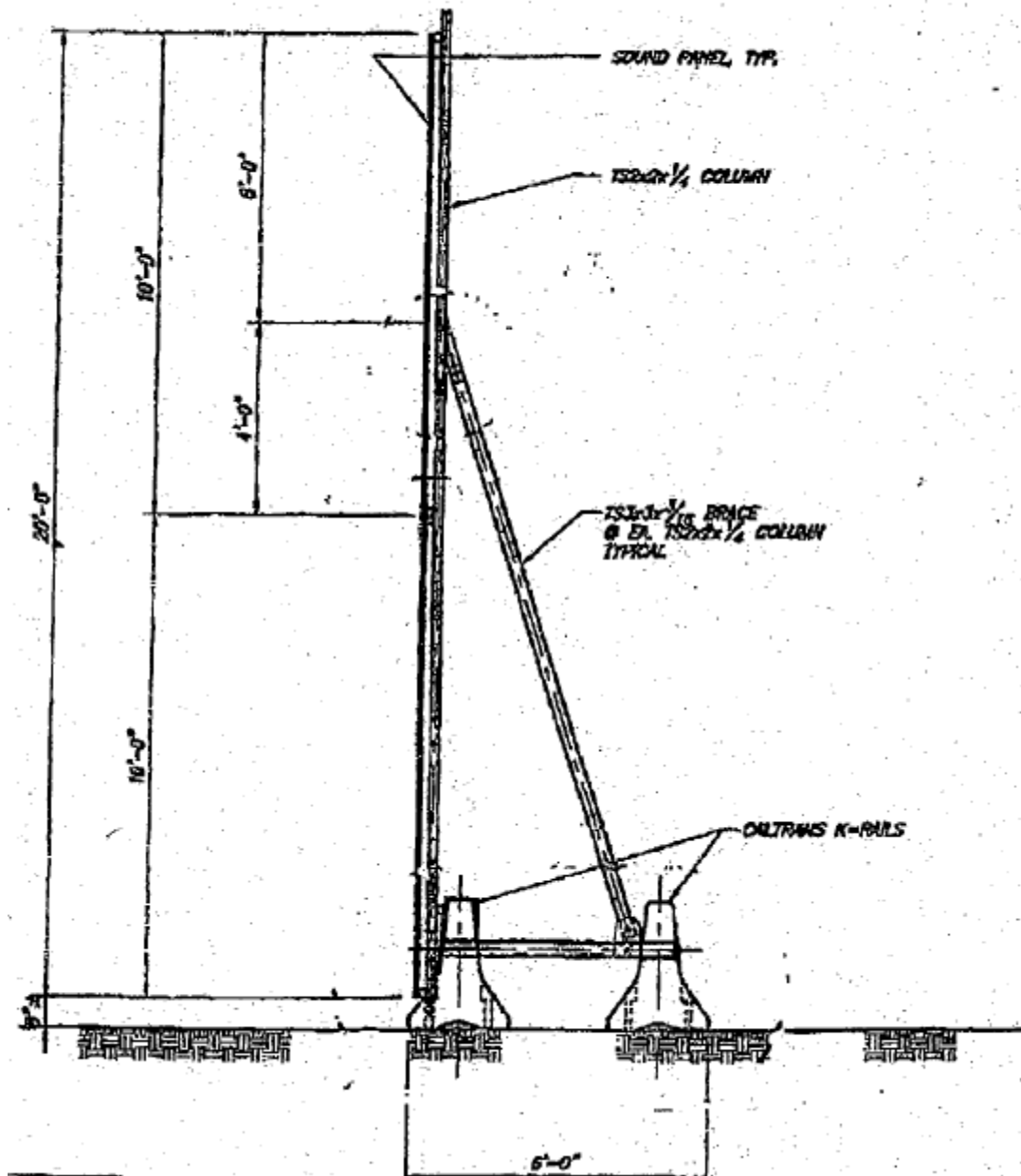
PHOTOS

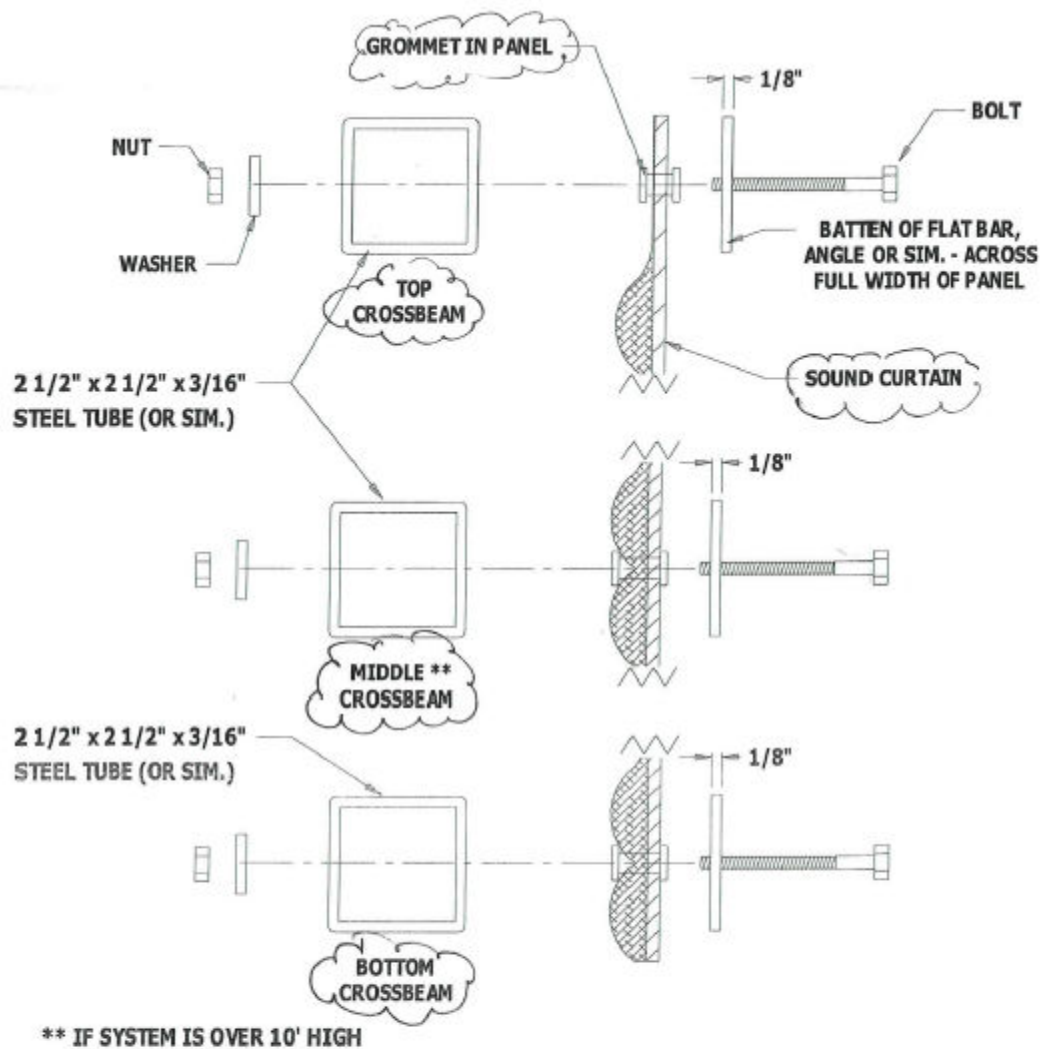


INSTALLATION AND ASSEMBLY



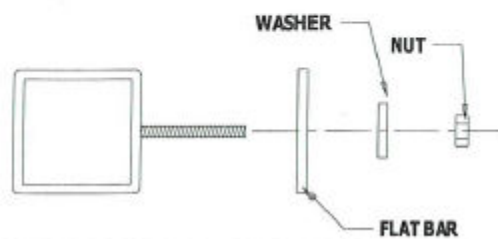
DETAIL: SOUND CURTAINS ATTACHED TO CHAIN LINK FENCE



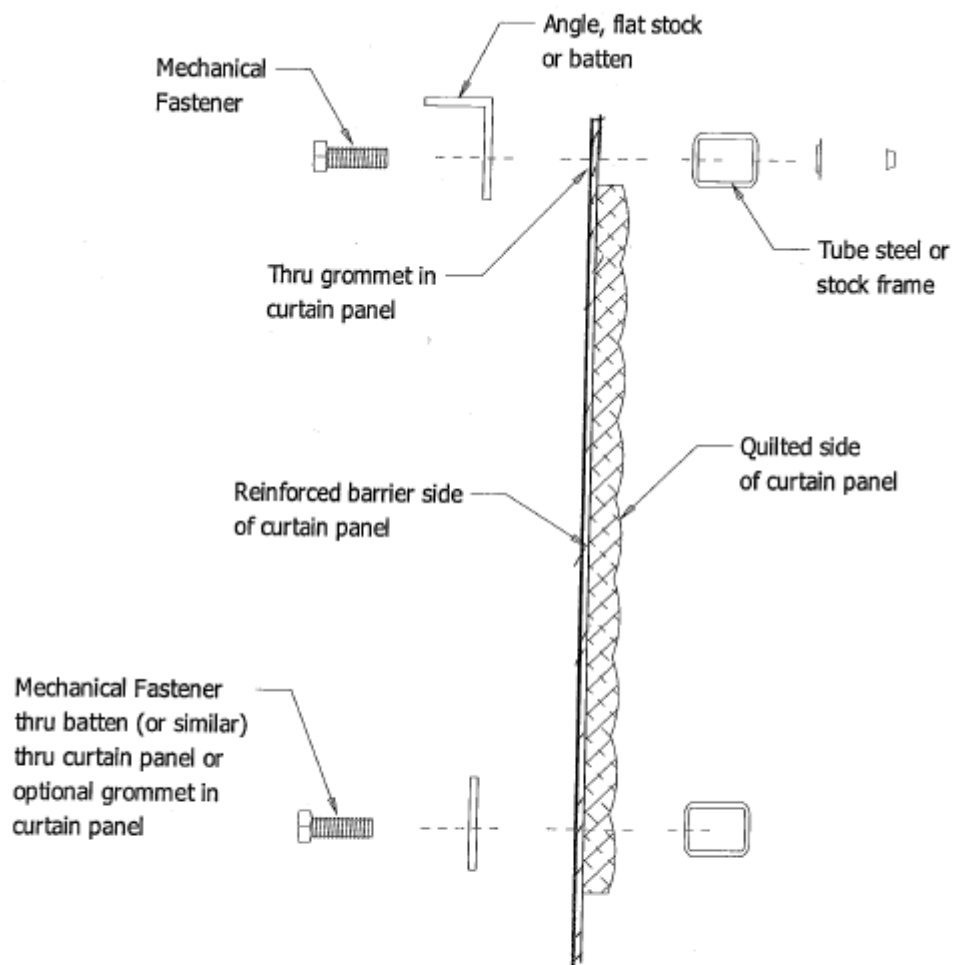


NOTE: SIZING AND SPACING OF VERTICAL COLUMNS OR POSTS TO BE DETERMINED BY STRUCTURAL ENGINEER.

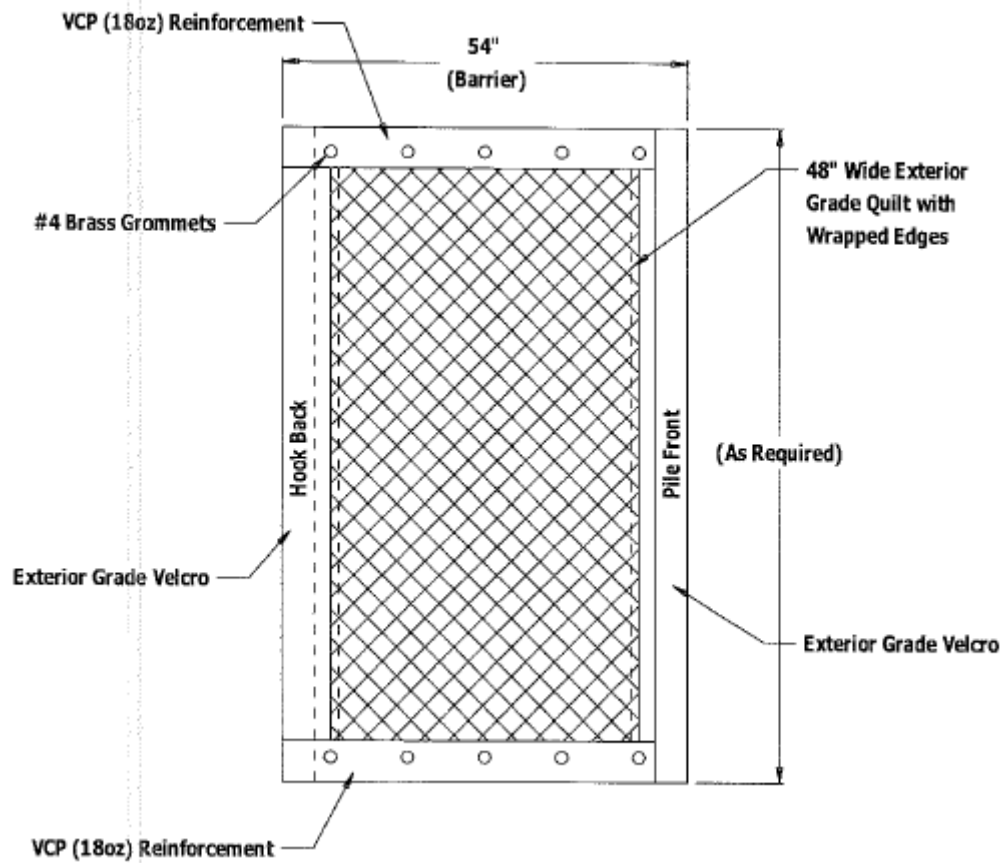
ALTERNATE: WELDED STUDS @ CROSSBEAMS



DETAIL: ATTACHMENT OF SOUND CURTAIN TO HORIZONTAL STRUCTURAL STEEL SUPPORTS

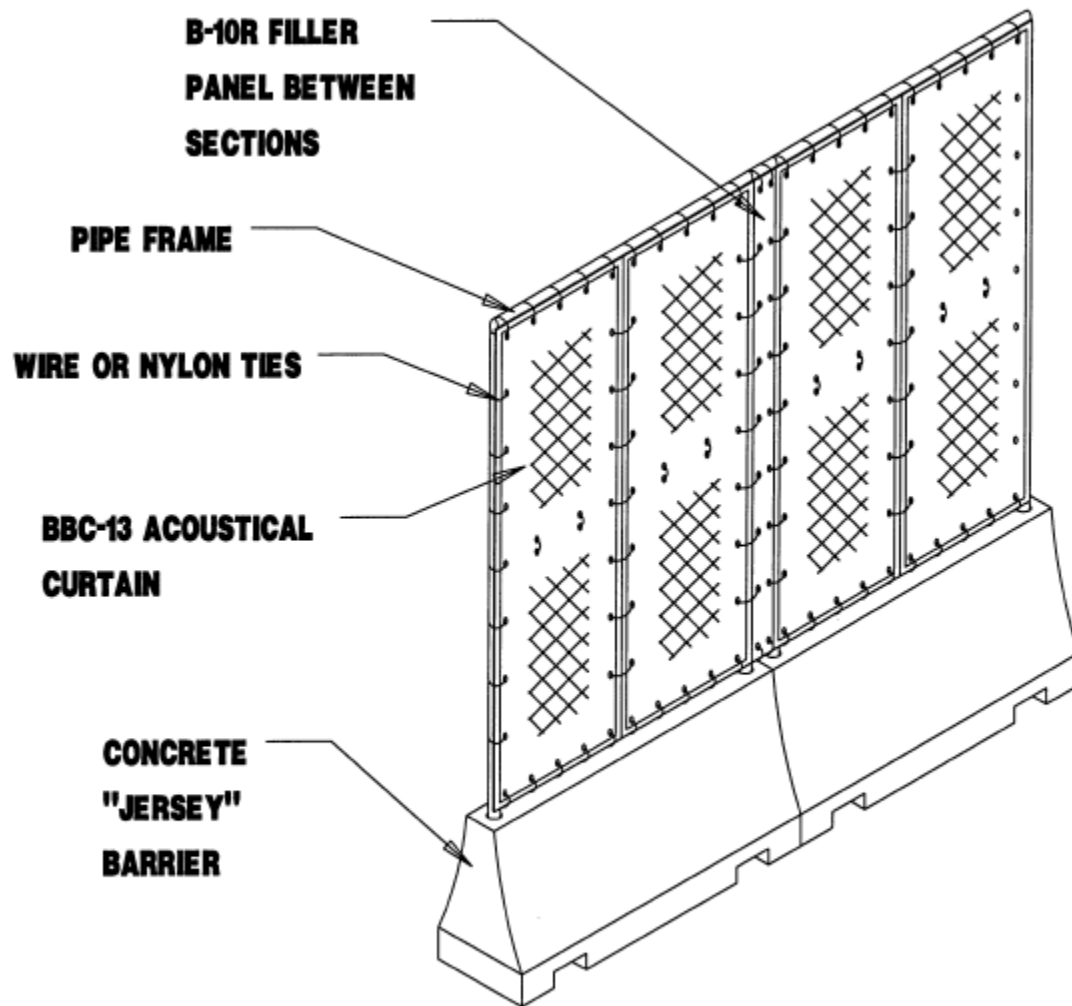


OUTDOOR INSTALLATION OF ACOUSTICAL CURTAIN PANELS
(CROSS-SECTION)

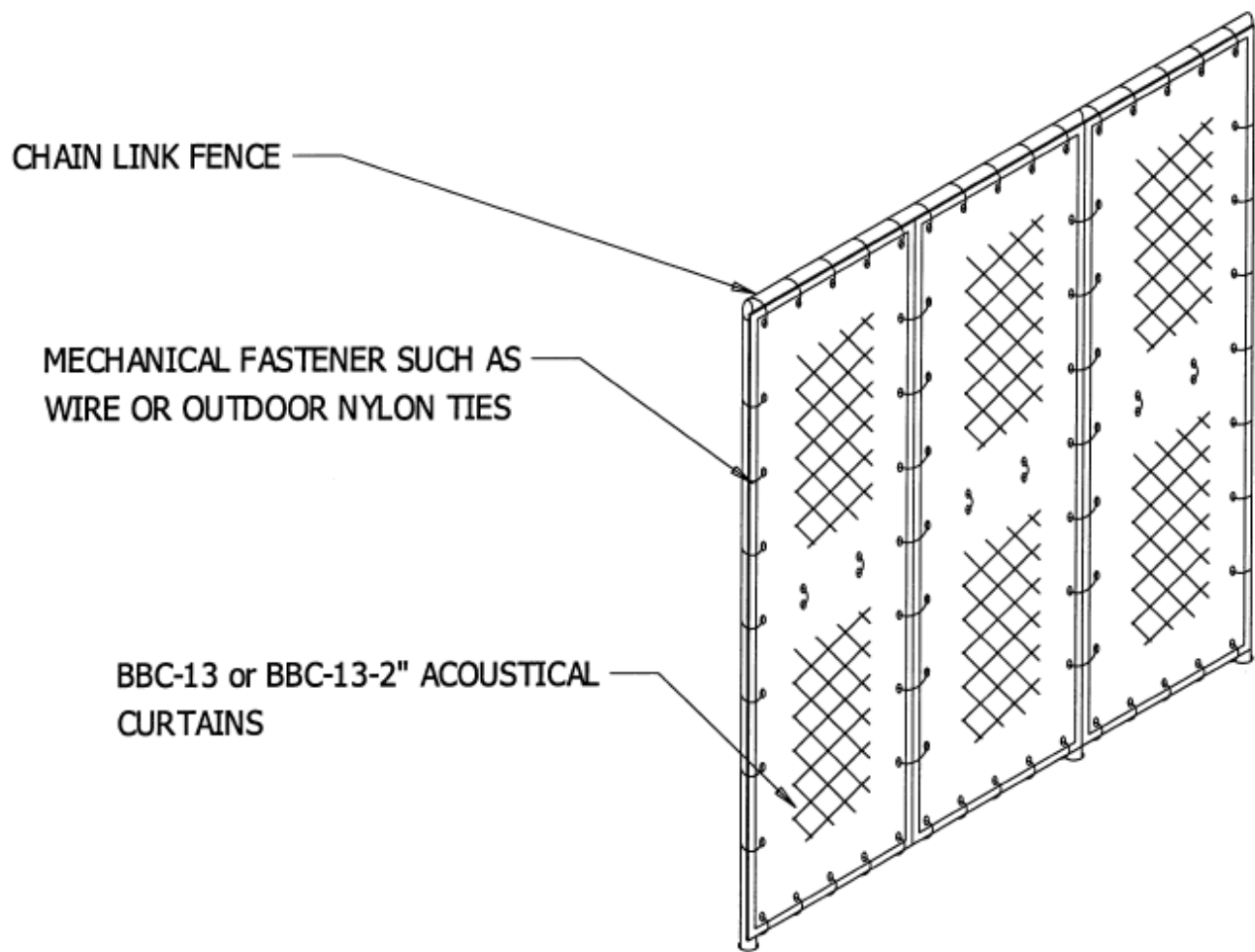


Quilted Side Shown
Faces Noise Source

**Typical BBC-EXT-R or BBC-EXT-R-2"
Sound Blanket**



TEMPORARY CONSTRUCTION NOISE BARRIER



ATTACHMENT OF BBC-13 or BBC-13-2" PANELS TO CHAIN LINK FENCE

TEST & TECHNICAL DATA

RIVERBANK ACOUSTICAL LABORATORIES

1512 BATAVIA AVENUE
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OF
IIT RESEARCH INSTITUTE

7081232-0104
FOUNDED 1918 BY
WALLACE CLEMENT SABINE

REPORT

FOR: United Process, Inc.

Sound Transmission Loss
Test RAL™-TL91-359

ON: Sound Seal, Model #BBC-13-2F,*
Composite Absorptive/Barrier

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CONDUCTED: 24 December 1991

TEST METHOD

Unless otherwise designated, the measurements reported below were made with all facilities and procedures in explicit conformity with the ASTM Designations E90-90 and E413-87, as well as other pertinent standards. Riverbank Acoustical Laboratories has been accredited by the U.S. Department of Commerce, National Institute of Standards and Technology (NIST) under the National Voluntary Laboratory Accreditation Program (NVLAP) for this test procedure. A description of the measuring technique is available separately. The microphone used was a Bruel & Kjaer serial number 1330828.

DESCRIPTION OF THE SPECIMEN

The test specimen was designated by the manufacturer as Sound Seal, Model #BBC-13-2F. The overall dimensions of the specimen as measured were 1.22 m (48.0 in.) wide by 2.44 m (96.5 in.) high and 19.1 mm (2.0 in.) thick. The specimen was placed directly in the laboratory's 1.22 m (4 ft) by 2.44 m (8 ft) test opening and was sealed on the periphery (both sides) with a dense mastic. The manufacturer's description of the specimen was as follows: An absorptive barrier that consisted of a 50.8 mm (2.0 in.) thick quilted fiberglass absorber sewn to one side of a 1 lb/sf reinforced acoustical barrier. The quilted fiberglass absorber was toward the source room. An external, visual inspection verified the manufacturer's description of the specimen. The weight of the specimen as measured was 19.7 kg (43.5 lbs) an average of 6.6 kg/m² (1.3 lbs/ft²). The transmission area used in the calculations was 3.0 m² (32 ft²). The source and receiving room temperatures at the time of the test were 21°C (70±2°F) and 55±2% relative humidity.

* 2" QUILTED FIBERGLASS ABSORBER

RIVERBANK ACOUSTICAL LABORATORIES

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REPORT

United Process, Inc.

RAL™-TL91-359

24 December 1991

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TEST RESULTS

Sound transmission loss values are tabulated at the eighteen standard frequencies. A graphic presentation of the data and additional information appear on the following pages. The precision of the TL test data are within the limits set by the ASTM Standard E90-90.

FREQ.	T.L.	C.L.	DEF.	FREQ.	T.L.	C.L.	DEF.
100	17	0.22	0	800	37	0.34	0
125	13	0.48	3	1000	40	0.30	0
160	16	0.29	3	1250	44	0.29	0
200	16	0.37	6	1600	47	0.24	0
250	20	0.34	5	2000	50	0.14	0
315	22	0.32	6	2500	51	0.17	0
400	26	0.43	5	3150	53	0.14	0
500	29	0.32	3	4000	55	0.11	0
630	33	0.34	0	5000	54	0.09	0

STC = 32

ABBREVIATION INDEX

FREQ. = FREQUENCY, HERTZ, (cps)
T.L. = TRANSMISSION LOSS, dB
C.L. = UNCERTAINTY IN dB, FOR A 95% CONFIDENCE LIMIT
DEF. = DEFICIENCIES, dB < STC CONTOUR
STC = SOUND TRANSMISSION CLASS

Reviewed by Diane C. Perrone
Diane C. Perrone
Experimentalist

Submitted by John W. Kopec
John W. Kopec
Supervisor, Riverbank
Acoustical Laboratories

RIVERBANK ACOUSTICAL LABORATORIES

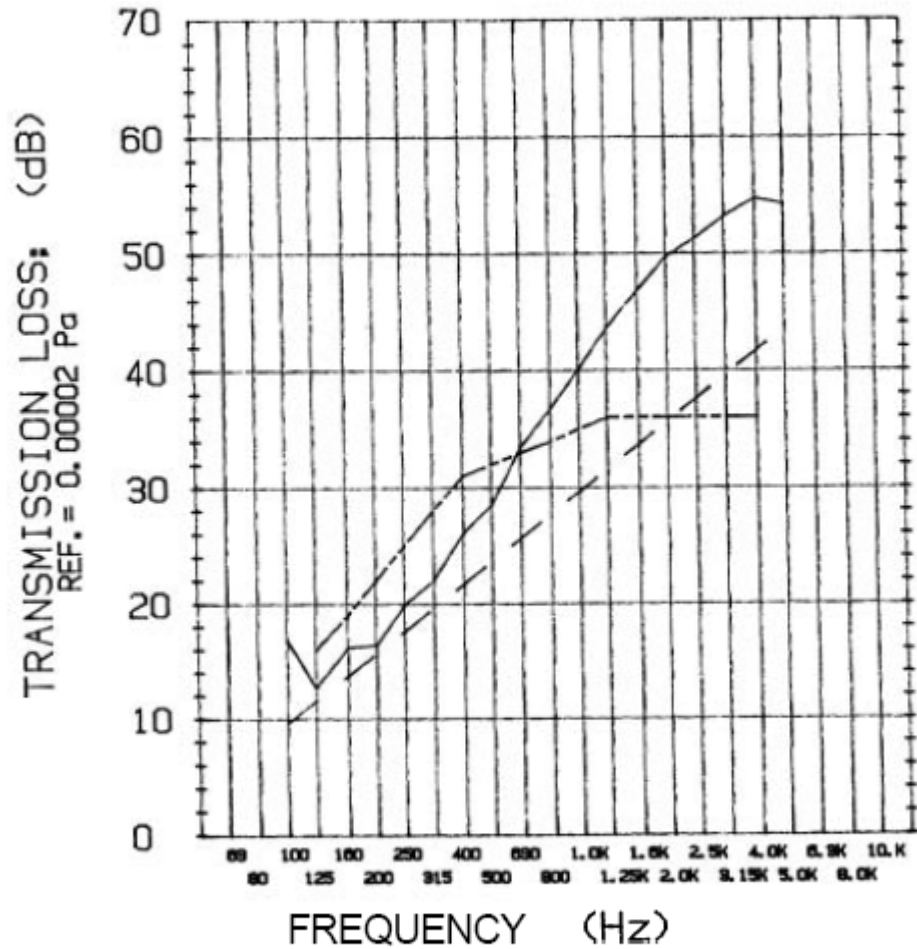
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REPORT TRANSMISSION LOSS REPORT RAL-TL91-359

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- - - SOUND TRANSMISSION CLASS CONTOUR
- . - MASS LAW CONTOUR

WHO WE ARE

Since its founding in 1989, **Acoustical Solutions Inc. (ASI)** has established a National reputation as a leader in environmental noise and vibration control. With the inception of our **Environmental Division**, ASI now offers a full line of products and services with a principal focus on Site Evaluation, Acoustical Studies, and Visual & Noise Barrier Systems for residential, commercial and industrial projects.

The ASI staff offers comprehensive expertise in: data analysis, modeling, policy and regulatory analysis, planning, value engineering and construction of physical and operational mitigation systems. As governmental agencies place increasing focus on inter-modal planning as well as design and development, we assist clients in the design and implementation of noise and vibration mitigation solutions for existing facilities and planned projects.

Since most noise problems involve both local government and the public sector, a key component of successful solutions is the effective communication of complex technical issues. Accurate and clearly presented information reduces governmental resistance, controversy and builds public consensus. ASI excels at making noise and vibration issues easily understood through presentations, demonstrations, graphics, the internet and written materials.

ASI is committed to providing the highest value in services and delivering innovative, cost effective solutions. Integrity, Leadership and Innovation are our cornerstones.

Our Mission

Acoustical Solutions is dedicated to improving the environments in which people live, work and play by providing the highest quality acoustical consulting services and products.

Acoustical Solutions for every environment of your life.

