



Acoustical Surfaces, Inc.

SOUNDPROOFING, ACOUSTICS, NOISE & VIBRATION CONTROL SPECIALISTS

123 Columbia Court North • Suite 201 • Chaska, MN 55318
(952) 448-5300 • Fax (952) 448-2613 • (800) 448-0121

Email: sales@acousticalsurfaces.com
Visit our Website: www.acousticalsurfaces.com

We Identify and S.T.O.P. Your Noise Problems

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HUNTINGDON ENGINEERING & ENVIRONMENTAL, INC.
662 Cromwell Avenue
St. Paul, Minnesota 55114

SOUND TRANSMISSION CLASS (STC) – ASTM): E90(90)

Composite Barrier Material

Rendered by Manufacturer and Released to:
Architectural Surfaces Inc./Acoustical Surfaces, Inc.
123 Columbia Court North
Chaska, Minnesota 55318

Client Purchase Order Number: 60411
Huntingdon Project Number: 4140 94-1981
Date: June 29, 1994

Purchased By:

Michael S. Karcher
Engineering Technician
Mechanical/Metallurgical Department
(612) 659-7326

Reviewed By:

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Mechanical/Metallurgical Department
(612) 659-7310

The test results contained in this report pertain only to the samples submitted for testing and not necessarily to all similar products.

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DATE: June 29, 1994

SOUND TRANSMISSION CLASS (STC) – ASTM: E90(90)

INTRODUCTION:

This report presents the results of a Sound Transmission Class (STC) test conducted on a Composite Barrier Material submitted by the Manufacturer. This test was requested by Manufacturer on June 17, 1994 with the testing conducted on June 20, 1994.

This report must not be reproduced except in full with the approval of Huntingdon Engineering & Environmental, Inc. the data in this report relates only to the item tested.

Huntingdon has been accredited by the U.S. Department of Commerce and the National Institute of Standards and Technology (NIST, formerly NBS) under their National Voluntary Laboratory Accreditation Program (NVLAP) for conducting this test procedure. This report may not be used to claim product endorsement by NVLAP or any agency of the U.S. Government.

TEST RESULTS SUMMARY:

The STC of the specimen described below was 29. A tabular and graphical presentation of the data is presented under "TEST RESULTS".

SPECIMEN IDENTIFICATION:

Manufacturer: Rendered by Manufacturer and Released to:
Architectural Surfaces Inc./Acoustical Surfaces Inc.

Model #: Composite Barrier Material

Nominal Dimensions (W x H x D): 4.5' x 4.5' x 1.25"

Weight: 25 lbs. (1.2 psf)

Specimen Description: – 1" Flat Foam
– Rubber Bonding Material
– 1/4" Flat Foam

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TEST EQUIPMENT:

<u>Manufacturer</u>	<u>Model</u>	<u>Description</u>	<u>S/N</u>
Northern Electronics	NE830	Real Time Analyzer	
Brüel & Kjær	3923	Rotating Microphone Boom	11511
Brüel & Kjær	4132	Pressure Condenser Microphone	815424
Larson-Davis	2560	Pressure Condenser Microphone	239016

TEST RESULTS:

Freq. (Hz)	TL	CL	Def	Freq. (Hz)	TL	CL	Def
125	20	3	0	800	27	0	4
160	21	2	0	1000	28	1	4
200	19	2	0	1250	30	0	3
250	21	1	1	1600	32	0	1
315	22	1	3	2000	32	0	1
400	23	1	5	2500	34	1	0
500	25	1	4	3150	37	1	0
630	25	1	5	4000	42	1	0

TOTAL DEFICIENCIES: 31 STC: 29

Where: TL = Transmission Loss (dB)
 CL = 95% Confidence Limit (db)
 Def= Deficiencies (below STC contour)

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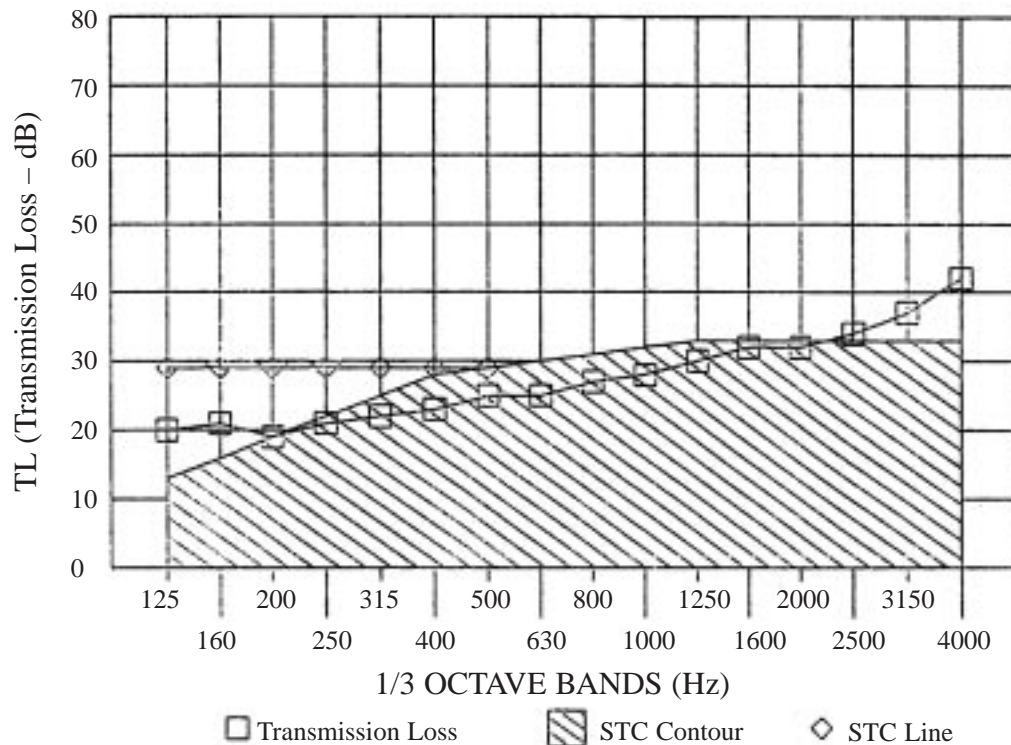
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TEST RESULTS (CONTINUED):

SOUND TRANSMISSION CLASS (STC)
COMPOSITE BARRIER MATERIAL



TEST PROCEDURE:

ASTM:E90(90) was followed in every respect. The STC value was obtained by applying the Transmission Loss (TL) values to the STC reference contour of ASTM: E413(87). The temperature and relative humidity of the termination room during the test was 70°F and 48%, respectively. All frequencies met the requirements for 95% confidence established by the standard.

REMARKS:

The test material will be retained for thirty days from the date of this report and then discarded unless otherwise notified.

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