

Architectural Surfaces, Inc.

DISTINCTIVE WOOD & SPECIALTY ACOUSTICAL CEILING & WALL SYSTEMS

123 Columbia Court North • Suite 201 • Chaska, MN 55318
952-448-5300 • Fax: 952-448-2613 • Toll Free: 1-800-710-8791
e-mail: info@architecturalsurfaces.net
Visit Our Web Site at www.architecturalsurfaces.net

CEILINGS YOU CAN LOOK UP TO!

STORK®

Materials Technology

Stork Twin City Testing Corporation

PROJECT NUMBER: 30160-08-92064-7
PAGE: 1 of 5
DATE: February 27, 2008

662 Cromwell Avenue Telephone : (651) 645-3601
Saint Paul, MN 55114 Toll Free : (888) 645-TEST
USA Telefax : (651) 659-7348
Website : www.storksmt.com

Investigative Chemistry Geotechnical Construction Materials
Non Destructive Testing Failure Analysis Product Evaluation
Metallurgical Analysis Materials Testing Welder Qualification

**SOUND ABSORPTION TESTING CONDUCTED ON THE
NEW WORLD™ PERFORATED PANELS
WITH ECHO ELIMINATOR BACKER PANELS**

Prepared for:
Acoustical Surfaces, Inc
Attn: Mr. Mike Mohs
123 Columbia Court North, Suite 201
Chaska, MN 55318

Client Purchase Order Number: Contract

Prepared By:

Mathew N. Botz
Project Manager
Product Testing Department
(651) 659-7353

Reviewed By:

Kyle T. Hall
Sr. Engineering Technician
Product Testing Department

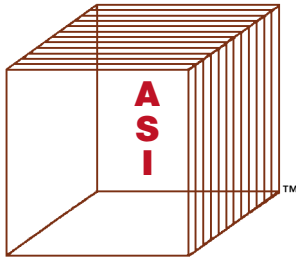
The test results contained in this report pertain only to the samples submitted for testing and not necessarily to all similar products.



Information and statements in this report are derived from material, information and/or specifications furnished by the client and exclude any expressed or implied warranties as to the fitness of the material tested or analyzed for any particular purpose or use. This report is the confidential property of our client and may not be used for advertising purposes. This report shall not be reproduced except in full, without written approval of this laboratory. The recording of false, fictitious or fraudulent statements or entries on this document may be punished as a felony under Federal Statutes including Federal Law Title 18, Chapter 47

Stork Twin City Testing is an operating unit of Stork Materials Technology B.V., Amsterdam, The Netherlands, which is a member of the Stork group

HIGHEST QUALITY, GENUINE WOOD AND VENEER, SOUND CONTROL, DECORATIVE CEILING & WALL SYSTEMS, EASILY INSTALLED TO STANDARD T-BAR GRID ALLOWING CONCEALED SUSPENSION AND COMPLETE PLENUM ACCESS. OPTIONS INCLUDE LINEAR, CUBE, GRILLE, COFFER, CURVED, PERFORATED OR CUSTOM IN ANY WOOD SPECIES. ALL SYSTEMS AVAILABLE FACTORY FINISHED WITH CLASS A FIRE RETARDANT PAINT, CLEAR VARNISH OR STAIN. OTHER SOUNDPROOFING, SOUND ABSORBING AND NOISE CONTROL ACCESSORIES AVAILABLE FOR CEILINGS, WALLS AND FLOORS.



Architectural Surfaces, Inc.

DISTINCTIVE WOOD & SPECIALTY ACOUSTICAL CEILING & WALL SYSTEMS

123 Columbia Court North • Suite 201 • Chaska, MN 55318
952-448-5300 • Fax: 952-448-2613 • Toll Free: 1-800-710-8791
e-mail: info@architecturalsurfaces.net
Visit Our Web Site at www.architecturalsurfaces.net

CEILINGS YOU CAN LOOK UP TO!

STORK®

Materials Technology

Stork Twin City Testing Corporation

PROJECT NUMBER: 30160-07-82419-7

PAGE: 2 of 5

DATE: February 27, 2008

Noise Reduction Coefficient (ASTM C423-07)

INTRODUCTION:

This report presents the results of the sound absorption testing conducted on the New World™ Perforated Panels with Echo Eliminator backer panels. The test sample was submitted by Mr. Mike Mohs of Acoustical Surfaces, Inc (ASI). This work was completed on February 15, 2008.

This report must not be reproduced except in full with the approval of Stork Twin City Testing Corporation. The data in this report relates only to the items tested.

Stork Twin City Testing Corporation 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 ASTM C423 test procedures. This report may not be used to claim product endorsement by NVLAP, NIST or any agency of the U.S. Government.

TEST RESULTS SUMMARY:

<i>TYPE E400 NRC TEST</i>			Test Results		
Test #	SAMPLE DESCRIPTION	ADDITIONAL INFORMATION	NRC	SAA	--
9	New World™ Wood Perforated Panels (3/8" Holes)	with 1" Echo Eliminator Panels	0.65	0.65	--
10	New World™ Wood Perforated Panels (3/8" Holes)	with 2" Echo Eliminator Panels	0.75	0.73	--

See 'TEST DATA' section for detailed results.

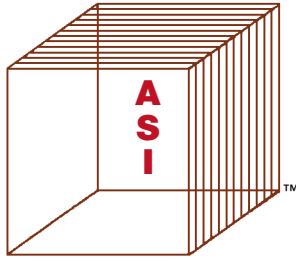
SPECIMEN DESCRIPTION: (Also see "Test Results")

The test specimens were identified by ASI as the New World™ Wood Perforated Panels tested with Echo Eliminator backer panels. The New World™ panels had dimensions of 24" x 24" x 3/4" and contained 3/8" penetrations in a staggered formation. The panels sat into a standard 2x2 T-bar gridwork. The samples were tested with Echo Eliminator backer panels (1" or 2" thick). The backer panels were positioned behind the New World™ panels.

Information and statements in this report are derived from material, information and/or specifications furnished by the client and exclude any expressed or implied warranties as to the fitness of the material tested or analyzed for any particular purpose or use. This report is the confidential property of our client and may not be used for advertising purposes. This report shall not be reproduced except in full, without written approval of this laboratory. The recording of false, fictitious or fraudulent statements or entries on this document may be punished as a felony under Federal Statutes including Federal Law Title 18, Chapter 47

Stork Twin City Testing is an operating unit of Stork Materials Technology B.V., Amsterdam, The Netherlands, which is a member of the Stork group

HIGHEST QUALITY, GENUINE WOOD AND VENEER, SOUND CONTROL, DECORATIVE CEILING & WALL SYSTEMS, EASILY INSTALLED TO STANDARD T-BAR GRID ALLOWING CONCEALED SUSPENSION AND COMPLETE PLENUM ACCESS. OPTIONS INCLUDE LINEAR, CUBE, GRILLE, COFFER, CURVED, PERFORATED OR CUSTOM IN ANY WOOD SPECIES. ALL SYSTEMS AVAILABLE FACTORY FINISHED WITH CLASS A FIRE RETARDANT PAINT, CLEAR VARNISH OR STAIN. OTHER SOUNDPROOFING, SOUND ABSORBING AND NOISE CONTROL ACCESSORIES AVAILABLE FOR CEILINGS, WALLS AND FLOORS.



Architectural Surfaces, Inc.

DISTINCTIVE WOOD & SPECIALTY ACOUSTICAL CEILING & WALL SYSTEMS

123 Columbia Court North • Suite 201 • Chaska, MN 55318
952-448-5300 • Fax: 952-448-2613 • Toll Free: 1-800-710-8791
e-mail: info@architecturalsurfaces.net
Visit Our Web Site at www.architecturalsurfaces.net

CEILING YOU CAN LOOK UP TO!

STORK[®]

Materials Technology

Stork Twin City Testing Corporation

PROJECT NUMBER: 30160-07-82419-7

PAGE: 3 of 5

DATE: February 27, 2008

TEST PROCEDURE

Sound Absorption Test

ASTM C 423-07, "Sound Absorption and Sound Absorption Coefficient by the Reverberation Room Method", was followed in every respect. The test sample was tested in a Type E400 Mounting style. The material was tested on 2x2 gridwork to simulate a ceiling tile installation. The overall sample had a dimension of 8'x 9' (72-ft²).

NRC was calculated by rounding the sound absorption coefficients for 250, 500, 1000 and 2000 Hz to the nearest 0.05. SAA was calculated by rounding the sound absorption coefficients for the twelve frequencies from 200 Hz to 2500 Hz to the nearest 0.01.

TEST EQUIPMENT:

<u>Manufacturer</u>	<u>Model</u>	<u>Description</u>	<u>S/N</u>
Norwegian Electronics	NE830	Real Time Analyzer	11511
Brüel & Kjær	3923	Rotating Microphone Boom	815424
Norsonic (Source Rm)	1230	Pressure Condenser Microphone	26361
Brüel & Kjær (Term Rm)	4192	Pressure Condenser Microphone	2360314

REMARKS:

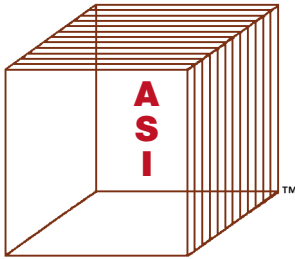
The test samples were returned to the client.

F:\Product\MMFII.FS\MNB\2008 REPORTS MNB\92064-ASI\92064-ASI-7.doc

Information and statements in this report are derived from material, information and/or specifications furnished by the client and exclude any expressed or implied warranties as to the fitness of the material tested or analyzed for any particular purpose or use. This report is the confidential property of our client and may not be used for advertising purposes. This report shall not be reproduced except in full, without written approval of this laboratory. The recording of false, fictitious or fraudulent statements or entries on this document may be punished as a felony under Federal Statutes including Federal Law Title 18, Chapter 47

Stork Twin City Testing is an operating unit of Stork Materials Technology B.V., Amsterdam, The Netherlands, which is a member of the Stork group

HIGHEST QUALITY, GENUINE WOOD AND VENEER, SOUND CONTROL, DECORATIVE CEILING & WALL SYSTEMS, EASILY INSTALLED TO STANDARD T-BAR GRID ALLOWING CONCEALED SUSPENSION AND COMPLETE PLENUM ACCESS. OPTIONS INCLUDE LINEAR, CUBE, GRILLE, COFFER, CURVED, PERFORATED OR CUSTOM IN ANY WOOD SPECIES. ALL SYSTEMS AVAILABLE FACTORY FINISHED WITH CLASS A FIRE RETARDANT PAINT, CLEAR VARNISH OR STAIN. OTHER SOUNDPROOFING, SOUND ABSORBING AND NOISE CONTROL ACCESSORIES AVAILABLE FOR CEILINGS, WALLS AND FLOORS.



Architectural Surfaces, Inc.

DISTINCTIVE WOOD & SPECIALTY ACOUSTICAL CEILING & WALL SYSTEMS

123 Columbia Court North • Suite 201 • Chaska, MN 55318
 952-448-5300 • Fax: 952-448-2613 • Toll Free: 1-800-710-8791
 e-mail: info@architecturalsurfaces.net
 Visit Our Web Site at www.architecturalsurfaces.net

CEILINGS YOU CAN LOOK UP TO!

STORK®

Materials Technology

Stork Twin City Testing Corporation

PROJECT NUMBER: 30160-07-82419-7

PAGE: 4 of 5

DATE: February 27, 2008

TEST RESULTS:

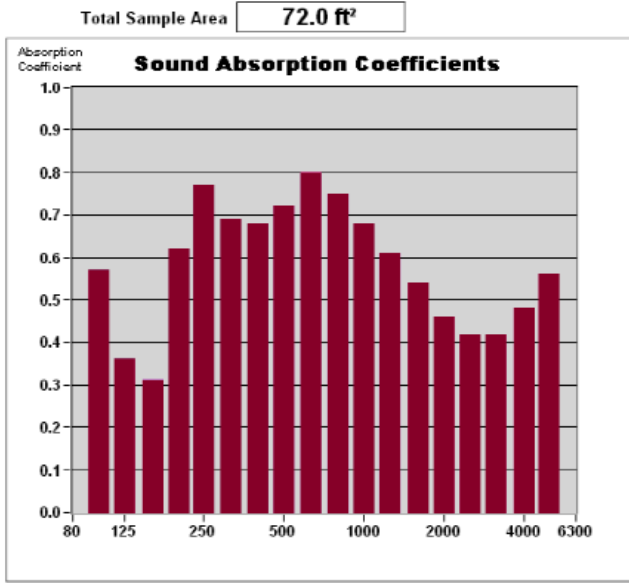
Filename: **ASTM C423 - Sound Absorption**

Client	Product	Model #	Quantity	Comment
Acoustical	3/4" Ceiling Tile	New World Panel	1	w/1" Echo Eliminator

Sample Size - Wt. Sample Description: Acoustical Surfaces: (staggered holes) Wood Perforated Panels w/ 1" Echo Eliminator: :
 Hole size: 3/8"Diam. 473 holes per 24"x 24" panel 8' x 9' x 1-3/4" Sample :

Time Stamp: Total Sample Area:

F (Hz)	Absorption Coefficient	Absorption (Sabins)*
100	0.57	40.87
125	0.36	26.06
160	0.31	22.53
200	0.62	44.49
250	0.77	55.27
315	0.69	49.36
400	0.68	49.11
500	0.72	51.85
630	0.80	57.93
800	0.75	54.19
1000	0.68	49.00
1250	0.61	43.70
1600	0.54	38.52
2000	0.46	33.11
2500	0.42	30.19
3150	0.42	30.51
4000	0.48	34.37
5000	0.56	40.30



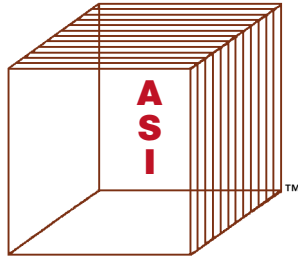
Temp (°C) R.H. (%) ATM (mbar)

SAA = 0.65 NRC = 0.65

* total absorption based on 72.0 ft²

Information and statements in this report are derived from material, information and/or specifications furnished by the client and exclude any expressed or implied warranties as to the fitness of the material tested or analyzed for any particular purpose or use. This report is the confidential property of our client and may not be used for advertising purposes. This report shall not be reproduced except in full, without written approval of this laboratory. The recording of false, fictitious or fraudulent statements or entries on this document may be punished as a felony under Federal Statutes including Federal Law Title 18, Chapter 47

Stork Twin City Testing is an operating unit of Stork Materials Technology B.V., Amsterdam, The Netherlands, which is a member of the Stork group



Architectural Surfaces, Inc.

DISTINCTIVE WOOD & SPECIALTY ACOUSTICAL CEILING & WALL SYSTEMS

123 Columbia Court North • Suite 201 • Chaska, MN 55318
 952-448-5300 • Fax: 952-448-2613 • Toll Free: 1-800-710-8791
 e-mail: info@architecturalsurfaces.net
 Visit Our Web Site at www.architecturalsurfaces.net

CEILINGS YOU CAN LOOK UP TO!

STORK®

Materials Technology

Stork Twin City Testing Corporation

PROJECT NUMBER: 30160-07-82419-7

PAGE: 5 of 5

DATE: February 27, 2008

TEST RESULTS:

Filename: test #10 **ASTM C423 - Sound Absorption**

Client: Acoustical Product: 3/4" Ceiling Tile Model #: New World Panel Quantity: 1 Comment: w/2" Echo Eliminator

Sample Size - Wt.: 108.0 in x 96.0 in x 2-3/4" - 180 lbs Sample Description: Acoustical Surfaces: (staggered holes) Wood Perforated Panels w/ 2" Echo Eliminator: : Hole size: 3/8"Diam., 473 holes per 24"x 24" panels 8' x 9' x 2-3/4" Sample :

Time Stamp: Fri, Feb 15, 2008 - 10:41 AM Total Sample Area: 72.0 ft²

F (Hz)	Absorption Coefficient	Absorption (Sabins)*
100	0.64	45.99
125	0.38	27.49
160	0.33	23.73
200	0.67	48.46
250	0.88	63.69
315	0.84	60.42
400	0.85	61.17
500	0.95	68.10
630	0.91	65.80
800	0.85	61.07
1000	0.72	51.54
1250	0.61	44.17
1600	0.54	39.23
2000	0.47	34.03
2500	0.42	29.91
3150	0.41	29.73
4000	0.46	33.23
5000	0.56	40.07

Temp (°C): 20.4 R.H. (%): 54 ATM (mbar): 990

* total absorption based on 72.0 ft²

SAA = 0.73 NRC = 0.75

Information and statements in this report are derived from material, information and/or specifications furnished by the client and exclude any expressed or implied warranties as to the fitness of the material tested or analyzed for any particular purpose or use. This report is the confidential property of our client and may not be used for advertising purposes. This report shall not be reproduced except in full, without written approval of this laboratory. The recording of false, fictitious or fraudulent statements or entries on this document may be punished as a felony under Federal Statutes including Federal Law Title 18, Chapter 47

Stork Twin City Testing is an operating unit of Stork Materials Technology B.V., Amsterdam, The Netherlands, which is a member of the Stork group

HIGHEST QUALITY, GENUINE WOOD AND VENEER, SOUND CONTROL, DECORATIVE CEILING & WALL SYSTEMS, EASILY INSTALLED TO STANDARD T-BAR GRID ALLOWING CONCEALED SUSPENSION AND COMPLETE PLENUM ACCESS. OPTIONS INCLUDE LINEAR, CUBE, GRILLE, COFFER, CURVED, PERFORATED OR CUSTOM IN ANY WOOD SPECIES. ALL SYSTEMS AVAILABLE FACTORY FINISHED WITH CLASS A FIRE RETARDANT PAINT, CLEAR VARNISH OR STAIN. OTHER SOUNDPROOFING, SOUND ABSORBING AND NOISE CONTROL ACCESSORIES AVAILABLE FOR CEILINGS, WALLS AND FLOORS.