

STORK®
Materials Technology

Stork Twin City Testing Corporation

JOB NUMBER: 30160 10-2185-1
PAGE: 1 of 4
DATE: February 25, 2010

662 Cromwell Avenue
Saint Paul, MN 55114
USA

Telephone : (651) 645-3601
Toll Free : (888) 645-TEST
Telefax : (651) 659-7348
Website : www.storktct.com

Investigative Chemistry
Non Destructive Testing
Metallurgical Analysis

Geotechnical
Failure Analysis
Materials Testing

Construction Materials
Product Evaluation
Welder Qualification

**SOUND ABSORPTION TESTING OF
WHITE POLYESTER PANELS**

Prepared for:
HUEINTEK INC.
Attn: Ms. Sumi Kim
3F, Samwha Bldg., 213-7, Nonhyun-dong
Gangnam-gu Seoul, Korea

Client Reference Number: PrePay

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 Corporation is an operating unit of Stork Materials Technology B.V., Amsterdam, The Netherlands, which is a member of the Stork Group

JOB NUMBER: 30160 10-2185-1

PAGE: 2 of 4

DATE: February 25, 2010

SOUND ABSORPTION / NOISE REDUCTION COEFFICIENT
(ASTM C423)

INTRODUCTION:

This report presents the results of sound absorption tests conducted on a sample of polyester boards. The testing was authorized by Ms. Sumi Kim of Hueintek Inc. The testing and data analysis were completed on February 4, 2010.

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, lab code # 200046-0) for conducting ASTM C423 test procedure. This report may not be used to claim product endorsement by NVLAP, NIST or any agency of the U.S. Government.

SUMMARY OF RESULTS:
NOISE REDUCTION COEFFICIENT (NRC)

<i>Sound Absorption Testing</i>					Test Results	
Test #	Sample Identification	Thickness (in)	Total Weight (lbs)	Weight (psf)	NRC	SAA
1	1" Polyester Panels	1	36.9	0.5	<i>0.70</i>	<i>0.69</i>

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 Corporation is an operating unit of Stork Materials Technology B.V., Amsterdam, The Netherlands, which is a member of the Stork Group

JOB NUMBER: 30160 10-2185-1

PAGE: 3 of 4

DATE: February 25, 2010

SAMPLE IDENTIFICATION:

Manufacturer : Hueintek Inc
Sample #1, Model # : 1" Polyester Panel
Panel Size : 24" x 48" x 1"
Average Panel Weight : 4.1-lbs (0.5-psf)
Quantity of Panels: 9
Area tested : 72-ft²
Specimen Description : The material was in panel form.



TEST METHOD:

Sound Absorption Test

ASTM C 423-09, "Sound Absorption and Sound Absorption Coefficient by the Reverberation Room Method", was followed in every respect. The samples were tested in a Type A mounting (on the floor).

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	10722
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 sample will be retained for a period of **15-days** and then discarded unless notified by the client.

F:\Product\MFFILES\MNB\2009 REPORTS MNB\02810-Hueintek.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 Corporation is an operating unit of Stork Materials Technology B.V., Amsterdam, The Netherlands, which is a member of the Stork Group

STORK®
 Materials Technology

Stork Twin City Testing Corporation

JOB NUMBER: 30160 10-2185-1

PAGE: 4 of 4

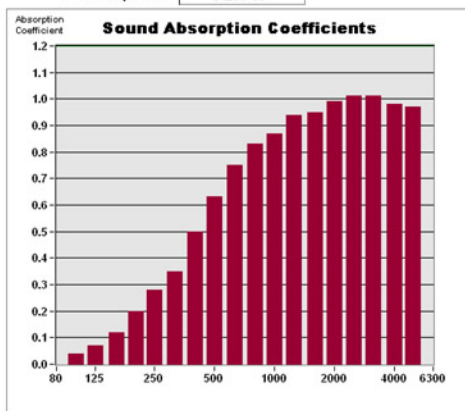
DATE: February 25, 2010

TEST DATA:

Filename test #1		ASTM C423 - Sound Absorption		
Client Hueintek Inc.	Product 1" Acoustic Panels	Model #	Quantity 1	Comment
Sample Size - Wt. 108.0 in x 96.0 in x 1" - 37 lbs		Sample Description Hueintek Inc. (9) 1" x 24" x 48" Polyester Acoustical Panels :		
Time Stamp Thu, Feb 04, 2010 - 10:11 AM		Total Sample Area 72.0 ft ²		

F (Hz)	Absorption Coefficient	Absorption (Sabins)*
100	0.04	2.87
125	0.07	5.16
160	0.12	8.53
200	0.20	14.17
250	0.28	20.06
315	0.35	25.23
400	0.50	36.15
500	0.63	45.52
630	0.75	53.71
800	0.83	59.97
1000	0.87	62.51
1250	0.94	67.90
1600	0.95	68.12
2000	0.99	71.59
2500	1.01	72.80
3150	1.01	72.48
4000	0.98	70.60
5000	0.97	70.12

 Temp (°C) **20.8** R.H. (%) **50** ATM (mbar) **1002**

 * total absorption based on 72.0 ft²

SAA = 0.69 NRC = 0.70

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 Corporation is an operating unit of Stork Materials Technology B.V., Amsterdam, The Netherlands, which is a member of the Stork Group