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SOUND ABSORPTION TESTING CONDUCTED
Polyester Acoustic Panel

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Seoul, South Korea

Date: August 6, 2012
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Report Number: ESP-10756-1



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Noise Reduction Coefficient (ASTM C423-09)

INTRODUCTION:

This report presents the results of acoustical testing of Polyester Acoustic Panel. This testing was requested by Ms. Sumi Kim and was conducted on August 3rd, 2012.

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The results stated in this report represent only the specific construction and acoustical conditions present at the time of the test. Measurements performed in accordance with this standard on nominally identical constructions and acoustical conditions may produce different results.

TEST RESULTS SUMMARY:

<i>Noise Reduction Coefficient (NRC) Test</i>				Test Results		
Test #	Sample Identification	Weight (lbs)	Weight (psf)	NRC	SAA	--
1	Polyester Acoustic Panel	57.6	0.08	0.95	0.93	--

Tabular and graphical presentations of the data are presented under "TEST RESULTS" below.

SPECIMEN DESCRIPTION: (Also see "Test Results")

The sample was identified as Polyester Acoustic Panel. The sample was received in 24" x 48" x 2" nominal sections (9 sections received). The exposed area was a total of 72 ft2 and weighed 57.6 lbs.



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TEST PROCEDURE AND EQUIPMENT:

Sound Absorption Test

ASTM C 423-09, "Sound Absorption and Sound Absorption Coefficient by the Reverberation Room Method", was followed in every respect. The sample was tested using Type A Mounting Method.

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 Description</u>	<u>S/N</u>	
NI-ATS	Sound Measuring System	NI-92374-ATS	TCT102709.2
Norsonic	Rotating Microphone Boom	NOR265	
BSWA (Source Rm)	Pressure Condenser Microphone	MP253	450007
GRAS (Term Rm)	Pressure Condenser Microphone	40AD	19220-1244



Test Data:

SOUND ABSORPTION
ASTM C423

General Information

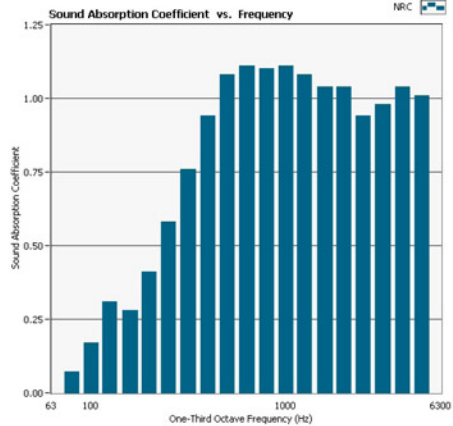
Project No:	10756-Hueintek-1
Customer:	Hueintek Inc.
Test Date:	08-03-2012
Specimen ID:	Polyester Acoustic Panel
Specimen Description:	
Specimen Dimensions - Area:	72.00" W x 144.00" H = 72.00 ft ²
Operator:	JMW

Data Table

	absorption empty (m ²)	absorption * sample (m ²)	Absorption Coefficient
80	4.81	0.44	0.07
100	5.15	1.16	0.17
125	2.76	2.05	0.31
160	2.96	1.88	0.28
200	3.74	2.75	0.41
250	3.71	3.86	0.58
315	3.43	5.10	0.76
400	3.60	6.31	0.94
500	3.99	7.22	1.08
630	4.26	7.39	1.11
800	4.73	7.36	1.10
1000	5.03	7.40	1.11
1250	5.45	7.21	1.08
1600	6.17	6.94	1.04
2000	6.97	6.97	1.04
2500	7.75	6.27	0.94
3150	8.61	6.53	0.98
4000	10.25	6.97	1.04
5000	12.20	6.76	1.01

Room Conditions

Temperature	23.0 °C
R.H.	53 %
ATM	977 hPa



NRC
0.95

SAA
0.93

* based on an extended plane area of 72.00 ft²