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**SOUND TRANSMISSION CLASS TESTING OF A  
T-MAX ACOUSTICAL DAMPING SHEET**

**Prepared for:**  
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*Client Reference Number:*

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**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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**SOUND TRANSMISSION CLASS (ASTM E90)**

**INTRODUCTION:**

This report presents the results of sound transmission loss tests conducted on the T-Max Acoustical Damping Sheet. The testing was authorized by Ms. Sumi Kim of Hueintek Inc. The testing and data analysis were completed on February 16, 2009.

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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 E90 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:**

**Sound Transmission Class (STC)**

<i>Sound Transmission Class Testing</i>				<b>Test Results</b>		
<b>Test #</b>	<b>Sample Identification</b>	<b>Weight (lbs)</b>	<b>Weight (psf)</b>	<b>STC</b>	<b>Def.</b>	<b>OITC</b>
1	Sound Block Sheet (T-MAX Acoustical Damping Sheet)	30	1.1	<b>26</b>	<b>24</b>	<b>21</b>

**SAMPLE IDENTIFICATION:**

**Manufacturer :** Hueintek Inc

**Model # :** Sound Block Sheet  
"T-Max Acoustical Damping Sheet"

**Size :** 47-3/8" x 82-3/4" x 1/8"

**Weight :** 30-lbs (1.1-psf)



**Specimen Description :** The material was in roll form.

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**TEST METHOD:** **Sound Transmission Test**

The Filler wall was previously tested to a STC of 61.

ASTM:E90(04), "Laboratory Measurement of Airborne Sound Transmission of Building Partitions," 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(04), "Determination of Sound Transmission Class." The actual transmission loss at each frequency was calculated by the following equations:

$$TL = NR + 10 \log S - 10 \log A_2$$

where: TL = Transmission Loss (dB)  
NR = Noise Reduction (dB)  
S = Surface area common to both sides (sq. ft.)  
A<sub>2</sub> = Sound absorption of the receiving room with the sample in place (sabins)

*OITC Procedure*

ASTM:E1332(03), "Determination of Outdoor-Indoor Transmission Class", was followed in every respect. Basically, the OITC was calculated by using the sound transmission loss values in the 80 to 4000 Hz range as measured in accordance with ASTM E-90(04). These transmission loss data are then used to determine the A-weighted sound level reduction of the specimen for the reference source spectrum specified in Table 1 of ASTM E1332(03). The appropriate calculations were made to determine the OITC value. The source room has a volume of 2948-ft<sup>3</sup> (83-m<sup>3</sup>) and the termination room has a volume of 5825-ft<sup>3</sup> (165-m<sup>3</sup>).

The temperatures and relative humidity of the termination room met the requirements of the standard during and after the test. All frequencies met the requirements for 95% confidence established by the standard.

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

F:\Product\MMFILES\MNB\2009 REPORTS MNB\02810-Hueintek.doc

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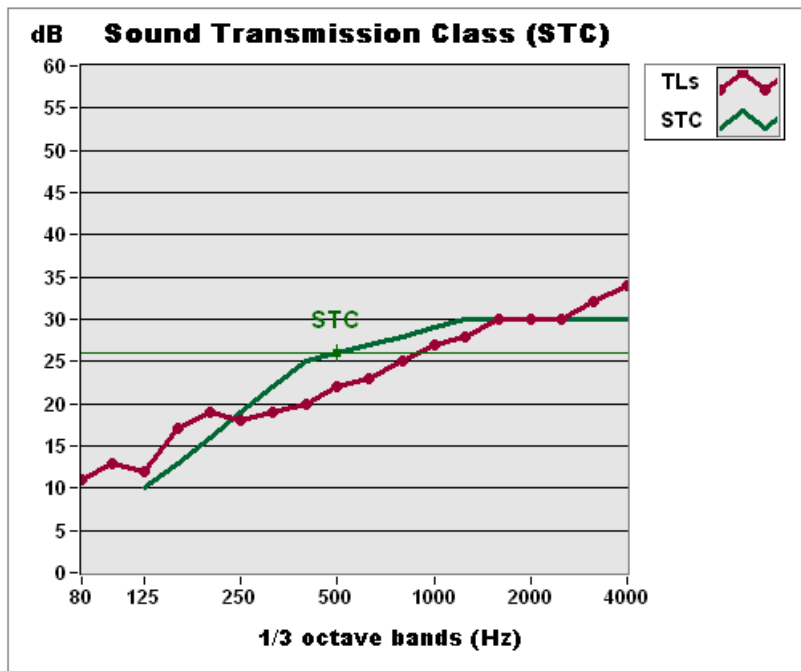
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**TEST DATA:**

Filename <b>test #1</b>						<b>ASTM E90 - Laboratory Sound Transmission Class</b>					
Project Folder <b>012810 Hueintex</b>		Client <b>Hueintex Inc.</b>		Product <b>T-Max</b>		Model # <b>Sound Block Sheet</b>		Quantity <b>1</b>		Comment <b>Black Rubber Roll</b>	
Sample Size - Wt. <b>47.3 in x 82.8 in x 1/8" - 30 lbs</b>				Sample Description <b>Hueintex Inc. Sound Block Sheet: T-MAX Acoustical Damping Sheet (4' x 8' x 1/8"), black rubber fabric: : Sample Size: 47-3/8" x 82-3/4" x 1/8" :</b>							
Time Stamp <b>Mon, Feb 16, 2009 - 10:13 AM</b>											

F (Hz)	TLs - sample TL values (dB)		
	TLs	95% CI	def
80	11	2.7	-
100	13	1.3	-
125	12	2.2	0
160	17	1.3	0
200	19	1.0	0
250	18	0.5	1
315	19	0.4	3
400	20	0.3	5
500	22	0.6	4
630	23	0.3	4
800	25	0.2	3
1000	27	0.2	2
1250	28	0.2	2
1600	30	0.2	0
2000	30	0.2	0
2500	30	0.2	0
3150	32	0.2	0
4000	34	0.3	0



**STC = 26 def: 24**  
**OITC: 21**

Temp (°C) **20.9** R.H. (%) **56** ATM (mbar) **998**

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