

Title: Sound Absorption Test Results

Product: 2" Fabric Wrapped Panel

Application: Wall & Ceiling

Testing Standard: ASTM C423 E-Mount with 1/4" airspace

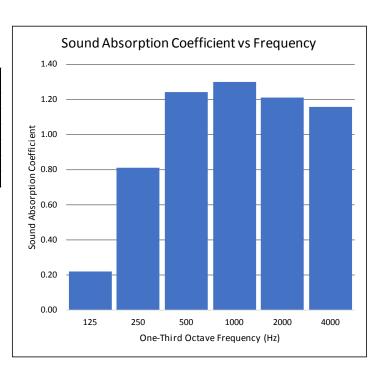
Test Date: 02/16/2000

Why this test: TThis test evaluates a products efficiency of absorbing sound at multiple frequencies. The test simulates the product's acoustical performance with a direct installation on a wall or ceiling.

Test Result Summary: NRC - 1.15

NDC

INKC	
1.15	
Frequency	Abs orption
(Hz)	Coefficient
125	0.22
250	0.81
500	1.24
1000	1.30
2000	1.21
4000	1.16



Test ID: 3018 98-75790.2

ASI TEST RESULT DISCLAIMER

ASI makes every effort to ensure the accuracy and reliability of the information provided. Laboratory testing is conducted by independent testing organizations. ASI does not guarantee that field tests or independent tests will not vary.

PHONE

WEB SITE

PROJECT NUMBER: 3018 98-75790.2 **PAGE:** 1 of 2

DATE: October 15, 1998

SOUND ABSORPTION - ASTM C423-90a

INTRODUCTION:

This report presents the results of a Noise Reduction Coefficient (NRC) test conducted on a 2" Wall Panel submitted on October 7, 1998 and was conducted on October 13, 1998.

This report must not be reproduced except in its entirety with the approval of Maxim Technologies, Inc. The data in this report relates only to the item tested.

Maxim Technologies, Inc. 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

SUMMARY OF RESULTS:

The NRC of the panel described below is 1.15. (See individual frequency values below under TEST RESULTS).

SPECIMEN IDENTIFICATION:

Manufacturer: Rendered by Manufacturer for Acoustical Surfaces Inc.

Type: 2" Wall Panel

Nom Dimensions (W x H x D): 4' x 8' x 2"

Weight: 35.0 lbs. each specimen (1.09 PSF)

Surface Area: 32 ft² each specimen.

Total Surface Area Tested: 64 ft² consisting of 2 specimens.

Mounting Type: On floor with 1/4" air space beneath. Edges taped.

Specimen Description: Acoustical Wall Panel, 2" thick 6.0 PCF, Fiberglass Core,

100% Polyester Facing

AS A MUTUAL PROTECTION TO CLIENTS, THE PUBLIC AND OURSELVES, ALL MAXIM TECHNOLOGIES, INC. REPORTS ARE SUBMITTED AS THE CONFIDENTIAL INFORMATION OF CLIENTS, AND AUTHORIZATION FOR PUBLICATION OF STATEMENT. CONCLUSIONS OR EXTRACTIONS FROM OR REGARDING OUR REPORTS IS RESERVED PENDING OUR PRIOR WRITTEN APPROVAL.

PROJECT NUMBER: 3018 98-75790.2 **PAGE:** 2 of 2

DATE: October 15, 1998

TEST METHOD:

ASTM C 423-90a, "Sound Absorption and Sound Absorption Coefficients by th Reverberation Room Method" was followed in every respect.

Absorption coefficients are the fraction of diffuse incident sound absorbed by the specimen and are expressed in sabins per square foot. The NRC is the average of the absorption coefficients for 250, 500, 1000, and 2000 Hertz and is reported to the nearest integral of 0.05.

The temperature and relative humidity of the chamber during the tests were 72°F and 58%, respectively.

TEST EQUIPMENT:

Manufacturer	Model	Serial #	<u>Description</u>
Norwegian Electronics	NE830	11511	Real Time Spectrum Analyzer
Brüel & Kjær	3923	815424	Rotating Microphone Boom
Larson-Davis	2560	1032	Pressure Condenser Microphone

2" Wall Panel

Frequency Hz	Abs. Coefficients	Uncertainty %
125	0.22	5.7
250	0.81	2.9
500	1.24	1.8
1000	1.30	1.3
2000	1.21	0.8
4000	1.16	0.8

Noise Reduction Coefficient (NRC) = 1.15

Freq. = Octave band center frequency.

Abs. Coefficient = Sound absorption coefficient (extended plane applications)

Uncertainty = % uncertainty of the absorption coefficient for 95% confidence

AS A MUTUAL PROTECTION TO CLIENTS, THE PUBLIC AND OURSELVES, ALL MAXIM TECHNOLOGIES, INC. REPORTS ARE SUBMITTED AS THE CONFIDENTIAL INFORMATION OF CLIENTS, AND AUTHORIZATION FOR PUBLICATION OF STATEMENT, CONCLUSIONS OR EXTRACTIONS FROM OR REGARDING OUR REPORTS IS RESERVED PENDING OUR PRIOR WRITTEN APPROVAL.