ITS Intertek Testing Services

NVLAP

For The Scope of Accreditation
Under NVLAP Lab Code 100402-0.

Job No. 3035322

January 7, 2003

REPORT NO. 3035322-002

SOUND ABSORPTION TEST ON BULLETIN BOARD MATERIAL

RENDERED TO

FORBO INDUSTRIES
HUMBOLT INDUSTRIAL PARK
HAZLETON, PENNSYLVANIA 18202

INTRODUCTION

This report gives the results of a Sound Absorption test and the determination of the Noise Reduction Coefficient on Bulletin Board 6.0mm tackable wall surface material. The test specimen was selected and supplied by the client and received at the laboratories on November 27, 2002. The sample appeared to be in a new, unused condition.

AUTHORIZATION

Purchase Order No. KM-62, Dated November 21, 2002.

TEST METHOD

The specimen was tested in accordance with the American Society for Testing and Materials designation ASTM C423-01, "Standard Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method".

GENERAL

This test method describes the measurement of sound absorption by analyzing the decay rate of sound in a reverberation room. The difference of the decay with and without the specimen in the room is utilized to determine the sound absorption of the specimen under test. Intertek Testing Services Acoustical Facilities utilizes a 16,640 cu. ft. (470 cubic meter) reverberation room.

ITS
Intertek Testing Services

NVLAP
For The Scope of Accreditation
Under NVLAP Lab Code 100402-0

Report No. 3035322-002

GENERAL - Cont'd

The sound absorption coefficient is ideal y defined as the fraction of the randomly incident sound power absorbed by the material. The greater the coefficient, the greater the sound absorption.

The Noise Reduction Coefficient (NRC) is a single number rating obtained by taking the arithmetic average of the absorption coefficients at 250, 500, 1000, and 2000 Hz rounded to the nearest multiple of 0.05.

The Sound Absorption Average (SAA) is a single number rating obtained by taking the arithmetic average of the one-third octave bands from 200 through 2500 Hz rounded to the nearest 0.01.

DESCRIPTION OF TEST SPECIMEN

The test specimen consisted of a sheet of Forbo Bulletin Board tackable wall surface material. The specimen was 6.0mm thick. The sheet of material was cut into two sheets measuring 4 feet by 9 feet for testing purposes. The tested portion of the sample weighed 74.5 pounds.

Sales pitch for Forbo Cork

ITS
Intertek Testing Services

NVLAP
For The Scope of Accreditation
Under NVLAP Lab Code 100402-0.

Report No. 3035322-002

RESULTS OF TEST

One Third Octave Band Center Frequency, Hz	Absorption Coefficients Sabins/ft^2	Percent Uncertainty
100	0.07	4.44
125	0.00	3.51
160	0.05	2.03
200	0.01	4.24
250	0.06	4.04
315	0.06	2.88
400	0.04	1.58
500	0.03	1.99
630	0.11	1.60
800	0.20	1.86
1000	0.19	1.61
1250	0.20	1.86
1600	0.08	1.14
2000	0.06	1.05
2500	0.02	1.04
3150	0.00	0.65
4000	0.00	1.21
5000	0.00	0.84
Sound Absorption Average (SAA)	0.09	

	Absorption Coefficients – Sabins/ft.^{2} One-Third Octave Band Center Frequency, Hz						
IDENTIFICATION	125	250	500	1000	2000	4000	NRC
Bulletin Board Sheet (6.0mm thickness)	0.00	0.06	0.03	0.19	0.06	0.00	0.10
Precision ±	0.05	0.02	0.02	0.01	0.01	0.02	

MOUNTING: Type "A" per ASTM Designation E795-00, "Standard Practices for Mounting Test Specimens During Sound Absorption Tests".

ITS
Intertek Testing Services

NVLAP
For The Scope of Accreditation
Under NVLAP Lab Code 100402-0.

Report No. 3935322-002

REMARKS

1. Aging Period: None
2. Ambient Temperature: 70 °F
3. Relative Humidity: 45%

CONCLUSION

The test method employed for this test has no pass-fail criteria, therefore, the evaluation of the test results is left to the discretion of the client.

This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

Date of Test: January 2, 2003

Report Approved By:

James R. Kline, Technician
Acoustical Testing

hkf