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TEST REPORT

For

Sound Seal
P. O. Box 545
Agawam, MA 01001
Bill Devin / 413-789-1770

Impact Sound Transmission Test
ASTM E 492 – 04 / ASTM E 989 – 06

On

Quarry Tile and Mortar over
Sound Seal® Impacta-Regupol Probase Tile Underlayment
6 Inch (152mm) Concrete Slab
(Formally known as CeraZorb Green)

Report Number: NGC 7008119

Assignment Number: G-455

Test Date: 08/05/2008

Report Date: 09/04/2008

Submitted by: _____
Steven M. Armenia
Test Technician

Reviewed by: _____
Robert J. Menchetti
Director

1650 Military Road • Buffalo, NY 14217-1198
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Report Number: NGC 7008119

Test Method: This test method is in accordance with American Society for Testing and Materials Standard Test Method for Laboratory Measurement of Sound Transmission Through Floor-Ceiling Assemblies Using the Tapping Machine - Designation: E 492 – 04 / E 989 - 89. The uncertainty limits of each tapping machine location met the precision requirements of section 11.3 of ASTM E 492-04.

Specimen Description: 6 inch (152mm) Concrete Slab Overlaid with, according to client, Quarry tile and mortar over CeraZorb green rubber underlayment.

The test specimen was a floor-ceiling assembly consisting of the following:

- 1 layer of 152mm x 152mm x 12.7mm (6 in. x 6 in. x ½ in.) unglazed clay quarry tile 27.3 kg/m^2 (5.6 PSF) installed using polymer modified mortar and polymer modified grout mixtures 4.9 kg/m^2 (1.0 PSF).
- 1 layer of 3.4mm (0.135 in.) Sound Seal® CeraZorb green rubber underlayment. Sample weight was 2.10 kg/m^2 (0.43 PSF). Sample was a black rubberized mat
- 152mm (6 in.) thick reinforced concrete slab 366.1 kg/m^2 (75.0 PSF).

The overall weight of the test assembly is 400.5 kg/m^2 (82.03 PSF).

The perimeter of the concrete slab was sealed with rubber gasketing and a sand filled trough. The test assembly is structurally isolated from the receiving room.

Specimen size: 3658mm x 4877mm (12 ft x 16 ft.)

Conditioning: Mortar allowed to cure for 7 days.

Test Results: The results of the tests are given on pages 3 and 4.

Normalized impact sound pressure level

Test: ASTM E 492 - 04 / ASTM E 989 - 06

Test Number: NGC7008119 Date: 8/5/2008
Size: 17.8 m²

Source room

Temperature [°C]: 24.7
Humidity [%]: 62

Receiving room
Volume V = 63.9 m³
Temperature [°C]: 23.2
Humidity [%]: 53

Impact Insulation Class IIC = 49 dB

Sum of unfavorable deviations: 29.0 dB
Max. unfavorable deviation: 7.0 dB at 250 Hz

Frequency [Hz]	L_n [dB]	L2 [dB]	T [s]	Corr. [dB]	u.Dev. [dB]	ΔL_n
50	58	63.2	3.70	-5.2	-.-	0.408
63	55	60.1	3.62	-5.1	-.-	0.307
80	52	58.3	4.17	-6.3	-.-	0.328
100	56	61.6	3.43	-5.6	-.-	0.581
125	64	69.8	3.70	-5.8	1	0.436
160	63	69.3	3.96	-6.3	-.-	0.199
200	68	74.2	3.90	-6.2	5	0.129
250	70	75.3	3.15	-5.3	7	0.124
315	69	73.9	3.09	-4.9	6	0.094
400	67	71.8	2.87	-4.8	5	0.104
500	62	66.4	2.68	-4.4	1	0.048
630	63	67.3	2.58	-4.3	3	0.070
800	60	64.3	2.60	-4.3	1	0.053
1000	58	61.7	2.40	-3.7	-.-	0.057
1250	55	58.0	2.12	-3.0	-.-	0.048
1600	52	54.6	2.03	-2.6	-.-	0.043
2000	48	50.6	1.87	-2.6	-.-	0.042
2500	46	48.0	1.71	-2.0	-.-	0.036
3150	43	44.4	1.56	-1.4	-.-	0.036
4000	38	39.1	1.38	-1.1	-.-	0.034
5000	33	34.2	1.21	-1.2	-.-	0.043

L_n = Normalized Sound Pressure Level, dB
L2 = Receiving Room Level, dB
T = Reverberation Time, seconds
ΔL_n = Uncertainty for 95% Confidence Level

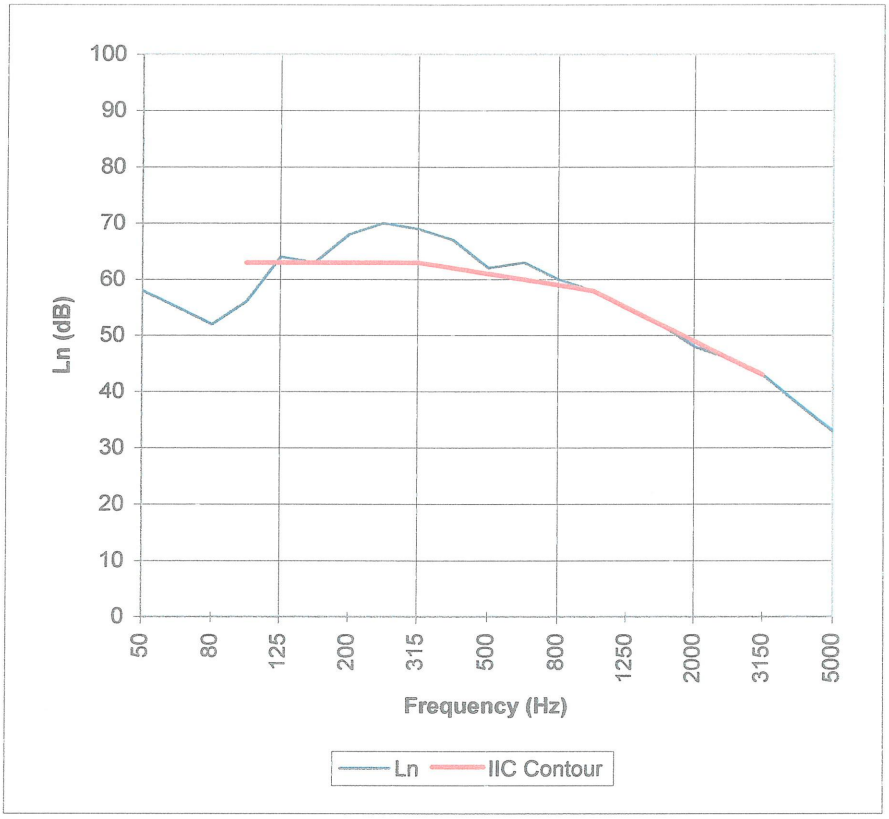
Normalized impact sound pressure level

Test: ASTM E 492 - 04 / ASTM E 989 - 06

Test Number: NGC7008119 Date: 8/5/2008

Impact Insulation Class IIC = 49 dB

Frequency [Hz]	L_n [dB]
50	58
63	55
80	52
100	56
125	64
160	63
200	68
250	70
315	69
400	67
500	62
630	63
800	60
1000	58
1250	55
1600	52
2000	48
2500	46
3150	43
4000	38
5000	33



* Due to high insulating value of specimen, background levels limit results at these frequencies.

L_n = Normalized Sound Pressure Level, dB

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