Acoustical Testing Laboratory

TEST REPORT

for

Midwest Padding, L.L.C.
P.O. Box 2283
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Norfolk, NE 68702-2283
Robert Pratt / 888-379-9695

Sound Transmission Loss Test
ASTM E 90 - 02
On

Laminate Flooring on QuietWalk™ Underlayment over 8" Concrete Slab Floor-Ceiling Assembly

Report Number: NGC 5004020

Assignment Number: G-231

Specimen Receipt Date: 09/09/2004

Test Date: 09/29/2004

Report Date: 10/01/2004

Submitted by: _____
Craig G. Cooper
Test Engineer

Reviewed by: _____
Robert J. Menchetti
Director

The results reported above apply to specific samples submitted for measurement.
No responsibility is assumed for performance of any other specimen.
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The laboratory's test reports in no way constitutes or implies product certification, approval, or endorsement by this laboratory.

National Gypsum
1650 Military Road · Buffalo, NY 14217-1198
(716)873-9750 · Fax (716)873-9753 · ngctest@nationalgypsum.com

Report Number: NGC 5004020

Test Method: This test method generally follows * the American Society for Testing and Materials Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements - Designation: E 90 - 02.

Specimen Description: 8" Concrete Slab floor-ceiling assembly overlaid with;
Laminate flooring on QuietWalk underlayment.

The test specimen was a floor-ceiling assembly consisting of the following:
- 1 layer of T&G wood laminate flooring, 5/16" thick, 7-3/4" wide planks, (1.58 PSF).
- 1 layer of 1/8" Midwest Padding QuietWalk™ underlayment, made of nonwoven fibers with layer of polyethylene film attached to one side. (0.14 PSF)
- 8" thick reinforced concrete slab (85.6 PSF).

The overall weight of the test assembly is 87.32 PSF nominal.

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

Specimen size: 12 ft x 16 ft.

Test samples were submitted by client and tested as received.

Conditioning: Concrete cured for a minimum of 28 days.

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

* Tests conducted in Floor-Ceiling chambers do not meet all requirements of the most recent ASTM E 90 Standard.

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Sound Transmission Loss Test Data

Per: ASTM E 90 - 02 / ASTM E 413 - 87

No. of test report: NGC5004020
Test Date: 9/29/2004
Size: 17.8 m²
Temperature [°C]: 22.9

Sound Transmission Class STC = 54 dB
Sum of unfavorable deviations: 32.0 dB
Max. unfavorable deviation: 8.0 dB at 125 Hz

Frequency [Hz]	STL [dB]	L1 [dB]	L2 [dB]	T [s]	Corr. [dB]	u.Dev. [dB]	ΔSTL
100	38	105.8	75.7	2.24	7.5	-.-	1.005
125	30	99.7	77.6	2.37	7.7	8.0	1.849
160	36	99.5	71.1	2.51	8.0	5.0	1.688
200	37	97.7	68.6	2.74	8.4	7.0	0.361
250	42	96.6	62.4	2.59	8.1	5.0	0.781
315	44	95.5	60.3	2.80	8.5	6.0	0.954
400	52	100.0	56.3	2.68	8.3	1.0	0.529
500	55	99.3	52.0	2.55	8.1	-.-	0.748
630	55	98.3	50.9	2.24	7.5	0.0	0.387
800	56	98.6	50.1	2.38	7.8	0.0	0.200
1000	59	97.7	46.7	2.36	7.7	-.-	0.332
1250	60	96.5	44.1	2.06	7.1	-.-	0.245
1600	60	96.4	42.7	1.84	6.6	-.-	0.265
2000	64	96.7	39.4	1.67	6.2	-.-	0.245
2500	64	98.3	40.1	1.49	5.7	-.-	0.200
3150	66	98.4	37.4	1.37	5.4	-.-	0.346
4000	67	97.8	35.4	1.20	4.8	-.-	0.500
5000	69	95.3	30.4	1.07	4.3	-.-	0.548

STL = Sound Transmission Loss, dB
L1 = Source Room Level, dB
L2 = Receiving Room Level, dB
T = Reverberation Time, seconds
Δ STL = Uncertainty for 95% Confidence Level

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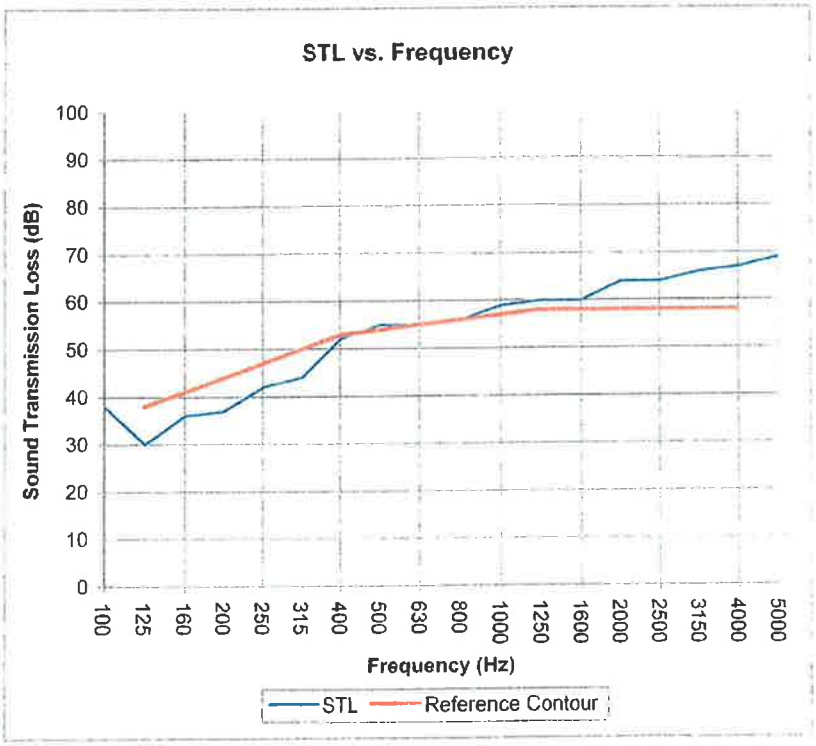

* Due to high insulating value of specimen, background levels limit results at these frequencies.

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