

TEST REPORT

for

PINA S.A.

Carretera de Teruel km 98
Fuentes – CUENCA, Spain 16193
Jose Luis Pineda / 34 926 569 710

Impact Sound Transmission Test

ASTM E 492 – 09 (2016)e1 / ASTM E 989 – 18

On

6 Inch (152 mm) Concrete Slab Floor- Ceiling Assembly Overlaid with 8 mm Laminate Flooring and DMX 1-Step 2.0 Underlayment

Report Number: NGC 7020014

Assignment Number: G-1668

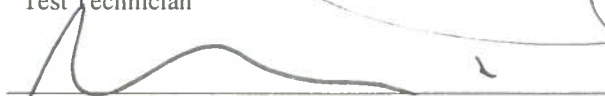
Test Date: 01/21/2020

Report Date: 02/03/2020

Submitted by:


Anthony J. Rivers
Test Technician

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. The laboratory's accreditation or any of its test reports in no way constitute or imply product certification, approval, or endorsement by NVLAP, NIST or any agency of the Federal Government. This report may not be reproduced except in full, without written approval of the laboratory.

Revision Summary:

Date	SUMMARY
Approval Date: 02/03/2020	Original issue date: 02/03/2020 Original NGCTS report: NGC 7020014

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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 492-09 (2016)e1 / E 989-18.

The uncertainty limits of each tapping machine location met the precision requirements of section A1.4 of ASTM E 492-09 (2016).

Specimen Description: 6 inch concrete slab floor ceiling assembly overlaid with, according to client, Step & Wall Natural Superior Oak Flooring.

The test specimen was a floor assembly and was observed to consist of the following:
All weights and dimension are averaged:

- 1 layer of, according to the client, Step & Wall Natural Superior Oak Flooring. The flooring was floating on the concrete slab. Measured average thickness: 11.68 mm (0.46 in.). Measured average weight: 8.97 kg/m² (1.84 PSF)
- 152.4 mm (6 in.) thick reinforced concrete slab, weighing: 366.2 kg/m² (75.00 PSF)

The overall weight of the test assembly is: 375.13 kg/m² (76.84 PSF)

The perimeter of the test frame was sealed with a rubber gasket and a sand filled trough.

The test frame was structurally isolated from the receiving room.

Specimen size: 3657.6 mm x 4876.8 mm (12 ft. x 16 ft.)

Conditioning: Concrete slab cured for a minimum of 28 days.

Test Results: The results of the tests are given on pages 4 and 5 of the report.

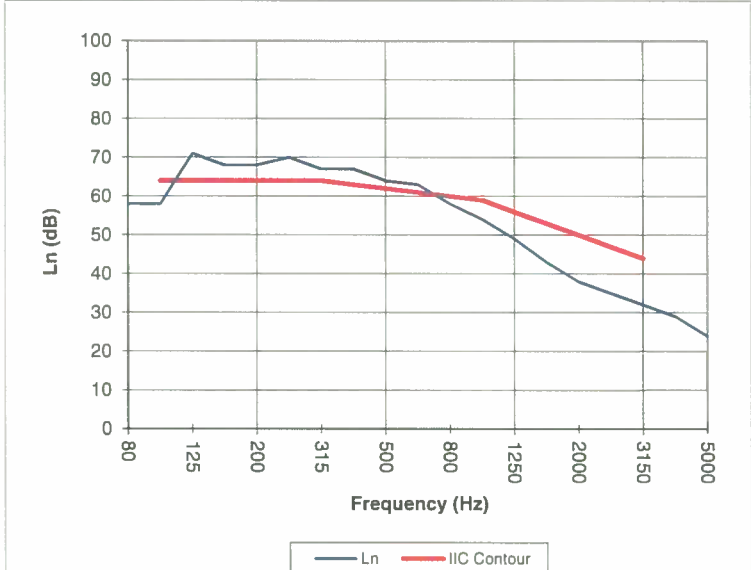
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Normalized impact sound pressure level						
Test: ASTM E 492 - 09 (2016) / ASTM E 989 - 18						
Test Report: NGC7020014					Date: 1/17/2020	
Specimen Size [m ²]: 17.8					Page 4 of 5	
Source room			Receiving room			
Rm Temp [°C]: 25			Volume [m ³]: 128			
Humidity [%]: 50			Rm Temp [°C]: 25			
			Humidity [%]: 50			
Impact Insulation Class IIC [dB]: 48						
Sum of Unfavorable Deviations [dB]: 32						
Max. Unfavorable Deviation [dB]: 7			at 125 Hz			
Frequency	L _n	L2	d	Corr.	u.Dev.	ΔL _n
[Hz]	[dB]	[dB]	[dB/s]	[dB]	[dB]	
80	58	59.0	21.09	-1.0		1.51
100	58	59.2	23.69	-1.2		2.03
125	71	72.4	19.94	-1.4	7	2.53
160	68	70.4	16.13	-2.4	4	1.80
200	68	70.7	14.41	-2.7	4	0.61
250	70	73.0	15.65	-3.0	6	1.39
315	67	69.2	16.09	-2.2	3	0.58
400	67	69.3	16.89	-2.3	4	0.42
500	64	66.4	17.47	-2.4	2	0.40
630	63	65.1	17.78	-2.1	2	0.48
800	58	60.1	18.73	-2.1		0.43
1000	54	56.1	18.21	-2.1		0.57
1250	49	50.9	19.68	-1.9		0.47
1600	43	44.2	21.07	-1.2		0.68
2000	38	39.3	23.73	-1.3		0.71
2500	35	35.9	25.90	-0.9		0.71
3150	32	32.3	27.91	-0.3		0.65
4000	29	28.1	32.52	0.9		0.88
5000	24	22.9	37.54	1.1		1.05

L_n = Normalized Sound Pressure Level, dB
 L2 = Receiving Room Level, dB
 d = Decay Rate, dB/second
 ΔL_n = Uncertainty for 95% Confidence Level

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