REPORT

3933 US ROUTE 11 CORTLAND, NEW YORK 13045

Order No. 3169380

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IMPACT SOUND TRANSMISSION TEST AND CLASSIFICATION OF ZAXON IONIQUE VINYL TILE OVER JUMPAX DUAL UNDERLAYMENT SYSTEM ON A SIX INCH CONCRETE SLAB

RENDERED TO

SOUND SEAL
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INTRODUCTION

This report gives the results of an Impact Sound Transmission test and the determination of the Impact Insulation Class of Zaxon Ionique Vinyl tile over Jumpax Dual Underlayment System. The sample was selected and supplied by the client and received at the laboratories on December 5, 2008. The sample appeared to be in a new, unused condition.

AUTHORIZATION

Signed Intertek Quotation No. 500122601.

TEST METHOD

The specimen was tested in general accordance with the American Society for Testing and Materials designation ASTM E2179-03, "Standard Test Method for Laboratory Measurement of the Effectiveness of Floor Coverings in Reducing Impact Sound Transmission Through Concrete Floors".

TEST METHOD – Cont'd

Two vertically adjacent rooms are used: the upper one being designated the source room and the lower one the receiving room (10,000 ft^3). A standard concrete floor is installed in an opening between them. The rooms and the floor installation are designed so the only significant sound radiation into the receiving room is from the standard concrete floor.

A standard tapping machine is placed and activated on the standard concrete floor and the impact sound pressure levels are measured in the room below. The floor covering to be evaluated is then placed on the standard concrete floor and the impact sound pressure levels measured again.

The differences in impact sound pressure level are used to calculate two single number ratings. The first is an IIC rating calculated for the covering installed on the reference concrete floor. The second rating, ΔIIC, represents the calculated reduction in IIC when the covering is placed on the reference concrete floor, that is the improvement in IIC due to the covering.

DESCRIPTION OF THE FLOOR/CEILING ASSEMBLY

The floor system consisted of a six inch thick concrete slab that forms the horizontal separation between two rooms. The slab is not isolated from the receiving room walls.

DESCRIPTION OF TEST SPECIMEN

The test specimen consisted of Zaxon Ionique Vinyl Tile and Jumpax Dual Underlayment Syatem. The underlayment was made up of a Dual Fiberboard construction with Foam fiber backing on one layer. The tile measured 18 inches by 18 inches by a nominal 0.12 inches in thickness and weighed 1.11 lbs per sq ft. The underlayment measured 23 inches by 47 inches a nominal 0.37 inches in thickness and weighed 1.10 lbs per sq ft.

RESULTS OF TEST

Zaxon Ionique Vinyl tile over Jumpax Dual Underlayment System

1/3 Octave Band Center Frequency Hertz	1/3 Octave Band Sound Pressure Level dB re 0.0002 Microbar				
	Bare Concrete	Floor Tested	Difference in dB	Reference Floor	Final Array
100	62.0	60.0	2.0	67.0	65.0
125	66.4	64.3	2.1	67.5	65.4
160	66.7	63.4	3.3	68.0	64.7
200	68.5	64.7	3.8	68.5	64.7
250	69.0	63.3	5.7	69.0	63.3
315	70.9	61.5	9.4	69.5	60.1
400	71.3	56.3	15.0	70.0	55.0
500	71.9	55.0	16.9	70.5	53.6
630	72.7	52.3	20.4	71.0	50.6
800	73.5	44.6	28.9	71.5	42.6
1000	74.5	38.7	35.8	72.0	36.2
1250	76.6	34.2	42.4	72.0	29.6
1600	78.0	31.1	46.9	72.0	25.1
2000	79.9	29.9	50.0	72.0	22.0
2500	79.5	26.0	53.5	72.0	18.5
3150	78.9	22.0	56.9	72.0	15.1
Impact insulation Class (IIC)*				28	53

Calculated improvement in Impact Insulation Class: IIC 53 – IIC 28 = ΔIIC 25

*Classified in accordance with ASTM E989-89 (Re-approved 1999), entitled, "Standard Classification for Determination of Impact Insulation Class (IIC)".

The uncertainty limit of the impact noise test data is less than 3 dB for the 1/3 octave bands centered in the range from 100 to 400 Hz and less than 2.5 dB for the bands centered on the range from 500 to 3150 Hz.

REMARKS

1. Curing Period: None.
2. Ambient Temperature: 70°F
3. Relative Humidity: 36%

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.

Date of Test: December 12, 2008

Report Approved by:

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Attachments: None