REPORT

3933 US ROUTE 11 CORTLAND, NEW YORK 13045

Order No. 100919282 Date: January 11, 2013

REPORT NO. 100919282CRT-001k

IMPACT SOUND TRANSMISSION TEST ON TEST # 154058
ID: 8mm LAMINATE FLOORING WITH 2mm ATTACHED FOAM
OVER A SIX INCH CONCRETE SLAB WITH A DROP CEILING

RENDERED TO

PROFESSIONAL TESTING
714 GLENWOOD PLACE
DALTON, GA, 30721

INTRODUCTION

This report gives the result of an Impact Sound Transmission test on Test # 154058 ID: 8mm Laminate Flooring with 2mm Attached Foam. The flooring was selected and supplied by the client and received at the laboratories on January 8, 2013. The flooring appeared to be in new, unused condition upon arrival.

AUTHORIZATION

Signed Intertek Quotation No. 500409884.

TEST METHOD

The floor system was tested in general accordance with the American Society for Testing and Materials designation ASTM E492-09, “Standard Test Method for Laboratory Measurement of Impact Sound Transmission through Floor-Ceiling Assemblies Using the Tapping Machine”. It was classified in accordance with ASTM E989-06, entitled, “Standard Classification for Determination of Impact Insulation Class (IIC)”.

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, △IIC, 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/ceiling assembly system consisted of a 6 inch thick concrete floor with a drop ceiling below forming the horizontal separation between two rooms, one directly above the other. The drop ceiling consisted of 14 inch deep steel bar joists spaced 38 inches on center. The ceiling construction consisted of 2 x 4 inch wood bolted to the bar joists. The 2 x 4 inch wood was spaced 24 inches on center. Resilient channels (1/2 inch single leaf) were positioned on 16 inch centers between the furring strips and the 1/2 inch gypsum board. Sound attenuation batts (U.S.G. Thermofiber), four (4) inches in thickness were placed between the joists in the formed cavity. The receiving room below measured 1440 cubic feet.

DESCRIPTION OF TEST SPECIMEN

The test specimen consisted of Test # 154058 ID: 8mm Laminate Flooring with 2mm Attached Foam underlayment supplied by Vius. The flooring planks measured 50 5/8 inches long by 7 2/3 inches wide and weighed 1.46 lbs/sq. ft.

RESULTS OF TEST

The data obtained in the room below the panel normalized to A_o = 10 square meters, is as follows:

1/3 Octave Band Center Frequency Hertz	1/3 Octave Band Sound Pressure Level dB re 0.0002 Microbar
100	56
125	56
160	57
200	56
250	56
315	55
400	53
500	52
630	51
800	47
1000	42
1250	37
1600	34
2000	29
2500	26
3150	20
Impact Insulation Class (IIC)	60

PRECISION

The 95% uncertainty level for each tapping machine location 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 in the range from 500 to 3150 Hz.

For the floor/ceiling construction, the 95% uncertainty limits ($\triangle L_n$) for the normalized sound pressure levels were determined to be less than 2 dB for the 1/3 octave bands centered in the range from 100 to 3150 Hz.

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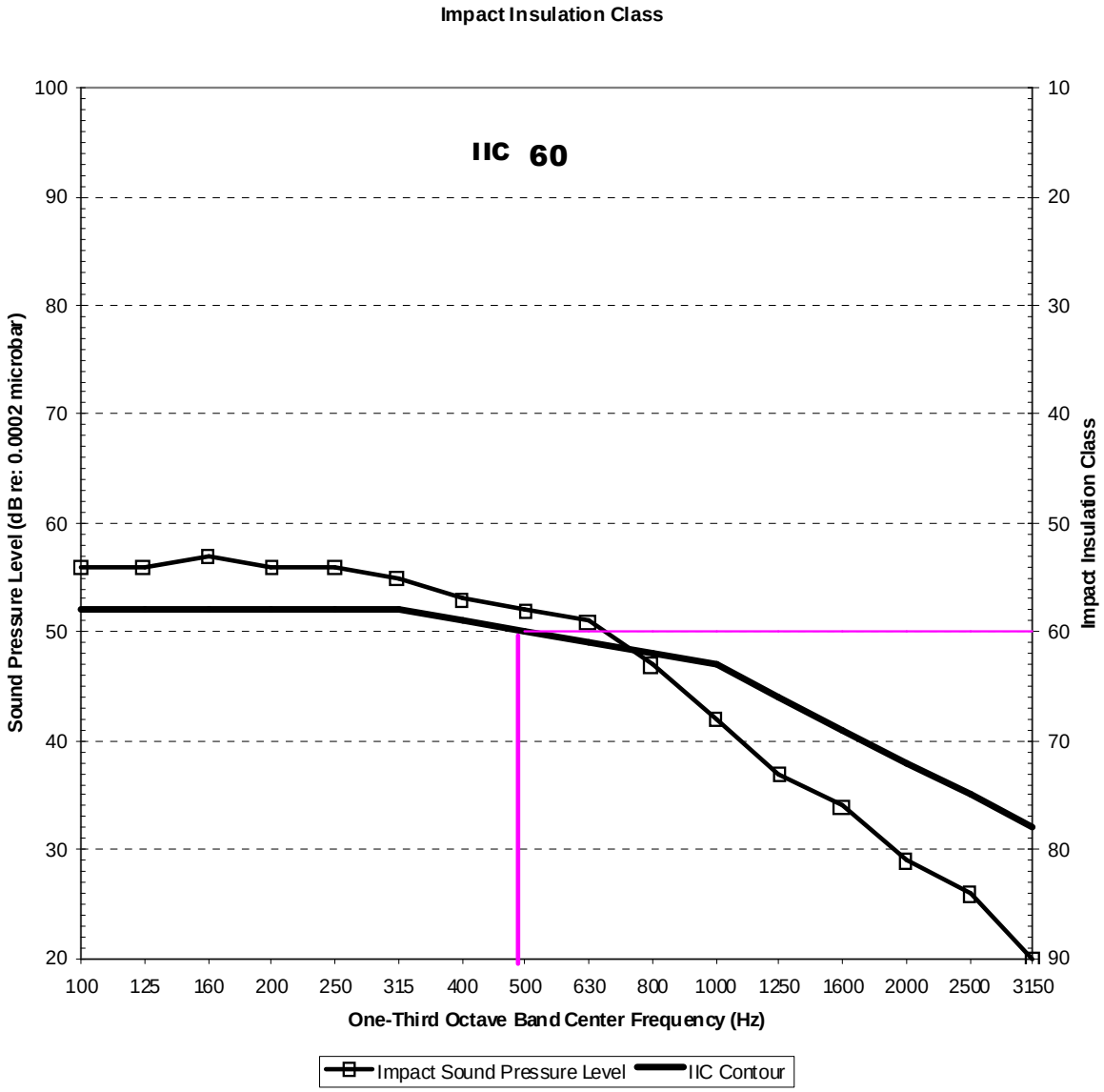

PROFESSIONAL TESTING

REMARKS

1. Ambient Temperature: 69 °F
2. Relative Humidity: 30%

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: January 11, 2013

Report Approved by:

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Report Reviewed By:

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Attachments: None