

## Test Report

Report Number:150925003SHF-BP-5

## Test Items, Method and Results:

Test item: Impact Sound Reduction

Test Method ASTM E2179-09

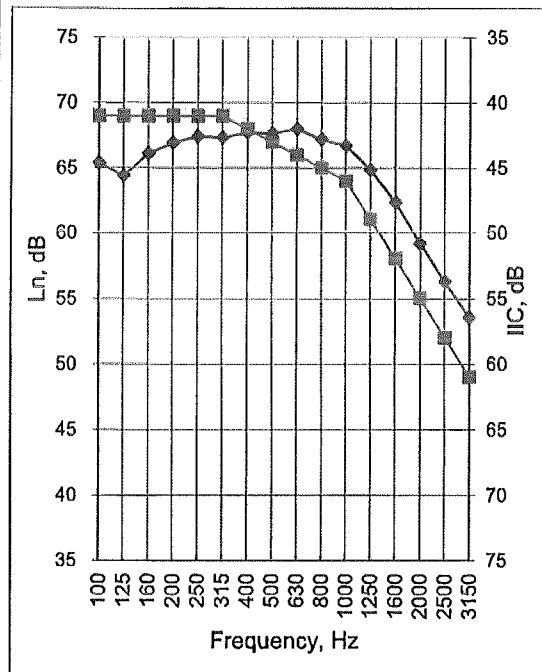
Temperature: 24°C

Relative Humidity: 50%

Specimen area: 10.8 m<sup>2</sup>

Specimen: 1220mm x 229mm x 5mm

Frequency (Hz)	L <sub>0</sub> (dB)	L <sub>c</sub> (dB)	L <sub>d</sub> (dB)	L <sub>ref</sub> (dB)	L <sub>ref,c</sub> (dB)
100	56.2	54.6	1.6	67.0	65.4
125	65.7	62.6	3.1	67.5	64.4
160	64.7	62.8	1.9	68.0	66.1
200	65.8	64.2	1.5	68.5	67.0
250	66.8	65.2	1.6	69.0	67.4
315	65.2	63.0	2.2	69.5	67.3
400	65.8	63.5	2.2	70.0	67.8
500	66.7	63.8	2.8	70.5	67.7
630	66.9	63.9	3.0	71.0	68.0
800	66.5	62.2	4.3	71.5	67.2
1000	65.9	60.7	5.3	72.0	66.7
1250	65.9	58.8	7.2	72.0	64.8
1600	65.6	56.0	9.7	72.0	62.4
2000	65.3	52.4	12.8	72.0	59.2
2500	64.9	49.2	15.7	72.0	56.3
3150	64.1	45.6	18.5	72.0	53.5
IIC <sub>c</sub> =	43				
ΔIIC=IIC <sub>c</sub> -28=	15				

Calculated improvement in Impact Insulation Class: IIC<sub>c</sub>-28 = ΔIIC 15

Note:

1. L<sub>0</sub> = Normalized Sound Pressure Level for Bare standard concrete floor  
 L<sub>c</sub> = Normalized Sound Pressure Level for Covering over concrete floor  
 L<sub>d</sub> = L<sub>0</sub> - L<sub>c</sub>  
 L<sub>ref</sub> = Reference floor average Normalized Impact Sound Pressure Level  
 L<sub>ref,c</sub> = L<sub>ref</sub> - L<sub>d</sub>
2. Classified IIC in accordance with ASTM E989-12, "Standard Classification for Determination of Impact Insulation Class".