Test Report

Report Number:140618003SHJ-BP-1

Applicant Name: Changzhou Huahang Packing Materials Co.,Ltd
Original Report Date: July 8, 2014
Applicant Address: No.28 Zhaojia Street Hengling Town, Wujin District, Changzhou City, Jiangsu Province, China
Attn: Zhu Chen

Sample Description:

Product: 3mm Ethylene/Vinyl Acctate
Model: HV-30
Samples Quantity: 15m^2
Sample ID: S140618003SHJ-001~020
Date Received: 2014-06-17
Date Test Conducted: 2014-06-18~2014-07-08

Tests Conducted:

Test Methods: ASTM E492-09, ASTM E989-06, ASTM E2179-09

Conclusion:

For details refer to attached page(s).
The conclusions of this test report may not be used as part of the requirements for Intertek product certification. Authority to Mark must be issued for a product to become certified.

Should you have any queries about the test report, please contact:

Approved by:	**Checked by:**	**Prepared by:**
Dorian Wu	Jodie Zhou	Eric Zhu
Supervisor	Technical Supervisor	Engineer

ORIGINAL

Test Items, Method and Results:

Test Method: ASTM E492-09

Temperature: 25ºC

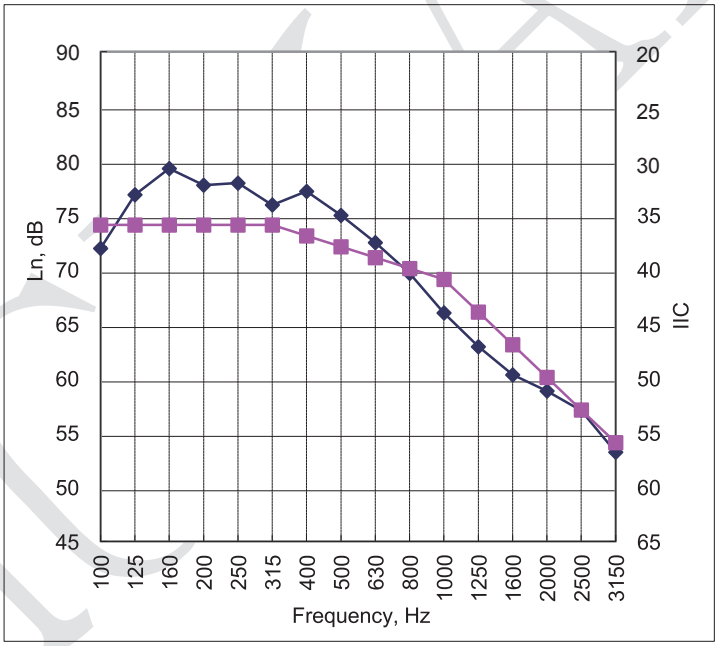
Relative Humidity: 65%

Specimen area: 12.8m^2

Volume of the receiving room: 121m^3

Floor/ceiling Assembly: The system consisted of 150mm thick concrete floor which had a 3mm sound insulation pad installed on the top of it. The 12 mm flooring specimens were then placed on the top of the insulation pad.

Frequency (Hz)	L_n (dB)
100	73
125	78
160	80
200	79
250	79
315	77
400	78
500	76
630	73
800	71
1000	67
1250	64
1600	61
2000	60
2500	58
3150	54
IIC=	73



Calculated Impact Insulation Class: IIC 73

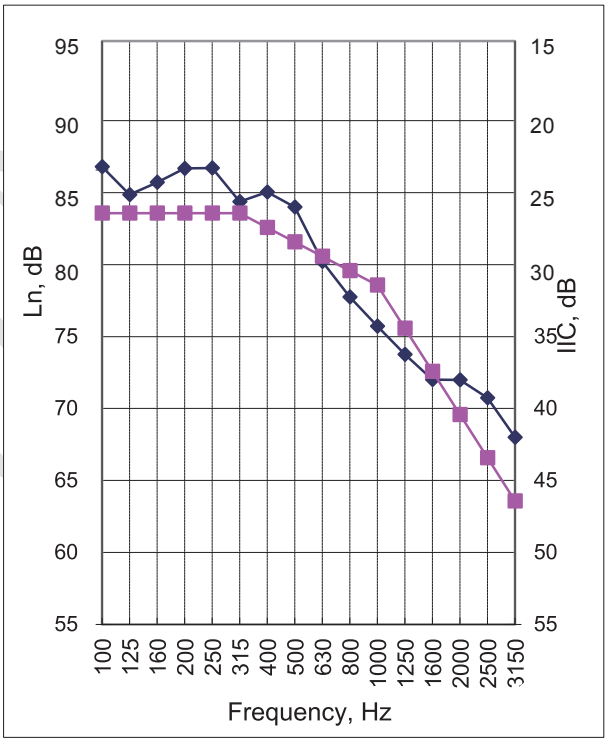
Note:

1. L_n = Normalized Sound Pressure Level for Covering over Floor/ceiling System
2. Classified IIC in accordance with ASTM E989-12, Standard Classification for Determination of Impact Insulation Class.
3. The IIC was for the whole floor/ceiling assembly system.

ORIGINAL

Test Method: ASTM E2179-09
Temperature: 25ºC
Relative Humidity: 65%
Specimen area: 12.8m^2
Volume of the receiving room: 121m^3
Floor/ceiling Assembly: The system consisted of 150mm thick concrete floor which had a 3mm sound insulation pad installed on the top of it. The 12 mm flooring specimens were then placed on the top of the insulation pad.

Frequency (Hz)	L_0 (dB)	Lc (dB)	Ld (dB)	Lref (dB)	Lref,c (dB)
100	79.6	77.8	1.8	90.0	88.2
125	87.0	82.8	4.2	90.5	86.3
160	89.0	85.1	3.9	91.0	87.1
200	87.1	83.7	3.4	91.5	88.1
250	87.7	83.8	3.9	92.0	88.1
315	88.6	81.9	6.7	92.5	85.8
400	89.6	83.1	6.5	93.0	86.5
500	89.0	80.9	8.1	93.5	85.4
630	90.7	78.3	12.4	94.0	81.6
800	90.9	75.6	15.3	94.5	79.2
1000	89.8	71.9	17.9	95.0	77.1
1250	88.6	68.8	19.8	95.0	75.2
1600	87.8	66.2	21.6	95.0	73.4
2000	86.3	64.7	21.6	95.0	73.4
2500	85.8	63.0	22.8	95.0	72.2
3150	84.7	59.1	25.6	95.0	69.4
IIC_c=		73			
$\Delta IIC=IIC_c-28$=		45			



Calculated improvement in Impact Insulation Class: $IIC_c-28 = \Delta IIC$ 45

Note:
L_0 = Normalized Sound Pressure Level for Bare standard concrete floor
L_c = Normalized Sound Pressure Level for Covering over concrete floor
L_d = $L_0 - L_c$
L_{ref} = Reference floor average Normalized Impact Sound Pressure Level
$L_{ref,c}$ = $L_{ref} - L_d$
Classified IIC_c in accordance with ASTM E989-12, Standard Classification for Determination of Impact Insulation Class.

Test Method: ASTM E90-09

Temperature: 25ºC

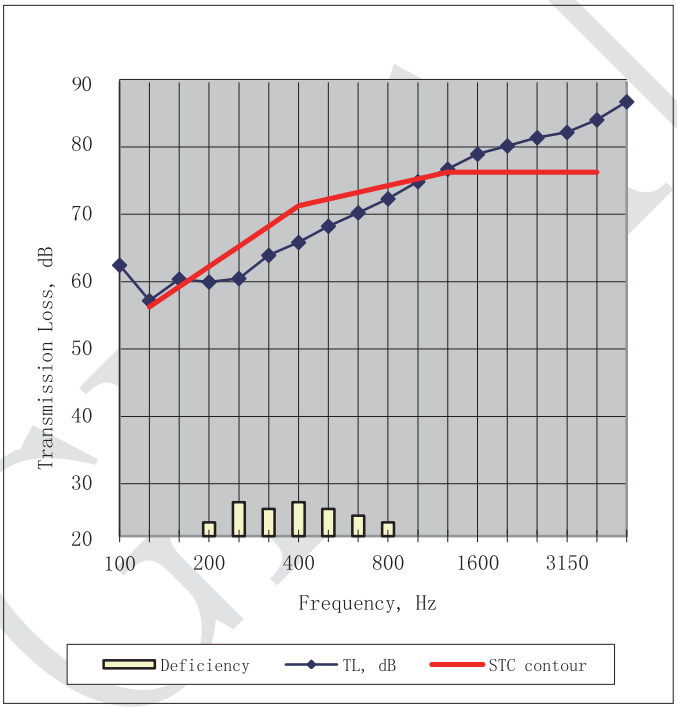
Relative Humidity: 65%

Specimen area: 12.8m^2

Volume of the receiving room: 121m^3

Floor/ceiling Assembly: The system consisted of 150mm thick concrete floor which had a 3mm sound insulation pad installed on the top of it. The 12 mm flooring specimens were then placed on the top of the insulation pad.

Frequency (Hz)	TL (dB)
100	62.2
125	56.9
160	60.1
200	59.7
250	60.2
315	63.7
400	65.6
500	68.0
630	70.0
800	72.1
1000	74.6
1250	76.5
1600	78.7
2000	79.9
2500	81.1
3150	81.9
4000	83.8
5000	86.7



Sound Transmission Class (STC)	72

Calculated Sound Transmission Class: STC 72

Note:

1. TL= Transmission loss, the partition was the Floor/ceiling Assembly System.
2. Classified STC in accordance with ASTM E413-10, Classification for Rating Sound Insulation.
3. The STC was for the whole floor/ceiling assembly system.

Appendix A: Sample photos



Test setup

****

The End of Report

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.