



## G3441.01-113-11-R0 ACOUSTICAL PERFORMANCE TEST REPORT ASTM E 2179

#### Rendered to

JONA PANEL SALES INC.

Series/Model: WhisperWalk

Specimen Type: Concrete Slab - 152 mm

Overall Size: 3023 mm by 3632 mm

 $\Delta IIC$  23

#### **Test Specimen Identification:**

Floor Topping: 11.53 mm Home Decorations Laminate Flooring

Floor Underlayment: 2.5 mm WhisperWalk Foam Underlayment with Foil

Floor Slab: 152 mm Concrete Slab

Reference should be made to Intertek-ATI Report G3441.01-113-11 for complete test specimen description. This page alone is not a complete report.





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#### **Acoustical Performance Test Report**

JONA PANEL SALES INC. 200-3275 Lakeshore Rd. Kelowna, British Columbia V1W 3T1 CANADA

> **Report** G3441.01-113-11 **Test Date** 10/03/16 **Report Date** 10/07/16

#### **Project Scope**

Architectural Testing, Inc., an Intertek company (Intertek-ATI), was contracted to conduct delta impact sound transmission test. The complete test data is included as attachments to this report. The full test specimen was assembled on the day of testing by Intertek-ATI. All materials provided by the client were installed on an existing Intertek-ATI assembly (Concrete Slab - 152 mm) utilizing Intertek-ATI-supplied materials.

#### **Test Methods**

The acoustical tests were conducted in accordance with the following standards. The equipment listed in the attachments meets the requirements of the following standards.

ASTM E 492-09(2016)e1, Standard Test Method for Laboratory Measurement of Impact Sound Transmission Through Floor-Ceiling Assemblies Using the Tapping Machine

ASTM E 2179-03(2016), Standard Test Method for Laboratory Measurement of the Effectiveness of Floor Coverings in Reducing Impact Sound Transmission Through Concrete Floors

ASTM E 2235-04 (2012) Standard Test Method for Determination of Decay Rates for Use in Sound Insulation Test Methods

#### **Test Procedure**

All testing was conducted in the VT test chambers at Intertek-ATI located in York, Pennsylvania. The microphones were calibrated before conducting the tests.

The delta impact insulation test was conducted in accordance with ASTM E 2179 test method. In addition to the impact sound transmission test, two sound pressure level measurements with the tapping machine operating at each position specified by ASTM E 492 with only the concrete slab installed.





## **Test Procedure** (Continued)

The air temperature and relative humidity conditions were monitored and recorded during all measurements.

#### **Test Conditions**

Source Room		Receive Room		
Average Temperature	19.3°C	Average Temperature	20.1°C	
Average Relative Humidity	68%	Average Relative Humidity	68%	

#### **Test Calculations**

The  $\Delta$ IIC (Delta Impact Insulation Class) rating was calculated in accordance with ASTM E 2179.

**Test Specimen Materials and Installation Details** 

1 est & peemen w	1 est Specimen Materiais and Instanation Details					
Material	Dimensions (mm)	Manufacturer and Series   Quantity		Average Weight		
Laminata Flooring	3023 by 452.4	11.5	Home Decorations	10.98 m	9.67 kg/m	
Laminate Flooring	Note: Loose laid					
Foam Underlayment with Foil	3023 by 1219.2	2.5	WhisperWalk	10.98 m	0.1 kg/m	
	Note: Loose laid					
Concrete Slab	3023 by 3632	152.0	N/A	10.98 m	366.18 kg/m	
	Note: The concrete slab was installed in a test frame flush to the source room.					

#### **Comments**

The total weight of the floor/ceiling assembly was 4127.9 kg. Intertek-ATI will store samples of the test specimen for four years. Photographs of the test specimen are included in the attachments. A drawing of the test specimen is included in the attachments.





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Intertek-ATI will service this report for the entire test record retention period. Test records, such as detailed drawings, datasheets, representative samples of test specimens, or other pertinent project documentation, will be retained by Intertek-ATI for the entire test record retention period. The test record retention period ends four years after the test date.

This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. It is the exclusive property of the client so named herein and relates only to the specimen tested. This report is intended to help in the client's quality assurance program, but it does not represent a continuous or exhaustive evaluation of the specimen tested or of other products or materials that were not evaluated. The statements and data provided herein do not constitute approval, disapproval, certification, or acceptance of performance or materials.

This report may not be reproduced, except in full, without the written approval of Intertek-ATI.

FOR INTERTEK-ATI:

RMAR

Robert M. Hall Jordan Strybos

Technician II - Acoustical Testing Project Manager - Acoustical Testing

Attachments (5 pages): This report is complete only when all attachments listed are included.

Instrumentation (1)

Delta Impact Insulation Data (2)

Photographs (1)

Drawings (1)

\* Stated by Client/Manufacturer

N/A - Non Applicable





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# **Revision Log**

Revision	<u>Date</u>	Page(s)	Description
R0	10/07/16	N/A	Original Report Issue





## **Attachments**

## Instrumentation

Instrument	Manufacturer	Model	ATI Number	Date of Calibration	
Data Acquisition Unit	National Instruments	PXI-1033	65124	06/16 *	
Microphone Calibrator	Norsonic	1251	INT00127	01/16	
Receive Room Microphone	PCB Piezontronics	378B20	63748	06/16	
Receive Room Microphone	PCB Piezotronics	378B20	63744	06/16	
Receive Room Microphone	PCB Piezotronics	378B20	63745	06/16	
Receive Room Microphone	PCB Piezotronics	378C20	65617	06/16	
Receive Room Microphone	PCB Piezotronics	378B20	63747	06/16	
Receive Room Environmental Indicator	Comet	T7510	63810 63811	10/15 10/15	
Source Room Microphone	PCB Piezotronics	378B20	63738	05/16	
Source Room Microphone	PCB Piezotronics	378B20	63739	05/16	
Source Room Microphone	PCB Piezotronics	378B20	63740	05/16	
Source Room Microphone	PCB Piezotronics	378B20	63742	05/16	
Source Room Microphone	Scantek	378B20	63741	05/16	
Source Room Environmental Indicator	Comet	T7510	63812	11/15	
Tapping Machine	Look Line s.r.l.	EM50 (TM50)	65351	02/16	

<sup>\*</sup> The calibration frequency for this equipment is every two years per the manufacturer's recommendation.

## **Test Chambers**

VT Receive Room Volume	158.86 m
VT Source Room Volume	190 m





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## **DELTA IMPACT INSULATION**

**ASTM E 2179** 

Test Date	10/03/16
Data File No.	G3441.01
Client	Jona Panel Sales Inc.
Description	11.53 mm Home Decorations Laminate Flooring, 2.5 mm WhisperWalk Foam Underlayment with Foil, 152 mm Concrete Slab
Specimen Area	10.98 m
Technician	Robert M. Hall

Evac	Bkgrd	Absorption	Normalized	95%	Normalized	95%	Resulting	No. of
Freq	SPL	(Square	Impact SPL	Conf	Impact SPL	Conf	Array	Defici-
(Hz)	(dB)	Meters)	BARE (dB)	Limit	SPEC (dB)	Limit	$L_{\text{ref,c}}$	encies
100	42.4	13.2	59.7	0.9	56.4	0.6	64	3
125	44.3	9.5	61.5	0.5	59.9	1.2	66	5
160	39.1	9.5	66.8	1.4	64.6	1.9	66	5
200	36.9	11.0	70.7	1.2	67.4	1.6	65	4
250	35.5	10.9	68.9	0.5	65.7	0.9	66	5
315	37.1	9.5	69.3	1.7	65.7	1.5	66	5
400	31.6	8.0	71.9	2.6	65.5	1.1	64	4
500	30.8	7.8	70.1	1.3	56.7	0.9	57	0
630	30.6	7.2	70.9	3.5	52.6	1.7	53	0
800	26.3	7.3	72.4	3.0	45.9	1.6	45	0
1000	24.6	7.0	72.8	3.6	40.4	0.9	40	0
1250	23.3	7.2	73.0	2.1	35.4	1.5	34	0
1600	19.4	7.3	74.4	2.6	30.2	0.8	28	0
2000	15.2	8.0	74.7	1.6	26.0	0.3	23	0
2500	11.3	8.6	75.1	1.5	26.0	0.8	23	0
3150	9.0	9.7	74.2	2.7	22.1	0.2	20	0

ΔIIC Rating 23 (Delta Impact Insulation Class)

Deficiencies 31 (Sum of Deficiencies)

Note: Receive Room levels less than 5 dB above the Background levels are highlighted in yellow.

ATI 00756, revised 04/14/15



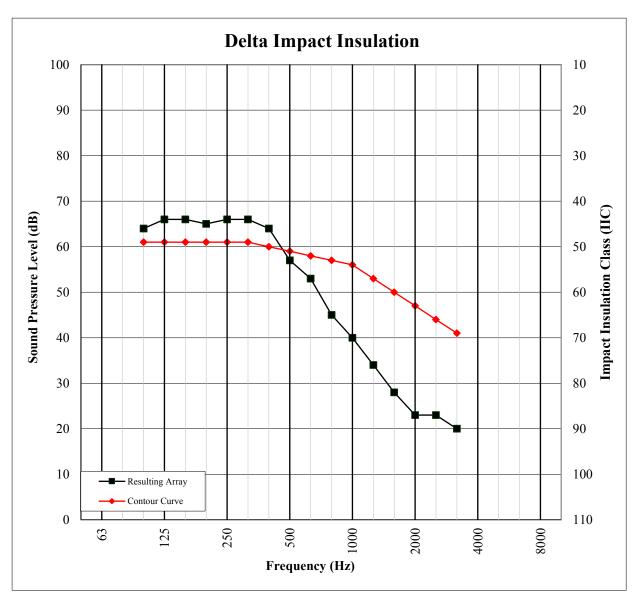




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# Photographs



**Source Room View of Test Specimen Installation** 

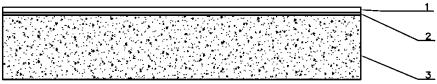


**Receive Room View of Test Specimen Installation** 





# **Drawing**



- 2-Underlayment
- 3-Concrete Slab