

**G0665.06-113-11-R0**  
**ACOUSTICAL PERFORMANCE TEST REPORT**  
**ASTM E 90 AND ASTM E 492**

**Rendered to**

**PROFLEX PRODUCTS, INC.**

**Series/Model: 12 mm Laminated Wood over LV200**

**Specimen Type: 152 mm Concrete Slab with Drop Ceiling**

**Overall Size: 3023 mm by 3632 mm**

**STC 63**  
**IIC 67**

**Test Specimen Identification:**

Floor Topping: 12.1 mm KRAUS ALACANTI KPLA10001 Charleston Hickory Laminated Wood

Floor Underlayment: 1.8 mm Proflex Products LV200 Rubber Foam Pad

Floor Slab: 152 mm Concrete Slab

Main Beams: 43 mm Armstrong HD8906 Drywall Main Beam

Cross Tees: 37.3 mm Armstrong XL8945P Cross Tee

Insulation: 88.9 mm Johns Manville Kraft Faced R-13 Fiberglass Insulation

Ceiling: 15.9 mm National Gypsum Gold Bond® Fire-Shield® Type X Gypsum Panel

Reference should be made to Intertek-ATI Report G0665.06-113-11 for complete test specimen description. This page alone is not a complete report.



## Acoustical Performance Test Report

PROFLEX PRODUCTS, INC.  
2826 Broadway Center Boulevard  
Brandon, Florida 33510

**Report** G0665.06-113-11  
**Test Date** 07/11/16  
**Report Date** 06/16/17

### Project Scope

This report is a reissue of the original Report No. G0665.02-113-11 and is rendered to Proflex Products, Inc. through written authorization. A summary of the results is listed in the Test Results section, and the complete test data is included as attachments to this report. The client provided the test specimen.

### 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 90-09, Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions

ASTM E 413-10, Classification for Rating Sound Insulation

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 989-06 (2012), Classification for Determination of Impact Insulation Class (IIC)

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 airborne transmission loss test was conducted in accordance with the ASTM E 90 test method using the single direction method. Two background noise sound pressure level and five sound absorption measurements were conducted at each of five microphone positions. Four sound pressure level measurements were made simultaneously in both rooms, at each of five microphone positions.

**Test Procedure (Continued)**

The impact sound transmission test was conducted in accordance with the ASTM E 492 test method. Two background noise sound pressure level, two sound pressure level measurements with the tapping machine operating at each position specified by ASTM E 492, and five sound absorption measurements were conducted at each of five microphone positions.

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

**Test Conditions**

Source Room		Receive Room	
Average Temperature	21.6°C	Average Temperature	22.4°C
Average Relative Humidity	51%	Average Relative Humidity	61%

**Test Calculations**

The STC (Sound Transmission Class) and IIC (Impact Insulation Class) ratings were calculated in accordance with ASTM E 413 and ASTM E 989, respectively.

**Test Specimen Materials and Installation Details**

Material	Dimensions (mm)	Thickness (mm)	Manufacturer and Series	Quantity	Average Weight
Laminated Wood	3023 by 3623	12.1	KRAUS ALACANTI KPLA10001 Charleston Hickory	10.98 m <sup>2</sup>	10.09 kg/m <sup>2</sup>
	<i>Note: Loose laid</i>				
Rubber Foam Pad	914 by 3048	1.8	Proflex Products LV200	10.98 m <sup>2</sup>	0.76 kg/m <sup>2</sup>
	<i>Note: Loose laid</i>				
Concrete Slab	3023 by 3632	152.0	N/A	10.98 m <sup>2</sup>	366.18 kg/m <sup>2</sup>
	<i>Note: The concrete slab was installed in a test frame flush to the source room.</i>				
Drywall Main Beam	38.1 by 2870	43.0	Armstrong HD8906	10.9 lin m	0.45 kg/m
	<i>Note: Twelve gauge hanger wires were attached to the bottom side of the concrete at twelve locations and then to the main beams. The hanger wire was twisted around itself a minimum of three times within 76 mm creating a 305 mm plenum. The measured steel thickness was 0.5 mm.</i>				
Cross Tee	38.3 by 1219	37.3	Armstrong XL8945P	27.2 lin m	0.45 kg/m
	<i>Note: Inserted into the main beams on 607 mm centers. The measured steel thickness was 0.5 mm.</i>				
Fiberglass Insulation	2962 by 584	88.9	Johns Manville Kraft Faced R-13	10.98 m <sup>2</sup>	1.33 kg/m <sup>2</sup>
	<i>Note: Loose laid onto the ceiling grid system</i>				

## Test Specimen Materials and Installation Details (Continued)

Material	Dimensions (mm)	Thickness (mm)	Manufacturer and Series	Quantity	Average Weight
Gypsum Panel	3023 by 1219	15.9	National Gypsum Gold Bond® Fire-Shield® Type X	10.56 m <sup>2</sup>	11.23 kg/m <sup>2</sup>
	<i>Note: Fastened with fine thread drywall screws on 305 mm centers</i>				

### Comments

The total weight of the floor/ceiling assembly was 4290.1 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.


This report is reissued in the name of Proflex Products, Inc. through written authorization from the original report holder.

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.

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FOR INTERTEK-ATI:



Digitally Signed by: Cody Snyder

Cody R. Snyder  
Technician II - Acoustical Testing



Digitally Signed by: Jordan Strybos

Jordan Strybos  
Project Manager - Acoustical Testing

Attachments (7 Pages): This report is complete only when all attachments are included.

\* Stated by Client/Manufacturer

N/A - Non Applicable

**Revision Log**

<u>Revision</u>	<u>Date</u>	<u>Page(s)</u>	<u>Description</u>
R0	06/16/17	N/A	Original Report Issue - Reissue of Report No. G0665.02-113-11 in the name of Proflex Products, Inc.

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