

# CLARKDIETRICH BUILDING SYSTEMS, LLC

## ACOUSTICAL PERFORMANCE TEST REPORT

### SCOPE OF WORK

ASTM E90 AND ASTM E492 TESTING ON EXPO LUXURY VINYL TILE

### SPECIMEN TYPE

Open Web Truss - 406 mm (16") - ClarkDietrich® Sound Clip - One-Layer USG SHEETROCK® Brand FIRECODE® C Core

### REPORT NUMBER

J4777.05-113-11-R1

### TEST DATE

03/12/19

### ISSUE DATE

04/15/19

### REVISED DATE

05/20/19

### RECORD RETENTION END

03/12/23

### PAGES

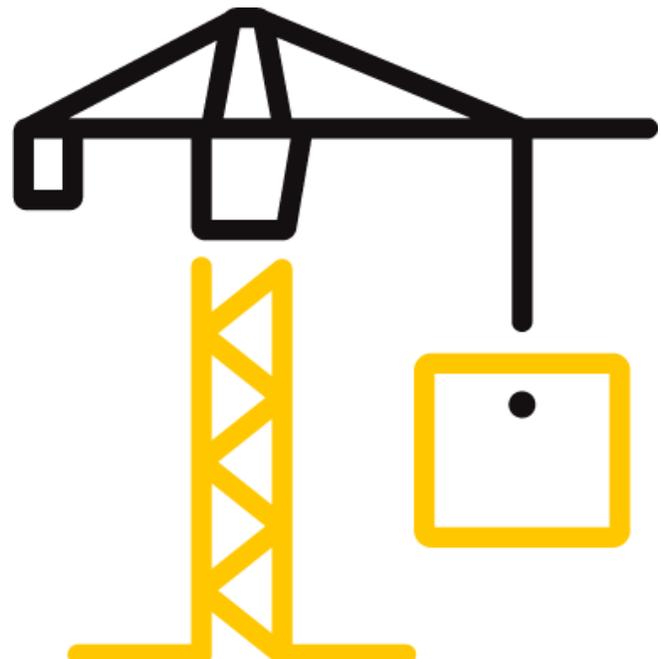
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### DOCUMENT CONTROL

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## TEST REPORT FOR CLARKDIETRICH BUILDING SYSTEMS, LLC

Report No.: J4777.05-113-11-R1

Date: 05/20/19

### REPORT ISSUED TO

#### CLARKDIETRICH BUILDING SYSTEMS, LLC

9100 Centre Pointe Drive, Suite 210

West Chester, Ohio 45069

### SECTION 1

#### SCOPE

Intertek Building & Construction (B&C) was contracted by ClarkDietrich Building Systems, LLC to perform testing in accordance with ASTM E90 AND ASTM E492 on Expo Luxury Vinyl Tile. Results obtained are tested values and were secured by using the designated test method(s). Testing was conducted in the VT test chambers at Intertek B&C located in York, Pennsylvania.

This report does not constitute certification of this product nor an opinion or endorsement by this laboratory.

### SECTION 2

#### SUMMARY OF TEST RESULTS

|                      |                        |
|----------------------|------------------------|
| <b>DATA FILE NO.</b> | J4777.05               |
| <b>SERIES/MODEL:</b> | Expo Luxury Vinyl Tile |
| <b>STC</b>           | 58                     |
| <b>IIC</b>           | 51                     |

**COMPLETED BY:** Cody R. Snyder  
Technician - Acoustical  
**TITLE:** Testing  
**SIGNATURE:**  
**DATE:** 05/20/19

**COMPLETED BY:** Daniel B. Mohler  
Project Lead - Acoustical  
**TITLE:** Testing  
**SIGNATURE:**  
**DATE:** 05/20/19

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**TEST REPORT FOR CLARKDIETRICH BUILDING SYSTEMS, LLC**

Report No.: J4777.05-113-11-R1

Date: 05/20/19

**SECTION 3****TEST METHODS**

The specimen was evaluated in accordance with the following:

**ASTM E90-09 (2016)**, *Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions*

**ASTM E413-16**, *Classification for Rating Sound Insulation*

**ASTM E492-09(2016)e1**, *Standard Test Method for Laboratory Measurement of Impact Sound Transmission Through Floor-Ceiling Assemblies Using the Tapping Machine*

**ASTM E989-18**, *Classification for Determination of Impact Insulation Class (IIC)*

**ASTM E2235-04 (2012)**, *Standard Test Method for Determination of Decay Rates for Use in Sound Insulation Test Methods*

**SECTION 4****MATERIAL SOURCE/INSTALLATION**

The full test specimen was assembled on the day of testing by B&C. All materials provided by the client were installed on an existing B&C assembly (Open Web Truss - 406 mm (16") - ClarkDietrich® Sound Clip - One-Layer USG SHEETROCK® Brand FIRECODE® C Core) utilizing B&C-supplied materials. The assembly was installed in a steel test frame which was installed into the opening between the source and receive rooms in the test chamber. The test frame was isolated from the structure with dense neoprene gasket.

The total weight of the floor/ceiling assembly was 1022 kg / 2252.8 lbs. B&C will store samples of the test specimen for four years. Photographs of the test specimen are included in the report. The client did not supply drawings of the test specimen.

B&C 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 B&C for the entire test record retention period.

**TEST REPORT FOR CLARKDIETRICH BUILDING SYSTEMS, LLC**

Report No.: J4777.05-113-11-R1

Date: 05/20/19

**SECTION 5  
EQUIPMENT**

| INSTRUMENT                           | MANUFACTURER         | MODEL    | DESCRIPTION                          | ASSET #  | CAL DATE |
|--------------------------------------|----------------------|----------|--------------------------------------|----------|----------|
| Data Acquisition Unit                | National Instruments | PXI-4462 | Data Acquisition Card                | INT00977 | 08/18 *  |
| Data Acquisition Unit                | National Instruments | PXI-4462 | Data Acquisition Card                | 65124    | 05/18 *  |
| Data Acquisition Unit                | National Instruments | PXI-4462 | Data Acquisition Card                | 63763-1  | 06/18 *  |
| Microphone Calibrator                | Norsonic             | Nor1251  | Acoustical Calibrator                | 65105    | 06/18    |
| Receive Room Microphone              | PCB Piezotronics     | 378C20   | Microphone and Preamplifier          | 65617    | 06/18    |
| Receive Room Microphone              | PCB Piezotronics     | 378B20   | Microphone and Preamplifier          | 64340    | 09/18    |
| Receive Room Microphone              | PCB Piezotronics     | 378B20   | Microphone and Preamplifier          | 63745    | 06/18    |
| Receive Room Microphone              | PCB Piezotronics     | 378B20   | Microphone and Preamplifier          | 63746    | 09/18    |
| Receive Room Microphone              | PCB Piezotronics     | 378B20   | Microphone and Preamplifier          | 63747    | 07/18    |
| Receive Room Environmental Indicator | Comet                | T7510    | Temperature and Humidity Transmitter | 63810    | 10/18    |
|                                      |                      |          |                                      | 63811    | 10/18    |
| Source Room Microphone               | PCB Piezotronics     | 378C20   | Microphone and Preamplifier          | 63744    | 04/18    |
| Source Room Microphone               | PCB Piezotronics     | 378C20   | Microphone and Preamplifier          | 63739    | 04/18    |
| Source Room Microphone               | PCB Piezotronics     | 378C20   | Microphone and Preamplifier          | 63740    | 04/18    |
| Source Room Microphone               | PCB Piezotronics     | 378C20   | Microphone and Preamplifier          | INT00653 | 01/19    |
| Source Room Microphone               | PCB Electronics      | 378C20   | Microphone and Preamplifier          | 63741    | 04/18    |
| Source Room Environmental Indicator  | Comet                | T7510    | Temperature and Humidity Transmitter | 63812    | 10/18    |
| Tapping Machine                      | Norsonic             | Nor277   | Tapping Machine                      | INT00936 | 12/18    |

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

|                               |  |
|-------------------------------|--|
| <b>VT RECEIVE ROOM VOLUME</b> | 156.28 m <sup>3</sup> (5519.06 ft <sup>3</sup> ) |
| <b>VT SOURCE ROOM VOLUME</b>  | 190 m <sup>3</sup> (6709.79 ft <sup>3</sup> )    |

**SECTION 6  
LIST OF OFFICIAL OBSERVERS**

| NAME               | COMPANY      |
|--------------------|--------------|
| Daniel R. Deickman | Intertek B&C |
| Daniel B. Mohler   | Intertek B&C |

**TEST REPORT FOR CLARKDIETRICH BUILDING SYSTEMS, LLC**

Report No.: J4777.05-113-11-R1

Date: 05/20/19

**SECTION 7****TEST PROCEDURE**

The microphones were calibrated before conducting the tests. The air temperature and relative humidity conditions were monitored and recorded during all measurements. The average temperature and humidity of both the source and received rooms are listed in Sections 10 and 11. The maximum and minimum temperatures and humidities of the receive room from the duration of the test are listed in Sections 12 and 13.

The airborne transmission loss test was conducted in accordance with the ASTM E90 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. Two sound pressure level measurements were made simultaneously in both rooms, at each of five microphone positions.

The impact sound transmission test was conducted in accordance with the ASTM E492 test method. Two background noise sound pressure level, two sound pressure level measurements with the tapping machine operating at each position specified by ASTM E492, and five sound absorption measurements were conducted at each of five microphone positions.

Detailed test procedures, data for flanking limit tests, repeatability measurements, and reference specimen tests are available upon request.

**SECTION 8****TEST CALCULATIONS**

The STC (Sound Transmission Class) and IIC (Impact Insulation Class) ratings were calculated in accordance with ASTM E413 and ASTM E989, respectively.

**TEST REPORT FOR CLARKDIETRICH BUILDING SYSTEMS, LLC**

Report No.: J4777.05-113-11-R1

Date: 05/20/19

**SECTION 9**

**TEST SPECIMEN DESCRIPTION**

| MATERIAL                        | Dimensions (mm/inch)   | Thickness (mm/inch) | MANUFACTURER AND SERIES               | QUANTITY                                       | AVERAGE WEIGHT                                     |
|---------------------------------|--|---------------------|---------------------------------------|--|--|
| Floor Underlayment              | 3022.6 by 3632.2<br>119 by 143   | 25.4 / 1            | USG Levelrock® Brand 2500             | 10.98 m <sup>2</sup><br>118.19 ft <sup>2</sup> | 49.8 kg/m <sup>2</sup><br>10.2 lb/ft <sup>2</sup>  |
|                                 | Note: Poured directly onto the subfloor underlayment, cured a minimum of 14 days. The gypsum panel had a closed cell foam perimeter isolation. No noticeable shrinkage or cracking was visible on the specimen.    |                     |                                       |  |  |
| Sound Attenuation Mat           | 3023 by 1003.3<br>119 by 39.5  | 6.4 / 0.25          | USG Levelrock® Brand SAM-N25™         | 10.98 m <sup>2</sup><br>118.19 ft <sup>2</sup> | 0.49 kg/m <sup>2</sup><br>0.1 lb/ft <sup>2</sup>   |
|                                 | Note: Loose laid with seams overlapping and taped  |                     |                                       |  |  |
| Oriented Strand Board Sheathing | 1219 by 2438<br>48 by 96   | 18.8 / 0.74         | N/A                                   | 10.98 m <sup>2</sup><br>118.19 ft <sup>2</sup> | 13.82 kg/m <sup>2</sup><br>2.83 lb/ft <sup>2</sup> |
|                                 | Note: Fastened to trusses with 76 mm (3") by 3 mm (0.12") framing nails on 203 mm (8") centers along perimeter and 305 mm (12") centers in the field.  |                     |                                       |  |  |
| Fiberglass Insulation           | 520.7 by 3023<br>20.5 by 119   | 88.9 / 3.5          | Johns Manville Unfaced R-13           | 10.98 m <sup>2</sup><br>118.19 ft <sup>2</sup> | 1.32 kg/m <sup>2</sup><br>0.27 lb/ft <sup>2</sup>  |
|                                 | Note: Installed into the cavities between the trusses, stapled flush to the subfloor.  |                     |                                       |  |  |
| Open Web Truss                  | 88.9 by 2933.7<br>3.5 by 115.5   | 406.4 / 16          | York PB Truss L/360                   | 7 trusses                                      | 16.93 kg/truss<br>37.32 lb/truss                   |
|                                 | Note: Installed on 610 mm (24") centers using JUS414 hanger brackets.  |                     |                                       |  |  |
| Resilient Sound Isolation Clip  | 76.2 by 36.5<br>3 by 1.4   | 31.8 / 1.25         | ClarkDietrich® Sound Clip             | 36 clips                                       | 0.06 kg/clip<br>0.14 lb/clip                       |
|                                 | Note: Installed in a 406 mm by 1219 mm (16" by 48") grid pattern.  |                     |                                       |  |  |
| Furring/Hat Channel             | 3657.6 by 76.2<br>144 by 3   | 22.3 / 0.88         | ClarkDietrich® 087F125-18             | 29.1 lin m<br>95.47 lin ft                     | 0.48 kg/m<br>0.32 lb/ft                            |
|                                 | Note: Installed on 406 mm (16") centers perpendicular to the trusses. The measured thickness of the metal was 0.7 mm (0.03").  |                     |                                       |  |  |
| Gypsum Panel                    | 1219 by 3023<br>48 by 119  | 15.9 / 0.63         | USG SHEETROCK® Brand FIRECODE® C Core | 10.98 m <sup>2</sup><br>118.19 ft <sup>2</sup> | 11.9 kg/m <sup>2</sup><br>2.44 lb/ft <sup>2</sup>  |
|                                 | Note: Fastened to the channels on 203 mm (8") centers with 25.4 mm (1") Type S bugle head screws. The seams of the gypsum panels were sealed with Pecora AC-20 FTR caulk and covered with pressure sensitive tape. |                     |                                       |  |  |

## TEST REPORT FOR CLARKDIETRICH BUILDING SYSTEMS, LLC

Report No.: J4777.05-113-11-R1

Date: 05/20/19

### SECTION 10

#### TEST RESULTS - AIRBORNE SOUND TRANSMISSION LOSS



|                      |   |                         |               |                        |                 |
|----------------------|---|-------------------------|---------------|------------------------|-----------------|
| <b>TEST DATE</b>     | 3/12/2019   |                         |               |                        |                 |
| <b>DATA FILE NO.</b> | J4777.05  |                         |               |                        |                 |
| <b>CLIENT</b>        | ClarkDietrich Building Systems, LLC   |                         |               |                        |                 |
| <b>DESCRIPTION</b>   | 2 mm (0.08") Shaw Expo Luxury Vinyl Tile, 25.4 mm (1") USG Levelrock® Brand 2500 Floor Underlayment, 6.4 mm (0.25") USG Levelrock® Brand SAM-N25™ Sound Attenuation Mat, 18.8 mm (0.74") Oriented Strand Board Sheathing, 88.9 mm (3.5") Johns Manville Unfaced R-13 Fiberglass Insulation, 406.4 mm (16") York PB Truss L/360 Open Web Truss, 31.75 mm (1.25") ClarkDietrich® Sound Clip Resilient Sound Isolation Clip, 22.3 mm (0.88") ClarkDietrich® 087F125-18 Furring/Hat Channel, 15.9 mm (0.63") USG SHEETROCK® Brand FIRECODE® C Core Gypsum Panel |                         |               |                        |                 |
| <b>SPECIMEN AREA</b> | 10.98 m <sup>2</sup>  | <b>Receive Temp.</b>    | 18.9°C (66°F) | <b>Source Temp.</b>    | 18.2°C (64.8°F) |
| <b>TECHNICIAN</b>    | DRD   | <b>Receive Humidity</b> | 63%           | <b>Source Humidity</b> | 63%             |

| FREQ<br>(Hz)      | BACKGROUND<br>SPL<br>(dB) | ABSORPTION<br>m <sup>2</sup>      | SOURCE<br>SPL<br>(dB) | RECEIVE<br>SPL<br>(dB) | SPECIMEN<br>TL<br>(dB)     | 95%<br>CONFIDENCE<br>LIMIT | NUMBER<br>OF<br>DEFICIENCIES |
|-------------------|---------------------------|-----------------------------------|-----------------------|------------------------|----------------------------|----------------------------|------------------------------|
| 50                | 37.3                      | 28.6                              | 100                   | 65                     | 32                         | 2.6                        | -                            |
| 63                | 37.1                      | 27.9                              | 98                    | 60                     | 35                         | 3.1                        | -                            |
| 80                | 37.3                      | 17.2                              | 106                   | 66                     | 39                         | 2.4                        | -                            |
| 100               | 29.5                      | 12.3                              | 104                   | 68                     | 36                         | 2.4                        | -                            |
| 125               | 31.8                      | 11.6                              | 102                   | 65                     | 38                         | 1.4                        | 4                            |
| 160               | 25.8                      | 9.7                               | 106                   | 63                     | 45                         | 0.8                        | 0                            |
| 200               | 21.2                      | 9.9                               | 101                   | 56                     | 47                         | 1.7                        | 1                            |
| 250               | 25.2                      | 9.8                               | 100                   | 54                     | 47                         | 0.5                        | 4                            |
| 315               | 21.8                      | 9.4                               | 103                   | 53                     | 51                         | 1.0                        | 3                            |
| 400               | 20.1                      | 8.2                               | 102                   | 50                     | 54                         | 1.0                        | 3                            |
| 500               | 20.5                      | 7.7                               | 102                   | 50                     | 54                         | 0.6                        | 4                            |
| 630               | 19.0                      | 7.5                               | 103                   | 50                     | 55                         | 0.6                        | 4                            |
| 800               | 19.2                      | 7.6                               | 102                   | 47                     | 57                         | 0.5                        | 3                            |
| 1000              | 18.5                      | 7.4                               | 101                   | 43                     | 60                         | 0.6                        | 1                            |
| 1250              | 13.7                      | 7.5                               | 102                   | 40                     | 65                         | 0.5                        | 0                            |
| 1600              | 10.6                      | 7.8                               | 102                   | 39                     | 66                         | 0.5                        | 0                            |
| 2000              | 10.1                      | 8.8                               | 102                   | 40                     | 64                         | 0.4                        | 0                            |
| 2500              | 5.8                       | 9.9                               | 100                   | 35                     | 67                         | 0.2                        | 0                            |
| 3150              | 4.5                       | 10.8                              | 101                   | 32                     | 71                         | 0.4                        | 0                            |
| 4000              | 4.8                       | 12.2                              | 102                   | 29                     | 74                         | 0.5                        | 0                            |
| 5000              | 5.5                       | 14.1                              | 102                   | 27                     | 76                         | 0.5                        | -                            |
| 6300              | 6.0                       | 17.8                              | 96                    | 16                     | 79                         | 0.7                        | -                            |
| 8000              | 6.7                       | 22.6                              | 96                    | 12                     | 82                         | 0.9                        | -                            |
| 10000             | 6.8                       | 22.6                              | 90                    | 7                      | 82                         | 0.7                        | -                            |
| <b>STC Rating</b> | <b>58</b>                 | <i>(Sound Transmission Class)</i> |                       |                        | <b>Sum of Deficiencies</b> | <b>27</b>                  |                              |

- Notes:**
- 1) Receive Room levels less than 5 dB above the Background levels are highlighted in yellow.
  - 2) Specimen TL levels listed in red are potentially limited by the laboratory flanking limit.
  - 3) Specimen TL levels listed in blue indicate the lower limit of the transmission loss.
  - 4) Specimen TL levels listed in green indicate that there has been a filler wall correction applied

## TEST REPORT FOR CLARKDIETRICH BUILDING SYSTEMS, LLC

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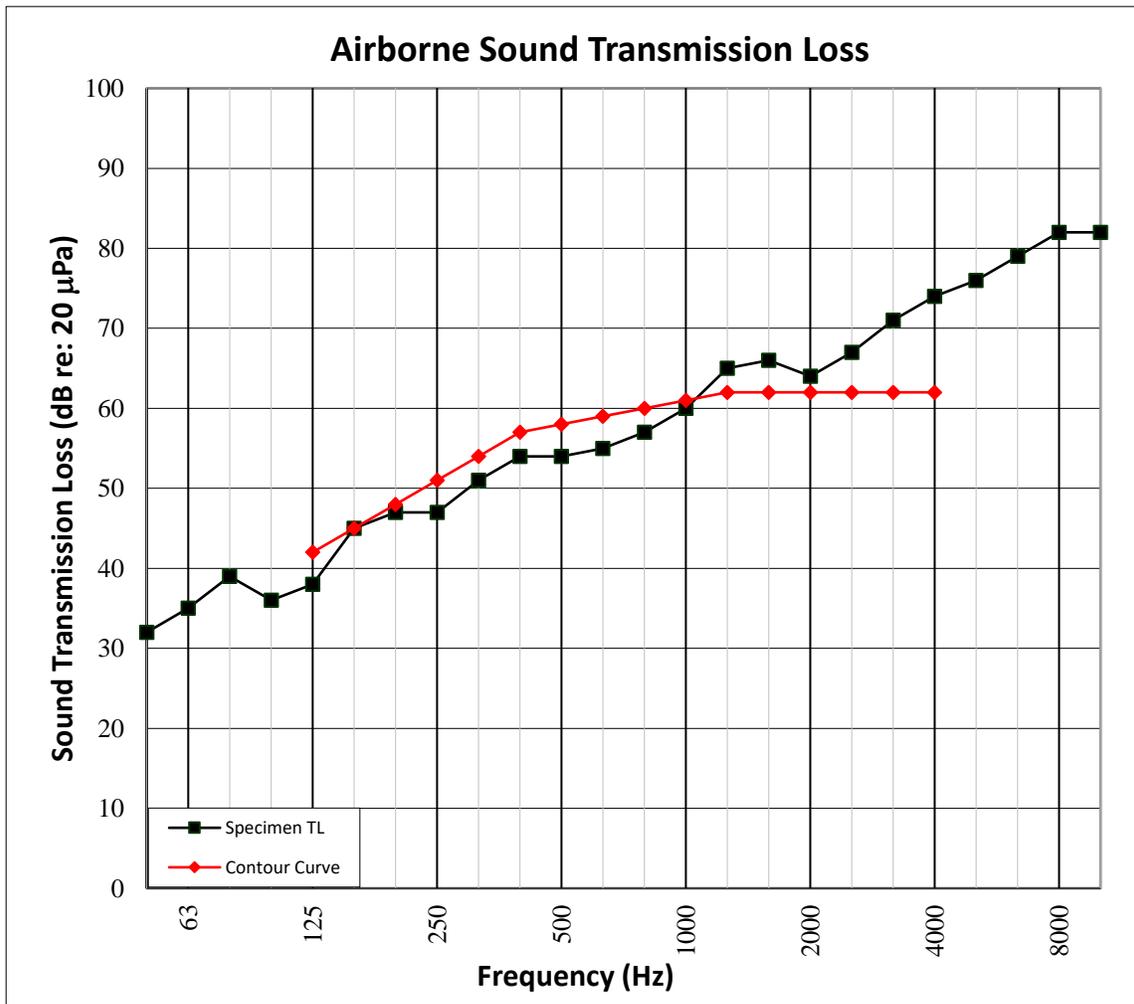
Date: 05/20/19

### SECTION 11

### TEST RESULTS - AIRBORNE SOUND TRANSMISSION LOSS GRAPH



|                      |   |                         |               |                        |                 |
|----------------------|---|-------------------------|---------------|------------------------|-----------------|
| <b>TEST DATE</b>     | 3/12/2019   |                         |               |                        |                 |
| <b>DATA FILE NO.</b> | J4777.05  |                         |               |                        |                 |
| <b>CLIENT</b>        | ClarkDietrich Building Systems, LLC   |                         |               |                        |                 |
| <b>DESCRIPTION</b>   | 2 mm (0.08") Shaw Expo Luxury Vinyl Tile, 25.4 mm (1") USG Levelrock® Brand 2500 Floor Underlayment, 6.4 mm (0.25") USG Levelrock® Brand SAM-N25™ Sound Attenuation Mat, 18.8 mm (0.74") Oriented Strand Board Sheathing, 88.9 mm (3.5") Johns Manville Unfaced R-13 Fiberglass Insulation, 406.4 mm (16") York PB Truss L/360 Open Web Truss, 31.75 mm (1.25") ClarkDietrich® Sound Clip Resilient Sound Isolation Clip, 22.3 mm (0.88") ClarkDietrich® 087F125-18 Furring/Hat Channel, 15.9 mm (0.63") USG SHEETROCK® Brand FIRECODE® C Core Gypsum Panel |                         |               |                        |                 |
| <b>SPECIMEN AREA</b> | 10.98 m <sup>2</sup>  | <b>Receive Temp.</b>    | 18.9°C (66°F) | <b>Source Temp.</b>    | 18.2°C (64.8°F) |
| <b>TECHNICIAN</b>    | DRD   | <b>Receive Humidity</b> | 63%           | <b>Source Humidity</b> | 63%             |



## TEST REPORT FOR CLARKDIETRICH BUILDING SYSTEMS, LLC

Report No.: J4777.05-113-11-R1

Date: 05/20/19

### SECTION 12

#### TEST RESULTS - IMPACT SOUND TRANSMISSION



|                      |   |                      |                 |                      |                 |
|----------------------|---|----------------------|-----------------|----------------------|-----------------|
| <b>TEST DATE</b>     | 3/12/2019   |                      |                 |                      |                 |
| <b>DATA FILE NO.</b> | J4777.05  |                      |                 |                      |                 |
| <b>CLIENT</b>        | ClarkDietrich Building Systems, LLC   |                      |                 |                      |                 |
| <b>DESCRIPTION</b>   | 2 mm (0.08") Shaw Expo Luxury Vinyl Tile, 25.4 mm (1") USG Levelrock® Brand 2500 Floor Underlayment, 6.4 mm (0.25") USG Levelrock® Brand SAM-N25™ Sound Attenuation Mat, 18.8 mm (0.74") Oriented Strand Board Sheathing, 88.9 mm (3.5") Johns Manville Unfaced R-13 Fiberglass Insulation, 406.4 mm (16") York PB Truss L/360 Open Web Truss, 31.75 mm (1.25") ClarkDietrich® Sound Clip Resilient Sound Isolation Clip, 22.3 mm (0.88") ClarkDietrich® 087F125-18 Furring/Hat Channel, 15.9 mm (0.63") USG SHEETROCK® Brand FIRECODE® C Core Gypsum Panel |                      |                 |                      |                 |
| <b>SPECIMEN AREA</b> | 10.98 m <sup>2</sup>  | <b>Maximum Temp.</b> | 18.9°C (66.1°F) | <b>Minimum Temp.</b> | 18.8°C (65.8°F) |
| <b>TECHNICIAN</b>    | DRD   | <b>Max. Humidity</b> | 64%             | <b>Min. Humidity</b> | 63%             |

| FREQ<br>(Hz)      | BACKGROUND<br>SPL<br>(dB) | ABSORPTION<br>m <sup>2</sup>     | NORMALIZED IMPACT SPL<br>(dB) | 95%<br>CONFIDENCE<br>LIMIT | NUMBER<br>OF<br>DEFICIENCIES |
|-------------------|---------------------------|----------------------------------|-------------------------------|----------------------------|------------------------------|
| 50                | 34.2                      | 31.6                             | 65                            | 1.3                        | -                            |
| 63                | 35.0                      | 28.1                             | 64                            | 3.2                        | -                            |
| 80                | 34.7                      | 16.9                             | 62                            | 0.8                        | -                            |
| 100               | 28.2                      | 10.7                             | 66                            | 0.9                        | 5                            |
| 125               | 28.0                      | 11.1                             | 67                            | 1.1                        | 6                            |
| 160               | 23.2                      | 10.4                             | 64                            | 0.6                        | 3                            |
| 200               | 20.7                      | 10.4                             | 64                            | 0.7                        | 3                            |
| 250               | 25.3                      | 10.4                             | 65                            | 0.7                        | 4                            |
| 315               | 21.1                      | 9.9                              | 62                            | 0.6                        | 1                            |
| 400               | 20.0                      | 8.1                              | 59                            | 0.5                        | 0                            |
| 500               | 20.8                      | 7.7                              | 59                            | 0.3                        | 0                            |
| 630               | 18.9                      | 7.4                              | 59                            | 0.2                        | 1                            |
| 800               | 20.4                      | 7.5                              | 58                            | 0.2                        | 1                            |
| 1000              | 18.7                      | 7.6                              | 53                            | 0.2                        | 0                            |
| 1250              | 13.3                      | 7.5                              | 48                            | 0.2                        | 0                            |
| 1600              | 9.7                       | 7.8                              | 45                            | 0.1                        | 0                            |
| 2000              | 9.2                       | 8.8                              | 46                            | 0.1                        | 0                            |
| 2500              | 5.3                       | 9.9                              | 41                            | 0.2                        | 0                            |
| 3150              | 4.3                       | 10.7                             | 33                            | 0.3                        | 0                            |
| 4000              | 4.7                       | 12.1                             | 25                            | 0.4                        | -                            |
| 5000              | 5.4                       | 14.0                             | 19                            | 0.7                        | -                            |
| 6300              | 5.9                       | 17.7                             | 13                            | 1.2                        | -                            |
| 8000              | 6.5                       | 22.5                             | 13                            | 1.2                        | -                            |
| 10000             | 6.7                       | 22.5                             | 11                            | 1.1                        | -                            |
| <b>IIC Rating</b> | <b>51</b>                 | <i>(Impact Insulation Class)</i> |                               | <b>Sum of Deficiencies</b> | <b>24</b>                    |

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

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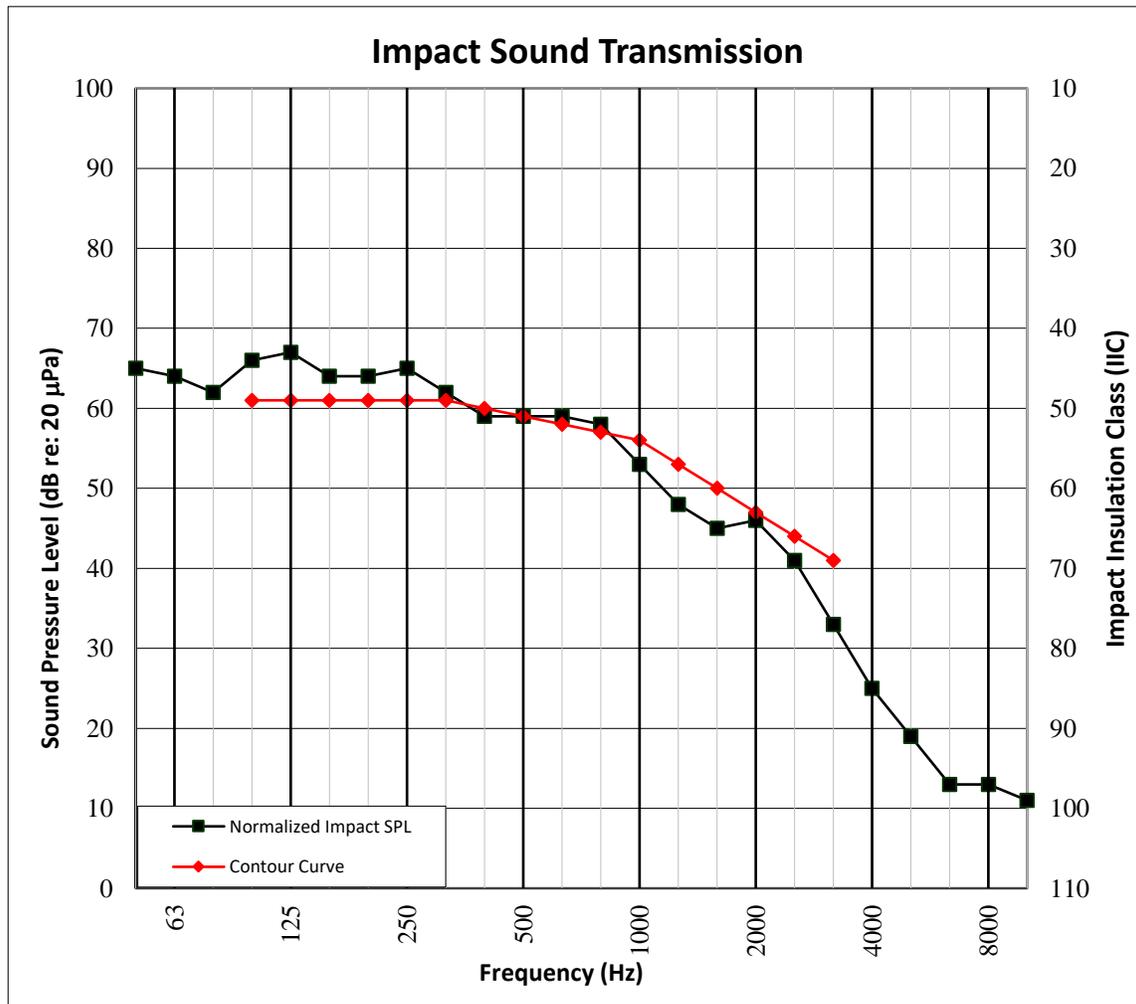
Date: 05/20/19

### SECTION 13

#### TEST RESULTS - IMPACT SOUND TRANSMISSION GRAPH



|                      |   |                      |                 |                      |                 |
|----------------------|---|----------------------|-----------------|----------------------|-----------------|
| <b>TEST DATE</b>     | 3/12/2019   |                      |                 |                      |                 |
| <b>DATA FILE NO.</b> | J4777.05  |                      |                 |                      |                 |
| <b>CLIENT</b>        | ClarkDietrich Building Systems, LLC   |                      |                 |                      |                 |
| <b>DESCRIPTION</b>   | 2 mm (0.08") Shaw Expo Luxury Vinyl Tile, 25.4 mm (1") USG Levelrock® Brand 2500 Floor Underlayment, 6.4 mm (0.25") USG Levelrock® Brand SAM-N25™ Sound Attenuation Mat, 18.8 mm (0.74") Oriented Strand Board Sheathing, 88.9 mm (3.5") Johns Manville Unfaced R-13 Fiberglass Insulation, 406.4 mm (16") York PB Truss L/360 Open Web Truss, 31.75 mm (1.25") ClarkDietrich® Sound Clip Resilient Sound Isolation Clip, 22.3 mm (0.88") ClarkDietrich® 087F125-18 Furring/Hat Channel, 15.9 mm (0.63") USG SHEETROCK® Brand FIRECODE® C Core Gypsum Panel |                      |                 |                      |                 |
| <b>SPECIMEN AREA</b> | 10.98 m <sup>2</sup>  | <b>Maximum Temp.</b> | 18.9°C (66.1°F) | <b>Minimum Temp.</b> | 18.8°C (65.8°F) |
| <b>TECHNICIAN</b>    | DRD   | <b>Max. Humidity</b> | 64%             | <b>Min. Humidity</b> | 63%             |



**TEST REPORT FOR CLARKDIETRICH BUILDING SYSTEMS, LLC**

Report No.: J4777.05-113-11-R1

Date: 05/20/19

**SECTION 14**

**PHOTOGRAPHS**



**Photo No. 1**  
**Source Room View of Test Specimen Installation**



**Photo No. 2**  
**Receive Room View of Test Specimen Installation**

**TEST REPORT FOR CLARKDIETRICH BUILDING SYSTEMS, LLC**

Report No.: J4777.05-113-11-R1

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**SECTION 15**

**REVISION LOG**

| REVISION # | DATE     | PAGES | DESCRIPTION               |
|------------|----------|-------|---------------------------|
| R0         | 04/15/19 | N/A   | Original Report Issue     |
| R1         | 05/20/19 | All   | Sound clip name corrected |