

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") - Direct Layer USG SHEETROCK® Brand FIRECODE® C Core - ClarkDietrich® Sound Clip - Two-Layers USG SHEETROCK® Brand FIRECODE® C

REPORT NUMBER

J4778.05-113-11-R1

TEST DATE

03/15/19

ISSUE DATE

REVISED DATE

04/15/19

05/20/19

RECORD RETENTION END

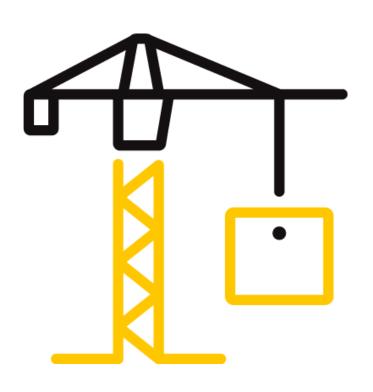
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TEST REPORT FOR CLARKDIETRICH BUILDING SYSTEMS, LLC

Report No.: J4778.05-113-11-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

DATA FILE NO.	J4778.05
SERIES/MODEL:	Expo Luxury Vinyl Tile
STC	58
IIC	50

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

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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") - Direct Layer USG SHEETROCK® Brand FIRECODE® C Core - ClarkDietrich® Sound Clip - Two-Layers 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 1279.1 kg / 2820.4 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.



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SECTION 5

EQUIPMENT

INSTRUMENT	MANUFACTURER MODEL DESCRIPTION		DESCRIPTION	ASSET #	CAL DAT	Έ
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	Comet	T7510	Temperature and Humidity	63810	10/18	
Indicator	Comet	17510	Transmitter	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.

VT RECEIVE ROOM VOLUME	156.28 m³ (5519.06 ft³)
VT SOURCE ROOM VOLUME	190 m³ (6709.79 ft³)

SECTION 6

LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Seth J. Allen	Intertek B&C
Daniel B. Mohler	Intertek B&C

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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.



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SECTION 9

TEST SPECIMEN DESCRIPTION

las by 6 Note: A sheet of 2 Sast Tack 85 spray ensitive adhesive (32") trowel. Adl (022.6 by 3632.2) (19 by 143 Note: Poured direction that a closed on the specimen. (023 by 1003.3) (19 by 39.5) Note: Loose laid w (219 by 2438) (18 by 96) Note: Fastened to (19 long perimeter a	v adhesive. The floor, which was spreachesive was allowed 25.4 / 1 ctly onto the subfidicell foam perimed 6.4 / 0.25 with seams overlap 18.8 / 0.74	N/A	ne sheeting with a me by 0.79 mm (1 specifications. 10.98 m² 118.19 ft² minimum of 14 dashrinkage or crack 10.98 m² 118.19 ft² 10.98 m² 10.98 m²	a pressure L/32" by 1/16" by 49.8 kg/m² 10.2 lb/ft² ays. The gypsum					
219.2 by 152.4 18 by 6 Note: A sheet of 2 Sast Tack 85 spray ensitive adhesive 1,32") trowel. Add 1022.6 by 3632.2 19 by 143 Note: Poured direction the specimen. 1023 by 1003.3 19 by 39.5 Note: Loose laid w 1.219 by 2438 18 by 96 Note: Fastened to 1.010 long perimeter a	2 / 0.08 mil polyethylene adhesive. The flo which was sprea hesive was allowe 25.4 / 1 ctly onto the subf d cell foam perime 6.4 / 0.25 with seams overlap 18.8 / 0.74	plastic was adhered to the super topping was adhered to the dusing a 0.79 mm by 1.59 md to cure per manufacturer's USG Levelrock® Brand 2500 loor underlayment, cured a reter isolation. No noticeable super looks by the super looks by the lo	118.19 ft² ubfloor topping with a me sheeting with a me sheeting with a me by 0.79 mm (1 specifications. 10.98 m² 118.19 ft² minimum of 14 dashrinkage or crack 10.98 m² 118.19 ft²	0.71 lb/ft² vith Sprayway a pressure l/32" by 1/16" by 49.8 kg/m² 10.2 lb/ft² ays. The gypsum king was visible 0.49 kg/m² 0.1 lb/ft²					
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ensit Tack 85 spray ensitive adhesive (./32") trowel. Adl (022.6 by 3632.2 (.19 by 143 Note: Poured directions and had a closed on the specimen. (023 by 1003.3 (.19 by 39.5 Note: Loose laid w (.219 by 2438 (.8 by 96 Note: Fastened to (.10 g perimeter a	v adhesive. The floor, which was spreachesive was allowed 25.4 / 1 ctly onto the subfidicell foam perimed 6.4 / 0.25 with seams overlap 18.8 / 0.74	or topping was adhered to the dusing a 0.79 mm by 1.59 md to cure per manufacturer's USG Levelrock® Brand 2500 loor underlayment, cured a reter isolation. No noticeable substituting Levelrock® Brand SAMN25™ oping and taped	ne sheeting with a me by 0.79 mm (1 specifications. 10.98 m² 118.19 ft² minimum of 14 dashrinkage or crack 10.98 m² 118.19 ft² 10.98 m² 10.98 m²	a pressure 1/32" by 1/16" by 49.8 kg/m² 10.2 lb/ft² ays. The gypsum king was visible 0.49 kg/m² 0.1 lb/ft²					
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Jobe 143 Jote: Poured direction the specimen. 1923 by 1003.3 John 19 by 39.5 Jote: Loose laid w. 219 by 2438 John 19 by 96 Jote: Fastened to along perimeter a	ctly onto the subfidicell foam perime 6.4 / 0.25 with seams overlap 18.8 / 0.74	loor underlayment, cured a reter isolation. No noticeable s USG Levelrock® Brand SAM- N25™ pping and taped N/A	ninimum of 14 dashrinkage or crack 10.98 m² 118.19 ft²	10.2 lb/ft² ays. The gypsum king was visible 0.49 kg/m² 0.1 lb/ft²					
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on the specimen. 1023 by 1003.3 19 by 39.5 Note: Loose laid w 1219 by 2438 18 by 96 Note: Fastened to Ilong perimeter a	6.4 / 0.25 with seams overlap	USG Levelrock® Brand SAM- N25™ oping and taped N/A	10.98 m ² 118.19 ft ²	0.49 kg/m ² 0.1 lb/ft ²					
1023 by 1003.3 19 by 39.5 Note: Loose laid w 1219 by 2438 Note: Fastened to Note: Fastened to	vith seams overlap	N25™ pping and taped N/A	118.19 ft ²	0.1 lb/ft²					
1023 by 1003.3 19 by 39.5 Note: Loose laid w 1219 by 2438 Note: Fastened to Note: Fastened to	vith seams overlap	N25™ pping and taped N/A	118.19 ft ²	0.1 lb/ft²					
.19 by 39.5 Note: Loose laid w .219 by 2438 .8 by 96 Note: Fastened to llong perimeter a	vith seams overlap	pping and taped	10.98 m²	•					
Note: Loose laid w 219 by 2438 8 by 96 Note: Fastened to Nong perimeter a	18.8 / 0.74	N/A		12 82 kg/m²					
.219 by 2438 8 by 96 Note: Fastened to llong perimeter a	18.8 / 0.74	N/A		13 82 kg/m²					
8 by 96 Note: Fastened to llong perimeter a	-	l '		117.07 V5/111					
Note: Fastened to llong perimeter a	trusses with 76 n		118.19 ft ²	2.83 lb/ft ²					
long perimeter a		nm (3") by 3 mm (0.12") fram							
	nd 305 mm (12")	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.							
20.7 by 3023		Johns Manville Unfaced R-	10.98 m²	1.32 kg/m ²					
-	88.9 / 3.5	13	118.19 ft ²	0.27 lb/ft ²					
	The cavities bet	I	T	16.93 kg/truss					
	406.4 / 16	York PB Truss L/360	7 trusses	37.32 lb/truss					
	010 111111 (24) Cei			14.01/2					
•	15.9 / 0.63			11.9 kg/m²					
	ractly to the truce			2.44 lb/ft²					
head screws. The seams of the gypsum panels were sealed with Pecora AC-20 FTR caulk and									
	sure sensitive tap	e. I	1	0.06 kg/clip					
•	31.8 / 1.25	ClarkDietrich® Sound Clip	24 clips	0.14 lb/clip					
	. 610 mm by 1310	mm (24" by 48") grid nottor		0.14 lb/clip					
	a 610 mm by 121:	Firm (24 by 48) grid patter		To 40 L /					
	22.3 / 0.88	ClarkDietrich® 087F125-18		0.48 kg/m					
	610 mm (24") aas	ators normandiaular to the tru		0.32 lb/ft					
		nters perpendicular to the tri	usses. The measu	rea thickness of					
	mm (0.03).	LISC SHEETBOOK® Brand	110 00 m²	11.9 kg/m²					
-	15.9 / 0.63			2.44 lb/ft ²					
	the channels on 3			,					
				_					
	•	uncis were scared with recor	4 //C 20 / /// Cdd/	k and covered					
	sitive tape.	USG SHEETROCK® Brand	10 98 m²	11.9 kg/m²					
•	15.9 / 0.63			2.44 lb/ft ²					
	the channels on 2								
				-					
	o.5 by 119 lote: Installed int 8.9 by 2933.7 .5 by 115.5 lote: Installed on 219 by 3023 8 by 119 lote: Fastened di lead screws. The lovered with pres 6.2 by 36.5 lote: Installed in 657.6 by 76.2 44 by 3 lote: Installed on le metal was 0.7 219 by 3023 8 by 119 lote: Fastened to locrews. The seam lith pressure sen 219 by 3023 8 by 119 lote: Fastened to locrews. The seam lote: Fastened to locrews. The seam lote: Fastened to locrews. The seam	10.5 by 119 10.5 by 119 10.5 by 119 10.5 by 115.5 10.6 circles 10.6 c	ote: Installed into the cavities between the trusses, stapled flust 8.9 by 2933.7 .5 by 115.5 ote: Installed on 610 mm (24") centers using JUS414 hanger by 219 by 3023 8 by 119 ote: Fastened directly to the trusses on 203 mm (8") centers we ad screws. The seams of the gypsum panels were sealed with overed with pressure sensitive tape. 6.2 by 36.5 by 1.4 ote: Installed in a 610 mm by 1219 mm (24" by 48") grid patter 657.6 by 76.2 44 by 3 ote: Installed on 610 mm (24") centers perpendicular to the truster memetal was 0.7 mm (0.03"). 219 by 3023 8 by 119 ote: Fastened to the channels on 305 mm (12") centers with 25 crews. The seams of the gypsum panels were sealed with Pecondith pressure sensitive tape. 31.8 / 1.25 ClarkDietrich® Sound Clip by 48") grid patter for the metal was 0.7 mm (0.03"). 31.8 / 0.63 ClarkDietrich® 087F125-18 ClarkDietrich® 087F125-18 ClarkDietrich® 087F125-18 ClarkDietrich® 087F125-18 ClarkDietrich® 087F125-18 ClarkDietrich® 087F125-18 ClarkDietrich® 087F125-18 ClarkDietrich® 087F125-18 ClarkDietrich® 087F125-18 ClarkDietrich® 087F125-18 ClarkDietrich® 087F125-18 ClarkDietrich® 087F125-18 ClarkDietrich® 087F125-18 ClarkDietrich® 087F125-18 Cla	13 118.19 ft² 1406.4 / 16 York PB Truss L/360 7 trusses 15 by 115.5 406.4 / 16 York PB Truss L/360 7 trusses 15 by 115.5 406.4 / 16 York PB Truss L/360 7 trusses 15 by 115.5 406.4 / 16 York PB Truss L/360 7 trusses 15 by 115.5 406.4 / 16 York PB Truss L/360 7 trusses 15 by 115.5 406.4 / 16 York PB Truss L/360 7 trusses 15 by 115.5 406.5 FIRECODE® C Core 118.19 ft² 16 by 119 15 FIRECODE® C Core 118.19 ft² 17 bovered with pressure sensitive tape. 18 by 119 16 FIRECODE® C Core 118.19 ft² 18 by 125 ClarkDietrich® Sound Clip 24 clips 18 by 1.4 ClarkDietrich® Sound Clip 24 clips 19 by 1.4 ClarkDietrich® 087F125-18 21.95 lin m 72 lin ft 10 certers with 40 sound Clip 10 process. The measure metal was 0.7 mm (0.03"). 19 by 3023 FIRECODE® C Core 118.19 ft² 19 by 3023 FIRECODE® C Core 118.19 ft² 10 cerews. The seams of the gypsum panels were sealed with Pecora AC-20 FTR caule with pressure sensitive tape. 10 cerews. The seams of the gypsum panels were sealed with Pecora AC-20 FTR caule with pressure sensitive tape. 10 cerews. The seams of the gypsum panels were sealed with Pecora AC-20 FTR caule with pressure sensitive tape. 11 sign 2 certers with 41.3 mm (1-5/8") Type crews. The seams of the gypsum panels were sealed with Pecora AC-20 FTR caule with pressure sensitive tape.					



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TEST REPORT FOR CLARKDIETRICH BUILDING SYSTEMS, LLC

Report No.: J4778.05-113-11-R1

Date: 05/20/19

SECTION 10

TEST RESULTS - AIRBORNE SOUND TRANSMISSION LOSS

TEST DATE	3/15/2019					
DATA FILE NO.	J4778.05	4778.05				
CLIENT	ClarkDietrich Bu	arkDietrich Building Systems, LLC				
DESCRIPTION	Brand SAM-N25™ Sound A 13 Fiberglass Insulation, 40 Core Gypsum Panel, 31.75 18 Furring/Hat Channel, 15	Testing Laboratory 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® rand SAM-N25™ Sound Attenuation Mat, 18.8 mm (0.74") Oriented Strand Board Sheathing, 88.9 mm (3.5") Johns Manville Unfaced R- 3 Fiberglass Insulation, 406.4 mm (16") York PB Truss L/360 Open Web Truss, 15.9 mm (0.63") USG SHEETROCK® Brand FIRECODE® C ore Gypsum Panel, 31.75 mm (1.25") ClarkDietrich® Sound Clip Resilient Sound Isolation Clip, 22.3 mm (0.88") ClarkDietrich® 087F125- 8 Furring/Hat Channel, 15.9 mm (0.63") USG SHEETROCK® Brand FIRECODE® C Core Gypsum Panel, 15.9 mm (0.63") USG SHEETROCK® rand FIRECODE® C Core Gypsum Panel				
SPECIMEN AREA	10.98 m ²	Receive Temp.	18.4°C (65.1°F)	Source Temp.	20.6°C (69.1°F)	
TECHNICIAN	SJA	Receive Humidity	53%	Source Humidity	53%	

FREQ	BACKGROUND	ABSORPTION	SOURCE	RECEIVE	SPECIMEN	95%	NUMBER
FREQ	SPL	ABSURPTION	SPL	SPL	TL	CONFIDENCE	OF
(Hz)	(dB)	m²	(dB)	(dB)	(dB)	LIMIT	DEFICIENCIES
50	42.1	29.6	99	63	33	3.4	-
63	36.7	31.6	99	59	37	4.1	-
80	35.7	17.8	107	69	38	2.7	-
100	30.6	12.5	106	69	38	2.3	-
125	30.0	11.1	103	66	38	1.7	4
160	30.6	10.1	105	66	40	1.7	5
200	26.4	9.7	101	59	44	1.3	4
250	27.8	10.5	99	55	45	0.8	6
315	27.4	9.7	102	54	50	0.8	4
400	20.3	8.3	102	50	53	0.4	4
500	20.5	7.9	102	48	56	0.6	2
630	24.3	7.7	103	44	61	0.6	0
800	23.5	7.8	102	42	63	0.4	0
1000	21.3	7.6	102	40	65	0.5	0
1250	18.4	7.9	102	37	68	0.5	0
1600	19.4	7.9	102	36	69	0.3	0
2000	17.0	9.1	102	35	69	0.4	0
2500	14.2	9.7	100	32	69	0.4	0
3150	11.0	10.4	101	29	74	0.5	0
4000	9.6	11.8	102	28	75	0.4	0
5000	7.6	13.6	102	25	77	0.6	-
6300	6.7	16.7	96	15	80	0.8	-
8000	6.9	21.7	95	11	82	0.9	-
10000	7.0	21.7	90	6	82	0.7	-
STC Ratin	g 58	(Sound Transmi	ssion Class)	_	Sum o	f Deficiencies	29

Notes:

- 1) Receive Room levels less than 5 dB above the Background levels are highlighted in yellow.
- 2) Specimen TL levels listed in $\ensuremath{\textit{red}}$ are potentially limited by the laboratory flanking limit.
- 3) Specimen TL levels listed in <u>blue</u> indicate the lower limit of the transmission loss.
- 4) Specimen TL levels listed in $\ green \ \ indicate that there has been a filler wall correction applied$



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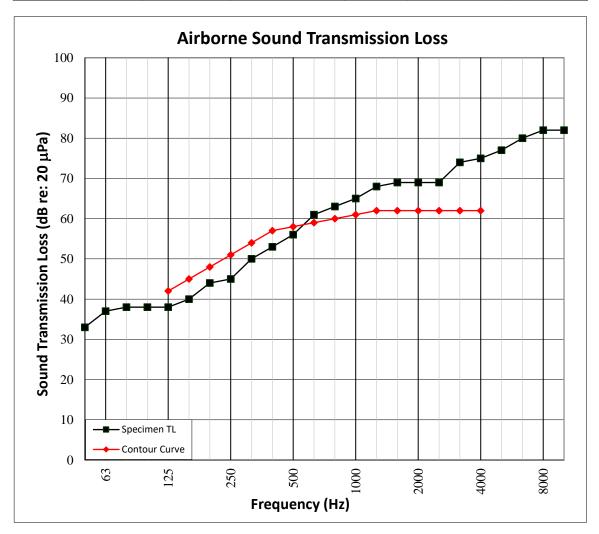
Report No.: J4778.05-113-11-R1

Date: 05/20/19

SECTION 11

TEST RESULTS - AIRBORNE SOUND TRANSMISSION LOSS GRAPH

TEST DATE DATA FILE NO. CLIENT DESCRIPTION	2 mm (0.08") Shaw Expo Lu Brand SAM-N25™ Sound A' 13 Fiberglass Insulation, 40 Core Gypsum Panel, 31.75	uilding Systems, LLC LIXLY Vinyl Tile, 25.4 mm (1") USG L ttenuation Mat, 18.8 mm (0.74") O 16.4 mm (16") York PB Truss L/360 C mm (1.25") ClarkDietrich® Sound C 2.9 mm (0.63") USG SHEETROCK® Br typsum Panel	riented Strand Boar Open Web Truss, 15 lip Resilient Sound I	d Sheathing, 88.9 mm (3.5") Jol .9 mm (0.63") USG SHEETROCK solation Clip, 22.3 mm (0.88") C	nns Manville Unfaced R- Brand FIRECODE® C larkDietrich® 087F125-
SPECIMEN AREA	10.98 m ²	Receive Temp.	18.4°C (65.1°F)	Source Temp.	20.6°C (69.1°F)
TECHNICIAN	SJA	Receive Humidity	53%	Source Humidity	53%





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SECTION 12

TEST RESULTS - IMPACT SOUND TRANSMISSION

TEST DATE DATA FILE NO. CLIENT DESCRIPTION	2 mm (0.08") Shaw Expo Li Brand SAM-N25™ Sound A	•				
	Core Gypsum Panel, 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, 15.9 mm (0.63") USG SHEETROCK® Brand FIRECODE® C Core Gypsum Panel, 15.9 mm (0.63") USG SHEETROCK® Brand FIRECODE® C Core Gypsum Panel					
SPECIMEN AREA	10.98 m²	Maximum Temp.	28.2°C (82.7°F)	Minimum Temp.	13.1°C (55.6°F)	
TECHNICIAN	SJA	Max. Humidity	72%	Min. Humidity	21%	

FREQ	BACKGROUND SPL	ABSORPTION	NORMALIZED IMPACT SPL	95% CONFIDENCE	NUMBER OF
(Hz)	(dB)	m²	(dB)	LIMIT	DEFICIENCIES
50	40.6	30.6	64	0.9	-
63	36.9	27.1	63	2.3	-
80	37.9	17.8	72	3.3	-
100	33.9	13.0	68	1.5	6
125	29.5	11.1	69	1.2	7
160	28.2	9.7	67	0.8	5
200	25.6	10.4	69	0.7	7
250	21.6	10.8	68	0.6	6
315	25.3	9.6	62	0.3	0
400	20.3	8.6	60	0.3	0
500	20.5	8.0	58	0.3	0
630	21.9	7.8	57	0.1	0
800	24.3	7.8	55	0.3	0
1000	21.4	7.6	48	0.2	0
1250	20.3	7.8	42	0.2	0
1600	24.3	7.9	41	0.2	0
2000	14.6	9.1	41	0.2	0
2500	12.5	9.7	32	0.3	0
3150	9.4	10.5	23	0.4	0
4000	7.9	11.7	15	0.5	-
5000	6.3	13.7	11	0.5	-
6300	6.4	16.8	7	0.4	-
8000	6.7	21.7	8	0.5	-
10000	6.8	21.7	8	0.5	-
IIC Rating	5 0	(Impact Insulati	on Class)	Sum of Deficiencies	31

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



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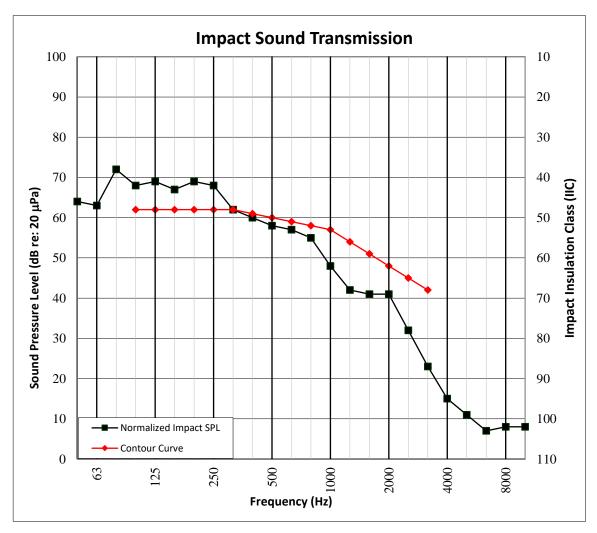
Report No.: J4778.05-113-11-R1

Date: 05/20/19

SECTION 13

TEST RESULTS - IMPACT SOUND TRANSMISSION GRAPH

	2 mm (0.08") Shaw Expo Lu Brand SAM-N25™ Sound A 13 Fiberglass Insulation, 4C Core Gypsum Panel, 31.75	uilding Systems, LLC uxury Vinyl Tile, 25.4 mm (1") USG L ttenuation Mat, 18.8 mm (0.74") O 16.4 mm (16") York PB Truss L/360 C mm (1.25") ClarkDietrich® Sound C 5.9 mm (0.63") USG SHEETROCK® Br typsum Panel	Priented Strand Boa Open Web Truss, 15 lip Resilient Sound I	rd Sheathing, 88.9 mm (3.5") Jol .9 mm (0.63") USG SHEETROCK solation Clip, 22.3 mm (0.88") C	hns Manville Unfaced R- Brand FIRECODE® C larkDietrich® 087F125-
SPECIMEN AREA TECHNICIAN	10.98 m² SJA	Maximum Temp. Max. Humidity	28.2°C (82.7°F)	Minimum Temp. Min. Humidity	13.1°C (55.6°F)





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SECTION 14

PHOTOGRAPHS



Photo No. 1 Source Room View of Test Specimen Installation



Photo No. 2
Receive Room View of Test Specimen Installation



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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