

ACOUSTICS REFERENCE MANUAL

MASS TIMBER CONSTRUCTION



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Acoustic Design for Mass Timber Construction

Introduction

The demand for mass timber construction has increased significantly in recent years due to its numerous benefits, including sustainability, strength, faster construction times, cost savings, and a natural wood aesthetic. However, a major drawback of mass timber construction is its poor acoustic performance.



Sound Ratings for Mass Timbers

This table illustrates that the baseline STC and IIC ratings for **cross-laminated timber (CLT)**, **glue-laminated timber (GLT)**, **dowel-laminated timber (DLT)**, **nail-laminated timber (NLT)**, and **mass plywood panels (MPP)** are far below the building code minimums.

CLT Thickness	STC	IIC
3 ply	38	22
5 ply	40	28
7 ply	41	28
9 ply	44	30

GLT Thickness	STC	IIC
3½"	38	22

DLT Thickness	STC	IIC
6"	38	33

NLT Thickness	STC	IIC
6" + ½" plywood	34	32

MPP Thickness	STC	IIC
5"	37	26

CONCRETE SLAB SURFACE

3 ply 105mm CLT PRODUCT COMPARISON

3” Concrete slab over Sonus curve

REGUPOL sonus curve is a high-performance acoustic dimpled rubber floor underlayment designed to reduce impact noise from footfall noise transmission and impact sound in Mass Timber Frame Construction. Made in the USA from recycled cars & truck tires are green circle certified for recycled content and qualify for up to 8 LEED points.



Detail	Assembly	Acoustic Rating	
	Concrete slab 3” sonus curve 17, (17 mm) CLT – 3 ply 105mm	IIC 48 LIIC 59 HIIC 49	STC 55
	Concrete slab 3” sonus curve 25, (25 mm) CLT – 3 ply 105mm	IIC 50 LIIC 61 HIIC 50	STC 55
	Concrete slab 3” sonus curve 50, (50 mm) CLT – 3 ply 105mm	IIC 51 LIIC 54 HIIC 51	STC 59

TEST REPORT

ACOUSTICAL PERFORMANCE

Test Number	S5237.05			
Test Date	5/7/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90	ASTM E492	ASTM E3207	ASTM E3222
Assembly	Concrete, 3" (76 mm) REGUPOL sonus curve 17, 21/32" (17 mm) 3-Ply CLT, 4-1/8" (105 mm)			
Predicted Ratings	STC 55	IIC 48	LIIC 59	HIIC 49
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

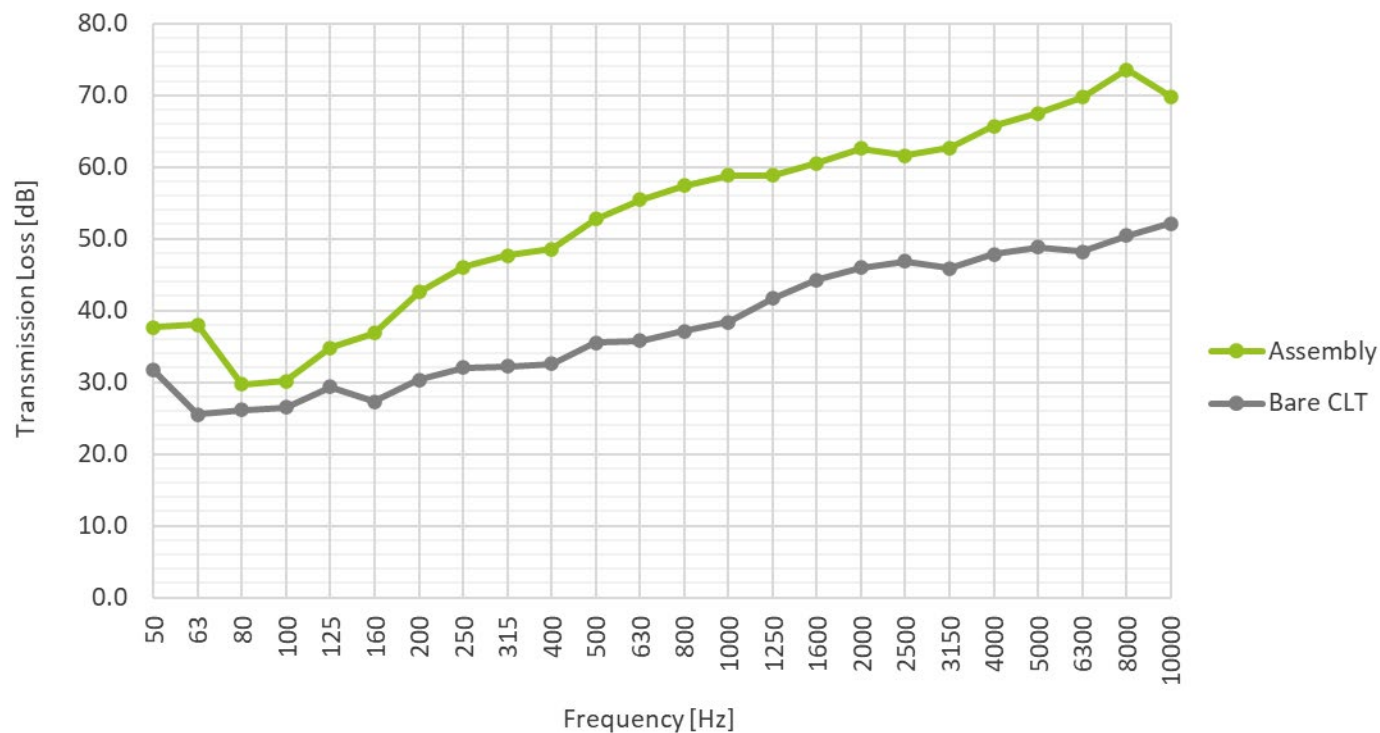
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TEST REPORT

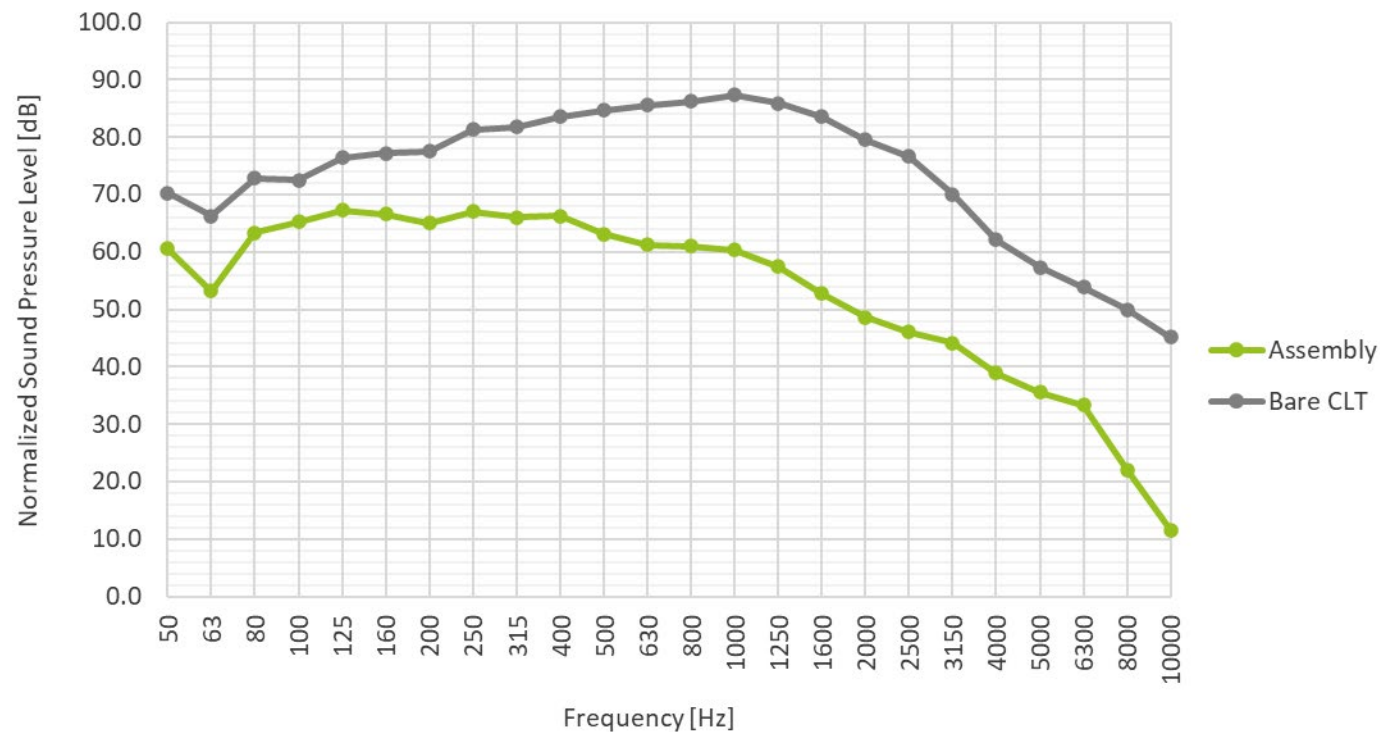
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	S5237.05			
Test Date	5/7/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3207, ASTM E3222			
Assembly	3-Ply CLT, REGUPOL sonus curve 17 , 3" Concrete			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	37.7	-	60.6	-
63	38.0	-	53.2	-
80	29.7	-	63.3	-
100	30.2	-	65.3	1
125	34.8	4	67.3	3
160	36.9	5	66.6	3
200	42.6	2	65.0	1
250	46.1	2	67.0	3
315	47.7	3	66.0	2
400	48.6	5	66.3	3
500	52.8	2	63.1	1
630	55.4	1	61.2	0
800	57.4	0	61.0	1
1000	58.8	0	60.3	1
1250	58.8	0	57.4	1
1600	60.5	0	52.8	0
2000	62.6	0	48.6	0
2500	61.6	0	46.0	0
3150	62.7	0	44.2	0
4000	65.7	0	38.9	-
5000	67.5	-	35.5	-
6300	69.7	-	33.3	-
8000	73.6	-	22.1	-
10000	69.8	-	11.6	-
Ratings	STC 55	24	IIC 48	20

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	S5237.00			
Test Date	5/4/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3207, ASTM E3222			
Assembly	3-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	31.7	-	70.3	-
63	25.5	-	66.3	-
80	26.1	-	72.8	-
100	26.5	-	72.5	0
125	29.4	0	76.4	0
160	27.3	0	77.2	0
200	30.3	0	77.5	0
250	32.0	0	81.3	0
315	32.2	3	81.8	0
400	32.6	5	83.6	0
500	35.5	4	84.7	0
630	35.8	4	85.6	0
800	37.1	4	86.2	1
1000	38.4	4	87.4	3
1250	41.7	1	85.9	5
1600	44.3	0	83.5	5
2000	46.0	0	79.5	5
2500	46.9	0	76.6	5
3150	45.9	0	70.0	1
4000	47.8	0	62.1	-
5000	48.8	-	57.3	-
6300	48.2	-	53.9	-
8000	50.4	-	49.9	-
10000	52.1	-	45.1	-
Ratings	STC 39	25	IIC 23	25

TEST REPORT

ACOUSTICAL PERFORMANCE

Test Number	S5237.01			
Test Date	5/7/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90	ASTM E492	ASTM E3207	ASTM E3222
Assembly	Concrete, 3" (76 mm) REGUPOL sonus curve, 1" (25 mm) 3-Ply CLT, 4-1/8" (105 mm)			
Predicted Ratings	STC 55	IIC 50	LIIC 61	HIIC 50

Detail



Please contact us to request a copy of the official test report from Intertek.

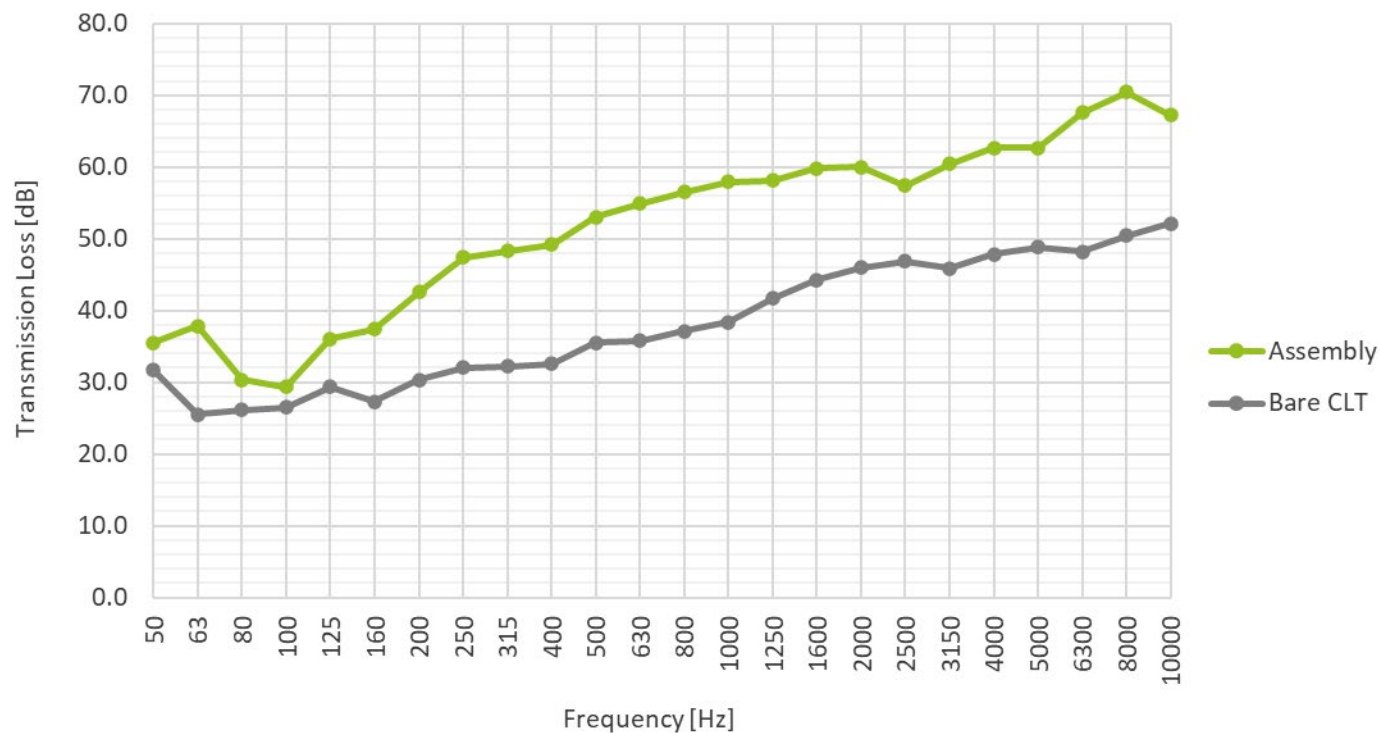
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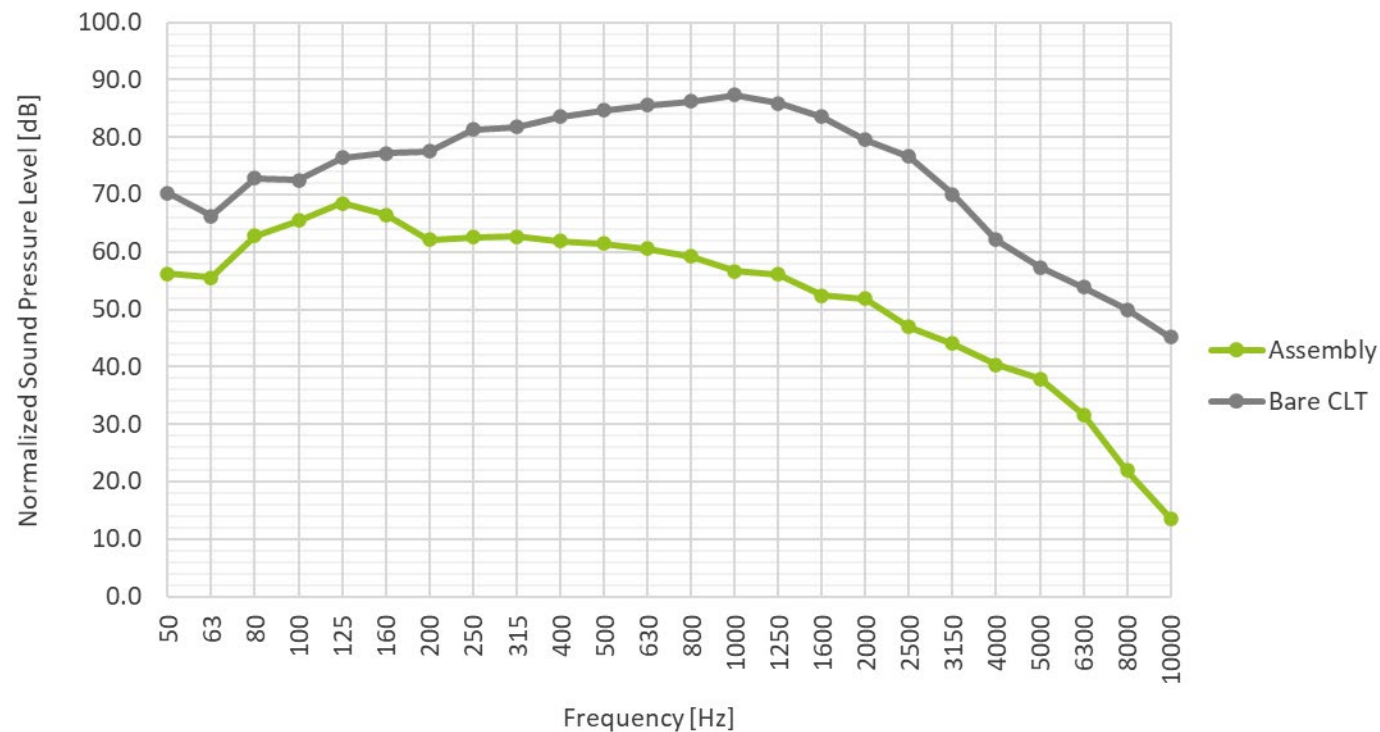
TEST REPORT

ACOUSTICAL PERFORMANCE

STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	S5237.01			
Test Date	5/7/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3207, ASTM E3222			
Assembly	3-Ply CLT, REGUPOL sonus curve 25 , 3" Concrete			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	35.5	-	56.2	-
63	37.8	-	55.5	-
80	30.3	-	62.8	-
100	29.4	-	65.5	3
125	36.1	3	68.5	6
160	37.4	5	66.5	4
200	42.6	2	62.1	0
250	47.4	1	62.6	1
315	48.3	3	62.7	1
400	49.2	5	61.9	1
500	53.0	2	61.4	1
630	54.9	1	60.6	2
800	56.5	0	59.2	1
1000	57.9	0	56.7	0
1250	58.1	1	56.1	2
1600	59.8	0	52.4	1
2000	60.0	0	51.9	4
2500	57.4	2	46.9	2
3150	60.4	0	44.0	2
4000	62.7	0	40.3	-
5000	62.7	-	37.9	-
6300	67.6	-	31.6	-
8000	70.4	-	21.9	-
10000	67.2	-	13.6	-
Ratings	STC 55	25	IIC 50	31

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	S5237.00			
Test Date	5/4/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3207, ASTM E3222			
Assembly	3-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	31.7	-	70.3	-
63	25.5	-	66.3	-
80	26.1	-	72.8	-
100	26.5	-	72.5	0
125	29.4	0	76.4	0
160	27.3	0	77.2	0
200	30.3	0	77.5	0
250	32.0	0	81.3	0
315	32.2	3	81.8	0
400	32.6	5	83.6	0
500	35.5	4	84.7	0
630	35.8	4	85.6	0
800	37.1	4	86.2	1
1000	38.4	4	87.4	3
1250	41.7	1	85.9	5
1600	44.3	0	83.5	5
2000	46.0	0	79.5	5
2500	46.9	0	76.6	5
3150	45.9	0	70.0	1
4000	47.8	0	62.1	-
5000	48.8	-	57.3	-
6300	48.2	-	53.9	-
8000	50.4	-	49.9	-
10000	52.1	-	45.1	-
Ratings	STC 39	25	IIC 23	25

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	S5237.09			
Test Date	5/7/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90	ASTM E492	ASTM E3207	ASTM E3222
Assembly	Concrete, 3" (76 mm) REGUPOL sonus curve 50, 2" (50 mm) 3-Ply CLT, 4-1/8" (105 mm)			
Predicted Ratings	STC 59	IIC 51	LIIC 54	HIIC 51



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Disclaimer

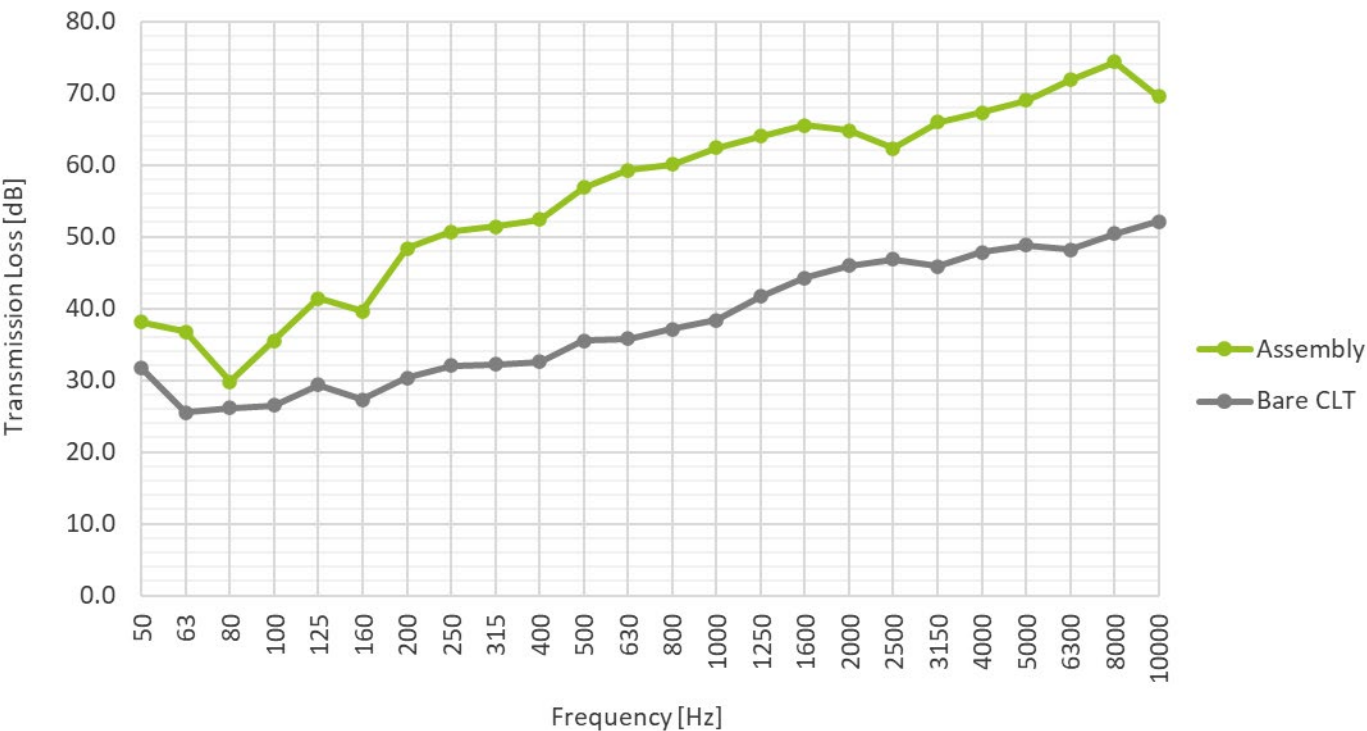
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TEST REPORT

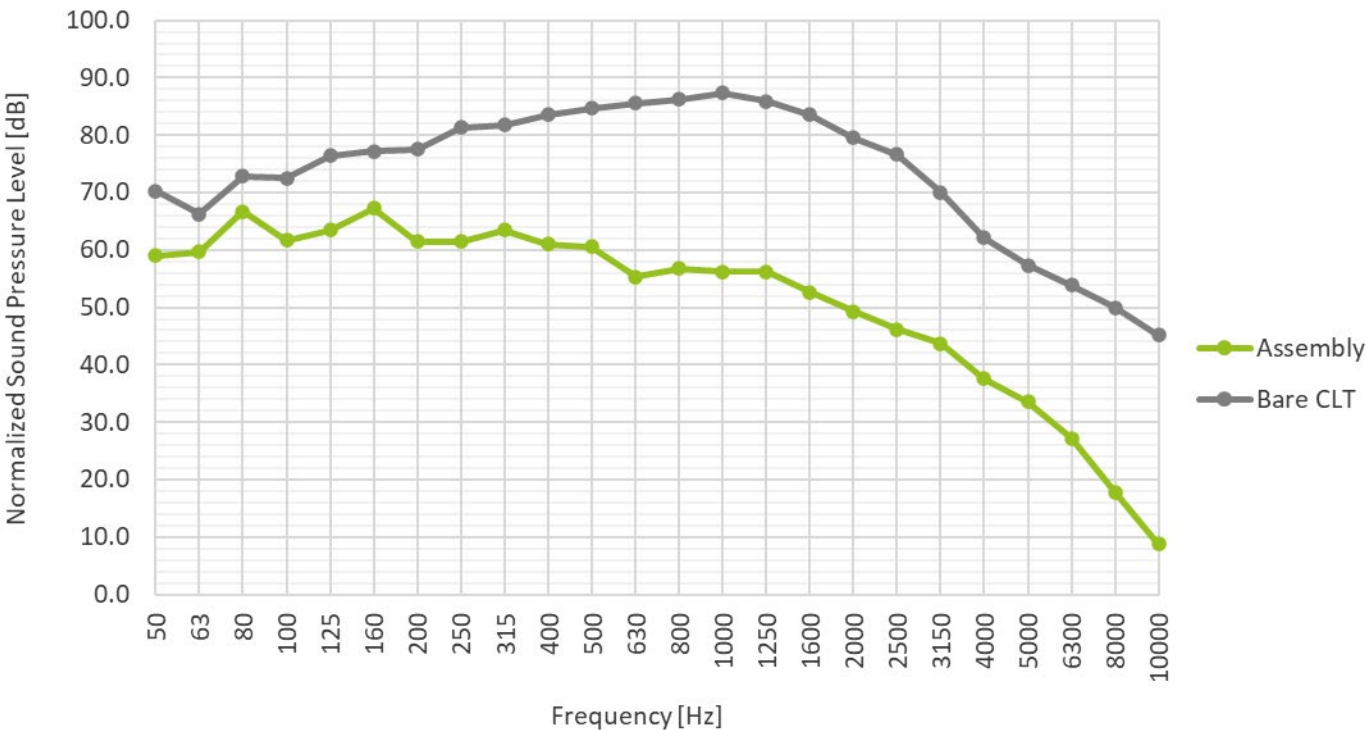
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	S5237.09			
Test Date	5/7/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3207, ASTM E3222			
Assembly	3-Ply CLT, REGUPOL sonus curve 50 , 3" Concrete			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	38.1	-	59.0	-
63	36.8	-	59.7	-
80	29.8	-	66.7	-
100	35.5	-	61.7	1
125	41.4	2	63.5	2
160	39.6	6	67.3	6
200	48.4	1	61.4	0
250	50.7	1	61.5	0
315	51.4	4	63.5	2
400	52.4	6	61.0	1
500	56.9	2	60.6	2
630	59.3	1	55.3	0
800	60.1	1	56.8	0
1000	62.4	0	56.2	0
1250	64.0	0	56.2	3
1600	65.5	0	52.6	3
2000	64.8	0	49.3	2
2500	62.3	1	46.2	2
3150	66.0	0	43.7	3
4000	67.3	0	37.6	-
5000	69.0	-	33.6	-
6300	71.9	-	27.2	-
8000	74.4	-	17.8	-
10000	69.5	-	8.8	-
Ratings	STC 59	25	IIC 51	27

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	S5237.00			
Test Date	5/4/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3207, ASTM E3222			
Assembly	3-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	31.7	-	70.3	-
63	25.5	-	66.3	-
80	26.1	-	72.8	-
100	26.5	-	72.5	0
125	29.4	0	76.4	0
160	27.3	0	77.2	0
200	30.3	0	77.5	0
250	32.0	0	81.3	0
315	32.2	3	81.8	0
400	32.6	5	83.6	0
500	35.5	4	84.7	0
630	35.8	4	85.6	0
800	37.1	4	86.2	1
1000	38.4	4	87.4	3
1250	41.7	1	85.9	5
1600	44.3	0	83.5	5
2000	46.0	0	79.5	5
2500	46.9	0	76.6	5
3150	45.9	0	70.0	1
4000	47.8	0	62.1	-
5000	48.8	-	57.3	-
6300	48.2	-	53.9	-
8000	50.4	-	49.9	-
10000	52.1	-	45.1	-
Ratings	STC 39	25	IIC 23	25

CONCRETE SLAB SURFACE

5 ply 140mm CLT PRODUCT COMPARISON

3” Concrete slab over Sonus curve



REGUPOL sonus curve is a high-performance acoustic dimpled rubber floor underlayment designed to reduce impact noise from footfall noise transmission and impact sound in Mass Timber Frame Construction. Made in the USA from recycled cars & truck tires are green circle certified for recycled content and qualify for up to 8 LEED points.



Detail	Assembly	Acoustic Rating	
	Concrete slab 3” sonus curve 10, (10 mm) CLT – 5 ply 140mm	IIC 49 HIIC 50 LIIC 65	STC 53
	Concrete slab 3” sonus curve 17, (17 mm) CLT – 5 ply 140mm	IIC 50 HIIC 51 LIIC 64	STC 54
	Concrete slab 3” sonus curve 25, (25 mm) CLT – 5 ply 140mm	IIC 52 HIIC 52 LIIC 61	STC 54
	Concrete slab 3” sonus curve 50, (50 mm) CLT – 5 ply 140mm	IIC 54 HIIC 54 LIIC 65	STC 57

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4267.10			
Test Date	5/28/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Concrete Topping, 3" sonus curve 10, 10 mm Nordic 5-Ply CLT, 140 mm			
Ratings	STC 53	IIC 49	HIIC 50	LIIC 65
Detail				

Please contact us to request a copy of the official test report from Intertek.

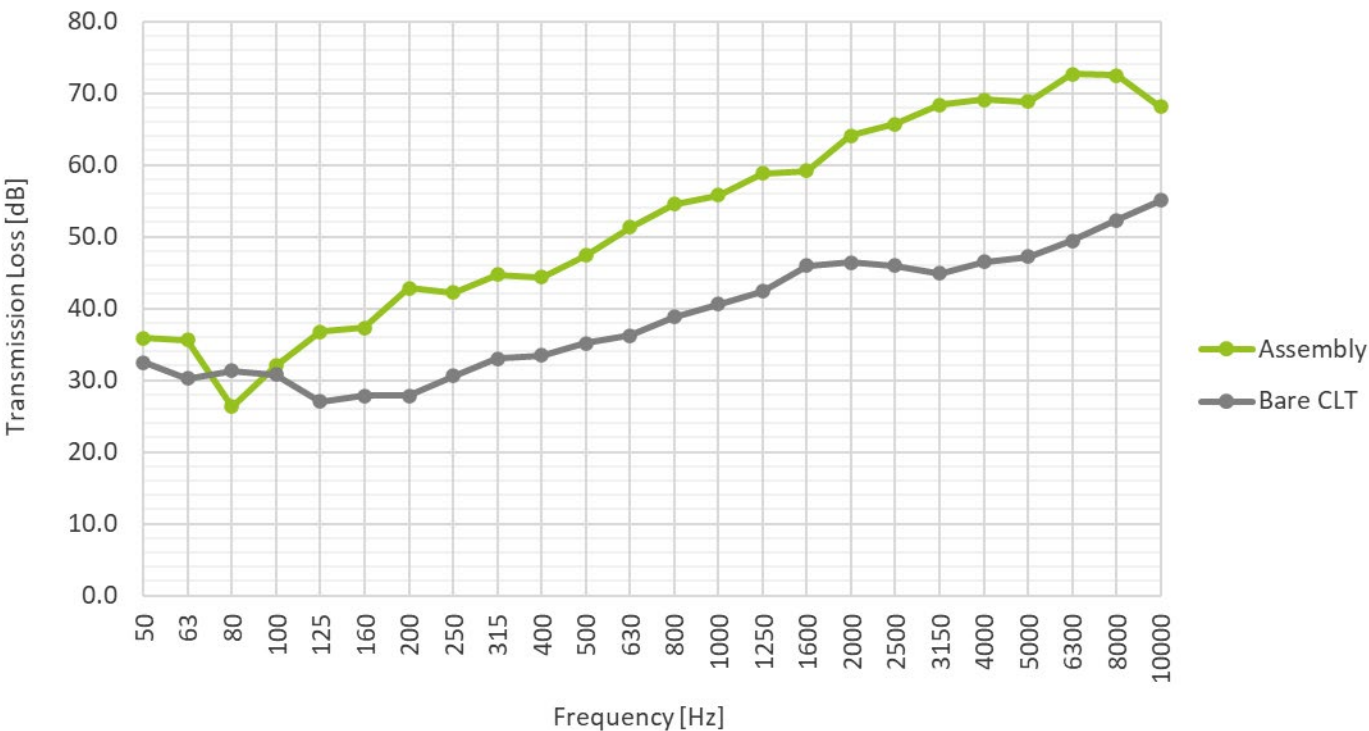
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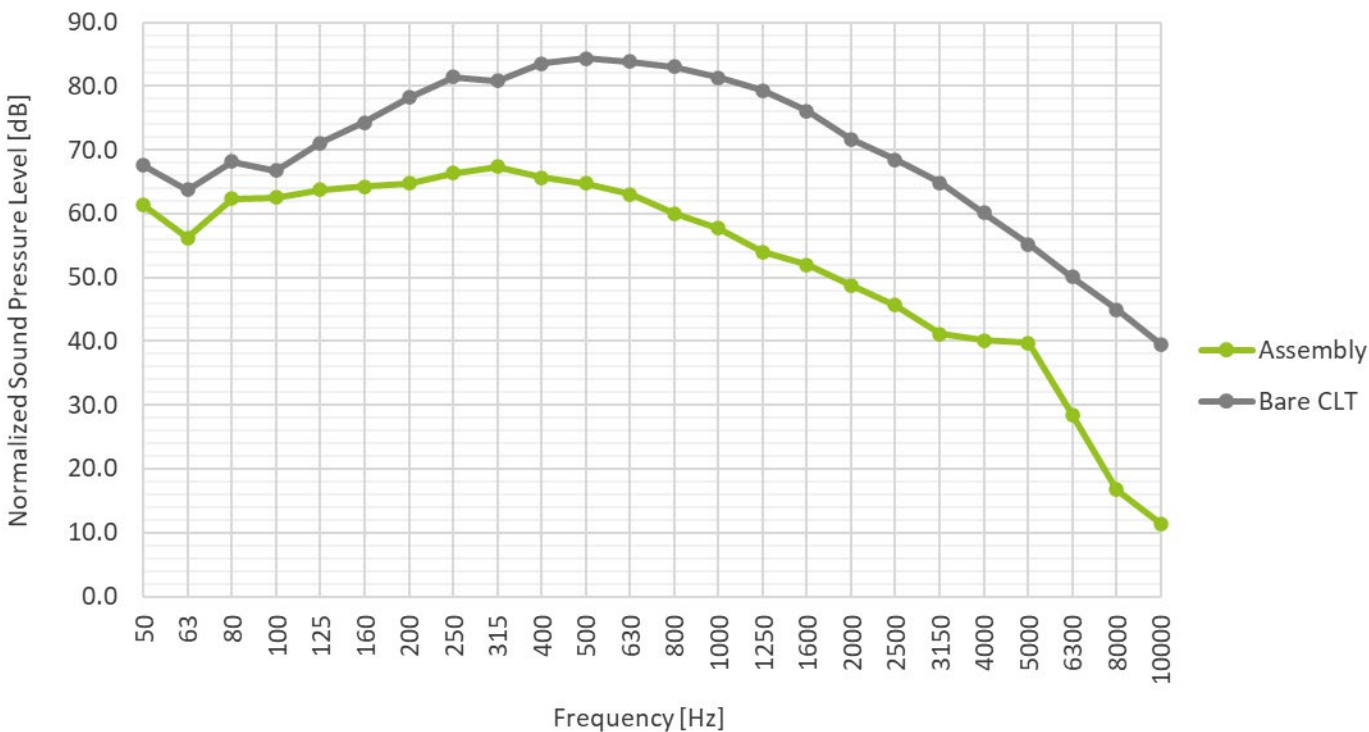
TEST REPORT

ACOUSTICAL PERFORMANCE

STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.10			
Test Date	5/28/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	3" Concrete Topping, sonus curve 10 , 140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	35.9	-	61.3	-
63	35.6	-	56.2	-
80	26.3	-	62.3	-
100	32.0	-	62.5	0
125	36.8	0	63.7	1
160	37.3	3	64.2	1
200	42.8	0	64.7	2
250	42.2	4	66.4	3
315	44.7	4	67.4	4
400	44.4	8	65.7	4
500	47.4	6	64.8	4
630	51.3	3	63.0	3
800	54.5	1	60.0	1
1000	55.8	0	57.7	0
1250	58.8	0	54.0	0
1600	59.2	0	52.0	0
2000	64.1	0	48.8	0
2500	65.7	0	45.7	0
3150	68.4	0	41.1	0
4000	69.1	0	40.1	-
5000	68.8	-	39.7	-
6300	72.7	-	28.5	-
8000	72.5	-	16.7	-
10000	68.1	-	11.4	-
Ratings	STC 53	29	IIC 49	23

TEST REPORT

ACOUSTICAL PERFORMANCE



Bare Nordic 5-Ply CLT Test Data Included for Comparison

Test Number	N/A			
Test Date	N/A			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.5	-	67.6	-
63	30.3	-	63.8	-
80	31.3	-	68.2	-
100	30.8	-	66.8	0
125	27.0	0	71.1	0
160	27.9	0	74.3	0
200	27.8	2	78.3	0
250	30.6	2	81.4	0
315	33.0	3	80.9	0
400	33.5	6	83.5	2
500	35.2	5	84.3	3
630	36.3	5	83.8	4
800	38.8	3	83.0	4
1000	40.6	2	81.3	3
1250	42.4	2	79.4	4
1600	46.0	0	76.1	4
2000	46.4	0	71.7	3
2500	46.0	0	68.4	2
3150	44.9	0	64.9	2
4000	46.5	0	60.2	-
5000	47.2	-	55.2	-
6300	49.4	-	50.1	-
8000	52.3	-	45.0	-
10000	55.1	-	39.5	-
Ratings	STC 40	30	IIC 29	31

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4267.01			
Test Date	5/28/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Concrete Topping, 3" sonus curve 17, 17 mm Nordic 5-Ply CLT, 140 mm			
Ratings	STC 54	IIC 50	HIIC 51	LIIC 64
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

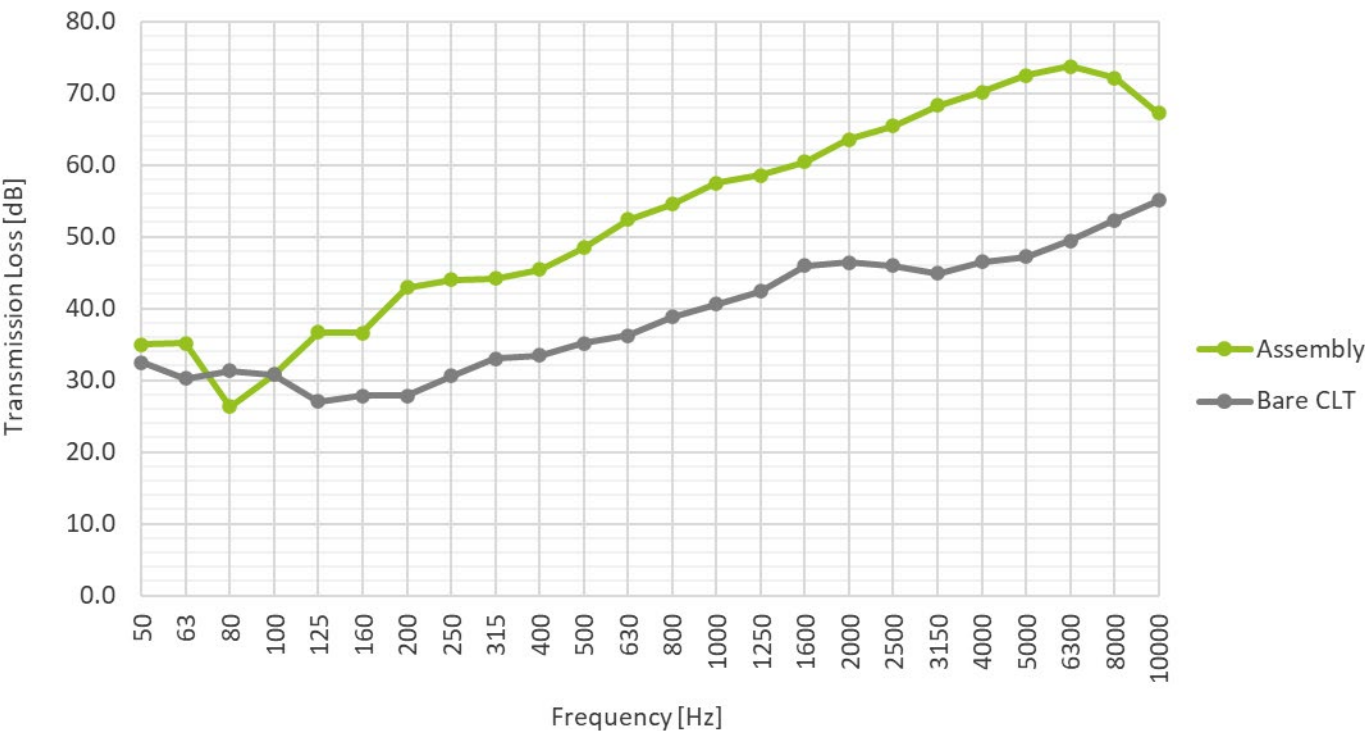
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TEST REPORT

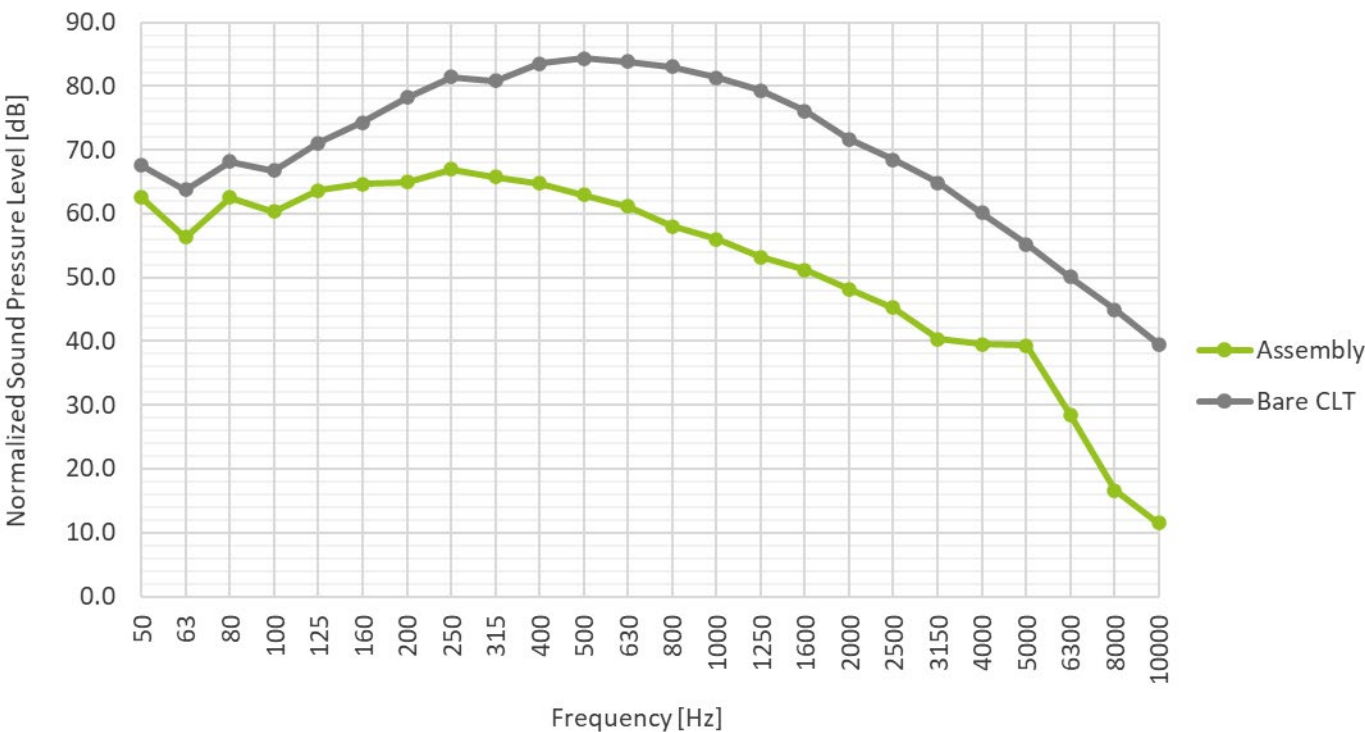
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.01			
Test Date	5/28/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	3" Concrete Topping, sonus curve 17 , 140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	35.0	-	62.5	-
63	35.2	-	56.3	-
80	26.3	-	62.5	-
100	30.8	-	60.3	0
125	36.7	1	63.6	2
160	36.6	4	64.6	3
200	42.9	1	65.0	3
250	44.0	3	67.0	5
315	44.2	6	65.8	4
400	45.4	8	64.7	4
500	48.5	5	62.9	3
630	52.4	3	61.1	2
800	54.5	1	58.0	0
1000	57.5	0	56.0	0
1250	58.6	0	53.2	0
1600	60.4	0	51.2	0
2000	63.6	0	48.2	0
2500	65.4	0	45.3	0
3150	68.3	0	40.3	0
4000	70.2	0	39.5	-
5000	72.5	-	39.3	-
6300	73.7	-	28.5	-
8000	72.1	-	16.6	-
10000	67.2	-	11.5	-
Ratings	STC 54	32	IIC 50	26

TEST REPORT

ACOUSTICAL PERFORMANCE



Bare Nordic 5-Ply CLT Test Data Included for Comparison

Test Number	N/A			
Test Date	N/A			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.5	-	67.6	-
63	30.3	-	63.8	-
80	31.3	-	68.2	-
100	30.8	-	66.8	0
125	27.0	0	71.1	0
160	27.9	0	74.3	0
200	27.8	2	78.3	0
250	30.6	2	81.4	0
315	33.0	3	80.9	0
400	33.5	6	83.5	2
500	35.2	5	84.3	3
630	36.3	5	83.8	4
800	38.8	3	83.0	4
1000	40.6	2	81.3	3
1250	42.4	2	79.4	4
1600	46.0	0	76.1	4
2000	46.4	0	71.7	3
2500	46.0	0	68.4	2
3150	44.9	0	64.9	2
4000	46.5	0	60.2	-
5000	47.2	-	55.2	-
6300	49.4	-	50.1	-
8000	52.3	-	45.0	-
10000	55.1	-	39.5	-
Ratings	STC 40	30	IIC 29	31

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4267.15			
Test Date	5/29/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Concrete Topping, 3" sonus curve 25, 25 mm Nordic 5-Ply CLT, 140 mm			
Ratings	STC 54	IIC 52	HIIC 52	LIIC 61
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

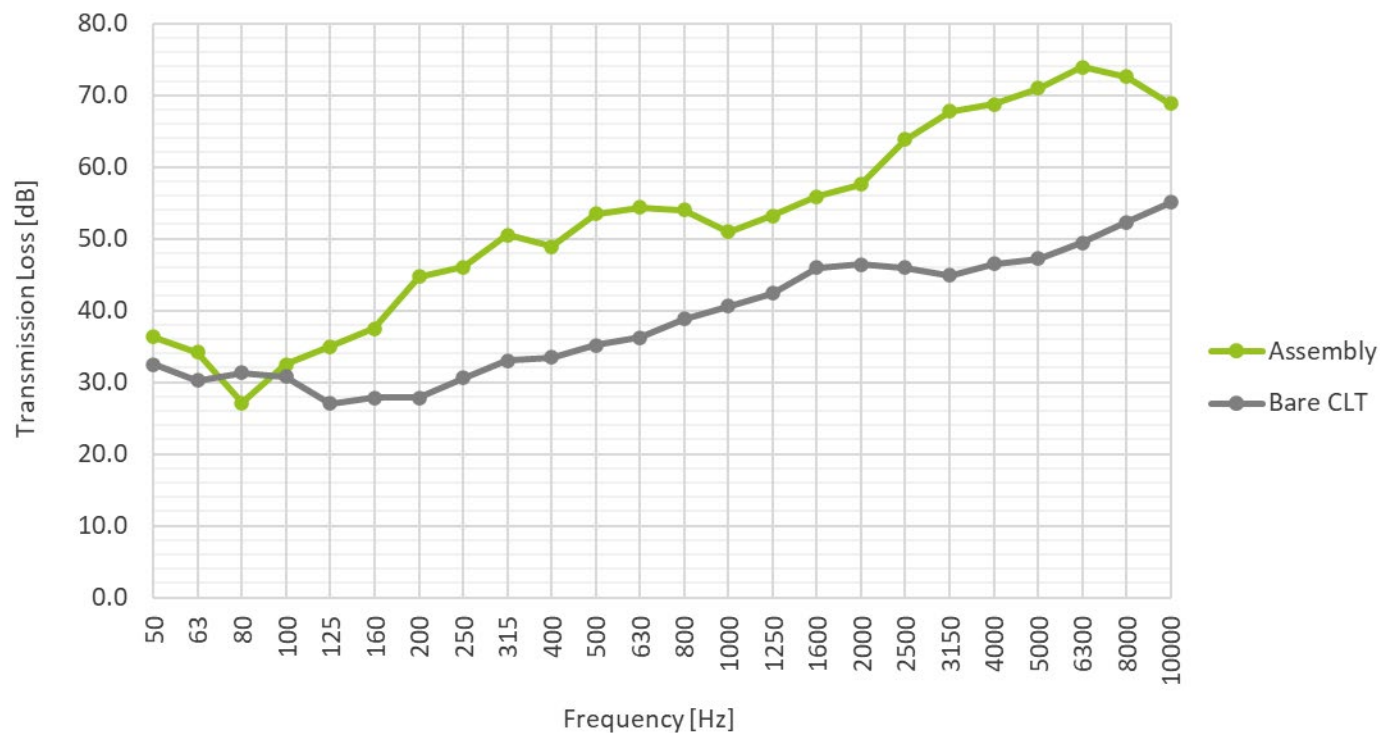
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TEST REPORT

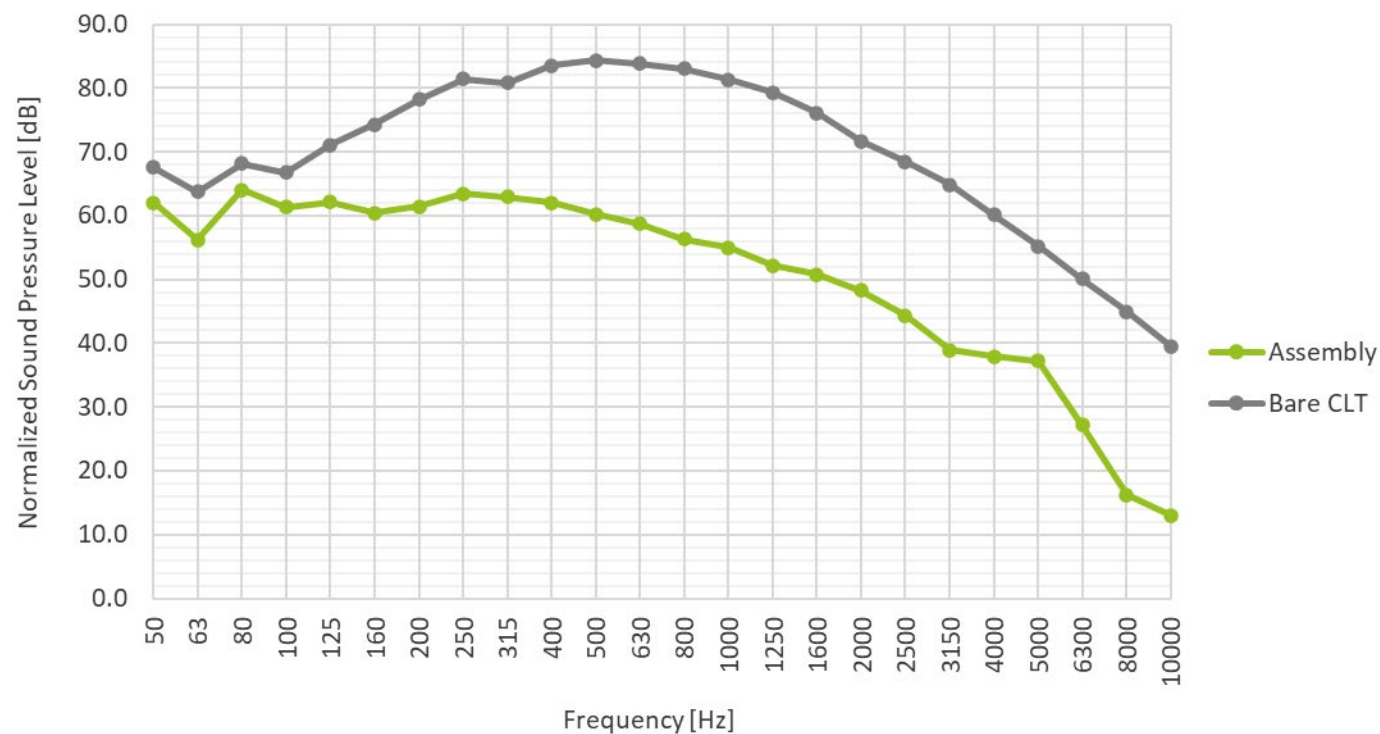
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.15			
Test Date	5/29/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	3" Concrete Topping, sonus curve 25 , 140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	36.3	-	62.0	-
63	34.2	-	56.2	-
80	27.1	-	64.0	-
100	32.5	-	61.3	1
125	35.0	3	62.1	2
160	37.5	4	60.4	0
200	44.7	0	61.4	1
250	46.1	1	63.4	3
315	50.5	0	62.9	3
400	48.9	4	62.0	3
500	53.5	1	60.2	2
630	54.4	1	58.7	2
800	54.0	2	56.3	0
1000	51.0	6	55.0	0
1250	53.2	5	52.2	0
1600	55.9	2	50.8	2
2000	57.6	0	48.3	2
2500	63.8	0	44.4	1
3150	67.8	0	38.9	0
4000	68.7	0	37.9	-
5000	71.0	-	37.2	-
6300	73.9	-	27.2	-
8000	72.6	-	16.2	-
10000	68.8	-	13.0	-
Ratings	STC 54	29	IIC 52	22

TEST REPORT

ACOUSTICAL PERFORMANCE



Bare Nordic 5-Ply CLT Test Data Included for Comparison

Test Number	N/A			
Test Date	N/A			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.5	-	67.6	-
63	30.3	-	63.8	-
80	31.3	-	68.2	-
100	30.8	-	66.8	0
125	27.0	0	71.1	0
160	27.9	0	74.3	0
200	27.8	2	78.3	0
250	30.6	2	81.4	0
315	33.0	3	80.9	0
400	33.5	6	83.5	2
500	35.2	5	84.3	3
630	36.3	5	83.8	4
800	38.8	3	83.0	4
1000	40.6	2	81.3	3
1250	42.4	2	79.4	4
1600	46.0	0	76.1	4
2000	46.4	0	71.7	3
2500	46.0	0	68.4	2
3150	44.9	0	64.9	2
4000	46.5	0	60.2	-
5000	47.2	-	55.2	-
6300	49.4	-	50.1	-
8000	52.3	-	45.0	-
10000	55.1	-	39.5	-
Ratings	STC 40	30	IIC 29	31

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4267.20			
Test Date	5/29/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Concrete Topping, 3" sonus curve 50, 50 mm Nordic 5-Ply CLT, 140 mm			
Ratings	STC 57	IIC 54	HIIC 54	LIIC 65
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

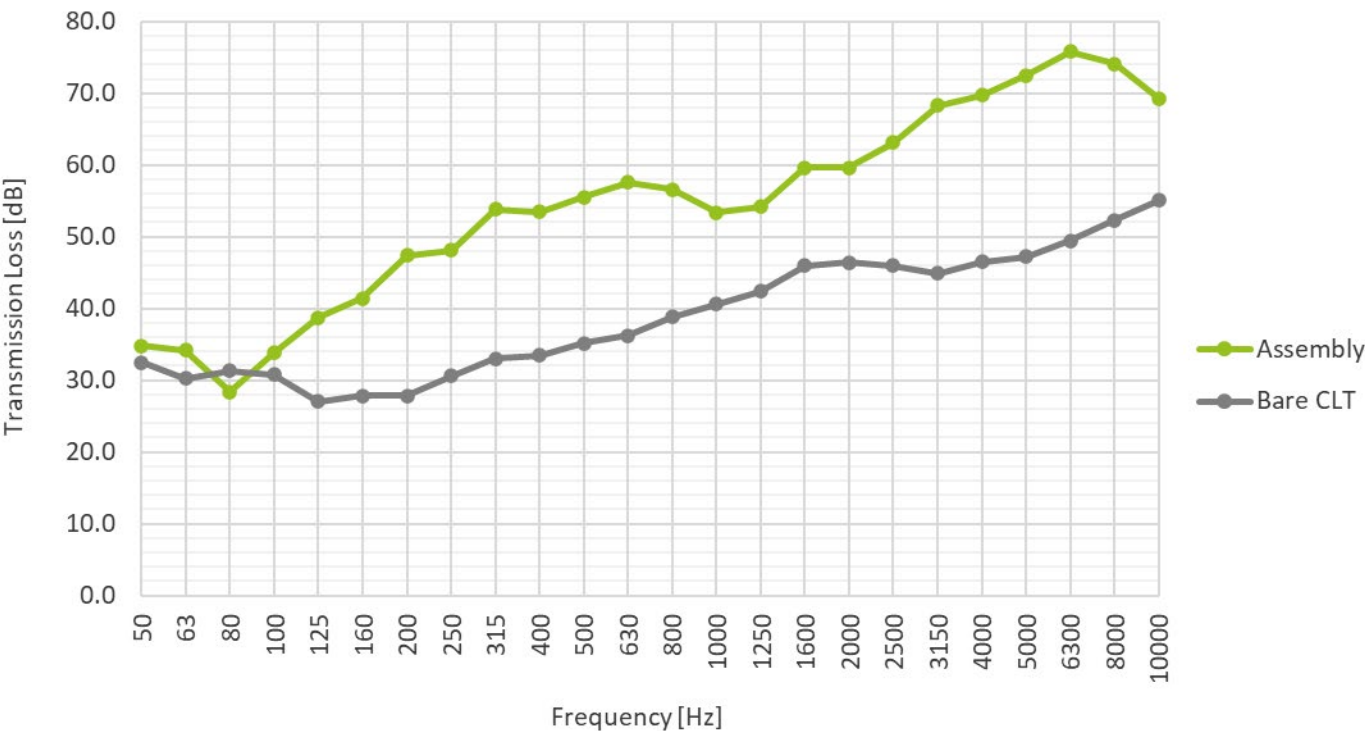
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TEST REPORT

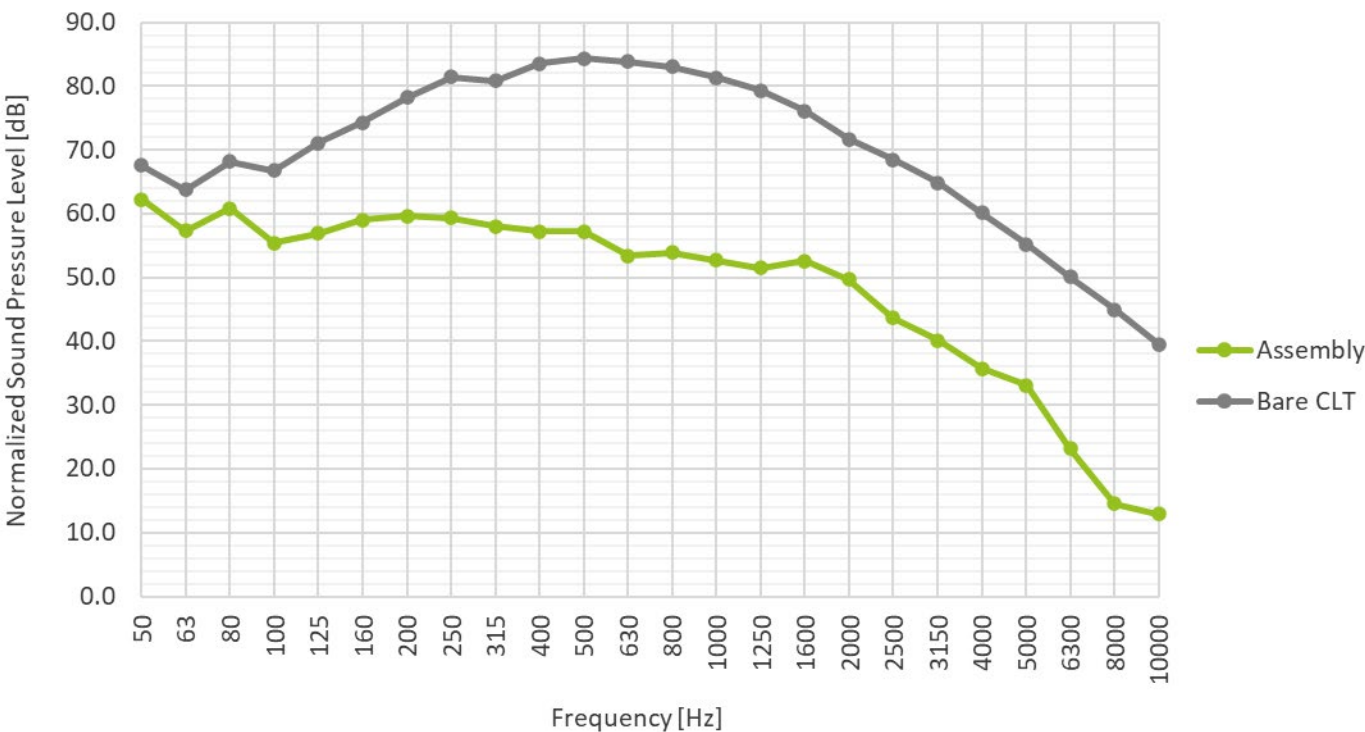
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.20			
Test Date	5/29/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	3" Concrete Topping, sonus curve 50, 140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	34.8	-	62.2	-
63	34.2	-	57.3	-
80	28.4	-	60.8	-
100	33.8	-	55.4	0
125	38.7	2	56.9	0
160	41.4	3	59.0	1
200	47.4	0	59.6	2
250	48.1	2	59.3	1
315	53.8	0	58.0	0
400	53.5	2	57.2	0
500	55.5	2	57.2	1
630	57.6	0	53.4	0
800	56.6	2	53.9	0
1000	53.4	7	52.7	0
1250	54.2	7	51.5	1
1600	59.6	1	52.6	6
2000	59.6	1	49.7	6
2500	63.1	0	43.7	3
3150	68.3	0	40.1	2
4000	69.7	0	35.7	-
5000	72.5	-	33.1	-
6300	75.8	-	23.2	-
8000	74.1	-	14.5	-
10000	69.3	-	12.9	-
Ratings	STC 57	29	IIC 54	23

TEST REPORT

ACOUSTICAL PERFORMANCE



Bare Nordic 5-Ply CLT Test Data Included for Comparison

Test Number	N/A			
Test Date	N/A			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.5	-	67.6	-
63	30.3	-	63.8	-
80	31.3	-	68.2	-
100	30.8	-	66.8	0
125	27.0	0	71.1	0
160	27.9	0	74.3	0
200	27.8	2	78.3	0
250	30.6	2	81.4	0
315	33.0	3	80.9	0
400	33.5	6	83.5	2
500	35.2	5	84.3	3
630	36.3	5	83.8	4
800	38.8	3	83.0	4
1000	40.6	2	81.3	3
1250	42.4	2	79.4	4
1600	46.0	0	76.1	4
2000	46.4	0	71.7	3
2500	46.0	0	68.4	2
3150	44.9	0	64.9	2
4000	46.5	0	60.2	-
5000	47.2	-	55.2	-
6300	49.4	-	50.1	-
8000	52.3	-	45.0	-
10000	55.1	-	39.5	-
Ratings	STC 40	30	IIC 29	31

CEMENT/SCREED BOARD SURFACE

5 ply 140mm CLT PRODUCT COMPARISON

EXACOR Dry Screed over Sonus curve

REGUPOL sonus curve is a high-performance acoustic dimpled rubber floor underlayment designed to reduce impact noise from footfall noise transmission and impact sound in Mass Timber Frame Construction. EXACOR is a ½" dry screed board that weighs 2.7lbs PSF and is glued and screwed to each other. Tested in 2 or 3 layers 1" or 1.5" thickness.



Detail	Assembly	Acoustic Rating	
	EXACOR dry screed 1" sonus curve 25, (25 mm) CLT – 5 ply 140mm	IIC 50 HIIC 58 LIIC 58	STC 52
	EXACOR dry screed 1.5" sonus curve 25, (25 mm) CLT – 5 ply 140mm	IIC 53 HIIC 61 LIIC 51	STC 53
	EXACOR dry screed 1" sonus curve 50, (50 mm) CLT – 5 ply 140mm	IIC 52 HIIC 62 LIIC 50	STC 54
	EXACOR dry screed 1.5" sonus curve 50, (50 mm) CLT – 5 ply 140mm	IIC 55 HIIC 63 LIIC 51	STC 57

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4267.31			
Test Date	5/31/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	EXACOR, 1" sonus curve 25, 25 mm Nordic 5-Ply CLT, 140 mm			
Ratings	STC 52	IIC 50	HIIC 58	LIIC 58
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

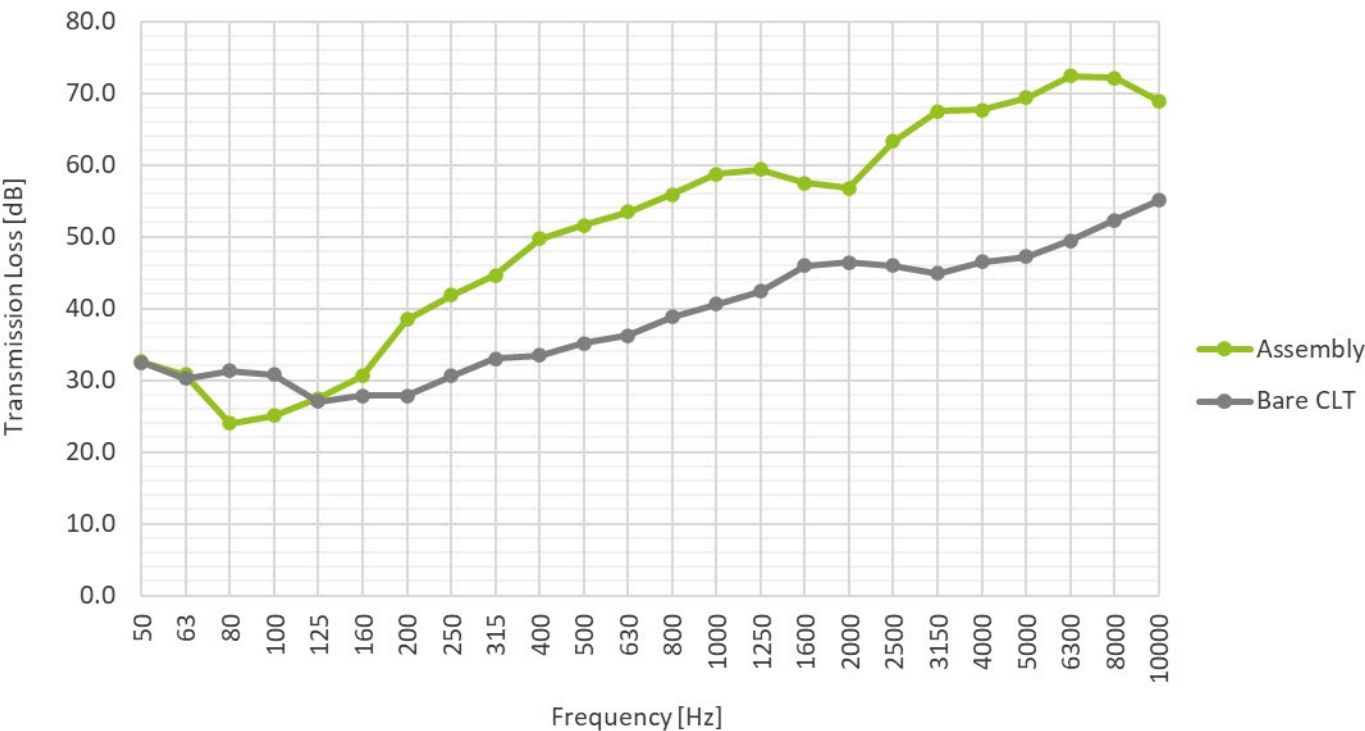
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TEST REPORT

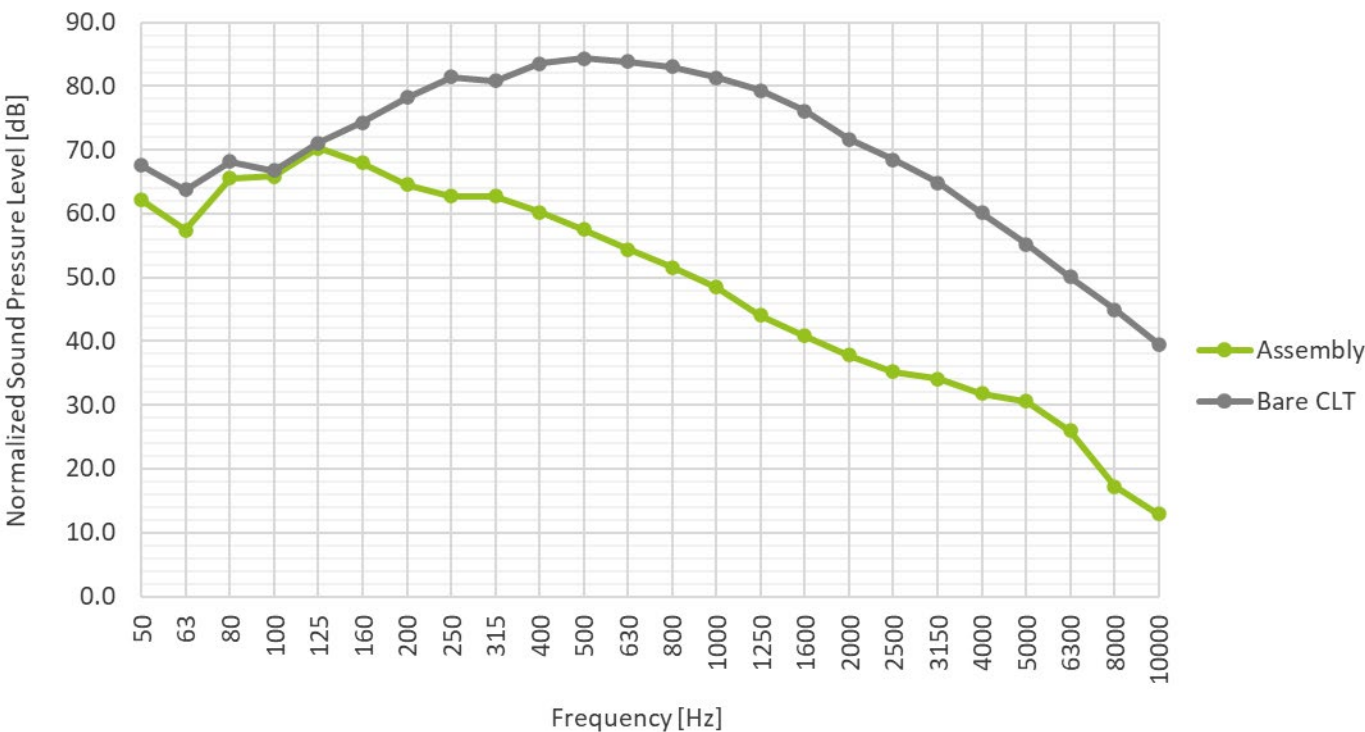
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.31			
Test Date	5/31/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	1" EXACOR, sonus curve 25 , 140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.6	-	62.1	-
63	30.8	-	57.4	-
80	24.0	-	65.6	-
100	25.1	-	65.9	4
125	27.5	8	70.3	8
160	30.6	8	68.0	6
200	38.5	4	64.5	2
250	41.9	3	62.7	1
315	44.6	3	62.7	1
400	49.7	1	60.2	0
500	51.6	0	57.5	0
630	53.5	0	54.4	0
800	55.9	0	51.6	0
1000	58.7	0	48.5	0
1250	59.4	0	44.1	0
1600	57.5	0	40.8	0
2000	56.8	0	37.8	0
2500	63.3	0	35.2	0
3150	67.5	0	34.1	0
4000	67.7	0	31.8	-
5000	69.4	-	30.6	-
6300	72.4	-	26.0	-
8000	72.1	-	17.2	-
10000	68.9	-	12.9	-
Ratings	STC 52	27	IIC 50	22

TEST REPORT

ACOUSTICAL PERFORMANCE



Bare Nordic 5-Ply CLT Test Data Included for Comparison

Test Number	N/A			
Test Date	N/A			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.5	-	67.6	-
63	30.3	-	63.8	-
80	31.3	-	68.2	-
100	30.8	-	66.8	0
125	27.0	0	71.1	0
160	27.9	0	74.3	0
200	27.8	2	78.3	0
250	30.6	2	81.4	0
315	33.0	3	80.9	0
400	33.5	6	83.5	2
500	35.2	5	84.3	3
630	36.3	5	83.8	4
800	38.8	3	83.0	4
1000	40.6	2	81.3	3
1250	42.4	2	79.4	4
1600	46.0	0	76.1	4
2000	46.4	0	71.7	3
2500	46.0	0	68.4	2
3150	44.9	0	64.9	2
4000	46.5	0	60.2	-
5000	47.2	-	55.2	-
6300	49.4	-	50.1	-
8000	52.3	-	45.0	-
10000	55.1	-	39.5	-
Ratings	STC 40	30	IIC 29	31

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4267.27			
Test Date	5/30/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	EXACOR, 1-1/2" sonus curve 25, 25 mm Nordic 5-Ply CLT, 140 mm			
Ratings	STC 53	IIC 53	HIIC 61	LIIC 51
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

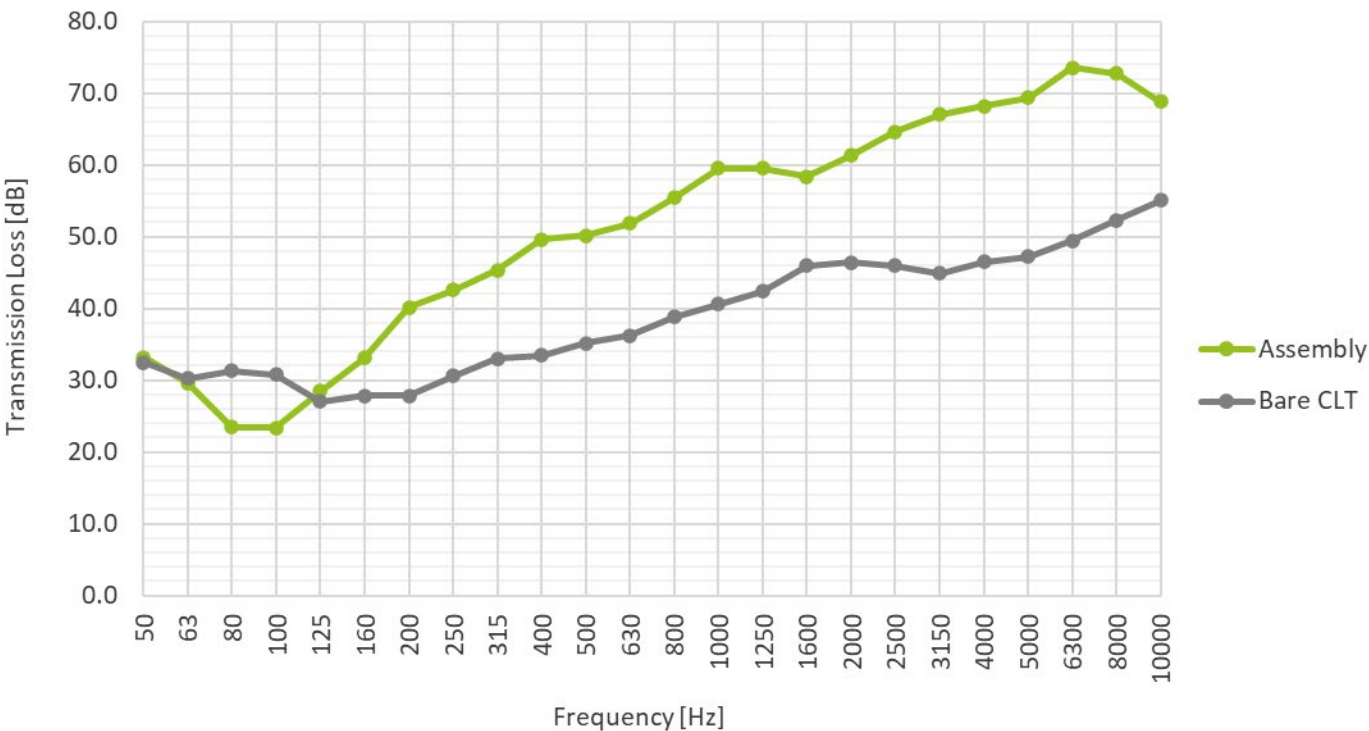
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TEST REPORT

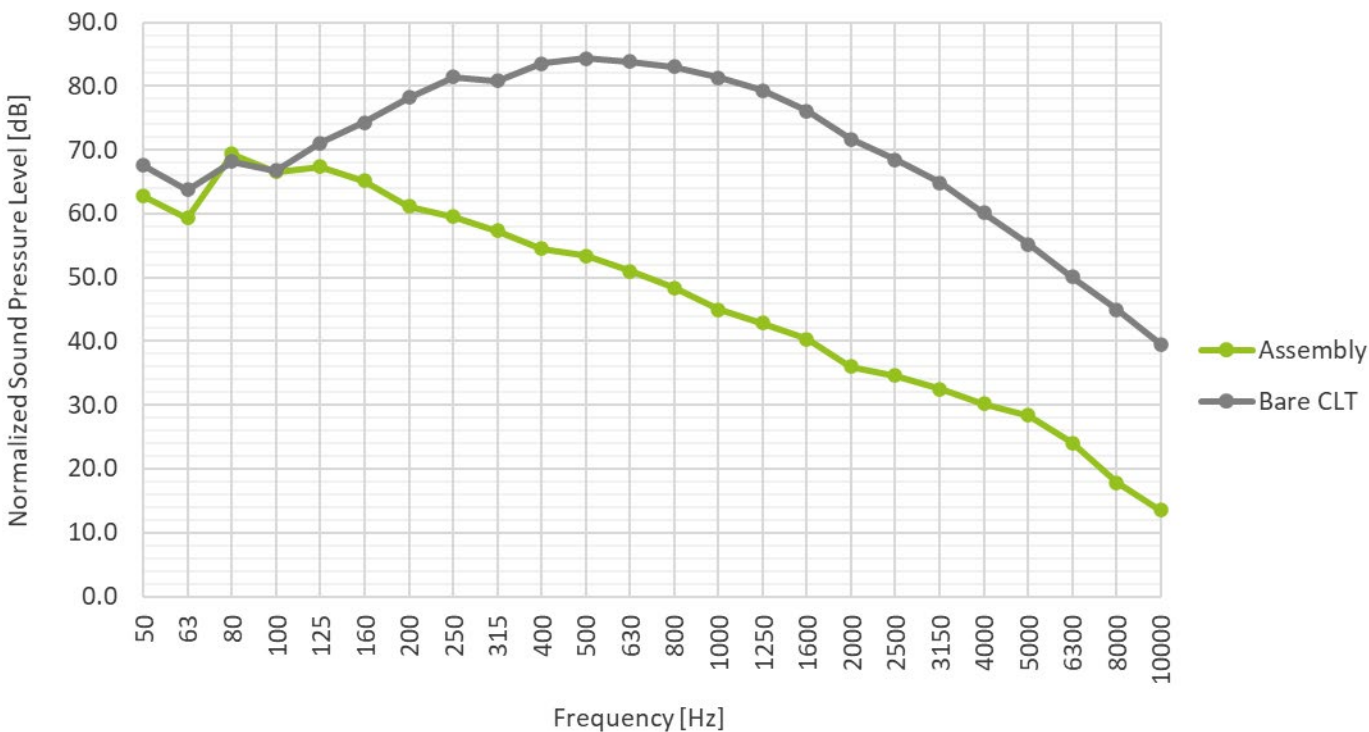
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.27			
Test Date	5/30/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	1-1/2" EXACOR, sonus curve 25, 140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	33.2	-	62.7	-
63	29.6	-	59.3	-
80	23.5	-	69.4	-
100	23.4	-	66.6	8
125	28.5	8	67.4	8
160	33.1	7	65.2	6
200	40.2	3	61.1	2
250	42.6	3	59.5	0
315	45.3	4	57.3	0
400	49.6	2	54.5	0
500	50.2	3	53.4	0
630	51.9	2	51.0	0
800	55.4	0	48.4	0
1000	59.5	0	45.0	0
1250	59.5	0	42.8	0
1600	58.4	0	40.3	0
2000	61.3	0	36.0	0
2500	64.6	0	34.6	0
3150	67.0	0	32.5	0
4000	68.2	0	30.2	-
5000	69.4	-	28.4	-
6300	73.6	-	24.1	-
8000	72.8	-	17.8	-
10000	68.8	-	13.5	-
Ratings	STC 53	32	IIC 53	24

TEST REPORT

ACOUSTICAL PERFORMANCE



Bare Nordic 5-Ply CLT Test Data Included for Comparison

Test Number	N/A			
Test Date	N/A			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.5	-	67.6	-
63	30.3	-	63.8	-
80	31.3	-	68.2	-
100	30.8	-	66.8	0
125	27.0	0	71.1	0
160	27.9	0	74.3	0
200	27.8	2	78.3	0
250	30.6	2	81.4	0
315	33.0	3	80.9	0
400	33.5	6	83.5	2
500	35.2	5	84.3	3
630	36.3	5	83.8	4
800	38.8	3	83.0	4
1000	40.6	2	81.3	3
1250	42.4	2	79.4	4
1600	46.0	0	76.1	4
2000	46.4	0	71.7	3
2500	46.0	0	68.4	2
3150	44.9	0	64.9	2
4000	46.5	0	60.2	-
5000	47.2	-	55.2	-
6300	49.4	-	50.1	-
8000	52.3	-	45.0	-
10000	55.1	-	39.5	-
Ratings	STC 40	30	IIC 29	31

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4267.26			
Test Date	5/31/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	EXACOR, 1" sonus curve 50, 50 mm Nordic 5-Ply CLT, 140 mm			
Ratings	STC 54	IIC 52	HIIC 62	LIIC 50
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

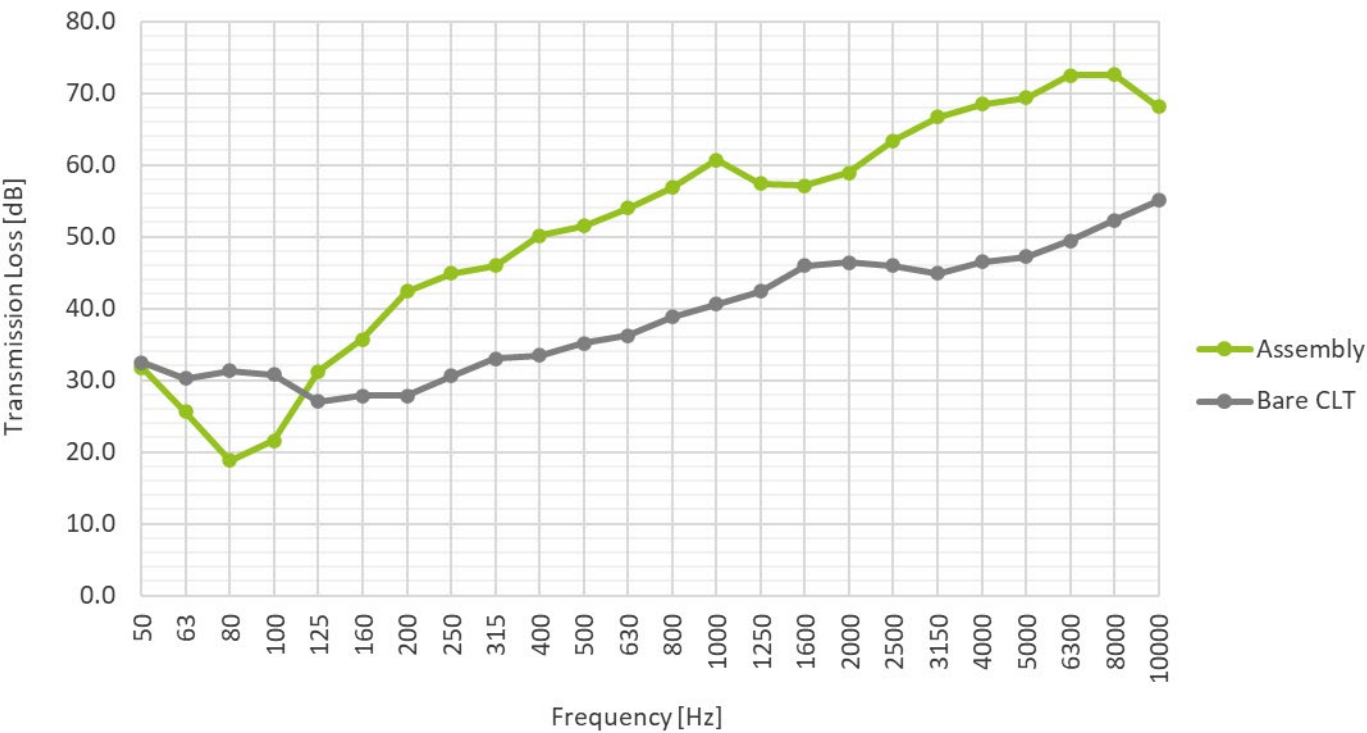
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TEST REPORT

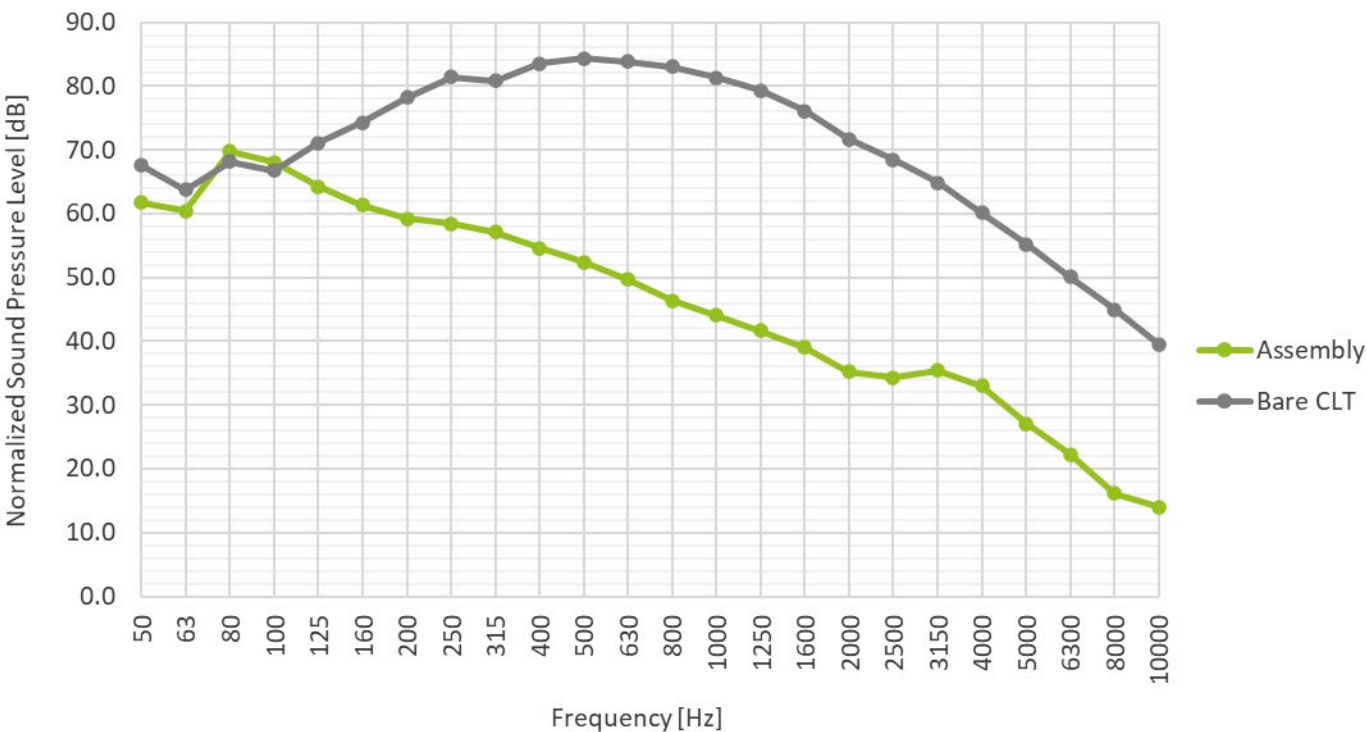
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.26			
Test Date	5/31/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	1" EXACOR, sonus curve 50 , 140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	31.8	-	61.7	-
63	25.6	-	60.4	-
80	18.8	-	69.8	-
100	21.6	-	68.1	8
125	31.2	7	64.2	4
160	35.7	5	61.3	1
200	42.4	2	59.2	0
250	44.9	2	58.4	0
315	46.0	4	57.1	0
400	50.2	3	54.6	0
500	51.5	2	52.4	0
630	54.0	1	49.7	0
800	56.9	0	46.4	0
1000	60.7	0	44.1	0
1250	57.4	1	41.6	0
1600	57.1	1	39.0	0
2000	58.9	0	35.2	0
2500	63.4	0	34.3	0
3150	66.7	0	35.4	0
4000	68.5	0	33.0	-
5000	69.4	-	27.1	-
6300	72.5	-	22.3	-
8000	72.6	-	16.1	-
10000	68.1	-	14.0	-
Ratings	STC 54	28	IIC 52	13

TEST REPORT

ACOUSTICAL PERFORMANCE



Bare Nordic 5-Ply CLT Test Data Included for Comparison

Test Number	N/A			
Test Date	N/A			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.5	-	67.6	-
63	30.3	-	63.8	-
80	31.3	-	68.2	-
100	30.8	-	66.8	0
125	27.0	0	71.1	0
160	27.9	0	74.3	0
200	27.8	2	78.3	0
250	30.6	2	81.4	0
315	33.0	3	80.9	0
400	33.5	6	83.5	2
500	35.2	5	84.3	3
630	36.3	5	83.8	4
800	38.8	3	83.0	4
1000	40.6	2	81.3	3
1250	42.4	2	79.4	4
1600	46.0	0	76.1	4
2000	46.4	0	71.7	3
2500	46.0	0	68.4	2
3150	44.9	0	64.9	2
4000	46.5	0	60.2	-
5000	47.2	-	55.2	-
6300	49.4	-	50.1	-
8000	52.3	-	45.0	-
10000	55.1	-	39.5	-
Ratings	STC 40	30	IIC 29	31

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4267.25			
Test Date	5/30/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	EXACOR, 1-1/2" sonus curve 50, 50 mm Nordic 5-Ply CLT, 140 mm			
Ratings	STC 57	IIC 55	HIIC 63	LIIC 51
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

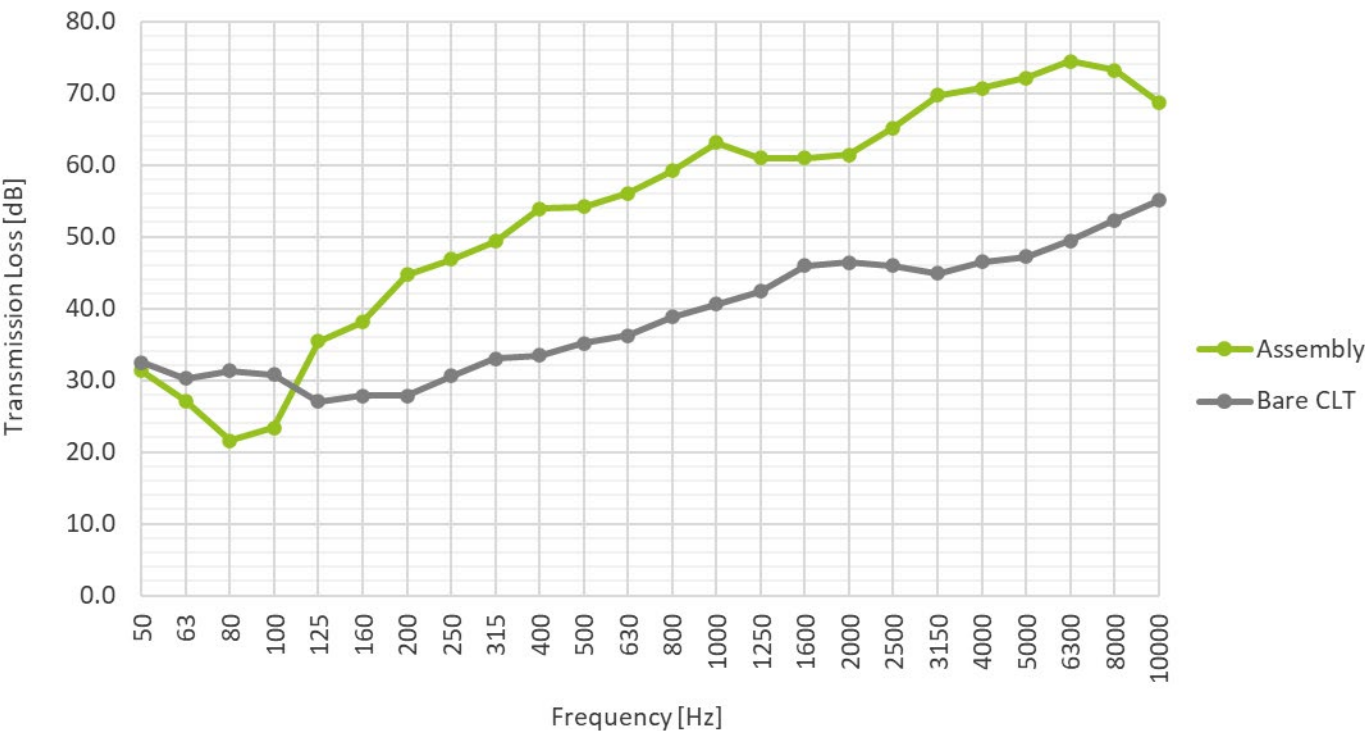
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TEST REPORT

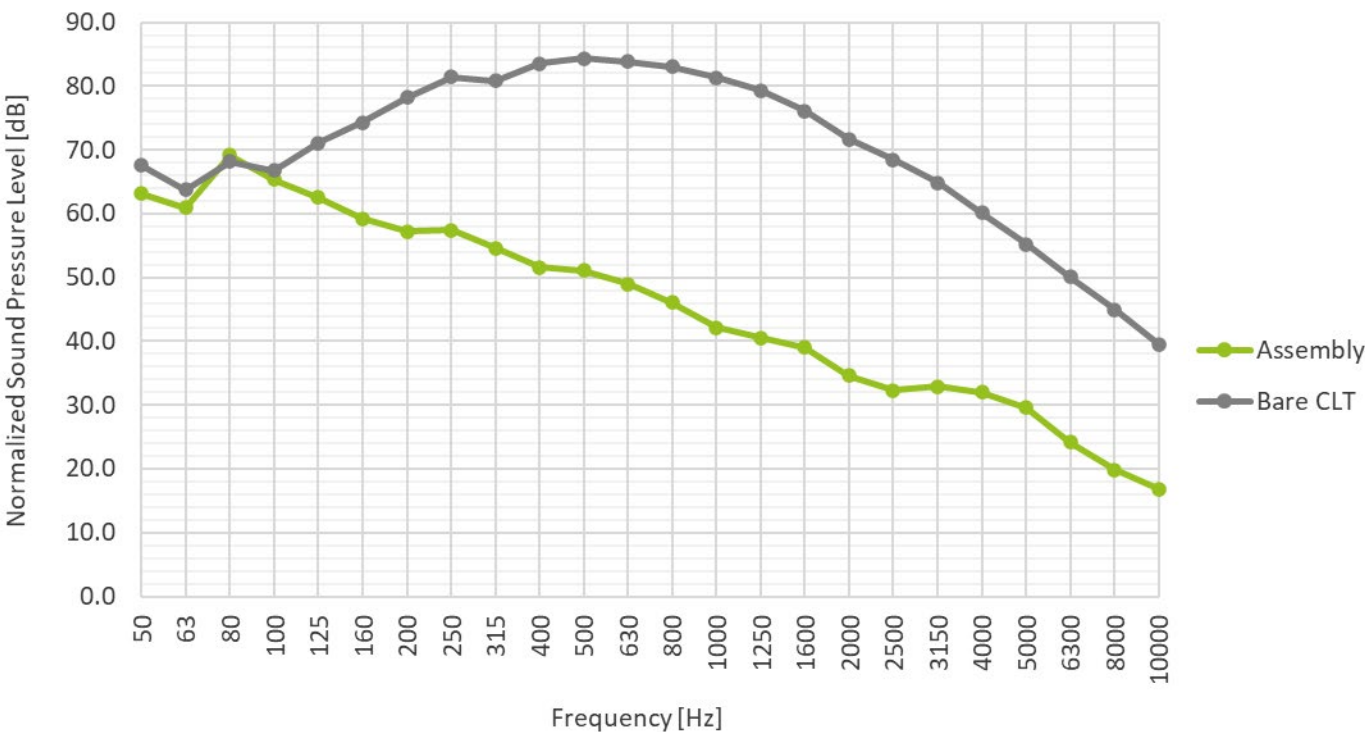
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.25			
Test Date	5/30/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	1-1/2" EXACOR, sonus curve 50, 140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	31.3	-	63.1	-
63	27.1	-	60.9	-
80	21.6	-	69.2	-
100	23.4	-	65.4	8
125	35.4	6	62.5	6
160	38.1	6	59.2	2
200	44.7	2	57.2	0
250	46.9	3	57.4	0
315	49.4	4	54.6	0
400	53.9	2	51.6	0
500	54.2	3	51.1	0
630	56.1	2	49.0	0
800	59.2	0	46.1	0
1000	63.1	0	42.1	0
1250	61.0	0	40.5	0
1600	61.0	0	39.0	0
2000	61.4	0	34.6	0
2500	65.2	0	32.3	0
3150	69.7	0	32.9	0
4000	70.7	0	32.0	-
5000	72.1	-	29.6	-
6300	74.5	-	24.2	-
8000	73.2	-	19.8	-
10000	68.7	-	16.8	-
Ratings	STC 57	28	IIC 55	16

TEST REPORT

ACOUSTICAL PERFORMANCE



Bare Nordic 5-Ply CLT Test Data Included for Comparison

Test Number	N/A			
Test Date	N/A			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.5	-	67.6	-
63	30.3	-	63.8	-
80	31.3	-	68.2	-
100	30.8	-	66.8	0
125	27.0	0	71.1	0
160	27.9	0	74.3	0
200	27.8	2	78.3	0
250	30.6	2	81.4	0
315	33.0	3	80.9	0
400	33.5	6	83.5	2
500	35.2	5	84.3	3
630	36.3	5	83.8	4
800	38.8	3	83.0	4
1000	40.6	2	81.3	3
1250	42.4	2	79.4	4
1600	46.0	0	76.1	4
2000	46.4	0	71.7	3
2500	46.0	0	68.4	2
3150	44.9	0	64.9	2
4000	46.5	0	60.2	-
5000	47.2	-	55.2	-
6300	49.4	-	50.1	-
8000	52.3	-	45.0	-
10000	55.1	-	39.5	-
Ratings	STC 40	30	IIC 29	31

HARDWOOD FLOOR SURFACE

3 ply 105mm CLT PRODUCT COMPARISON

3" Concrete slab over Sonus curve with hardwood

REGUPOL sonus curve is a high-performance acoustic dimpled rubber floor underlayment designed to reduce impact noise from footfall noise transmission and impact sound in Mass Timber Frame Construction. Made in the USA from recycled cars & truck tires are green circle certified for recycled content and qualify for up to 8 LEED points.



Detail	Assembly	Acoustic Rating	
	Concrete slab 3" sonus curve 17, (17 mm) CLT – 3 ply 105mm hardwood	IIC 54 LIIC 65 HIIC 60	STC 54
	Concrete slab 3" sonus curve 17, (17 mm) CLT – 3 ply 105mm sonus core 5 with hardwood	IIC 55 LIIC 66 HIIC 65	STC 55
	Concrete slab 3" sonus curve 25, (25 mm) CLT – 3 ply 105mm sonus core 5 with hardwood	IIC 57 LIIC 67 HIIC 70	STC 55
	Concrete slab 3" sonus curve 50, (50 mm) CLT – 3 ply 105mm sonus core 5 with hardwood	IIC 58 LIIC 58 HIIC 65	STC 59

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	S5237.08			
Test Date	5/7/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90	ASTM E492	ASTM E3207	ASTM E3222
Assembly	Engineered Wood, 3/8" (10 mm) Concrete, 3" (76 mm) REGUPOL sonus curve 17, 21/32" (17 mm) 3-Ply CLT, 4-1/8" (105 mm)			
Predicted Ratings	STC 54	IIC 54	LIIC 65	HIIC 60

Detail



Please contact us to request a copy of the official test report from Intertek.

Disclaimer

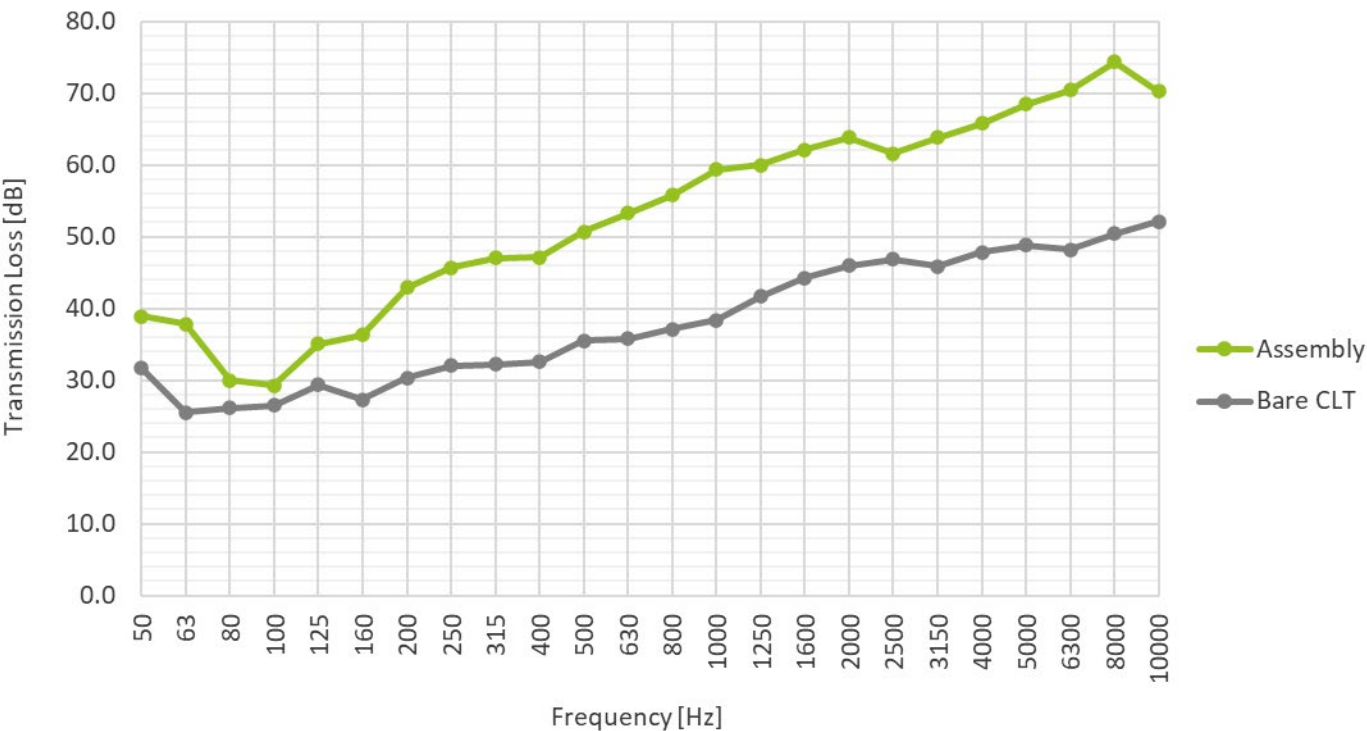
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TEST REPORT

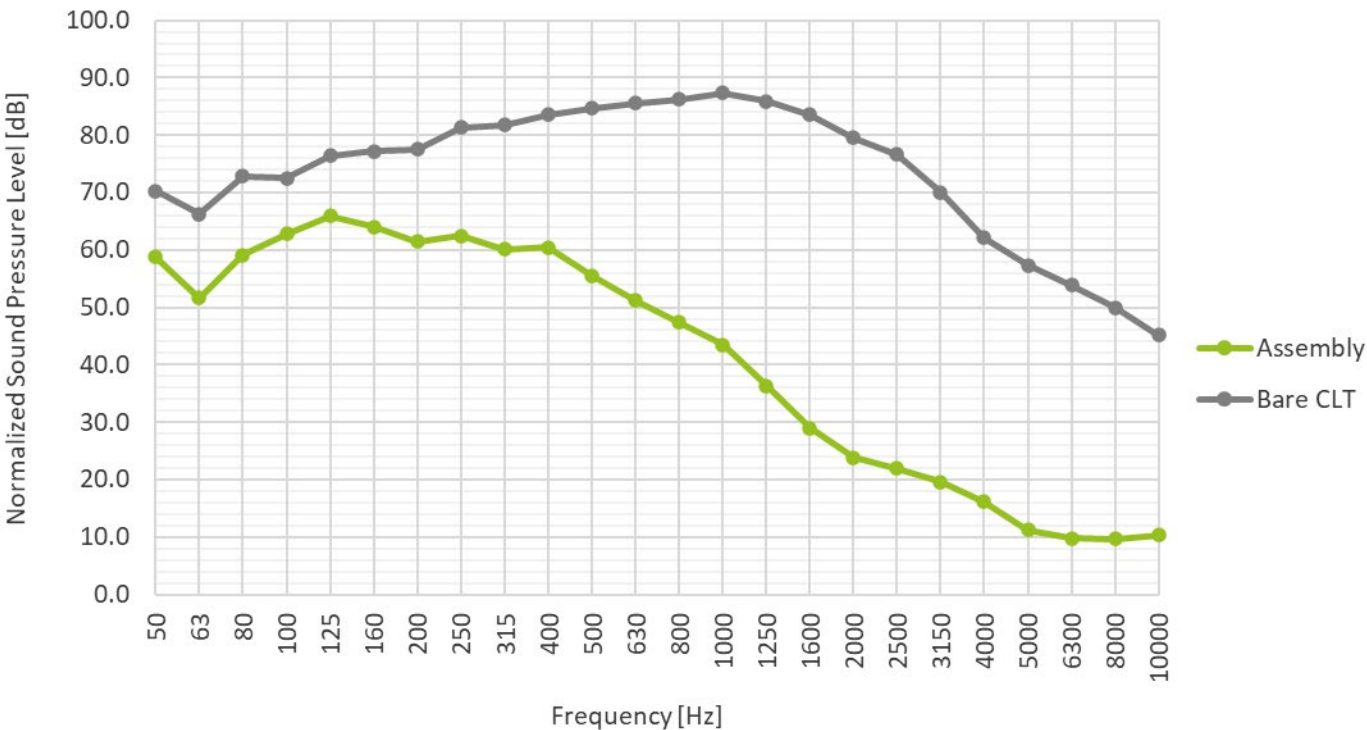
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	S5237.08			
Test Date	5/7/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3207, ASTM E3222			
Assembly	3-Ply CLT, REGUPOL sonus curve 17 , 3" Concrete, Engineered Wood			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	38.9	-	58.8	-
63	37.8	-	51.6	-
80	30.0	-	59.1	-
100	29.3	-	62.8	5
125	35.1	3	65.9	8
160	36.3	5	64.0	6
200	42.9	1	61.4	3
250	45.7	1	62.5	5
315	47.0	3	60.1	2
400	47.1	6	60.4	3
500	50.7	3	55.5	0
630	53.3	2	51.2	0
800	55.8	0	47.4	0
1000	59.4	0	43.5	0
1250	60.0	0	36.3	0
1600	62.1	0	29.0	0
2000	63.8	0	23.8	0
2500	61.6	0	21.9	0
3150	63.8	0	19.6	0
4000	65.8	0	16.1	-
5000	68.5	-	11.2	-
6300	70.4	-	9.8	-
8000	74.4	-	9.7	-
10000	70.3	-	10.3	-
Ratings	STC 54	24	IIC 54	32

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	S5237.00			
Test Date	5/4/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3207, ASTM E3222			
Assembly	3-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	31.7	-	70.3	-
63	25.5	-	66.3	-
80	26.1	-	72.8	-
100	26.5	-	72.5	0
125	29.4	0	76.4	0
160	27.3	0	77.2	0
200	30.3	0	77.5	0
250	32.0	0	81.3	0
315	32.2	3	81.8	0
400	32.6	5	83.6	0
500	35.5	4	84.7	0
630	35.8	4	85.6	0
800	37.1	4	86.2	1
1000	38.4	4	87.4	3
1250	41.7	1	85.9	5
1600	44.3	0	83.5	5
2000	46.0	0	79.5	5
2500	46.9	0	76.6	5
3150	45.9	0	70.0	1
4000	47.8	0	62.1	-
5000	48.8	-	57.3	-
6300	48.2	-	53.9	-
8000	50.4	-	49.9	-
10000	52.1	-	45.1	-
Ratings	STC 39	25	IIC 23	25

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	S5237.06			
Test Date	5/7/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90	ASTM E492	ASTM E3207	ASTM E3222
Assembly	Engineered Wood, 3/8" (10 mm) REGUPOL sonus core 5, 3/16" (5 mm) Concrete, 3" (76 mm) REGUPOL sonus curve 17, 21/32" (17 mm) 3-Ply CLT, 4-1/8" (105 mm)			
Predicted Ratings	STC 55	IIC 55	LIIC 66	HIIC 65

Detail



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Disclaimer

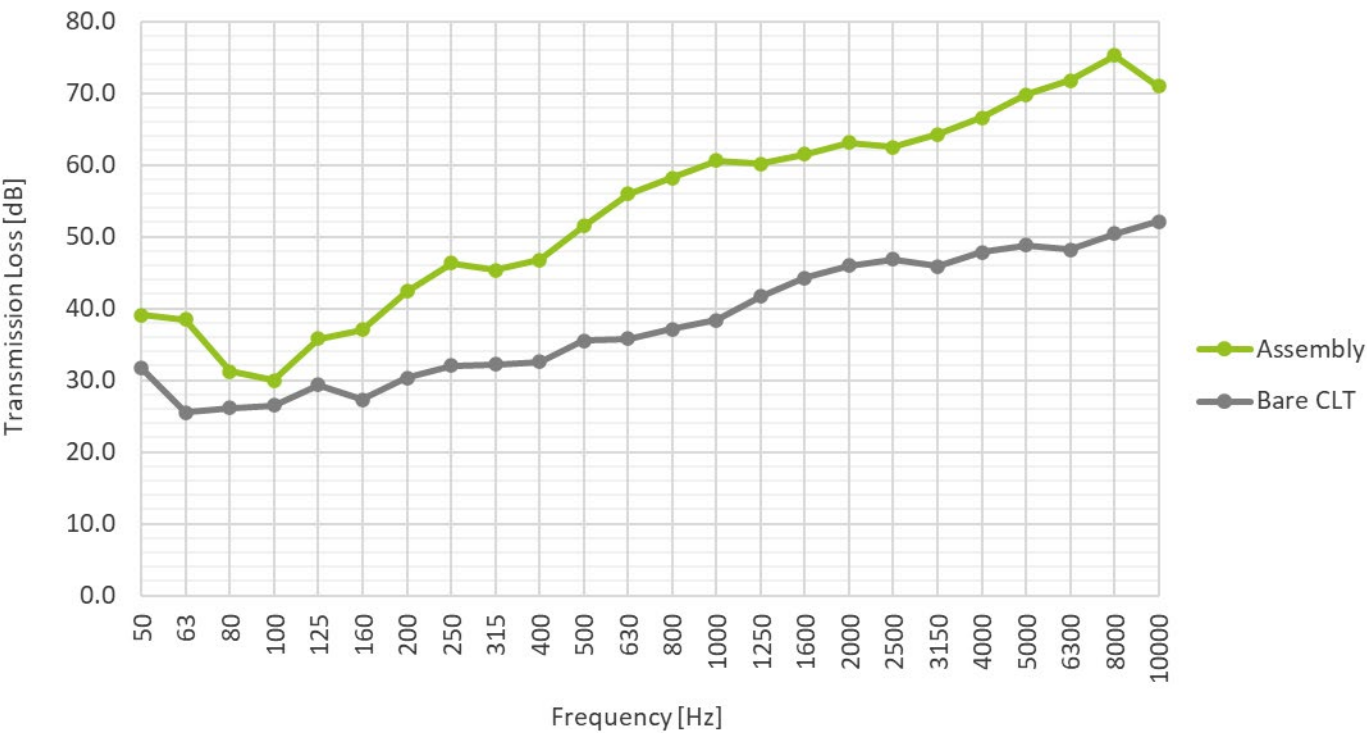
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TEST REPORT

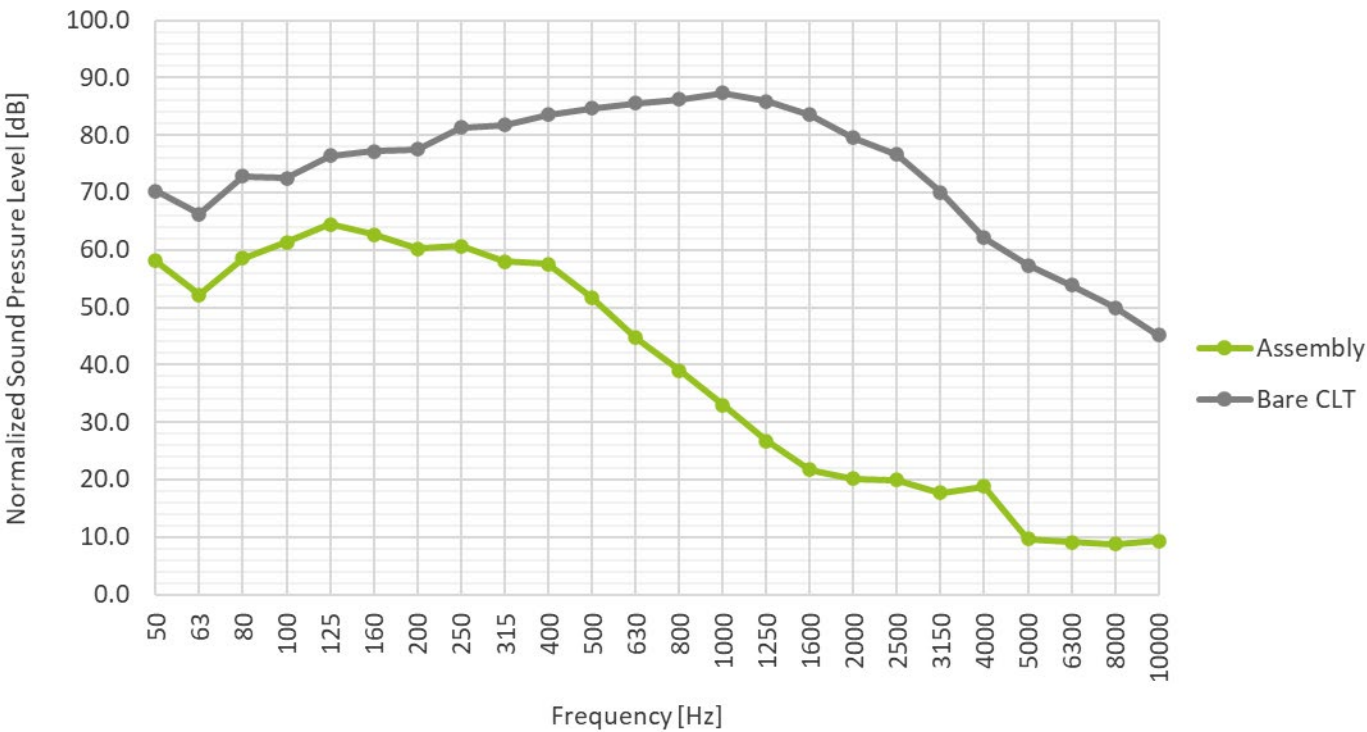
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	S5237.06			
Test Date	5/7/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3207, ASTM E3222			
Assembly	3-Ply CLT, REGUPOL sonus curve 17 , 3" Concrete, REGUPOL sonus core 5 , Engineered Hardwood			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	39.1	-	58.1	-
63	38.5	-	52.2	-
80	31.2	-	58.6	-
100	30.0	-	61.3	4
125	35.8	3	64.5	8
160	37.0	5	62.7	6
200	42.4	3	60.2	3
250	46.3	2	60.7	4
315	45.3	6	58.0	1
400	46.8	7	57.6	2
500	51.5	4	51.7	0
630	56.0	0	44.7	0
800	58.2	0	39.0	0
1000	60.6	0	33.0	0
1250	60.2	0	26.7	0
1600	61.5	0	21.7	0
2000	63.1	0	20.1	0
2500	62.5	0	19.9	0
3150	64.3	0	17.7	0
4000	66.6	0	18.8	-
5000	69.8	-	9.7	-
6300	71.8	-	9.1	-
8000	75.3	-	8.8	-
10000	71.0	-	9.3	-
Ratings	STC 55	30	IIC 55	28

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	S5237.00			
Test Date	5/4/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3207, ASTM E3222			
Assembly	3-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	31.7	-	70.3	-
63	25.5	-	66.3	-
80	26.1	-	72.8	-
100	26.5	-	72.5	0
125	29.4	0	76.4	0
160	27.3	0	77.2	0
200	30.3	0	77.5	0
250	32.0	0	81.3	0
315	32.2	3	81.8	0
400	32.6	5	83.6	0
500	35.5	4	84.7	0
630	35.8	4	85.6	0
800	37.1	4	86.2	1
1000	38.4	4	87.4	3
1250	41.7	1	85.9	5
1600	44.3	0	83.5	5
2000	46.0	0	79.5	5
2500	46.9	0	76.6	5
3150	45.9	0	70.0	1
4000	47.8	0	62.1	-
5000	48.8	-	57.3	-
6300	48.2	-	53.9	-
8000	50.4	-	49.9	-
10000	52.1	-	45.1	-
Ratings	STC 39	25	IIC 23	25

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	S5237.02			
Test Date	5/7/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90	ASTM E492	ASTM E3207	ASTM E3222
Assembly	Engineered Wood, 3/8 (10 mm) REGUPOL sonus core 5, 3/16 (5 mm) Concrete, 3" (76 mm) REGUPOL sonus curve, 1" (25 mm) 3-Ply CLT, 4-1/8" (105 mm)			
Predicted Ratings	STC 55	IIC 57	LIIC 67	HIIC 70
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

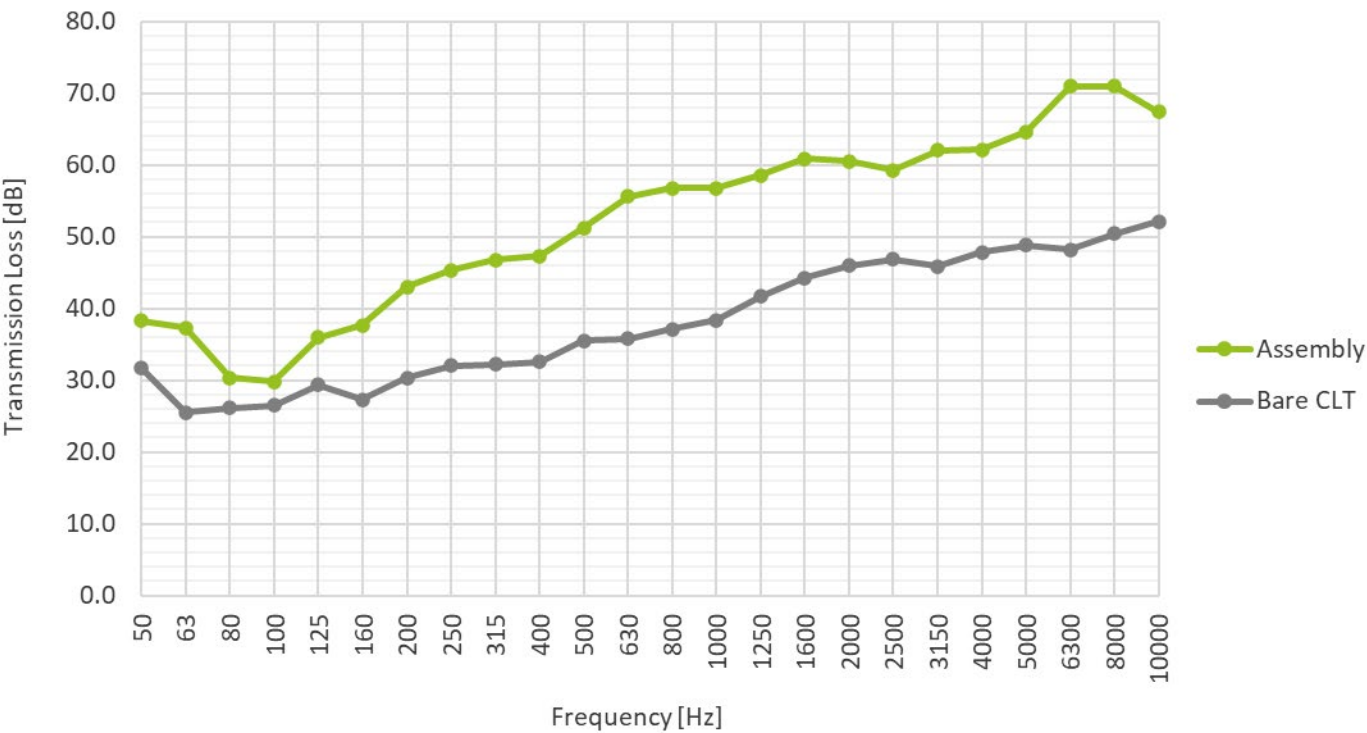
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TEST REPORT

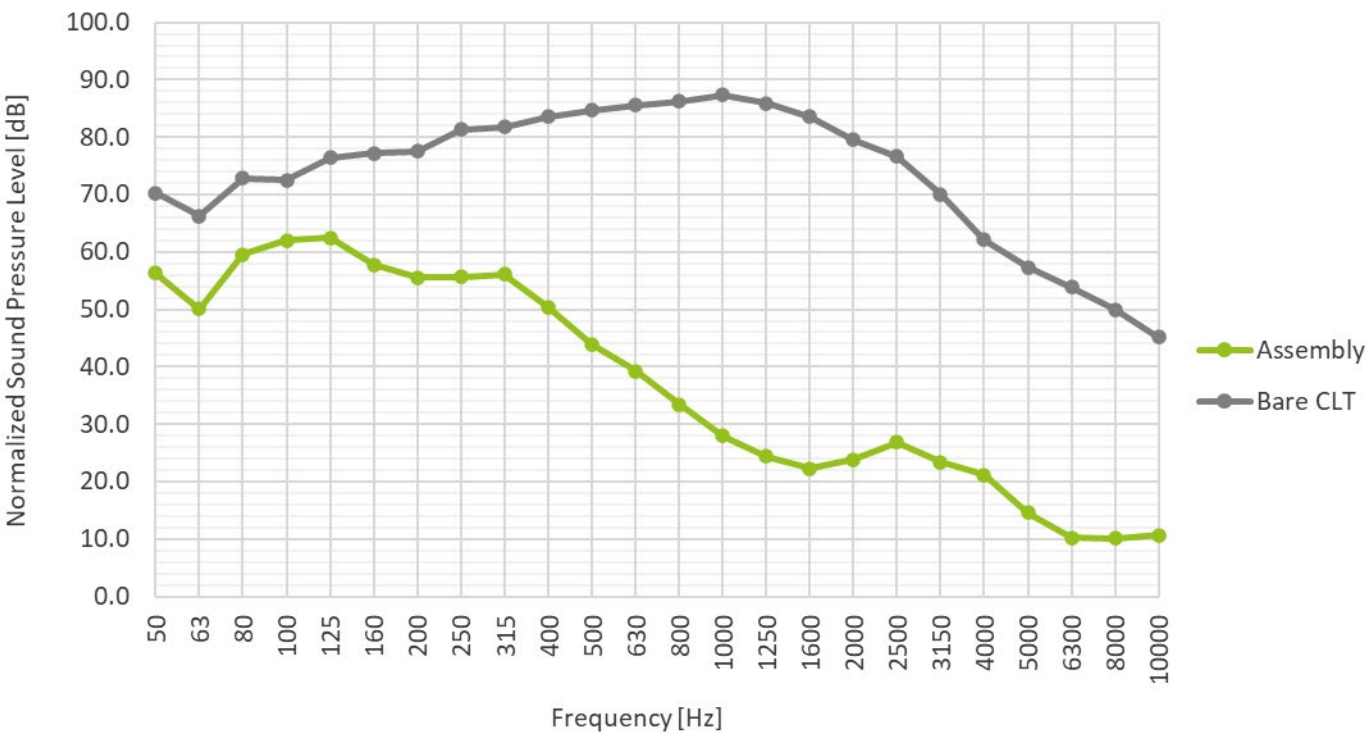
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	S5237.02			
Test Date	5/7/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3207, ASTM E3222			
Assembly	3-Ply CLT, REGUPOL sonus curve 25 , 3" Concrete, REGUPOL sonus core 5 , Engineered Wood			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	38.3	-	56.3	-
63	37.3	-	50.1	-
80	30.3	-	59.5	-
100	29.8	-	62.0	7
125	36.0	3	62.5	8
160	37.7	4	57.8	3
200	43.0	2	55.5	1
250	45.3	3	55.6	1
315	46.8	4	56.1	1
400	47.3	7	50.4	0
500	51.2	4	43.9	0
630	55.6	0	39.2	0
800	56.8	0	33.4	0
1000	56.8	1	28.0	0
1250	58.6	0	24.4	0
1600	60.9	0	22.3	0
2000	60.5	0	23.8	0
2500	59.3	0	26.9	0
3150	62.0	0	23.4	0
4000	62.1	0	21.1	-
5000	64.6	-	14.6	-
6300	71.0	-	10.2	-
8000	71.0	-	10.1	-
10000	67.4	-	10.7	-
Ratings	STC 55	28	IIC 57	21

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	S5237.00			
Test Date	5/4/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3207, ASTM E3222			
Assembly	3-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	31.7	-	70.3	-
63	25.5	-	66.3	-
80	26.1	-	72.8	-
100	26.5	-	72.5	0
125	29.4	0	76.4	0
160	27.3	0	77.2	0
200	30.3	0	77.5	0
250	32.0	0	81.3	0
315	32.2	3	81.8	0
400	32.6	5	83.6	0
500	35.5	4	84.7	0
630	35.8	4	85.6	0
800	37.1	4	86.2	1
1000	38.4	4	87.4	3
1250	41.7	1	85.9	5
1600	44.3	0	83.5	5
2000	46.0	0	79.5	5
2500	46.9	0	76.6	5
3150	45.9	0	70.0	1
4000	47.8	0	62.1	-
5000	48.8	-	57.3	-
6300	48.2	-	53.9	-
8000	50.4	-	49.9	-
10000	52.1	-	45.1	-
Ratings	STC 39	25	IIC 23	25

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	S5237.10			
Test Date	5/7/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90	ASTM E492	ASTM E3207	ASTM E3222
Assembly	Engineered Wood, 3/8" (10 mm) REGUPOL sonus core 5, 3/16" (5 mm) Concrete, 3" (76 mm) REGUPOL sonus curve 50, 2" (50 mm) 3-Ply CLT, 4-1/8" (105 mm)			
Predicted Ratings	STC 59	IIC 58	LIIC 58	HIIC 65
Detail				

Please contact us to request a copy of the official test report from Intertek.

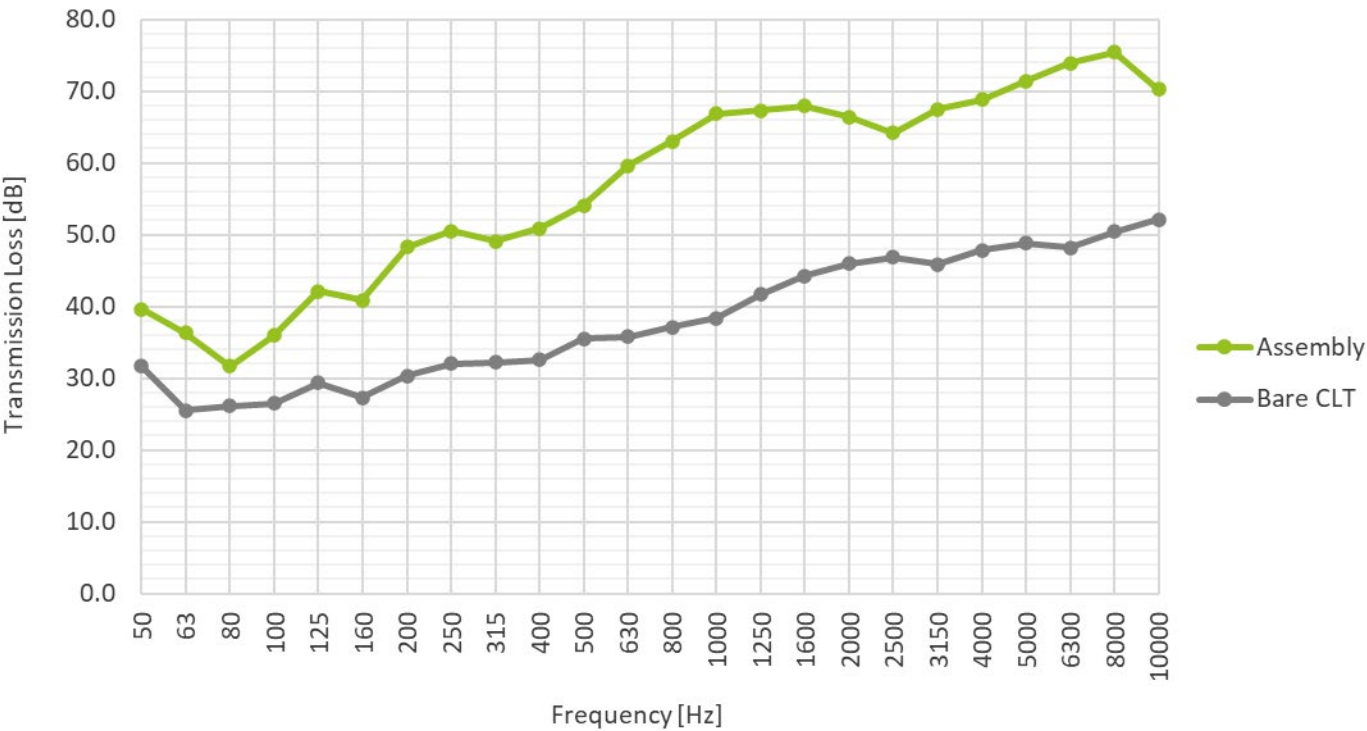
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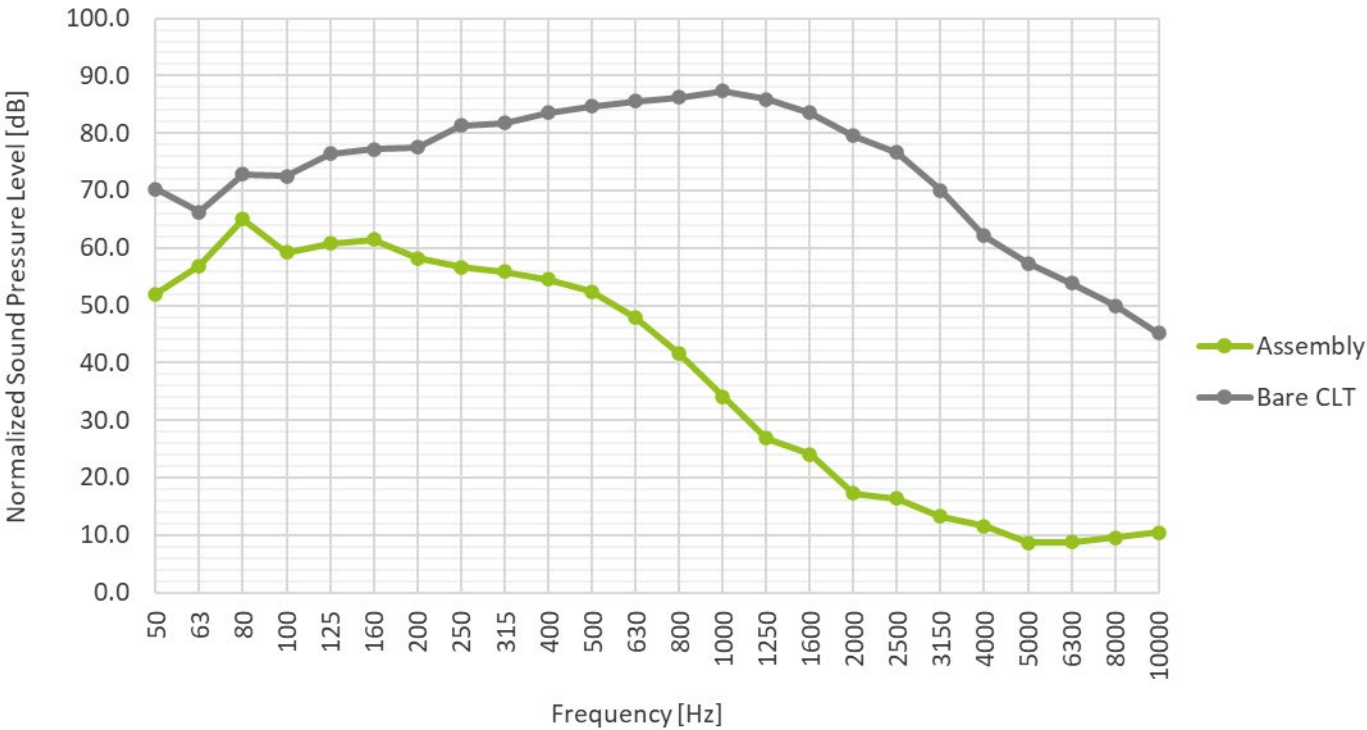
TEST REPORT

ACOUSTICAL PERFORMANCE

STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	S5237.10			
Test Date	5/7/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3207, ASTM E3222			
Assembly	3-Ply CLT, REGUPOL sonus curve 50 , 3" Concrete, REGUPOL sonus core 5 , Engineered Hardwood			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	39.6	-	52.0	-
63	36.3	-	56.9	-
80	31.7	-	65.0	-
100	36.0	-	59.2	5
125	42.1	1	60.8	7
160	40.9	5	61.5	7
200	48.3	1	58.2	4
250	50.5	1	56.7	3
315	49.1	6	55.9	2
400	50.9	7	54.5	1
500	54.1	5	52.4	0
630	59.6	0	47.8	0
800	63.0	0	41.6	0
1000	66.9	0	34.1	0
1250	67.3	0	26.9	0
1600	67.9	0	24.1	0
2000	66.4	0	17.2	0
2500	64.2	0	16.3	0
3150	67.5	0	13.2	0
4000	68.8	0	11.6	-
5000	71.4	-	8.7	-
6300	73.9	-	8.8	-
8000	75.4	-	9.5	-
10000	70.3	-	10.4	-
Ratings	STC 59	26	IIC 58	29

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	S5237.00			
Test Date	5/4/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3207, ASTM E3222			
Assembly	3-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	31.7	-	70.3	-
63	25.5	-	66.3	-
80	26.1	-	72.8	-
100	26.5	-	72.5	0
125	29.4	0	76.4	0
160	27.3	0	77.2	0
200	30.3	0	77.5	0
250	32.0	0	81.3	0
315	32.2	3	81.8	0
400	32.6	5	83.6	0
500	35.5	4	84.7	0
630	35.8	4	85.6	0
800	37.1	4	86.2	1
1000	38.4	4	87.4	3
1250	41.7	1	85.9	5
1600	44.3	0	83.5	5
2000	46.0	0	79.5	5
2500	46.9	0	76.6	5
3150	45.9	0	70.0	1
4000	47.8	0	62.1	-
5000	48.8	-	57.3	-
6300	48.2	-	53.9	-
8000	50.4	-	49.9	-
10000	52.1	-	45.1	-
Ratings	STC 39	25	IIC 23	25

HARDWOOD FLOOR SURFACE

5 ply 140mm CLT PRODUCT COMPARISON

3” Concrete slab over Sonus curve with hardwood

REGUPOL sonus curve is a high-performance acoustic dimpled rubber floor underlayment designed to reduce impact noise from footfall noise transmission and impact sound in Mass Timber Frame Construction. Made in the USA from recycled cars & truck tires are green circle certified for recycled content and qualify for up to 8 LEED points.



Detail	Assembly	Acoustic Rating	
	Concrete slab 3” sonus curve 10, (10 mm) CLT – 5 ply 140mm Sonus core 3 with hardwood	IIC 55 HIIC 60 LIIC 66	STC 50
	Concrete slab 3” sonus curve 17, (17 mm) CLT – 5 ply 140mm Sonus core 3 with hardwood	IIC 55 HIIC 61 LIIC 62	STC 52
	Concrete slab 3” sonus curve 25, (25 mm) CLT – 5 ply 140mm Sonus core 3 with hardwood	IIC 57 HIIC 66 LIIC 65	STC 54
	Concrete slab 3” sonus curve 50, (50 mm) CLT – 5 ply 140mm Sonus core 3 with hardwood	IIC 63 HIIC 72 LIIC 69	STC 57

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4267.12			
Test Date	5/29/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Engineered Hardwood sonus core 3, 3 mm Concrete Topping, 3" sonus curve 10, 10 mm Nordic 5-Ply CLT, 140 mm			
Ratings	STC 50	IIC 55	HIIC 60	LIIC 66
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

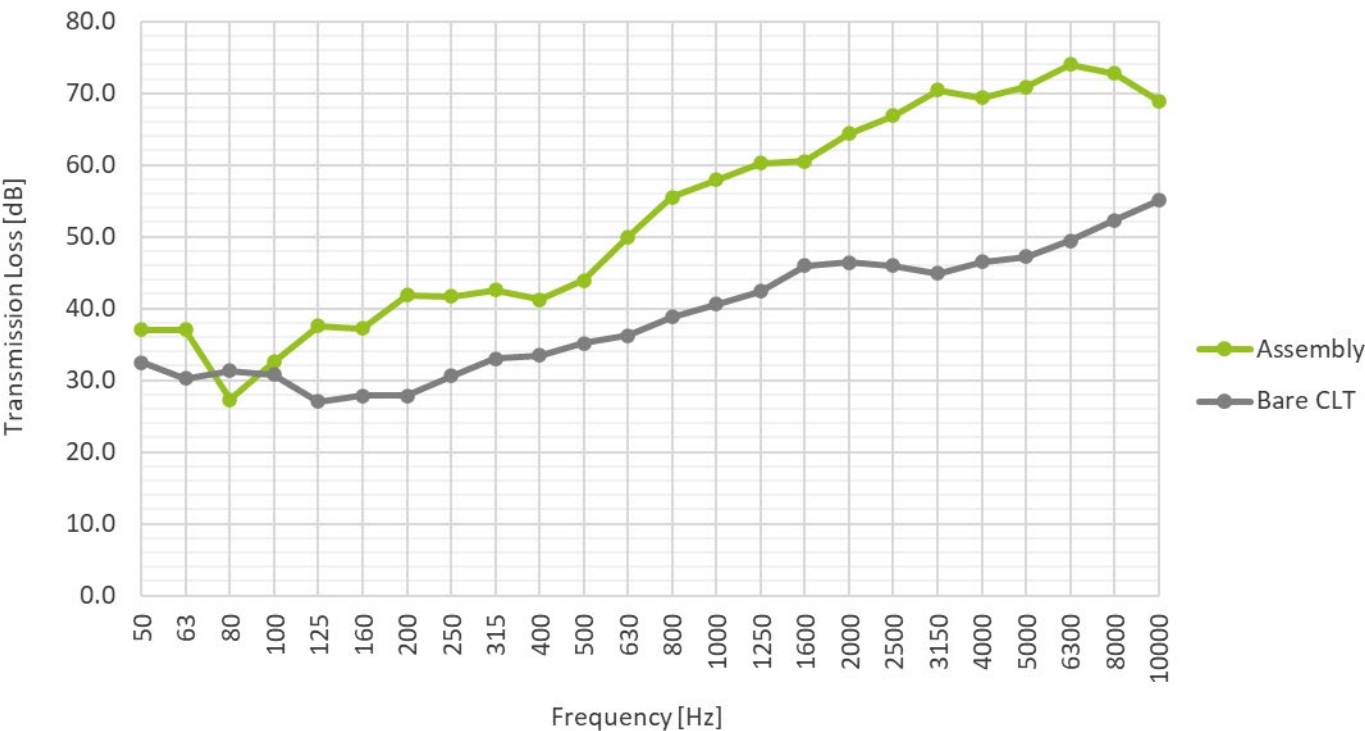
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TEST REPORT

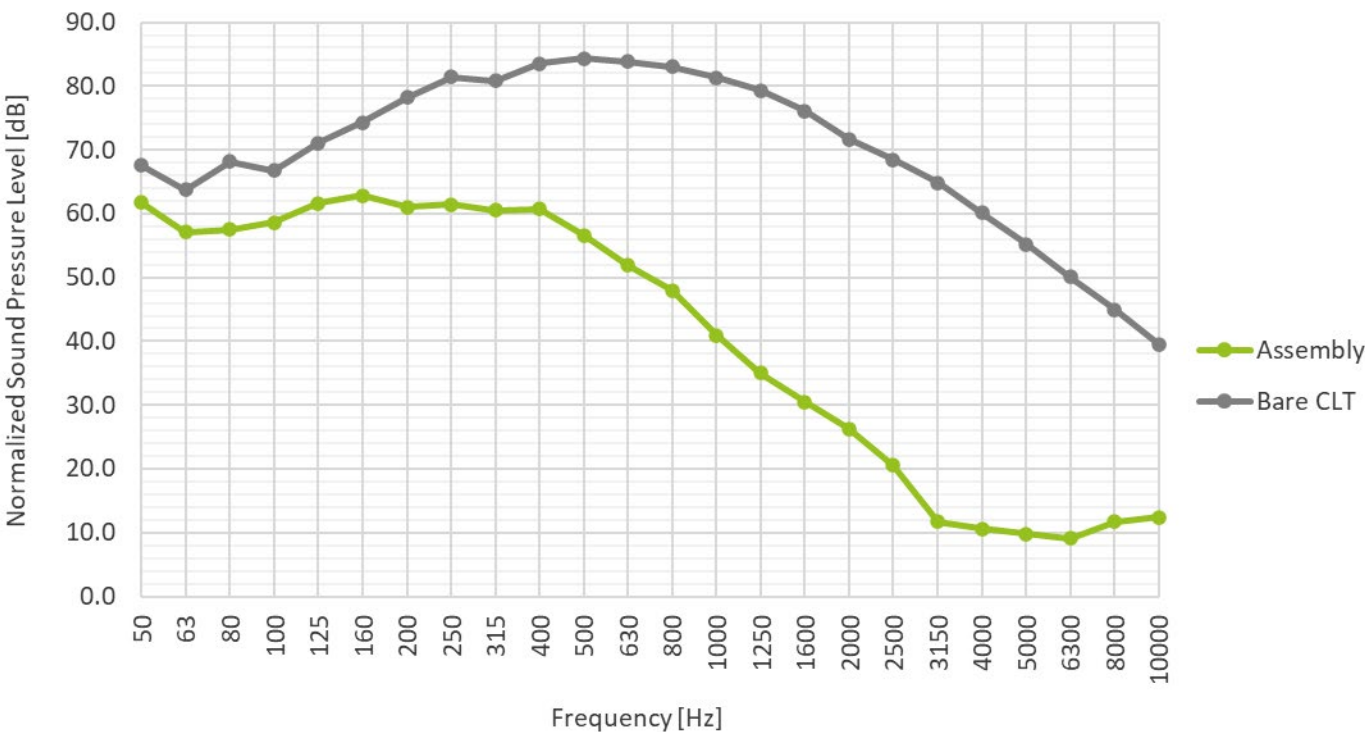
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.12			
Test Date	5/29/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Engineered Hardwood, sonus core 3 , 3" Concrete Topping, sonus curve 10 , 140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	37.0	-	61.7	-
63	37.0	-	57.1	-
80	27.3	-	57.5	-
100	32.6	-	58.6	2
125	37.6	0	61.6	5
160	37.2	0	62.8	6
200	41.9	0	61.0	4
250	41.7	1	61.4	4
315	42.6	3	60.5	4
400	41.2	8	60.7	5
500	43.9	6	56.6	2
630	50.0	1	51.9	0
800	55.5	0	48.0	0
1000	57.9	0	40.9	0
1250	60.3	0	35.0	0
1600	60.5	0	30.5	0
2000	64.4	0	26.3	0
2500	66.9	0	20.5	0
3150	70.4	0	11.7	0
4000	69.4	0	10.6	-
5000	70.9	-	9.8	-
6300	74.0	-	9.1	-
8000	72.8	-	11.7	-
10000	68.9	-	12.4	-
Ratings	STC 50	19	IIC 55	32

TEST REPORT

ACOUSTICAL PERFORMANCE



Bare Nordic 5-Ply CLT Test Data Included for Comparison

Test Number	N/A			
Test Date	N/A			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.5	-	67.6	-
63	30.3	-	63.8	-
80	31.3	-	68.2	-
100	30.8	-	66.8	0
125	27.0	0	71.1	0
160	27.9	0	74.3	0
200	27.8	2	78.3	0
250	30.6	2	81.4	0
315	33.0	3	80.9	0
400	33.5	6	83.5	2
500	35.2	5	84.3	3
630	36.3	5	83.8	4
800	38.8	3	83.0	4
1000	40.6	2	81.3	3
1250	42.4	2	79.4	4
1600	46.0	0	76.1	4
2000	46.4	0	71.7	3
2500	46.0	0	68.4	2
3150	44.9	0	64.9	2
4000	46.5	0	60.2	-
5000	47.2	-	55.2	-
6300	49.4	-	50.1	-
8000	52.3	-	45.0	-
10000	55.1	-	39.5	-
Ratings	STC 40	30	IIC 29	31

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4267.03			
Test Date	5/28/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Engineered Hardwood sonus core 3, 3 mm Concrete Topping, 3" sonus curve 17, 17 mm Nordic 5-Ply CLT, 140 mm			
Ratings	STC 52	IIC 55	HIIC 61	LIIC 62
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

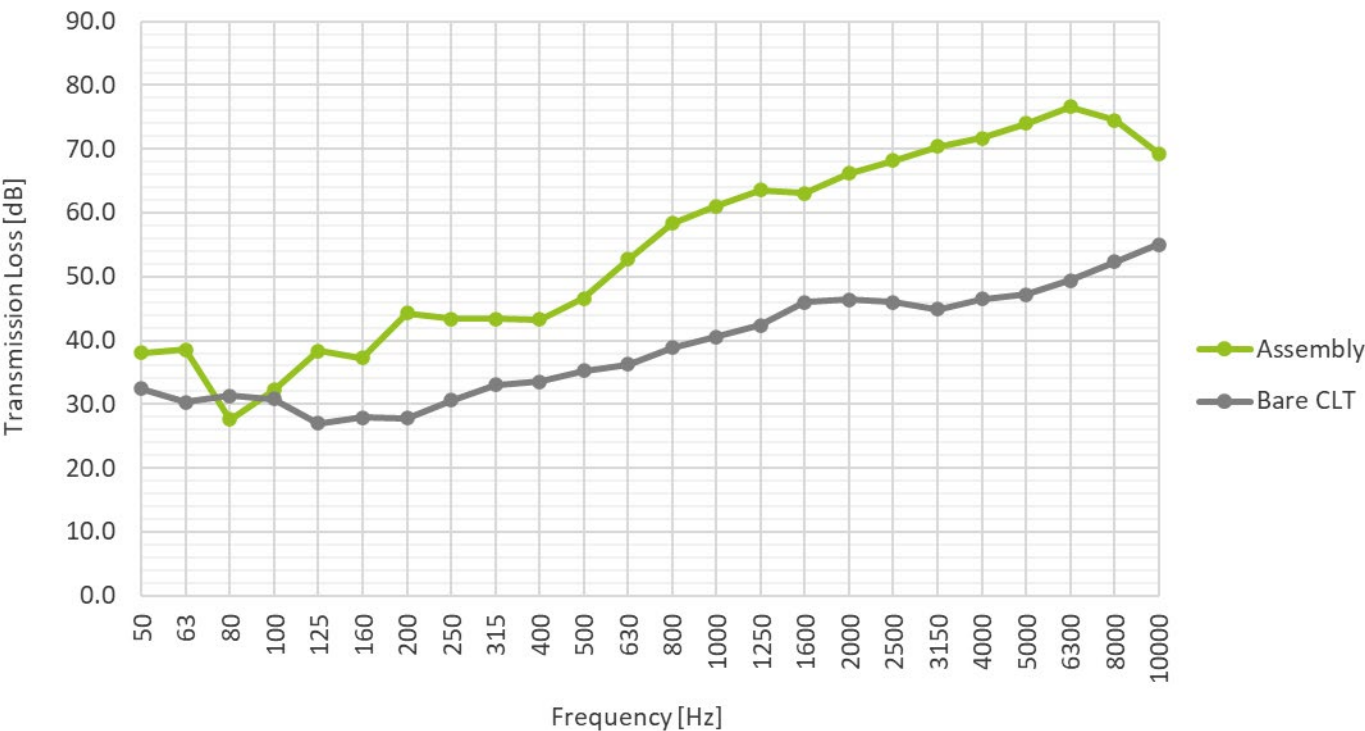
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TEST REPORT

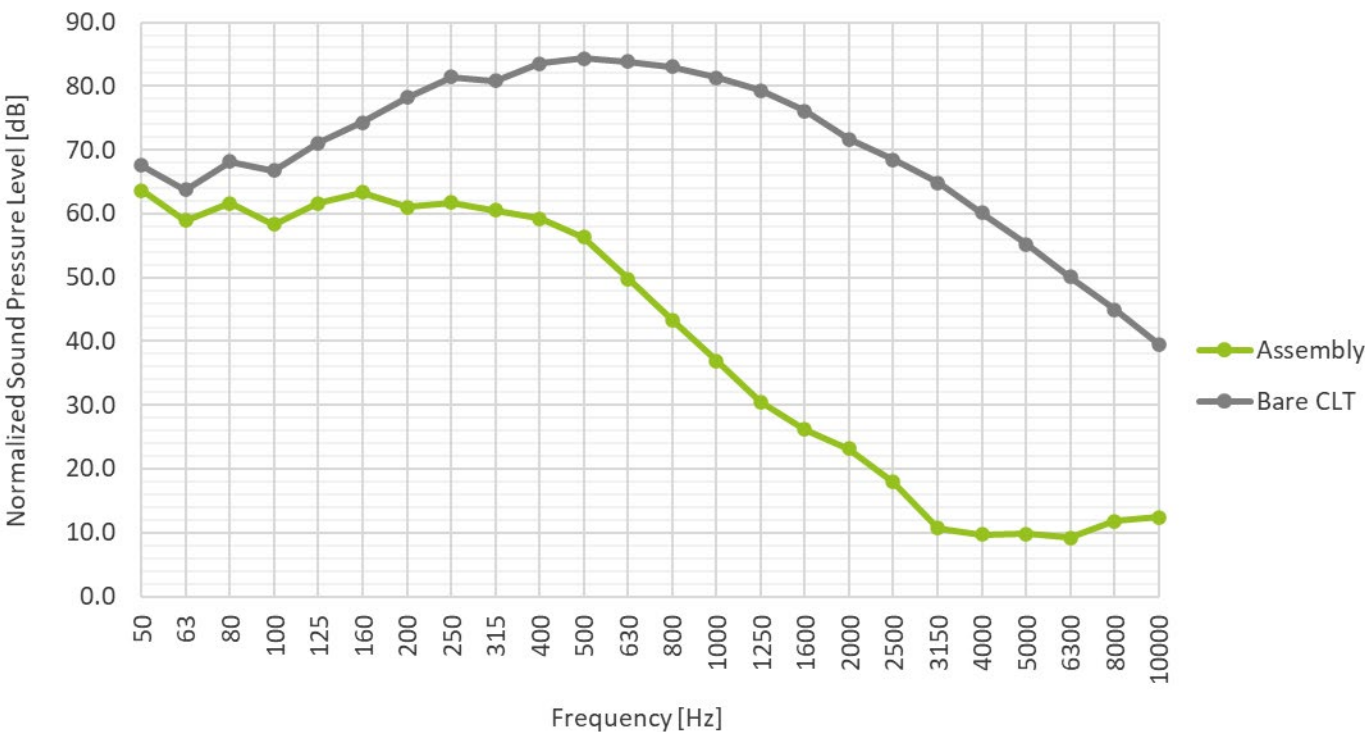
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.03			
Test Date	5/28/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Engineered Hardwood, sonus core 3 , 3" Concrete Topping, sonus curve 17 , 140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	38.1	-	63.6	-
63	38.6	-	58.9	-
80	27.6	-	61.6	-
100	32.2	-	58.3	1
125	38.4	0	61.6	5
160	37.2	2	63.3	6
200	44.3	0	61.0	4
250	43.4	2	61.7	5
315	43.4	5	60.5	3
400	43.3	8	59.2	3
500	46.6	5	56.3	1
630	52.7	0	49.8	0
800	58.3	0	43.4	0
1000	61.1	0	36.9	0
1250	63.6	0	30.5	0
1600	63.1	0	26.2	0
2000	66.2	0	23.2	0
2500	68.2	0	17.9	0
3150	70.4	0	10.7	0
4000	71.7	0	9.7	-
5000	74.0	-	9.8	-
6300	76.6	-	9.2	-
8000	74.5	-	11.8	-
10000	69.3	-	12.4	-
Ratings	STC 52	22	IIC 55	28

TEST REPORT

ACOUSTICAL PERFORMANCE



Bare Nordic 5-Ply CLT Test Data Included for Comparison

Test Number	N/A			
Test Date	N/A			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.5	-	67.6	-
63	30.3	-	63.8	-
80	31.3	-	68.2	-
100	30.8	-	66.8	0
125	27.0	0	71.1	0
160	27.9	0	74.3	0
200	27.8	2	78.3	0
250	30.6	2	81.4	0
315	33.0	3	80.9	0
400	33.5	6	83.5	2
500	35.2	5	84.3	3
630	36.3	5	83.8	4
800	38.8	3	83.0	4
1000	40.6	2	81.3	3
1250	42.4	2	79.4	4
1600	46.0	0	76.1	4
2000	46.4	0	71.7	3
2500	46.0	0	68.4	2
3150	44.9	0	64.9	2
4000	46.5	0	60.2	-
5000	47.2	-	55.2	-
6300	49.4	-	50.1	-
8000	52.3	-	45.0	-
10000	55.1	-	39.5	-
Ratings	STC 40	30	IIC 29	31

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4267.17			
Test Date	5/29/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Engineered Hardwood sonus core 3, 3 mm Concrete Topping, 3" sonus curve 25, 25 mm Nordic 5-Ply CLT, 140 mm			
Ratings	STC 54	IIC 57	HIIC 66	LIIC 65
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

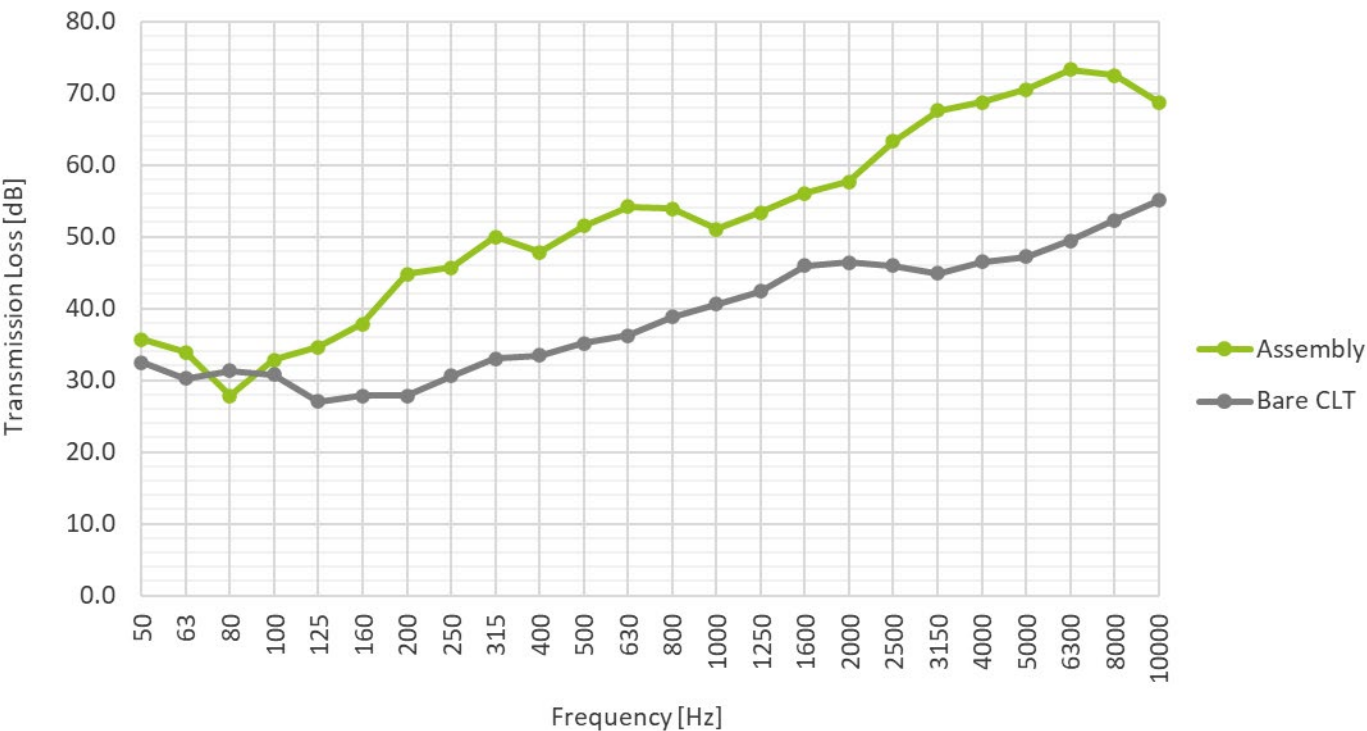
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TEST REPORT

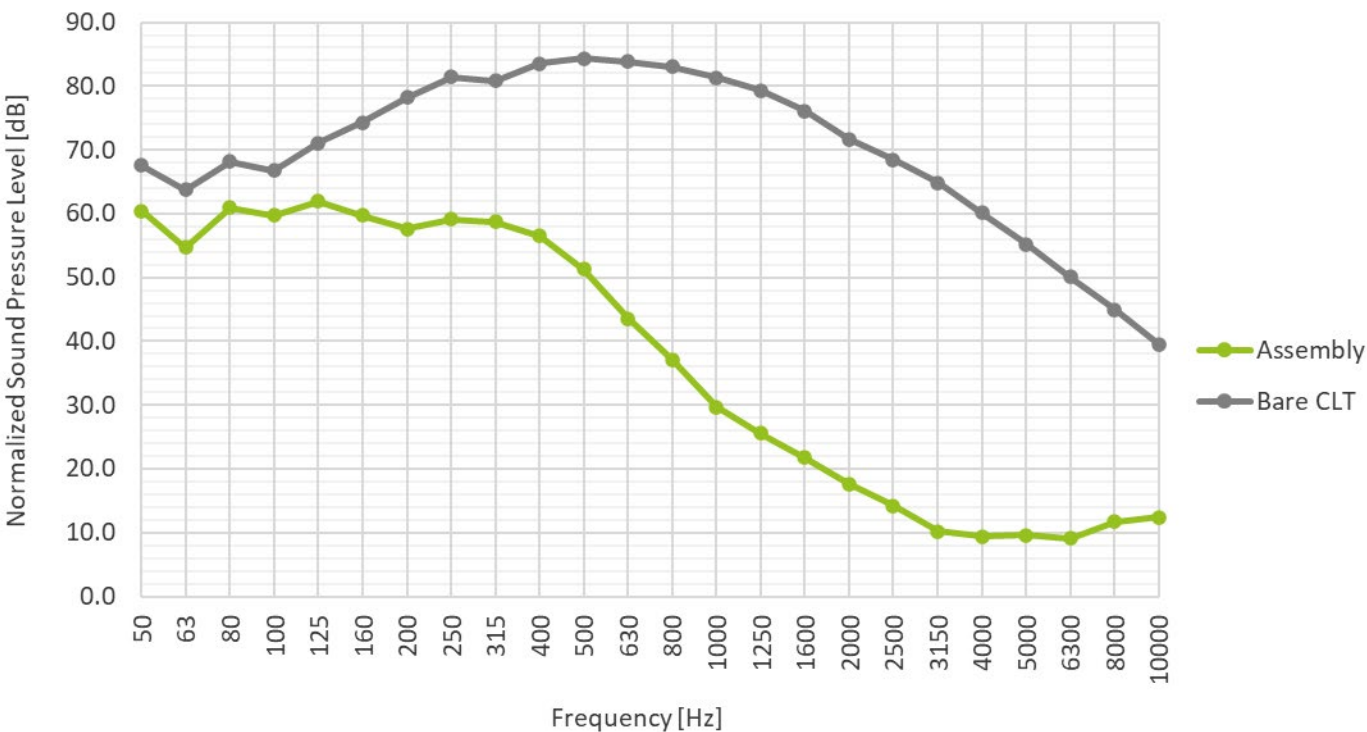
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.17			
Test Date	5/29/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Engineered Hardwood, sonus core 3 , 3" Concrete Topping, sonus curve 25 , 140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	36.2	-	61.5	-
63	35.7	-	56.6	-
80	27.1	-	61.9	-
100	32.2	-	60.3	6
125	36.1	2	61.6	8
160	37.4	4	59.4	5
200	44.6	0	57.4	3
250	44.3	3	58.0	4
315	47.3	3	57.5	4
400	44.8	8	54.7	2
500	46.5	8	48.8	0
630	51.9	3	42.0	0
800	57.8	0	33.9	0
1000	60.5	0	26.0	0
1250	62.6	0	21.6	0
1600	65.3	0	16.6	0
2000	65.6	0	12.2	0
2500	67.2	0	8.4	0
3150	69.6	0	5.8	0
4000	71.2	0	7.1	-
5000	71.2	-	8.7	-
6300	73.6	-	8.8	-
8000	71.9	-	11.7	-
10000	68.3	-	12.3	-
Ratings	STC 54	30	IIC 57	30

TEST REPORT

ACOUSTICAL PERFORMANCE



Bare Nordic 5-Ply CLT Test Data Included for Comparison

Test Number	N/A			
Test Date	N/A			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.5	-	67.6	-
63	30.3	-	63.8	-
80	31.3	-	68.2	-
100	30.8	-	66.8	0
125	27.0	0	71.1	0
160	27.9	0	74.3	0
200	27.8	2	78.3	0
250	30.6	2	81.4	0
315	33.0	3	80.9	0
400	33.5	6	83.5	2
500	35.2	5	84.3	3
630	36.3	5	83.8	4
800	38.8	3	83.0	4
1000	40.6	2	81.3	3
1250	42.4	2	79.4	4
1600	46.0	0	76.1	4
2000	46.4	0	71.7	3
2500	46.0	0	68.4	2
3150	44.9	0	64.9	2
4000	46.5	0	60.2	-
5000	47.2	-	55.2	-
6300	49.4	-	50.1	-
8000	52.3	-	45.0	-
10000	55.1	-	39.5	-
Ratings	STC 40	30	IIC 29	31

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4267.22			
Test Date	5/30/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Engineered Hardwood sonus core 3, 3 mm Concrete Topping, 3" sonus curve 50, 50 mm Nordic 5-Ply CLT, 140 mm			
Ratings	STC 57	IIC 63	HIIC 72	LIIC 69

Detail



Please contact us to request a copy of the official test report from Intertek.

Disclaimer

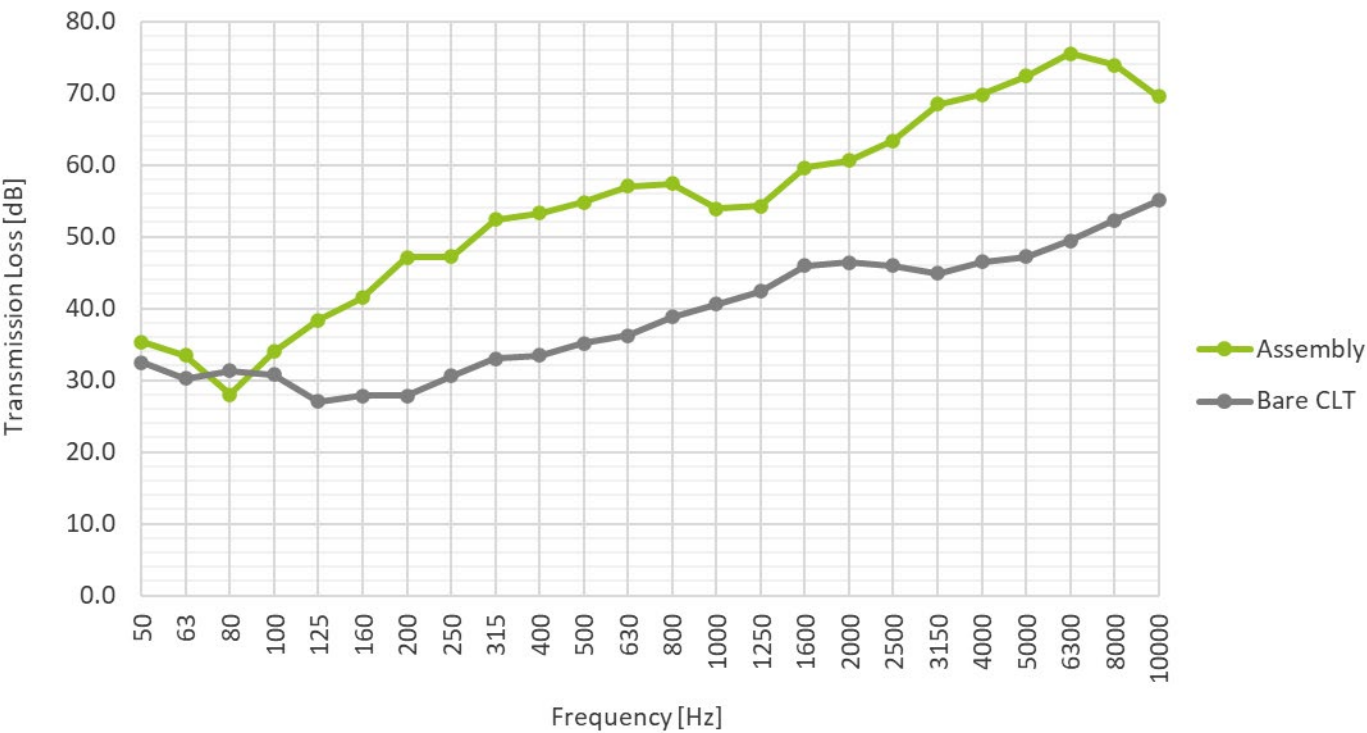
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TEST REPORT

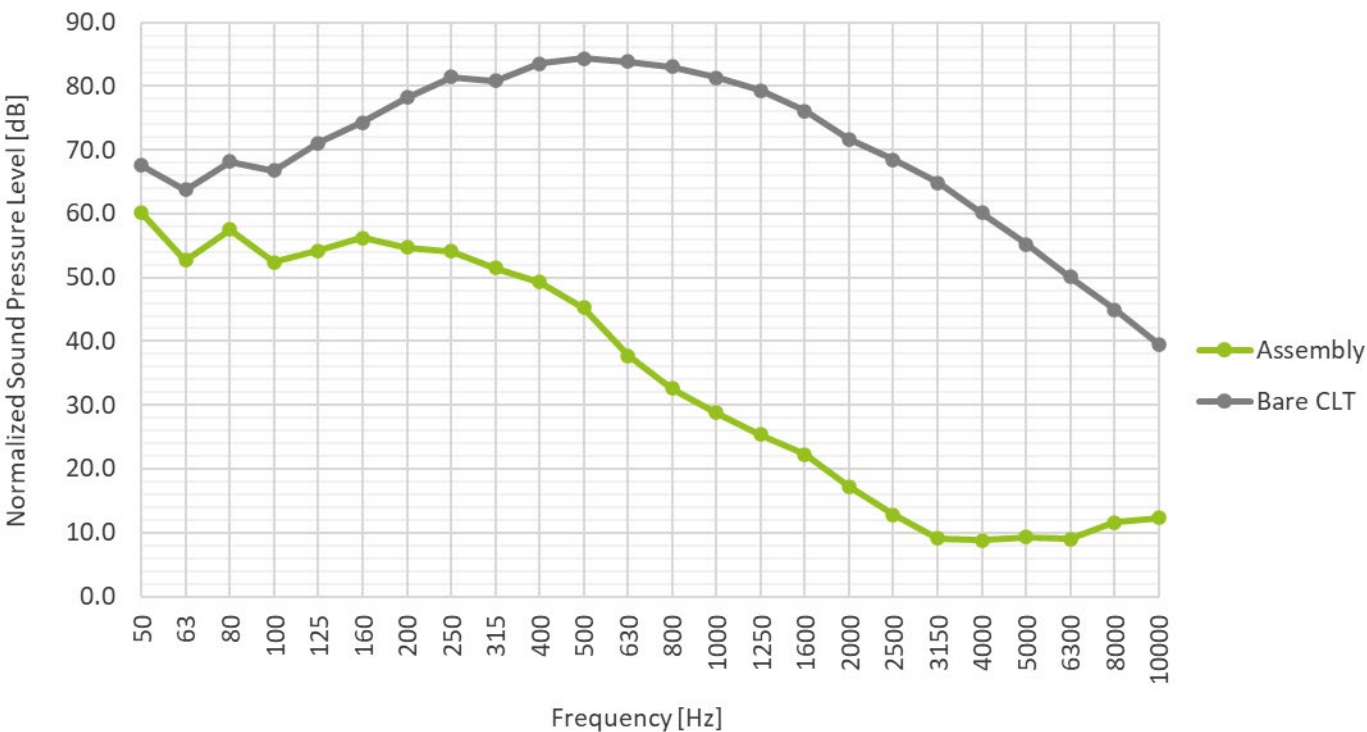
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.22			
Test Date	5/30/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Engineered Hardwood, sonus core 3 , 3" Concrete Topping, sonus curve 50 , 140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	35.3	-	60.1	-
63	33.5	-	52.7	-
80	28.0	-	57.5	-
100	34.0	-	52.4	3
125	38.4	3	54.2	5
160	41.5	3	56.2	7
200	47.1	0	54.7	6
250	47.2	3	54.1	5
315	52.4	1	51.5	3
400	53.3	3	49.3	1
500	54.8	2	45.3	0
630	57.0	1	37.7	0
800	57.4	2	32.6	0
1000	53.9	6	28.8	0
1250	54.3	7	25.4	0
1600	59.6	1	22.3	0
2000	60.6	0	17.2	0
2500	63.4	0	12.8	0
3150	68.5	0	9.1	0
4000	69.8	0	8.8	-
5000	72.4	-	9.3	-
6300	75.5	-	9.0	-
8000	73.9	-	11.6	-
10000	69.5	-	12.3	-
Ratings	STC 57	32	IIC 63	30

TEST REPORT

ACOUSTICAL PERFORMANCE



Bare Nordic 5-Ply CLT Test Data Included for Comparison

Test Number	N/A			
Test Date	N/A			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.5	-	67.6	-
63	30.3	-	63.8	-
80	31.3	-	68.2	-
100	30.8	-	66.8	0
125	27.0	0	71.1	0
160	27.9	0	74.3	0
200	27.8	2	78.3	0
250	30.6	2	81.4	0
315	33.0	3	80.9	0
400	33.5	6	83.5	2
500	35.2	5	84.3	3
630	36.3	5	83.8	4
800	38.8	3	83.0	4
1000	40.6	2	81.3	3
1250	42.4	2	79.4	4
1600	46.0	0	76.1	4
2000	46.4	0	71.7	3
2500	46.0	0	68.4	2
3150	44.9	0	64.9	2
4000	46.5	0	60.2	-
5000	47.2	-	55.2	-
6300	49.4	-	50.1	-
8000	52.3	-	45.0	-
10000	55.1	-	39.5	-
Ratings	STC 40	30	IIC 29	31

HARDWOOD FLOOR SURFACE

5 ply 140mm CLT PRODUCT COMPARISON



EXACOR Dry Screed over Sonus curve with hardwood

REGUPOL sonus curve is a high-performance acoustic dimpled rubber floor underlayment designed to reduce impact noise from footfall noise transmission and impact sound in Mass Timber Frame Construction. EXACOR is a ½" dry screed board that weighs 2.7lbs PSF and is glued and screwed to each other. Tested in 2 or 3 layers 1" or 1.5" thickness.



Detail	Assembly	Acoustic Rating	
	EXACOR dry screed 1" sonus curve 25, (25 mm) CLT – 5 ply 140mm sonus core 3 with hardwood	IIC 52 HIIC 69 LIIC 50	STC 52
	EXACOR dry screed 1.5" sonus curve 50, (50 mm) CLT – 5 ply 140mm sonus core 3 with hardwood	IIC 53 HIIC 69 LIIC 55	STC 53
	EXACOR dry screed 1.5" sonus curve 50, (50 mm) CLT – 5 ply 140mm sonus core 3 with hardwood	IIC 55 HIIC 73 LIIC 53	STC 59
	EXACOR dry screed 1.5" sonus curve 50, (50 mm) CLT – 5 ply 140mm sonus core 10 with hardwood	IIC 56 HIIC 77 LIIC 51	STC 58

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.34			
Test Date	5/31/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Hardwood sonus core 3, 3 mm EXACOR, 1" sonus curve 25, 25 mm Nordic 5-Ply CLT, 140 mm			
Ratings	STC 52	IIC 52	HIIC 69	LIIC 50
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

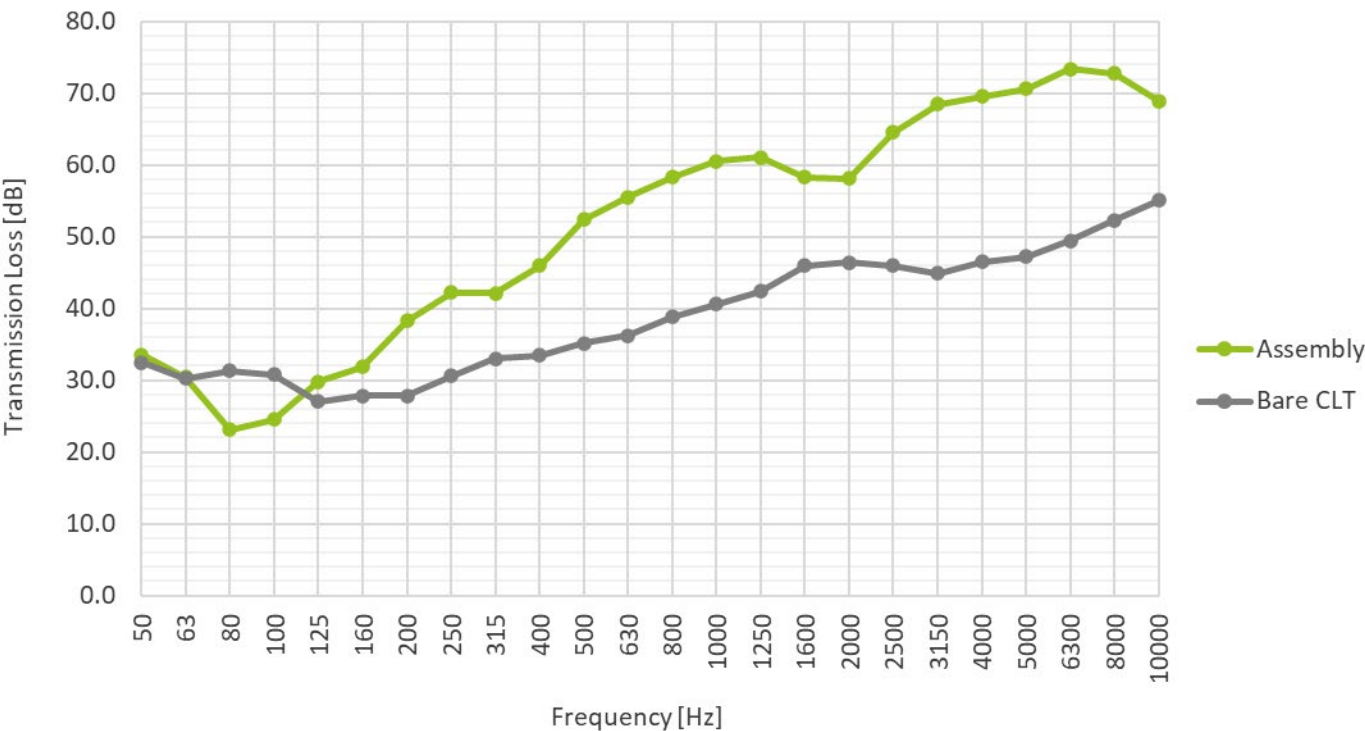
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TEST REPORT

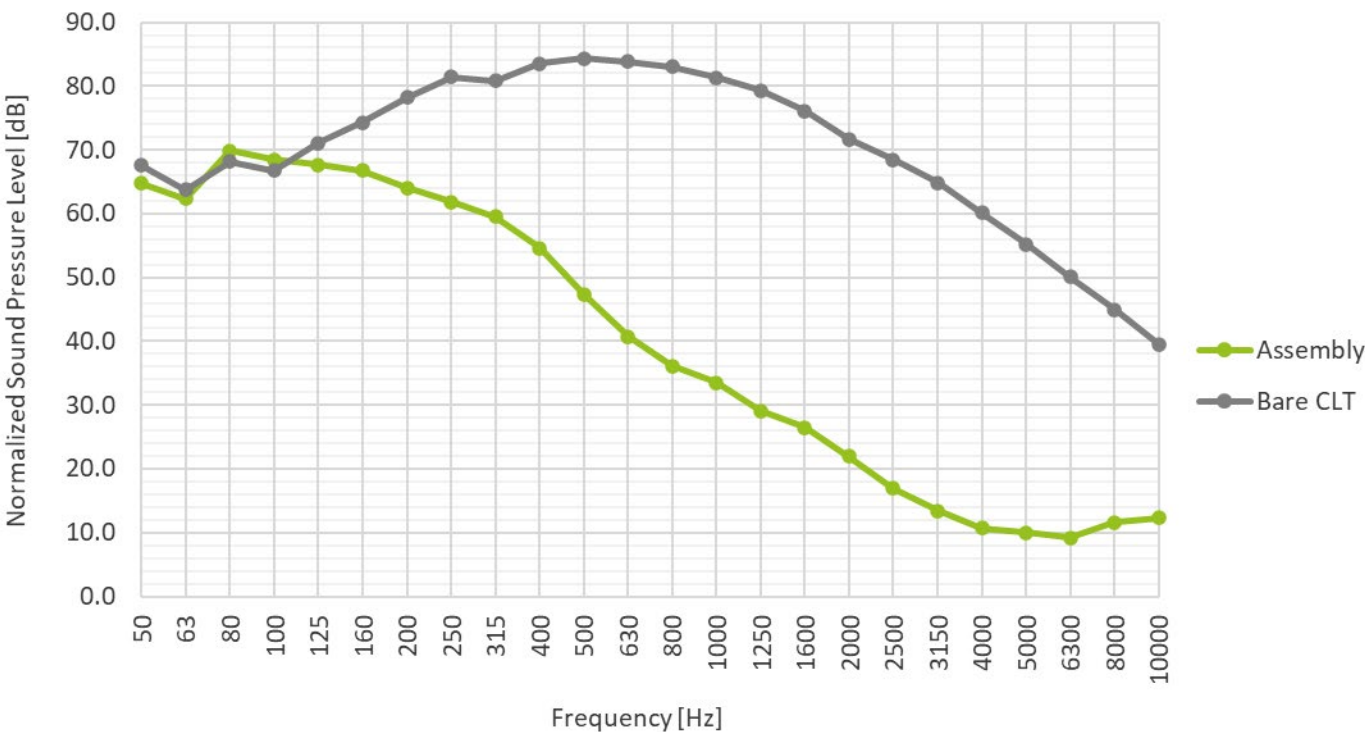
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.34			
Test Date	5/31/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Hardwood, sonus core 3 , 1" EXACOR, sonus curve 25 , 140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	33.6	-	64.7	-
63	30.4	-	62.3	-
80	23.1	-	69.9	-
100	24.5	-	68.5	8
125	29.8	6	67.7	8
160	31.9	7	66.8	7
200	38.3	4	64.0	4
250	42.2	3	61.8	2
315	42.1	6	59.5	0
400	46.0	5	54.6	0
500	52.4	0	47.4	0
630	55.5	0	40.7	0
800	58.3	0	36.1	0
1000	60.5	0	33.5	0
1250	61.1	0	29.1	0
1600	58.3	0	26.5	0
2000	58.1	0	22.0	0
2500	64.5	0	16.9	0
3150	68.5	0	13.4	0
4000	69.5	0	10.7	-
5000	70.6	-	10.0	-
6300	73.4	-	9.2	-
8000	72.8	-	11.6	-
10000	68.9	-	12.3	-
Ratings	STC 52	31	IIC 52	29

TEST REPORT

ACOUSTICAL PERFORMANCE



Bare Nordic 5-Ply CLT Test Data Included for Comparison

Test Number	N/A			
Test Date	N/A			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.5	-	67.6	-
63	30.3	-	63.8	-
80	31.3	-	68.2	-
100	30.8	-	66.8	0
125	27.0	0	71.1	0
160	27.9	0	74.3	0
200	27.8	2	78.3	0
250	30.6	2	81.4	0
315	33.0	3	80.9	0
400	33.5	6	83.5	2
500	35.2	5	84.3	3
630	36.3	5	83.8	4
800	38.8	3	83.0	4
1000	40.6	2	81.3	3
1250	42.4	2	79.4	4
1600	46.0	0	76.1	4
2000	46.4	0	71.7	3
2500	46.0	0	68.4	2
3150	44.9	0	64.9	2
4000	46.5	0	60.2	-
5000	47.2	-	55.2	-
6300	49.4	-	50.1	-
8000	52.3	-	45.0	-
10000	55.1	-	39.5	-
Ratings	STC 40	30	IIC 29	31

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4267.30			
Test Date	5/31/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Hardwood sonus core 3, 3 mm EXACOR, 1-1/2" sonus curve 25, 25 mm Nordic 5-Ply CLT, 140 mm			
Ratings	STC 53	IIC 53	HIIC 69	LIIC 55
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

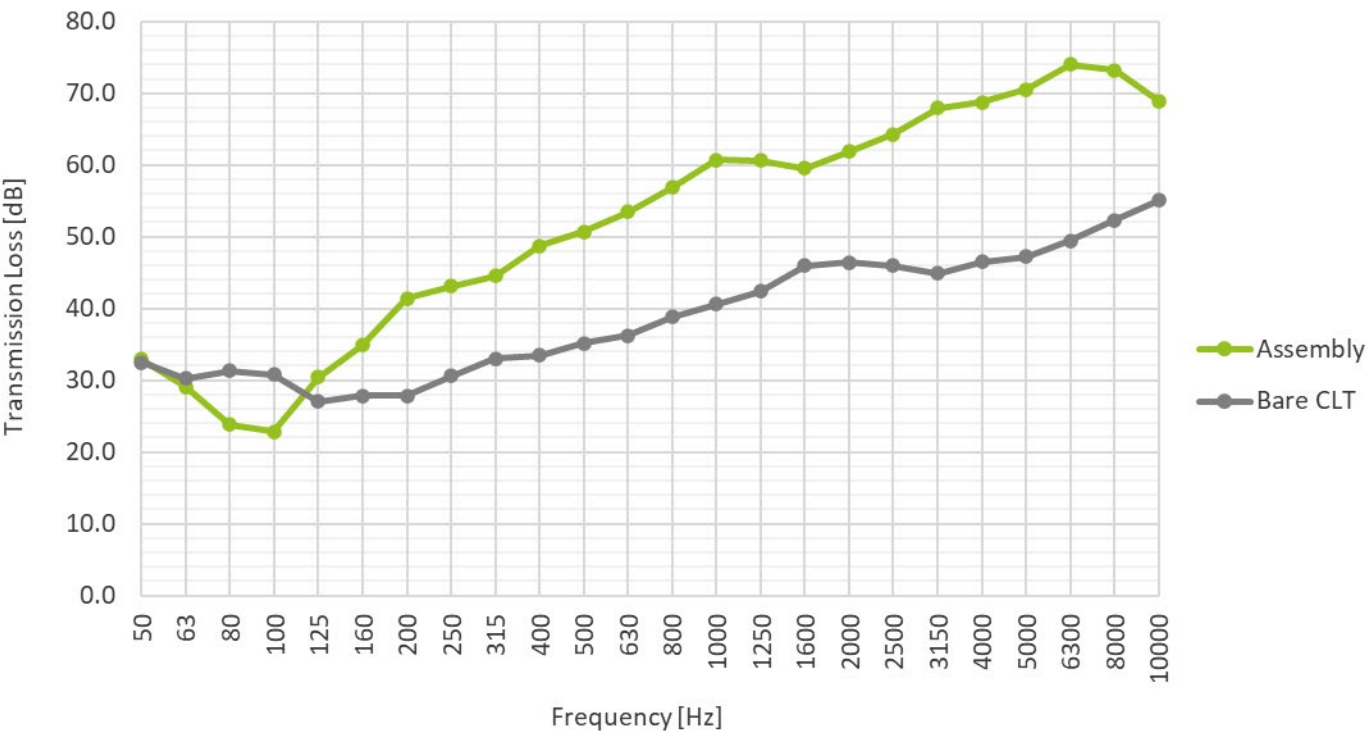
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TEST REPORT

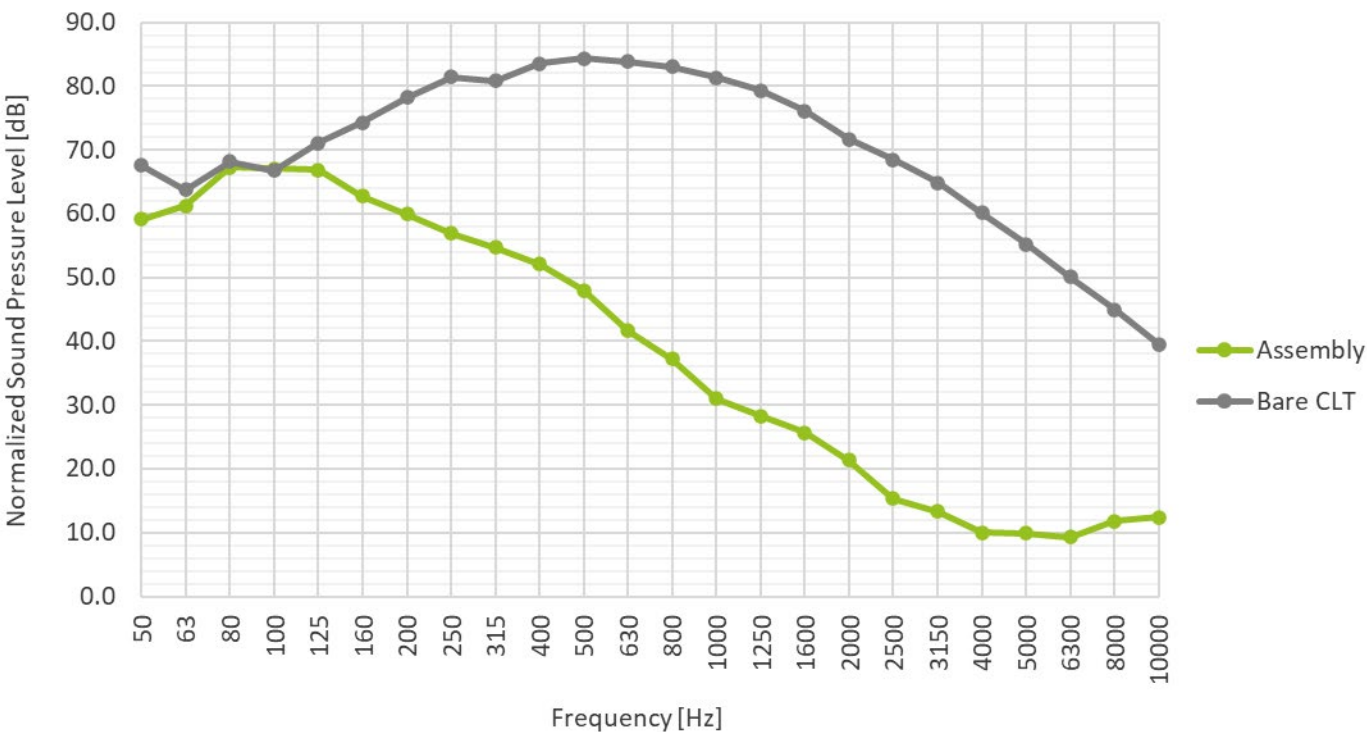
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.30			
Test Date	5/31/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Hardwood, sonus core 3 , 1-1/2" EXACOR, sonus curve 25 , 140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.9	-	59.1	-
63	29.1	-	61.2	-
80	23.8	-	67.3	-
100	22.8	-	67.1	8
125	30.4	7	66.9	8
160	34.9	5	62.7	4
200	41.4	2	59.9	1
250	43.1	3	56.9	0
315	44.5	5	54.7	0
400	48.7	3	52.1	0
500	50.7	2	48.0	0
630	53.5	0	41.6	0
800	56.9	0	37.2	0
1000	60.7	0	31.0	0
1250	60.6	0	28.3	0
1600	59.5	0	25.7	0
2000	61.9	0	21.3	0
2500	64.3	0	15.3	0
3150	67.9	0	13.3	0
4000	68.7	0	10.0	-
5000	70.5	-	9.9	-
6300	74.0	-	9.3	-
8000	73.2	-	11.8	-
10000	68.9	-	12.4	-
Ratings	STC 53	27	IIC 53	21

TEST REPORT

ACOUSTICAL PERFORMANCE



Bare Nordic 5-Ply CLT Test Data Included for Comparison

Test Number	N/A			
Test Date	N/A			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.5	-	67.6	-
63	30.3	-	63.8	-
80	31.3	-	68.2	-
100	30.8	-	66.8	0
125	27.0	0	71.1	0
160	27.9	0	74.3	0
200	27.8	2	78.3	0
250	30.6	2	81.4	0
315	33.0	3	80.9	0
400	33.5	6	83.5	2
500	35.2	5	84.3	3
630	36.3	5	83.8	4
800	38.8	3	83.0	4
1000	40.6	2	81.3	3
1250	42.4	2	79.4	4
1600	46.0	0	76.1	4
2000	46.4	0	71.7	3
2500	46.0	0	68.4	2
3150	44.9	0	64.9	2
4000	46.5	0	60.2	-
5000	47.2	-	55.2	-
6300	49.4	-	50.1	-
8000	52.3	-	45.0	-
10000	55.1	-	39.5	-
Ratings	STC 40	30	IIC 29	31

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4267.35			
Test Date	5/31/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Engineered Hardwood sonus core 3, 3 mm EXACOR, 1-1/2" sonus curve 50, 50 mm Nordic 5-Ply CLT, 140 mm			
Ratings	STC 59	IIC 55	HIIC 73	LIIC 53
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

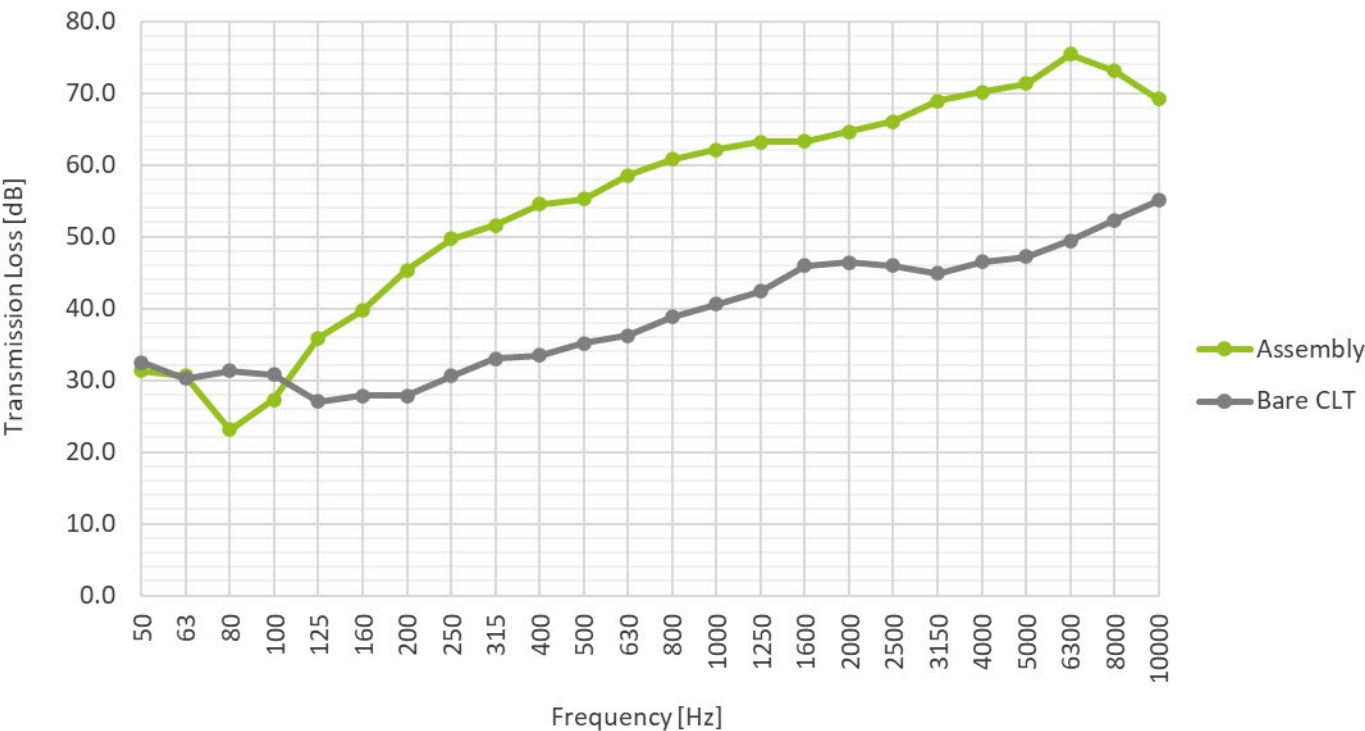
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TEST REPORT

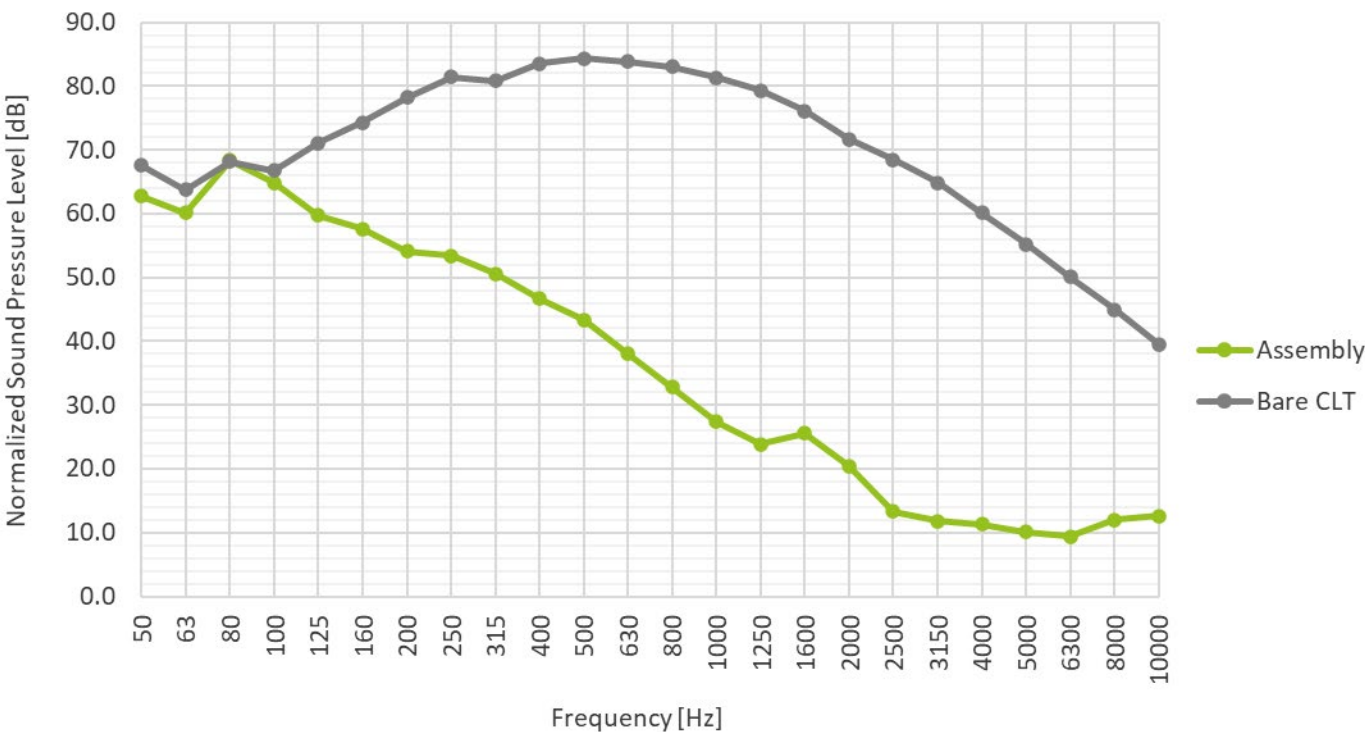
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.35			
Test Date	5/30/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Engineered Hardwood, sonus core 3 , 1-1/2" EXACOR, sonus curve 50 , 140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	31.3	-	62.7	-
63	30.6	-	60.1	-
80	23.1	-	68.4	-
100	27.3	-	64.9	8
125	35.9	7	59.7	3
160	39.7	6	57.6	1
200	45.3	4	54.1	0
250	49.7	2	53.4	0
315	51.6	3	50.6	0
400	54.5	3	46.7	0
500	55.3	4	43.4	0
630	58.6	1	38.0	0
800	60.8	0	32.8	0
1000	62.1	0	27.4	0
1250	63.2	0	23.9	0
1600	63.3	0	25.6	0
2000	64.6	0	20.4	0
2500	66.1	0	13.3	0
3150	68.9	0	11.8	0
4000	70.2	0	11.3	-
5000	71.3	-	10.1	-
6300	75.4	-	9.4	-
8000	73.1	-	12.0	-
10000	69.2	-	12.6	-
Ratings	STC 59	30	IIC 55	12

TEST REPORT

ACOUSTICAL PERFORMANCE



Bare Nordic 5-Ply CLT Test Data Included for Comparison

Test Number	N/A			
Test Date	N/A			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.5	-	67.6	-
63	30.3	-	63.8	-
80	31.3	-	68.2	-
100	30.8	-	66.8	0
125	27.0	0	71.1	0
160	27.9	0	74.3	0
200	27.8	2	78.3	0
250	30.6	2	81.4	0
315	33.0	3	80.9	0
400	33.5	6	83.5	2
500	35.2	5	84.3	3
630	36.3	5	83.8	4
800	38.8	3	83.0	4
1000	40.6	2	81.3	3
1250	42.4	2	79.4	4
1600	46.0	0	76.1	4
2000	46.4	0	71.7	3
2500	46.0	0	68.4	2
3150	44.9	0	64.9	2
4000	46.5	0	60.2	-
5000	47.2	-	55.2	-
6300	49.4	-	50.1	-
8000	52.3	-	45.0	-
10000	55.1	-	39.5	-
Ratings	STC 40	30	IIC 29	31

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4267.37			
Test Date	5/31/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Engineered Hardwood sonus core 10, 10 mm EXACOR, 1-1/2" sonus curve 50, 50 mm Nordic 5-Ply CLT, 140 mm			
Ratings	STC 58	IIC 56	HIIC 77	LIIC 50
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

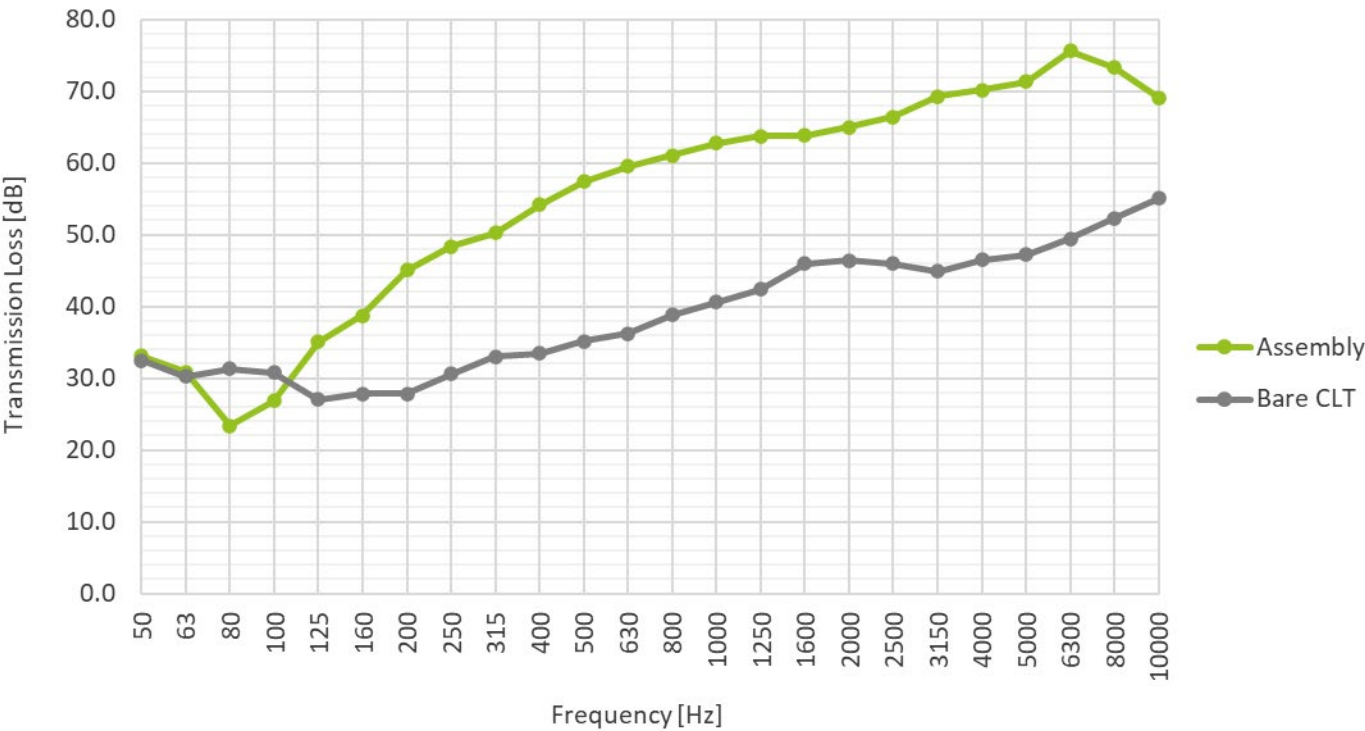
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TEST REPORT

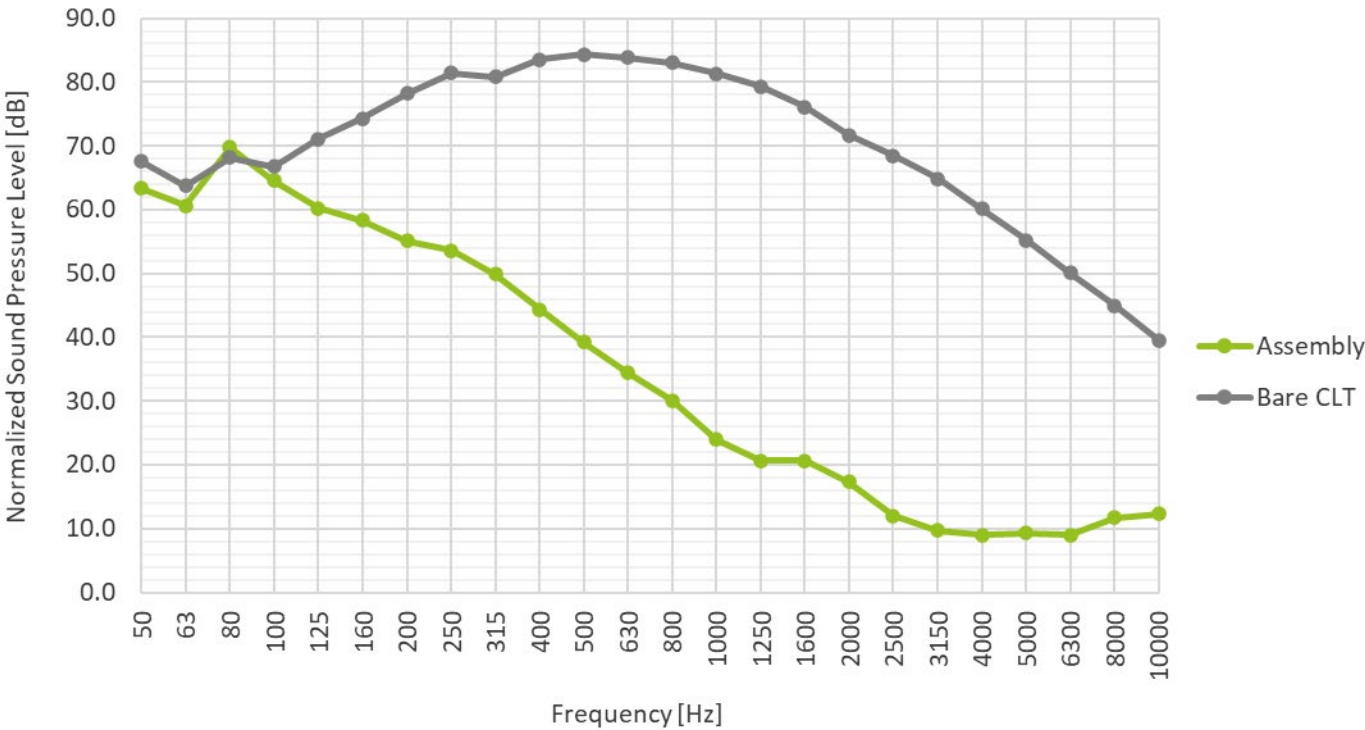
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.37			
Test Date	5/31/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Engineered Hardwood, sonus core 10 , 1-1/2" EXACOR, sonus curve 50 , 140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	33.1	-	63.3	-
63	30.9	-	60.6	-
80	23.4	-	69.8	-
100	26.9	-	64.5	8
125	35.1	7	60.2	4
160	38.7	6	58.3	2
200	45.1	3	55.1	0
250	48.4	3	53.6	0
315	50.3	4	49.9	0
400	54.2	3	44.4	0
500	57.4	1	39.2	0
630	59.5	0	34.4	0
800	61.1	0	30.1	0
1000	62.8	0	24.0	0
1250	63.7	0	20.6	0
1600	63.8	0	20.6	0
2000	65.0	0	17.3	0
2500	66.4	0	12.0	0
3150	69.3	0	9.7	0
4000	70.2	0	9.0	-
5000	71.3	-	9.3	-
6300	75.6	-	9.0	-
8000	73.3	-	11.7	-
10000	69.1	-	12.3	-
Ratings	STC 58	27	IIC 56	14

TEST REPORT

ACOUSTICAL PERFORMANCE



Bare Nordic 5-Ply CLT Test Data Included for Comparison

Test Number	N/A			
Test Date	N/A			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.5	-	67.6	-
63	30.3	-	63.8	-
80	31.3	-	68.2	-
100	30.8	-	66.8	0
125	27.0	0	71.1	0
160	27.9	0	74.3	0
200	27.8	2	78.3	0
250	30.6	2	81.4	0
315	33.0	3	80.9	0
400	33.5	6	83.5	2
500	35.2	5	84.3	3
630	36.3	5	83.8	4
800	38.8	3	83.0	4
1000	40.6	2	81.3	3
1250	42.4	2	79.4	4
1600	46.0	0	76.1	4
2000	46.4	0	71.7	3
2500	46.0	0	68.4	2
3150	44.9	0	64.9	2
4000	46.5	0	60.2	-
5000	47.2	-	55.2	-
6300	49.4	-	50.1	-
8000	52.3	-	45.0	-
10000	55.1	-	39.5	-
Ratings	STC 40	30	IIC 29	31

LVT FLOOR SURFACE

3 ply 105mm CLT PRODUCT COMPARISON

3" Concrete slab over Sonus curve w/click LVT (vinyl)

REGUPOL sonus curve is a high-performance acoustic dimpled rubber floor underlayment designed to reduce impact noise from footfall noise transmission and impact sound in Mass Timber Frame Construction. Made in the USA from recycled cars & truck tires are green circle certified for recycled content and qualify for up to 8 LEED points.



Detail	Assembly	Acoustic Rating	
	Concrete slab 3" sonus curve 17, (17 mm) CLT – 3 ply 105mm sonus core 3 with click LVT	IIC 54 LIIC 62 HIIC 65	STC 53
	Concrete slab 3" sonus curve 25, (25 mm) CLT – 3 ply 105mm sonus core 5 with click LVT	IIC 57 LIIC 74 HIIC 68	STC 55
	Concrete slab 3" sonus curve 50, (50 mm) CLT – 3 ply 105mm sonus core 3 with click LVT	IIC 58 LIIC 56 HIIC 67	STC 59

TEST REPORT

ACOUSTICAL PERFORMANCE

Test Number	S5237.07			
Test Date	5/7/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90	ASTM E492	ASTM E3207	ASTM E3222
Assembly	Click-Lock LVT, 7/32" (5.5 mm) REGUPOL sonus core 3, 1/8" (3 mm) Concrete, 3" (76 mm) REGUPOL sonus curve 17, 21/32" (17 mm) 3-Ply CLT, 4-1/8" (105 mm)			
Predicted Ratings	STC 53	IIC 54	LIIC 62	HIIC 65
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

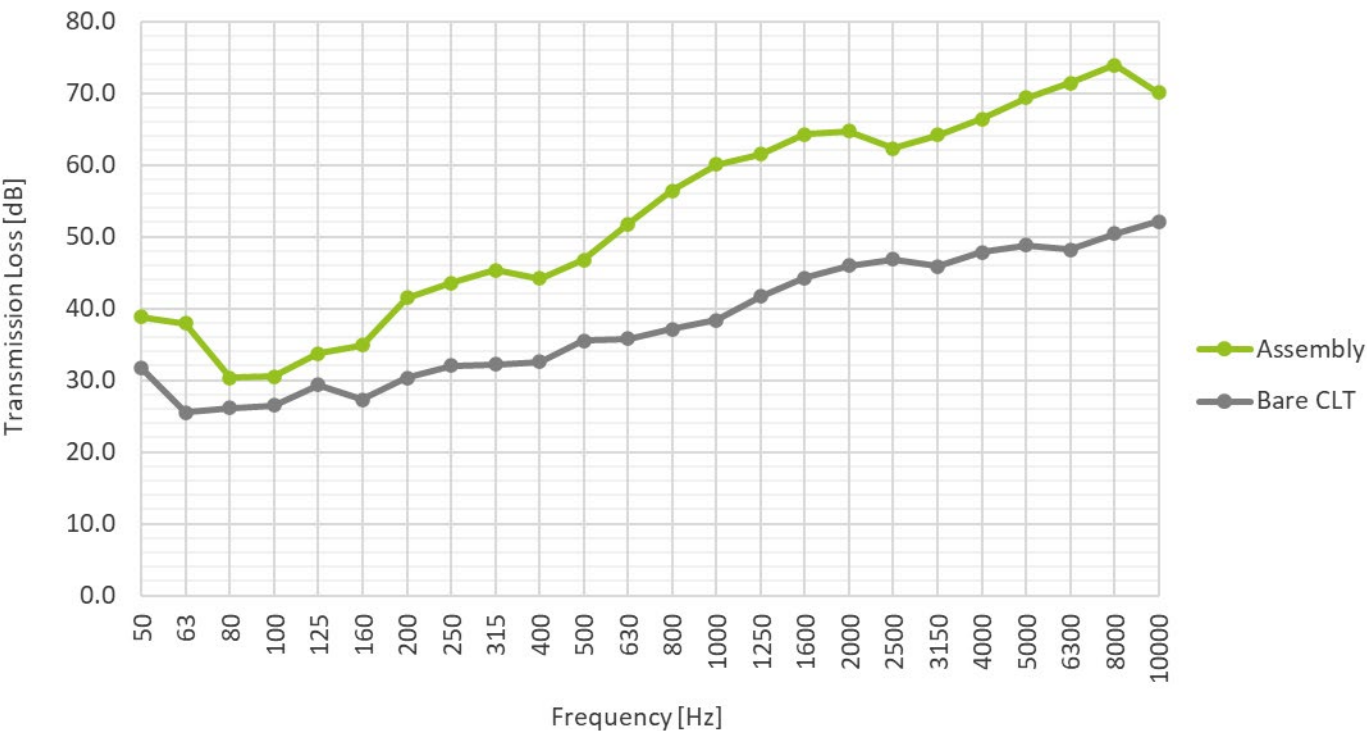
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TEST REPORT

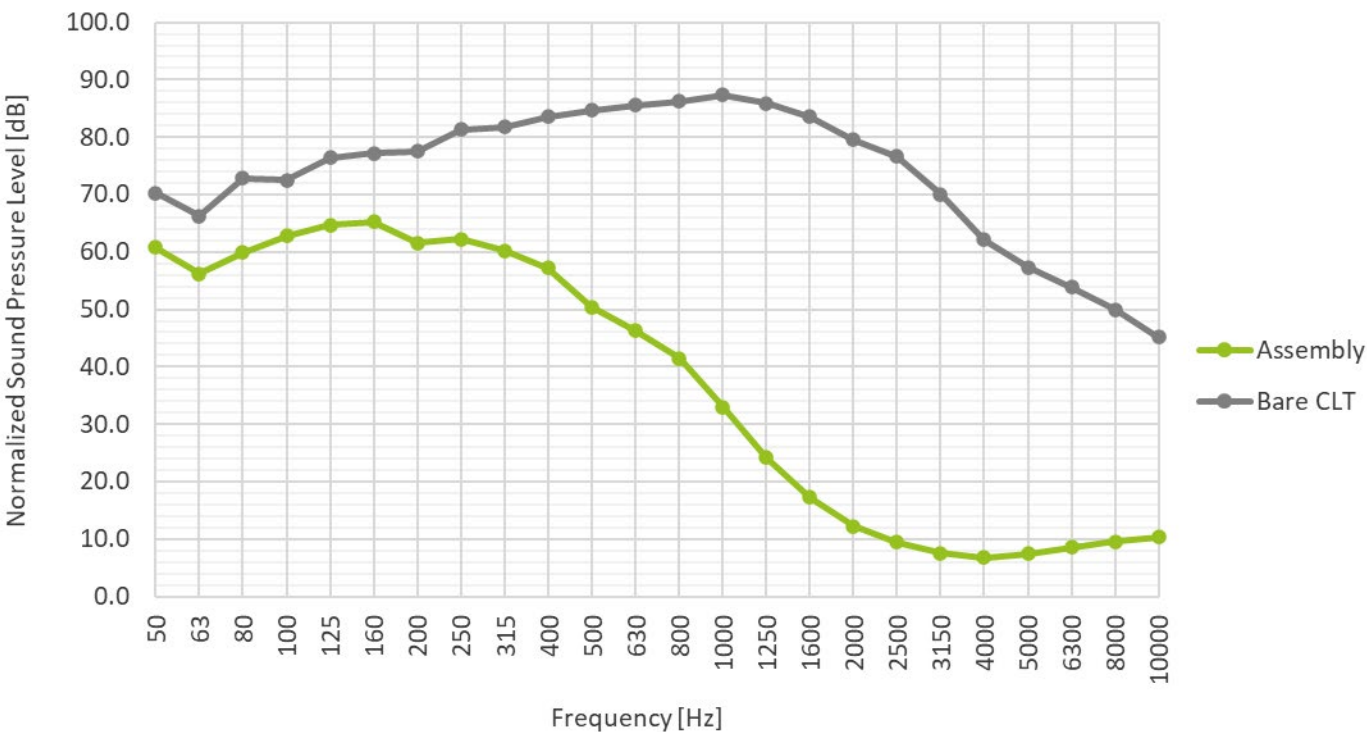
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	S5237.07			
Test Date	5/7/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3207, ASTM E3222			
Assembly	3-Ply CLT, REGUPOL sonus curve 17 , 3" Concrete, REGUPOL sonus core 3 , Click-Lock LVT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	38.8	-	60.8	-
63	37.9	-	56.2	-
80	30.3	-	59.9	-
100	30.5	-	62.8	5
125	33.7	3	64.7	7
160	34.9	5	65.2	7
200	41.5	1	61.6	4
250	43.6	2	62.2	4
315	45.3	4	60.2	2
400	44.2	8	57.2	0
500	46.8	6	50.4	0
630	51.8	2	46.3	0
800	56.4	0	41.5	0
1000	60.1	0	33.0	0
1250	61.5	0	24.2	0
1600	64.3	0	17.3	0
2000	64.7	0	12.2	0
2500	62.3	0	9.4	0
3150	64.2	0	7.5	0
4000	66.4	0	6.7	-
5000	69.4	-	7.4	-
6300	71.4	-	8.5	-
8000	73.9	-	9.5	-
10000	70.1	-	10.3	-
Ratings	STC 53	31	IIC 54	29

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	S5237.00			
Test Date	5/4/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3207, ASTM E3222			
Assembly	3-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	31.7	-	70.3	-
63	25.5	-	66.3	-
80	26.1	-	72.8	-
100	26.5	-	72.5	0
125	29.4	0	76.4	0
160	27.3	0	77.2	0
200	30.3	0	77.5	0
250	32.0	0	81.3	0
315	32.2	3	81.8	0
400	32.6	5	83.6	0
500	35.5	4	84.7	0
630	35.8	4	85.6	0
800	37.1	4	86.2	1
1000	38.4	4	87.4	3
1250	41.7	1	85.9	5
1600	44.3	0	83.5	5
2000	46.0	0	79.5	5
2500	46.9	0	76.6	5
3150	45.9	0	70.0	1
4000	47.8	0	62.1	-
5000	48.8	-	57.3	-
6300	48.2	-	53.9	-
8000	50.4	-	49.9	-
10000	52.1	-	45.1	-
Ratings	STC 39	25	IIC 23	25

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	S5237.03			
Test Date	5/7/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90	ASTM E492	ASTM E3207	ASTM E3222
Assembly	Click-Lock LVT, 7/32" (5.5 mm) REGUPOL sonus core 5, 3/16" (5 mm) Concrete, 3" (76 mm) REGUPOL sonus curve, 1" (25 mm) 3-Ply CLT, 4-1/8" (105 mm)			
Predicted Ratings	STC 55	IIC 57	LIIC 74	HIIC 68
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

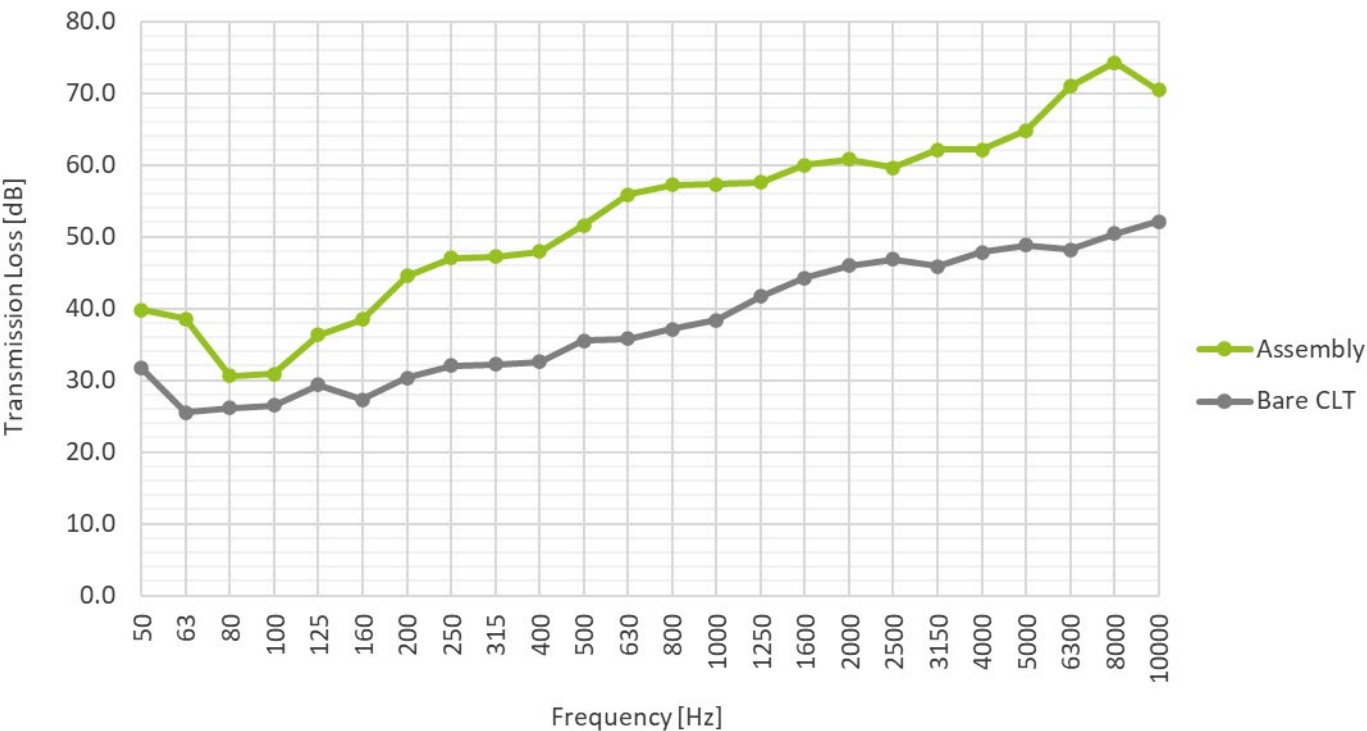
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TEST REPORT

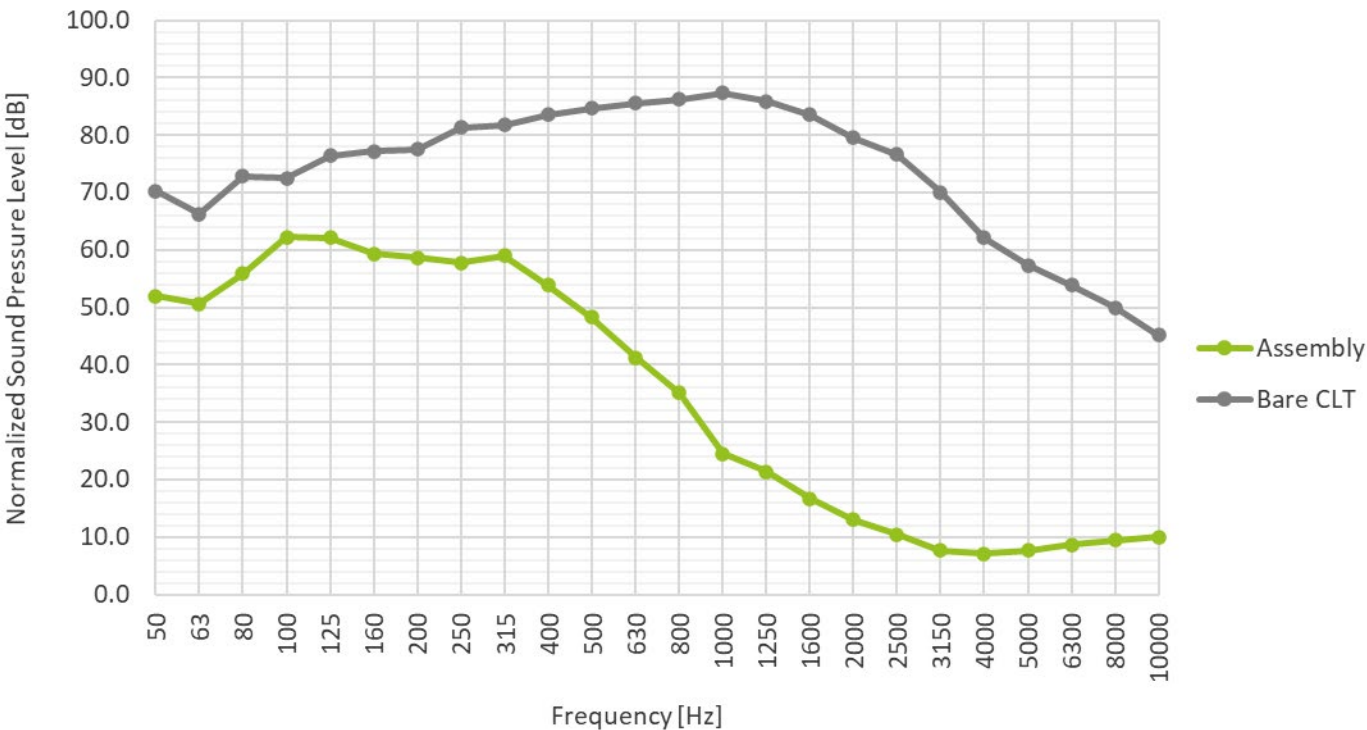
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	S5237.03			
Test Date	5/7/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3207, ASTM E3222			
Assembly	3-Ply CLT, REGUPOL sonus curve 25 , 3" Concrete, REGUPOL sonus core 5 , 5.5 mm Click-Lock LVT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	39.8	-	52.0	-
63	38.6	-	50.6	-
80	30.6	-	55.9	-
100	30.9	-	62.2	7
125	36.3	3	62.1	7
160	38.5	3	59.3	4
200	44.5	0	58.7	4
250	47.0	1	57.8	3
315	47.2	4	59.0	4
400	47.9	6	53.9	0
500	51.6	3	48.3	0
630	55.9	0	41.3	0
800	57.2	0	35.1	0
1000	57.3	1	24.5	0
1250	57.6	1	21.4	0
1600	60.0	0	16.7	0
2000	60.8	0	13.0	0
2500	59.6	0	10.4	0
3150	62.1	0	7.6	0
4000	62.1	0	7.1	-
5000	64.8	-	7.6	-
6300	71.0	-	8.6	-
8000	74.3	-	9.4	-
10000	70.4	-	10.0	-
Ratings	STC 55	22	IIC 57	29

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	S5237.00			
Test Date	5/4/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3207, ASTM E3222			
Assembly	3-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	31.7	-	70.3	-
63	25.5	-	66.3	-
80	26.1	-	72.8	-
100	26.5	-	72.5	0
125	29.4	0	76.4	0
160	27.3	0	77.2	0
200	30.3	0	77.5	0
250	32.0	0	81.3	0
315	32.2	3	81.8	0
400	32.6	5	83.6	0
500	35.5	4	84.7	0
630	35.8	4	85.6	0
800	37.1	4	86.2	1
1000	38.4	4	87.4	3
1250	41.7	1	85.9	5
1600	44.3	0	83.5	5
2000	46.0	0	79.5	5
2500	46.9	0	76.6	5
3150	45.9	0	70.0	1
4000	47.8	0	62.1	-
5000	48.8	-	57.3	-
6300	48.2	-	53.9	-
8000	50.4	-	49.9	-
10000	52.1	-	45.1	-
Ratings	STC 39	25	IIC 23	25

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	S5237.11			
Test Date	5/7/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90	ASTM E492	ASTM E3207	ASTM E3222
Assembly	Click-Lock LVT, 7/32" (5.5 mm) REGUPOL sonus core 3, 1/8" (3 mm) Concrete, 3" (76 mm) REGUPOL sonus curve 50, 2" (50 mm) 3-Ply CLT, 4-1/8" (105 mm)			
Predicted Ratings	STC 59	IIC 58	LIIC 56	HIIC 67
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

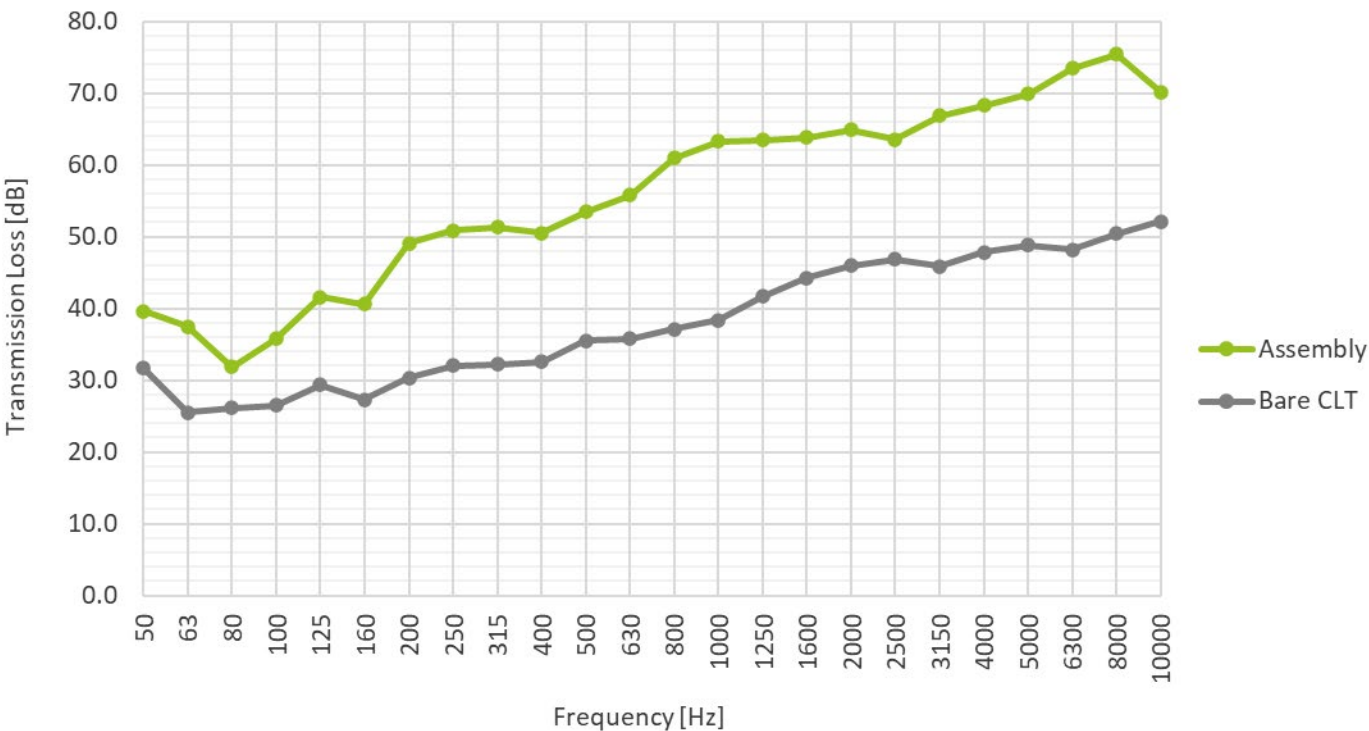
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TEST REPORT

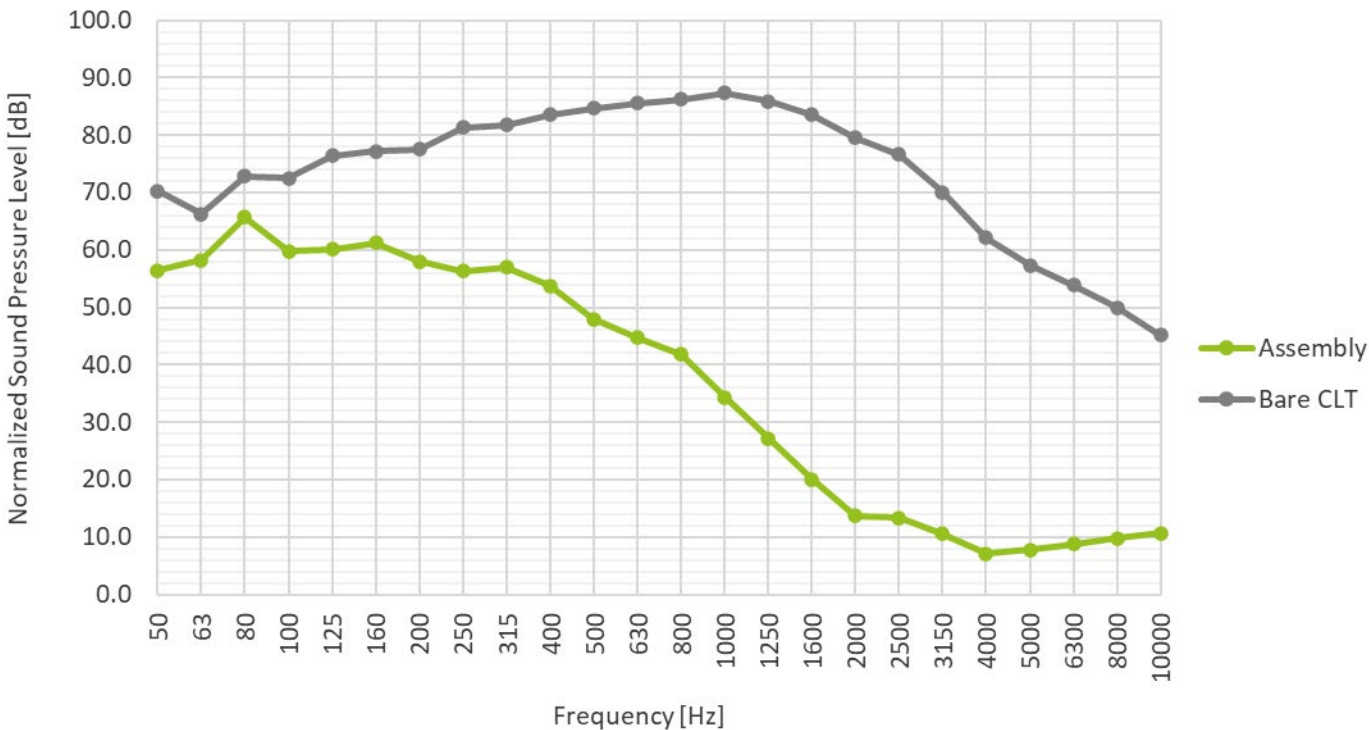
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	S5237.11			
Test Date	5/7/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3207, ASTM E3222			
Assembly	3-Ply CLT, REGUPOL sonus curve 50 , 3" Concrete, REGUPOL sonus core 3 , 5.5 mm Click-Lock LVT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	39.6	-	56.4	-
63	37.5	-	58.2	-
80	31.9	-	65.7	-
100	35.8	-	59.8	6
125	41.6	1	60.1	6
160	40.6	5	61.2	7
200	49.1	0	58.0	4
250	50.9	1	56.3	2
315	51.3	4	57.0	3
400	50.5	7	53.7	1
500	53.5	5	48.0	0
630	55.8	4	44.7	0
800	61.0	0	41.8	0
1000	63.3	0	34.3	0
1250	63.5	0	27.2	0
1600	63.8	0	20.0	0
2000	64.9	0	13.7	0
2500	63.6	0	13.3	0
3150	66.9	0	10.6	0
4000	68.3	0	7.1	-
5000	69.9	-	7.8	-
6300	73.5	-	8.8	-
8000	75.4	-	9.8	-
10000	70.2	-	10.7	-
Ratings	STC 59	27	IIC 58	29

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	S5237.00			
Test Date	5/4/2025			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3207, ASTM E3222			
Assembly	3-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	31.7	-	70.3	-
63	25.5	-	66.3	-
80	26.1	-	72.8	-
100	26.5	-	72.5	0
125	29.4	0	76.4	0
160	27.3	0	77.2	0
200	30.3	0	77.5	0
250	32.0	0	81.3	0
315	32.2	3	81.8	0
400	32.6	5	83.6	0
500	35.5	4	84.7	0
630	35.8	4	85.6	0
800	37.1	4	86.2	1
1000	38.4	4	87.4	3
1250	41.7	1	85.9	5
1600	44.3	0	83.5	5
2000	46.0	0	79.5	5
2500	46.9	0	76.6	5
3150	45.9	0	70.0	1
4000	47.8	0	62.1	-
5000	48.8	-	57.3	-
6300	48.2	-	53.9	-
8000	50.4	-	49.9	-
10000	52.1	-	45.1	-
Ratings	STC 39	25	IIC 23	25

LVT FLOOR SURFACE

5 ply 140mm CLT PRODUCT COMPARISON

3" Concrete slab over Sonus curve w/click LVT (vinyl)

REGUPOL sonus curve is a high-performance acoustic dimpled rubber floor underlayment designed to reduce impact noise from footfall noise transmission and impact sound in Mass Timber Frame Construction. Made in the USA from recycled cars & truck tires are green circle certified for recycled content and qualify for up to 8 LEED points.



Detail	Assembly	Acoustic Rating	
	Concrete slab 3" sonus curve 10, (10 mm) CLT – 5 ply 140mm sonus core 3 with click LVT	IIC 55 HIIC 63 LIIC 59	STC 50
	Concrete slab 3" sonus curve 17, (17 mm) CLT – 5 ply 140mm sonus core 3 with click LVT	IIC 56 HIIC 64 LIIC 61	STC 53
	Concrete slab 3" sonus curve 25, (25 mm) CLT – 5 ply 140mm sonus core 3 with click LVT	IIC 58 HIIC 68 LIIC 65	STC 54
	Concrete slab 3" sonus curve 50, (50 mm) CLT – 5 ply 140mm sonus core 3 with click LVT	IIC 63 HIIC 76 LIIC 67	STC 57

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4267.11			
Test Date	5/29/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Rigid Core Click Lock LVT, 5.5 mm sonus core 3, 3 mm Concrete Topping, 3" sonus curve 10, 10 mm Nordic 5-Ply CLT, 140 mm			
Ratings	STC 50	IIC 55	HIIC 63	LIIC 59
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

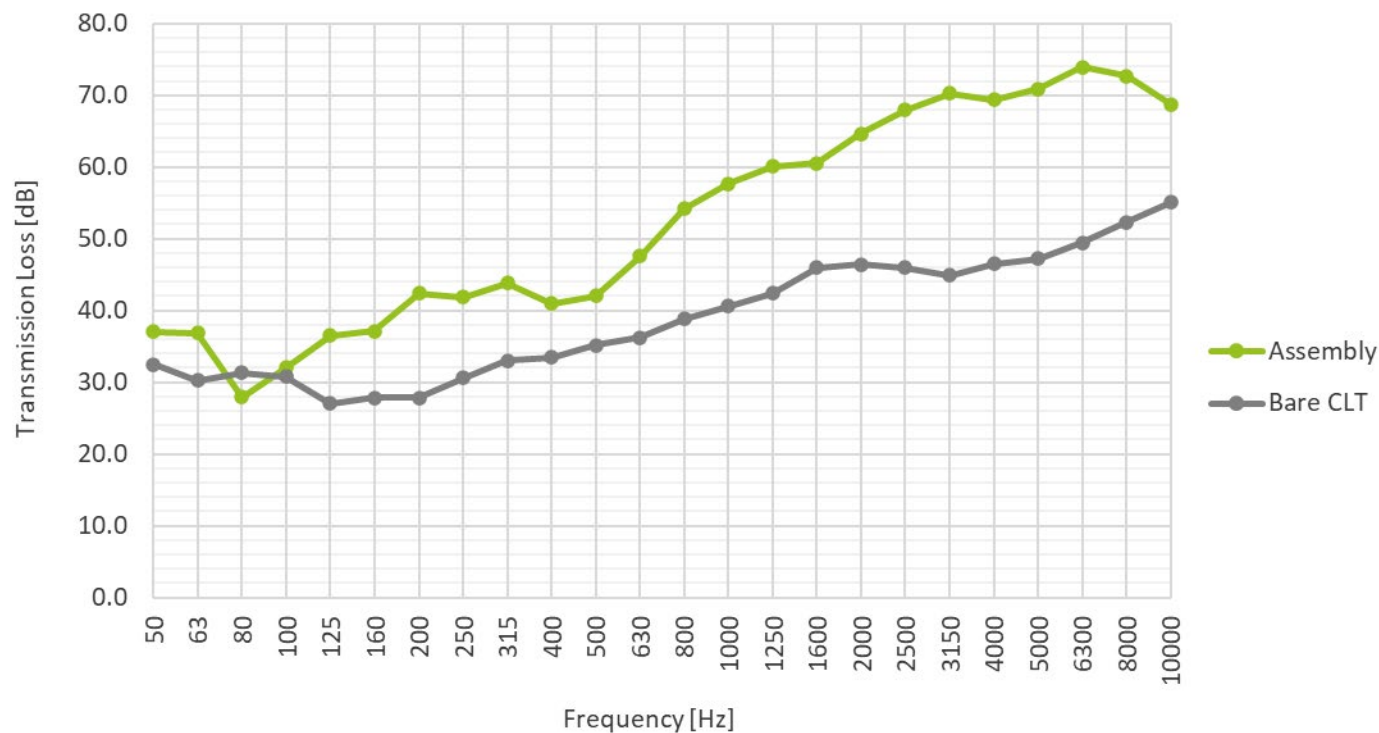
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TEST REPORT

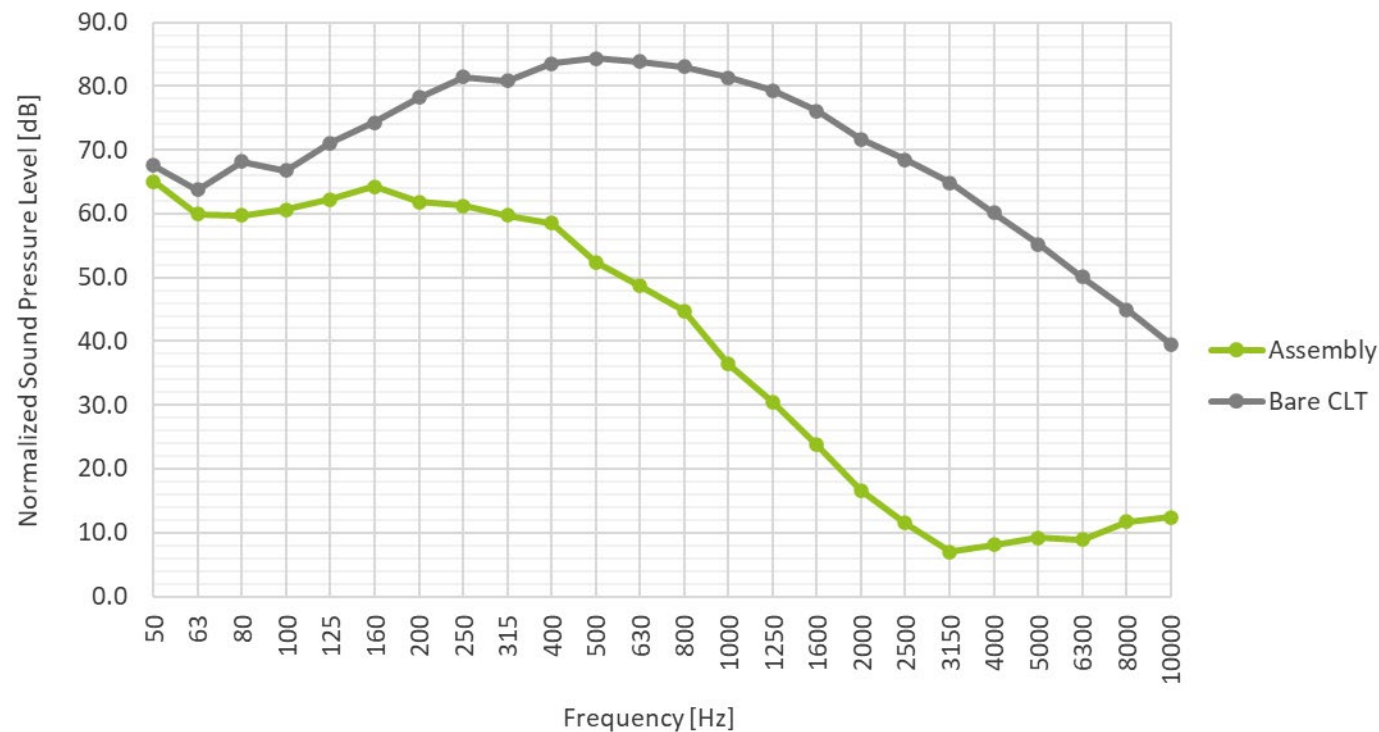
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.11			
Test Date	5/29/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	5.5 mm Rigid Core Click Lock LVT, sonus core 3 , 3" Concrete Topping, sonus curve 10 , 140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	37.0	-	65.1	-
63	36.9	-	59.9	-
80	27.9	-	59.7	-
100	32.0	-	60.6	4
125	36.5	0	62.2	5
160	37.1	0	64.2	7
200	42.4	0	61.8	5
250	41.9	1	61.2	4
315	43.8	2	59.7	3
400	41.0	8	58.5	3
500	42.0	8	52.4	0
630	47.6	3	48.7	0
800	54.2	0	44.8	0
1000	57.7	0	36.4	0
1250	60.1	0	30.5	0
1600	60.5	0	23.8	0
2000	64.6	0	16.6	0
2500	67.9	0	11.5	0
3150	70.3	0	7.0	0
4000	69.4	0	8.1	-
5000	70.9	-	9.2	-
6300	73.9	-	8.9	-
8000	72.7	-	11.7	-
10000	68.7	-	12.4	-
Ratings	STC 50	22	IIC 55	31

TEST REPORT

ACOUSTICAL PERFORMANCE



Bare Nordic 5-Ply CLT Test Data Included for Comparison

Test Number	N/A			
Test Date	N/A			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.5	-	67.6	-
63	30.3	-	63.8	-
80	31.3	-	68.2	-
100	30.8	-	66.8	0
125	27.0	0	71.1	0
160	27.9	0	74.3	0
200	27.8	2	78.3	0
250	30.6	2	81.4	0
315	33.0	3	80.9	0
400	33.5	6	83.5	2
500	35.2	5	84.3	3
630	36.3	5	83.8	4
800	38.8	3	83.0	4
1000	40.6	2	81.3	3
1250	42.4	2	79.4	4
1600	46.0	0	76.1	4
2000	46.4	0	71.7	3
2500	46.0	0	68.4	2
3150	44.9	0	64.9	2
4000	46.5	0	60.2	-
5000	47.2	-	55.2	-
6300	49.4	-	50.1	-
8000	52.3	-	45.0	-
10000	55.1	-	39.5	-
Ratings	STC 40	30	IIC 29	31

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4267.02			
Test Date	5/28/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Rigid Core Click Lock LVT, 5.5 mm sonus core 3, 3 mm Concrete Topping, 3" sonus curve 17, 17 mm Nordic 5-Ply CLT, 140 mm			
Ratings	STC 53	IIC 56	HIIC 64	LIIC 61
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

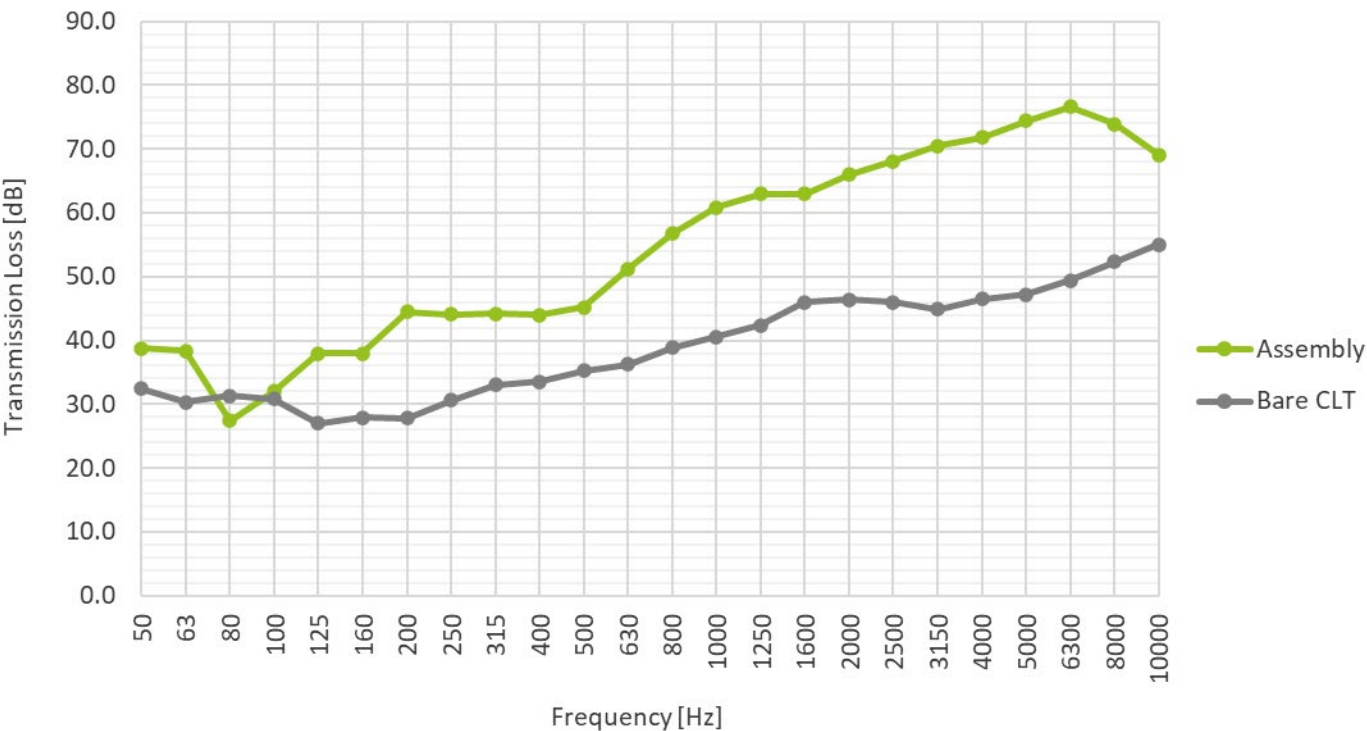
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TEST REPORT

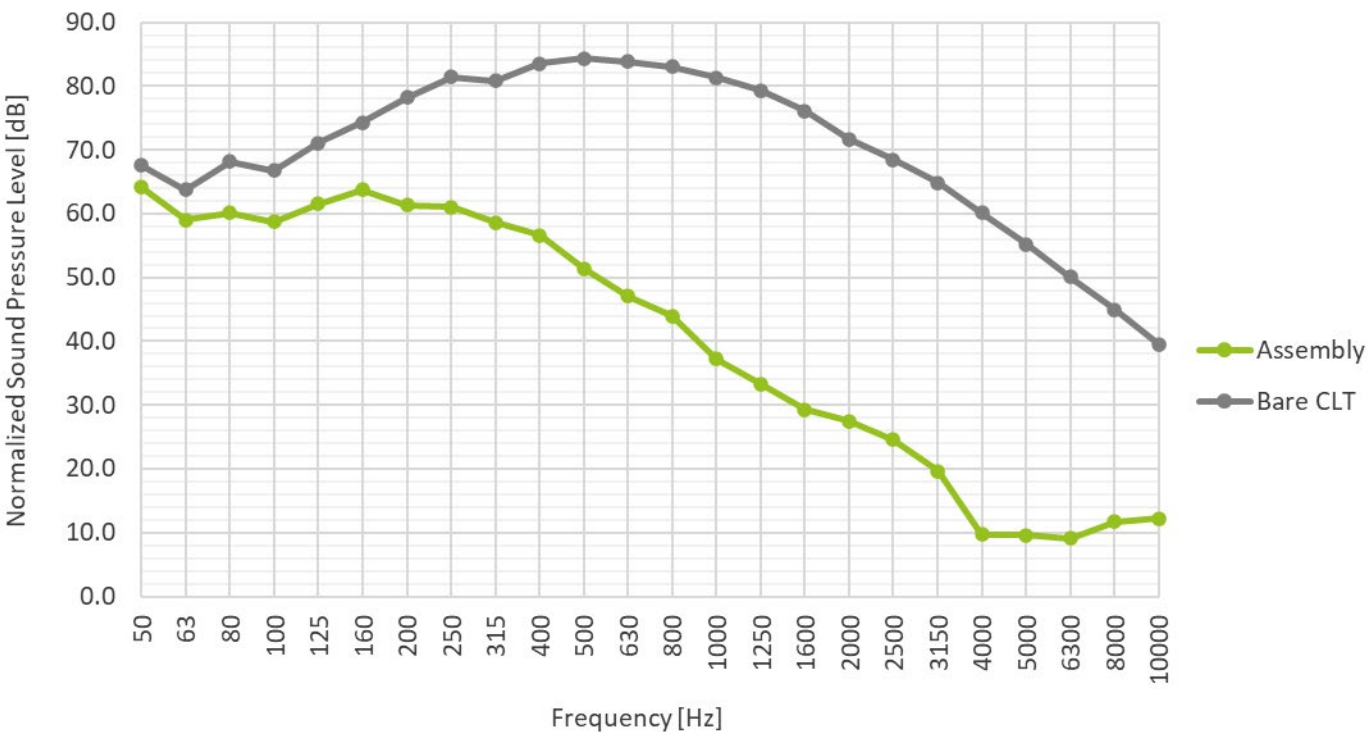
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.02			
Test Date	5/28/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	5.5 mm Rigid Core Click Lock LVT, sonus core 3 , 3" Concrete Topping, sonus curve 17 , 140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	38.8	-	64.1	-
63	38.4	-	59.0	-
80	27.4	-	60.1	-
100	32.0	-	58.7	3
125	38.0	0	61.5	5
160	38.0	2	63.7	8
200	44.5	0	61.3	5
250	44.1	2	61.0	5
315	44.2	5	58.6	3
400	44.0	8	56.6	2
500	45.2	8	51.4	0
630	51.2	3	47.1	0
800	56.7	0	44.0	0
1000	60.9	0	37.2	0
1250	63.0	0	33.3	0
1600	63.0	0	29.3	0
2000	66.0	0	27.5	0
2500	68.1	0	24.6	0
3150	70.5	0	19.6	0
4000	71.8	0	9.7	-
5000	74.4	-	9.6	-
6300	76.6	-	9.1	-
8000	73.9	-	11.7	-
10000	69.1	-	12.2	-
Ratings	STC 53	28	IIC 56	31

TEST REPORT

ACOUSTICAL PERFORMANCE



Bare Nordic 5-Ply CLT Test Data Included for Comparison

Test Number	N/A			
Test Date	N/A			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.5	-	67.6	-
63	30.3	-	63.8	-
80	31.3	-	68.2	-
100	30.8	-	66.8	0
125	27.0	0	71.1	0
160	27.9	0	74.3	0
200	27.8	2	78.3	0
250	30.6	2	81.4	0
315	33.0	3	80.9	0
400	33.5	6	83.5	2
500	35.2	5	84.3	3
630	36.3	5	83.8	4
800	38.8	3	83.0	4
1000	40.6	2	81.3	3
1250	42.4	2	79.4	4
1600	46.0	0	76.1	4
2000	46.4	0	71.7	3
2500	46.0	0	68.4	2
3150	44.9	0	64.9	2
4000	46.5	0	60.2	-
5000	47.2	-	55.2	-
6300	49.4	-	50.1	-
8000	52.3	-	45.0	-
10000	55.1	-	39.5	-
Ratings	STC 40	30	IIC 29	31

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4267.16			
Test Date	5/29/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Rigid Core Click Lock LVT, 5.5 mm sonus core 3, 3 mm Concrete Topping, 3" sonus curve 25, 25 mm Nordic 5-Ply CLT, 140 mm			
Ratings	STC 54	IIC 58	HIIC 68	LIIC 65
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

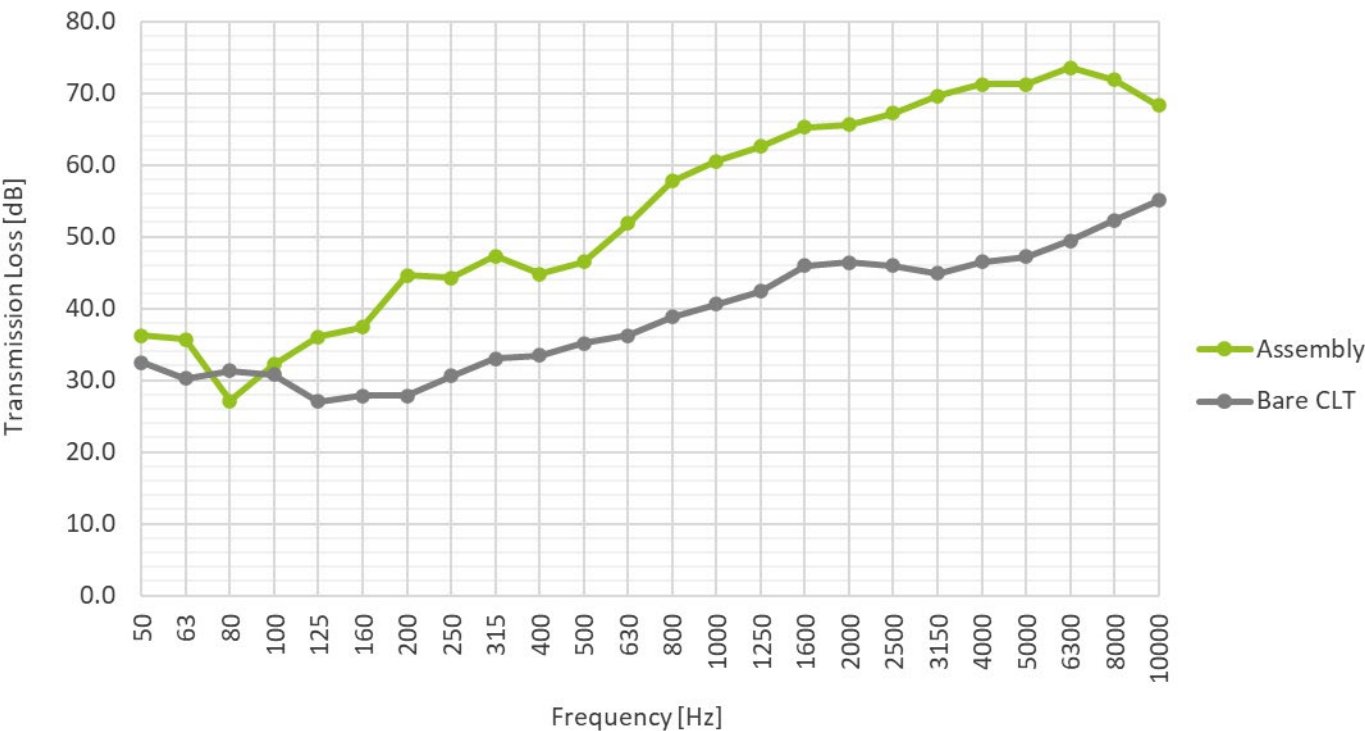
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TEST REPORT

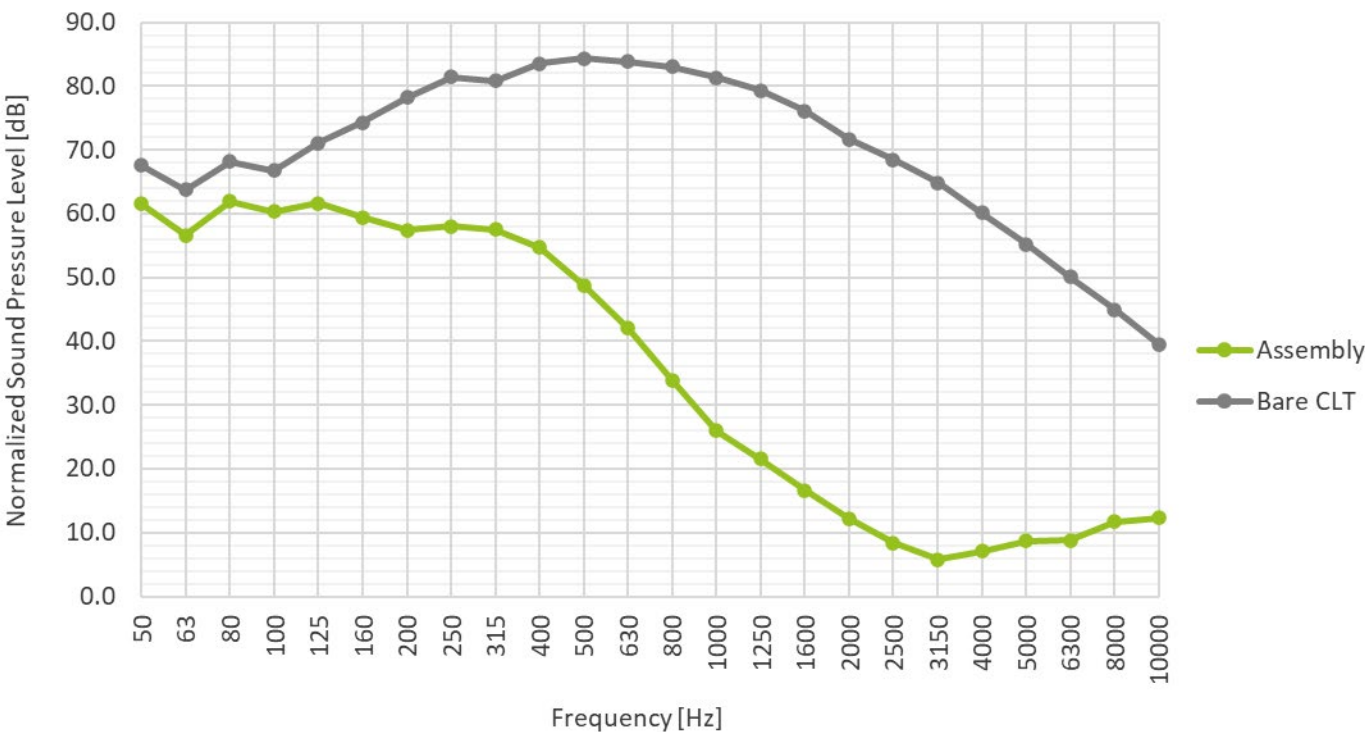
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.16			
Test Date	5/29/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	5.5 mm Rigid Core Click Lock LVT, sonus core 3 , 3" Concrete Topping, sonus curve 25 , 140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	36.2	-	61.5	-
63	35.7	-	56.6	-
80	27.1	-	61.9	-
100	32.2	-	60.3	6
125	36.1	2	61.6	8
160	37.4	4	59.4	5
200	44.6	0	57.4	3
250	44.3	3	58.0	4
315	47.3	3	57.5	4
400	44.8	8	54.7	2
500	46.5	8	48.8	0
630	51.9	3	42.0	0
800	57.8	0	33.9	0
1000	60.5	0	26.0	0
1250	62.6	0	21.6	0
1600	65.3	0	16.6	0
2000	65.6	0	12.2	0
2500	67.2	0	8.4	0
3150	69.6	0	5.8	0
4000	71.2	0	7.1	-
5000	71.2	-	8.7	-
6300	73.6	-	8.8	-
8000	71.9	-	11.7	-
10000	68.3	-	12.3	-
Ratings	STC 54	31	IIC 58	32

TEST REPORT

ACOUSTICAL PERFORMANCE



Bare Nordic 5-Ply CLT Test Data Included for Comparison

Test Number	N/A			
Test Date	N/A			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.5	-	67.6	-
63	30.3	-	63.8	-
80	31.3	-	68.2	-
100	30.8	-	66.8	0
125	27.0	0	71.1	0
160	27.9	0	74.3	0
200	27.8	2	78.3	0
250	30.6	2	81.4	0
315	33.0	3	80.9	0
400	33.5	6	83.5	2
500	35.2	5	84.3	3
630	36.3	5	83.8	4
800	38.8	3	83.0	4
1000	40.6	2	81.3	3
1250	42.4	2	79.4	4
1600	46.0	0	76.1	4
2000	46.4	0	71.7	3
2500	46.0	0	68.4	2
3150	44.9	0	64.9	2
4000	46.5	0	60.2	-
5000	47.2	-	55.2	-
6300	49.4	-	50.1	-
8000	52.3	-	45.0	-
10000	55.1	-	39.5	-
Ratings	STC 40	30	IIC 29	31

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4267.21			
Test Date	5/30/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Rigid Core Click Lock LVT, 5.5 mm sonus core 3, 3 mm Concrete Topping, 3" sonus curve 50, 50 mm Nordic 5-Ply CLT, 140 mm			
Ratings	STC 57	IIC 63	HIIC 76	LIIC 67
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

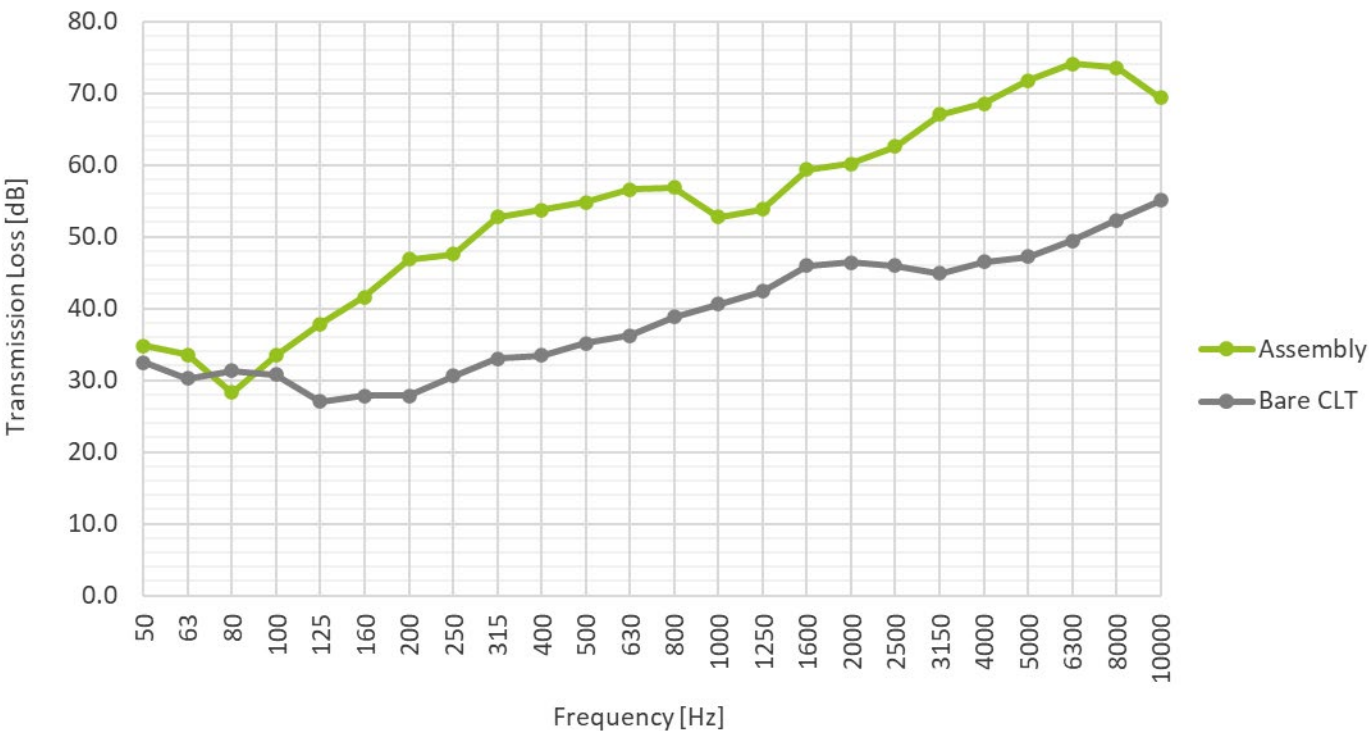
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TEST REPORT

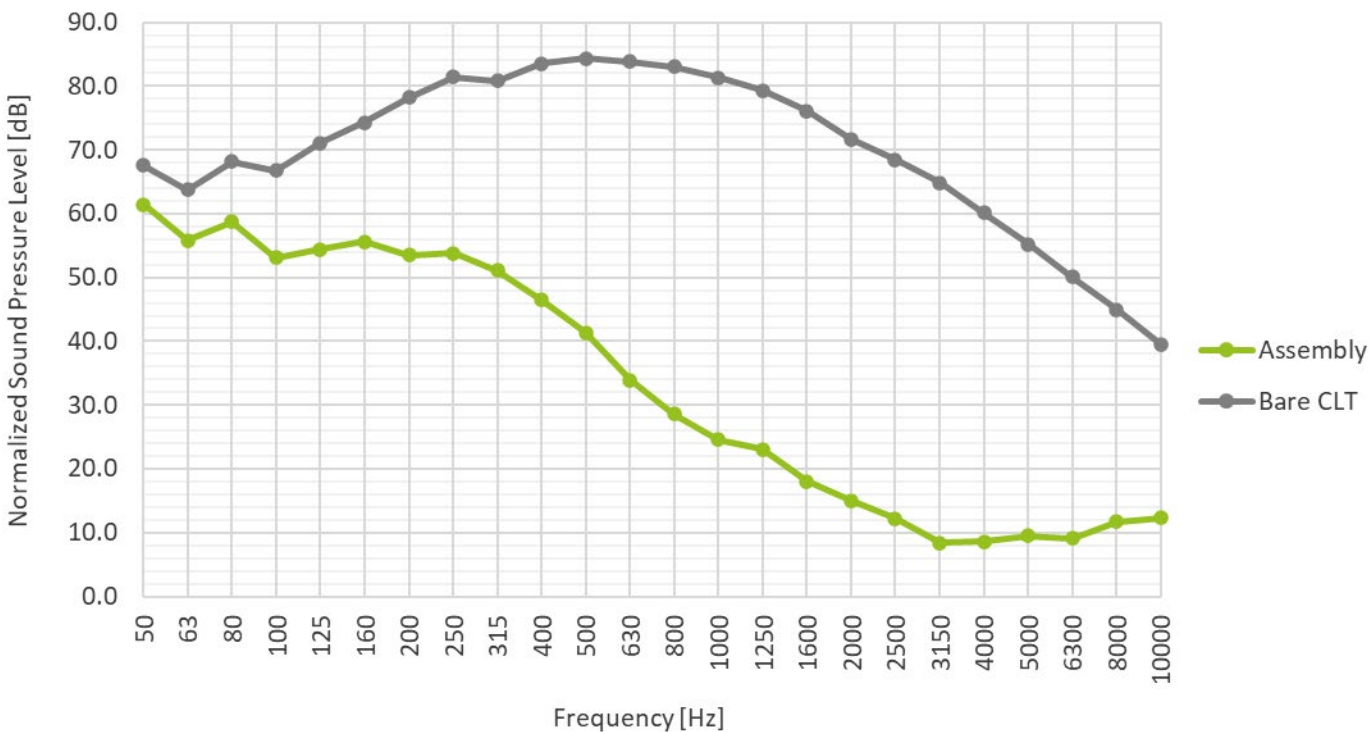
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.21			
Test Date	5/30/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	5.5 mm Rigid Core Click Lock LVT, sonus core 3 , 3" Concrete Topping, sonus curve 50 , 140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	34.8	-	61.4	-
63	33.6	-	55.8	-
80	28.3	-	58.7	-
100	33.5	-	53.1	4
125	37.8	3	54.4	5
160	41.6	2	55.6	7
200	46.9	0	53.5	4
250	47.6	2	53.8	5
315	52.8	0	51.1	2
400	53.7	2	46.5	0
500	54.8	2	41.3	0
630	56.6	1	33.9	0
800	56.9	2	28.6	0
1000	52.8	7	24.6	0
1250	53.8	7	23.1	0
1600	59.4	2	18.0	0
2000	60.2	1	15.0	0
2500	62.6	0	12.2	0
3150	67.0	0	8.4	0
4000	68.6	0	8.6	-
5000	71.8	-	9.5	-
6300	74.1	-	9.1	-
8000	73.6	-	11.7	-
10000	69.4	-	12.3	-
Ratings	STC 57	31	IIC 63	27

TEST REPORT

ACOUSTICAL PERFORMANCE



Bare Nordic 5-Ply CLT Test Data Included for Comparison

Test Number	N/A			
Test Date	N/A			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.5	-	67.6	-
63	30.3	-	63.8	-
80	31.3	-	68.2	-
100	30.8	-	66.8	0
125	27.0	0	71.1	0
160	27.9	0	74.3	0
200	27.8	2	78.3	0
250	30.6	2	81.4	0
315	33.0	3	80.9	0
400	33.5	6	83.5	2
500	35.2	5	84.3	3
630	36.3	5	83.8	4
800	38.8	3	83.0	4
1000	40.6	2	81.3	3
1250	42.4	2	79.4	4
1600	46.0	0	76.1	4
2000	46.4	0	71.7	3
2500	46.0	0	68.4	2
3150	44.9	0	64.9	2
4000	46.5	0	60.2	-
5000	47.2	-	55.2	-
6300	49.4	-	50.1	-
8000	52.3	-	45.0	-
10000	55.1	-	39.5	-
Ratings	STC 40	30	IIC 29	31

LVT FLOOR SURFACE

5 ply 140mm CLT PRODUCT COMPARISON

EXACOR Dry Screed over Sonus curve with click LVT (vinyl)

REGUPOL sonus curve is a high-performance acoustic dimpled rubber floor underlayment designed to reduce impact noise from footfall noise transmission and impact sound in Mass Timber Frame Construction. EXACOR is a ½" dry screed board that weighs 2.7lbs PSF and is glued and screwed to each other. Tested in 2 or 3 layers 1" or 1.5" thickness.



Detail	Assembly	Acoustic Rating	
	EXACOR dry screed 1" sonus curve 25, (25 mm) CLT – 5 ply 140mm sonus multi 3 with 2mm LVT	IIC 50 HIIC 64 LIIC 54	STC 52
	EXACOR dry screed 1.5" sonus curve 25, (25 mm) CLT – 5 ply 140mm sonus multi 3 with 2mm LVT	IIC 53 HIIC 66 LIIC 51	STC 53
	EXACOR dry screed 1.5" sonus curve 50, (50 mm) CLT – 5 ply 140mm sonus core 3 with LVT	IIC 56 HIIC 78 LIIC 52	STC 58
	EXACOR dry screed 1.5" sonus curve 50, (50 mm) CLT – 5 ply 140mm sonus xl 5 with LVT	IIC 57 HIIC 81 LIIC 52	STC 58

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4267.32			
Test Date	5/31/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	LVT, 2 mm sonus multi 3, 3 mm EXACOR, 1" sonus curve 25, 25 mm Nordic 5-Ply CLT, 140 mm			
Ratings	STC 52	IIC 50	HIIC 64	LIIC 54
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

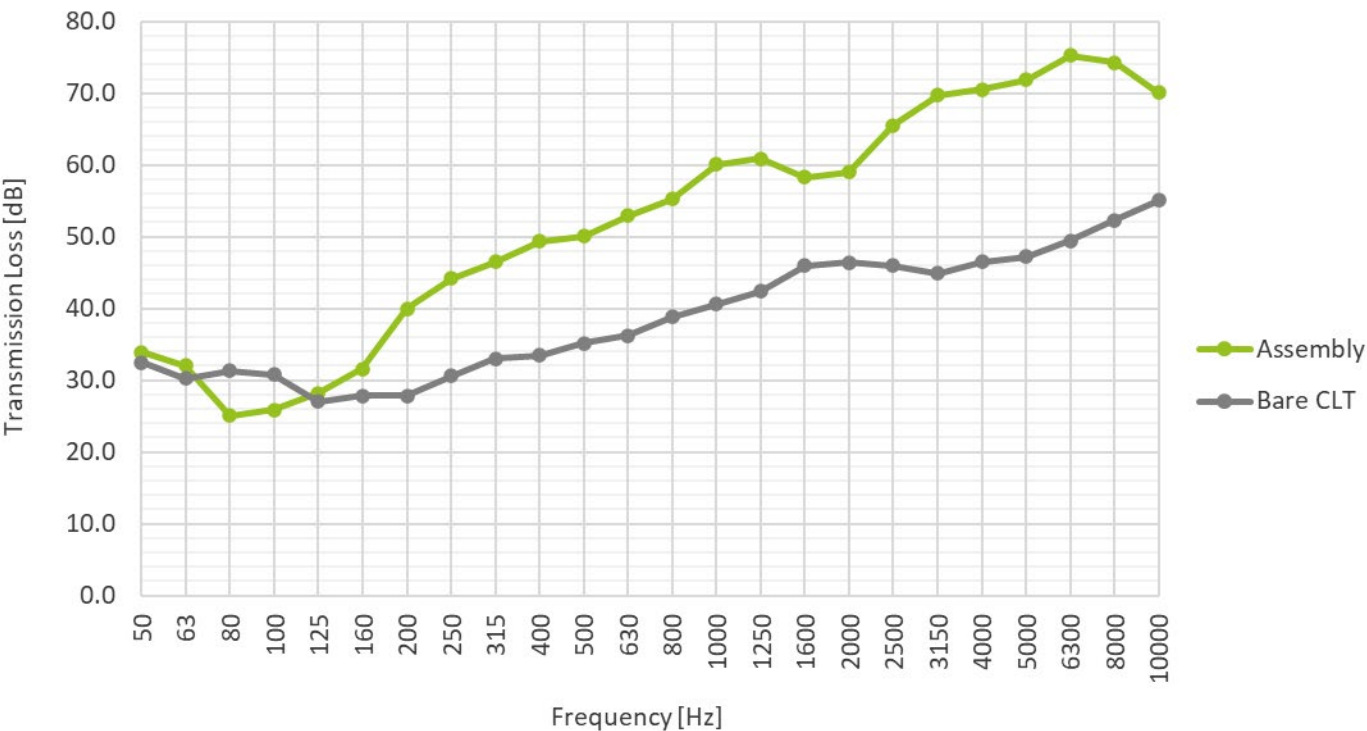
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TEST REPORT

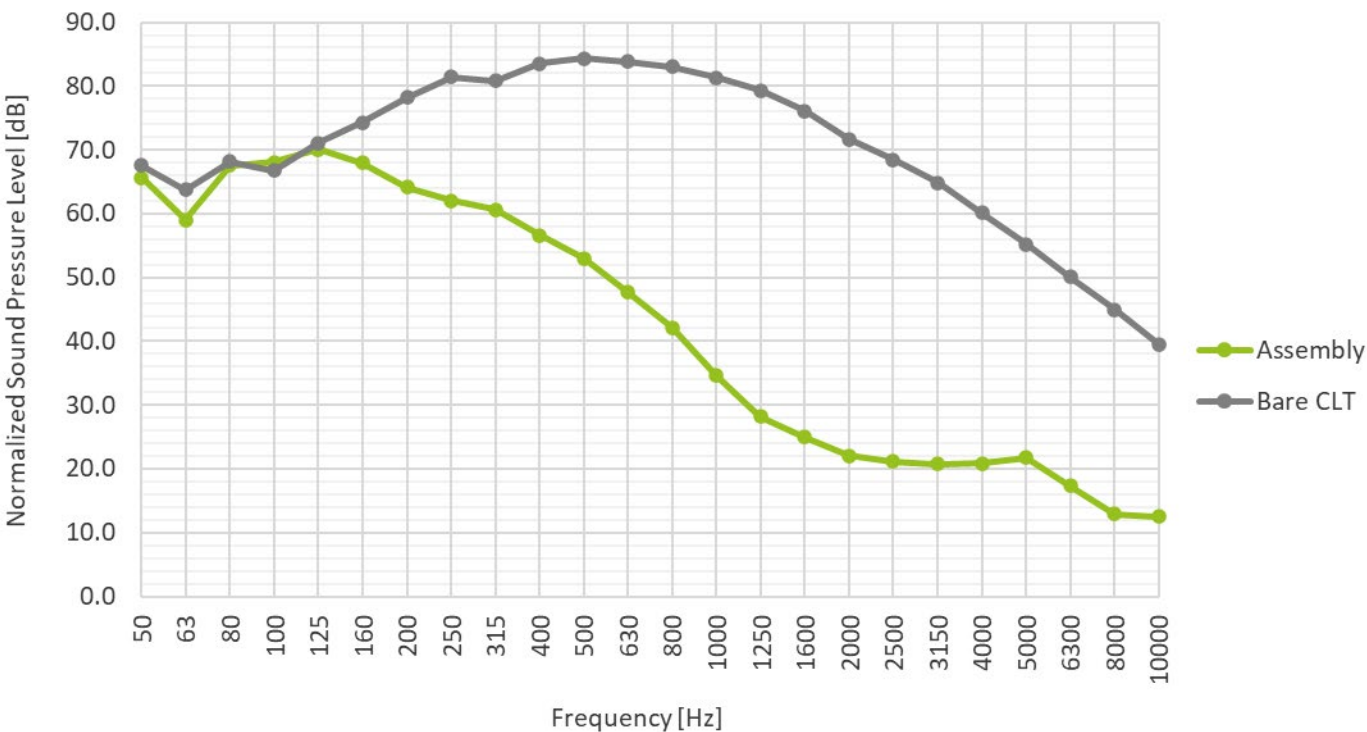
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.32			
Test Date	5/31/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	2 mm LVT, sonus multi 3 , 1" EXACOR, sonus curve 25 , 140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	33.9	-	65.7	-
63	32.0	-	59.0	-
80	25.1	-	67.6	-
100	25.9	-	68.1	6
125	28.2	8	70.1	8
160	31.6	7	68.0	6
200	40.0	2	64.1	2
250	44.2	1	62.0	0
315	46.5	2	60.6	0
400	49.4	2	56.6	0
500	50.1	2	53.0	0
630	52.9	0	47.7	0
800	55.3	0	42.1	0
1000	60.1	0	34.6	0
1250	60.9	0	28.2	0
1600	58.3	0	25.0	0
2000	59.0	0	22.1	0
2500	65.5	0	21.1	0
3150	69.7	0	20.7	0
4000	70.5	0	20.8	-
5000	71.9	-	21.8	-
6300	75.3	-	17.3	-
8000	74.3	-	12.9	-
10000	70.1	-	12.5	-
Ratings	STC 52	24	IIC 50	22

TEST REPORT

ACOUSTICAL PERFORMANCE



Bare Nordic 5-Ply CLT Test Data Included for Comparison

Test Number	N/A			
Test Date	N/A			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.5	-	67.6	-
63	30.3	-	63.8	-
80	31.3	-	68.2	-
100	30.8	-	66.8	0
125	27.0	0	71.1	0
160	27.9	0	74.3	0
200	27.8	2	78.3	0
250	30.6	2	81.4	0
315	33.0	3	80.9	0
400	33.5	6	83.5	2
500	35.2	5	84.3	3
630	36.3	5	83.8	4
800	38.8	3	83.0	4
1000	40.6	2	81.3	3
1250	42.4	2	79.4	4
1600	46.0	0	76.1	4
2000	46.4	0	71.7	3
2500	46.0	0	68.4	2
3150	44.9	0	64.9	2
4000	46.5	0	60.2	-
5000	47.2	-	55.2	-
6300	49.4	-	50.1	-
8000	52.3	-	45.0	-
10000	55.1	-	39.5	-
Ratings	STC 40	30	IIC 29	31

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4267.28			
Test Date	5/30/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	LVT, 2 mm sonus multi 3, 3 mm EXACOR, 1-1/2" sonus curve 25, 25 mm Nordic 5-Ply CLT, 140 mm			
Ratings	STC 53	IIC 53	HIIC 66	LIIC 51
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

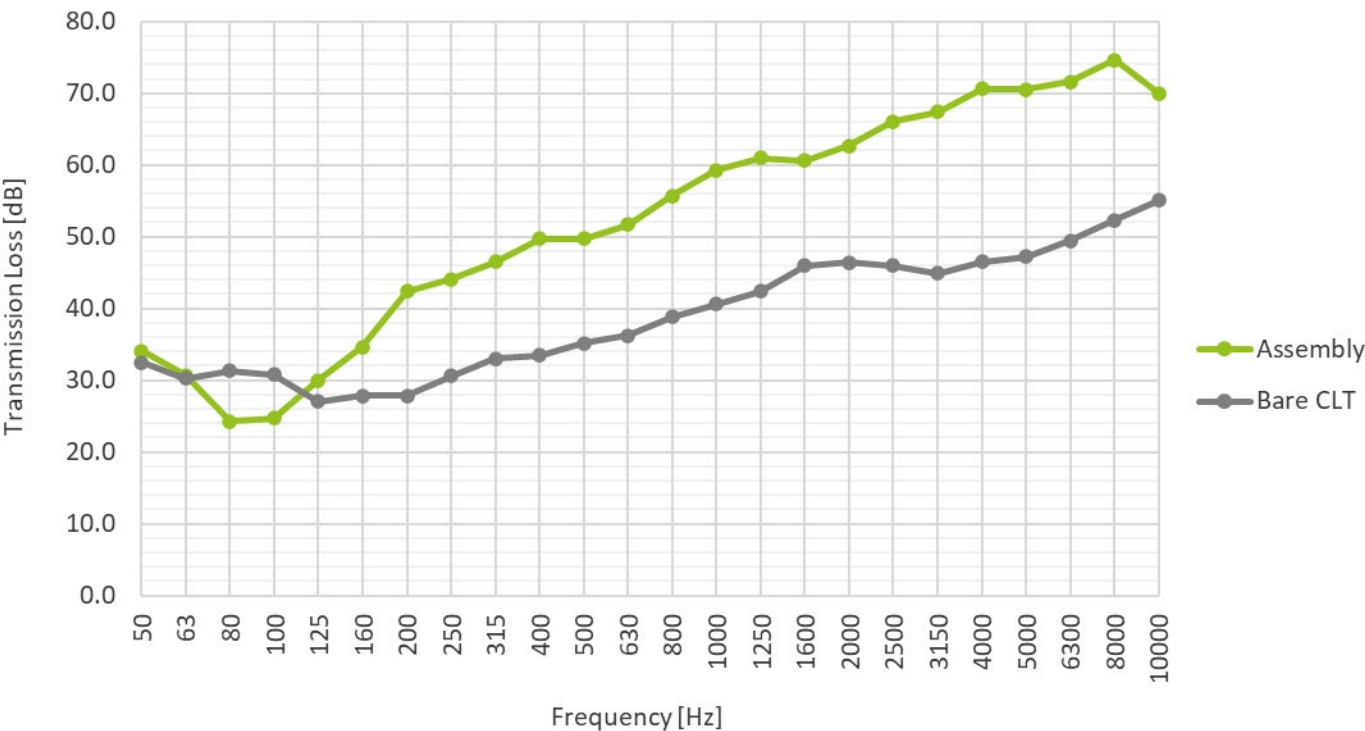
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TEST REPORT

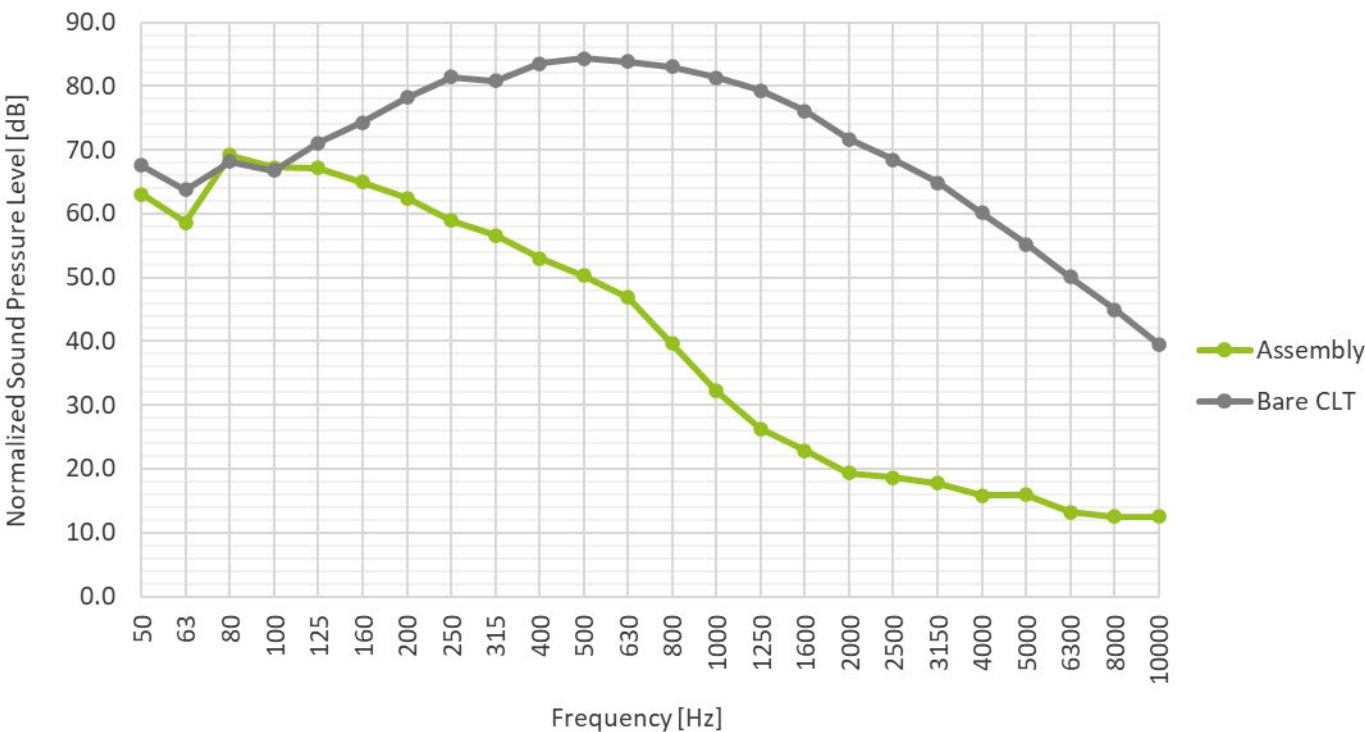
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.28			
Test Date	5/30/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	2 mm LVT, sonus multi 3 , 1-1/2" EXACOR, sonus curve 25 , 140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	34.1	-	63.0	-
63	30.7	-	58.6	-
80	24.3	-	69.2	-
100	24.7	-	67.3	8
125	30.0	7	67.2	8
160	34.6	5	65.0	6
200	42.4	1	62.4	3
250	44.1	2	58.9	0
315	46.5	3	56.6	0
400	49.7	2	53.0	0
500	49.7	3	50.3	0
630	51.7	2	46.9	0
800	55.7	0	39.6	0
1000	59.3	0	32.2	0
1250	61.0	0	26.3	0
1600	60.6	0	22.9	0
2000	62.7	0	19.3	0
2500	66.1	0	18.6	0
3150	67.4	0	17.7	0
4000	70.6	0	15.8	-
5000	70.5	-	15.9	-
6300	71.6	-	13.2	-
8000	74.6	-	12.5	-
10000	70.0	-	12.5	-
Ratings	STC 53	25	IIC 53	25

TEST REPORT

ACOUSTICAL PERFORMANCE



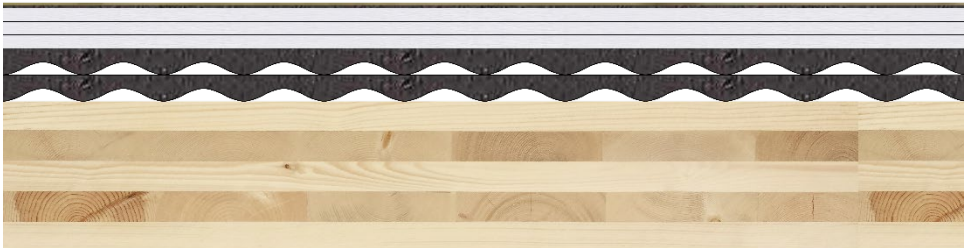
Bare Nordic 5-Ply CLT Test Data Included for Comparison

Test Number	N/A			
Test Date	N/A			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.5	-	67.6	-
63	30.3	-	63.8	-
80	31.3	-	68.2	-
100	30.8	-	66.8	0
125	27.0	0	71.1	0
160	27.9	0	74.3	0
200	27.8	2	78.3	0
250	30.6	2	81.4	0
315	33.0	3	80.9	0
400	33.5	6	83.5	2
500	35.2	5	84.3	3
630	36.3	5	83.8	4
800	38.8	3	83.0	4
1000	40.6	2	81.3	3
1250	42.4	2	79.4	4
1600	46.0	0	76.1	4
2000	46.4	0	71.7	3
2500	46.0	0	68.4	2
3150	44.9	0	64.9	2
4000	46.5	0	60.2	-
5000	47.2	-	55.2	-
6300	49.4	-	50.1	-
8000	52.3	-	45.0	-
10000	55.1	-	39.5	-
Ratings	STC 40	30	IIC 29	31

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4267.36			
Test Date	5/31/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Rigid Core Click Lock LVT, 5.5 mm sonus core 3, 3 mm EXACOR, 1-1/2" sonus curve 50, 50 mm Nordic 5-Ply CLT, 140 mm			
Ratings	STC 58	IIC 56	HIIC 78	LIIC 52
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

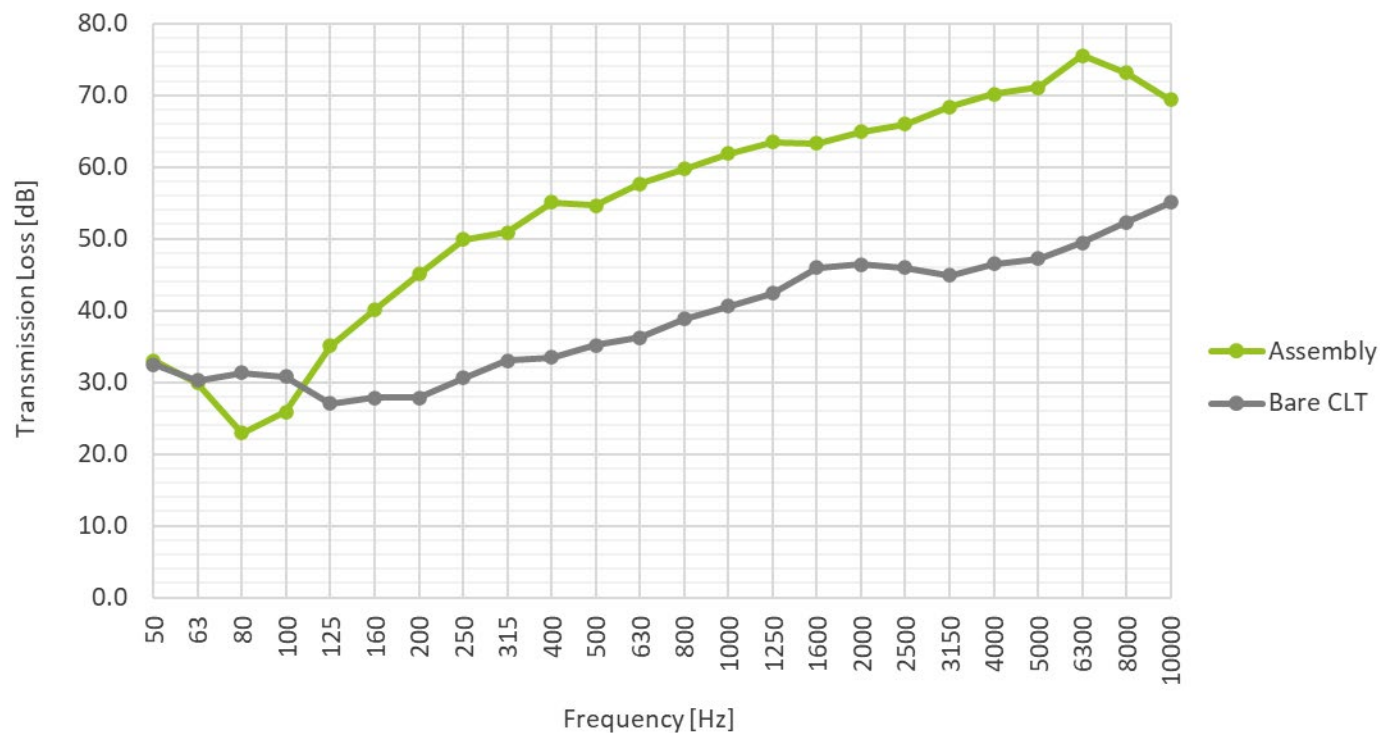
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TEST REPORT

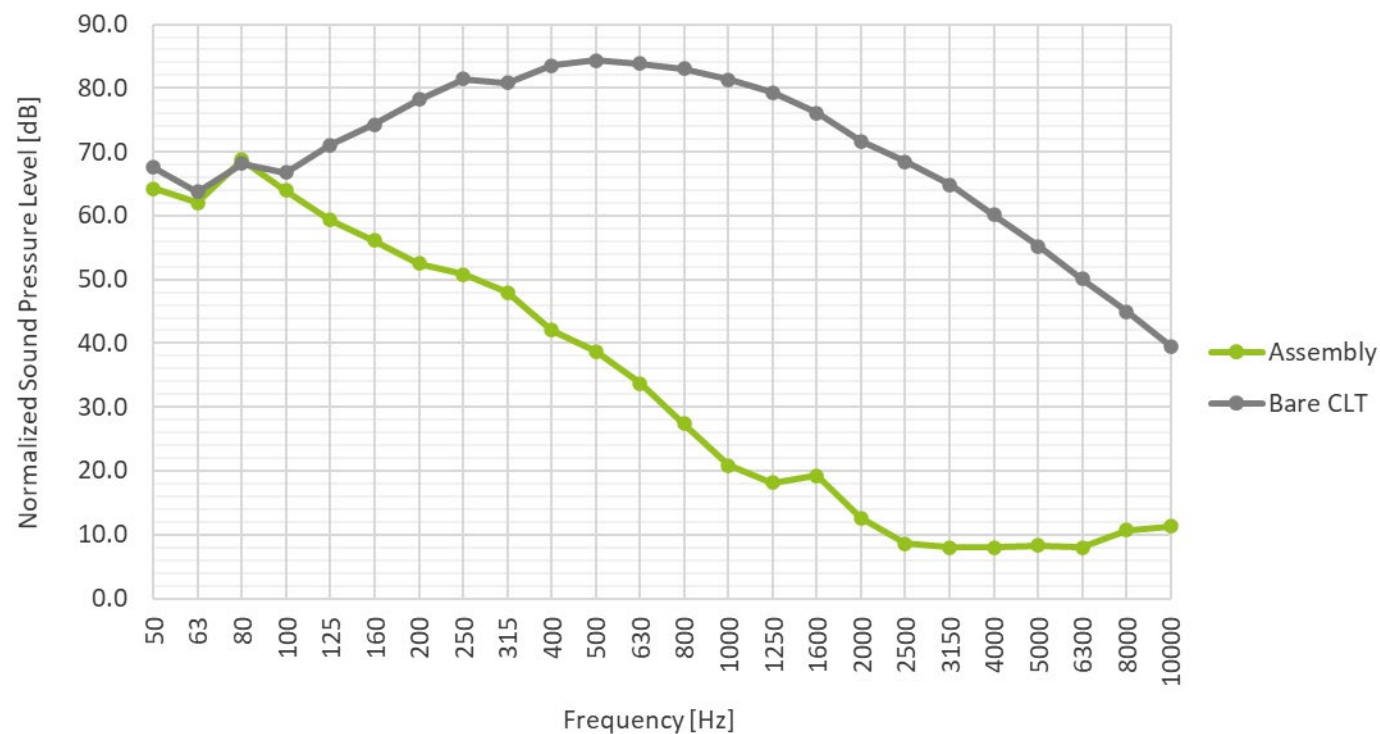
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.36			
Test Date	5/31/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	5.5 mm Rigid Core Click Lock LVT, sonus core 3 , 1-1/2" EXACOR, sonus curve 50 , 140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	33.0	-	64.2	-
63	29.9	-	62.0	-
80	22.9	-	68.8	-
100	25.9	-	63.9	8
125	35.1	7	59.3	3
160	40.1	5	56.1	0
200	45.1	3	52.5	0
250	49.9	1	50.8	0
315	50.9	3	48.0	0
400	55.1	2	42.0	0
500	54.6	3	38.7	0
630	57.7	1	33.7	0
800	59.7	0	27.4	0
1000	61.9	0	20.8	0
1250	63.5	0	18.1	0
1600	63.3	0	19.2	0
2000	64.9	0	12.6	0
2500	66.0	0	8.6	0
3150	68.4	0	8.0	0
4000	70.2	0	8.0	-
5000	71.1	-	8.3	-
6300	75.5	-	8.0	-
8000	73.1	-	10.7	-
10000	69.4	-	11.3	-
Ratings	STC 58	25	IIC 56	11

TEST REPORT

ACOUSTICAL PERFORMANCE



Bare Nordic 5-Ply CLT Test Data Included for Comparison

Test Number	N/A			
Test Date	N/A			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.5	-	67.6	-
63	30.3	-	63.8	-
80	31.3	-	68.2	-
100	30.8	-	66.8	0
125	27.0	0	71.1	0
160	27.9	0	74.3	0
200	27.8	2	78.3	0
250	30.6	2	81.4	0
315	33.0	3	80.9	0
400	33.5	6	83.5	2
500	35.2	5	84.3	3
630	36.3	5	83.8	4
800	38.8	3	83.0	4
1000	40.6	2	81.3	3
1250	42.4	2	79.4	4
1600	46.0	0	76.1	4
2000	46.4	0	71.7	3
2500	46.0	0	68.4	2
3150	44.9	0	64.9	2
4000	46.5	0	60.2	-
5000	47.2	-	55.2	-
6300	49.4	-	50.1	-
8000	52.3	-	45.0	-
10000	55.1	-	39.5	-
Ratings	STC 40	30	IIC 29	31

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4267.39			
Test Date	5/31/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Rigid Core Click Lock LVT, 5.5 mm sonus XL 5, 5 mm EXACOR, 1-1/2" sonus curve 50, 50 mm Nordic 5-Ply CLT, 140 mm			
Ratings	STC 58	IIC 57	HIIC 81	LIIC 52
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

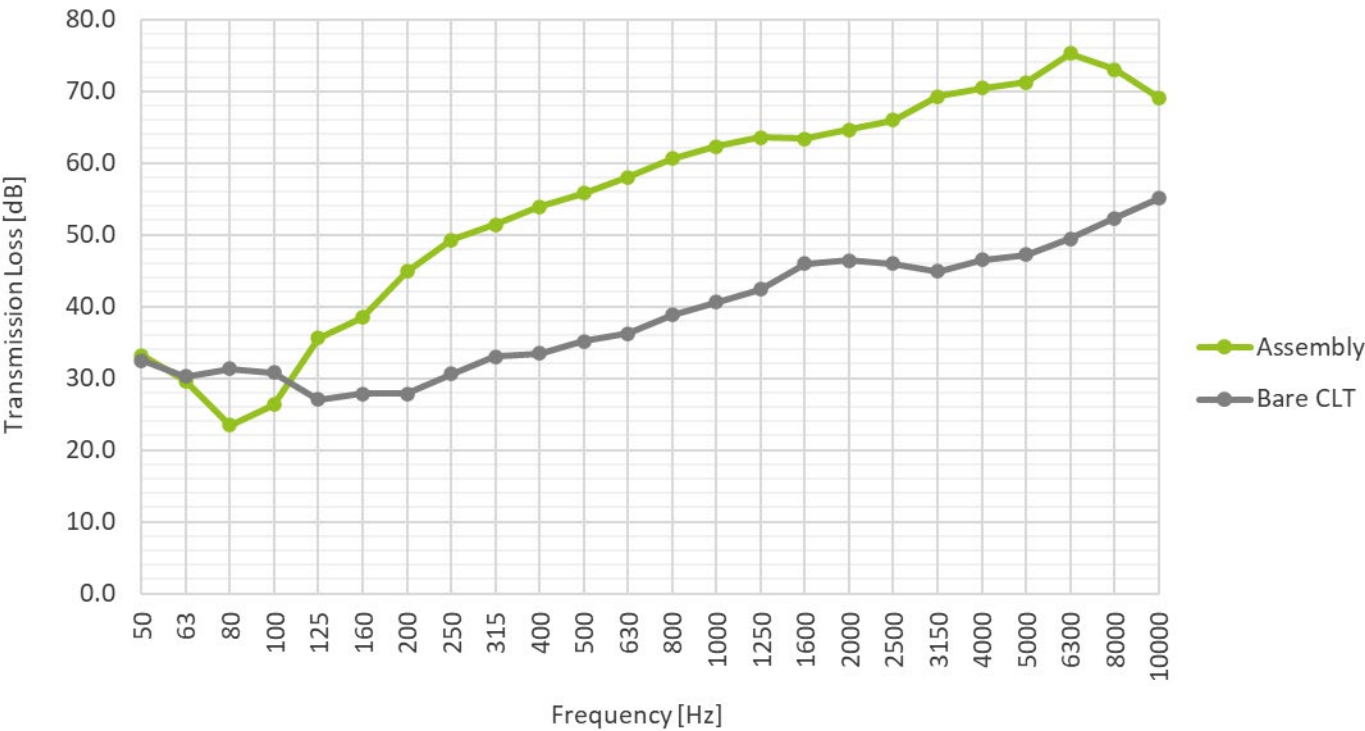
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TEST REPORT

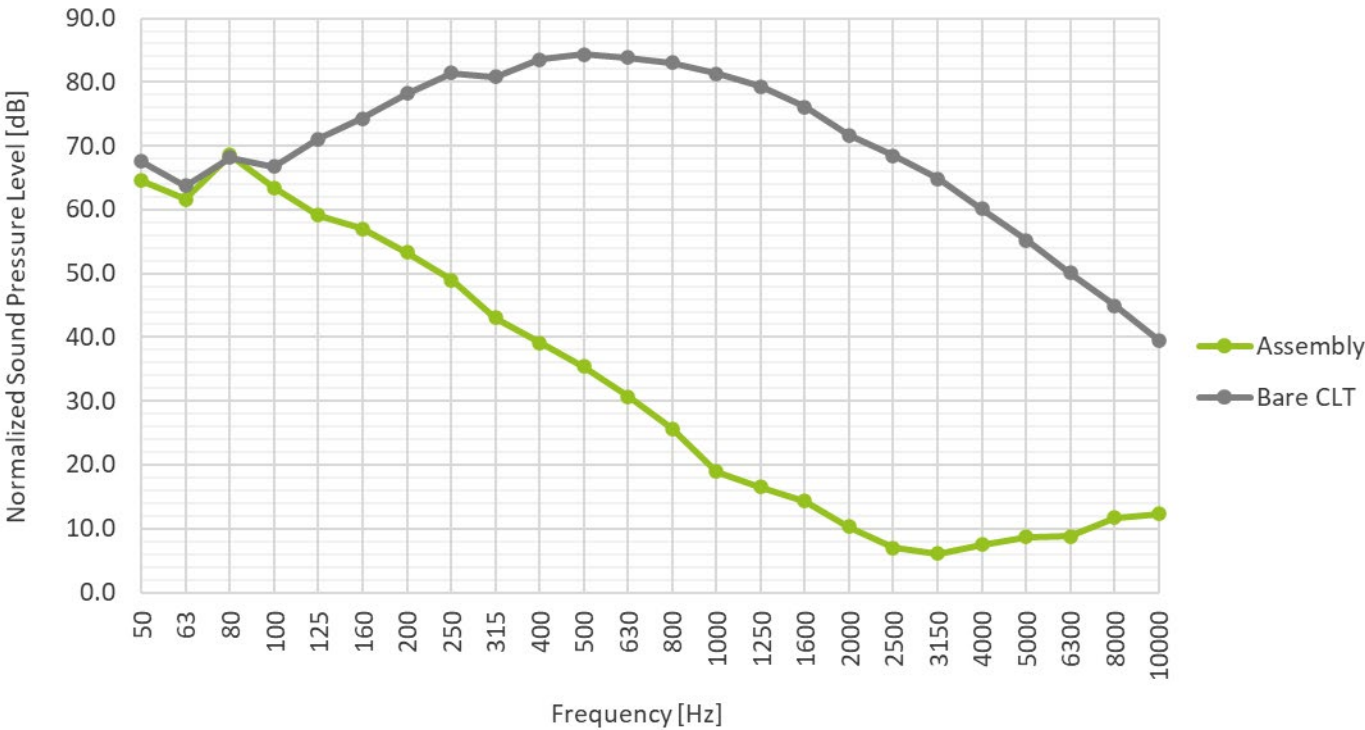
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.39			
Test Date	5/31/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	5.5 mm Rigid Core Click Lock LVT, sonus XL 5 , 1-1/2" EXACOR, sonus curve 50 , 140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	33.2	-	64.5	-
63	29.6	-	61.6	-
80	23.5	-	68.6	-
100	26.3	-	63.4	8
125	35.6	6	59.1	4
160	38.5	6	57.0	2
200	44.9	3	53.3	0
250	49.3	2	49.0	0
315	51.4	3	43.0	0
400	53.9	3	39.1	0
500	55.8	2	35.4	0
630	58.0	1	30.7	0
800	60.6	0	25.7	0
1000	62.3	0	18.9	0
1250	63.6	0	16.5	0
1600	63.4	0	14.3	0
2000	64.6	0	10.3	0
2500	66.0	0	7.0	0
3150	69.3	0	6.1	0
4000	70.4	0	7.5	-
5000	71.2	-	8.7	-
6300	75.3	-	8.8	-
8000	73.0	-	11.7	-
10000	69.1	-	12.3	-
Ratings	STC 58	26	IIC 57	14

TEST REPORT

ACOUSTICAL PERFORMANCE



Bare Nordic 5-Ply CLT Test Data Included for Comparison

Test Number	N/A			
Test Date	N/A			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.5	-	67.6	-
63	30.3	-	63.8	-
80	31.3	-	68.2	-
100	30.8	-	66.8	0
125	27.0	0	71.1	0
160	27.9	0	74.3	0
200	27.8	2	78.3	0
250	30.6	2	81.4	0
315	33.0	3	80.9	0
400	33.5	6	83.5	2
500	35.2	5	84.3	3
630	36.3	5	83.8	4
800	38.8	3	83.0	4
1000	40.6	2	81.3	3
1250	42.4	2	79.4	4
1600	46.0	0	76.1	4
2000	46.4	0	71.7	3
2500	46.0	0	68.4	2
3150	44.9	0	64.9	2
4000	46.5	0	60.2	-
5000	47.2	-	55.2	-
6300	49.4	-	50.1	-
8000	52.3	-	45.0	-
10000	55.1	-	39.5	-
Ratings	STC 40	30	IIC 29	31

HARDWOOD & LVT FLOOR SURFACE

5 ply 140mm CLT PRODUCT COMPARISON

SoundPanel x4 with ½" Exacor dry screed board



The **REGUPOL soundpanel X4** is a panelized floating floor system designed to absorb airborne sound and dissipate structure-borne vibration. Each 4' x 4' panel is perfectly suitable for use in mass timber construction. A layer of EXACOR® dry screed panel or ¾" plywood can be used to secure the soundpanel X4 system together to each other.



Detail	Assembly	Acoustic Rating	
	½" EXACOR board soundpanel x4 CLT – 5 ply 140mm	IIC 51 HIIC 54 LIIC 52	STC 55
	sonus core 3 with hardwood ½" EXACOR board soundpanel x4 CLT – 5 ply 140mm	IIC 56 HIIC 65 LIIC 61	STC 57
	sonus core 5 with hardwood ½" EXACOR board soundpanel x4 CLT – 5 ply 140mm	IIC 58 HIIC 67 LIIC 55	STC 57
	sonus core 3 with LVT ½" EXACOR board soundpanel x4 CLT – 5 ply 140mm	IIC 56 HIIC 68 LIIC 48	STC 57

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.40			
Test Date	5/30/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	EXACOR, 1/2" soundpanel, 2-19/32" Nordic 5-Ply CLT, 140 mm			
Ratings	STC 55	IIC 51	HIIC 54	LIIC 52
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

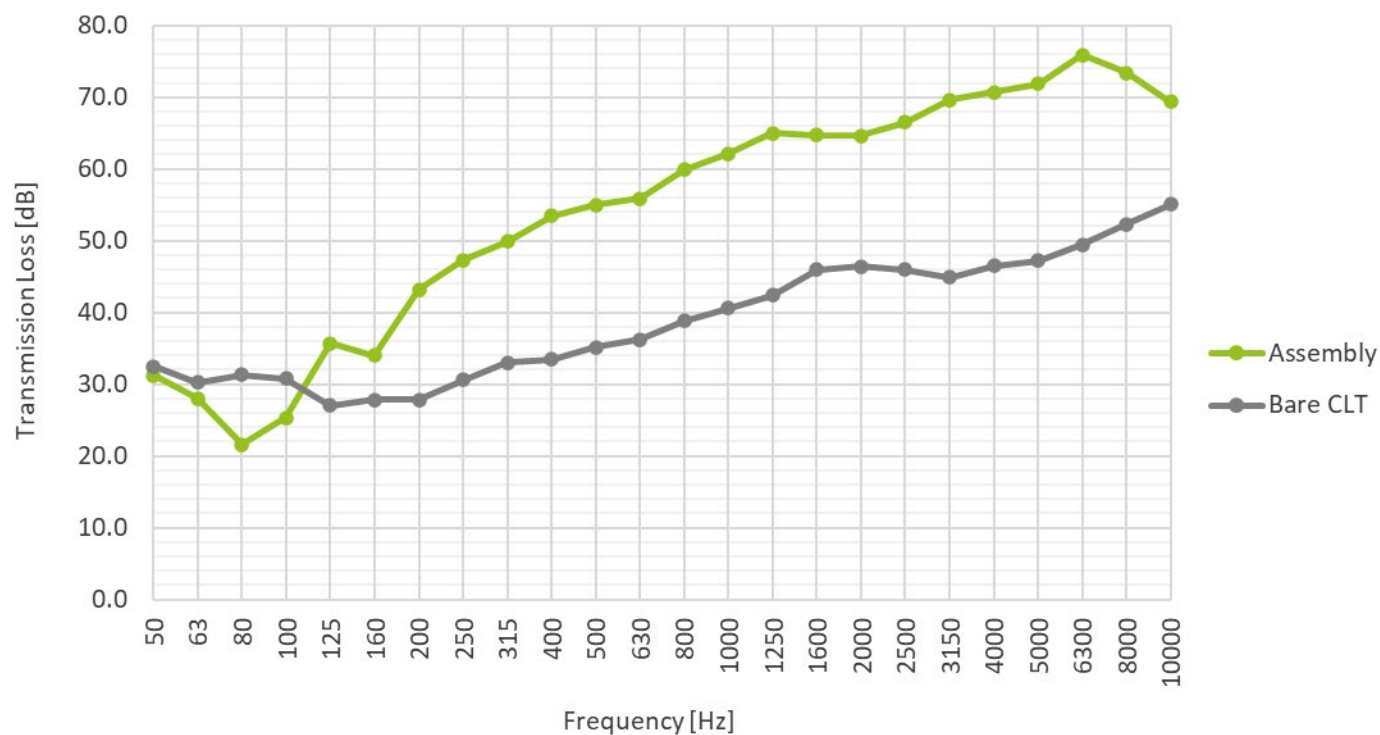
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TEST REPORT

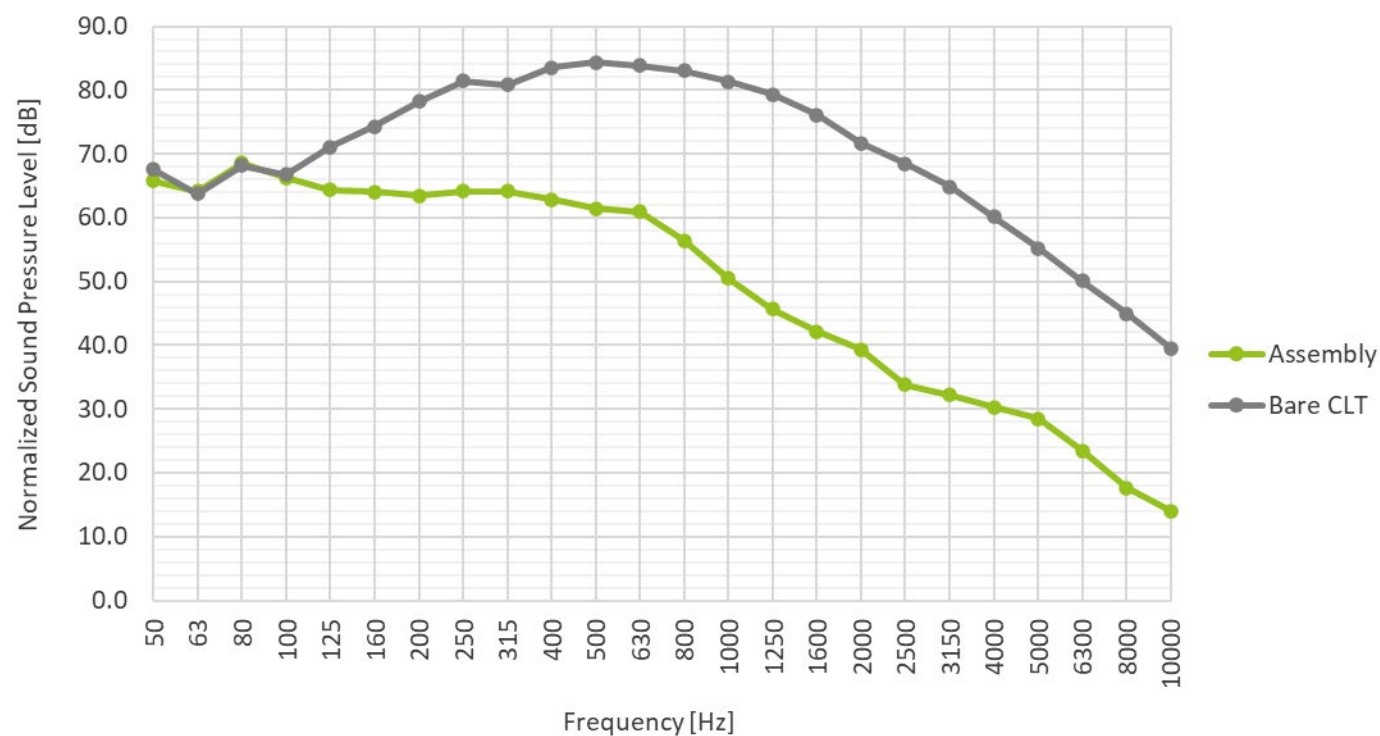
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.40			
Test Date	5/30/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	1/2" EXACOR, soundpanel , 140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	31.2	-	65.8	-
63	28.0	-	64.1	-
80	21.6	-	68.6	-
100	25.3	-	66.3	5
125	35.7	3	64.3	3
160	34.0	8	64.0	3
200	43.2	2	63.4	2
250	47.3	1	64.1	3
315	49.9	1	64.1	3
400	53.5	1	62.8	3
500	55.0	0	61.4	2
630	55.9	0	60.9	3
800	59.9	0	56.4	0
1000	62.1	0	50.5	0
1250	65.0	0	45.7	0
1600	64.7	0	42.1	0
2000	64.6	0	39.3	0
2500	66.5	0	33.8	0
3150	69.6	0	32.2	0
4000	70.7	0	30.3	-
5000	71.9	-	28.5	-
6300	75.9	-	23.5	-
8000	73.4	-	17.6	-
10000	69.4	-	14.0	-
Ratings	STC 55	16	IIC 51	27

TEST REPORT

ACOUSTICAL PERFORMANCE



Bare Nordic 5-Ply CLT Test Data Included for Comparison

Test Number	N/A			
Test Date	N/A			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.5	-	67.6	-
63	30.3	-	63.8	-
80	31.3	-	68.2	-
100	30.8	-	66.8	0
125	27.0	0	71.1	0
160	27.9	0	74.3	0
200	27.8	2	78.3	0
250	30.6	2	81.4	0
315	33.0	3	80.9	0
400	33.5	6	83.5	2
500	35.2	5	84.3	3
630	36.3	5	83.8	4
800	38.8	3	83.0	4
1000	40.6	2	81.3	3
1250	42.4	2	79.4	4
1600	46.0	0	76.1	4
2000	46.4	0	71.7	3
2500	46.0	0	68.4	2
3150	44.9	0	64.9	2
4000	46.5	0	60.2	-
5000	47.2	-	55.2	-
6300	49.4	-	50.1	-
8000	52.3	-	45.0	-
10000	55.1	-	39.5	-
Ratings	STC 40	30	IIC 29	31

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.42			
Test Date	6/1/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Engineered Hardwood sonus core 3, 3 mm EXACOR, 1/2" soundpanel, 2-19/32" Nordic 5-Ply CLT, 140 mm			
Ratings	STC 57	IIC 56	HIIC 65	LIIC 51
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

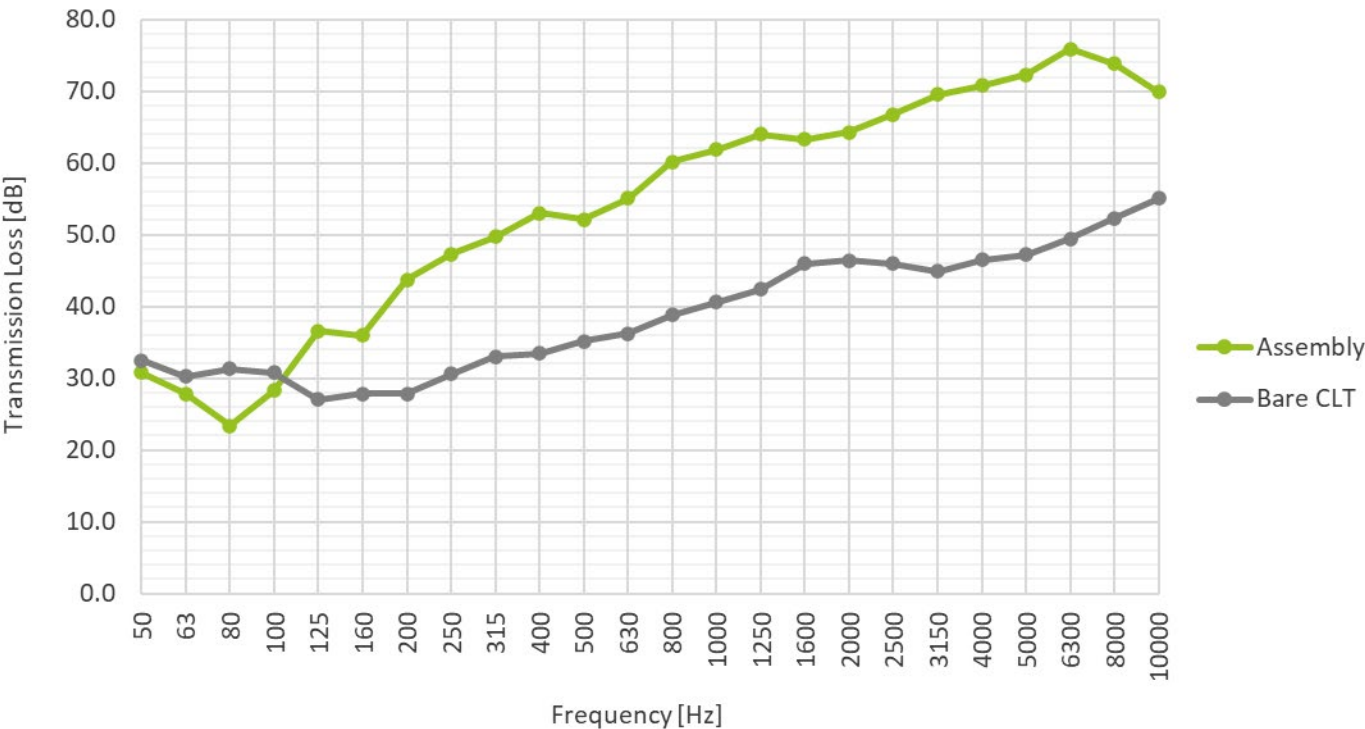
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TEST REPORT

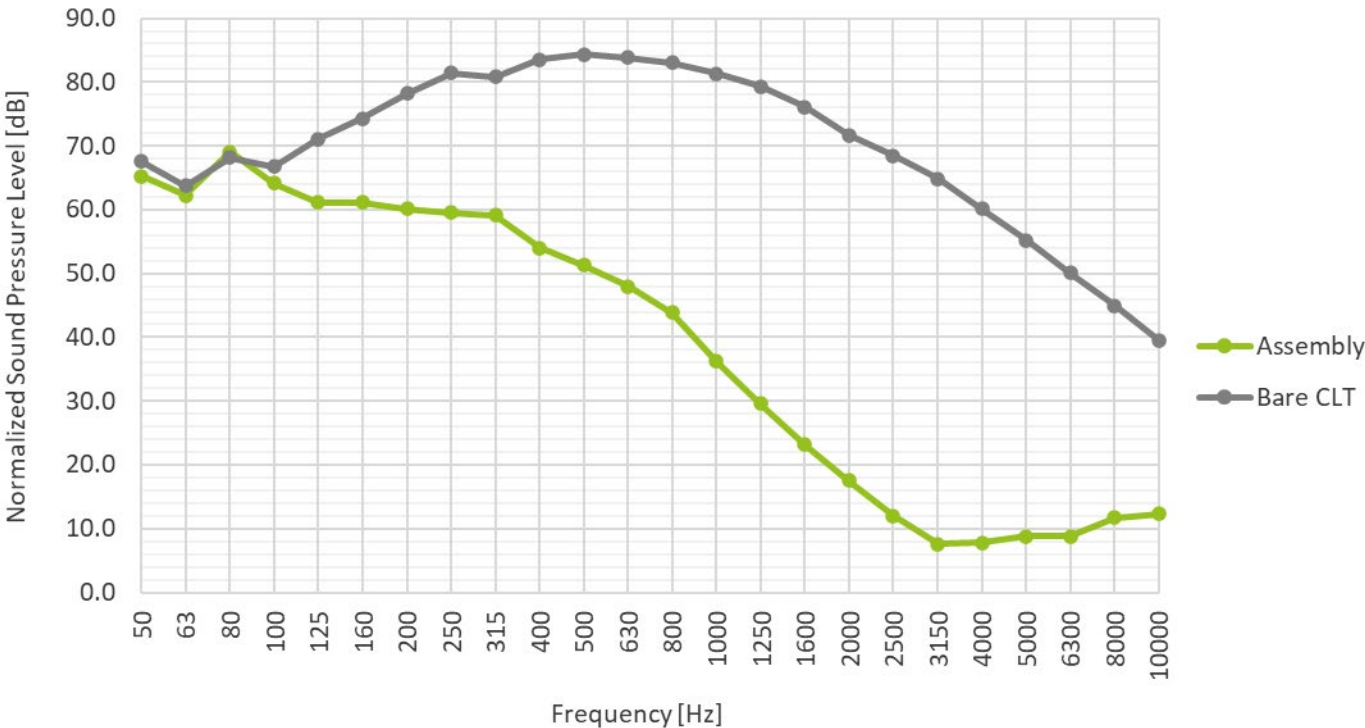
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.42			
Test Date	6/1/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Engineered Hardwood, sonus core 3 , 1/2" EXACOR, soundpanel , 140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	30.8	-	65.3	-
63	27.8	-	62.2	-
80	23.4	-	69.1	-
100	28.3	-	64.1	8
125	36.6	4	61.1	5
160	36.0	8	61.1	5
200	43.7	3	60.1	4
250	47.3	3	59.5	3
315	49.7	3	59.1	3
400	53.0	3	54.0	0
500	52.1	5	51.3	0
630	55.1	3	48.0	0
800	60.2	0	43.9	0
1000	61.9	0	36.2	0
1250	64.0	0	29.6	0
1600	63.3	0	23.2	0
2000	64.3	0	17.5	0
2500	66.8	0	12.0	0
3150	69.5	0	7.6	0
4000	70.8	0	7.8	-
5000	72.3	-	8.8	-
6300	75.9	-	8.8	-
8000	73.8	-	11.7	-
10000	69.9	-	12.3	-
Ratings	STC 57	32	IIC 56	28

TEST REPORT

ACOUSTICAL PERFORMANCE



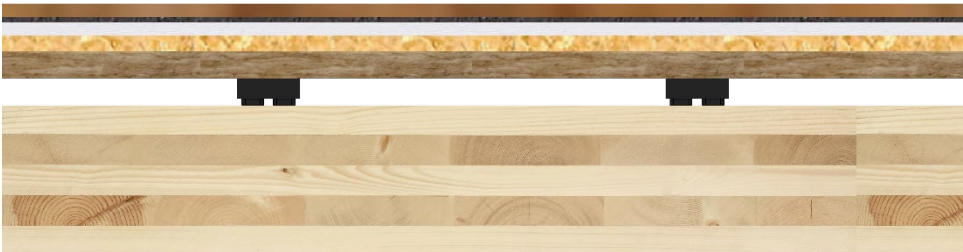
Bare Nordic 5-Ply CLT Test Data Included for Comparison

Test Number	N/A			
Test Date	N/A			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.5	-	67.6	-
63	30.3	-	63.8	-
80	31.3	-	68.2	-
100	30.8	-	66.8	0
125	27.0	0	71.1	0
160	27.9	0	74.3	0
200	27.8	2	78.3	0
250	30.6	2	81.4	0
315	33.0	3	80.9	0
400	33.5	6	83.5	2
500	35.2	5	84.3	3
630	36.3	5	83.8	4
800	38.8	3	83.0	4
1000	40.6	2	81.3	3
1250	42.4	2	79.4	4
1600	46.0	0	76.1	4
2000	46.4	0	71.7	3
2500	46.0	0	68.4	2
3150	44.9	0	64.9	2
4000	46.5	0	60.2	-
5000	47.2	-	55.2	-
6300	49.4	-	50.1	-
8000	52.3	-	45.0	-
10000	55.1	-	39.5	-
Ratings	STC 40	30	IIC 29	31

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.44			
Test Date	6/1/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Engineered Hardwood sonus core 5, 5 mm EXACOR, 1/2" soundpanel, 2-19/32" Nordic 5-Ply CLT, 140 mm			
Ratings	STC 57	IIC 58	HIIC 67	LIIC 55
Detail				

Please contact us to request a copy of the official test report from Intertek.

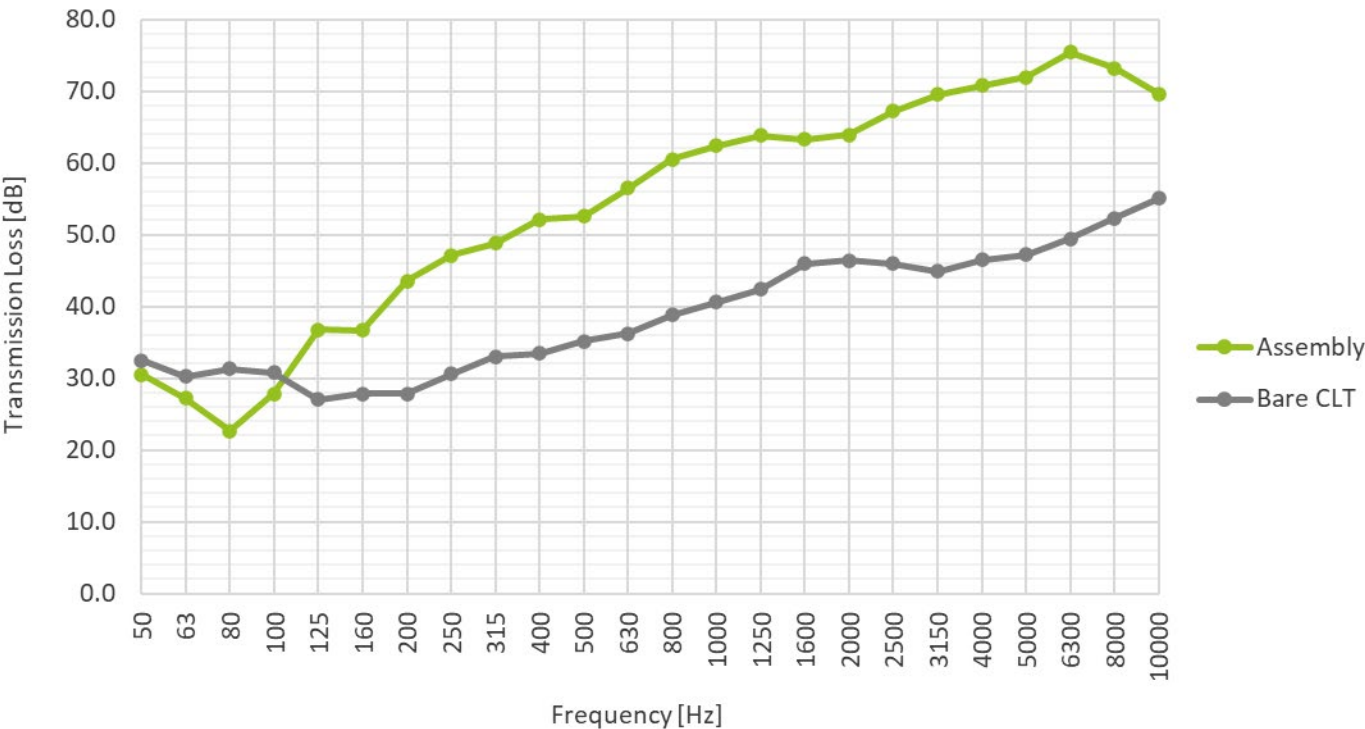
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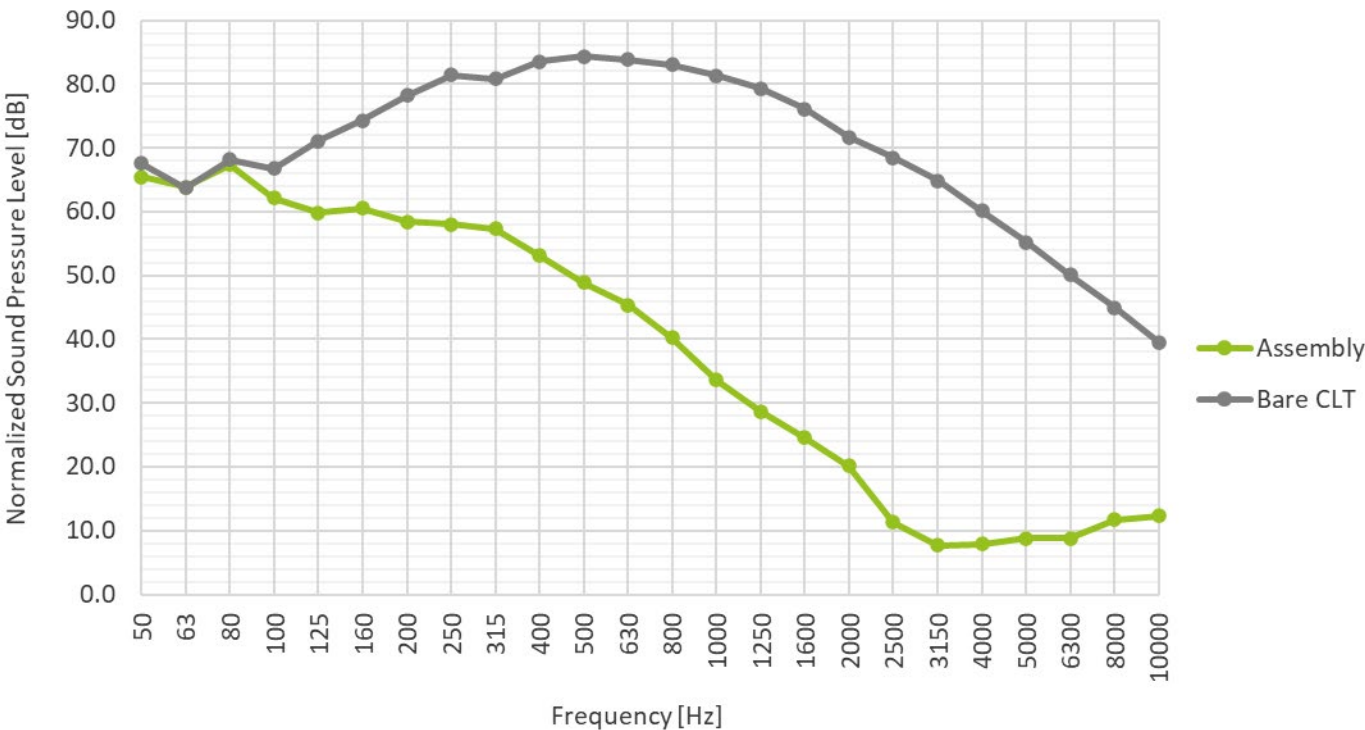
TEST REPORT
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.44			
Test Date	6/1/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Engineered Hardwood, sonus core 5 , 1/2" EXACOR, soundpanel , 140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	30.5	-	65.5	-
63	27.2	-	63.8	-
80	22.7	-	67.4	-
100	27.8	-	62.1	8
125	36.8	4	59.8	6
160	36.7	7	60.5	7
200	43.6	3	58.4	4
250	47.1	3	58.0	4
315	48.8	4	57.3	3
400	52.1	4	53.1	0
500	52.6	4	48.9	0
630	56.5	1	45.4	0
800	60.5	0	40.2	0
1000	62.4	0	33.6	0
1250	63.8	0	28.7	0
1600	63.3	0	24.6	0
2000	63.9	0	20.1	0
2500	67.2	0	11.3	0
3150	69.5	0	7.7	0
4000	70.8	0	7.9	-
5000	72.0	-	8.8	-
6300	75.4	-	8.8	-
8000	73.2	-	11.7	-
10000	69.6	-	12.3	-
Ratings	STC 57	30	IIC 58	32

TEST REPORT

ACOUSTICAL PERFORMANCE



Bare Nordic 5-Ply CLT Test Data Included for Comparison

Test Number	N/A			
Test Date	N/A			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.5	-	67.6	-
63	30.3	-	63.8	-
80	31.3	-	68.2	-
100	30.8	-	66.8	0
125	27.0	0	71.1	0
160	27.9	0	74.3	0
200	27.8	2	78.3	0
250	30.6	2	81.4	0
315	33.0	3	80.9	0
400	33.5	6	83.5	2
500	35.2	5	84.3	3
630	36.3	5	83.8	4
800	38.8	3	83.0	4
1000	40.6	2	81.3	3
1250	42.4	2	79.4	4
1600	46.0	0	76.1	4
2000	46.4	0	71.7	3
2500	46.0	0	68.4	2
3150	44.9	0	64.9	2
4000	46.5	0	60.2	-
5000	47.2	-	55.2	-
6300	49.4	-	50.1	-
8000	52.3	-	45.0	-
10000	55.1	-	39.5	-
Ratings	STC 40	30	IIC 29	31

TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.41			
Test Date	6/1/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	Rigid Core Click Lock LVT, 5.5 mm sonus core 3, 3 mm EXACOR, 1/2" soundpanel, 2-19/32" Nordic 5-Ply CLT, 140 mm			
Ratings	STC 57	IIC 56	HIIC 68	LIIC 48
Detail				

Please contact us to request a copy of the official test report from Intertek.

Disclaimer

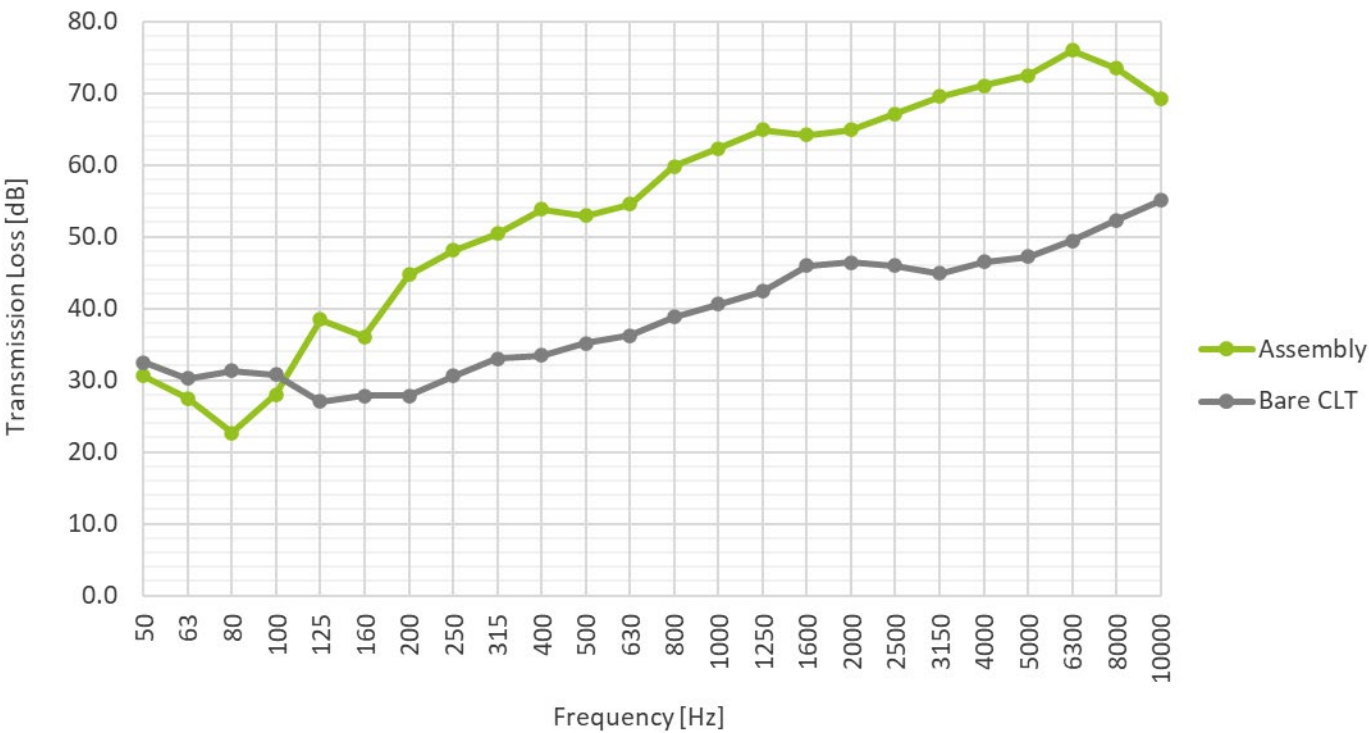
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TEST REPORT

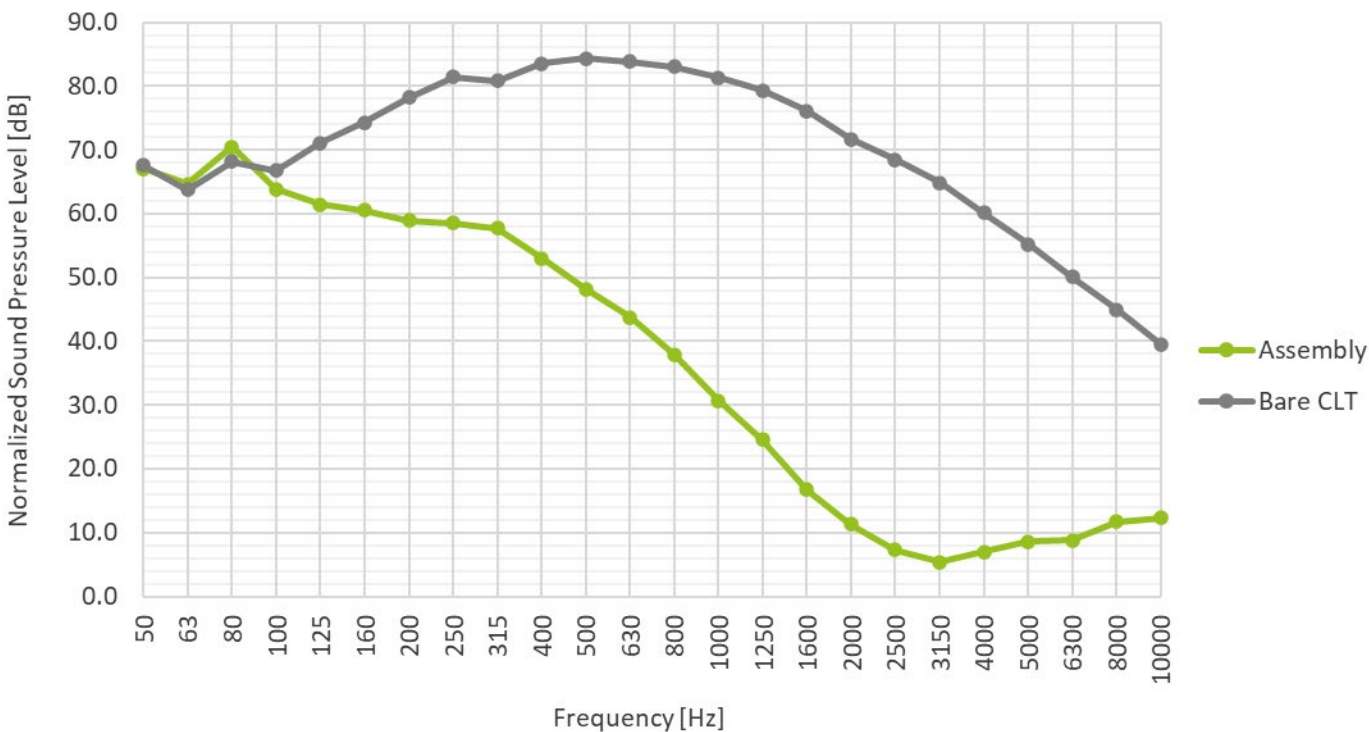
ACOUSTICAL PERFORMANCE



STC (Sound Transmission Class)



IIC (Impact Insulation Class)



TEST REPORT

ACOUSTICAL PERFORMANCE



Test Number	R4167.41			
Test Date	6/1/2024			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	5.5 mm Rigid Core Click Lock LVT, sonus core 3 , 1/2" EXACOR, soundpanel , 140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	30.6	-	67.1	-
63	27.5	-	64.6	-
80	22.7	-	70.5	-
100	28.0	-	63.8	8
125	38.5	2	61.4	5
160	36.1	8	60.5	5
200	44.7	2	58.9	3
250	48.1	2	58.5	2
315	50.4	3	57.7	2
400	53.8	2	53.0	0
500	52.9	4	48.2	0
630	54.5	4	43.8	0
800	59.8	0	37.9	0
1000	62.3	0	30.7	0
1250	64.9	0	24.6	0
1600	64.2	0	16.7	0
2000	64.9	0	11.3	0
2500	67.1	0	7.3	0
3150	69.5	0	5.4	0
4000	71.1	0	7.0	-
5000	72.5	-	8.6	-
6300	76.0	-	8.8	-
8000	73.5	-	11.7	-
10000	69.3	-	12.3	-
Ratings	STC 57	27	IIC 56	25

TEST REPORT

ACOUSTICAL PERFORMANCE



Bare Nordic 5-Ply CLT Test Data Included for Comparison

Test Number	N/A			
Test Date	N/A			
Test Location	Intertek (York, PA)			
Standards	ASTM E90, ASTM E492, ASTM E3222			
Assembly	140 mm Nordic 5-Ply CLT			
Frequency [Hz]	Transmission Loss [dB]	Deficiencies	Normalized SPL [dB]	Deficiencies
50	32.5	-	67.6	-
63	30.3	-	63.8	-
80	31.3	-	68.2	-
100	30.8	-	66.8	0
125	27.0	0	71.1	0
160	27.9	0	74.3	0
200	27.8	2	78.3	0
250	30.6	2	81.4	0
315	33.0	3	80.9	0
400	33.5	6	83.5	2
500	35.2	5	84.3	3
630	36.3	5	83.8	4
800	38.8	3	83.0	4
1000	40.6	2	81.3	3
1250	42.4	2	79.4	4
1600	46.0	0	76.1	4
2000	46.4	0	71.7	3
2500	46.0	0	68.4	2
3150	44.9	0	64.9	2
4000	46.5	0	60.2	-
5000	47.2	-	55.2	-
6300	49.4	-	50.1	-
8000	52.3	-	45.0	-
10000	55.1	-	39.5	-
Ratings	STC 40	30	IIC 29	31

Download TDS & Specifications

Product	Download Technical Data Sheets	Download 3 Part Specifications																																													
TECHNICAL DATA: MISS TRIMMER CONSTRUCTION REGUPOL SONUS CURVE 10  The REGUPOL Sonus Curve 10 is a 10' x 10' x 1/2" high performance acoustic panel designed for use in a variety of applications. It is constructed from a high density, non-toxic, and non-flammable material. The panel is designed to absorb sound waves and reduce noise levels in a room. It is available in a variety of colors and finishes. Key Features: 10' x 10' x 1/2" dimensions - High density, non-toxic, and non-flammable material - Designed to absorb sound waves and reduce noise levels - Available in a variety of colors and finishes Technical Data: <table border="1"> <thead> <tr> <th>Property</th> <th>Value</th> <th>Unit</th> </tr> </thead> <tbody> <tr> <td>Weight</td> <td>10.0</td> <td>lbs</td> </tr> <tr> <td>Thickness</td> <td>1/2"</td> <td></td> </tr> <tr> <td>Length</td> <td>10'</td> <td></td> </tr> <tr> <td>Width</td> <td>10'</td> <td></td> </tr> <tr> <td>Area</td> <td>100</td> <td>sq ft</td> </tr> <tr> <td>Volume</td> <td>5.0</td> <td>cu ft</td> </tr> <tr> <td>Weight per sq ft</td> <td>0.1</td> <td>lbs/sq ft</td> </tr> <tr> <td>Weight per cu ft</td> <td>2.0</td> <td>lbs/cu ft</td> </tr> <tr> <td>Sound Absorption Coefficient</td> <td>0.95</td> <td></td> </tr> <tr> <td>Sound Reflection Coefficient</td> <td>0.05</td> <td></td> </tr> <tr> <td>Sound Transmission Coefficient</td> <td>0.05</td> <td></td> </tr> <tr> <td>Sound Absorption</td> <td>9.5</td> <td>sq ft</td> </tr> <tr> <td>Sound Reflection</td> <td>0.5</td> <td>sq ft</td> </tr> <tr> <td>Sound Transmission</td> <td>0.5</td> <td>sq ft</td> </tr> </tbody> </table>	Property	Value	Unit	Weight	10.0	lbs	Thickness	1/2"		Length	10'		Width	10'		Area	100	sq ft	Volume	5.0	cu ft	Weight per sq ft	0.1	lbs/sq ft	Weight per cu ft	2.0	lbs/cu ft	Sound Absorption Coefficient	0.95		Sound Reflection Coefficient	0.05		Sound Transmission Coefficient	0.05		Sound Absorption	9.5	sq ft	Sound Reflection	0.5	sq ft	Sound Transmission	0.5	sq ft	Sonus curve 10 - TDS	Sonus curve 10 – spec
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TECHNICAL DATA: MISS TRIMMER CONSTRUCTION REGUPOL SONUS CURVE 17  The REGUPOL Sonus Curve 17 is a 17' x 17' x 1/2" high performance acoustic panel designed for use in a variety of applications. It is constructed from a high density, non-toxic, and non-flammable material. The panel is designed to absorb sound waves and reduce noise levels in a room. It is available in a variety of colors and finishes. Key Features: 17' x 17' x 1/2" dimensions - High density, non-toxic, and non-flammable material - Designed to absorb sound waves and reduce noise levels - Available in a variety of colors and finishes Technical Data: <table border="1"> <thead> <tr> <th>Property</th> <th>Value</th> <th>Unit</th> </tr> </thead> <tbody> <tr> <td>Weight</td> <td>17.0</td> <td>lbs</td> </tr> <tr> <td>Thickness</td> <td>1/2"</td> <td></td> </tr> <tr> <td>Length</td> <td>17'</td> <td></td> </tr> <tr> <td>Width</td> <td>17'</td> <td></td> </tr> <tr> <td>Area</td> <td>289</td> <td>sq ft</td> </tr> <tr> <td>Volume</td> <td>14.45</td> <td>cu ft</td> </tr> <tr> <td>Weight per sq ft</td> <td>0.1</td> <td>lbs/sq ft</td> </tr> <tr> <td>Weight per cu ft</td> <td>2.0</td> <td>lbs/cu ft</td> </tr> <tr> <td>Sound Absorption Coefficient</td> <td>0.95</td> <td></td> </tr> <tr> <td>Sound Reflection Coefficient</td> <td>0.05</td> <td></td> </tr> <tr> <td>Sound Transmission Coefficient</td> <td>0.05</td> <td></td> </tr> <tr> <td>Sound Absorption</td> <td>274.55</td> <td>sq ft</td> </tr> <tr> <td>Sound Reflection</td> <td>14.45</td> <td>sq ft</td> </tr> <tr> <td>Sound Transmission</td> <td>14.45</td> <td>sq ft</td> </tr> </tbody> </table>	Property	Value	Unit	Weight	17.0	lbs	Thickness	1/2"		Length	17'		Width	17'		Area	289	sq ft	Volume	14.45	cu ft	Weight per sq ft	0.1	lbs/sq ft	Weight per cu ft	2.0	lbs/cu ft	Sound Absorption Coefficient	0.95		Sound Reflection Coefficient	0.05		Sound Transmission Coefficient	0.05		Sound Absorption	274.55	sq ft	Sound Reflection	14.45	sq ft	Sound Transmission	14.45	sq ft	Sonus curve 17 - TDS	Sonus curve 17 - spec
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TECHNICAL DATA: MISS TRIMMER CONSTRUCTION REGUPOL SONUS CURVE 25  The REGUPOL Sonus Curve 25 is a 25' x 25' x 1/2" high performance acoustic panel designed for use in a variety of applications. It is constructed from a high density, non-toxic, and non-flammable material. The panel is designed to absorb sound waves and reduce noise levels in a room. It is available in a variety of colors and finishes. Key Features: 25' x 25' x 1/2" dimensions - High density, non-toxic, and non-flammable material - Designed to absorb sound waves and reduce noise levels - Available in a variety of colors and finishes Technical Data: <table border="1"> <thead> <tr> <th>Property</th> <th>Value</th> <th>Unit</th> </tr> </thead> <tbody> <tr> <td>Weight</td> <td>25.0</td> <td>lbs</td> </tr> <tr> <td>Thickness</td> <td>1/2"</td> <td></td> </tr> <tr> <td>Length</td> <td>25'</td> <td></td> </tr> <tr> <td>Width</td> <td>25'</td> <td></td> </tr> <tr> <td>Area</td> <td>625</td> <td>sq ft</td> </tr> <tr> <td>Volume</td> <td>31.25</td> <td>cu ft</td> </tr> <tr> <td>Weight per sq ft</td> <td>0.1</td> <td>lbs/sq ft</td> </tr> <tr> <td>Weight per cu ft</td> <td>2.0</td> <td>lbs/cu ft</td> </tr> <tr> <td>Sound Absorption Coefficient</td> <td>0.95</td> <td></td> </tr> <tr> <td>Sound Reflection Coefficient</td> <td>0.05</td> <td></td> </tr> <tr> <td>Sound Transmission Coefficient</td> <td>0.05</td> <td></td> </tr> <tr> <td>Sound Absorption</td> <td>593.75</td> <td>sq ft</td> </tr> <tr> <td>Sound Reflection</td> <td>31.25</td> <td>sq ft</td> </tr> <tr> <td>Sound Transmission</td> <td>31.25</td> <td>sq ft</td> </tr> </tbody> </table>	Property	Value	Unit	Weight	25.0	lbs	Thickness	1/2"		Length	25'		Width	25'		Area	625	sq ft	Volume	31.25	cu ft	Weight per sq ft	0.1	lbs/sq ft	Weight per cu ft	2.0	lbs/cu ft	Sound Absorption Coefficient	0.95		Sound Reflection Coefficient	0.05		Sound Transmission Coefficient	0.05		Sound Absorption	593.75	sq ft	Sound Reflection	31.25	sq ft	Sound Transmission	31.25	sq ft	Sonus curve 25 – TDS	Sonus curve 25 - spec
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TECHNICAL DATA: MISS TRIMMER CONSTRUCTION REGUPOL SONUS CURVE 50  The REGUPOL Sonus Curve 50 is a 50' x 50' x 1/2" high performance acoustic panel designed for use in a variety of applications. It is constructed from a high density, non-toxic, and non-flammable material. The panel is designed to absorb sound waves and reduce noise levels in a room. It is available in a variety of colors and finishes. Key Features: 50' x 50' x 1/2" dimensions - High density, non-toxic, and non-flammable material - Designed to absorb sound waves and reduce noise levels - Available in a variety of colors and finishes Technical Data: <table border="1"> <thead> <tr> <th>Property</th> <th>Value</th> <th>Unit</th> </tr> </thead> <tbody> <tr> <td>Weight</td> <td>50.0</td> <td>lbs</td> </tr> <tr> <td>Thickness</td> <td>1/2"</td> <td></td> </tr> <tr> <td>Length</td> <td>50'</td> <td></td> </tr> <tr> <td>Width</td> <td>50'</td> <td></td> </tr> <tr> <td>Area</td> <td>2500</td> <td>sq ft</td> </tr> <tr> <td>Volume</td> <td>1250</td> <td>cu ft</td> </tr> <tr> <td>Weight per sq ft</td> <td>0.1</td> <td>lbs/sq ft</td> </tr> <tr> <td>Weight per cu ft</td> <td>2.0</td> <td>lbs/cu ft</td> </tr> <tr> <td>Sound Absorption Coefficient</td> <td>0.95</td> <td></td> </tr> <tr> <td>Sound Reflection Coefficient</td> <td>0.05</td> <td></td> </tr> <tr> <td>Sound Transmission Coefficient</td> <td>0.05</td> <td></td> </tr> <tr> <td>Sound Absorption</td> <td>2375</td> <td>sq ft</td> </tr> <tr> <td>Sound Reflection</td> <td>1250</td> <td>sq ft</td> </tr> <tr> <td>Sound Transmission</td> <td>1250</td> <td>sq ft</td> </tr> </tbody> </table>	Property	Value	Unit	Weight	50.0	lbs	Thickness	1/2"		Length	50'		Width	50'		Area	2500	sq ft	Volume	1250	cu ft	Weight per sq ft	0.1	lbs/sq ft	Weight per cu ft	2.0	lbs/cu ft	Sound Absorption Coefficient	0.95		Sound Reflection Coefficient	0.05		Sound Transmission Coefficient	0.05		Sound Absorption	2375	sq ft	Sound Reflection	1250	sq ft	Sound Transmission	1250	sq ft	Sonus curve 50 – TDS	Sonus curve 50 - spec
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TECHNICAL DATA: MISS TRIMMER CONSTRUCTION REGUPOL SOUNDPANEL X4  The REGUPOL Soundpanel X4 is a 4' x 4' x 1/2" high performance acoustic panel designed for use in a variety of applications. It is constructed from a high density, non-toxic, and non-flammable material. The panel is designed to absorb sound waves and reduce noise levels in a room. It is available in a variety of colors and finishes. Key Features: 4' x 4' x 1/2" dimensions - High density, non-toxic, and non-flammable material - Designed to absorb sound waves and reduce noise levels - Available in a variety of colors and finishes Technical Data: <table border="1"> <thead> <tr> <th>Property</th> <th>Value</th> <th>Unit</th> </tr> </thead> <tbody> <tr> <td>Weight</td> <td>4.0</td> <td>lbs</td> </tr> <tr> <td>Thickness</td> <td>1/2"</td> <td></td> </tr> <tr> <td>Length</td> <td>4'</td> <td></td> </tr> <tr> <td>Width</td> <td>4'</td> <td></td> </tr> <tr> <td>Area</td> <td>16</td> <td>sq ft</td> </tr> <tr> <td>Volume</td> <td>8</td> <td>cu ft</td> </tr> <tr> <td>Weight per sq ft</td> <td>0.1</td> <td>lbs/sq ft</td> </tr> <tr> <td>Weight per cu ft</td> <td>2.0</td> <td>lbs/cu ft</td> </tr> <tr> <td>Sound Absorption Coefficient</td> <td>0.95</td> <td></td> </tr> <tr> <td>Sound Reflection Coefficient</td> <td>0.05</td> <td></td> </tr> <tr> <td>Sound Transmission Coefficient</td> <td>0.05</td> <td></td> </tr> <tr> <td>Sound Absorption</td> <td>15.2</td> <td>sq ft</td> </tr> <tr> <td>Sound Reflection</td> <td>0.8</td> <td>sq ft</td> </tr> <tr> <td>Sound Transmission</td> <td>0.8</td> <td>sq ft</td> </tr> </tbody> </table>	Property	Value	Unit	Weight	4.0	lbs	Thickness	1/2"		Length	4'		Width	4'		Area	16	sq ft	Volume	8	cu ft	Weight per sq ft	0.1	lbs/sq ft	Weight per cu ft	2.0	lbs/cu ft	Sound Absorption Coefficient	0.95		Sound Reflection Coefficient	0.05		Sound Transmission Coefficient	0.05		Sound Absorption	15.2	sq ft	Sound Reflection	0.8	sq ft	Sound Transmission	0.8	sq ft	Soundpanel x4 – TDS	Soundpanel x4 - spec
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TECHNICAL DATA: MASS TIMBER CONSTRUCTION

REGUPOL SONUS CURVE 10



The **REGUPOL sonus curve 10** is a 3/8" (10 mm) thick high-performance acoustical floor underlayment. It greatly reduces footfall noise transmission and impact sound. Its dimpled profile minimizes contact to the subfloor. The **sonus curve 10** is perfectly suitable for use in mass timber construction. Typically, a 2" to 4" concrete topping is installed over the **sonus curve 10**. Alternatively, 2 to 3 layers (1" to 1-1/2") of EXACOR® panels can be used. The **sonus curve 10** offers excellent acoustic performance and can achieve STC and IIC ratings in the high 50s and HIIC ratings as high as 69.



Mass Timber Construction Applications

- › Cross-Laminated Timber (CLT)
- › Dowel-Laminated Timber (DLT)
- › Glued-Laminated Timber (glulam)
- › Mass Plywood Panels (MPP)
- › Nail-Laminated Timber (NLT)

Materials

- › Polyurethane
- › Styrene-Butadiene Rubber

Form	Thickness	Width	Length	Unit Area	Weight	Unit Weight
Rolls	3/8" (10 mm)	4'	25'	100 ft ²	1.23 lb/ft ²	123 lb

Property	Result	Standard	Note
Density	37 lb / cuft (+/- 4 lb)	ASTM D792	
Hardness	25 – 35	ASTM D2240	A Shore Durometer
Temperature Resistance	0 – 140 °F		
LEED	up to 8 points	USGBC LEED v4.1	see documentation
Recycled Content	92%	ISO 14021	GreenCircle 22-0194
VOC	compliant	CDPH/EHLB V1.1	CA Specification

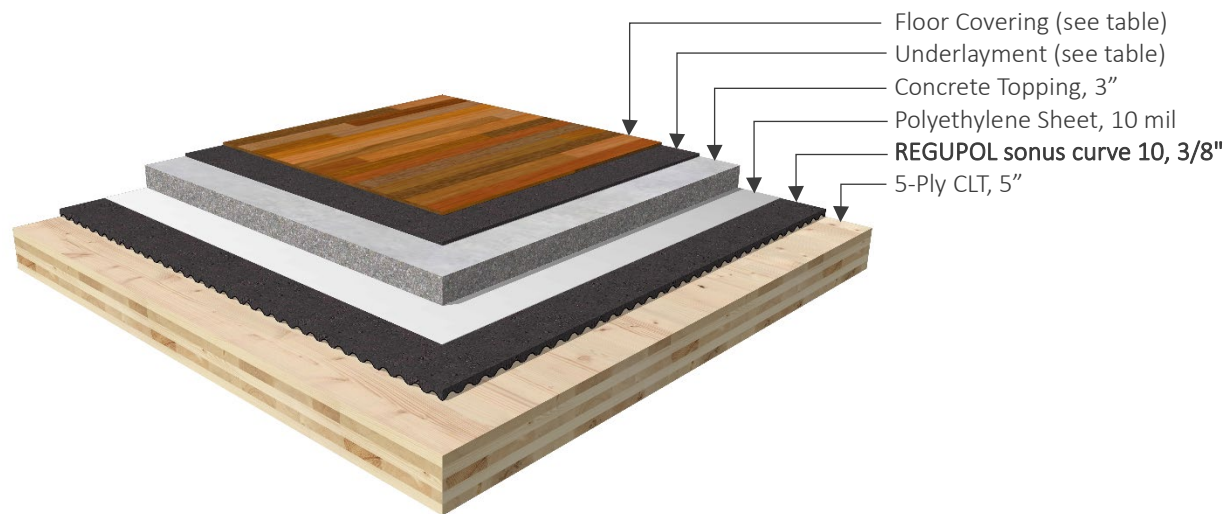
TECHNICAL DATA: MASS TIMBER CONSTRUCTION

REGUPOL SONUS CURVE 10



Acoustical Testing

5-Ply CLT with **sonus curve 10** and 3" Concrete Topping



Floor Covering	Underlayment	Test Number	HIIC	IIC	STC
None	None	R4167.10	50	49	53
Engineered Wood	sonus core 3	R4167.12	60	55	50
	sonus XL 5	R4167.14	63	55	50
SPC 5.5 mm	sonus core 3	R4167.11	63	55	50
	sonus XL 5	R4167.13	69	58	50

*Note, all tests were completed with 5-Ply CLT, **sonus curve 10**, and a 3" concrete topping.*

Accessories

REGUPOL perimeter
isolation strip



Section 03 30 00: Cast-In-Place Concrete

Sonus Curve 10

PART 1: GENERAL

1.1 SECTION INCLUDES

- A. Noise-reducing recycled rubber impact insulation systems
- B. Adhesives

1.2 RELATED SECTIONS

- A. Concrete Substrate
- B. Mass Timber: CLT, DLT, MPP substrates
- C. Plywood Substrate
- D. Tile, Carpet, Wood
- E. Noise Control and Vibration Isolation

1.3 REFERENCES

- A. American Society for Testing and Materials (ASTM).

ASTM F2170 - Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in-situ Probes

1. ASTM E492 Standard Test Method for Laboratory Measurement of Impact Sound Transmission Through Floor-Ceiling Assemblies Using the Tapping Machine
2. ASTM D5116 Standard Guide for small-scale environmental chamber determinations of Organic Emissions for Indoor Material/ Products
3. ASTM C627 Standard Test Method of Evaluating Ceramic Tile Installation Systems using the Robinson Type Floor Test
4. ASTM E1007 Standard Test Method for Field Measurement of Tapping Machine Impact Sound Transmission through Floor-Ceiling assemblies and Associated support structures
5. ASTM E2179 Standard Test Method for Laboratory Measurement of the Effectiveness of Floor Coverings in Reducing Impact Sound Transmission through Concrete Floors
6. ASTM E90 E2179 Standard Test Method for Laboratory Measurement of Airborne Sound Transmission loss of Building Partitions and Elements

- B. Leadership in Energy and Environmental Design - LEED®

1. LEED is an internationally recognized green building certification system, providing third-party verification that a building or community was designed and built using strategies aimed at

improving performance across all the metrics that matter most: energy savings, water efficiency, CO₂ emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts.

1.4 SYSTEM DESCRIPTION

- A. Performance Requirements: Provide recycled rubber resilient underlayment padding, which has been manufactured and installed to maintain performance criteria stated by the manufacturer without defects, damage or failure.

1.5 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 1. Preparation instructions and recommendations.
 2. Storage and handling requirements and recommendations.
 3. Installation methods.
 4. LEED Documentation of how the requirement for credit will be met.
 5. South Coast Air Quality Management District (SCAQMD) Rule # 1168
 6. Certification of Post Consumer and Post-Industrial materials
- C. Selection Samples: For each product specified, two complete sets
- D. Verification Samples: For each product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product and patterns.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: The manufacturer shall be a firm with a minimum of 25 years of successful experience in the manufacture of products with similar requirements.
- B. Installer Qualifications: The installer shall be a firm with a minimum of two years of successful experience in installation of products with similar requirements.
- C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 1. Finish areas designated by Architect.
 2. Do not proceed with the remaining work until workmanship, color, and sheen are approved by Architect.

3. Refinish the mock-up area as required to produce acceptable work.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.8 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by the manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. Acceptable Manufacturer:
Regupol America, LLC
11 Ritter Way, Lebanon, PA 17042
Toll Free Tel: (800) 537-8737
Tel: (717) 675-2198 Fax: (717) 675-2199
Email: bmd@regupol.com
Web: <http://www.Regupol.com>
- B. Substitutions: Not permitted.

2.2 PRODUCT

- A. Regupol Sonus Curve 10 Recycled rubber Impact Sound Insulation
 1. Material:
 - A. Made from 100% recycled SBR (Styrene-Butadiene Rubber) tire rubber. Sonus Curve 10 is a dimpled resilient rubber-based mat that can be applied under full weight concrete or gypsum.
 2. Physical Characteristics:
 - A. 10 mm thick with 5 mm dimple)
 - B. 48" inches by 25 ft rolls.
 - C. Material Weight .123 lbs./ft²
 3. Impact Insulation Class
140mm 5-py CLT w/10mm Sonus Curve 10 and 3" full weight concrete and no finished flooring (IIC 49), (STC 53), (HIIC 50), (LIIC 65)

A. Regupol Sonus Perimeter Isolation Strip

1. Material:
 - A. Made from closed cell foam
2. Physical Characteristics:
 - A. 4"-6" x 50' x 1/2" thick closed cell foam isolation strips with PSA adhesive strip to be installed around perimeter or any protruding object in room to avoid sound flanking paths
- B. 10 Mil Polyethylene Film (not required with plywood)
 1. Material:
 - A. 10 mil Polyethylene sheeting to be installed over Sonus Curve 10 to prevent leakage of lightweight concrete or full weight concrete topping.
 - B. Geotextile fabric sheeting to be installed to prevent leakage of gypsum topping

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify the Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.

3.4 PROTECTION

- A. Protect installed products until completion of the project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION

The information and data contained herein are based on industry accepted testing, manufacturing tolerances and prior product usage as set forth. It is intended as descriptive of the performance characteristics and capabilities of Regupol Sonus Curve and does not certify applicability for any particular or specific project. The specifier needs to edit the guide specification to fit the needs of specific projects. Technical assistance, calculations and design recommendations are available from Regupol America, and are subject to terms and conditions provided upon request.

TECHNICAL DATA: MASS TIMBER CONSTRUCTION

REGUPOL SONUS CURVE 17



The **REGUPOL sonus curve 17** is a 3/4" (17 mm) thick high-performance acoustical floor underlayment. It greatly reduces footfall noise transmission and impact sound. Its dimpled profile minimizes contact to the subfloor. The **sonus curve 17** is perfectly suitable for use in mass timber construction. Typically, a 2" to 4" concrete topping is installed over the **sonus curve 17**. Alternatively, 2 to 3 layers (1" to 1-1/2") of EXACOR® panels can be used. The **sonus curve 17** offers excellent acoustic performance and can achieve STC and IIC ratings in the high 50s and HIRC ratings as high as 70.



Mass Timber Construction Applications

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Materials

- › Polyurethane
- › Styrene-Butadiene Rubber

Form	Thickness	Width	Length	Unit Area	Weight	Unit Weight
Rolls	3/4" (17 mm)	4'	25'	100 ft ²	2.05 lb/ft ²	205 lb

Property	Result	Standard	Note
Density	37 lb / cuft (+/- 4 lb)	ASTM D792	
Hardness	25 – 35	ASTM D2240	A Shore Durometer
Maximum Surface Load	50 kN/m ²		
Mean Dynamic Stiffness	$s'_t \leq 15 \text{ MN/m}^3$	DIN EN 29052-1	
Compressibility	$c \leq 2 \text{ mm}$	DIN EN 12431	
Thermal Conductivity	$\lambda = 0.075 \text{ W/(mK)}$	DIN EN 12667	
Thermal Resistance	$R = 0.167 \text{ (m}^2\text{K)/W}$	DIN EN 12667	
Temperature Resistance	0 – 140 °F		
Fire Classification	E	DIN EN 13501-1	
LEED	up to 8 points	USGBC LEED v4.1	see documentation
Recycled Content	92%	ISO 14021	GreenCircle 22-0194
VOC	compliant	CDPH/EHLB V1.1	CA Specification
Nitrosamine	Compliant	DIK Method	
PAH	Compliant	DIN EN 18287	

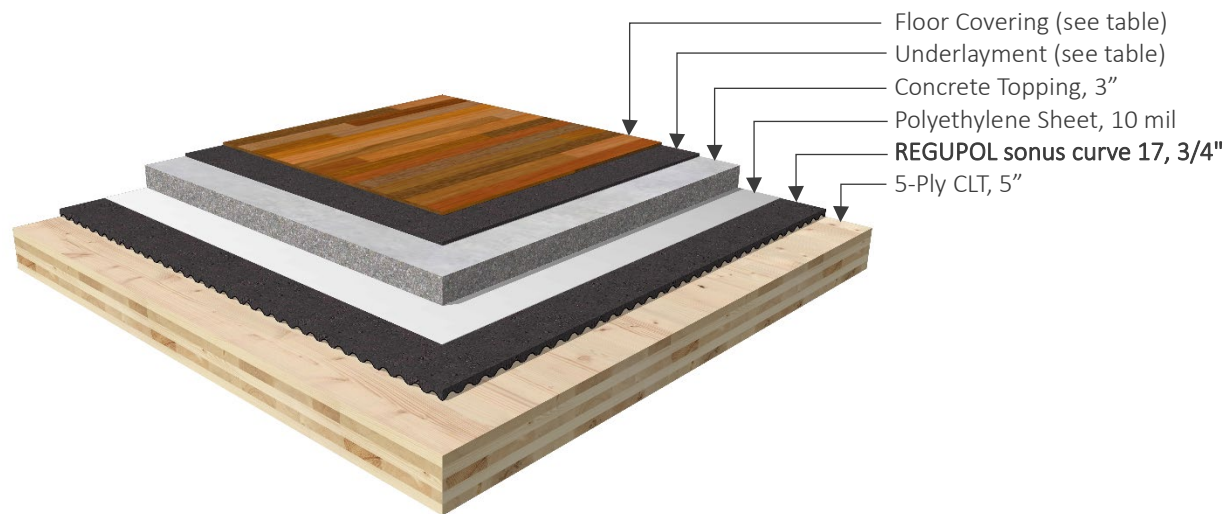
TECHNICAL DATA: MASS TIMBER CONSTRUCTION

REGUPOL SONUS CURVE 17



Acoustical Testing

5-Ply CLT with **sonus curve 17** and 3" Concrete Topping



Floor Covering	Underlayment	Test Number	HIIC	IIC	STC
Concrete slab	None	R4167.01	51	50	54
Engineered Wood	sonus core 3	R4167.03	61	55	52
	sonus core 5	R4167.05	62	55	52
	sonus core 10	R4167.07	64	55	52
	sonus XL 5	R4167.09	66	56	52
SPC 5.5 mm	sonus core 3	R4167.02	64	56	53
	sonus core 5	R4167.04	68	56	52
	sonus core 10	R4167.06	66	55	53
	sonus XL 5	R4167.08	70	57	52

*Note, all tests were completed with 5-Ply CLT, **sonus curve 17**, and a 3" concrete topping.*

Accessories

REGUPOL perimeter
isolation strip



Section 03 30 00: Cast-In-Place Concrete

Sonus Curve 17

PART 1: GENERAL

1.1 SECTION INCLUDES

- A. Noise-reducing recycled rubber impact insulation systems
- B. Adhesives

1.2 RELATED SECTIONS

- A. Concrete Substrate
- B. Mass Timber: CLT, DLT, MPP substrates
- C. Plywood Substrate
- D. Tile, Carpet, Wood
- E. Noise Control and Vibration Isolation

1.3 REFERENCES

- A. American Society for Testing and Materials (ASTM).

ASTM F2170 - Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in-situ Probes

1. ASTM E492 Standard Test Method for Laboratory Measurement of Impact Sound Transmission Through Floor-Ceiling Assemblies Using the Tapping Machine
2. ASTM D5116 Standard Guide for small-scale environmental chamber determinations of Organic Emissions for Indoor Material/ Products
3. ASTM C627 Standard Test Method of Evaluating Ceramic Tile Installation Systems using the Robinson Type Floor Test
4. ASTM E1007 Standard Test Method for Field Measurement of Tapping Machine Impact Sound Transmission through Floor-Ceiling assemblies and Associated support structures
5. ASTM E2179 Standard Test Method for Laboratory Measurement of the Effectiveness of Floor Coverings in Reducing Impact Sound Transmission through Concrete Floors
6. ASTM E90 E2179 Standard Test Method for Laboratory Measurement of Airborne Sound Transmission loss of Building Partitions and Elements

- B. Leadership in Energy and Environmental Design - LEED®

1. LEED is an internationally recognized green building certification system, providing third-party verification that a building or community was designed and built using strategies aimed at

improving performance across all the metrics that matter most: energy savings, water efficiency, CO₂ emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts.

1.4 SYSTEM DESCRIPTION

- A. Performance Requirements: Provide recycled rubber resilient underlayment padding, which has been manufactured and installed to maintain performance criteria stated by the manufacturer without defects, damage or failure.

1.5 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 1. Preparation instructions and recommendations.
 2. Storage and handling requirements and recommendations.
 3. Installation methods.
 4. LEED Documentation of how the requirement for credit will be met.
 5. South Coast Air Quality Management District (SCAQMD) Rule # 1168
 6. Certification of Post Consumer and Post-Industrial materials
- C. Selection Samples: For each product specified, two complete sets
- D. Verification Samples: For each product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product and patterns.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: The manufacturer shall be a firm with a minimum of 25 years of successful experience in the manufacture of products with similar requirements.
- B. Installer Qualifications: The installer shall be a firm with a minimum of two years of successful experience in installation of products with similar requirements.
- C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 1. Finish areas designated by Architect.
 2. Do not proceed with the remaining work until workmanship, color, and sheen are approved by Architect.

3. Refinish the mock-up area as required to produce acceptable work.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.8 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by the manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. Acceptable Manufacturer:
Regupol America, LLC
11 Ritter Way, Lebanon, PA 17042
Toll Free Tel: (800) 537-8737
Tel: (717) 675-2198 Fax: (717) 675-2199
Email: bmd@regupol.com
Web: <http://www.Regupol.com>
- B. Substitutions: Not permitted.

2.2 PRODUCT

- A. Regupol Sonus Curve 17 Recycled rubber Impact Sound Insulation
 1. Material:
 - A. Made from 100% recycled SBR (Styrene-Butadiene Rubber) tire rubber. Sonus Curve 17 is a dimpled resilient rubber-based mat that can be applied under full weight concrete or gypsum.
 2. Physical Characteristics:
 - A. 17mm thick with 8mm dimple
 - B. 48" inches by 25 ft rolls.
 - C. Material Weight 2.05 lbs./ft²
 3. Impact Insulation Class
140mm 5-py CLT w/17mm Sonus Curve 17 and 3" full weight concrete and no finished flooring (IIC 50), (STC 53), (HIIC 50),(LIIC 65)

A. Regupol Sonus Perimeter Isolation Strip

1. Material:
 - A. Made from closed cell foam
2. Physical Characteristics:
 - A. 4"-6" x 50' x 1/2" thick closed cell foam isolation strips with PSA adhesive strip to be installed around perimeter or any protruding object in room to avoid sound flanking paths
- B. 10 Mil Polyethylene Film (not required with plywood)
 1. Material:
 - A. 10 mil Polyethylene sheeting to be installed over Sonus Curve 17 to prevent leakage of lightweight concrete or full weight concrete topping.
 - B. Geotextile fabric sheeting to be installed to prevent leakage of gypsum topping

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify the Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.

3.4 PROTECTION

- A. Protect installed products until completion of the project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION

The information and data contained herein are based on industry accepted testing, manufacturing tolerances and prior product usage as set forth. It is intended as descriptive of the performance characteristics and capabilities of Regupol Sonus Curve and does not certify applicability for any particular or specific project. The specifier needs to edit the guide specification to fit the needs of specific projects. Technical assistance, calculations and design recommendations are available from Regupol America, and are subject to terms and conditions provided upon request.

TECHNICAL DATA: MASS TIMBER CONSTRUCTION

REGUPOL SONUS CURVE 25



The **REGUPOL sonus curve 25** is a 1" (25 mm) thick high-performance acoustical floor underlayment. It greatly reduces footfall noise transmission and impact sound. Its dimpled profile minimizes contact to the subfloor. The **sonus curve 25** is perfectly suitable for use in mass timber construction. Typically, a 2" to 4" concrete topping is installed over the **sonus curve 25**. Alternatively, 2 to 3 layers (1" to 1-1/2") of EXACOR® panels can be used. The **sonus curve 25** offers excellent acoustic performance and can achieve STC and IIC ratings in the high 50s and HIRC ratings as high as 77.



Mass Timber Construction Applications

- › Cross-Laminated Timber (CLT)
- › Dowel-Laminated Timber (DLT)
- › Glued-Laminated Timber (glulam)
- › Mass Plywood Panels (MPP)
- › Nail-Laminated Timber (NLT)

Materials

- › Polyurethane
- › Styrene-Butadiene Rubber

Form	Thickness	Width	Length	Unit Area	Weight	Unit Weight
Rolls	1" (25 mm)	4'	25'	100 ft ²	3 lb/ft ²	300 lb

Property	Result	Standard	Note
Density	37 lb / cuft (+/- 4 lb)	ASTM D792	
Hardness	25 – 35	ASTM D2240	A Shore Durometer
Maximum Surface Load	50 kN/m ²		
Mean Dynamic Stiffness	$s'_t \leq 13 \text{ MN/m}^3$	DIN EN 29052-1	
Compressibility	$c \leq 2 \text{ mm}$	DIN EN 12431	
Thermal Conductivity	$\lambda = 0.075 \text{ W/(mK)}$	DIN EN 12667	
Thermal Resistance	$R = 0.213 \text{ (m}^2\text{K)/W}$	DIN EN 12667	
Temperature Resistance	0 – 140 °F		
Fire Classification	E	DIN EN 13501-1	
LEED	up to 8 points	USGBC LEED v4.1	see documentation
Recycled Content	92%	ISO 14021	GreenCircle 22-0194
VOC	compliant	CDPH/EHLB V1.1	CA Specification
Nitrosamine	compliant	DIK Method	
PAH	compliant	DIN EN 18287	

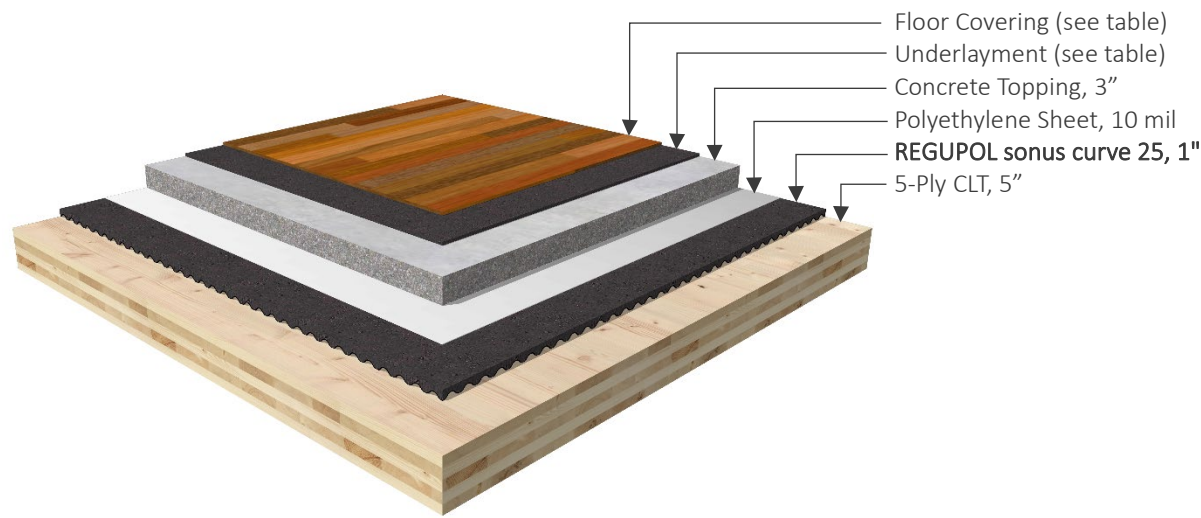
TECHNICAL DATA: MASS TIMBER CONSTRUCTION

REGUPOL SONUS CURVE 25



Acoustical Testing

5-Ply CLT with sonus curve 25 and 3” Concrete Topping



Floor Covering	Underlayment	Test Number	HIIC	IIC	STC
None	None	R4167.15	52	52	54
Engineered Wood	sonus core 3	R4167.17	66	57	54
	sonus XL 5	R4167.19	71	59	54
SPC, 5.5 mm	sonus core 3	R4167.16	68	58	54
	sonus XL 5	R4167.18	77	59	54

Note, all tests were completed with 5-Ply CLT, sonus curve 25, and a 3” concrete topping.

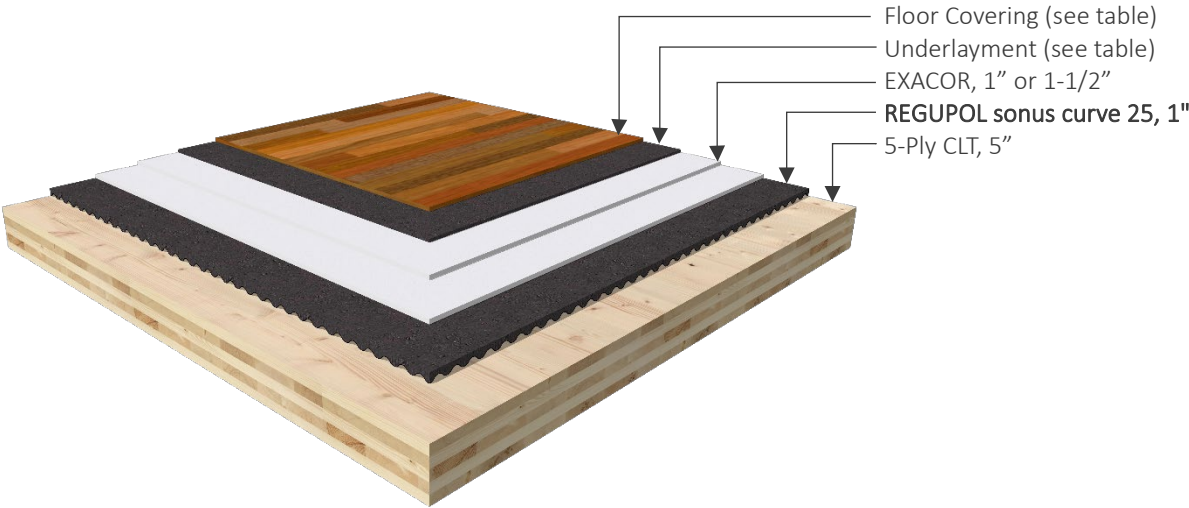
TECHNICAL DATA: MASS TIMBER CONSTRUCTION

REGUPOL SONUS CURVE 25



Acoustical Testing

5-Ply CLT with **sonus curve 25** and EXACOR



Floor Covering	Underlayment	Topping	Test Number	HIIC	IIC	STC
None	None	EXACOR, 1"	R4167.31	58	50	52
		EXACOR, 1-1/2"	R4167.27	61	53	53
Engineered Wood	sonus core 10	EXACOR, 1"	R4167.34	69	52	52
	sonus core 3	EXACOR, 1-1/2"	R4167.30	69	53	53
LVT, 2 mm	sonus multi 3	EXACOR, 1"	R4167.32	64	50	52
		EXACOR, 1-1/2"	R4167.28	66	53	53
SPC, 5.5 mm	sonus XL 5	EXACOR, 1"	R4167.33	73	51	52
		EXACOR, 1-1/2"	R4167.29	76	54	53

*Note, all tests were completed with 5-Ply CLT, **sonus curve 25**, and EXACOR.*

Accessories

REGUPOL perimeter
isolation strip



Section 03 30 00: Cast-In-Place Concrete

Sonus Curve 25

PART 1: GENERAL

1.1 SECTION INCLUDES

- A. Noise-reducing recycled rubber impact insulation systems
- B. Adhesives

1.2 RELATED SECTIONS

- A. Concrete Substrate
- B. Mass Timber: CLT, DLT, MPP substrates
- C. Plywood Substrate
- D. Tile, Carpet, Wood
- E. Noise Control and Vibration Isolation

1.3 REFERENCES

- A. American Society for Testing and Materials (ASTM).

ASTM F2170 - Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in-situ Probes

1. ASTM E492 Standard Test Method for Laboratory Measurement of Impact Sound Transmission Through Floor-Ceiling Assemblies Using the Tapping Machine
2. ASTM D5116 Standard Guide for small-scale environmental chamber determinations of Organic Emissions for Indoor Material/ Products
3. ASTM C627 Standard Test Method of Evaluating Ceramic Tile Installation Systems using the Robinson Type Floor Test
4. ASTM E1007 Standard Test Method for Field Measurement of Tapping Machine Impact Sound Transmission through Floor-Ceiling assemblies and Associated support structures
5. ASTM E2179 Standard Test Method for Laboratory Measurement of the Effectiveness of Floor Coverings in Reducing Impact Sound Transmission through Concrete Floors
6. ASTM E90 E2179 Standard Test Method for Laboratory Measurement of Airborne Sound Transmission loss of Building Partitions and Elements

- B. Leadership in Energy and Environmental Design - LEED®

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improving performance across all the metrics that matter most: energy savings, water efficiency, CO₂ emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts.

1.4 SYSTEM DESCRIPTION

- A. Performance Requirements: Provide recycled rubber resilient underlayment padding, which has been manufactured and installed to maintain performance criteria stated by the manufacturer without defects, damage or failure.

1.5 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 1. Preparation instructions and recommendations.
 2. Storage and handling requirements and recommendations.
 3. Installation methods.
 4. LEED Documentation of how the requirement for credit will be met.
 5. South Coast Air Quality Management District (SCAQMD) Rule # 1168
 6. Certification of Post Consumer and Post-Industrial materials
- C. Selection Samples: For each product specified, two complete sets
- D. Verification Samples: For each product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product and patterns.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: The manufacturer shall be a firm with a minimum of 25 years of successful experience in the manufacture of products with similar requirements.
- B. Installer Qualifications: The installer shall be a firm with a minimum of two years of successful experience in installation of products with similar requirements.
- C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 1. Finish areas designated by Architect.
 2. Do not proceed with the remaining work until workmanship, color, and sheen are approved by Architect.

3. Refinish the mock-up area as required to produce acceptable work.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.8 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by the manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. Acceptable Manufacturer:
Regupol America, LLC
11 Ritter Way, Lebanon, PA 17042
Toll Free Tel: (800) 537-8737
Tel: (717) 675-2198 Fax: (717) 675-2199
Email: bmd@regupol.com
Web: <http://www.Regupol.com>
- B. Substitutions: Not permitted.

2.2 PRODUCT

- A. Regupol Sonus Curve 25 Recycled rubber Impact Sound Insulation
 1. Material:
 - A. Made from 100% recycled SBR (Styrene-Butadiene Rubber) tire rubber. Sonus Curve 25 is a dimpled resilient rubber-based mat that can be applied under full weight concrete or gypsum.
 2. Physical Characteristics:
 - A. 25 mm thick with 7 mm dimple
 - B. 48" inches by 25 ft rolls.
 - C. Material Weight 3.0 lbs./ft²
 3. Impact Insulation Class
140mm 5-py CLT w/25mm Sonus Curve 25 and 3" full weight concrete and no finished flooring (IIC 52), (STC 54), (HIIC 52),(LIIC 61)

A. Regupol Sonus Perimeter Isolation Strip

1. Material:
 - A. Made from closed cell foam
2. Physical Characteristics:
 - A. 4"-6" x 50' x 1/2" thick closed cell foam isolation strips with PSA adhesive strip to be installed around perimeter or any protruding object in room to avoid sound flanking paths
- B. 10 Mil Polyethylene Film (not required with plywood)
 1. Material:
 - A. 10 mil Polyethylene sheeting to be installed over Sonus Curve 25 to prevent leakage of lightweight concrete or full weight concrete topping.
 - B. Geotextile fabric sheeting to be installed to prevent leakage of gypsum topping

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify the Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.

3.4 PROTECTION

- A. Protect installed products until completion of the project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION

The information and data contained herein are based on industry accepted testing, manufacturing tolerances and prior product usage as set forth. It is intended as descriptive of the performance characteristics and capabilities of Regupol Sonus Curve and does not certify applicability for any particular or specific project. The specifier needs to edit the guide specification to fit the needs of specific projects. Technical assistance, calculations and design recommendations are available from Regupol America, and are subject to terms and conditions provided upon request.

TECHNICAL DATA: MASS TIMBER CONSTRUCTION

REGUPOL SONUS CURVE 50



The **REGUPOL sonus curve 50** is a 2" (50 mm) thick high-performance acoustical floor underlayment. It consists of two layers of the **sonus curve 25**. It greatly reduces footfall noise transmission and impact sound. Its dimpled profile minimizes contact to the subfloor. The **sonus curve 50** is perfectly suitable for use in mass timber construction. Typically, a 2" to 4" concrete topping is installed over the **sonus curve 50**. Alternatively, 2 to 3 layers (1" to 1-1/2") of EXACOR® panels can be used. The **sonus curve 50** offers excellent acoustic performance and can achieve STC and IIC ratings in the 60s and HIRC ratings as high as 81.



Mass Timber Construction Applications

- › Cross-Laminated Timber (CLT)
- › Dowel-Laminated Timber (DLT)
- › Glued-Laminated Timber (glulam)
- › Mass Plywood Panels (MPP)
- › Nail-Laminated Timber (NLT)

Materials

- › Polyurethane
- › Styrene-Butadiene Rubber

Form	Thickness	Width	Length	Unit Area	Weight	Unit Weight
Rolls	1" (25 mm)	4'	25'	100 ft ²	3 lb/ft ²	300 lb

*Note, the **sonus curve 50** consists of two layers, each 1" thick (25 mm) for a total 2" thickness (50 mm).*

Property	Result	Standard	Note
Density	37 lb / cuft (+/- 4 lb)	ASTM D792	
Hardness	25 – 35	ASTM D2240	A Shore Durometer
Maximum Surface Load	50 kN/m ²		
Mean Dynamic Stiffness	$s'_t \leq 13 \text{ MN/m}^3$	DIN EN 29052-1	
Compressibility	$c \leq 2 \text{ mm}$	DIN EN 12431	
Thermal Conductivity	$\lambda = 0.075 \text{ W/(mK)}$	DIN EN 12667	
Thermal Resistance	$R = 0.213 \text{ (m}^2\text{K)/W}$	DIN EN 12667	
Temperature Resistance	0 – 140 °F		
Fire Classification	E	DIN EN 13501-1	
LEED	up to 8 points	USGBC LEED v4.1	see documentation
Recycled Content	92%	ISO 14021	GreenCircle 22-0194
VOC	compliant	CDPH/EHLB V1.1	CA Specification
Nitrosamine	compliant	DIK Method	
PAH	compliant	DIN EN 18287	

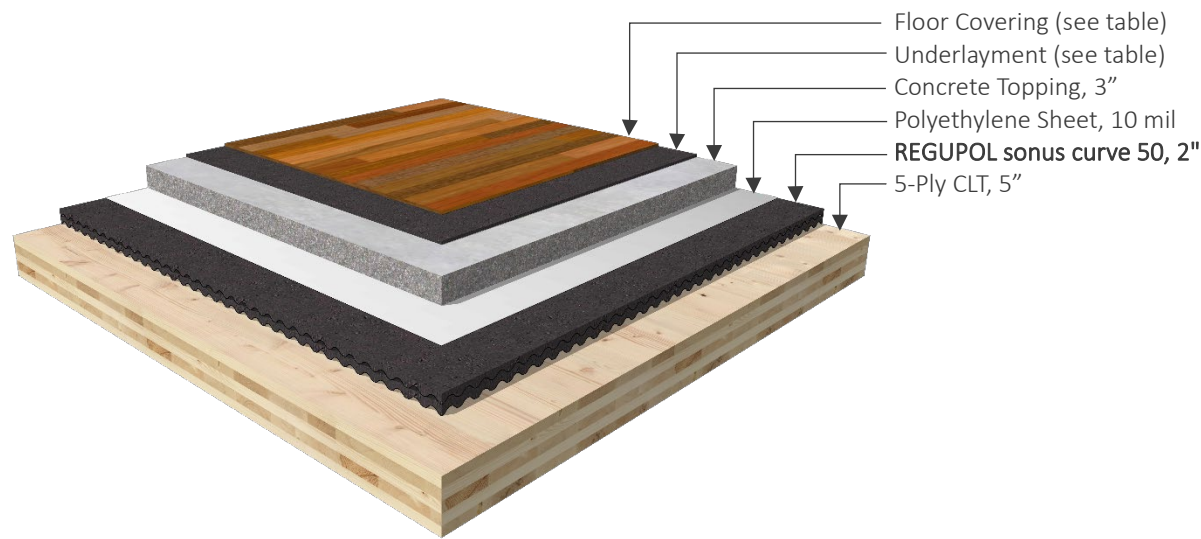
TECHNICAL DATA: MASS TIMBER CONSTRUCTION

REGUPOL SONUS CURVE 50



Acoustical Testing

5-Ply CLT with **sonus curve 50** and 3" Concrete Topping



Floor Covering	Underlayment	Test Number	HIIC	IIC	STC
None	None	R4167.20	54	54	57
Engineered Wood	sonus core 3	R4167.22	72	63	57
	sonus XL 5	R4167.24	75	64	57
SPC, 5.5 mm	sonus core 3	R4167.21	76	63	57
	sonus XL 5	R4167.23	80	65	57

*Note, all tests were completed with 5-Ply CLT, **sonus curve 50**, and a 3" concrete topping.*

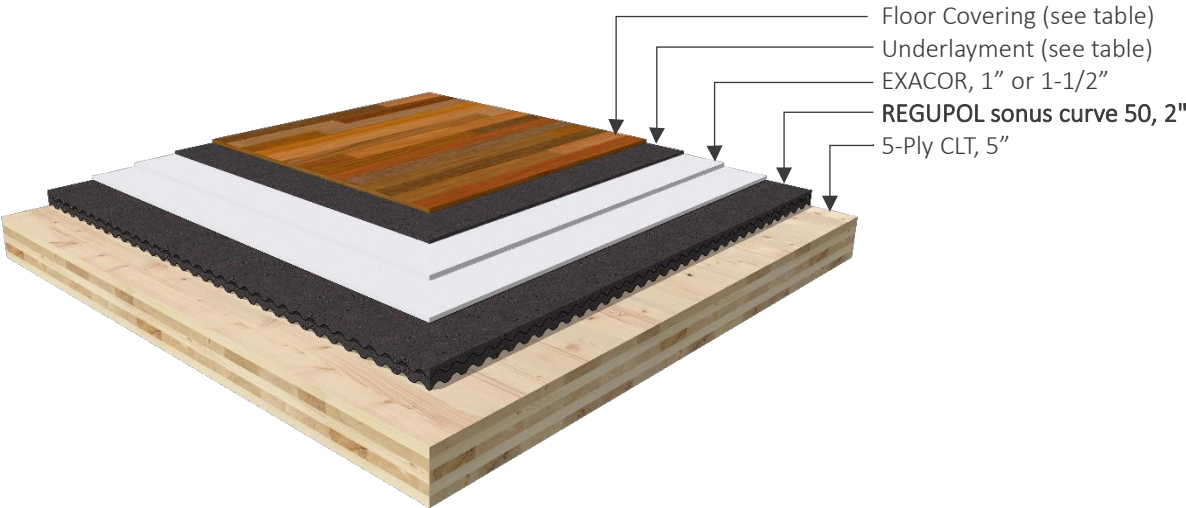
TECHNICAL DATA: MASS TIMBER CONSTRUCTION

REGUPOL SONUS CURVE 50



Acoustical Testing

5-Ply CLT with **sonus curve 50** and EXACOR



Floor Covering	Underlayment	Topping	Test Number	HIIC	IIC	STC
None	None	EXACOR, 1"	R4167.26	62	52	54
		EXACOR, 1-1/2"	R4167.25	63	55	57
Engineered Wood	sonus core 3	EXACOR, 1-1/2"	R4167.35	73	55	59
	sonus core 10	EXACOR, 1-1/2"	R4167.37	77	56	58
	sonus XL 5	EXACOR, 1-1/2"	R4167.38	77	57	58
SPC, 5.5 mm	sonus core 3	EXACOR, 1-1/2"	R4167.36	78	56	58
	sonus XL 5	EXACOR, 1-1/2"	R4167.39	81	57	58

*Note, all tests were completed with 5-Ply CLT, **sonus curve 50**, and EXACOR.*

Accessories

REGUPOL perimeter
isolation strip



Section 03 30 00: Cast-In-Place Concrete

Sonus Curve 50

PART 1: GENERAL

1.1 SECTION INCLUDES

- A. Noise-reducing recycled rubber impact insulation systems
- B. Adhesives

1.2 RELATED SECTIONS

- A. Concrete Substrate
- B. Mass Timber: CLT, DLT, MPP substrates
- C. Plywood Substrate
- D. Tile, Carpet, Wood
- E. Noise Control and Vibration Isolation

1.3 REFERENCES

- A. American Society for Testing and Materials (ASTM).

ASTM F2170 - Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in-situ Probes

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4. ASTM E1007 Standard Test Method for Field Measurement of Tapping Machine Impact Sound Transmission through Floor-Ceiling assemblies and Associated support structures
5. ASTM E2179 Standard Test Method for Laboratory Measurement of the Effectiveness of Floor Coverings in Reducing Impact Sound Transmission through Concrete Floors
6. ASTM E90 E2179 Standard Test Method for Laboratory Measurement of Airborne Sound Transmission loss of Building Partitions and Elements

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improving performance across all the metrics that matter most: energy savings, water efficiency, CO₂ emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts.

1.4 SYSTEM DESCRIPTION

- A. Performance Requirements: Provide recycled rubber resilient underlayment padding, which has been manufactured and installed to maintain performance criteria stated by the manufacturer without defects, damage or failure.

1.5 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 1. Preparation instructions and recommendations.
 2. Storage and handling requirements and recommendations.
 3. Installation methods.
 4. LEED Documentation of how the requirement for credit will be met.
 5. South Coast Air Quality Management District (SCAQMD) Rule # 1168
 6. Certification of Post Consumer and Post-Industrial materials
- C. Selection Samples: For each product specified, two complete sets
- D. Verification Samples: For each product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product and patterns.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: The manufacturer shall be a firm with a minimum of 25 years of successful experience in the manufacture of products with similar requirements.
- B. Installer Qualifications: The installer shall be a firm with a minimum of two years of successful experience in installation of products with similar requirements.
- C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
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1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.

1.8 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by the manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. Acceptable Manufacturer:
Regupol America, LLC
11 Ritter Way, Lebanon, PA 17042
Toll Free Tel: (800) 537-8737
Tel: (717) 675-2198 Fax: (717) 675-2199
Email: bmd@regupol.com
Web: <http://www.Regupol.com>
- B. Substitutions: Not permitted.

2.2 PRODUCT

- A. Regupol Sonus Curve 50 Recycled rubber Impact Sound Insulation
 1. Material:
 - A. Made from 100% recycled SBR (Styrene-Butadiene Rubber) tire rubber. Sonus Curve 50 is a dimpled resilient rubber-based mat that can be applied under full weight concrete or gypsum.
 2. Physical Characteristics:
 - A. 50 mm thick (2-layers Curve 25 with 7 mm dimple)
 - B. 48" inches by 25 ft rolls.
 - C. Material Weight 6.0 lbs./ft²
 3. Impact Insulation Class
140mm 5-py CLT w/50mm Sonus Curve 50 and 3" full weight concrete and no finished flooring (IIC 54), (STC 57), (HIIC 54), (LIIC 65)

A. Regupol Sonus Perimeter Isolation Strip

1. Material:
 - A. Made from closed cell foam
2. Physical Characteristics:
 - A. 4"-6" x 50' x 1/2" thick closed cell foam isolation strips with PSA adhesive strip to be installed around perimeter or any protruding object in room to avoid sound flanking paths
- B. 10 Mil Polyethylene Film (not required with plywood)
 1. Material:
 - A. 10 mil Polyethylene sheeting to be installed over Sonus Curve 50 to prevent leakage of lightweight concrete or full weight concrete topping.
 - B. Geotextile fabric sheeting to be installed to prevent leakage of gypsum topping

PART 3 EXECUTION

3.1 EXAMINATION

- A. Do not begin installation until substrates have been properly prepared.
- B. If substrate preparation is the responsibility of another installer, notify the Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.

3.4 PROTECTION

- A. Protect installed products until completion of the project.
- B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION

The information and data contained herein are based on industry accepted testing, manufacturing tolerances and prior product usage as set forth. It is intended as descriptive of the performance characteristics and capabilities of Regupol Sonus Curve and does not certify applicability for any particular or specific project. The specifier needs to edit the guide specification to fit the needs of specific projects. Technical assistance, calculations and design recommendations are available from Regupol America, and are subject to terms and conditions provided upon request.

TECHNICAL DATA: MASS TIMBER CONSTRUCTION

REGUPOL SOUNDPANEL X4



The **REGUPOL soundpanel X4** is a panelized floating floor system designed to absorb airborne sound and dissipate structure-borne vibration. It is perfectly suitable for use in mass timber construction. A layer of EXACOR® panel can be used to secure the **soundpanel X4** together. The **soundpanel X4** offers excellent acoustic performance and can achieve STC and IIC ratings in the high 50s and HIIC ratings as high as 74.



Each **soundpanel X4** is preassembled and consists of a high quality OSB panel, fiberglass insulation, and nine **soundpad X4** rubber bearings. The standard **soundpanel X4** creates a 1" air gap over the subfloor.

Mass Timber Construction Applications

- › Cross-Laminated Timber (CLT)
- › Dowel-Laminated Timber (DLT)
- › Glue-Laminated Timber (glulam)
- › Mass Plywood Panels (MPP)
- › Nail-Laminated Timber (NLT)

Materials

- › OSB Panel, 19/32"
- › Fiberglass Batt, 1"
- › **REGUPOL soundpad X4, 2"**
 - Polyurethane
 - Styrene-Butadiene Rubber

Please contact us for information on custom configurations and availability.

Thickness	Length	Width	Area	Weight	Maximum Load
2-19/32"	4'	4'	16 ft ²	40 lb	250 lb/ft ²

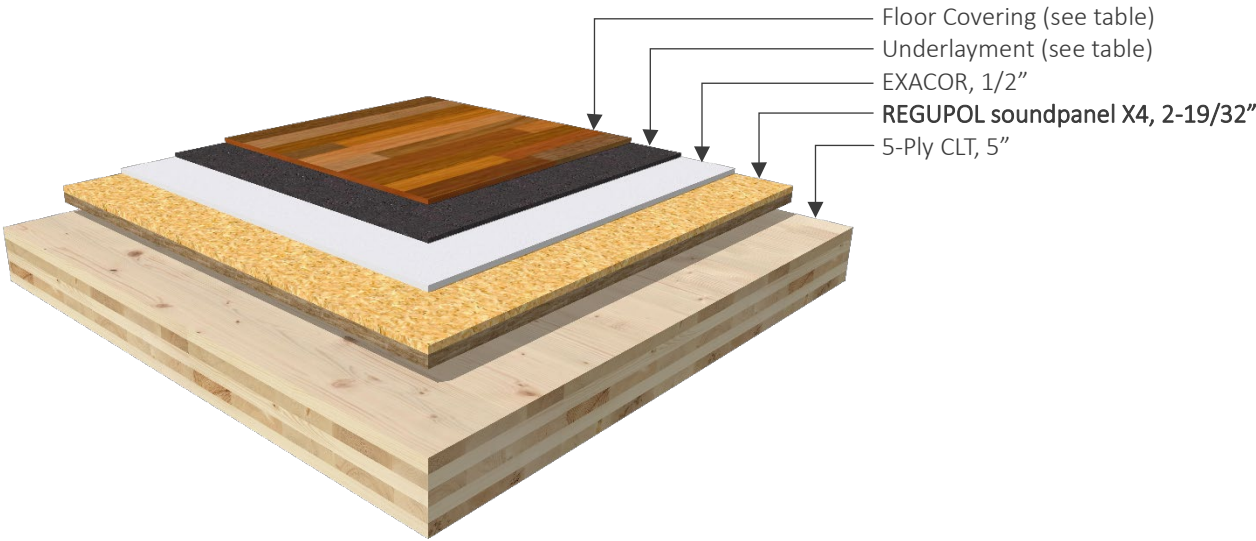
TECHNICAL DATA: MASS TIMBER CONSTRUCTION

REGUPOL SOUNDpanel X4



Acoustical Testing

5-Ply CLT with soundpanel X4 and EXACOR



Floor Covering	Underlayment	Test Number	HIIC	IIC	STC
None	None	R4167.40	54	51	55
Engineered Wood	sonus core 3	R4167.42	65	56	57
	sonus core 5	R4167.44	67	58	57
	sonus core 10	R4167.46	68	57	58
	sonus XL 5	R4167.48	71	58	57
	sonus core 3	R4167.41	68	56	57
SPC, 5.5 mm	sonus core 5	R4167.43	68	56	57
	sonus core 10	R4167.45	68	57	57
	sonus XL 5	R4167.47	74	58	57
	None	R4167.49	66	55	57
aktiv, 9 mm	None	R4167.49	66	55	57

Note, all tests were completed with 5-Ply CLT, soundpanel X4, and EXACOR 1/2".

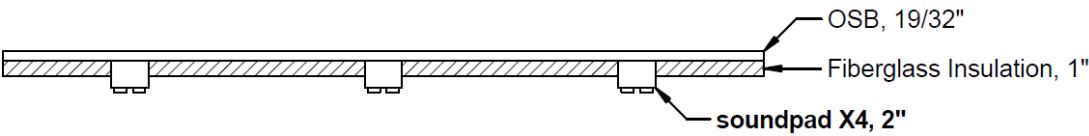
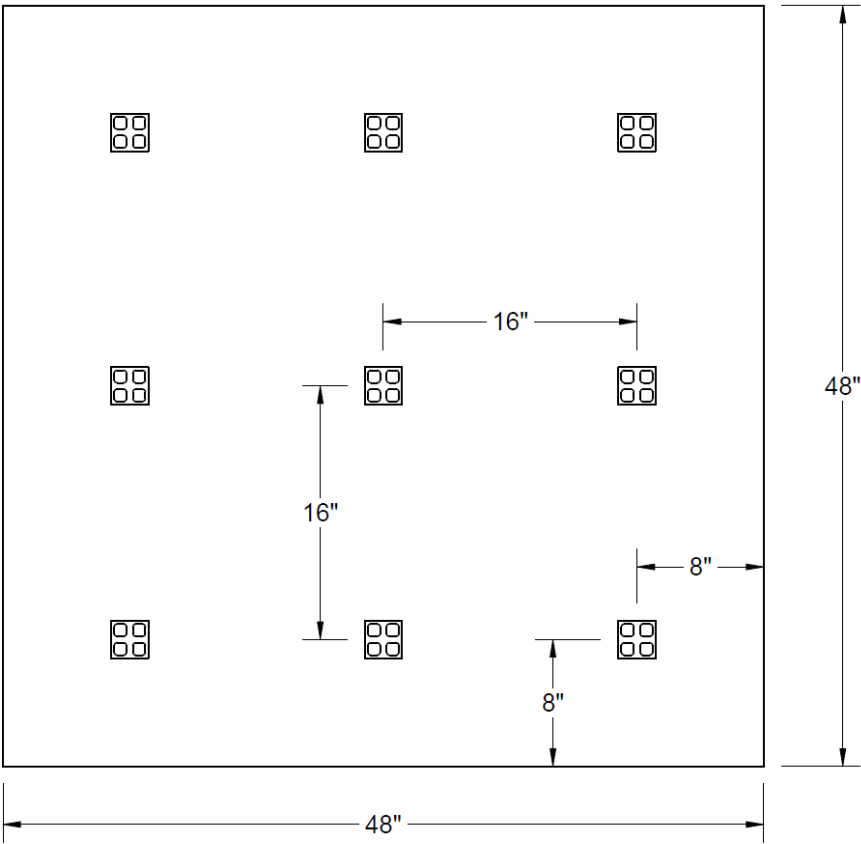
TECHNICAL DATA: MASS TIMBER CONSTRUCTION

REGUPOL SOUNDPAD X4



Dimensions

Total Thickness: 2-19/32"



Accessories

REGUPOL
soundpad X4



REGUPOL perimeter
isolation strip





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