

EWFMat ACOUSTIC RUBBER UNDERLAY 5mm & 3mm

by Elite wooden floors

Eliminating Noise And Vibration Building Elements





SUMMARY OF TEST RESULTS

4.5mm Click Vinyl Planks	EWFMate 5 mm			EWFMate 3 mm		
Flooring Refrence Guide	LnTw	FIIC	Page number	LnTw	FIIC	Page number
Sub Base	61	43	8-9	-	-	-
Sub Base & Floor	46	65	8-9	-	-	-
Sub Base, Floor & Underlay	42	66	8-9	-	-	-

5mm(5+1.5mm IXPE) Hybrid Vinyl	EWFMate 5 mm			EWFMate 3 mm		
Flooring Reference Guide	LnTw	FIIC	Page number	LnTw	FIIC	Page number
Sub Base	61	43	10	64	35	11
Sub Base & Floor	42	68	10	42	63	11
Sub Base, Floor & Underlay	41	66	10	42	63	11

8mm Laminated Timber	EWFMate 5 mm			EWFMate 3 mm		
Flooring Refrence Guide	LnTw	FIIC	Page number	LnTw	FIIC	Page number
Sub Base	64	35	12	64	35	13
Sub Base & Floor	43	61	12	43	61	13
Sub Base, Floor & Underlay	45	61	12	44	62	13

12mm Laminated Timber	EWFMate 5 mm			EWFMate 3 mm		
Flooring Refrence Guide	LnTw	FIIC	Page number	LnTw	FIIC	Page number
Sub Base	61	43	14	64	35	15
Sub Base & Floor	47	64	14	46	60	15
Sub Base, Floor & Underlay	45	65	14	46	60	15

14mm Engineered Timber	EWFMate 5 mm			EWFMate 3 mm		
Flooring Refrence Guide	LnTw	FIIC	Page number	LnTw	FIIC	Page number
Sub Base	61	35	16	64	35	17
Sub Base & Floor	46	61	16	43	61	17
Sub Base, Floor & Underlay	45	66	16	44	62	17

15mm Engineered Timber	EWFMate 5 mm			EWFMate 3 mm		
Flooring Refrence Guide	LnTw	FIIC	Page number	LnTw	FIIC	Page number
Sub Base	64	35	18	64	35	19
Sub Base & Floor	43	61	18	46	60	19
Sub Base, Floor & Underlay	44	66	18	45	61	19

14mm Engineered Timber Glued to Underlay	EWFMate 5 mm			EWFMate 3 mm		
Flooring Reference Guide	LnTw	FIIC	Page number	LnTw	FIIC	Page number
Sub Base	64	35	20-21	-	-	-
Sub Base & Floor	43	61	20-21	-	-	-
Sub Base, Floor & Underlay	48	55	20-21	-	-	-

DESCRIPTION



EWFMat Acoustic Rubber Underlay is a fully recycled rubber designed for use with hard floorings, such as Engineered timber, Laminate, stone flooring, designed to absorb footfall noise and increase living standards within the construction, whether in residential or commercial applications. The material also has a Zero OPD (Ozone Depleting Potential) and Zero GWP (Global Warming Potential). The specially selected Rubber particles are designed to give excellent resilience yet upmost compressive strength.

Reasons for Acoustic Underlay

1.Sound Insulation

Acoustic underlay limits its transmission of sound and general footfall.

2.Subfloor Leveling

The decoration floors may bridge if the subfloor is not perfectly flat. Soft underlayment helps to prevent from damage.

3.Flooring System Optimization

With the right underlay, it optimizes the entire laminate flooring system and thus extends its service life.

4.Thermal insulation

Another key benefit and a potential money-saver is the increase of thermal insulation as a result of underlay installation. The multiple layers beneath the floorboards keep the cold from escaping whilst also serving as an extra insulation layer. Less heat is lost through the floorboards and temperatures can be regulated more easily.

5.Dust reduction and moisture absorber

For household members that suffer from allergies, underlay is a great investment as it acts as an obstacle for dust particles. Underlay reduces air flow, which consequently reduces the buildup of dust and grime.
In relation to liquid spills, underlay also has moisture resistant qualities, protecting your underflooring from early decay.



SPECIFICATION



Description	Acoustic Underlay
Density	700kg/m ³
Type	Sheet
length	1100mm
Width	1000mm
Thickness	5mm & 3mm
Base colour	Black
Service Temp	-25-80°c
Material Composition	recycled rubber
Compression recovery	90% minimum at 1 hour

TEST RESULT OF 5MM & 3MM EWFMat Acoustic Rubber Underlay, OVER 200MM CONCRETE SLAB

		EWFMat Acoustic Rubber Underlay 5mm			EWFMat Acoustic Rubber Underlay 3mm		
Flooring System	EWFMat	LnTw+Ci	FIIC	AAAC Rating	LnTw+Ci	FIIC	AAAC Rating
4.5mm Click Vinyl Planks	FULL COVER	42	66	★★★★★	-	-	-
6.5mm Hybrid Vinyl	FULL COVER	41	66	★★★★★	42	63	★★★★★
8mm Laminated Timber	FULL COVER	45	61	★★★★★	44	62	★★★★★
12mm Laminated Timber	FULL COVER	45	65	★★★★★	46	60	★★★★★
14mm Engineered Timber	FULL COVER	45	66	★★★★★	44	62	★★★★★
15mm Engineered Timber	FULL COVER	44	66	★★★★★	45	61	★★★★★
14mm Engineered Glued to Underlay	FULL COVER	48	55	★★★★★	-	-	-

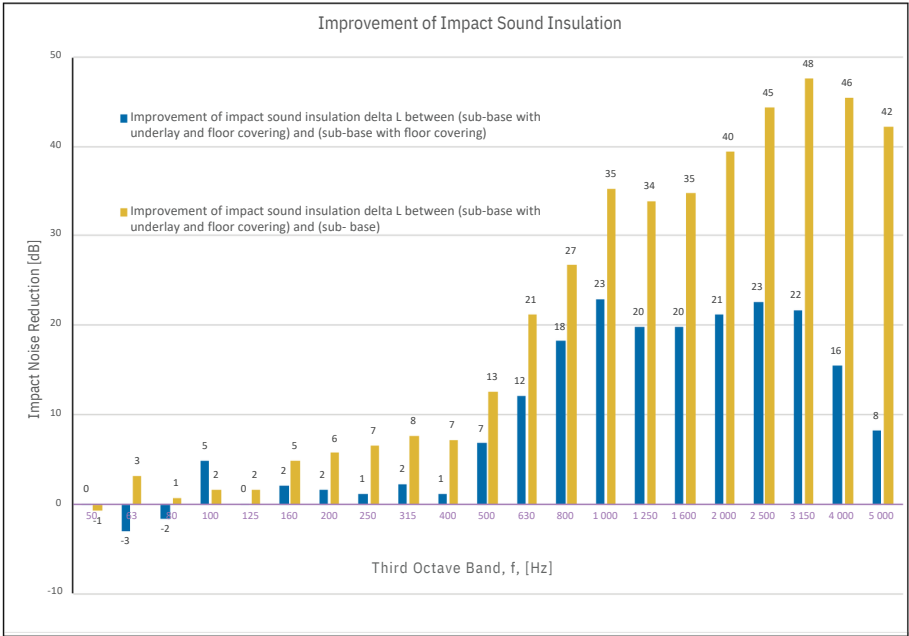


Products EWFMat tested with



FIELD MEASUREMENTS OF EWFMat WITH VINYL PLANKS 4.5MM

	Name				Thickness (mm)	Density (SI)
Description of Floor System	4.5 mm Click Vinyl Planks				4.5	--
	Flooring Acoustic Rubber Underlay				5	700
	200 mm reinforced concrete slab				200	2540
	80~120 mm suspended ceiling cavity + 10~13 mm plasterboard ceiling				80~120 + 10~13	--
Room Floor Dimensions	Width :	3.2	m			
	Length :	3.2	m			
	Area :	10.24	m ²			
Sample Dimensions	Width :	1	m			
	Length :	1	m			
	Area :	1	m ²			
	Location	Width	Length	Area	Height	Volume
Receiver Rm	Bedroom	3.2	3.2	10.24	2.7	27.648
	Room Surfaces					
Walls Floor Ceiling	Masonry/plasterboard					
	Concrete					
	Plasterboard					



AAACStar R.	2	3	4	5	6
L'nT , w	65	55	50	45	40
FIIC	45	55	60	65	70
Comments	Below BCA 62	Clearly Audible	Audible	Barely Inaudible	Normally Inaudible

Definitions of Noise Metrics

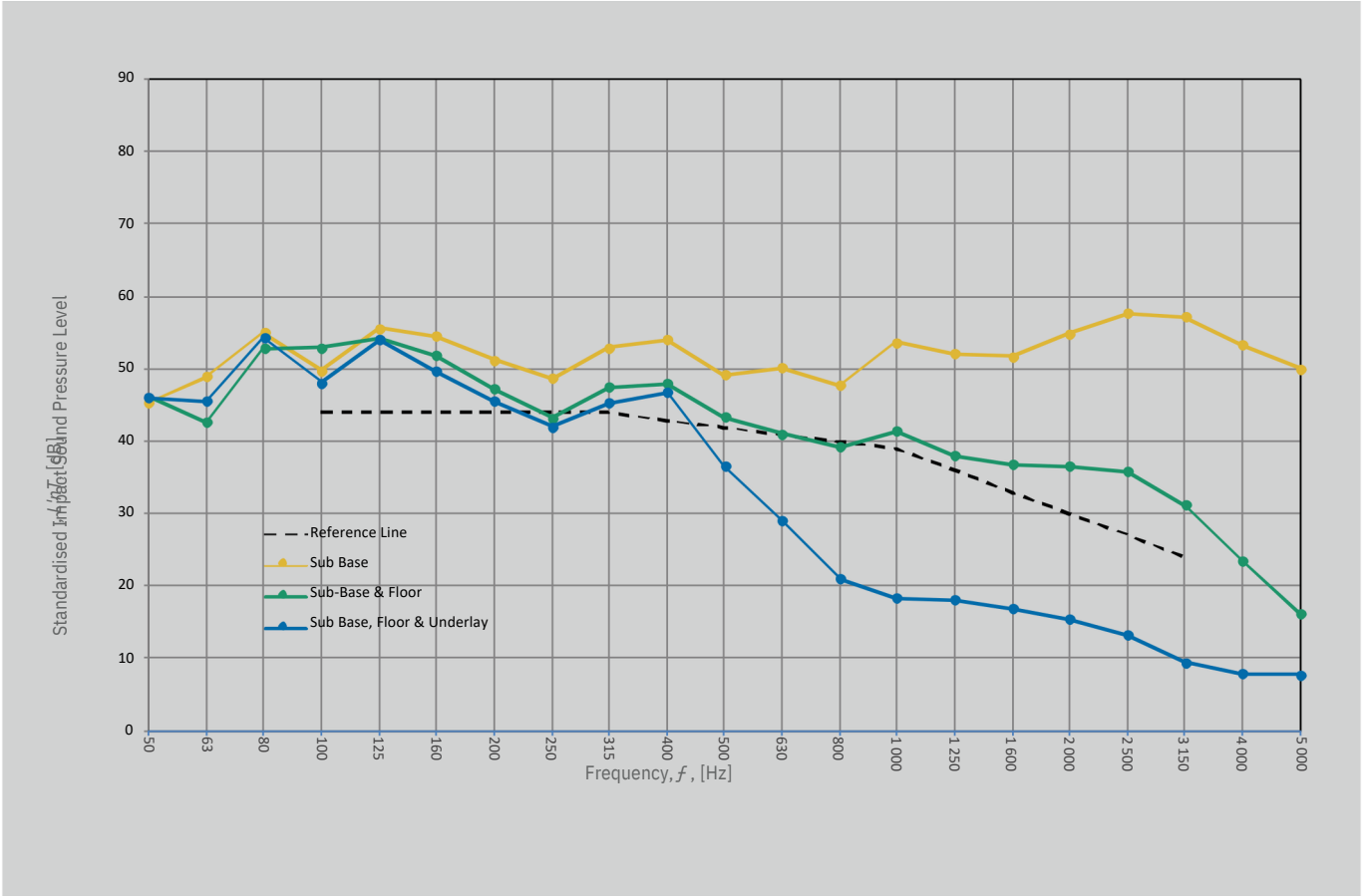
FIIC:
FieldImpact Insulation Class is a single-number rating of how well a floor system attenuates impact type sounds, such as footsteps. Calculated from third-octave band normalised impact sound pressure level data and referenced to 10 m² as described in ASTM E989. The higher the single-number rating, the better its impact insulation performance.

L'nT,w:
The Weighted Standardised Impact Sound ressure Level when measured in situ referenced to a reverberation time (RT60) of 0.5 seconds. Used by the AAAC to determine their respective Star Rating.

Ci:
Spectrum adaption term is a low frequency correction factor. Typically for massive floors such as concrete, the values are about zero while for timber joist floors Ci is positive because of the low resonant frequencies. Considers frequency range between 100-and 2500 Hz.

Ci(50-2500):
Sameasabove,but for the frequency range 50 -2500 Hz.

Ci(125-2000):
Sameasabove,butfor the frequency range 125 -2000 Hz.



Frequency f Hz	L'nT (one-third octave) dB		
	Sub Base	Sub Base Floor	Sub Base Floor Underlay
50	45.4	46.2	46.1
63	48.9	42.7	45.7
80	55.2	52.9	54.5
100	49.9	53.0	48.2
125	55.7	54.2	54.1
160	54.6	51.9	49.8
200	51.3	47.3	45.6
250	48.8	43.3	42.1
315	53.1	47.6	45.4
400	54.1	48.1	46.9
500	49.2	43.5	36.7
630	50.2	41.1	29.0
800	47.9	39.4	21.1
1000	53.8	41.5	18.5
1250	52.1	38.1	18.1
1600	51.8	36.9	17.0
2000	55.0	36.7	15.5
2500	57.7	35.9	13.2
3150	57.2	31.2	9.5
4000	53.5	23.4	7.9
5000	50.1	16.1	7.8

Sub Base (Test 00)		
L'nT,w	61	AS ISO 717.2 -
Ci	-11	2004 AS ISO
Ci(50-2500)	-10	717.2 - 2004 AS
Ci(63-2000)	-11	ISO 717.2 - 2004
AAAC ★	2 Star	AS ISO 717.2 -
FIIC	43	2004 AAAC
Guideline ASTM E1007-14		

Sub Base & Floor		
L'nT,w	46	AS ISO 717.2 -
Ci	-1	2004 AS ISO
Ci(50-2500)	0	717.2 - 2004 AS
Ci(63-2000)	-1	ISO 717.2 - 2004
AAAC ★	4 Star	AS ISO 717.2 -
FIIC	65	2004 AAAC
Guideline ASTM E1007-14		

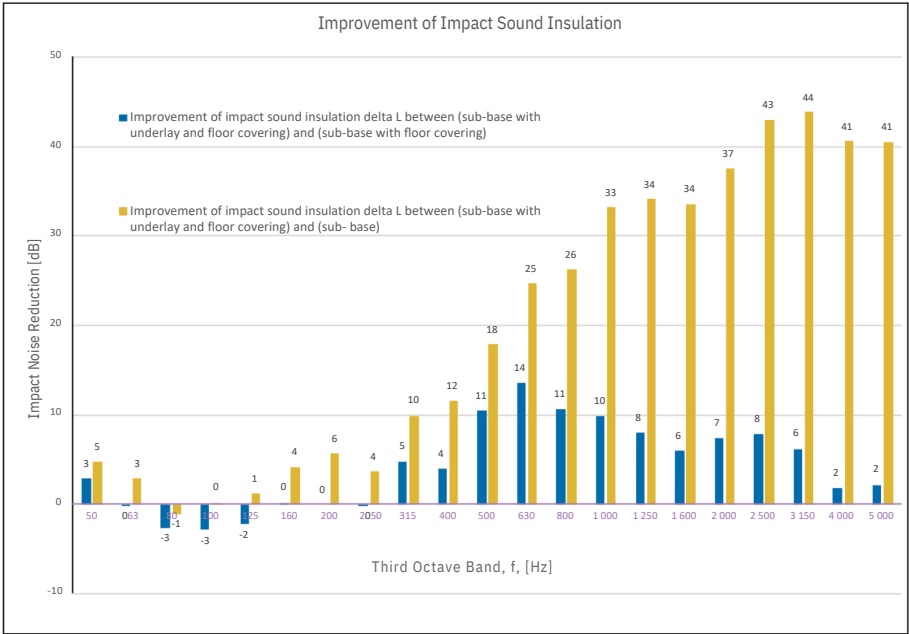
Sub Base, Floor & Underlay (Test 01)		
L'nT,w	42	AS ISO 717.2 -
Ci	0	2004 AS ISO
Ci(50-2500)	3	717.2 - 2004 AS
Ci(63-2000)	2	ISO 717.2 - 2004
AAAC ★	5 Star	AS ISO 717.2 -
FIIC	66	2004 AAAC
Guideline ASTM E1007-14		

FIELD MEASUREMENTS OF EWFMat WITH HYBRID 5MM(5+1.5MM IXPE)

	Name			Thickness (mm)	Density (SI)
				5mm (5+1.5mm IXPE)	--
Description of Floor System	5mm (5+1.5mm IXPE) Hybrid Flooring Acoustic Rubber Underlay			5	700
	200 mm reinforced concrete slab			200	2540
	80~120 mm suspended ceiling cavity + 10~13 mm plasterboard ceiling			80~120 + 10~13	--
Room	Width :	3.2	m		
Floor	Length :	3.2	m		
Dimensions	Area :	10.24	m ²		
Sample Dimensions	Width :	1	m		
	Length :	1	m		
	Area :	1	m ²		

	Location	Width	Length	Area	Height	Volume
Receiver Rm	Bedroom	3.2	3.2	10.24	2.7	27.648

	Room Surfaces					
Walls	Masonry/plasterboard					
Floor	Concrete					
Ceilin g	Plasterboard					



AAACStar R.	2	3	4	5	6
L'nT , w	65	55	50	45	40
FIIC	45	55	60	65	70
Comments	Below 62 BCA	Clearly Audible	Audible	Barely Inaudible	Normally Inaudible

Definitions of Noise Metrics

FIIC:
FieldImpact Insulation Class is a single-number rating of how well a floor system attenuates impact type sounds, such as footsteps. Calculated from third-octave band normalised impact sound pressure level data and referenced to 10 m² as described in ASTM E989. The higher the single-number rating, the better its impact insulation performance.

L'nT,w:
The Weighted Standardised Impact Sound ressure Level when measured in situ referenced to a reverberation time (RT60) of 0.5 seconds. Used by the AAAC to determine their respective Star Rating.

Ci:
Spectrum adaption term is a low frequency correction factor. Typically for massive floors such as concrete, the values are about zero while for timber joist floors Ci is positive because of the low resonant frequencies. Considers frequency range between 100-and 2500 Hz.

Ci(50-2500):
Sameasabove,but for the frequency range 50 -2500 Hz.

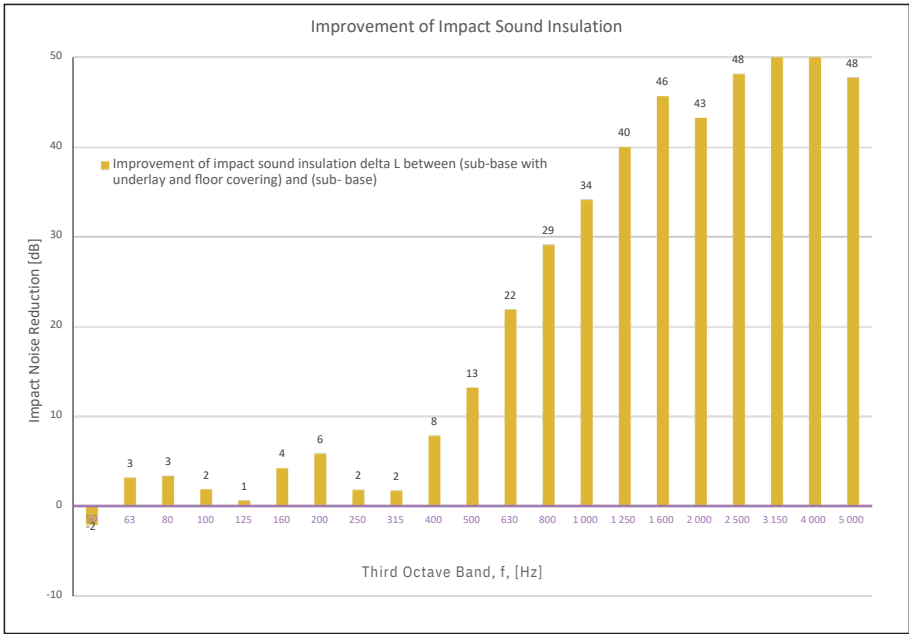
Ci(125-2000):
Sameasabove,butfor the frequency range 125 -2000 Hz.

FIELD MEASUREMENTS OF EWFMat WITH HYBRID 5MM(5+1.5MM IXPE)

	Name			Thickness (mm)	Density (SI)
				5mm (5+1.5mm IXPE)	
Description of Floor System	5mm (5+1.5mm IXPE) Hybrid				--
	3 mm Uniroll RF700			3	700
	200 mm reinforced concrete slab			200	2540
	100 mm suspended ceiling cavity + 13 mm plasterboard ceiling			100 + 13	--
Room	Width :	7	m		
Floor	Length :	4.5	m		
Dimension s	Area :	31.5	m ²		
Sample Dimensions	Width :	1	m		
	Length :	1	m		
	Area :	1	m ²		

	Location	Width	Length	Area	Height	Volume
Receiver Rm	Bedroom	7	4.5	31.5	2.7	85.08

	Room Surfaces					
Walls	Plasterboard					
Floor	Concrete					
Ceilin g	Plasterboard					



AAACStar R.	2	3	4	5	6
L'nT , w	65	55	50	45	40
FIIC	45	55	60	65	70
Comments	Below 62 BCA	Clearly Audible	Audible	Barely Inaudible	Normally I naudible

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Ci(50-2500):
Sameasabove,but for the frequency range 50 -2500 Hz.

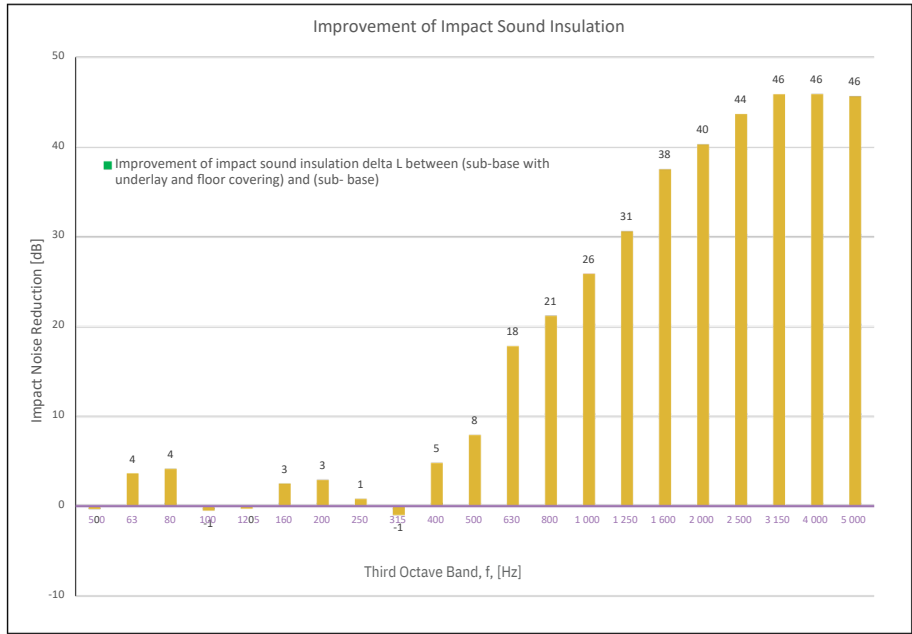
Ci(125-2000):
Sameasabove,butfor the frequency range 125 -2000 Hz.

FIELD MEASUREMENTS OF EWFMat WITH LAMINATE 8MM

	Name		Thickness (mm)	Density (SI)
Description of Floor System	8 mm laminated timber		8	--
	EWFMat 5 mm		5	--
	200~220 mm reinforced concrete slab		200~220	2540
	80~120 mm suspended ceiling cavity + 13 mm plasterboard ceiling		80~120 + 13	--
Room Floor Dimension s	Width :	7	m	
	Length :	4.5	m	
	Area :	31.5	m ²	
Sample Dimensions	Width :	1	m	
	Length :	1	m	
	Area :	1	m ²	

	Location	Width	Length	Area	Height	Volume
Receiver Rm	Bedroom	7	4.5	31.5	2.7	85.08

	Room Surfaces
Walls Floor Ceilings	Plasterboard
	Concrete
	Plasterboard



AAACStar R.	2	3	4	5	6
L'nT , w	65	55	50	45	40
FIIC	45	55	60	65	70
Comments	Below 62 BCA	Clearly Audible	Audible	Barely Inaudible	Normally Inaudible

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L'nT,w:
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Ci(50-2500):
Sameasabove,but for the frequency range 50 -2500 Hz.

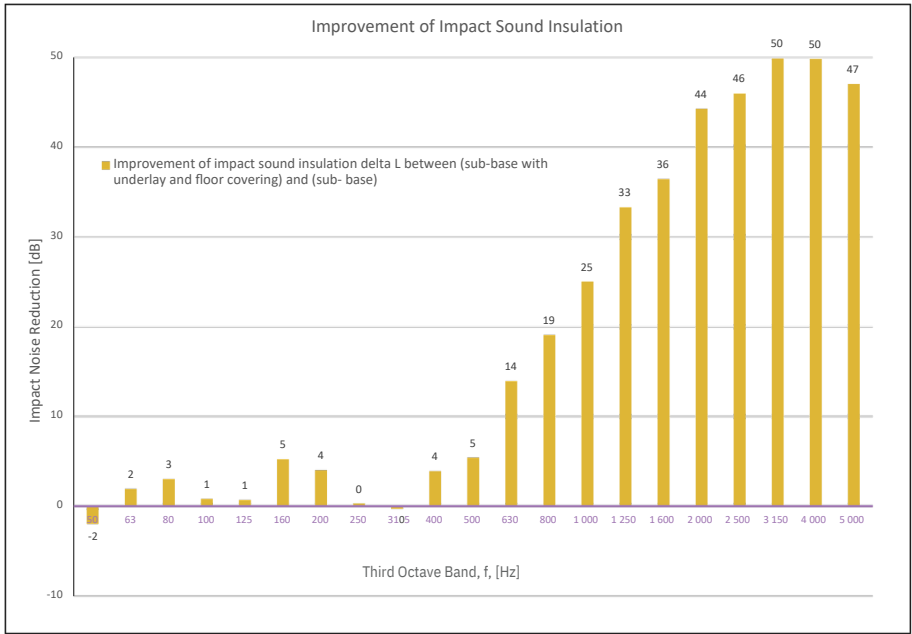
Ci(125-2000):
Sameasabove,butfor the frequency range 125 -2000 Hz.

FIELD MEASUREMENTS OF EWFMat WITH LAMINATE 8MM

	Name		Thickness (mm)	Density (SI)
Description of Floor System	8 mm laminated timber		8	--
	EWFMat 3 mm		3	--
	200~220 mm reinforced concrete slab		200~220	2540
	80~120 mm suspended ceiling caivty + 13 mm plasterboard ceiling		80~120 + 13	--
Room Floor Dimension s	Width :	7	m	
	Length :	4.5	m	
	Area :	31.5	m ²	
Sample Dimensions	Width :	1	m	
	Length :	1	m	
	Area :	1	m ²	

	Location	Width	Length	Area	Height	Volume
Receiver Rm	Bedroom	7	4.5	31.5	2.7	85.08

	Room Surfaces
Walls Floor Ceilings	Plasterboard
	Concrete
	Plasterboard



AAACStar R.	2	3	4	5	6
L'nT , w	65	55	50	45	40
FIIC	45	55	60	65	70
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Ci(50-2500):
Sameasabove,but for the frequency range 50 -2500 Hz.

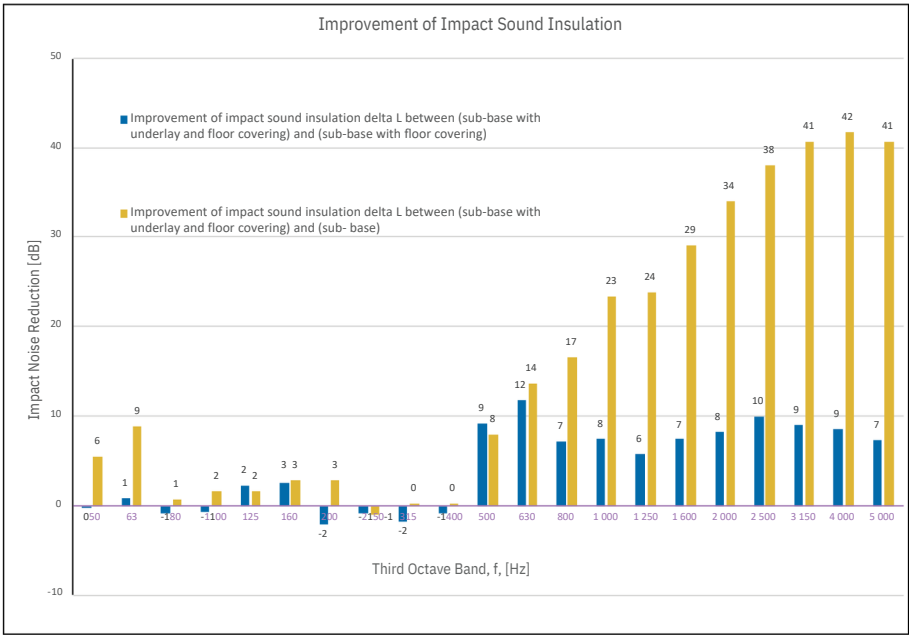
Ci(125-2000):
Sameasabove,butfor the frequency range 125 -2000 Hz.

FIELD MEASUREMENTS OF EWFMat WITH LAMINATE 12MM

	Name	Thickness (mm)	Density (SI)
Description of Floor System	12 mm laminated timber	12	--
	Flooring Acoustic Rubber Underlay	5	700
	200 mm reinforced concrete slab	200	2540
	80~120 mm suspended ceiling cavity + 10~13 mm plasterboard ceiling	80~120 + 10~13	--
Room Floor Dimension s	Width :	3.2	m
	Length :	3.2	m
	Area :	10.24	m ²
Sample Dimensions	Width :	1	m
	Length :	1	m
	Area :	1	m ²

	Location	Width	Length	Area	Height	Volume
Receiver Rm	Bedroom	3.2	3.2	10.24	2.7	27.648

	Room Surfaces
Walls	Masonry/plasterboard
Floor	Concrete
Ceilin g	Plasterboard



AAACStar R.	2	3	4	5	6
L'nT , w	65	55	50	45	40
FIIC	45	55	60	65	70
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L'nT,w:
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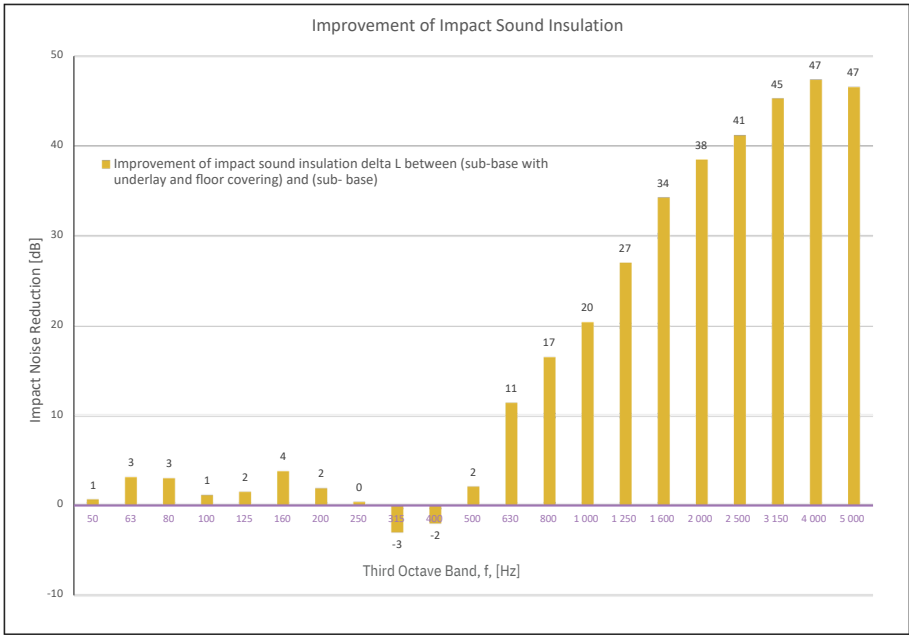
Ci(125-2000):
Sameasabove,butfor the frequency range 125 -2000 Hz.

FIELD MEASUREMENTS OF EWFMat WITH 4.5MM LAMINATE 12MM

	Name	Thickness (mm)	Density (SI)
Description of Floor System	12 mm laminated timber	12	--
	EWFMat 3 mm	3	--
	200~220 mm reinforced concrete slab	200~220	2540
	80~120 mm suspended ceiling caivty + 13 mm plasterboard ceiling	80~120 + 13	--
Room Floor Dimension s	Width :	7	m
	Length :	4.5	m
	Area :	31.5	m ²
Sample Dimensions	Width :	1	m
	Length :	1	m
	Area :	1	m ²

	Location	Width	Length	Area	Height	Volume
Receiver Rm	Bedroom	7	4.5	31.5	2.7	85.08

	Room Surfaces
Walls	Plasterboard
Floor	Concrete
Ceilin g	Plasterboard



AAACStar R.	2	3	4	5	6
L'nT , w	65	55	50	45	40
FIIC	45	55	60	65	70
Comments	Below 62 BCA	Clearly Audible	Audible	Barely Inaudible	Normally Inaudible

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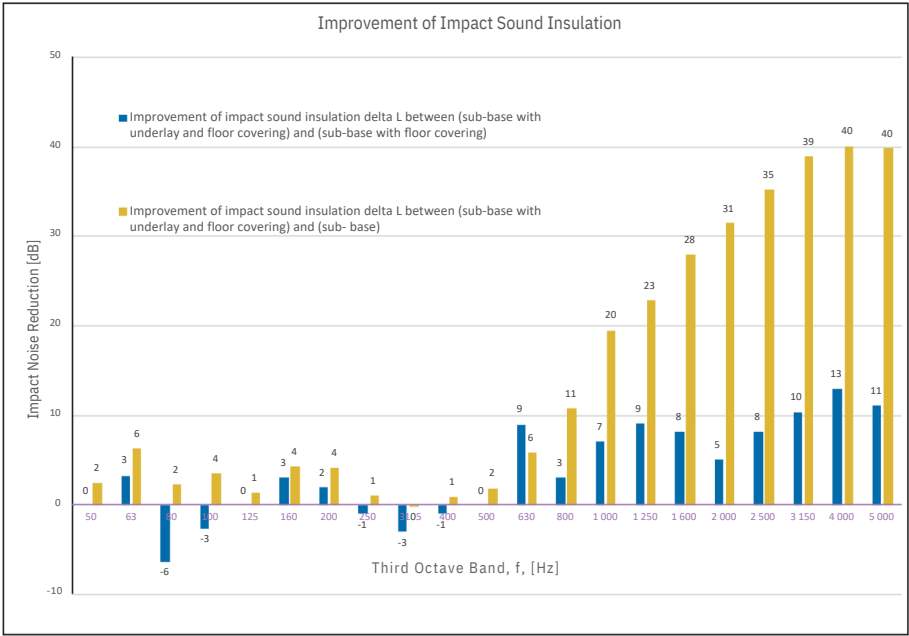
Ci(125-2000):
Sameasabove,butfor the frequency range 125 -2000 Hz.

FIELD MEASUREMENTS OF EWFMat WITH ENGINEERED TIMBER 14MM

	Name	Thickness (mm)	Density (SI)
Description of Floor System	14 mm engineered timber	14	--
	Flooring Acoustic Rubber Underlay	5	700
	200 mm reinforced concrete slab	200	2540
	80~120 mm suspended ceiling cavity + 10~13 mm plasterboard ceiling	80~120 + 10~13	--
Room Floor Dimension s	Width :	3.2	m
	Length :	3.2	m
	Area :	10.24	m ²
Sample Dimensions	Width :	1	m
	Length :	1	m
	Area :	1	m ²

	Location	Width	Length	Area	Height	Volume
Receiver Rm	Bedroom	3.2	3.2	10.24	2.7	27.648

	Room Surfaces
Walls	Masonry/plasterboard
Floor	Concrete
Ceilin g	Plasterboard



AAACStar R.	2	3	4	5	6
L'nT , w	65	55	50	45	40
FIIC	45	55	60	65	70
Comments	Below 62	BCA Clearly Audible	Audible	Barely Inaudible	Normally Inaudible

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L'nT,w:
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Ci:
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Ci(50-2500):
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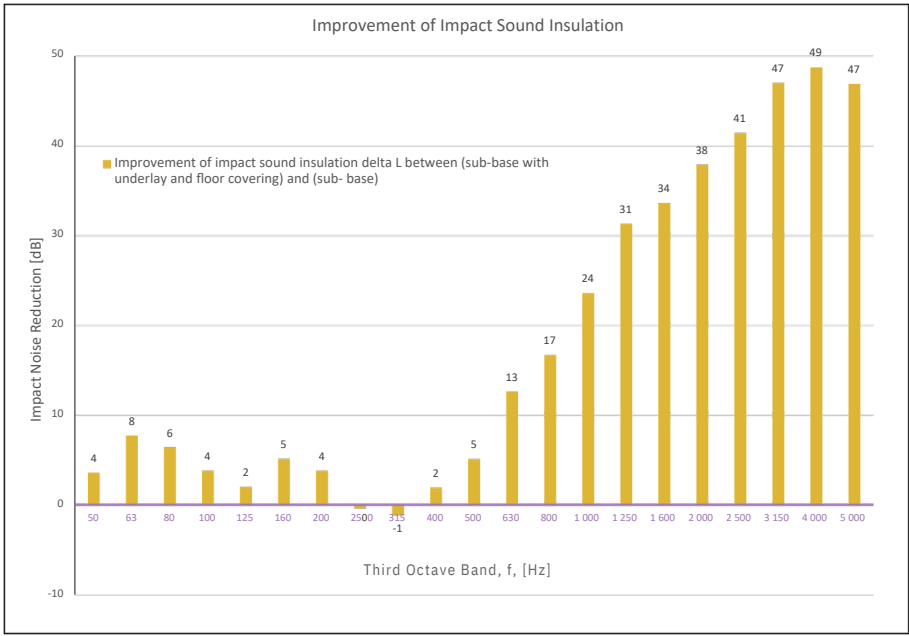
Ci(125-2000):
Sameasabove,butfor the frequency range 125 -2000 Hz.

FIELD MEASUREMENTS OF EWFMat WITH ENGINEERED TIMBER 14MM

	Name	Thickness (mm)	Density (SI)
Description of Floor System	14 mm engineered timber	14	--
	EWFMat 3 mm	3	--
	200~220 mm reinforced concrete slab	200~220	2540
	80~120 mm suspended ceiling cavity + 13 mm plasterboard ceiling	80~120 + 13	--
Room Floor Dimension s	Width :	7	m
	Length :	4.5	m
	Area :	31.5	m ²
Sample Dimensions	Width :	1	m
	Length :	1	m
	Area :	1	m ²

	Location	Width	Length	Area	Height	Volume
Receiver Rm	Bedroom	7	4.5	31.5	2.7	85.08

	Room Surfaces
Walls	Plasterboard
Floor	Concrete
Ceilin g	Plasterboard



AAACStar R.	2	3	4	5	6
L'nT , w	65	55	50	45	40
FIIC	45	55	60	65	70
Comments	Below 62 BCA	Clearly Audible	Audible	Barely Inaudible	Normally Inaudible

Definitions of Noise Metrics

FIIC:
FieldImpact Insulation Class is a single-number rating of how well a floor system attenuates impact type sounds, such as footsteps. Calculated from third-octave band normalised impact sound pressure level data and referenced to 10 m² as described in ASTM E989. The higher the single-number rating, the better its impact insulation performance.

L'nT,w:
The Weighted Standardised Impact Sound ressure Level when measured in situ referenced to a reverberation time (RT60) of 0.5 seconds. Used by the AAAC to determine their respective Star Rating.

Ci:
Spectrum adaption term is a low frequency correction factor. Typically for massive floors such as concrete, the values are about zero while for timber joist floors Ci is positive because of the low resonant frequencies. Considers frequency range between 100-and 2500 Hz.

Ci(50-2500):
Sameasabove,but for the frequency range 50 -2500 Hz.

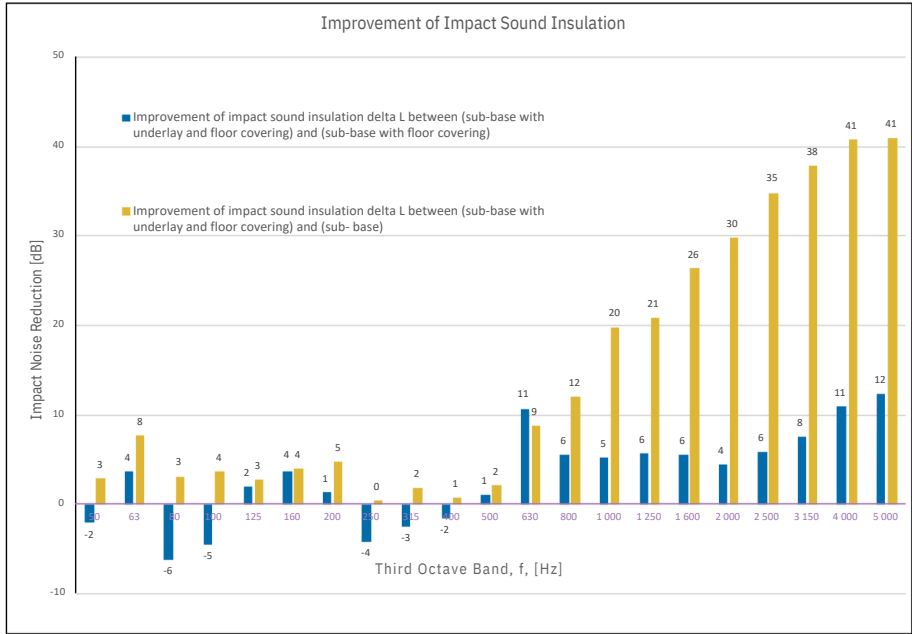
Ci(125-2000):
Sameasabove,butfor the frequency range 125 -2000 Hz.

FIELD MEASUREMENTS OF EWFMat WITH ENGINEERED TIMBER 15MM

	Name			Thickness (mm)	Density (SI)
Description of Floor System	15 mm engineered timber flooring			15	--
	Flooring Acoustic Rubber Underlay			5	700
	200 mm reinforced concrete slab			200	2540
	80~120 mm suspended ceiling cavity + 10~13 mm plasterboard ceiling			80~120 + 10~13	--
Room Floor Dimensions	Width :	3.2	m		
	Length :	3.2	m		
	Area :	10.24	m ²		
Sample Dimensions	Width :	1	m		
	Length :	1	m		
	Area :	1	m ²		

	Location	Width	Length	Area	Height	Volume
Receiver Rm	Bedroom	3.2	3.2	10.24	2.7	27.648

	Room Surfaces
Walls	Masonry/plasterboard
Floor	Concrete
Ceiling	Plasterboard



AAACStar R.	2	3	4	5	6
L'nT , w	65	55	50	45	40
FIIC	45	55	60	65	70
Comments	Below BCA 62	Clearly Audible	Audible	Barely Inaudible	Normally Inaudible

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Ci(50-2500):
Sameasabove,but for the frequency range 50 -2500 Hz.

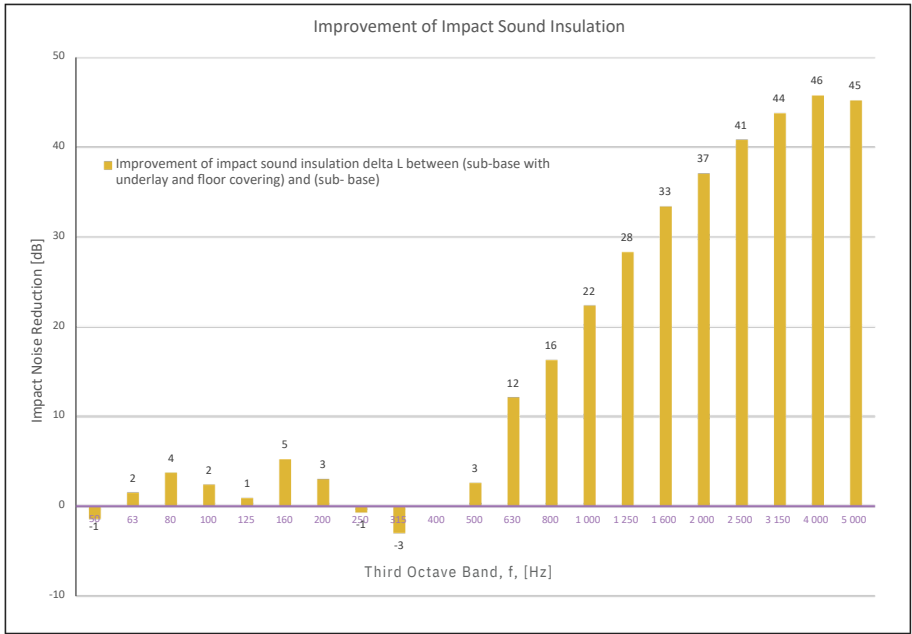
Ci(125-2000):
Sameasabove,butfor the frequency range 125 -2000 Hz.

FIELD MEASUREMENTS OF EWFMat WITH ENGINEERED TIMBER 15MM

	Name			Thickness (mm)	Density (SI)
Description of Floor System	15 mm engineered timber flooring			15	--
	EWFMat 3 mm			3	--
	200~220 mm reinforced concrete slab			200~220	2540
	80~120 mm suspended ceiling cavity + 13 mm plasterboard ceiling			80~120 + 13	--
Room	Width :	7	m		
Floor	Length :	4.5	m		
Dimension s	Area :	31.5	m ²		
Sample Dimensions	Width :	1	m		
	Length :	1	m		
	Area :	1	m ²		

	Location	Width	Length	Area	Height	Volume
Receiver Rm	Bedroom	7	4.5	31.5	2.7	85.08

	Room Surfaces
Walls	Plasterboard
Floor	Concrete
Ceiling	Plasterboard



AAACStar R.	2	3	4	5	6
L'nT , w	65	55	50	45	40
FIIC	45	55	60	65	70
Comments	Below BCA 62	Clearly Audible	Audible	Barely Inaudible	Normally Inaudible

Definitions of Noise Metrics

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FieldImpact Insulation Class is a single-number rating of how well a floor system attenuates impact type sounds, such as footsteps. Calculated from third-octave band normalised impact sound pressure level data and referenced to 10 m² as described in ASTM E989. The higher the single-number rating, the better its impact insulation performance.

L'nT,w:
The Weighted Standardised Impact Sound ressure Level when measured in situ referenced to a reverberation time (RT60) of 0.5 seconds. Used by the AAAC to determine their respective Star Rating.

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Ci(50-2500):
Sameasabove,but for the frequency range 50 -2500 Hz.

Ci(125-2000):
Sameasabove,butfor the frequency range 125 -2000 Hz.

FIELD MEASUREMENTS OF EWFMat WITH ENGINEERED TIMBER 14MM GLUED TO UNDERLAY

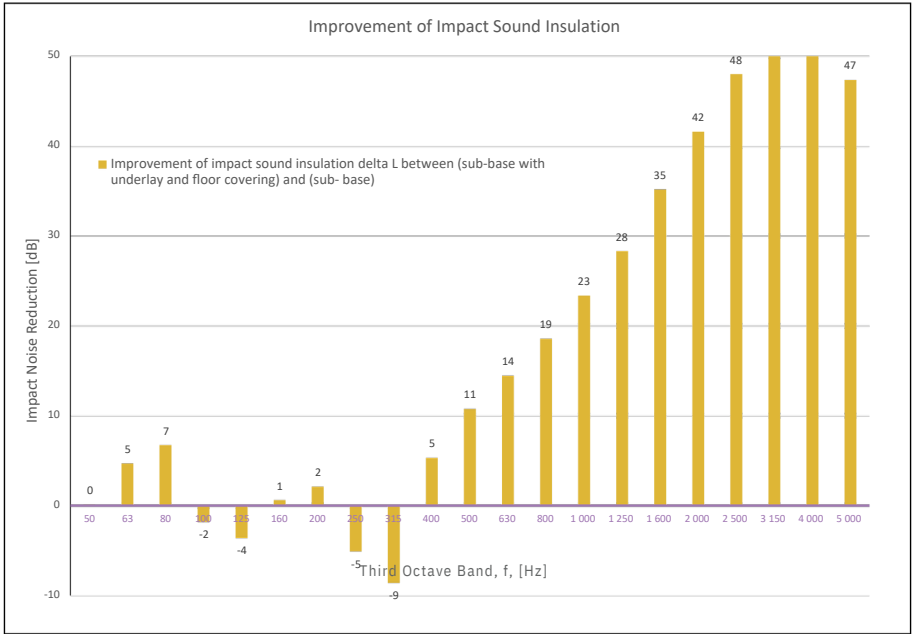
	Name	Thickness (mm)	Density (SI)
Description of Floor System	14 mm engineered timber glued to	14	--
	EWFMat 5 mm	5	--
	200~220 mm reinforced concrete slab	200~220	2540
	80~120 mm suspended ceiling cavity + 13 mm plasterboard ceiling	80~120 + 13	--

Room Floor Dimension s	Width :	7	m
	Length :	4.5	m
	Area :	31.5	m ²

Sample Dimensions	Width :	1	m
	Length :	1	m
	Area :	1	m ²

	Location	Width	Length	Area	Height	Volume
Receiver Rm	Bedroom	7	4.5	31.5	2.7	85.08

	Room Surfaces
Walls Floor Ceilin g	Plasterboard
	Concrete
	Plasterboard



AAACStar R.	2	3	4	5	6
L'nT , w	65	55	5	45	40
FIIC	45	55	0	65	70
Comments	Below BCA 62	Clearly Audible	6 Audible 0	Barely Inaudible	Normally Inaudible

Definitions of Noise Metrics

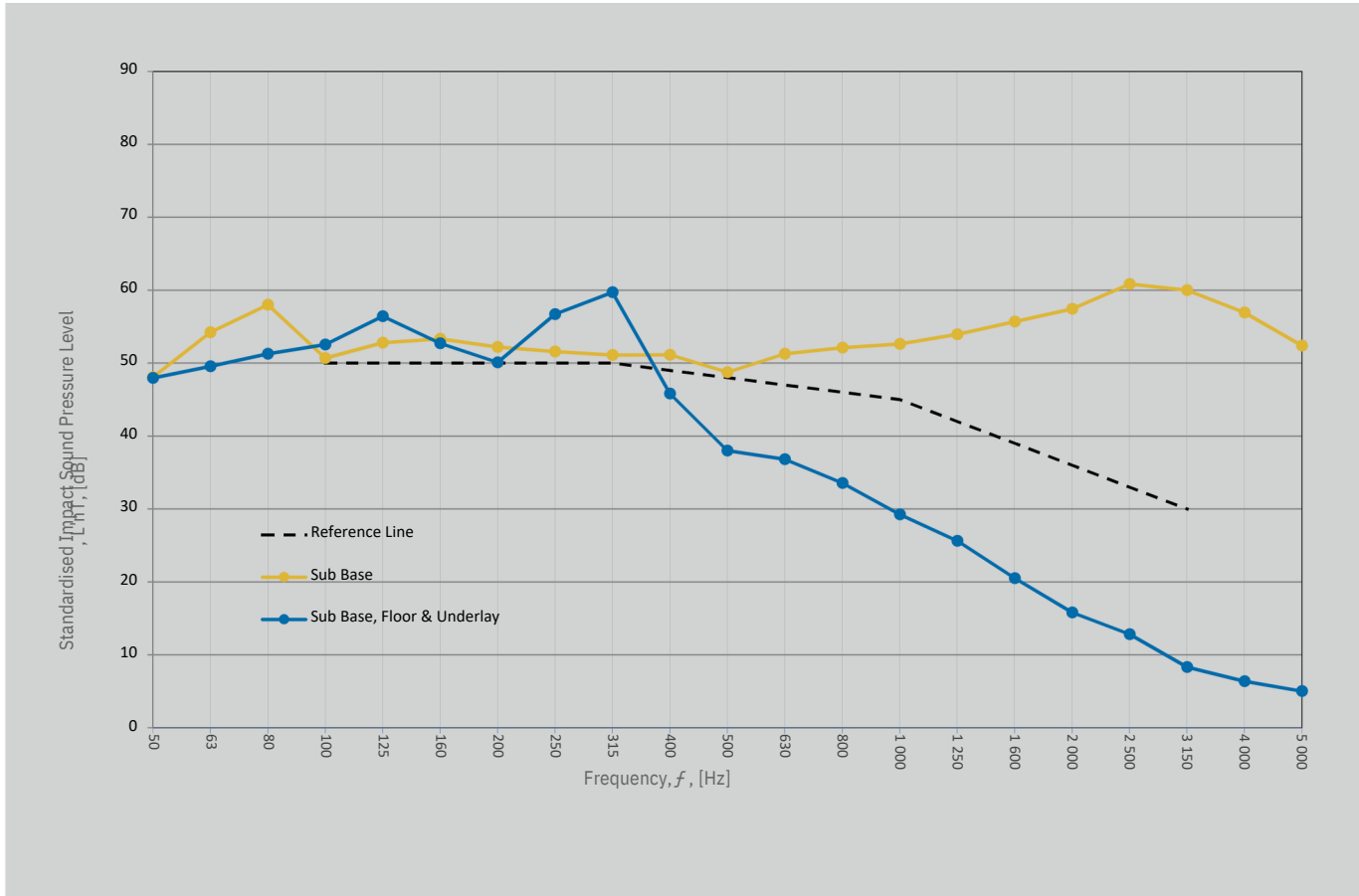
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Ci(50-2500):
Sameasabove,but for the frequency range 50 -2500 Hz.

Ci(125-2000):
Sameasabove,butfor the frequency range 125 -2000 Hz.



Frequency f Hz	L'nT (one-third octave) dB		
	Sub Base	Sub Base Floor	Sub Base Floor Underlay
50	48.1	38.0	47.9
63	54.2	48.4	49.5
80	58.0	50.4	51.3
100	50.7	46.4	52.5
125	52.8	54.1	56.4
160	53.3	49.2	52.7
200	52.2	43.3	50.1
250	51.6	49.6	56.7
315	51.1	49.3	59.7
400	51.1	45.1	45.8
500	48.8	45.8	38.0
630	51.3	43.6	36.8
800	52.1	39.4	33.6
1000	52.6	33.7	29.2
1250	53.9	31.8	25.6
1600	55.7	28.9	20.5
2000	57.4	26.7	15.8
2500	60.8	28.3	12.8
3150	60.0	24.2	8.3
4000	56.9	16.6	6.4
5000	52.4	10.9	5.0

Sub Base (Test 00)		
L'nT,w	64	AS ISO 717.2 -
Ci	-13	2004 AS ISO
Ci(50-2500)	-12	717.2 - 2004 AS
Ci(63-2000)	-13	ISO 717.2 - 2004
AAAC ★	2 Star	AS ISO 717.2 -
FIIC	35	2004 AAAC
		Guidleline ASTM
		E1007-14

Sub Base & Floor		
L'nT,w	43	AS ISO 717.2 -
Ci	0	2004 AS ISO
Ci(50-2500)	1	717.2 - 2004 AS
Ci(63-2000)	1	ISO 717.2 - 2004
AAAC ★	5 Star	AS ISO 717.2 -
FIIC	61	2004 AAAC
		Guidleline ASTM
		E1007-14

Sub Base, Floor & Underlay (Test 01)		
L'nT,w	48	AS ISO 717.2 -
Ci	1	2004 AS ISO
Ci(50-2500)	1	717.2 - 2004 AS
Ci(63-2000)	1	ISO 717.2 - 2004
AAAC ★	4 Star	AS ISO 717.2 -
FIIC	55	2004 AAAC
		Guidleline ASTM
		E1007-14

An aerial night view of a city skyline, featuring numerous illuminated skyscrapers and buildings. The image is partially obscured by large, diagonal, semi-transparent purple geometric shapes that create a modern, abstract design. The sky is dark with some light clouds.

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