REPORT

Acoustics 2007-01-17 P604997

Measurement personal: Karl Tillberg

Determination of impact sound insulation in a laboratory according to ISO 140-6

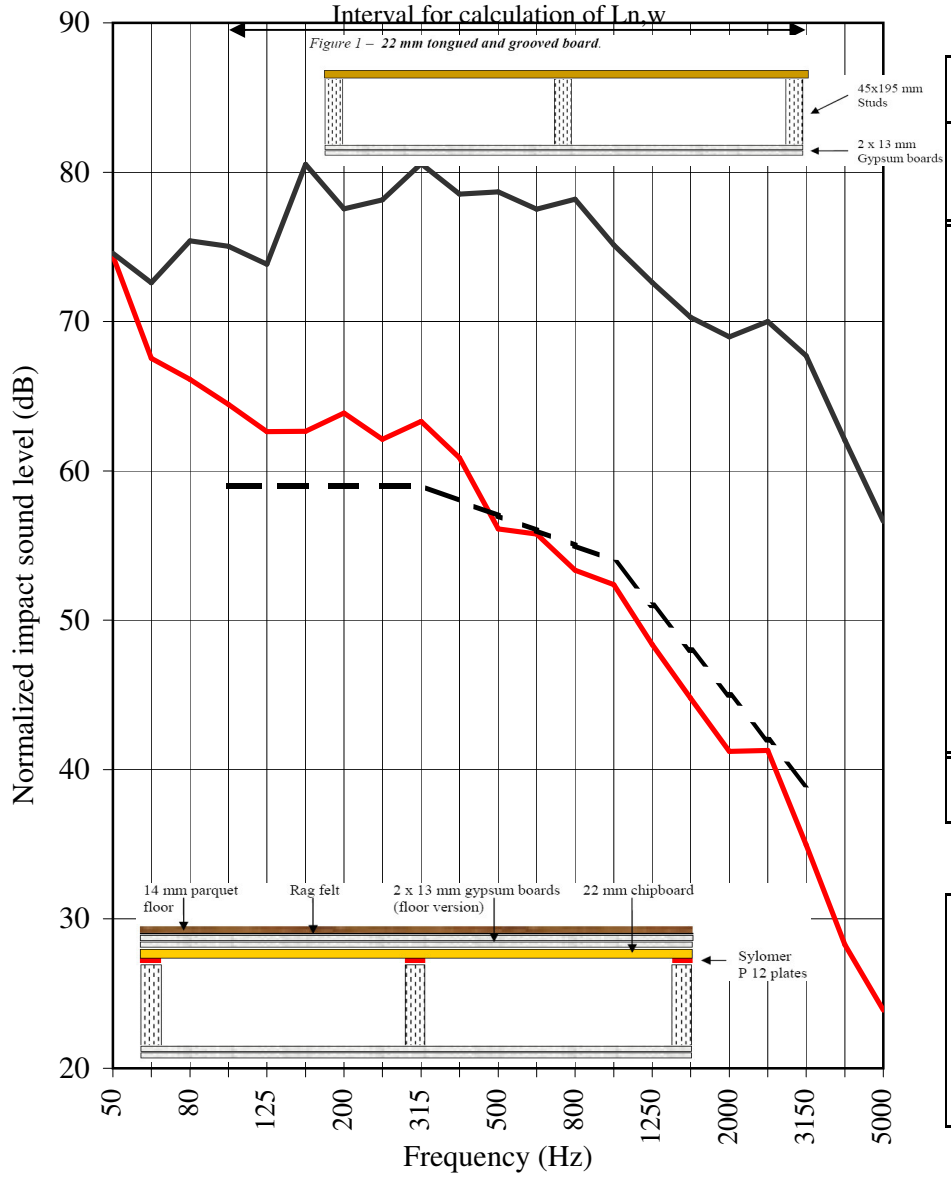
Client: Christian Berner AB

Measurement object: P12 + empty version of the floor structure

Measurement date: 2006-11-30

Sending room: Upper impact sound insulation lab on SP
Receiving room: Lower impact sound insulation lab on SP
Volume of R-room: 138 m^3

Results: Weighted impact sound level, $L_{n,w}$ and adaption terms, C_I & $C_{I,50\text{-}2500}$



Frequency (Hz)	Ln (dB)	Ln 0 (dB)
50	74,4	74,6
63	67,5	72,6
80	66,1	75,4
100	64,4	75,0
125	62,6	73,8
160	62,7	80,5
200	63,9	77,5
250	62,1	78,1
315	63,3	80,6
400	60,9	78,5
500	56,1	78,7
630	55,8	77,5
800	53,4	78,2
1000	52,4	75,1
1250	48,4	72,6
1600	44,8	70,3
2000	41,2	69,0
2500	41,3	70,0
3150	35,0	67,7
4000	28,3	62,1
5000	23,9	56,6

$L_{n,w}$	**57**	**78**
C_I	0	-4
$C_{I,50\text{-}2500}$	5	-4
Sum. dev.	27,9	24,2
Max. dev.	5,4	7,7
Frequency	100	3150

REPORT

Acoustics 2007-01-17 P604997

Measurement personal: Karl Tillberg

Determination of sound insulation in a laboratory according to SS-EN-ISO 140-3:95

Client: Christian Berner AB

Measurement object: P12 + empty version of the floor structure

Measurement date: 2006-11-30

Temperature and humidity: 19ºC resp. 47 % RH

Area of the test opening and module: 12,00 m^2, whole opening

Results: Weighted sound reduction index, R_w and adaption terms, C & $C_{50-3150}$

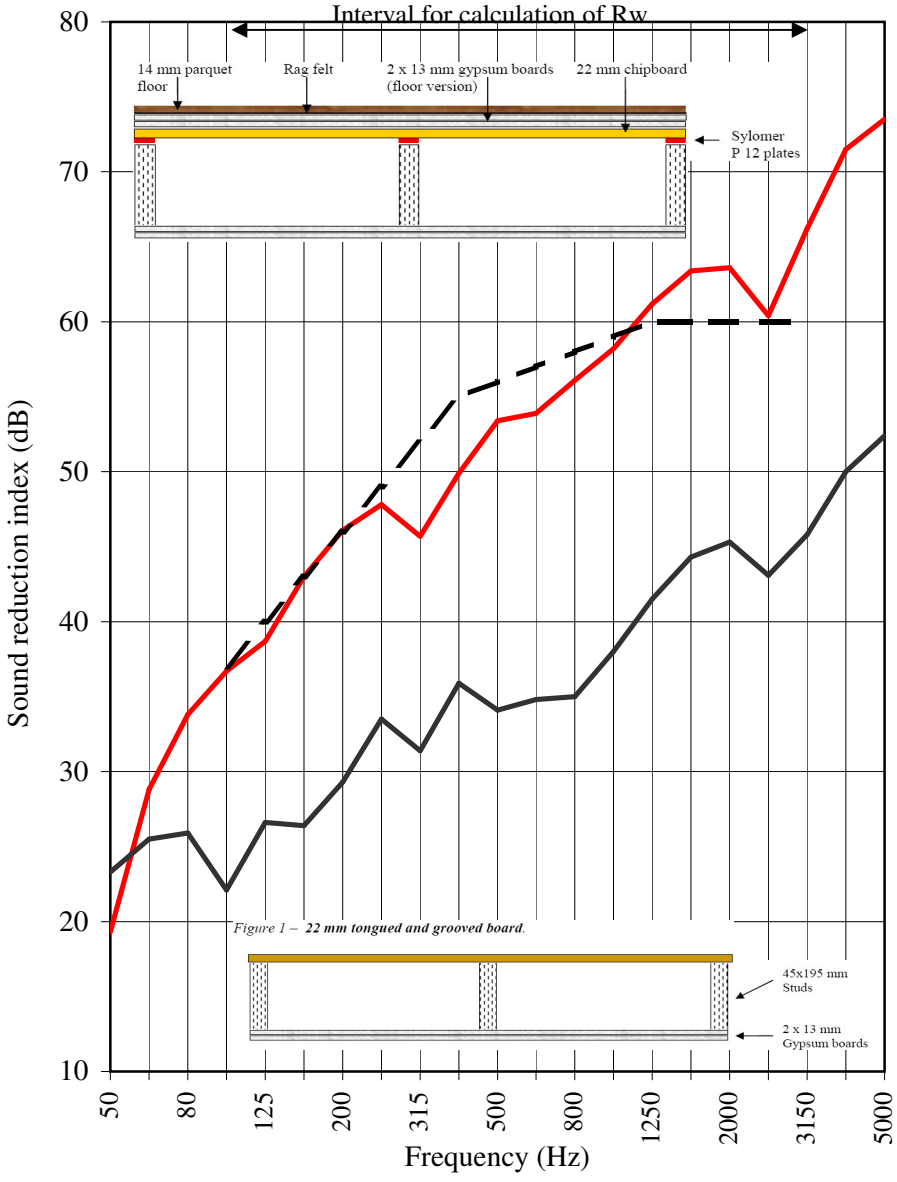


*Figure 1 – **22 mm tongued and grooved board.***

Frequency (Hz)	Rw (dB)	Rw 0 (dB)
50	19,3	23,3
63	28,8	25,5
80	33,8	25,9
100	36,7	22,1
125	38,7	26,6
160	43,0	26,4
200	46,1	29,3
250	47,8	33,5
315	45,7	31,4
400	49,9	35,9
500	53,4	34,1
630	53,9	34,8
800	56,1	35,0
1000	58,2	38,0
1250	61,2	41,5
1600	63,4	44,3
2000	63,6	45,3
2500	60,4	43,1
3150	66,2	45,8
4000	71,5	50,0
5000	73,5	52,4

R_w	**56**	**39**
(C; Ctr)	(-1;-5)	(-1;-4)
$C_{50-3150}$	(-3;-13)	(-1;-5)
$C_{50-5000}$	(-2;-13)	(0;-5)
R mean	52,8	35,4
Sum. dev.	22,6	27,3
Max. dev.	6,3	6,0
Frequency	315	800

REPORT

Acoustics 2007-01-17 P604997

Technical officier: Karl Tillberg

Determination of impact sound insulation in a laboratory according to ISO 140-6

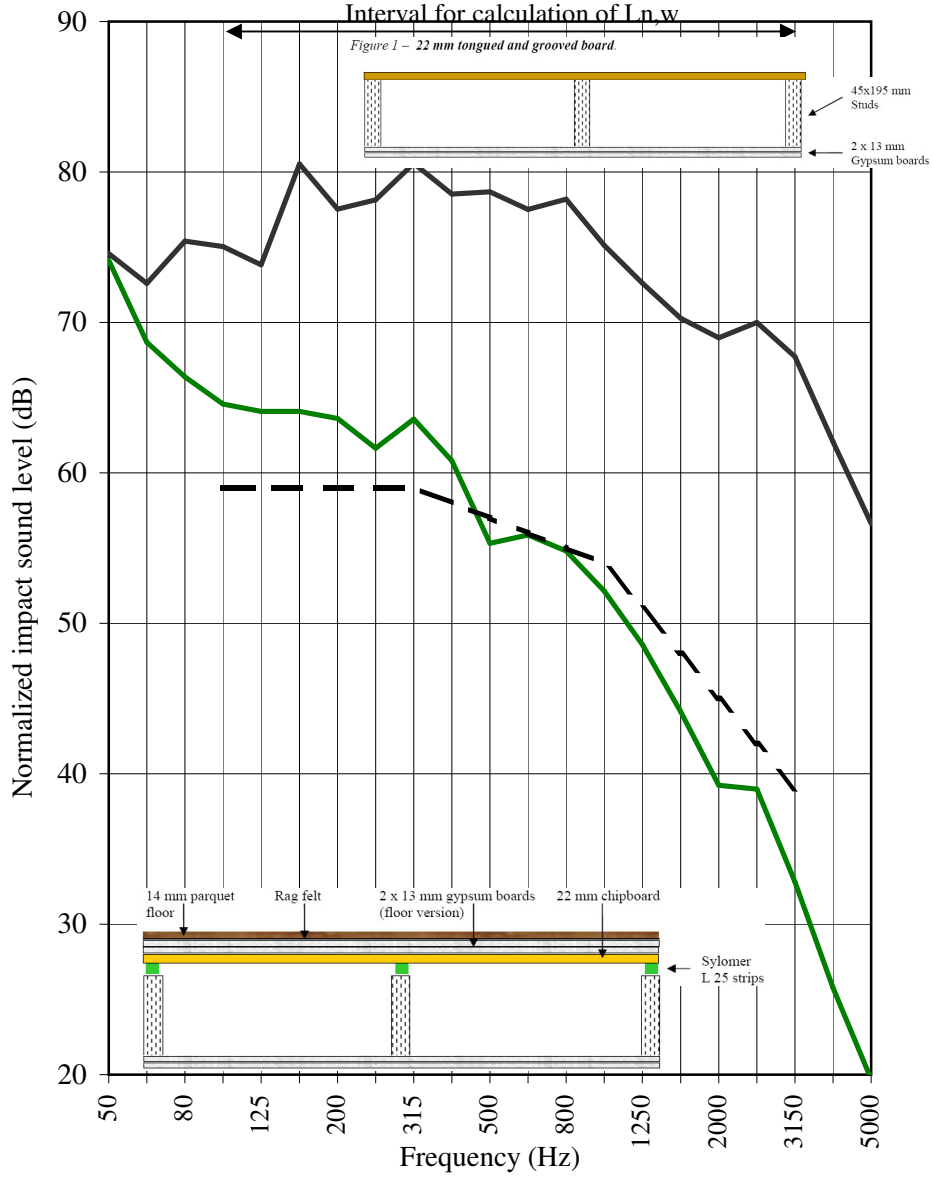
Client: Christian Berner AB

Measurement object: L25 + empty version of the floor structure

Measurement date: 2006-12-06

Sending room: Upper impact sound insulation lab on SP
Receiving room: Lower impact sound insulation lab on SP
Volume of R-room: 138 m^3

Results: Weighted impact sound level, $L_{n,w}$ and adaption terms, C_I & $C_{I,50\text{-}2500}$



Frequency (Hz)	Ln (dB)	Ln 0 (dB)
50	74,1	74,6
63	68,7	72,6
80	66,4	75,4
100	64,6	75,0
125	64,1	73,8
160	64,1	80,5
200	63,6	77,5
250	61,6	78,1
315	63,6	80,6
400	60,8	78,5
500	55,3	78,7
630	55,9	77,5
800	54,8	78,2
1000	52,2	75,1
1250	48,6	72,6
1600	44,1	70,3
2000	39,2	69,0
2500	39,0	70,0
3150	32,8	67,7
4000	25,8	62,1
5000	≤ 19,7	56,6

$L_{n,w}$	**57**	**78**
C_I	0	-4
$C_{I,50\text{-}2500}$	5	-4
Sum. dev.	30,4	24,2
Max. dev.	5,6	7,7
Frequency	100	3150

REPORT

Acoustics 2007-01-17 P604997

Measurement personal: Karl Tillberg

Determination of sound insulation in a laboratory according to SS-EN-ISO 140-3:95

Client: Christian Berner AB

Measurement object: L25 + empty version of the floor structure

Measurement date: 2006-12-04

Temperature and humidity: 20ºC resp. 45 % RH

Area of the test opening and module: 12,00 m^2, whole opening

Results: Weighted sound reduction index, R_w and adaption terms, C & $C_{50\text{-}3150}$

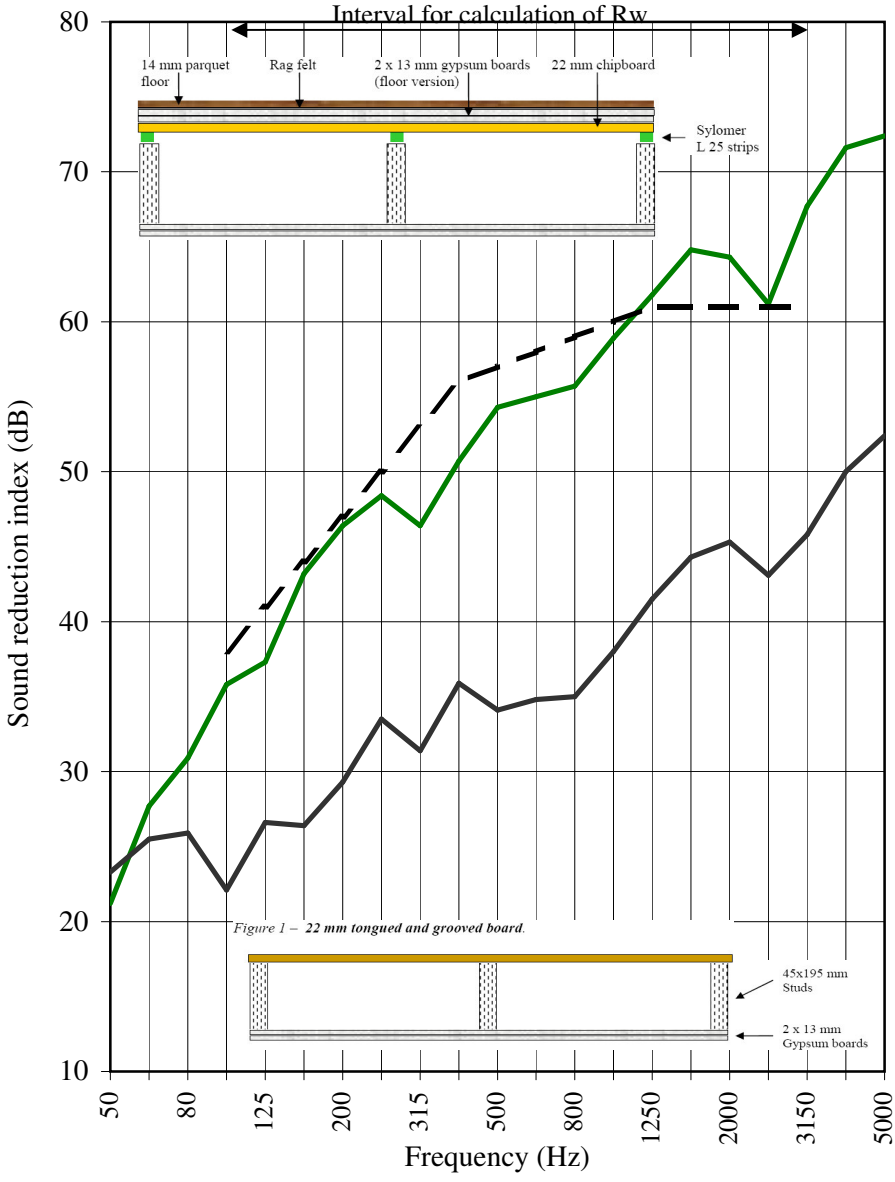


*Figure 1 – **22 mm tongued and grooved board.***

Frequency (Hz)	Rw (dB)	Rw 0 (dB)
50	21,2	23,3
63	27,7	25,5
80	30,9	25,9
100	35,8	22,1
125	37,3	26,6
160	43,2	26,4
200	46,4	29,3
250	48,4	33,5
315	46,4	31,4
400	50,7	35,9
500	54,3	34,1
630	55,0	34,8
800	55,7	35,0
1000	58,9	38,0
1250	61,8	41,5
1600	64,8	44,3
2000	64,3	45,3
2500	61,2	43,1
3150	67,7	45,8
4000	71,6	50,0
5000	72,4	52,4

R_w	**57**	**39**
(C; Ctr)	(-2;-6)	(-1;-4)
$C_{50\text{-}3150}$	(-4;-14)	(-1;-5)
$C_{50\text{-}5000}$	(-3;-14)	(0;-5)
R mean	53,2	35,4
Sum. dev.	30,9	27,3
Max. dev.	6,6	6,0
Frequency	315	800

REPORT

Acoustics 2007-01-17 P604997

Technical officier: Karl Tillberg

Determination of impact sound insulation in a laboratory according to ISO 140-6

Client: Christian Berner AB

Measurement object: L25 heavy + empty version of the floor structure

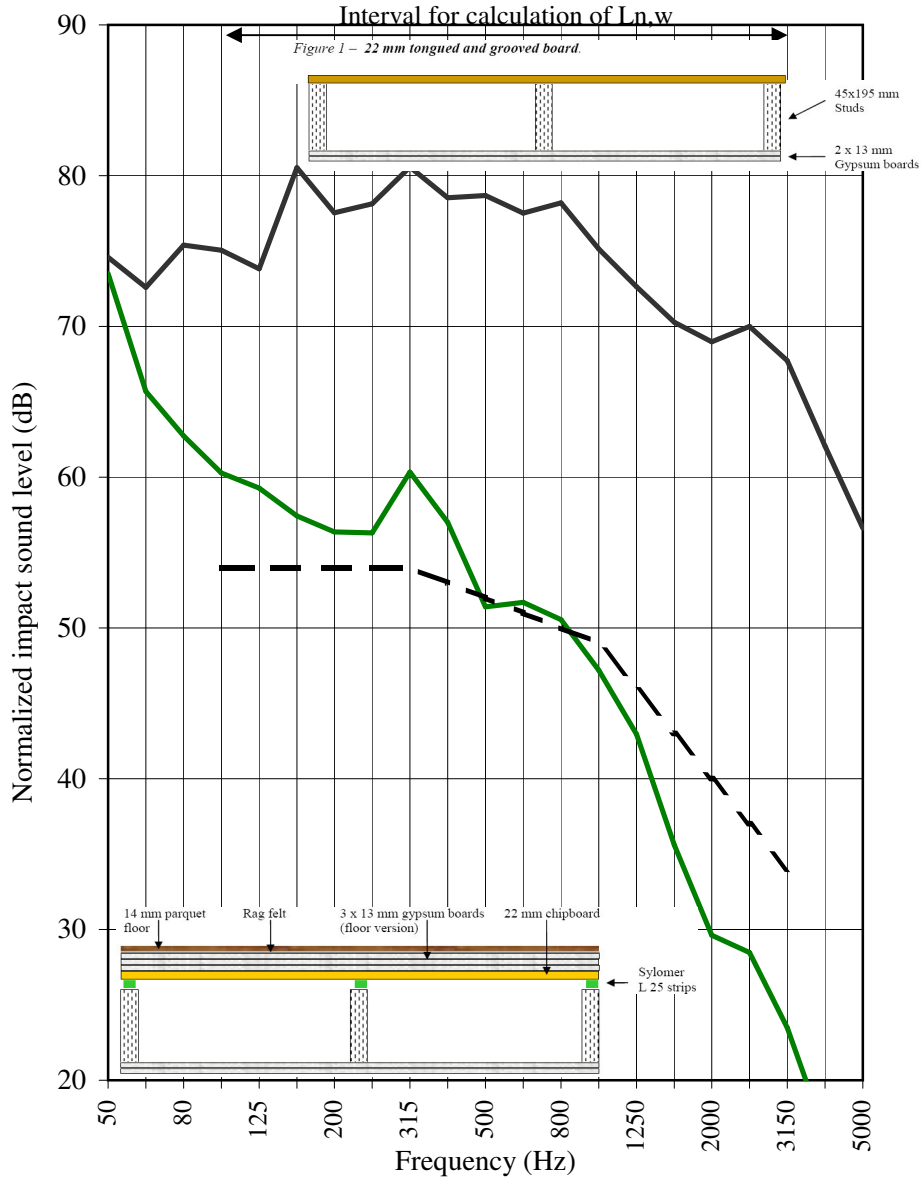
Measurement date: 2006-12-06

Sending room: Upper impact sound insulation lab on SP

Receiving room: Lower impact sound insulation lab on SP

Volume of R-room: 138 m^3

Results: Weighted impact sound level, $L_{n,w}$ and adaption terms, C_I & $C_{I,50\text{-}2500}$



Frequency (Hz)	Ln (dB)	Ln 0 (dB)
50	73,5	74,6
63	65,7	72,6
80	62,7	75,4
100	60,3	75,0
125	59,3	73,8
160	57,4	80,5
200	56,4	77,5
250	56,3	78,1
315	60,3	80,6
400	57,0	78,5
500	51,4	78,7
630	51,7	77,5
800	50,6	78,2
1000	47,2	75,1
1250	43,0	72,6
1600	35,6	70,3
2000	29,6	69,0
2500	28,5	70,0
3150	23,5	67,7
4000	≤ 16,4	62,1
5000	≤ 14,1	56,6

$L_{n,w}$	**52**	**78**
C_I	0	-4
$C_{I,50\text{-}2500}$	8	-4
Sum. dev.	31,3	24,2
Max. dev.	6,3	7,7
Frequency	315	3150

REPORT

Acoustics 2007-01-17 P604997

Measurement personal: Karl Tillberg

Determination of sound insulation in a laboratory according to SS-EN-ISO 140-3:95

Client: Christian Berner AB

Measurement object: L25 heavy + empty version of the floor structure

Measurement date: 2006-12-06

Temperature and humidity: 19,5ºC resp. 45,8 % RH

Area of the test opening and module: 12,00 m^2, whole opening

Results: Weighted sound reduction index, R_w and adaption terms, C & $C_{50\text{-}3150}$

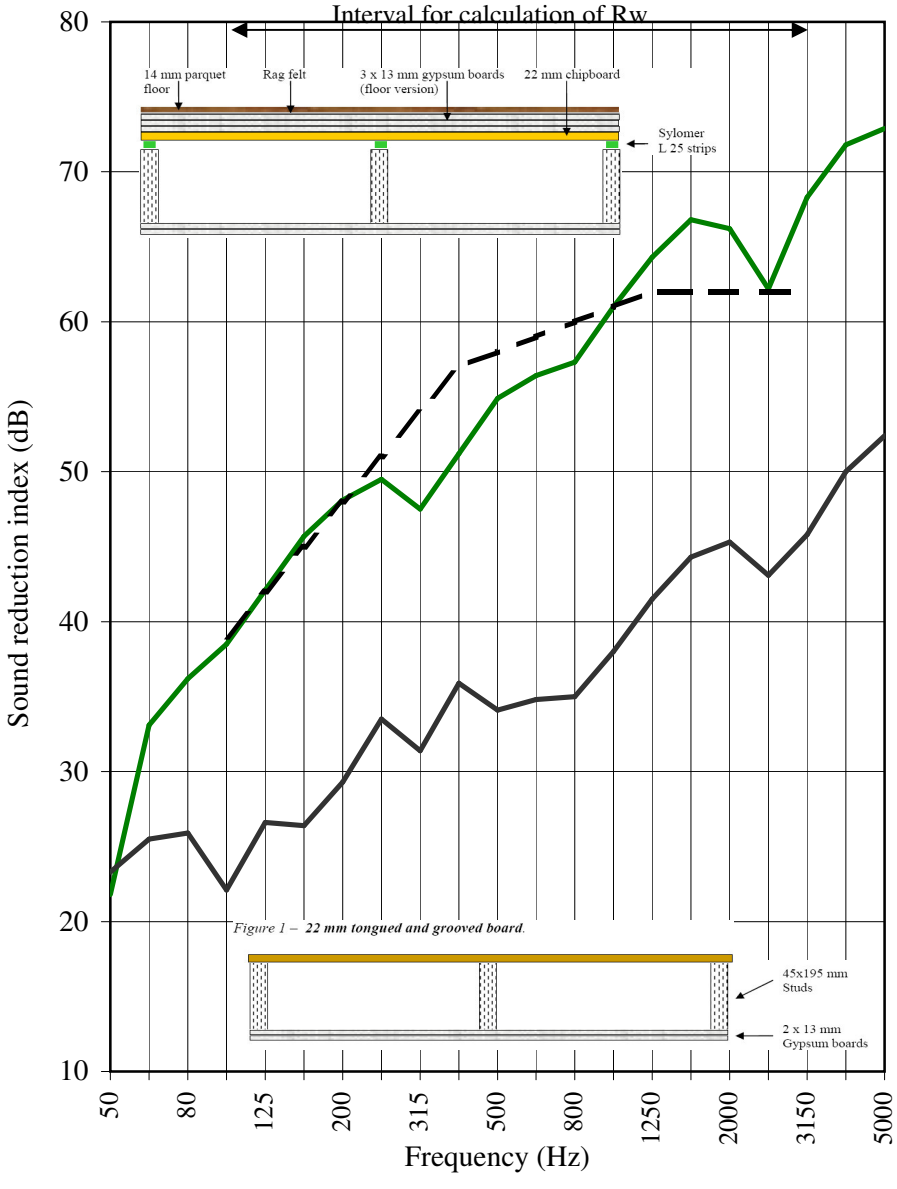


*Figure 1 – **22 mm tongued and grooved board.***

Frequency (Hz)	Rw (dB)	Rw 0 (dB)
50	21,8	23,3
63	33,1	25,5
80	36,2	25,9
100	38,5	22,1
125	42,1	26,6
160	45,7	26,4
200	48,1	29,3
250	49,5	33,5
315	47,5	31,4
400	51,2	35,9
500	54,9	34,1
630	56,4	34,8
800	57,3	35,0
1000	61,0	38,0
1250	64,3	41,5
1600	66,8	44,3
2000	66,2	45,3
2500	62,2	43,1
3150	68,3	45,8
4000	71,8	50,0
5000	72,9	52,4

R_w	**58**	**39**
(C; Ctr)	(-1;-5)	(-1;-4)
$C_{50\text{-}3150}$	(-3;-13)	(-1;-5)
$C_{50\text{-}5000}$	(-2;-13)	(0;-5)
R mean	55,0	35,4
Sum. dev.	22,7	27,3
Max. dev.	6,5	6,0
Frequency	315	800

REPORT

Acoustics 2007-01-17 P604997

Technical officier: Karl Tillberg

Determination of impact sound insulation in a laboratory according to ISO 140-6

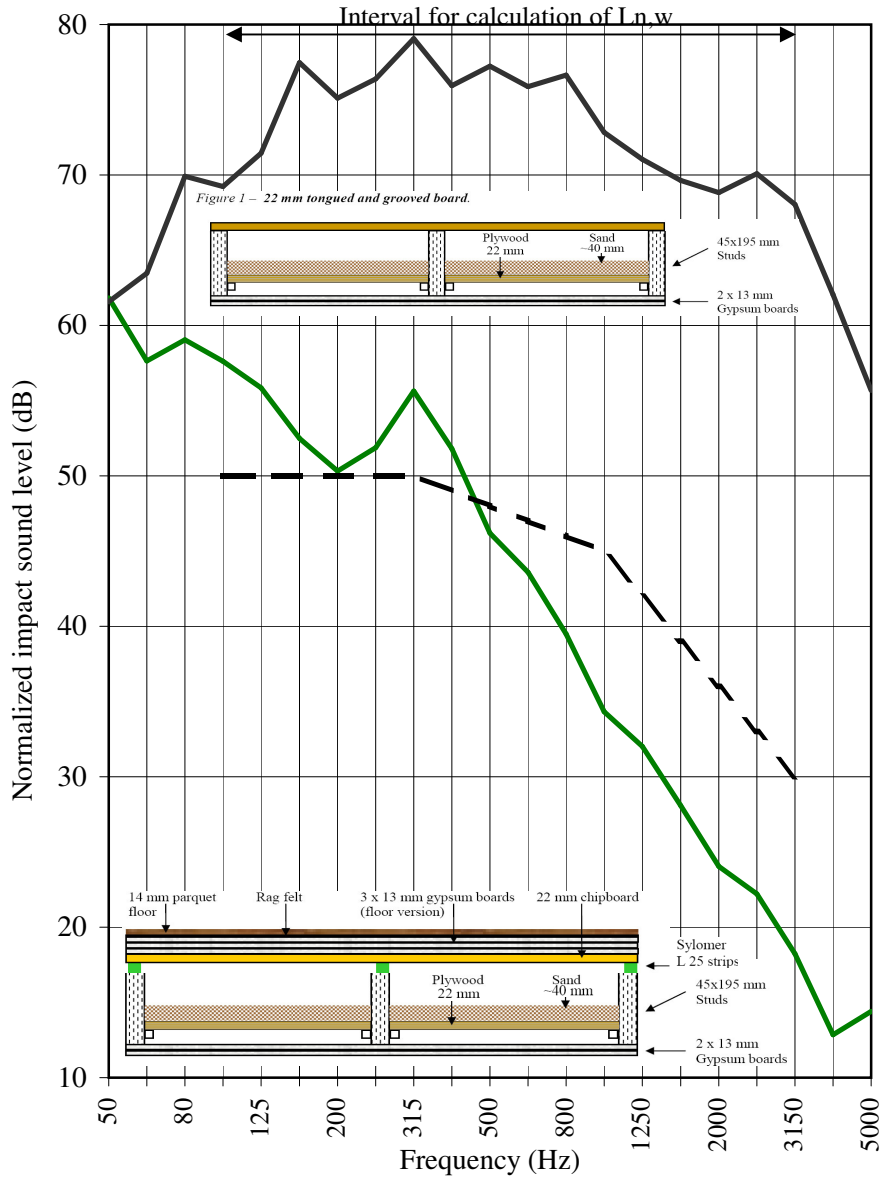
Client: Christian Berner AB

Measurement object: L25 heavy + sand version of the floor structure

Measurement date: 2006-12-06

Sending room: Upper impact sound insulation lab on SP
Receiving room: Lower impact sound insulation lab on SP
Volume of R-room: 138 m^3

Results: Weighted impact sound level, $L_{n,w}$ and adaption terms, C_I & $C_{I,50-2500}$



Frequency (Hz)	Ln (dB)	Ln 0 (dB)
50	61,8	61,6
63	57,6	63,5
80	59,0	69,9
100	57,6	69,2
125	55,9	71,4
160	52,5	77,5
200	50,3	75,1
250	51,9	76,4
315	55,6	79,1
400	51,8	75,9
500	46,2	77,2
630	43,6	75,9
800	39,5	76,6
1000	34,3	72,8
1250	32,0	71,0
1600	28,1	69,6
2000	24,0	68,8
2500	22,2	70,1
3150	18,2	68,1
4000	≤ 12,9	62,0
5000	≤ 14,4	55,7

$L_{n,w}$	**48**	**77**
C_I	0	-5
$C_{I,50-2500}$	4	-5
Sum. dev.	26,6	24,6
Max. dev.	7,6	9,1
Frequency	100	3150

REPORT

Acoustics 2007-01-17 P604997

Measurement personal: Karl Tillberg

Determination of sound insulation in a laboratory according to SS-EN-ISO 140-3:95

Client: Christian Berner AB

Measurement object: L25 heavy + heavy version of the floor structure

Measurement date: 2006-12-22

Temperature and humidity: 18,3ºC resp. 43 % RH

Area of the test opening and module: 12,00 m^2, whole opening

Results: Weighted sound reduction index, R_w and adaption terms, C & $C_{50\text{-}3150}$

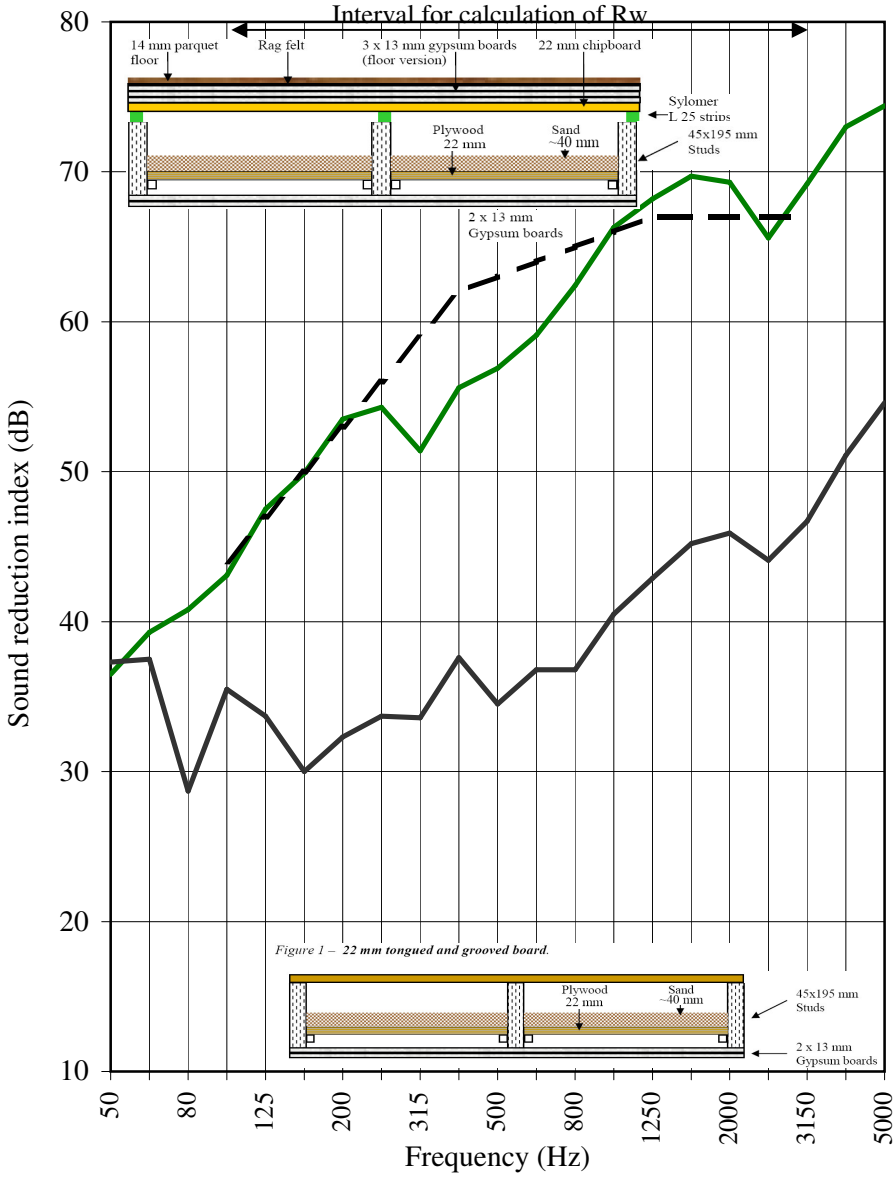


*Figure 1 – **22 mm tongued and grooved board.***

Frequency (Hz)	Rw (dB)	Rw 0 (dB)
50	36,5	37,3
63	39,3	37,5
80	40,8	28,7
100	43,1	35,5
125	47,5	33,7
160	49,9	30,0
200	53,5	32,3
250	54,3	33,7
315	51,4	33,6
400	55,6	37,6
500	56,9	34,5
630	59,1	36,8
800	62,4	36,8
1000	66,3	40,5
1250	68,2	42,9
1600	69,7	45,2
2000	69,3	45,9
2500	65,6	44,1
3150	69,2	46,7
4000	73,0	51,1
5000	74,4	54,6

R_w	**63**	**41**
(C; Ctr)	(-2;-6)	(-1;-3)
$C_{50\text{-}3150}$	(-3;-9)	(-1;-4)
$C_{50\text{-}5000}$	(-2;-9)	(0;-4)
R mean	58,9	38,1
Sum. dev.	31,7	30,5
Max. dev.	7,6	6,5
Frequency	315	500