

BS EN ISO 140-8:1998 Acoustics - Laboratory measurements of the reduction of transmitted impact noise by floor coverings on a heavyweight standard floor

Client SU

Object Audit Sample
Rubber floor covering

Measurement procedure: ISO 140-8:1998

Test procedure: ISO 717-2:1996

Mass per unit: 5.2 kg/m²

Size: 3 off 0.5m x 1.0m m²

Receiving room

Volume V = 220 m³

Condition: clean

Type: Large Rev Room

Location: Transmission Suite

Improvement of impact insulation $\Delta L_w = 19$ dB

Single figure weighted impact improvement value.

Weighted Norm. impact sound pres. level $L_{n,o,w} = 82$ dB

Weighted Norm. impact sound pres. level $L_{n,1,w} = 61$ dB

Weighted Norm. impact sound pres. level $L_{n,r,w} = 59$ dB

Frequency [Hz]	L1 [dB]	T [s]	L_{nl} [dB]	L_{no} [dB]	ΔL [dB]	$L_{n,r}$ [dB]
50	--	--	--	--	--	--
63	--	--	--	--	--	--
80	--	--	--	--	--	--
100	67.3	5.75	65.2	67.6	2.4	64.6
125	71.6	5.19	69.9	70.5	0.6	66.9
160	67.9	4.48	66.9	68.7	1.8	66.2
200	66.6	4.68	65.4	70.2	4.8	63.7
250	67.7	5.45	65.8	70.3	4.5	64.5
315	67.2	5.34	65.4	71.1	5.7	63.8
400	67.4	4.98	65.9	71.6	5.7	64.3
500	64.8	5.27	63.0	71.3	8.3	62.2
630	61.3	5.28	59.5	71.9	12.4	58.6
800	55.2	5.42	53.3	71.4	18.1	53.4
1000	50.3	5.32	48.5	73.0	24.5	47.5
1250	41.5	5.00	40.0	74.9	34.9	37.1
1600	35.8	4.78	34.5	75.7	41.2	30.8
2000	29.6	4.28	28.8	76.1	47.3	24.7
2500	19.4	3.83	19.0	75.8	56.8	15.2
3150	12.5	3.33	12.7	76.0	63.3	8.7
4000	13.9	2.79	14.9	74.8	59.9	--
5000	20.4	2.13	22.6	73.4	50.8	--

Third octave band impact improvement values.

University of Salford School of Computing Science & Engineering

No. of test report: II-07-11-02

Salford, 7.11.2007

BS EN ISO 140-8:1998 Acoustics - Laboratory measurements of the reduction of transmitted impact noise by floor coverings on a heavyweight standard floor

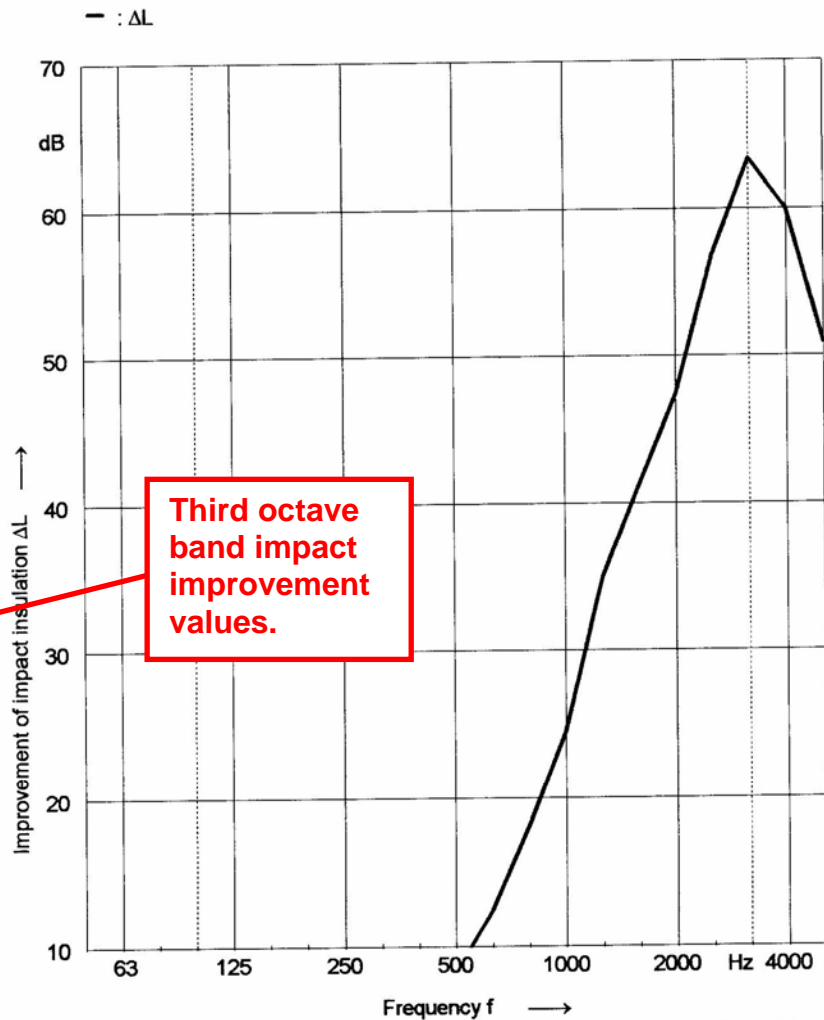
Client: SU
 Test specimen mounted by:
 Description of the specimen:
 Audit Sample rubber floor covering

Product identification: Rubber floor covering
 Test room identification: Roof of Large Rev Room / Large Rev Room
 Date of test: 07/11/07

Mass per unit: 5.2 kg/m²
 Curing time:
 Temperature [°C]: 18.3
 Humidity [%]: 53.1
 Receiving room Volume: 220 m³

Frequency [Hz]	Ln,o 1/3 oct. [dB]	ΔL 1/3 oct. [dB]
50	--	--
63	--	--
80	--	--
100	67.6	2.4
125	70.5	0.6
160	68.7	1.8
200	70.2	4.8
250	70.3	4.5
315	71.1	5.7
400	71.6	5.7
500	71.3	8.3
630	71.9	12.4
800	71.4	18.1
1000	73.0	24.5
1250	74.9	34.9
1600	75.7	41.2
2000	76.1	47.3
2500	75.8	56.8
3150	76.0	63.3
4000	74.8	59.9
5000	73.4	50.8

*: Background noise too high



Rating according to ISO 717-2
 $\Delta L_w = 19$ dB $C_{l,\Delta} = -11$ dB $C_{l,r} = 0$ dB
 The results are based on test made with an artificial source under laboratory conditions (engineering method)

University of Salford School of Computing Science & Engineering

No. of test report: II-07-11-02
 Salford, 7.11.2007

Signature: _____

Single figure weighted impact improvement value.

Single figure weighted reduction value with a C_l spectrum in this case would be $19 - 11 = 8$