

**Reduction of impact sound pressure levels according to ISO 140-8
Laboratory measurements of the reduction of transmitted impact sound by floor coverings on a standard floor**

Client: **Batten & Cradle Flooring Systems Ltd.**

Date of test: **Friday, 19 March 2010**

Test rooms: **Reverberation Chambers A and B**

Description and identification of the test specimen and test arrangement:

A 3.6m x 3.2m Batten & Cradle Flooring system comprising: 4 sheets of 3600mmx800mmx20mm (*LengthxWidthxThickness*) *Strandfloor* tongue and groove flooring screw fixed with 50mm x 8g screws at 200mm centers to dressed 42mmx42mm fingerjoint timber battens spaced at 450mm centres on *RC-20* rubber cradles spaced at 450mm on the concrete test floor. The 62mm deep cavity space between the battens is lined with 75mm Pink Batts Silencer.

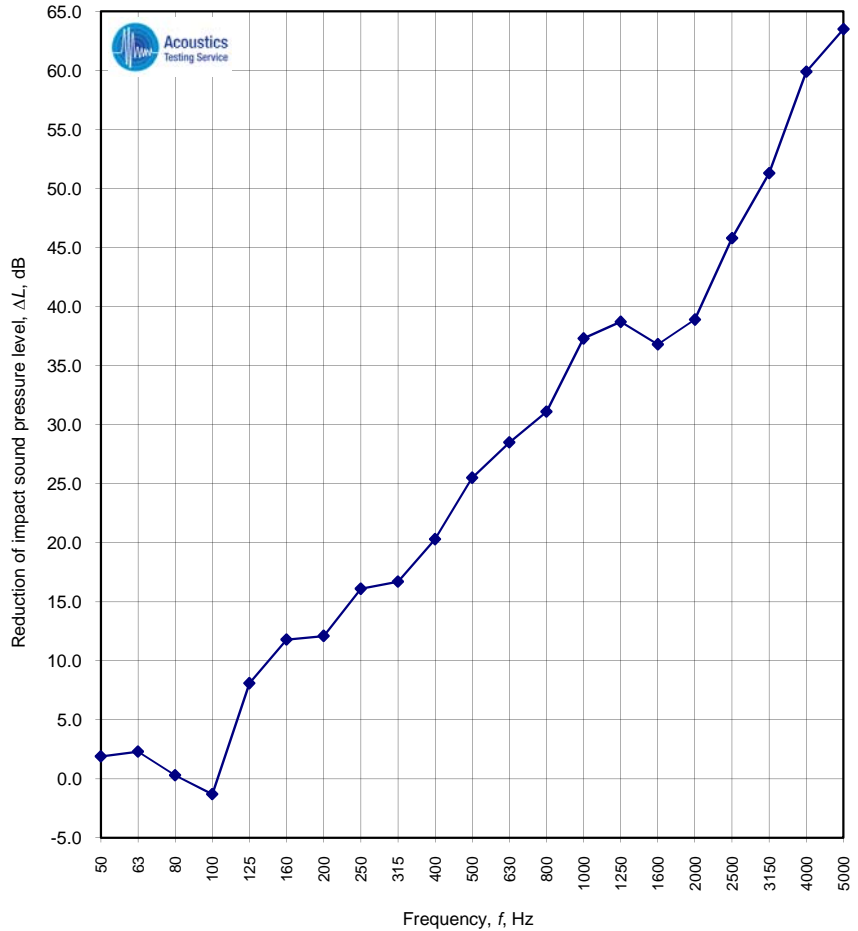
Source chamber was Chamber A and receiving chamber was Chamber B. Test specimen installed by the client. Curing time was hours.

Deviation from standard: The bare test floor used is of uniform thickness for an area of only 2.6m x 2.6m. The description of the bare test floor is given in the full report.

Computer Files: T1006 Bare Floor.CMG(ID.15, ID.16, ID.54, ID.2, ID.0, ID.1)T1006-2 TL.CMG(ID.15, ID.16, ID.54, ID.2, ID.0, ID.1)

Air temp in the test rooms: 21 °C
Air humidity in test rooms: 55 %
Receiving room volume: 153 m³

Frequency <i>f</i> Hz	<i>L</i> _{<i>n,0</i>} One-third octave dB	ΔL One-third octave dB
50	58.6	1.9
63	52.8	2.3
80	53.8	0.3
100	63.1	-1.3
125	62.3	8.1
160	70.0	11.8
200	66.9	12.1
250	71.5	16.1
315	68.4	16.7
400	73.3	20.3
500	78.6	25.5
630	76.4	28.5
800	71.9	31.1
1000	72.6	37.3
1250	72.9	38.7
1600	79.0	36.8
2000	78.8	38.9
2500	76.9	45.8
3150	75.5	51.3
4000	71.2	59.9
5000	67.4	63.5



Notes: #N/A = Value not available. **Bold** values are used to calculate ΔL_w .
< indicates that the true value is lower.
*L*_{*n,0*} are the bare floor impact sound levels.

Rating according to ISO 717-2:

$\Delta L_w = 27$ dB

$C_{I,\Delta} = 15$ dB

$C_{I,r} = 3$ dB

$C_{I,50-2500} = 4$ dB

These results are based on a test made with an artificial source under laboratory conditions (engineering Method).

No. of test report: **T1006-2**

Name of test institute: University of Auckland Acoustics Testing Service.

Date: 26-March-2010

Signature: **Preliminary Results Only**