

Godfrey Hirst Australia Pty Ltd

TEST REPORT

REPORT NUMBER

180727009SHF-BP-2

ISSUE DATE

2018/8/15

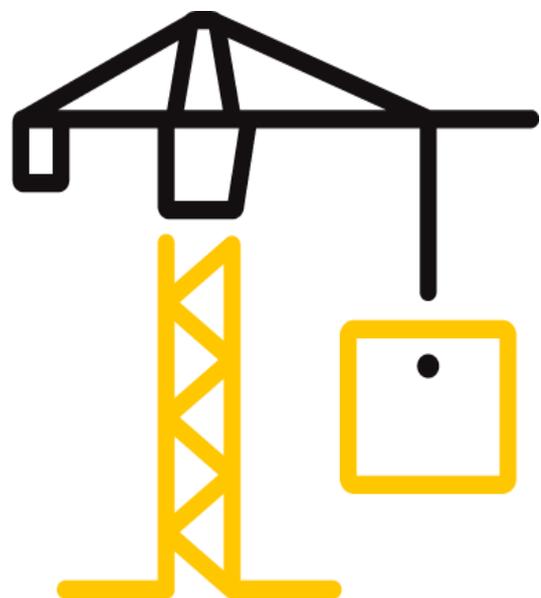
PAGES

7

DOCUMENT CONTROL NUMBER

LFT-APAC-SHF-OP-10a

© 2018 INTERTEK



Test Report

Issue Date: 2018/8/15 Intertek Report No. 180727009SHF-BP-2

Applicant: Godfrey Hirst Australia Pty Ltd

Applicant Address: 7 Factories Road South Geelong, Victoria 3220, Australia

Attn: Mandy Chandley

SUBJECT: Performance testing
GH Hybrid 6.5mm / 0.5mm Wear Layer

Dear Sir,

This test report represents the results of our evaluation of the above referenced product(s) to the requirements contained in the following standards:

TEST METHODS AND STANDARDS
Refer to the next following Pages.

SAMPLE ID	MODEL	SPECIFICATION
S180727009SHF.008	/	/

SAMPLE RECEIVED: 2018/7/23
TESTED FROM: 2018/7/27 TO 2018/8/15

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

Test Report

Issue Date: 2018/8/15

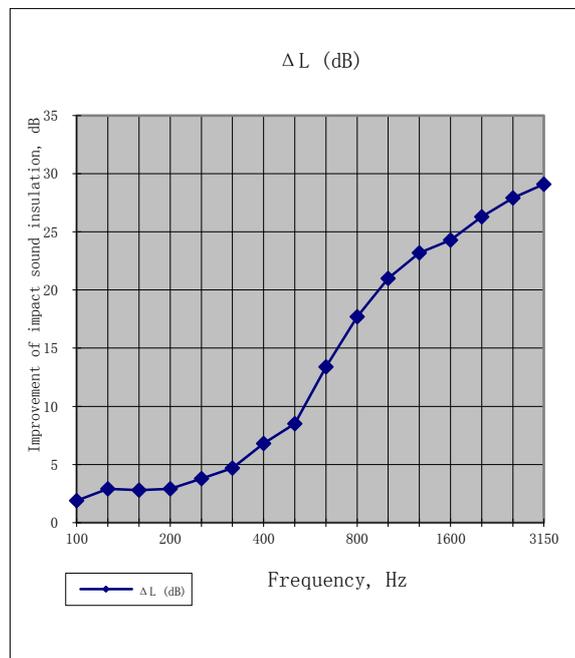
Intertek Report No. 180727009SHF-BP-2

Test Items, Method and Results:

Test method: ISO 10140-3:2010+A1-2015

Temperature: 34 °C Relative Humidity: 60 %
 Volume of the source room: 77 m³ Volume of the receiving room: 112 m³
 (Length × Width × Height) (5.7m × 4.9m × 4.0m)
 Specimen area: 11.6 m² Static pressure: 100.4 kPa
 Floor assembly: The system consisted of 150mm thick concrete floor and the GH Hybrid 6.5mm / 0.5mm Wear Layer (Backed with 1.5mm EVA) were placed on the concrete floor.

Frequency (Hz)	Ln (dB)	ΔL (dB)
100	59.7	1.9
125	60.8	2.9
160	61.0	2.8
200	59.1	2.9
250	61.7	3.8
315	62.0	4.7
400	63.1	6.8
500	62.0	8.5
630	61.0	13.4
800	62.6	17.7
1000	61.6	21.0
1250	61.8	23.2
1600	61.2	24.3
2000	60.9	26.3
2500	59.8	27.9
3150	59.0	29.1



Rating according to ISO 717-2:2013, the ΔLw was shown below.

Weighted improvement of impact sound insulation	ΔLw=	18 dB
Spectrum adaptation	C _Δ =	-9 dB

Note:

- These results are based on test made with an artificial source under laboratory conditions .
- Ln,0 = Normalized Sound Pressure Level for Bare standard concrete floor
 ΔL = Reduction of impact sound pressure level after floor covering
 ΔLw = Weighted reduction of impact sound pressure level
 C_Δ = Spectrum adaptation term
- The thickness, manufacturing technique and raw material among the samples are the same except for colour claimed by the applicant.

Test Report

Issue Date: 2018/8/15

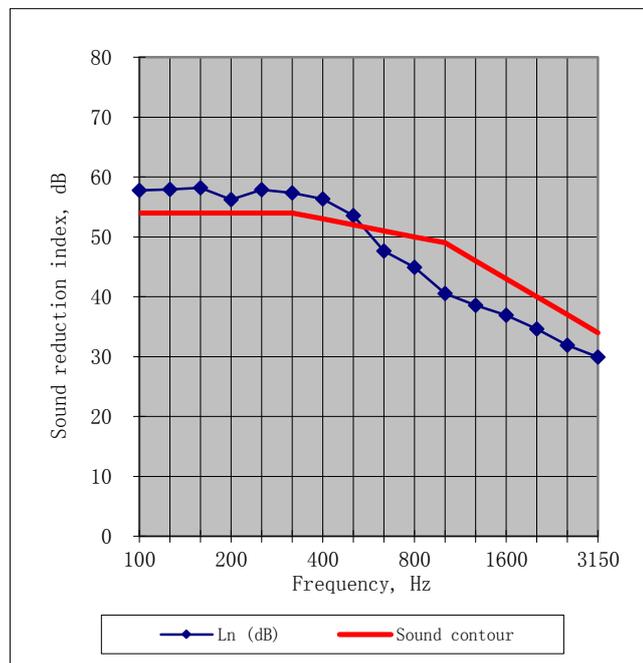
Intertek Report No. 180727009SHF-BP-2

Test Items, Method and Results:

Test method: ISO 10140-3:2010+A1-2015

Temperature: 34 °C Relative Humidity: 60 %
 Volume of the source room: 77 m³ Volume of the receiving room: 112 m³
 (Length × Width × Height) (5.7m × 4.9m × 4.0m)
 Specimen area: 11.6 m² Static pressure: 100.4 kPa
 Floor assembly: The system consisted of 150mm thick concrete floor and the GH Hybrid 6.5mm / 0.5mm Wear Layer (Backed with 1.5mm EVA) were placed on the concrete floor.

Frequency (Hz)	Ln (dB)
100	57.8
125	57.9
160	58.2
200	56.2
250	57.9
315	57.3
400	56.3
500	53.5
630	47.6
800	44.9
1000	40.6
1250	38.6
1600	36.9
2000	34.6
2500	31.9
3150	29.9



Rating according to ISO 717-2:2013, the Ln,w was shown below.

Weighted normalized impact sound pressure level	Ln,w=	52	dB
Spectrum adaptation	C ₁ =	-1	dB

Note:

- These results are based on test made with an artificial source under laboratory conditions .
- Ln = Normalized Sound Pressure Level for Covering over Floor System
 Ln,w = Weighted normalized impact sound pressure level
 C₁ = Spectrum adaptation
- The thickness, manufacturing technique and raw material among the samples are the same except for colour claimed by the applicant.

Test Report

Issue Date: 2018/8/15

Intertek Report No. 180727009SHF-BP-2

Test Items, Method and Results:

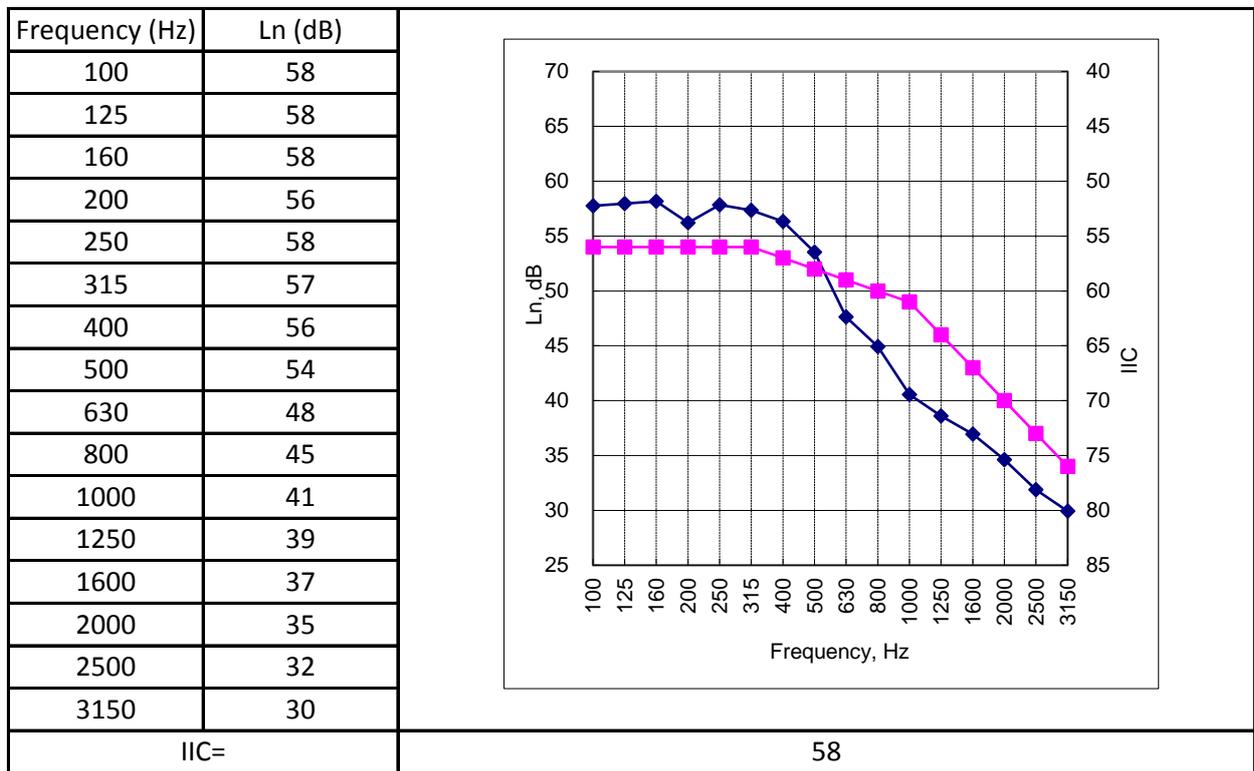
Test method: ASTM E492-09(2016)^{e1}

Temperature: 34 °C

Relative Humidity: 60 %

Specimen area: 11.6 m²

Floor assembly: The system consisted of 150mm thick concrete floor and the GH Hybrid 6.5mm / 0.5mm Wear Layer (Backed with 1.5mm EVA) were placed on the concrete floor.



Calculated Impact Insulation Class: IIC 58

Note:

1. Ln = Normalized Sound Pressure Level for Covering over Floor System
2. Classified IIC in accordance with ASTM E989-12, Standard Classification for Determination of Impact Insulation Class.
3. The IIC was for the whole floor assembly system.
4. The thickness, manufacturing technique and raw material among the samples are the same except for colour claimed by the applicant.

Test Report

Issue Date: 2018/8/15

Intertek Report No. 180727009SHF-BP-2

Test Photos:



Test set up

Note:

The applicant claimed that the specimens were the same samples except color.

Test Report

Issue Date: 2018/8/15

Intertek Report No. 180727009SHF-BP-2

APPENDIX: SAMPLE RECEIVED PHOTO



REPORT AUTHORIZED

When signed with physical or electronic signature, the contents of this report have been prepared and approved per Intertek's quality process in accordance with ISO 17025.


Name: Jodie Zhou
Title: Reviewer


Name: Evyn Cui
Title: Project Engineer



Revision:

NO.	DATE	CHANGES	AUTHOR	REVIEWER
180727009SHF-BP-2	2018/8/15	First issue	Evyn Cui	Jodie Zhou