

## Oasis Technical Data

	Standard	Result
Tile Size (mm)		177.8 x 1219.2 mm (7" x 48")
Total Thickness (mm)		5.0 mm
Wear Layer Thickness (mm)		0.5 mm
Weight (±50 gr/m <sup>2</sup> )	EN 430	8.3kg / m <sup>2</sup>
Box Quantity		10 Planks / 2.167 m <sup>2</sup>
Peeling Strength of Layer	EN 431	Pass
Impact sound reduction	ISO 140-7	L'nT,w 52
Dimension stability	EN 434	0.10%
Color fastness to light	ISO 105 B02	≥ Grade6
Static indentation	EN 433	≤ 0.1mm
Embossing	Regular/Deep	
Flexibility	EN 435	Pass
Abrasion resistance	EN 660-2	Class T
Castor chair resistance	EN 425	Pass
Slip resistance	AS 4586:2013	R10
Fire rating	AS. ISO 9239.1 2003	CFH: 8.5 kW/m <sup>2</sup> Smoke Value: 208 % min
Usage category	EN 685	23/42
Resistance to chemical	EN 423	Pass
Electrostatic properties	EN 1815	< 2kv
Surface treatment		PUR
UL Environmental	UL 82386-4230	NSF/ANSI 332 - 2011 Silver - Sustainability Assessment for Resilient Floor Coverings
Environmental	Floor score (SCS-EC10.3-2014 v3.0)	Indoor Air Quality Certified; low VOC emissions
Adhesive	ISO 9001 : 2008	
Quality Control Mgmt		
Environmental Mgmt	ISO 14001 : 2004	



For more information  **1300 093 745**

Email [info@decoline.com.au](mailto:info@decoline.com.au) Visit [www.decoline.com.au](http://www.decoline.com.au)

**FIELD IMPACT SOUND INSULATION - TEST CERTIFICATE**

Test 3 of 4

**5mm Decoline Oasis Vinyl sample**

<b>PROJECT:</b>	PN4222 ALLEGRA Apartments Southport LNT	<b>Meas. Date:</b>	13-Jul-17
<b>Test Location:</b>	L6 U10 living to L5 U10 living	<b>Meas. Parameter:</b>	LLeq
<b>Test Surface:</b>	5mm Decoline Oasis Vinyl sample	<b>Tapping Machine:</b>	Look Line EM50
<b>Client:</b>	DecoLine Pty Ltd	<b>Receiving Room Volume:</b>	65 m <sup>3</sup>
<b>Test Performed:</b>	Eric Huang		

<b>DESCRIPTION OF FLOOR AND SPECIMEN</b>	<b>No. of Source posn:</b>	2
Unit: 5mm Decoline Oasis Vinyl sample	<b>Mic. posn:</b>	2 sweeps
Product:	<b>RT meas:</b>	4 Imp.
Adhesive: Loosely laid	<b>SLM:</b>	Nor 140
Ceiling: 10mm Plasterboard ceiling with a 100mm air gap		
Slab: 200mm Concrete slab		

**Weighted Standardized Impact SPL**

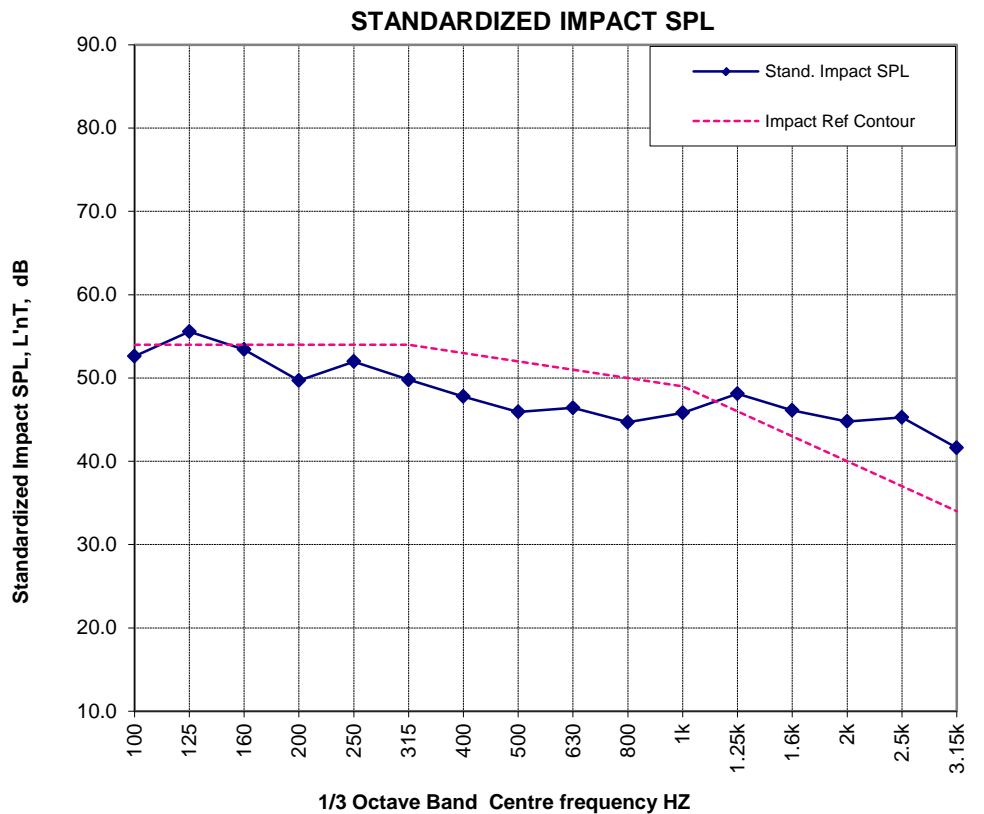
**L'nT,w**

**52**

ISO 140-7:1998 & 717-2:1996

Results standardized to a RT of 0.5 seconds

Centre Frequency Hz	Stand. Impact SPL dB	Impact Ref Contour dB	Deficiencies dB
100	52.6	54	
125	55.6	54	1.6
160	53.4	54	
200	49.7	54	
250	52.0	54	
315	49.8	54	
400	47.8	53	
500	45.9	52	
630	46.4	51	
800	44.7	50	
1k	45.8	49	
1.25k	48.1	46	2.1
1.6k	46.1	43	3.1
2k	44.8	40	4.8
2.5k	45.3	37	8.3
3.15k	41.6	34	7.6
<b>Total</b>			



L'nT,w 52 27.4

**FIELD IMPACT INSULATION TESTS**

**ALLEGRA, SCARBOROUGH ST, SOUTHPORT**



**TEST REPORT**

<b>Commissioned by:</b>	DecoLine Pty Ltd
<b>Date:</b>	18 July 2017
<b>Project number:</b>	4222
<b>Version:</b>	V.0
<b>Author:</b>	Eric Huang

DOCUMENT INFORMATION				
<b>Author:</b> Eric Huang		<b>Approved by:</b> Roger Hawkins		
<b>Date:</b> 18 July 2017		<b>Date:</b> 18 July 2017		
VERSION HISTORY				
Version	Description	Date	Author	Approved by
V.0	Final	18/07/17	Eric Huang	Roger Hawkins
V.1				
V.2				
DOCUMENT DISTRIBUTION				
Copy	Name/Company	Hard Copy	Electronic Copy	
01	DecoLine Pty Ltd	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
02		<input type="checkbox"/>	<input type="checkbox"/>	
03		<input type="checkbox"/>	<input type="checkbox"/>	
04		<input type="checkbox"/>	<input type="checkbox"/>	
05		<input type="checkbox"/>	<input type="checkbox"/>	

**TITLE** Field Impact Insulation Test  
DecoLine Pty Ltd product tests,  
Unit 10 – ALLEGRA, 138, Scarborough St, Southport LnTw  
Test Report

**TESTS BY** Eric Huang  
Acoustic Engineer - Palmer Acoustics (Australia) Pty Ltd

**REPORT DATE** 18 July 2017

**TEST DATE** 13 July 2017

**TEST LOCATION** Level 6 Unit 10 Living area  
to Level 5 Unit 10 Living area

**FOR** DecoLine Pty Ltd

CONTENTS

1.0 INTRODUCTION ..... 1

2.0 EQUIPMENT AND PROCEDURES ..... 1

2.1 Instrumentation ..... 1

2.2 Measurement Procedures ..... 1

3.0 DESCRIPTION OF ROOMS ..... 2

4.0 RESULTS ..... 2

5.0 DISCUSSION ..... 3

APPENDIX A ..... 4

APPENDIX B ..... 6

## 1.0 INTRODUCTION

Palmer Acoustics have been engaged by the DecoLine Pty Ltd to perform field impact insulation tests at level 6 Unit 10, ALLEGRA 139 Scarborough St Southport. The tests were conducted on loose laid vinyl plank flooring samples installed in the living area of level 6 Unit 10. The measurements were conducted in the living area of level 5 Unit 10 – directly beneath unit 10 in level 6. The descriptions of the tests are as follows:

- Test 1: Concrete slab with plasterboard ceiling;
- Test 2: 5mm Decoline Ocean loose lay vinyl plank;
- Test 3: 5mm Decoline Oasis loose lay vinyl plank;
- Test 4: 5mm Decoline loose lay vinyl tile;

## 2.0 EQUIPMENT AND PROCEDURES

### 2.1 Instrumentation

The following instruments were used in the evaluation.

- Norsonics 140 Sound level meter (serial number 1403252)
- Look Line tapping machine EM50 (serial number TM.14031)
- B & K 4231 Calibrator (serial number 2095146)

The operation of the sound level measuring equipment was field calibrated before and after each measurement session and was found to be within 0.2dB of the reference signal. All instrumentation used in this assessment holds a current calibration certificate from a certified NATA calibration laboratory.

### 2.2 Measurement Procedures

Testing was conducted in conformance with ISO 140/VII “Field measurement of impact sound insulation of floors”. The evaluation of the results to derive the single figure ratings of FIIC and  $L'nT,w$  were conducted to:

- ISO 717-2 1996 “Rating of insulation in buildings and of building elements – Part 2 Impact Sound Insulation” and
- ASTM E989-1989 Standard Classification for Determination of Impact Insulation Class (IIC).

The loose lay vinyl plank samples in the living area were tapped in two (2) different orientations with the receiving spaces sound measurements averaged over a 1-minute period per test orientation.

Ambient sound levels were measured before and after the testing with the results included in the assessment as per standard.

Receiving room reverberation measurements were performed, utilising RT Software in the Norsonics 140 analyser, at four locations throughout the spaces with the results arithmetically averaged.

### 3.0 DESCRIPTION OF ROOMS

All windows and doors were closed in the source room and receiving room.

#### Transmitting Room

Test Floor: Decoline loose lay planks;  
 Walls: Plasterboard;  
 Enclosure: Windows and all doors were closed;  
 Room finish: Not finished.

#### Receiving Room

Floor: Concrete Slab;  
 Ceiling: 10mm plasterboard ceiling with a 100mm air gap;  
 Walls: Plasterboard;  
 Enclosure: Windows and all doors were closed;  
 Room finish: Not finished.



### 4.0 RESULTS

Our tests gave the following results:

Test System	L'nT,w
Test 1 – Concrete slab with plasterboard ceiling	59
Test 2 – 5mm Decoline Ocean loose lay vinyl plank	51
Test 3 – 5mm Decoline Oasis loose lay vinyl plank	52
Test 4 – 5mm Decoline loose lay vinyl tile	53

**Table 1:** Test Result Summary – impact tests

Test Certificates detailing the  $\frac{1}{3}$  octave band results are provided in APPENDIX B to this report in terms of L'nT,w, and related spectrum adaptation terms in accordance with ISO 717 - 2: 1996

L'nT,w is a term used in the Building Code of Australia (BCA), see also APPENDIX A. It should be noted that L'nT,w is a weighted room noise level and that a lower number represents better performance.



## 5.0 DISCUSSION

The following table shows the vinyl plank samples' impact insulation rating reduction from the bare concrete slab (with plasterboard ceiling):

Flooring types	$\Delta L'nT_w$ Reduction
1. 5mm Decoline Ocean loose lay vinyl plank	8
2. 5mm Decoline Oasis loose lay vinyl plank	7
3. 5mm Decoline loose lay vinyl tile	6

Author:



**ERIC HUANG** BEng  
Engineer

Reviewed by:



**ROGER HAWKINS** RPEQ 6022  
Senior Engineer

## APPENDIX A

### GLOSSARY

#### IMPACT MEASUREMENT AND ASSESSMENT DESCRIPTORS

- $L_{Aeq,T}$  – Time average A-weighted sound pressure level is the average energy equivalent level of the A Weighted sound over a period "T".
- $L_{Aeq}$  – Equivalent Continuous Noise Level. The noise level in dB(A) which if present for the entire measurement period would produce the same sound energy to be received as was actually received as a result of a signal which varied with time. Normally abbreviated to "Leq" or " $L_{Aeq}$ ", often followed by a specification of the time period (such as 1 hour or 8 hours) indicating the period of time to which the measured value has been normalized;
- $L'_{nT,w}$  – Weighted Standardised impact sound pressure level; a measurement of impact sound transmission between rooms. Lower values denote better performance. The single figure measure is derived by adapting a standard response curve to measured 1/3 octave band sound pressure levels. Measured results are adjusted based upon a reverberation time of 0.5 sec in receiving room. Normally derived from a field test.
- $L'_{n,w}$  – Weighted Normalized impact sound pressure level; a laboratory measurement of impact sound transmission between rooms. Lower values denote better performance. The single figure measure is derived by adapting a standard response curve to measured 1/3 octave band sound pressure level measurements. Measured results are adjusted based on the absorption of 10m<sup>2</sup> in the receiving room. Normally derived from a laboratory test.
- $C_I$  – A spectrum adaptation term compensating for the effect of floor coverings when applied to bare floors under test. The usually negative value, in decibels, is added to the single-number quantity,  $L'_{nw}$  or  $L'_{nTw}$ .
- **Field Impact Insulation Class (FIIC)** – a single-number rating derived from measured values of normalized one-third octave band impact sound pressure levels in accordance with Eq 4 and the reference contours in Classification E 989. It provides an estimate of the sound insulating performance of a floor-ceiling assembly and associated support structures under tapping machine excitation.
- **Impact Insulation Class (IIC)** – This classification covers the determination of a single-figure rating that can be used for comparing floor-ceiling assemblies for general building design purposes.
- **Impact Sound Pressure Level (L)** – the average sound pressure level in a specified frequency band produced in the receiving room by the operation of the standard tapping machine on the floor assembly, averaged over each of the specified machine positions.
- $L'_{nT}$  – **Standardised Impact Sound Pressure Level** – the impact sound pressure level standardised to room with a reference reverberation time of 0.5 seconds.
- $L'_n$  – **Normalized Impact Sound Pressure Level** – the impact sound pressure level normalized to reference absorption area of 10 metric sabins (108 sabins).

- **Receiving Room** – a room below or adjacent to the floor specimen under test in which the impact sound pressure levels are measured.
- **Source Room** – the room containing the tapping machine.

## STANDARDS

- **ISO 140 – 6**  
Acoustics – Measurement of sound Insulation in buildings and of building elements – Part 6: Laboratory measurements of impact sound insulation of floors
- **ISO 140 – 7**  
Acoustics – Measurement of sound Insulation in buildings and of building elements – Part 7: Field measurements of impact sound insulation of floors
- **ISO 717 – 2**  
Acoustics – Rating of sound insulation in building and of building elements – Part 2: Impact sound insulation
- **ASTM Classification E 1007 – 97**  
Standard Test Method for Field Measurement of Tapping Machine Impact Sound Transmission through Floor-Ceiling Assemblies and Associated Support Structures
- **ASTM Classification E 989 – 89**  
Standard Classification for Determination of Impact Insulation Class (IIC)

**APPENDIX B**

Test certificates (4)

**FIELD IMPACT SOUND INSULATION - TEST CERTIFICATE**

**Test 1 of 4**

**Concrete slab**

<b>PROJECT:</b>	PN4222 ALLEGRA Apartments Southport LNT	<b>Meas. Date:</b>	13-Jul-17
<b>Test Location:</b>	L6 U10 living to L5 U10 living	<b>Meas. Parameter:</b>	LLeq
<b>Test Surface:</b>	Concrete Slab	<b>Tapping Machine:</b>	Look Line EM50
<b>Client:</b>	DecoLine Pty Ltd	<b>Receiving Room Volume:</b>	65 m <sup>3</sup>
<b>Test Performed:</b>	Eric Huang		

<b>DESCRIPTION OF FLOOR AND SPECIMEN</b>	<b>No. of Source posn:</b>	2
Unit: Concrete slab	<b>Mic. posn:</b>	2 sweeps
Product:	<b>RT meas:</b>	4 Imp.
Adhesive:	<b>SLM:</b>	Nor 140
Ceiling: 10mm Plasterboard ceiling with a 100mm air gap		
Slab: 200mm Concrete slab		

**Weighted Standardized Impact SPL**

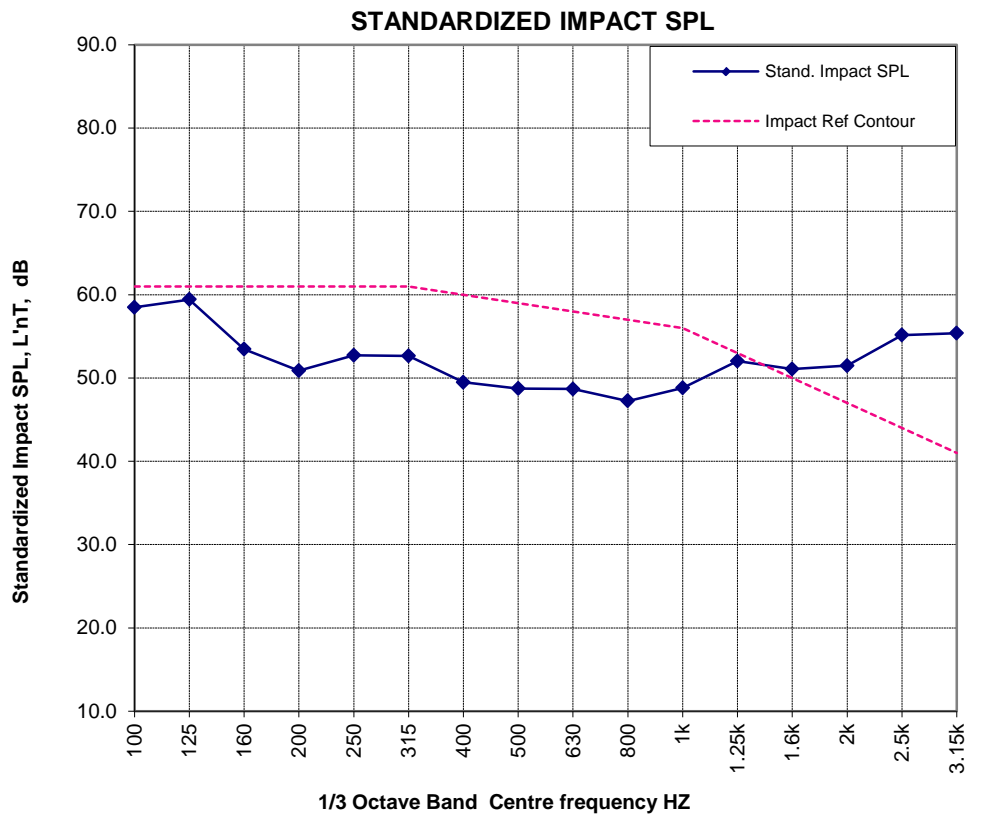
**L'nT,w**

**59**

ISO 140-7:1998 & 717-2:1996

Results standardized to a RT of 0.5 seconds

Centre Frequency Hz	Stand. Impact SPL dB	Impact Ref Contour dB	Deficiencies dB
100	58.5	61	
125	59.4	61	
160	53.5	61	
200	50.9	61	
250	52.7	61	
315	52.7	61	
400	49.5	60	
500	48.7	59	
630	48.7	58	
800	47.2	57	
1k	48.8	56	
1.25k	52.0	53	
1.6k	51.1	50	1.1
2k	51.5	47	4.5
2.5k	55.1	44	11.1
3.15k	55.4	41	14.4
<b>Total</b>			



L'nT,w      59      31.1

**FIELD IMPACT SOUND INSULATION - TEST CERTIFICATE**

Test 2 of 4

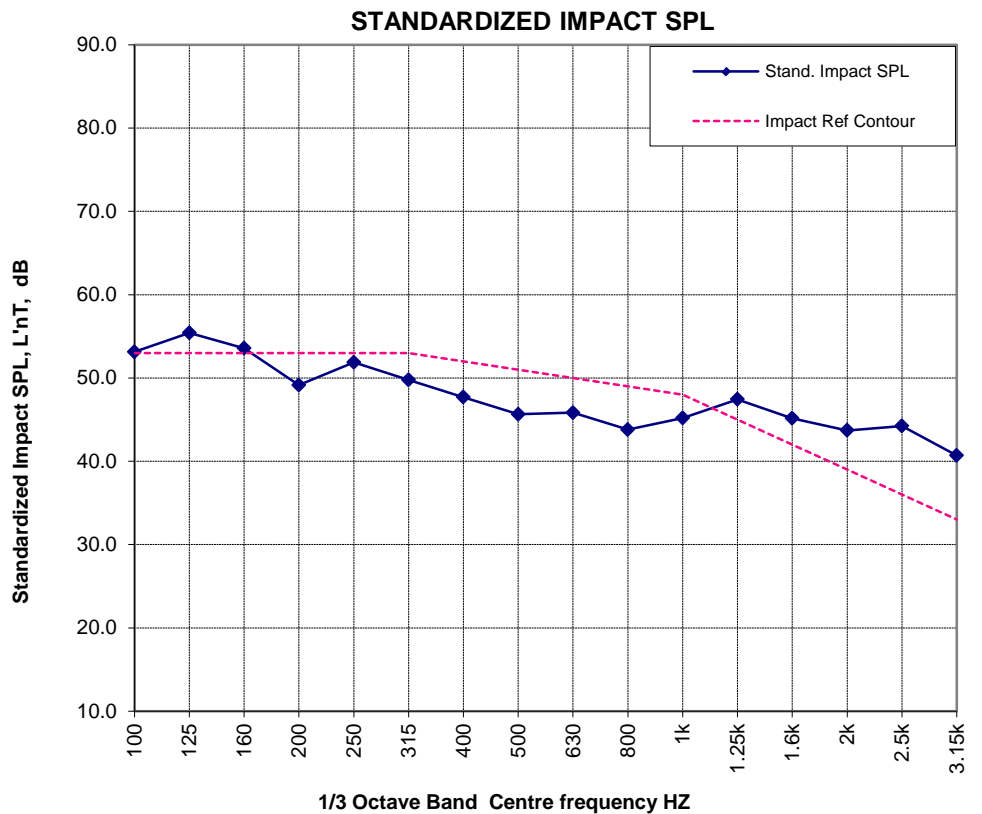
5mm Decoline Ocean Vinyl sample

<b>PROJECT:</b>	PN4222 ALLEGRA Apartments Southport LNT	<b>Meas. Date:</b>	13-Jul-17
<b>Test Location:</b>	L6 U10 living to L5 U10 living	<b>Meas. Parameter:</b>	LLeq
<b>Test Surface:</b>	5mm Decoline Ocean Vinyl sample	<b>Tapping Machine:</b>	Look Line EM50
<b>Client:</b>	DecoLine Pty Ltd	<b>Receiving Room Volume:</b>	65 m <sup>3</sup>
<b>Test Performed:</b>	Eric Huang		

<b>DESCRIPTION OF FLOOR AND SPECIMEN</b>	<b>No. of Source posn:</b>	2
Unit: 5mm Decoline Ocean Vinyl sample	<b>Mic. posn:</b>	2 sweeps
Product:	<b>RT meas:</b>	4 Imp.
Adhesive: Loosely laid	<b>SLM:</b>	Nor 140
Ceiling: 10mm Plasterboard ceiling with a 100mm air gap		
Slab: 200mm Concrete slab		

<b>Weighted Standardized Impact SPL</b>	<b>L'nT,w</b>	<b>51</b>	ISO 140-7:1998 & 717-2:1996
Results standardized to a RT of 0.5 seconds			

Centre Frequency Hz	Stand. Impact SPL dB	Impact Ref Contour dB	Deficiencies dB
100	53.1	53	0.1
125	55.4	53	2.4
160	53.6	53	0.6
200	49.2	53	
250	51.9	53	
315	49.8	53	
400	47.7	52	
500	45.6	51	
630	45.8	50	
800	43.8	49	
1k	45.2	48	
1.25k	47.4	45	2.4
1.6k	45.1	42	3.1
2k	43.7	39	4.7
2.5k	44.2	36	8.2
3.15k	40.7	33	7.7
<b>Total</b>			



L'nT,w 51 29.3

**FIELD IMPACT SOUND INSULATION - TEST CERTIFICATE**

Test 3 of 4

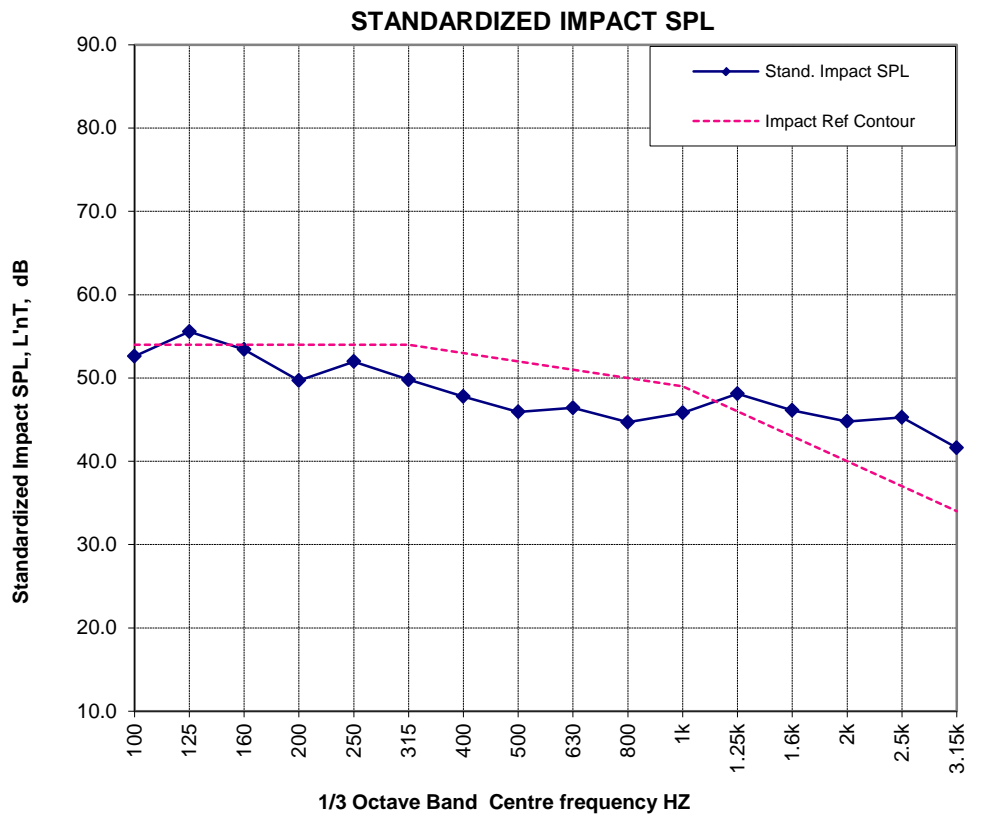
**5mm Decoline Oasis Vinyl sample**

<b>PROJECT:</b>	PN4222 ALLEGRA Apartments Southport LNT	<b>Meas. Date:</b>	13-Jul-17
<b>Test Location:</b>	L6 U10 living to L5 U10 living	<b>Meas. Parameter:</b>	LLeq
<b>Test Surface:</b>	5mm Decoline Oasis Vinyl sample	<b>Tapping Machine:</b>	Look Line EM50
<b>Client:</b>	DecoLine Pty Ltd	<b>Receiving Room Volume:</b>	65 m <sup>3</sup>
<b>Test Performed:</b>	Eric Huang		

<b>DESCRIPTION OF FLOOR AND SPECIMEN</b>	<b>No. of Source posn:</b>	2
Unit: 5mm Decoline Oasis Vinyl sample	<b>Mic. posn:</b>	2 sweeps
Product:	<b>RT meas:</b>	4 Imp.
Adhesive: Loosely laid	<b>SLM:</b>	Nor 140
Ceiling: 10mm Plasterboard ceiling with a 100mm air gap		
Slab: 200mm Concrete slab		

<b>Weighted Standardized Impact SPL</b>	<b>L'nT,w</b>	<b>52</b>	ISO 140-7:1998 & 717-2:1996
Results standardized to a RT of 0.5 seconds			

Centre Frequency Hz	Stand. Impact SPL dB	Impact Ref Contour dB	Deficiencies dB
100	52.6	54	
125	55.6	54	1.6
160	53.4	54	
200	49.7	54	
250	52.0	54	
315	49.8	54	
400	47.8	53	
500	45.9	52	
630	46.4	51	
800	44.7	50	
1k	45.8	49	
1.25k	48.1	46	2.1
1.6k	46.1	43	3.1
2k	44.8	40	4.8
2.5k	45.3	37	8.3
3.15k	41.6	34	7.6
<b>Total</b>			



L'nT,w 52 27.4

**FIELD IMPACT SOUND INSULATION - TEST CERTIFICATE**

**Test 4 of 4**

**5mm Decoline Vinyl Tile sample**

<b>PROJECT:</b>	PN4222 ALLEGRA Apartments Southport LNT	<b>Meas. Date:</b>	13-Jul-17
<b>Test Location:</b>	L6 U10 living to L5 U10 living	<b>Meas. Parameter:</b>	LLeq
<b>Test Surface:</b>	5mm Decoline Vinyl Tile sample	<b>Tapping Machine:</b>	Look Line EM50
<b>Client:</b>	DecoLine Pty Ltd	<b>Receiving Room Volume:</b>	65 m <sup>3</sup>
<b>Test Performed:</b>	Eric Huang		

<b>DESCRIPTION OF FLOOR AND SPECIMEN</b>	<b>No. of Source posn:</b>	2
Unit: 5mm Decoline Vinyl Tile sample	<b>Mic. posn:</b>	2 sweeps
Product:	<b>RT meas:</b>	4 Imp.
Adhesive: Loosely laid	<b>SLM:</b>	Nor 140
Ceiling: 10mm Plasterboard ceiling with a 100mm air gap		
Slab: 200mm Concrete slab		

**Weighted Standardized Impact SPL**

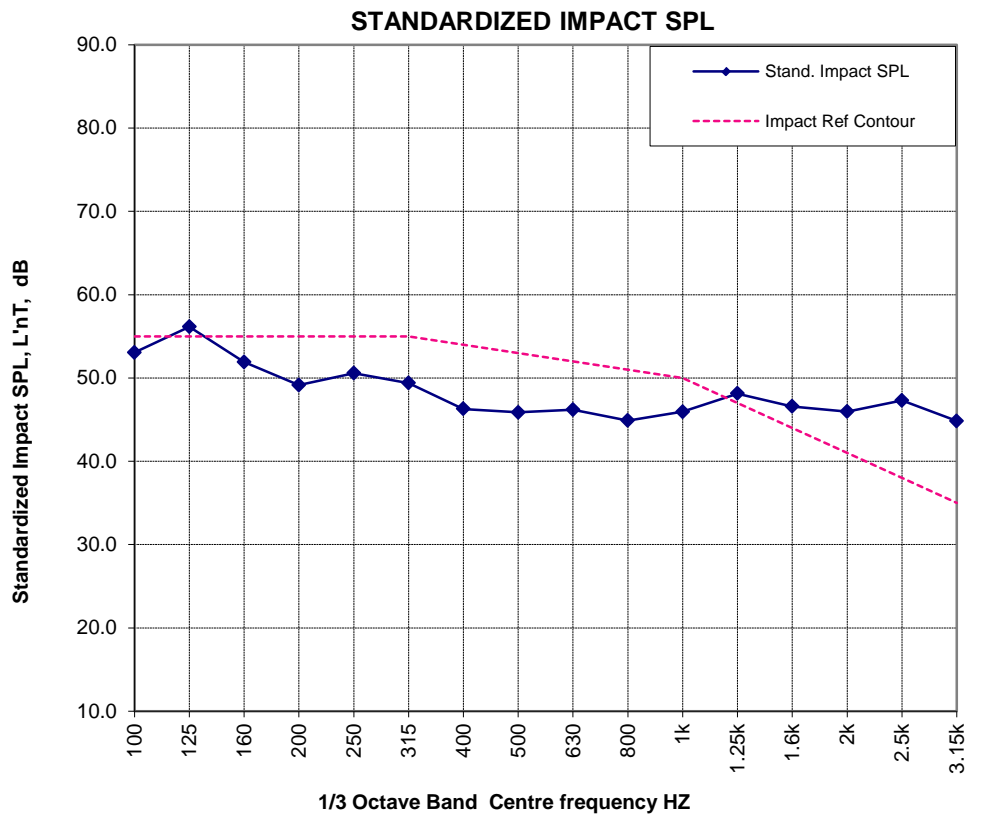
**L'nT,w**

**53**

ISO 140-7:1998 & 717-2:1996

Results standardized to a RT of 0.5 seconds

Centre Frequency Hz	Stand. Impact SPL dB	Impact Ref Contour dB	Deficiencies dB
100	53.1	55	
125	56.2	55	1.2
160	51.9	55	
200	49.2	55	
250	50.6	55	
315	49.4	55	
400	46.3	54	
500	45.9	53	
630	46.2	52	
800	44.9	51	
1k	45.9	50	
1.25k	48.1	47	1.1
1.6k	46.6	44	2.6
2k	46.0	41	5.0
2.5k	47.3	38	9.3
3.15k	44.8	35	9.8
<b>Total</b>			



L'nT,w 53 29.0



## DECOLINE OASIS

Sample description as provided by customer

Order No. James

VINYL PLANK Dimensions 177.8 mm x 1219.2 mm Thickness 5 mm Wear Layer 0.5 mm

TEST METHOD: AS.ISO 9239.1 2003 Reaction To Fire Tests For Floorings Part 1 Determination of the Burning Behaviour Using a Radiant Heat Source. As required by the Building Code of Australia (BCA) and National Construction Code 2015 (NCC) specifications C1.10. Sample conditioning as specified in BS EN 13238.2010.

Sample Submitted Date **May 2017**

Test Date **12 May 2017**

Total Thickness mm

### Assembly System: DIRECT STICK (Details Below).

The floor covering was directly stuck to the substrate using Vinyl adhesive.

**Substrate: Non-Combustible** - 6mm Fibre Reinforced Cement Board to simulate a Non-Combustible Flooring. The Holding Torque on Specimen Frame was 2Nm.

The standard requires two Initial Tests be conducted on samples mounted in both Length and Width directions. Two further samples are then tested in whichever direction has the lowest Critical Radiant Flux.

Initial Tests: **Length** Direction Critical Radiant Flux **8.9 kW/m<sup>2</sup>**  
**Width** Direction Critical Radiant Flux **8.9 kW/m<sup>2</sup>**

	Specimen Tests conducted in the <b>Length</b> Direction			
	Specimen #1	Specimen #2	Specimen #3	Mean
Critical Radiant Flux (kW/m <sup>2</sup> )	8.9	7.8	8.8	8.5
Smoke Development Rate (%.min)	187	235	203	208

The values quoted below are as required by BCA and NCC Specification C1.10 Fire Hazard Properties (Floors). The Critical Radiant Flux quoted is the value at Flame-Out/Extinguishment (BCA General Provisions A1.1).

**Mean Critical Radiant Flux 8.5 kW/m<sup>2</sup>**

**Mean Smoke Development Rate 208 %.min**

Observations: The samples shrunk away from the heat source, ignited and burnt a relatively short distance.

AS.ISO 9239.1 Clause 9(o) The test results relate to the behaviour of the test specimens of a product under the particular conditions of the test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.

All information required for compliance with the BCA and NCC is given on this test report page.

	<b>M. B. Webb</b> Technical Manager	
	DATE: 12 May 2017	
	Performance & Approvals Accreditation No. 15393	
	Accredited for compliance with ISO/IEC 17025.	

**TIME FOR EACH SPECIMEN TO REACH EACH MARKER IN SECONDS**

Specimen	50	60	110	160	210	260	310	360	410	460	510	560	610	660	710	760	810	860
1	274	276	304	388	528	/												
2	188	189	283	452	605	859	/											
3	249	251	306	497	642													

**TESTS**

**BURNING CHARACTERISTICS**

**SMOKE PRODUCTION**

Specimen	Burn Length (mm) at Flame Out/ Extinguishment	Time To Burn Out (s)	Maximum Light Attenuation (%)	Smoke Development Rate (%.min)
Initial Test: Width	230	843	42	219
Specimen Tests: Length				
1	230	806	44	187
2	280	1,196	43	235
3	236	885	41	203
Mean	249	962	43	208




**M. B. Webb**  
Technical Manager

DATE: 12 May 2017

Performance and Approvals  
Accreditation No. 15393  
Accredited for compliance  
with ISO/IEC 17025.

2004 04 09 4346 3 July 2017



# Infrastructure Technologies

Gate 5, 2 Normanby Road Clayton VIC 3168, Australia

Telephone: 61 3 9545 2777 Web: <http://www.csiro.au>

Registered Testing Authority - CSIRO

23 November 2018

Our Ref. EN13 / 2582 03/0212

## TEST REPORT No. 8180.1

Requested by: Decoline Pty Ltd  
3/3363-3365 Pacific Highway  
Slacks Creek,  
QLD 4127

on (date): 6 September 2018

Manufacturer:

Product Desc.: Oasis

Sampling details:

Where: At customer premises

Date: 29 October 2018

By whom: Customer (delivered by courier)

How (methods): N/A

The results reported relate only to the sample(s) tested and the information received. No responsibility is taken for the accuracy of the sampling unless it is done under our own supervision. CSIRO cannot accept responsibility for deviations in the manufactured quality and performance of the product. While CSIRO takes care in preparing the reports it provides to clients, it does not warrant that the information in this particular report will be free of errors or omissions or that it will be suitable for the client's purposes. CSIRO will not be responsible for the results of any actions taken by the client or any other person on the basis of the information contained in the report or any opinions expressed in it. The reproduction of this test report is only authorised in the form of a complete photographic facsimile. Our written approval is necessary for any partial reproduction.

This test report consists of 4 pages

### SUMMARY OF SLIP RESISTANCE TESTS PERFORMED:

		Result	Class
AS 4586:2013 (Amendment No. 1)	Slip resistance classification of new pedestrian surface materials, Appendix D: OIL-WET INCLINING PLATFORM TEST METHOD Corrected mean overall acceptance angle:	12°	R 10

In order to interpret the classifications, please refer to Standards Australia Handbook 198, An Introductory Guide to the Slip Resistance of Pedestrian Surface Materials, which recommends minimum classifications for a wide variety of locations.

It is important to realise that test results obtained on unused factory-fresh samples may not be directly applicable in service, where proprietary surface coatings, contamination, wear and subsequent cleaning all influence the behaviour of the pedestrian surface.



REPORT NO: 8180.1  
ISSUE DATE: 23 November 2018  
MANUFACTURER:  
PRODUCT DESC: Oasis

Page 2 of 4

PHOTOS:



Top view



Close up



REPORT NO: 8180.1  
ISSUE DATE: 23 November 2018  
MANUFACTURER:  
PRODUCT DESC: Oasis

Page 3 of 4

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**SLIP RESISTANCE CLASSIFICATION OF NEW PEDESTRIAN SURFACE MATERIALS**

**OIL-WET INCLINING PLATFORM TEST METHOD**

TEST CARRIED OUT IN ACCORDANCE WITH  
AS 4586:2013 (Appendix D) (Amendment No. 1)

Test Date: 23 November 2018

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Location: Slip Resistance Laboratory Test conducted by: KH, DN

Sample Unfixed

Joint width: 0 mm

Surface structure:  Smooth  
 Profiled  
 Structured

**RESULTS**

**Corrected mean overall acceptance angle: 12 °**

**Displacement space: not tested**

**CLASSIFICATION: Slip Resistance Assessment Group:**

**R 10**

**Displacement Space Assessment Group:**

**-**

Test shoe used: Leipzig V73-SP

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## Infrastructure Technologies

Gate 5, 2 Normanby Road Clayton VIC 3168, Australia

Telephone: 61 3 9545 2777 Web: <http://www.csiro.au>

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REPORT NO: 8180.1  
ISSUE DATE: 23 November 2018  
MANUFACTURER:  
PRODUCT DESC: Oasis

Page 4 of 4

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Date and Place 23 November 2018, Clayton, Vic

Name, Title and Digital Signature:

A digital signature in black ink, appearing to read 'Khanh Ho', is overlaid on a semi-transparent grey circular watermark of the CSIRO logo.

**KHANH HO**  
**Technical Officer**  
Tel: 61 3 95452777  
Email: [Khanh.Ho@csiro.au](mailto:Khanh.Ho@csiro.au)

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