Ocean Technical Data

	Standard	Result
Tile Size (mm)		228.6 x 1219.2 mm (9” x 48”)
Total Thickness (mm)		5.0 mm
Wear Layer Thickness (mm)		0.5 mm
Weight (±50 gr/m2)	EN 430	8.3kg / m²
Box Quantity		8 Planks / 2.232 m²
Peeling Strength of Layer	EN 431	Pass
Impact sound reduction	ISO 140-7	L'nT,w 51
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: 8.7 kW/m² 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 ✆07 3488 8115

Email info@decoline.com.au **Visit** www.decoline.com.au

palmer acoustics Australia Pty Ltd

Member Firm: AAAC
Association of Australian Acoustical Consultants

FIELD IMPACT SOUND INSULATION - TEST CERTIFICATE

Test 2 of 4

5mm Decoline Ocean Vinyl sample

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

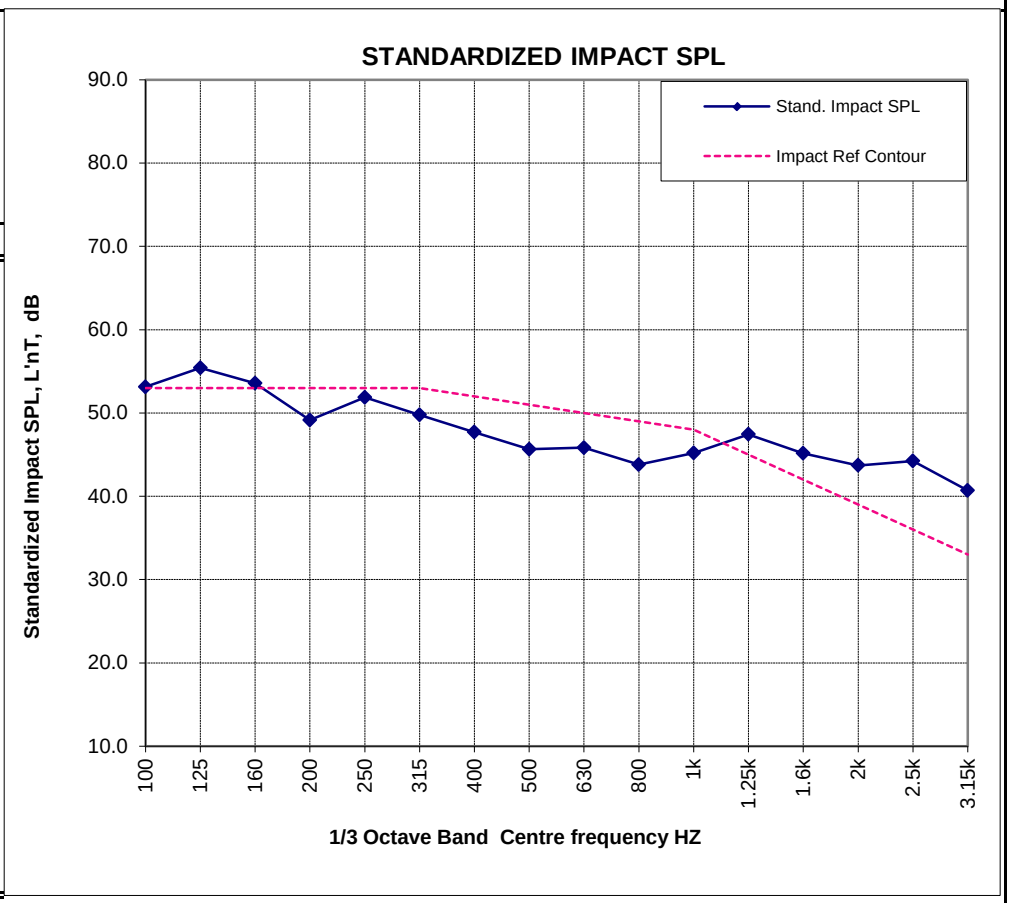
DESCRIPTION OF FLOOR AND SPECIMEN		**No. of Source posn:**	2
Unit:	5mm Decoline Ocean Vinyl sample	**Mic. posn:**	2 sweeps
Product:		**RT meas:**	4 Imp.
Adhesive:	Loosely laid	**SLM:**	Nor 140
Ceiling:	10mm Plasterboard ceiling with a 100mm air gap		
Slab:	200mm Concrete slab		

Weighted Standardized Impact SPL
Results standardized to a RT of 0.5 seconds

L'nT,w 51

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

Centre Frequency	Stand. Impact SPL	Impact Ref Contour	Deficiencies
Hz	dB	dB	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
			Total
L'nT,w	51		29.3



24 Mexicanus Drive Park Ridge QLD 4125
Ph (61 7) 3802 2155 www.palmeracoustics.com

palmer acoustics Australia Pty Ltd

palmer acoustics Australia Pty Ltd

FIELD IMPACT INSULATION TESTS

ALLEGRA, SCARBOROUGH ST, SOUTHPORT

TEST REPORT

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

24 Mexicanus Drive PO Box 790 Park Ridge Queensland 4125 Australia p. +61 7 3802 2155 enquiry@palmeracoustics.com www.palmeracoustics.com

DOCUMENT INFORMATION	
Author: Eric Huang **Date**: 18 July 2017	**Approved by**: Roger Hawkins **Date**: 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	☐	☑
02		☐	☐
03		☐	☐
04		☐	☐
05		☐	☐

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

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 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	Δ 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 "L_{eq}" 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 tome 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 10m² 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)

palmer acoustics Australia Pty Ltd

Member Firm: AAAC
Association of Australian Acoustical Consultants

FIELD IMPACT SOUND INSULATION - TEST CERTIFICATE

Test 1 of 4

Concrete slab

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

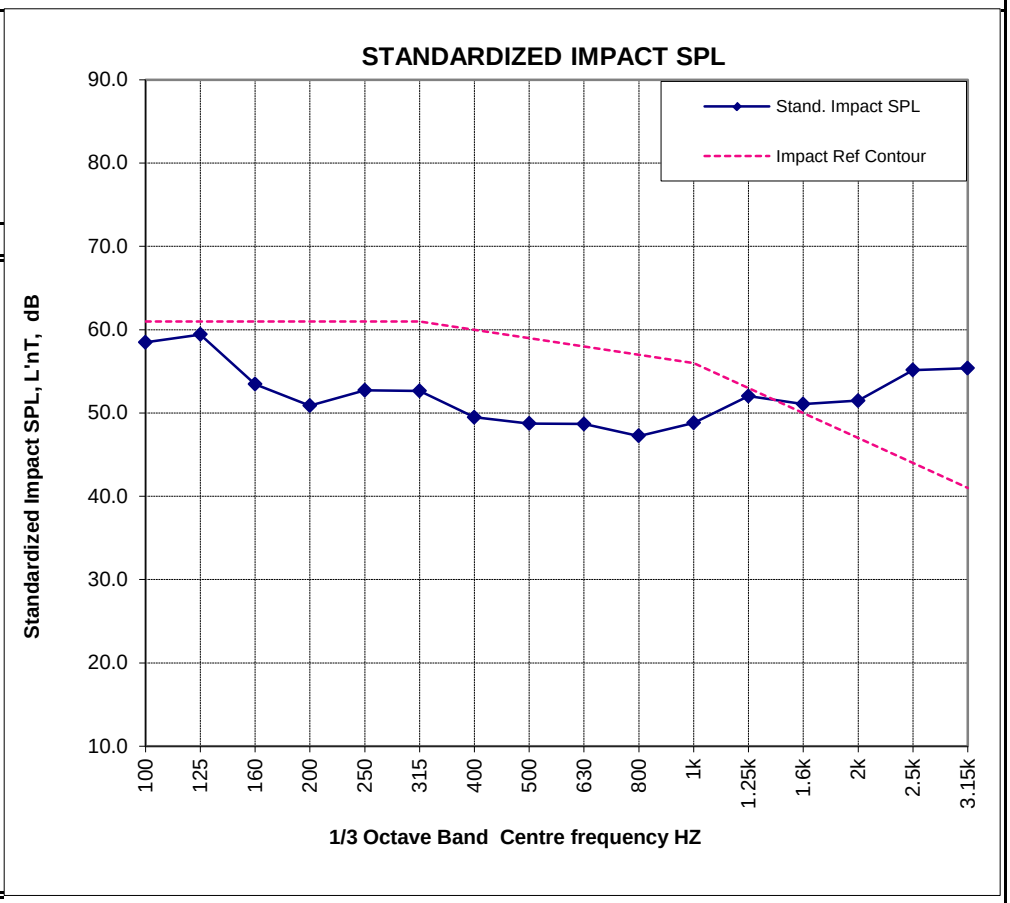
DESCRIPTION OF FLOOR AND SPECIMEN		**No. of Source posn:**	2
Unit:	Concrete slab	**Mic. posn:**	2 sweeps
Product:		**RT meas:**	4 Imp.
Adhesive:		**SLM:**	Nor 140
Ceiling:	10mm Plasterboard ceiling with a 100mm air gap		
Slab:	200mm Concrete slab		

Weighted Standardized Impact SPL
Results standardized to a RT of 0.5 seconds

L'nT,w 59

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

Centre Frequency	Stand. Impact SPL	Impact Ref Contour	Deficiencies
Hz	dB	dB	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
			Total
L'nT,w	59		31.1



24 Mexicanus Drive Park Ridge QLD 4125
Ph (61 7) 3802 2155 www.palmeracoustics.com

palmer acoustics Australia Pty Ltd

palmer acoustics Australia Pty Ltd

Member Firm: AAAC
Association of Australian Acoustical Consultants

FIELD IMPACT SOUND INSULATION - TEST CERTIFICATE

Test 2 of 4

5mm Decoline Ocean Vinyl sample

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

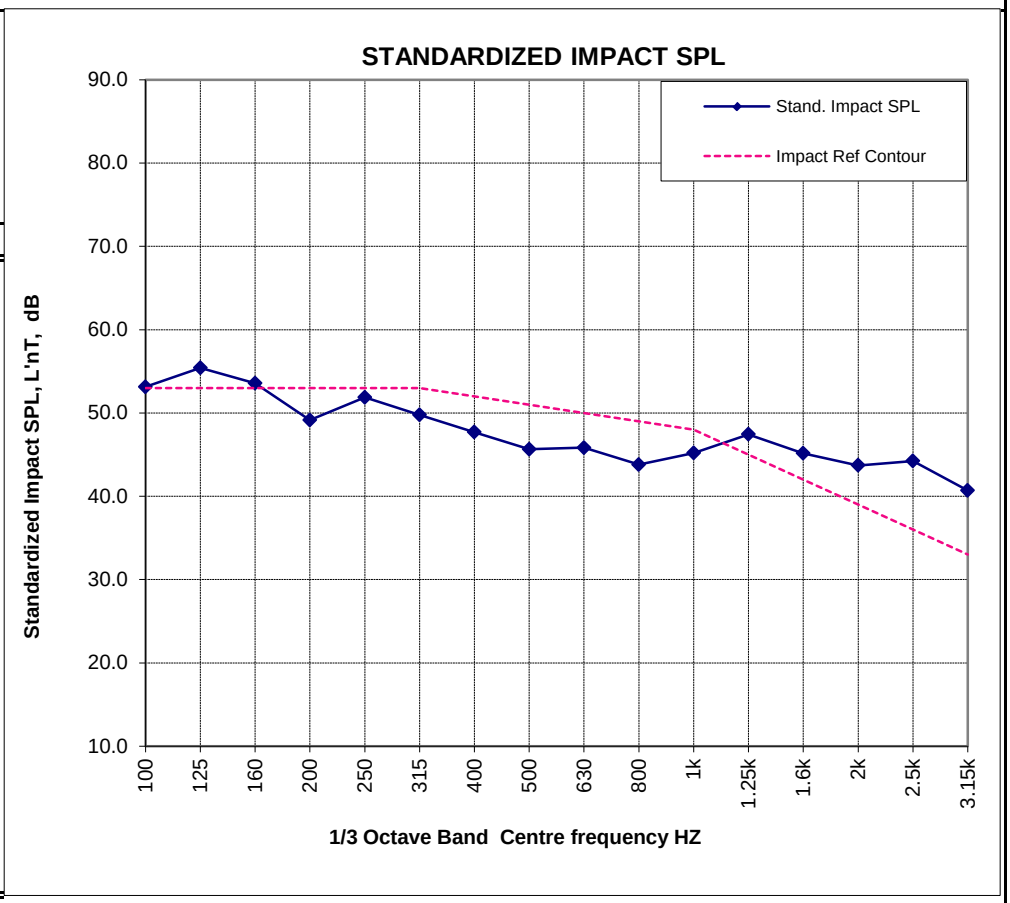
DESCRIPTION OF FLOOR AND SPECIMEN		**No. of Source posn:**	2
Unit:	5mm Decoline Ocean Vinyl sample	**Mic. posn:**	2 sweeps
Product:		**RT meas:**	4 Imp.
Adhesive:	Loosely laid	**SLM:**	Nor 140
Ceiling:	10mm Plasterboard ceiling with a 100mm air gap		
Slab:	200mm Concrete slab		

Weighted Standardized Impact SPL
Results standardized to a RT of 0.5 seconds

L'nT,w 51

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

Centre Frequency	Stand. Impact SPL	Impact Ref Contour	Deficiencies
Hz	dB	dB	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
			Total
L'nT,w	51		29.3



24 Mexicanus Drive Park Ridge QLD 4125
Ph (61 7) 3802 2155 www.palmeracoustics.com

palmer acoustics Australia Pty Ltd

palmer acoustics Australia Pty Ltd

Member Firm: AAAC
Association of Australian Acoustical Consultants

FIELD IMPACT SOUND INSULATION - TEST CERTIFICATE

Test 3 of 4

5mm Decoline Oasis Vinyl sample

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

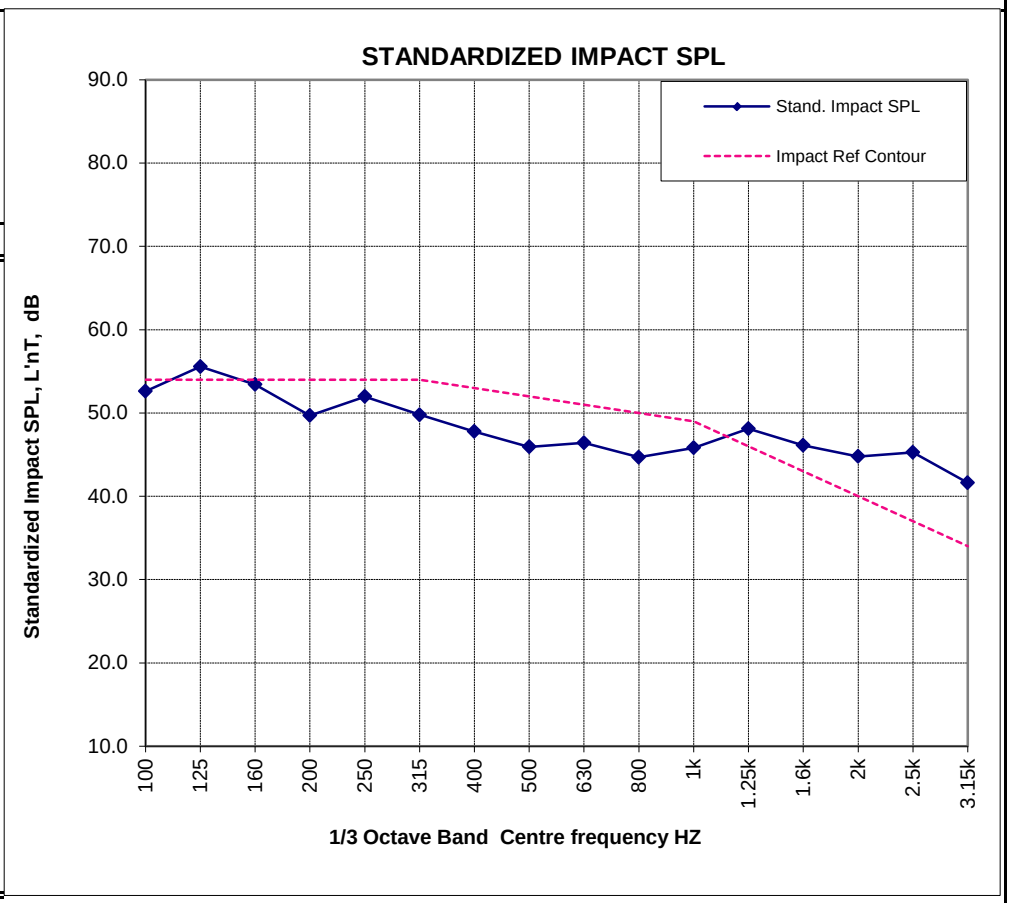
DESCRIPTION OF FLOOR AND SPECIMEN		**No. of Source posn:**	2
Unit:	5mm Decoline Oasis Vinyl sample	**Mic. posn:**	2 sweeps
Product:		**RT meas:**	4 Imp.
Adhesive:	Loosely laid	**SLM:**	Nor 140
Ceiling:	10mm Plasterboard ceiling with a 100mm air gap		
Slab:	200mm Concrete slab		

Weighted Standardized Impact SPL
Results standardized to a RT of 0.5 seconds

L'nT,w 52

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

Centre Frequency	Stand. Impact SPL	Impact Ref Contour	Deficiencies
Hz	dB	dB	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
			Total
L'nT,w	52		27.4



24 Mexicanus Drive Park Ridge QLD 4125
Ph (61 7) 3802 2155 www.palmeracoustics.com

palmer acoustics Australia Pty Ltd

palmer acoustics Australia Pty Ltd

Member Firm: AAAC
Association of Australian Acoustical Consultants

FIELD IMPACT SOUND INSULATION - TEST CERTIFICATE

Test 4 of 4

5mm Decoline Vinyl Tile sample

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

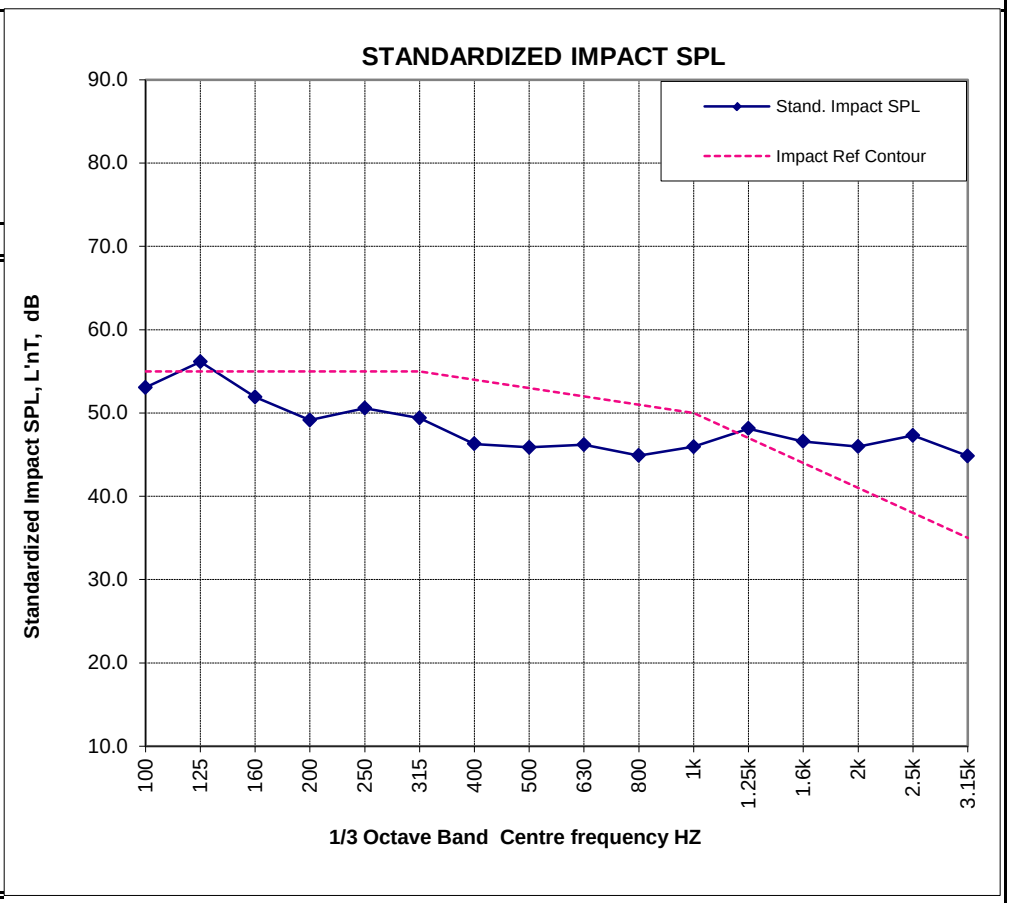
DESCRIPTION OF FLOOR AND SPECIMEN		**No. of Source posn:**	2
Unit:	5mm Decoline Vinyl Tile sample	**Mic. posn:**	2 sweeps
Product:		**RT meas:**	4 Imp.
Adhesive:	Loosely laid	**SLM:**	Nor 140
Ceiling:	10mm Plasterboard ceiling with a 100mm air gap		
Slab:	200mm Concrete slab		

Weighted Standardized Impact SPL
Results standardized to a RT of 0.5 seconds

L'nT,w 53

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

Centre Frequency	Stand. Impact SPL	Impact Ref Contour	Deficiencies
Hz	dB	dB	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
			Total
L'nT,w	53		29.0



24 Mexicanus Drive Park Ridge QLD 4125
Ph (61 7) 3802 2155 www.palmeracoustics.com

palmer acoustics Australia Pty Ltd

m/s Decoria Floor
Unit 3/3363 -3365 Pacific Highway ,Slacks Creek QLD
4127 Australia.

LABORATORY TEST REPORT
P172067A

DECOLINE OCEAN

Sample description as provided by customer
VINYL PLANK Dimensions 228.6 mm x 1219.2 mm Thickness 5 mm

Order No. **James**

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/m²
Width Direction Critical Radiant Flux **8.7** kW/m²

	Specimen Tests conducted in the Width Direction			
	Specimen #1	Specimen #2	Specimen #3	Mean
Critical Radiant Flux (kW/m²)	8.7	8.6	8.7	8.7
Smoke Development Rate (%.min)	228	186	209	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 8.7 kW/m²

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.

Page 1 of 2 (v5-0, 11/03/2017)

NATA ACCREDITED FOR TECHNICAL COMPETENCE

M. B. Webb
Technical Manager

DATE: 12 May 2017

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

APL Australia Pty Ltd
5 Carinish Rd, Oakleigh South
Victoria 3167 Australia

Telephone: 03 9543 1618
Facsimile: 03 9562 1818
Mobile: 0411 039 088

Email: apl@aplaustralia.com.au
Web: www.aplaustralia.com.au
ABN 69 468 849 319

The information provided on this page of the test report is for the Sponsors Use Only and will meet the requirements of the standard. This page is Not Required and has No Validity under Specification C1.10 Fire Hazard Properties (Floors) of the BCA and NCC 2015.
The laboratory does not allow the use of this page of the report without the use of page 1.

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	215	217	399	508	793													
2	241	242	416	538	886													
3	239	240	385	493	752													

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: **Length**	**230**	**881**	**38**	**242**
Specimen Tests: **Width**				
1	242	953	36	228
2	249	1,026	38	186
3	241	972	41	209
Mean	244	984	38	208

NATA
ACCREDITED FOR TECHNICAL COMPETENCE

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 3 July 2017

APL Australia Pty Ltd
5 Carinish Rd, Oakleigh South
Victoria 3167 Australia
Telephone: 03 9543 1618
Facsimile: 03 9562 1818
Mobile: 0411 039 088
Email: apl@aplaustralia.com.au
Web: www.aplaustralia.com.au
ABN 69 468 849 319

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. 8180.2

Requested by: Decoline Pty Ltd
3/3363-3365 Pacific Highway
Slacks Creek,
QLD 4127
on (date): 6 September 2018
Manufacturer:
Product Desc.: Ocean

Sampling details:
Where: At customer premises
Date: 29 October 2018
By whom: Customer (delivered by courier)
How (methods): N/A

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:	13°	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.

Infrastructure Technologies

Gate 5, 2 Normanby Road Clayton VIC 3168, Australia
Telephone: 61 3 9545 2777 Web: http://www.csiro.au

REPORT NO: 8180.2
ISSUE DATE: 23 November 2018
MANUFACTURER:
PRODUCT DESC: Ocean

PHOTOS:

Top view

Close up

Infrastructure Technologies

Gate 5, 2 Normanby Road Clayton VIC 3168, Australia
Telephone: 61 3 9545 2777 Web: http://www.csiro.au

REPORT NO: 8180.2
ISSUE DATE: 23 November 2018
MANUFACTURER:
PRODUCT DESC: Ocean

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

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

Sample Unfixed

Joint width: 0 mm

Surface structure:
[ ] Smooth
[X] Profiled
[ ] Structured

RESULTS

Corrected mean overall acceptance angle: 13 °

Displacement space: not tested

CLASSIFICATION: Slip Resistance Assessment Group: R 10

Displacement Space Assessment Group: -

Test shoe used: Leipzig V73-SP

Infrastructure Technologies

Gate 5, 2 Normanby Road Clayton VIC 3168, Australia
Telephone: 61 3 9545 2777 Web: http://www.csiro.au

REPORT NO: 8180.2
ISSUE DATE: 23 November 2018
MANUFACTURER:
PRODUCT DESC: Ocean

Date and Place 23 November 2018, Clayton, Vic

Name, Title and Digital Signature:

KHANH HO
Technical Officer
Tel: 61 3 95452777
Email: Khanh.Ho@csiro.au