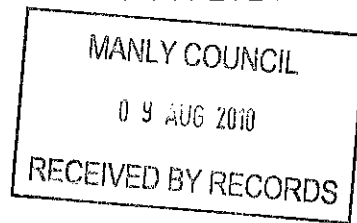


DixGardner

PTY. LTD.

Building Certifiers
Strata Plan Certifiers
Building Regulations
Consultants
Fire Safety Consultants

6th August 2010



The General Manager
Manly Council
PO Box 82
Manly NSW 1655

Attention: Planning Department

Dear Sir/Madam,

**RE: DA NO: 17/09 S96
15-17 THE CORSO, MANLY NSW 2095**

Please find attached a copy of the Interim Occupation Certificate for the above development that has been granted by the Principal Certifying Authority, Lyall Dix.

The certificate relates to the alterations and additions to the existing building at the above address for additional retail use and office refurbishment, including external facade work.

Together with the Certificate, we have enclosed the following for Council's record:

1. Interim Occupation Certificate Application Form
2. Final Fire Safety Certificate
3. Revised Fire Safety Schedule
4. Other documents relied upon.

We have attached a cheque for the registration of this certificate. In forwarding the receipt for this cheque it is requested that reference be made to the address of the premises.

If you have any queries regarding the above please do not hesitate to contact the undersigned on 9279 3657 during business hours.

Yours faithfully,

Carl Parkinson
Dix Gardner Pty Ltd

CC:- Hilrok Properties Pty Ltd.

*\$30.00
R/W 709625
15/8/2010*

Occupation Certificate

Issued under the Environmental Planning and Assessment Act 1979
Sections 109C (1) (c) and 109H

Certificate No.: 205/10

Subject land: 15-17 The Corso, Manly NSW 2095
Lot and DP: Lot 1, DP 5777268; Lot 1, DP 64558 & Lot B, DP 373583

Applicant: Hilrok Properties Pty Ltd.
Address: 27 The Corso, Manly NSW 2095

Owner: Hilrok Properties Pty Ltd.

Type of Certificate: Interim

Determination: Approved
Date of Determination: 06/08/2010

Attachments:
1. Other certificates relied upon
2. Final Fire Safety Certificate

Whole/Part of building works: Whole, excluding minor works to one office
Description of part (if applicable): N/A
BCA Classification: Class 5 & 6

DA No.: 17/09 S96
Issued by: Manly Council

Construction Certificate No.: 003/10
Date: 27/01/2010

Accreditation Level: A1 - Accredited Certifier - Building Surveyor Grade 1
Registration No.: BPB0092
Accreditation Body: Building Professionals Board

I certify that:

- the health and safety of the occupants of the building have been taken into consideration where an interim occupation certificate is being issued, and
- a current development consent or complying development certificate is in force for the building, and
- if any building work has been carried out, a current construction certificate (or complying development certificate) has been issued with respect to the plans and specifications for the building, and
- the building is suitable for occupation or use in accordance with its classification under the Building Code of Australia, and
- a fire safety certificate has been issued for the building, and
- a report from the Fire Commissioner has been considered (if required).

Signed:



Lyall Dix
Principal Certifying Authority

Date: 06/08/2010



DixGardner

PTY. LTD.

Building Certifiers
Strata Plan Certifiers
Building Regulations
Consultants
Fire Safety Consultants

OCCUPATION CERTIFICATE APPLICATION FORM

Environmental Planning & Assessment Act 1979, s.109C
Environmental Planning & Assessment Regulation 2000, cl.126 or 139

☒ Interim

☒ Final

APPLICANT

Name HILROCK PROPERTIES PTY LTD
Address 27 THE CORSO
Manly 2095
Signature & Date [Signature] 13/7/10

OWNER

Name HILROCK PROPERTIES PTY LTD
Address AS ABOVE

SUBJECT LAND

Address 15, 15A, 17 THE CORSO MANLY
Lot & DP LOT1, DP 571268 ; LOT1, DP 64558 & LOTB, DP 373583

PROPOSAL

Description THE PROPOSAL COMPRISES RESTORATION & CONSERVATION OF
THE WHOLE OF THE PROPERTIES INTERNALLY AND
Part or Whole EXTERNALLY. THERE IS NO PROPOSED CHANGE IN
of Building USAGE OF THE BUILDINGS.

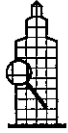
DEVELOPMENT CONSENT

Not applicable for applications for CDC

DA No. 17/09 Date of Determination 11/08/09 & 2/06/09

CONSTRUCTION/COMPLYING DEVELOPMENT CERTIFICATE

Construction or
Complying
Development
Certificate No 003/10 Date 27/01/2010



INSPECTION RECORD

Address:	15-17 The Corso, Manly NSW 2095		
DA No.:	17/09	CC/CDC No.:	003/10
AC/PCA:	Lyll Dix - BPB0092	DG Project No:	09/0333
Inspection Type:	Pre / Stormwater / Final / BCA Compliance	Inspections By:	Carl Parkinson (Building Surveyor) Lyll Dix (PCA)

CRITICAL STAGE INSPECTIONS		Section 109E (3) (d) of the Act & Clause 162A of the Reg's			
In the case of a class 5, 6, 7, 8 or 9 building,	Critical Stage Inspection Satisfactory			Inspection Date	Officer
(a) Prior to issuing the Construction Certificate	Yes <input checked="" type="checkbox"/>	Missed <input type="checkbox"/>	N/A <input type="checkbox"/>	15/06/2009 18/01/2010	LD/CP
(b) prior to covering any stormwater drainage connections, and	Yes <input checked="" type="checkbox"/>	Missed <input type="checkbox"/>	N/A <input type="checkbox"/>	29/06/2010	LD/CP
(c) after the building work has been completed and prior to any occupation certificate.	Yes <input checked="" type="checkbox"/>	Missed <input type="checkbox"/>	N/A <input type="checkbox"/>	29/06/2010 23/07/2010 03/08/2010	LD/CP

Fire Safety Certificate

Issued under the Environmental Planning and Assessment Regulation 2000,
Clauses 170 to 174

Type of Certificate

☐ Interim ☒ Final

Owner / Agent

I, James Crawford

Address

of Quasar Constructions Pty Ltd
Unit 3 & 4, 23 Brookhollow Ave NSW 2153

Certify that:

each of the essential fire safety measures specified in the current fire safety schedule for the building to which the certificate relates:

- a) has been assessed by a properly qualified person, and
- b) was found, when it was assessed, to be capable of performing to at least the standard required by the current fire safety schedule for the building for which the certificate is issued.

Identification of Building

Location: Manly NSW 2095

Street: 15 - 17 The Corso, Manly NSW 2095

Nearest Cross Street: Market Lane

House/unit no or name: Retail / Commerical Building, Number 15 - 17

Particulars of Building

Scope

☒ Whole ☐ Part

Description of Part (where applicable)

House/unit no or name: Retail/Commerical Building, Number 15 - 17

Date of Assessment: 22/07/2010

Owner's Details

Name: Hilrok Properties Pty Ltd

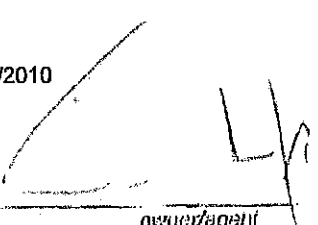
Address: 17 The Corso, Manly NSW 2095

Essential Fire and other Safety Measures	Standard of Performance
Automatic fire detection and alarm system	BCA Spec. E2.2a and AS 1670-2004
Emergency Lighting	BCA Clauses E4.2/E4.4 & AS/NZS 2293.1-1995/ 2005
Exit Signs	BCA Clauses E4.5/NSW E4.6 /E4.8 and AS/NZS 2293.1-1995/ 2005
Fire hydrant systems (street hydrant)	BCA Clause E1.3 & AS 2419.1-2005
Fire doors (Electrical switch board cupboard)	BCA Clause C2.13 & AS1905.1-2005
Hose reel system	BCA Clause E1.4 & AS 2441-2005
Mechanical air handling systems including auto-shutdown of the air handling system	BCA Clauses E2.2/NSW F4.5(b) & AS/NZS 1668.1-1998
PORTABLE FIRE EXTINGUISHERS	BCA CLAUSE E1.6 & AS 2444-2001.

Date of Certificate

dated this day of 22/07/2010

Signature


owner/agent

A copy of this certificate together with the relevant fire safety schedule must be forwarded to the Council and the Commissioner of the New South Wales Brigades.

A copy of this certificate together with the relevant fire safety schedule must be prominently displayed in the building.

Notes for completing the Fire Safety Certificate

Note 1

An interim fire safety certificate or a final fire safety certificate is required before:

- an interim occupation certificate can be issued to allow a partially completed new building (including and altered portion of, or an extension to, a new building) to be occupied or used, or
- an interim occupation certification can be issued to allow a change of building use for part of an existing building.

A final fire safety certificate is required:

- before a final occupation certificate can be issued to allow a new building (including an altered portion of, or extension to, a new building) to be occupied or used, or
- before a final occupation certificate can be issued to allow a change of building use for an existing building, or
- in accordance with a fire safety order given by a council.

An interim fire safety certificate is issued for part of the building and may deal only with those essential fire safety measures appearing on the most recent fire safety schedule (see note 3) relevant to the part of the building for which interim occupation certificate will be sought.

A final fire safety certificate must deal with all essential fire safety measures appearing on the most recent fire safety schedule (see note 3), subject to the following.

An interim fire safety certificate or a final fire safety certificate need not deal with those essential fire safety measures which have been the subject of some other final fire safety certificate or annual fire safety statement within the previous 6 months, unless the person or authority responsible for determining the relevant development consent, complying development certificate, construction certificate or fire safety order, has specified otherwise in the schedule. See also note 3.

Note 2

The person who carries out the assessment:

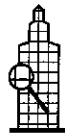
- must inspect and verify the performance of each fire safety measure being assessed; and
- in the case of a (interim or final) fire safety certificate for a new building (not an alteration to, or enlargement or extension of an existing building) must test the operation of each item of fire safety equipment installed in the building.

Note 3

The relevant essential fire safety measures are those specified in the most recent fire safety schedule, attached to one of the following:

- development consent for a change of building use; or
- complying development certificate for the erection of a building or a change of building use; or
- construction certificate for proposed building work, including building work associated with a change of building use; or
- a fire safety order.

The fire safety schedule will also identify standard of performance for each essential fire safety measure.



Fire Safety Schedule

(Clause 168 of the Environmental Planning and Assessment Regulation 2000)

Premises: 15-17 The Corso, Manly NSW 2095
Development Consent No.: 17/09
Construction Certificate No.: 003/10

The following essential fire safety measures shall be implemented in the whole of the building premises and each of the fire safety measures must satisfy the standard of performance listed in the schedule which, for the purposes of Clause 168 of the Environmental Planning and Assessment Regulation 2000, is deemed to be the current fire safety schedule for the building.

SCHEDULE

Essential Fire and other Safety Measures	Standard of Performance	Existing	Proposed
Automatic fire detection and alarm system	BCA Spec. E2.2a and AS 1670-2004		✓
Automatic fire suppression system (sprinklers)	BCA Spec. E1.5 and AS 2118.1-1995	✓	
Emergency Lighting	BCA Clauses E4.2/E4.4 & AS/NZS 2293.1-1995/ 2005	✓	✓
Exit Signs	BCA Clauses E4.5/NSW E4.6 /E4.8 and AS/NZS 2293.1-1995/ 2005	✓	✓
Fire hydrant systems (street hydrant)	BCA Clause E1.3 & AS 2419.1-2005		✓
Fire Doors (Electrical switch board cupboard)	BCA Clause C2.13 & AS1905.1-2005		✓
Hose reel system	BCA Clause E1.4 & AS 2441-2005		✓
Mechanical air handling systems including auto-shutdown of the air handling system	BCA Clauses E2.2/NSW F4.5(b) & AS/NZS 1668.1-1998		✓
Portable fire extinguishers	BCA Clause E1.6 and AS 2444-2001	✓	✓

09 0043

Statement of Available Pressure and Flow

Sydney
WATER

Hybrid Consulting Services
PO Box 7660
Baulkham Hills, 2153

WMS No: 34924
Contact No: 8849-3531
Fax No: 8849-3111

Attention: Scott Harris

Date: 07/09/2009

Pressure & Flow Application Number: 2656443
Your Pressure Inquiry Dated: Fri August 28 2009
Property Address: 17 The Corso Manly 2095

The expected maximum and minimum pressures available in the water main given below relate to modelled existing demand conditions, either with or without extra flows for emergency fire fighting, and are not to be construed as availability for normal domestic supply for any proposed development.

ASSUMED CONNECTION DETAILS

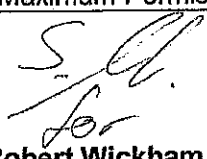
Street Name: The Corso	Side of Street: North
Distance & Direction from Nearest Cross Street	50 metres East from Darley Road
Approximate Ground Level (AHD):	6 metres
Nominal Size of Water Main (DN):	450 mm

EXPECTED WATER MAIN PRESSURES AT CONNECTION POINT

Normal Supply Conditions	
Maximum Pressure	104 metre head
Minimum Pressure	56 metre head

WITH PROPERTY FIRE PREVENTION SYSTEM DEMANDS	Flow l/s	Pressure head m
Fire Hose Reel Installations (Two hose reels simultaneously)	0.66	55
Fire Hydrant / Sprinkler Installations (Pressure expected to be maintained for 95% of the time)	5	73
	10	72
	15	71
	20	71
	30	69
	35	68
	40	68
Fire Installations based on peak demand (Pressure expected to be maintained with flows combined with peak demand in the watermain)	5	55
	10	54
	15	53
	20	52
	30	50
	35	49
	40	48
Maximum Permissible Flow	48	46

(Please refer to reverse side for Notes)


Robert Wickham
Team Leader
Asset Planning

28th July 2010

NBRS+Partners
Level 3, 4 Glen Street
MILSONS POINT NSW 2061

Attention: Whom it may concern

RE: CERTIFICATE OF COMPLIANCE – 15-17 The Corso, Manly NSW 2061

Quasar Constructions Pty Ltd wishes to confirm that the works under taken to the development mentioned above complies with all design documentation.

For any queries don't hesitate to contact the under signed.

Yours faithfully
Quasar Constructions Pty Ltd



Graeme Shaw
Operations Manager



Unit 3 & 4, 23 Broothollow Drive
Baulkham Hills NSW 2153
PO Box 7918 Baulkham Hills NSW 2153
T: 02 8853 5600
F: 02 9680 9340
E: enquiries@quasargroup.com.au
W: quasargroup.com.au

ACN 069 663 403 ABN 86 069 663 403
Company Licence No. 76988C

28th July 2010

NBRS+Partners
Level 3, 4 Glen Street
MILSONS POINT NSW 2061

Attention: Whom it may concern

RE: CERTIFICATE OF COMPLIANCE – 15-17 The Corso, Manly NSW 2061

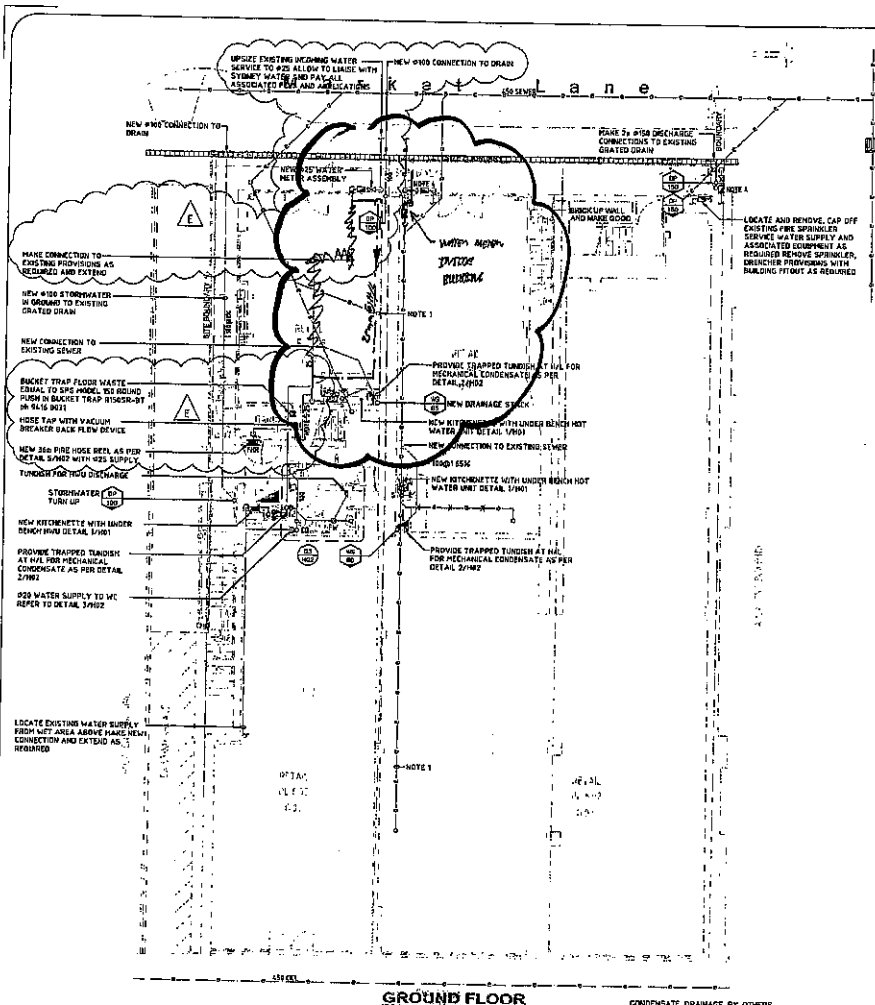
Quasar Constructions Pty Ltd wishes to confirm that the Garbage Room located at 15-17 The Corso, Manly premises complies and satisfies Development Consent Condition DA215 – 219.

For any queries don't hesitate to contact the under signed.

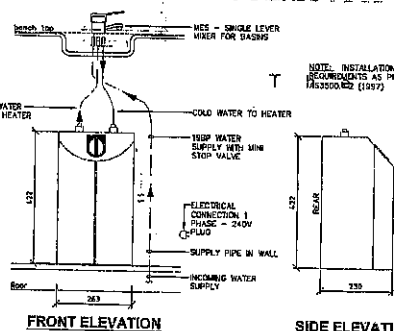
Yours faithfully
Quasar Constructions Pty Ltd

A handwritten signature in black ink, appearing to be "Graeme Shaw", written in a cursive style.

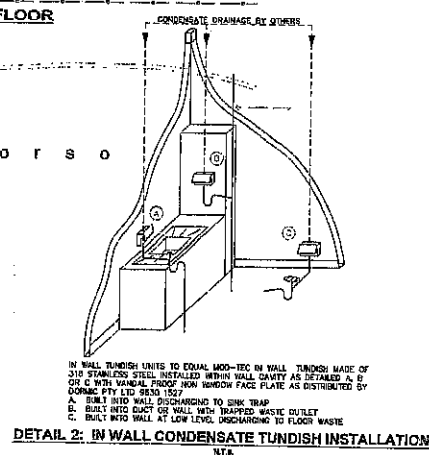
Graeme Shaw
Operations Manager



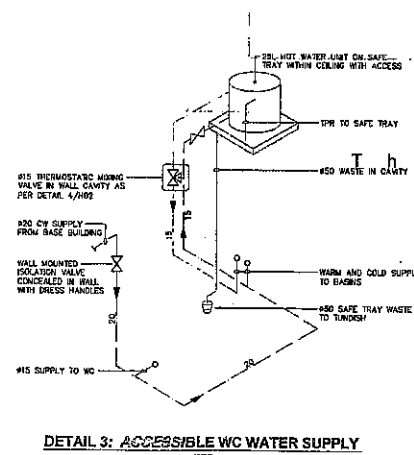
GROUND FLOOR



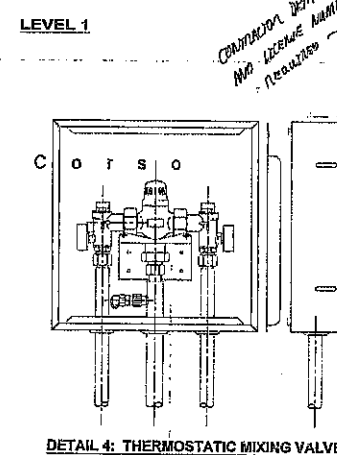
DETAIL 1: STIEREL ELTRON SNUS/MES UNDER BASIN HOT WATER UNIT



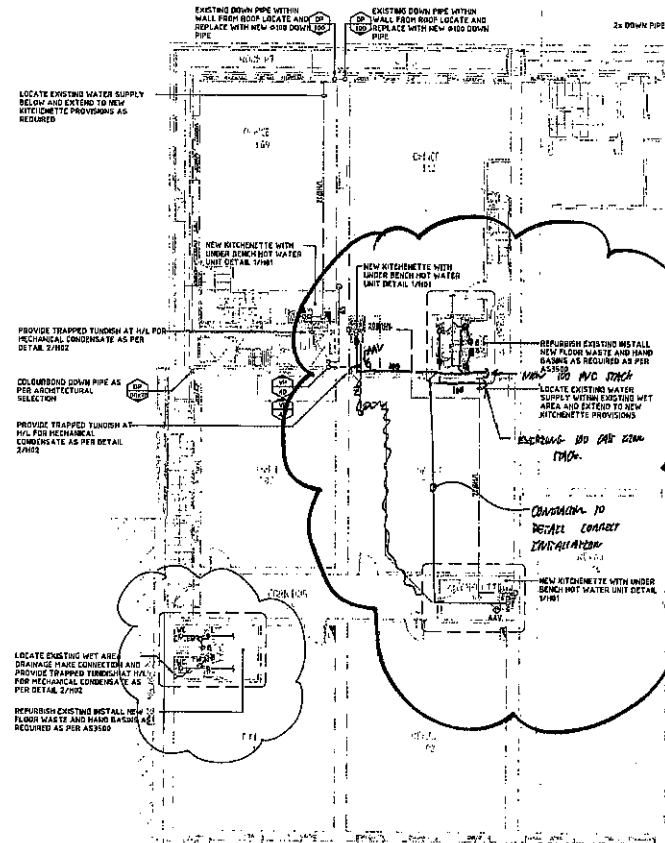
DETAIL 2: IN WALL CONDENSATE TUNDRISH INSTALLATION



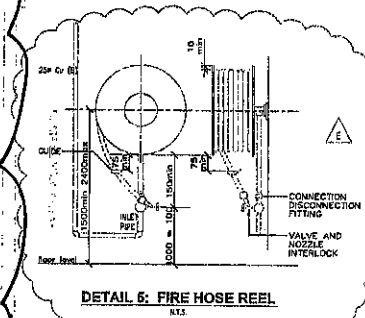
DETAIL 3: ACCESSIBLE WC WATER SUPPLY



DETAIL 4: THERMOSTATIC MIXING VALVE



LEVEL 1



DETAIL 5: FIRE HOSE REEL

ATTENTION: THIS DRAWING HAS BEEN PRODUCED FOR THE PURPOSE OF INDICATING THE DIAGNOSTIC DESIGN AND SCOPE OF WORKS REQUIRED FOR THE INSTALLATION OF SERVICES AS DETAILED AND SHOULD NOT BE INTERPRETED AS BEING FINAL. THIS DOCUMENT SHOULD BE READ IN CONJUNCTION WITH THE ARCHITECTURAL DRAWINGS, ASSOCIATED SPECIFICATIONS, CODES AND STANDARDS. ALL LEVELS AND HEIGHTS SHOWN SHALL BE INVESTIGATED AND CONFIRMED ON SITE BY THE SUBCONTRACTOR AND NOT BE DEPENDENT ON THE COMPLETION OF ANY WORKS. THIS DOCUMENT IS SUBJECT TO COPYRIGHT AND IS NOT TO BE REPRODUCED WITHOUT THE CONSENT OF HYBRID CONSULTING SERVICES, PH (02) 9659 6671

NOTES

1. ALLOW TO LOCATE ALL EXISTING SERVICE PROVISIONS, CAP OFF REDUNDANT SERVICES AS REQUIRED AS PER LOCAL AUTHORITY REQUIREMENTS & ENSURE ALL UP STREAM SERVICES ARE MAINTAINED.
2. REMOVE AND OR RELOCATE ALL EXTERNAL SERVICE MOUNTED AUTOMATIC SERVICE PROVISIONS.
3. ALL NEW AND EXISTING PIPE WORK TO BE CONCEALED.
4. RETAIN AND RELOCATE EXISTING WATER METER ASSEMBLY PROVIDE ACCESS AS PER SYDNEY WATER REQUIREMENTS.
5. PIPE WORK CHASED IN MASONRY WALL AS PER STRUCTURAL ENGINEERS REQUIREMENTS.

E	100mm	100mm	100mm
D	100mm	100mm	100mm
C	100mm	100mm	100mm
B	100mm	100mm	100mm
A	100mm	100mm	100mm
P1	100mm	100mm	100mm
No	100mm	100mm	100mm

AHSCA
Hydraulic Consultant

Hybrid Consulting Services p/l

Hybrid Consulting Services p/l
2/10000/102 (1/197)
1/10000/102 (1/197)
1/10000/102 (1/197)
1/10000/102 (1/197)

NBRS+PARTNERS
2/10000/102 (1/197)
1/10000/102 (1/197)
1/10000/102 (1/197)
1/10000/102 (1/197)

Project
15, 16A & 17 THE CORSO
MANLY

SOLVE IT PLUMBING
1885 2323
HYDRAULIC SERVICES

AS BUILT DRAWING

Project No.	Drawing No.	Revision
09043	H02	AT
Scale	Date	Sheet
1:100	AUGUST 2008	2 of 2

STORMWATER

All work is done in accordance to the AS3500

Work is done to architectural drawings

Material used is PVC

CERTIFICATION

To Whom It May Concern

Project: 15-17 The Corso Manly
Retail Shops base building only G.01, G03, & G.04. Office space areas 1.01, 1.02, 1.07, 1.08, 1.09, & 1.10. House and common areas

The Electrical project mentioned above including Emergency lighting and Exit signs for whole/part of building:
Retail Shops base building only G.01, G03, & G.04. Office space 1.01, 1.02, 1.07, 1.08, 1.09, & 1.10. House and common areas, of this facility is as per and in accordance with the following;
The electrical design is as per documentation, drawings and specifications provided by Knox Advanced Engineering Consultants.

1. AS3000:2008 and Section J of BCA.
2. AS2293.1:2005
3. BCA Clauses E4.2, E4.4, E4.5/NSW, E4.6, E4.7 and E4.8
4. Design Meetings to date.
5. Knox Advanced Engineering Consultants relevant drawings and specifications.



.....
Manuel Bonnici

July 13, 2010



Waddington Consulting Pty Ltd

ACN 130 522 851
Structural and Civil Engineering
Suite 506, Level 5
22 Central Ave, Manly NSW
P.O. Box 1044
Manly NSW 1655

22 July 2010

Hilrok Properties Pty Ltd
17 The Corso
Manly NSW

P (02) 9976 0070
F (02) 9976 0095

c/o
NBRS & Partners
Level 3, 4 Glen St
Milsons Point NSW 2061

Attention: Mr Graham Nicholas

Dear Graham,

Subject: Alterations and Additions at 15-17 The Corso, Manly
ENGINEERS CERTIFICATE FOR INSPECTIONS

I certify that our firm carried out the structural engineering inspections of the structural work listed below for the alterations and additions at the above address and that at the time of the inspection the structure appeared to be in accordance with the design intent of the structural details shown on drawings 9053-S0.00, S1.00, S2.00, S3.00, S3.01.

During construction, we carried out the following engineering inspections. The date of the inspection is given in brackets.

- **Steel reinforcement for the reinforced concrete ground floor level slabs and external paving slabs** (22/04/2010, 03/06/2010, 18/06/2010, 21/06/2010)
- **Structural steel and timber framing for first floor, new awnings and new wall openings** (17/02/2010, 23/02/2010, 21/06/2010)

This certificate assumes the construction was carried out by a licensed builder who has experience in this type of work. The above inspections do not, in any way whatsoever, relieve the builder of his responsibility.

The above inspections do not include inspections for contract administration purposes (e.g. progress payments), cosmetic matters and work that, once the competence of the builder has been established, is reasonable for the builder to supervise.

Yours sincerely,

Simon Waddington
MIEAust CPEng NPER (Structural)
Director
Waddington Consulting Pty Ltd

Fire Safety Certificate for Emergency and Exit Lighting

Issued under the Environmental Planning and Assessment Regulation 2000,
Clauses 170 to 174

Type of Certificate

☐ Interim ☒ Final

Owner / Agent

I, Manuel Bonnici

Address

of 12/23 Bay Rd, Taren Point NSW 2229

Certify that:

each of the essential fire safety measures specified in the current fire safety schedule for the building to which the certificate relates:

- a) has been assessed by a properly qualified person, and
- b) was found, when it was assessed, to be capable of performing to at least the standard required by the current fire safety schedule for the building for which the certificate is issued.
- c) All of the electrical design is as per Knox Advanced Engineering documentation, drawings and specifications issued for this project.

Identification of Building

Street The Corso Manly 2095

House/Unit No. or Building Name 15 -17

Side of Street West

Nearest Cross Street Market Lane

Particulars of Building

Scope ☒ Whole ☒ Part

Description of Part (where applicable) Retail Shops base building only G.01, G03, & G.04. Office areas 1.01, 1.02, 1.07, 1.08, 1.09, & 1.10. House and common areas.

House/Unit No. or Building Name

Date of Assessment 13/07/2010

Owner's Details

Name Hilrok Properties PTY LTD

Address 27 The Corso Manly 2095

Essential Fire and Other Safety Measures	Standard of Performance
Emergency Lighting	BCA Clause E4.4 & AS 2293.1-2005 BCA Clause E4.2
Exit Signs	BCA Clause E4.5, E4.6 & E4.8 and AS 2293.1 - 2005

Date of Certificate dated this thirteenth day of July 2010

Signature



owner/agent

A copy of this certificate together with the relevant fire safety schedule must be forwarded to the Council and the Commissioner of the New South Wales Brigades.

A copy of this certificate together with the relevant fire safety schedule must be prominently displayed in the building.

Notes for completing the Fire Safety Certificate

Note 1

An interim fire safety certificate or a final fire safety certificate is required before:

- an interim occupation certificate can be issued to allow a partially completed new building (including and altered portion of, or an extension to, a new building) to be occupied or used, or
- an interim occupation certification can be issued to allow a change of building use for part of an existing building.

A final fire safety certificate is required:

- before a final occupation certificate can be issued to allow a new building (including an altered portion of, or extension to, a new building) to be occupied or used, or
- before a final occupation certificate can be issued to allow a change of building use for an existing building, or
- in accordance with a fire safety order given by a council.

An interim fire safety certificate is issued for part of the building and may deal only with those essential fire safety measures appearing on the most recent fire safety schedule (see note 3) relevant to the part of the building for which interim occupation certificate will be sought.

A final fire safety certificate must deal with all essential fire safety measures appearing on the most recent fire safety schedule (see note 3), subject to the following.

An interim fire safety certificate or a final fire safety certificate need not deal with those essential fire safety measures which have been the subject of some other final fire safety certificate or annual fire safety statement within the previous 6 months, unless the person or authority responsible for determining the relevant development consent, complying development certificate, construction certificate or fire safety order, has specified otherwise in the schedule. See also note 3.

Note 2

The person who carries out the assessment:

- must inspect and verify the performance of each fire safety measure being assessed; and
- in the case of a (interim or final) fire safety certificate for a new building (not an alteration to, or enlargement or extension of an existing building) must test the operation of each item of fire safety equipment installed in the building.

Note 3

The relevant essential fire safety measures are those specified in the most recent fire safety schedule, attached to one of the following:

- development consent for a change of building use; or
- complying development certificate for the erection of a building or a change of building use; or
- construction certificate for proposed building work, including building work associated with a change of building use; or
- a fire safety order.

The fire safety schedule will also identify standard of performance for each essential fire safety measure.

Final/Interim Fire Safety Certificate

issued under the Environmental Planning and Assessment Regulation
1994-Clauses 80E and 80F

Certificate

type of certificate

interim

☒ final

certificate

name owner/agent
address

I **Peter Sloane**
of **Star Fire Systems NSW**
37/7 Hoyle Ave Castle Hill NSW 2154

certify that

- (a) each of the essential fire measures listed below:
- has been assessed by a person (chosen by me) who was properly qualified to do so, and
 - was found, when it was assessed, to have been properly implemented and to be capable of performing to a standard not less than that required by the most recent fire safety schedule (copy attached) for the building for which the certificate is issued.
- (b) the information contained in this certificate is, to the best of my knowledge and belief, true and accurate.

identification of building

Location
Street:
nearest cross street:
house/unit no or name

Manly NSW 2095
The Corso
Market Lane
Retail/Commercial Building, Number 15-17

particulars of building

whole/part
description of part

Part
all areas excluding Retails G.02 and 1.14 (Bank Tenancy)

date of assessment

13/7/2010

owner's details

Name
Address

Hilrok Properties Pty Ltd
27 The Corso Manly NSW 2095

essential fire safety measures measure

standard of performance

Fire Detection System

AS1670.1-2004, BCA Spec E2.2a

Occupant Warning System

AS1670.1-2004, BCA Spec E2.2a


date of certificate

dated this

14th

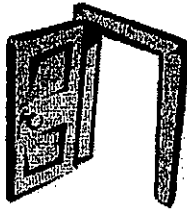
day of **July 2010**

signature


owner/agent/installer

* A copy of this certificate together with the relevant fire safety schedule must be forwarded to the council and the Commissioner of the New South Wales Fire Brigades.

* A copy of this certificate together with the relevant fire safety schedule must be prominently displayed in the building.



Advanced Metal Door Frames P/L
A.B.N 42 076 510 060
UNIT 1A 42 BEAUMONT RD MT KURING-GAI NSW 2080
PH: 9457 7901 FAX: 9457 7902

FIRE SAFETY CERTIFICATE

Name owner/agent: I, Terry Frendo
Address: of, Advanced Metal Door Frames P/L
1a 42 Beaumont Road, Mt Kuring-Gai, NSW 2080

Certify that:

- (a) Each of the essential fire measures listed below:
- Has been assessed by a person (chosen by me) who was properly qualified to do so, and was found, when assessed, to have properly implemented and to be capable of performing to a standard not less than that required by the most recent fire safety schedule for the building for which the certificate is issued
- (b) The information contained in this certificate is, to the best of my knowledge and belief, true and accurate.

Identification of Building

Location: Manly
House No. Unit No. or Name: 15-17
Street: The Corso
Side of Street: n/a
Nearest Cross Street: n/a

Date of Assessment by the Properly Qualified Person 13th July, 2010

Owner's Details

Name: Quasar Constructions
Address: Unit 3 & 4, 23 Brookhollow Avenue, Baulkham Hills

Essential/Critical Fire Safety Measures:

Measure	Standard of Performance
FIRE DOOR ASSEMBLY	AS 1905.1-2005 AS & NZS 1905 : 1 – 1997 BCA CLAUSE C3.4
FIRE SEALS	BCA C3.12, C3.15 & Spec C3.15
SMOKE DOORS	BCA Spec C3.4
SOLID CORE DOORS	BCA C3.11

Date of Statement

dated this Tuesday 13th July 2010

Signature




A copy of the certificate together with the relevant fire safety schedule must be forwarded to the Council and Commissioner of the New South Wales Fire Brigades.

A copy of this certificate together with the relevant fire safety schedule must be prominently displayed in the building.

FINAL/INTERIM FIRE SAFETY CERTIFICATE

(Form 15)

Issued under the Environmental Planning and Assessment Regulations 1994
clauses 80E and 80F

Type of Certificate see note 1 (overleaf)	<input type="checkbox"/> INTERIM <input checked="" type="checkbox"/> FINAL												
certificate see note 1 (overleaf) see note 2 (overleaf) assessment requirements. see note 3 (overleaf) relevant fire safety schedule.	I Geoffrey Beeche, CPEng. of Crest Air Conditioning certify that: (a) each of the essential fire measures listed below: * has been assessed by a person who was properly qualified to do so, and * was found, when it was assessed, to have been properly implemented and to be capable of performing to a standard not less than that required by the most recent fire safety schedule (copy attached) for the building for which the certificate is issued. * (b) the information contained in this certificate is, to the best of my knowledge and belief, true and accurate.												
Identification of Building location	<table border="0"> <tr> <td>Location</td> <td>MANLY</td> </tr> <tr> <td>Street</td> <td>15-17 THE CORSO</td> </tr> <tr> <td>Side of Street</td> <td>NORTHERN</td> </tr> <tr> <td>Nearest cross street</td> <td>DARLEY ROAD</td> </tr> <tr> <td>Name</td> <td>RETAIL/OFFICE DEVELOPMENT</td> </tr> </table>	Location	MANLY	Street	15-17 THE CORSO	Side of Street	NORTHERN	Nearest cross street	DARLEY ROAD	Name	RETAIL/OFFICE DEVELOPMENT		
Location	MANLY												
Street	15-17 THE CORSO												
Side of Street	NORTHERN												
Nearest cross street	DARLEY ROAD												
Name	RETAIL/OFFICE DEVELOPMENT												
Particulars of Building	<table border="0"> <tr> <td>Whole/Part:</td> <td>Part</td> </tr> <tr> <td>Description of Part</td> <td>Upstairs only (downstairs awaiting fitout)</td> </tr> </table>	Whole/Part:	Part	Description of Part	Upstairs only (downstairs awaiting fitout)								
Whole/Part:	Part												
Description of Part	Upstairs only (downstairs awaiting fitout)												
Date of Assessment	Monday 19th July 2010												
Owners Details Name Address	Hilrok Properties Pty Ltd 17 The Corso Manly NSW 2095												
Essential Fire Safety Measures see note 3	<table border="0"> <tr> <td>Measure</td> <td>Standard of Performance</td> </tr> <tr> <td>Electrical Installation</td> <td>AS3000</td> </tr> <tr> <td>Ductwork</td> <td>AS4254</td> </tr> <tr> <td>Mechanical air handling</td> <td>AS1668.1 & AS1668.2</td> </tr> <tr> <td>Energy efficiency</td> <td>BCA Section J5</td> </tr> <tr> <td>Fire Dampers</td> <td>AS1668.1</td> </tr> </table>	Measure	Standard of Performance	Electrical Installation	AS3000	Ductwork	AS4254	Mechanical air handling	AS1668.1 & AS1668.2	Energy efficiency	BCA Section J5	Fire Dampers	AS1668.1
Measure	Standard of Performance												
Electrical Installation	AS3000												
Ductwork	AS4254												
Mechanical air handling	AS1668.1 & AS1668.2												
Energy efficiency	BCA Section J5												
Fire Dampers	AS1668.1												
Municipality	Warringah Shire Council												
Signature	 Agent												

* A copy of this certificate together with the relevant fire safety schedule must be forwarded to the council and the Commissioner of the New South Wales Fire Brigade.

* A copy of this certificate together with the relevant fire safety schedule must be prominently displayed in the building.

solveit

PLUMBING

ABN. 82004517552 LIC NO. 1824250

SPECIALISING IN - DRAINAGE - GAS FITTING & 24HR EMERGENCY WORK

8 CROWN STREET, HARRIS PARK, NSW 2150

MOBILE. 0419600737 FAX. 98970201

12 July 2010

To: Quasar Constructions

Job Address: 15, 17, 17A The Corso Manly

Description: Certificate

To Whom It May Concern:

This is to state that all work done at the above property complies with the AS3500 and BCA part J7.

Thank You

Arthur Romanous

solveit

PLUMBING

ABN - 82004517552 LIC NO - 1824250

SPECIALISING IN - DRAINAGE - GAS FITTING & 24HR EMERGENCY WORK

8 CROWN STREET, HARRIS PARK, NSW 2150

MOBILE - 0419 600 737 FAX - 98970201

12 July 2010

To: Quasar Constructions

Job Address: 15, 17, 17A The Corso Manly

Description: Fire Hose Reel certificate

To Whom It May Concern:

This is to state that the fire hose reels at the above address have been installed to manufactures instructions and in accordance to BCA Clauses E1.4 & AS 2441-2005

Thank You

Arthur Romanous



creating effective height safety solutions

QUASAR CONSTRUCTIONS

21 JUL 2010

RECEIVED

HEIGHT SAFETY SYSTEM WARRANTY

1. Roofsafe Industrial Safety Pty Limited guarantees the height safety system and installation against defects caused by faulty workmanship and materials for twelve (12) months from the date of purchase.
2. During this Guarantee period Roofsafe Industrial Safety will replace any defective parts and provide labour to install. However if the product includes a number of accessories only the defective product or accessory will be replaced.
3. In addition the parts and accessories making up the system are guaranteed for structural integrity for a period of 12 months from date of purchase.
4. It is a condition of this warranty and a requirement of the Australian Standard AS/NZS 1891 Part 4 that this system be inspected and recertified every twelve months by Roofsafe.
5. Roofsafe Industrial Safety reserves the right to make minor adjustments instead of replacing the product or accessory.
6. In the event of a part, product, accessory or system being replaced during this guarantee, the guarantee on the replacement will expire at the original date i.e. 12 months from the original purchase date.
7. This guarantee excludes defects caused by the product or system not being used in accordance with instructions, accidental damage, misuse or being tampered with by unauthorised persons.
8. If failure or fault occurs, notification should immediately be given in writing to Roofsafe Industrial Safety at 130 Gilba Road, Girraween N.S.W. 2145.
9. If any product or part is forwarded to Roofsafe Industrial Safety a label should be attached stating your full name, address and nature of fault or complaint. The Guarantee and copy of the Purchase Receipt should also accompany any claims.
10. This guarantee is additional to the Conditions and Guarantee which are mandatory and as implied by the Trade Practices Act 1974 and other legislation.

PRODUCT: WALKWAY, LADDER/STAIR, PLATFORM

MODEL: WW, RIS, PLF

DATE OF PURCHASE / INSTALLATION: 19.07.2010

PURCHASED BY: QUASAR CONSTRUCTIONS

LOCATION: 17 THE CORSO, MANLY

AUTHORISED BY: 

ROOFSAFE INDUSTRIAL SAFETY

Roofsafe-T-Systems

ABN 48 008 445 458

www.roofsafe.com.au

Head Office: 130 Gilba Rd, Girraween NSW 2145 Australia
PO Box 260, Pendle Hill NSW 2145

T: +61 2 9890 8644, F: +61 2 9896 8650, E: sales@roofsafe.com.au

Melbourne
Ph: (03) 9545 3177
Fx: (03) 9545 3455

Adelaide
(08) 8241 0690
(08) 8241 0122

Brisbane
(07) 3216 6413
(07) 3216 7745

Perth
(08) 9417 9337
(08) 9417 9337

Canberra
(02) 6280 7200
(02) 6239 1066

Hobart
1300 663 255
1300 662 994



creating effective height safety solutions

Certificate of Inspection

Installed System

Certificate No :

02-02-8880

Site Barcode :

CLIENT	Quasar Constructions			17 The Corso			
ADDRESS	P.O. Box 7918			Manly			
Baulkham Hills		POSTCODE	2153, NSW				
PHONE	88535631	FAX					
ASSET TYPE	BAR CODE	COMISSION DATE	NEXT SERVICE	RATING	*COMPLYING STANDARDS	MANUFACTURED & INSTALLED BY	COMMENTS
Aluminium Walkway	WW	19.07.2010	N/A	150kg	1657-1992	RIS/RIS	5m x 600mm Wide Walkway Installed, 19m x 1m Wide Walkway Installed, visually inspected pass
Aluminium Ladder/Stair	RIS	19.07.2010	N/A	150kg	1657-1992	RIS/RIS	1 x Access Ladder/Stair Installed with Handrail, visually inspected pass
Aluminium Platform	PLF	19.07.2010	N/A	150kg	1657-1992	RIS/RIS	1 x 2m Platform Installedail, visually inspected pass

Supply & Install: Walkway, Ladder/Stair, Platform

*Design and location of Height Safety System is in accordance with AS/NZS 1891-4 – AS1657-1992 and local Regulatory Authorities.

AUTHORISED BY: Dean Harrison

DATE: 19.07.2010

SIGNATURE:

SYDNEY: Tel: (02) 9896 8644 Fax: (02) 9896 8650	BRISBANE: Tel: (07) 3216 6413 Fax: (07) 3216 7745	CANBERRA: Tel: (02) 6280 7200 Fax: (02) 6239 1066	MELBOURNE: Tel: (03) 9545 3177 Fax: (03) 9545 3455	ADELAIDE: Tel: (08) 8241 0090 Fax: (08) 8241 0122
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Vista Glass Australia P/L

ABN 69 133 088 356

PO Box 7030 Penrith Sth LPO NSW 2750

Ph - 0433 045 897 - Fax - 02 4729 0750

Email - vistaglass2@bigpond.com

Glazing Certificate

Project: 15-17 The Corso Manly

Date: 14th July 2010

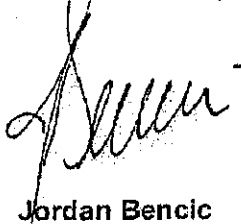
Quasar Constructions
Units 3 & 4 Brookhollow Ave
Baulkham Hills NSW 2153

Attn Mr Serge Younan

This is to Certify that the glass installed to all windows and doors installed by
Vista Glass Australia P/L A Grade Safety Glass and complies to AS1288-2006 Human
Impact codes

The windows and doors have been installed into a builder prepared opening , the
certification only covers the integrity of the installation of window frames and glass
and does not take into account the suitability of the linings surrounding the window or
the integrity of the opening.

Yours Sincerely



Jordan Bencic

Vista Glass Australia P/L

ABN 69 133 088 356

PO Box 7030 Parrlth Sth LPO NSW 2750

Ph - 0433 045 897 - Fax - 02 4729 0750

Email - vistaglass2@bigpond.com

Project: 15-17 The Corso Manly

Date: 14th July 2010

**Quasar Constructions
Units 3 & 4 Brookhollow Ave
Baulkham Hills NSW 2153**

Attn Mr Eric Katafano

All materials used to all windows and doors installed by Vista Glass Australia P/L conform to all required BCA codes and specifications.

All work was carried out as per specification other than where changes were made at the builders request or in situ issues would not allow for specified materials to be used.

Materials that could not be sourced or were not able to be used in the appropriate method were substituted with equal quality or better upon approval of the builder's site representative,

Yours Sincerely



Jordan Bencic

LUMINARY 48

Product Specifications

Product:	Luminary 48
Date:	January 2007
Description:	Fine Gauge, High Density Level Loop Heather
Pile Fibre:	100% Pure New Selected Carpet Wools
Fibre Quality:	Semi Worsted, multi-ply, twisted and non set
*Pile Fibre:	92% Wool, 8% BCF Nylon
*Fibre Quality:	Semi Worsted plus Solution Dyed Nylon Accent
Gauge:	3.175 mm (1/8")
Stitch Rate:	54.7 per 100mm
Pile Mass:	1627 gm/m ² (48 oz/yd ²)
Pile Height:	4.8mm
Colouration:	Stock Dyed
Primary Backing:	114 g/m ² (3.3 oz/yd ²) Woven Polypropylene
Secondary Backing:	237 g/m ² (7 oz/yd ²) Woven Jute
Laminate:	956 g/m ² (28.2 oz/yd ²) Synthetic Latex
Total Weight:	10.7 kg/LM (86.6oz/yd ²)
Width:	3.66 metres
A.C.C.S. Reg. No.:	93037
A.C.C.S. Grade:	Residential Extra Heavy Duty (Stairs) - 6 Star Contract Extra Heavy Duty (Stairs) - 4 Star
Critical Radiant Flux: (Burning Behaviour)	CHF Mean Result 8.5 kw/m ² (Conventionally) Smoke Value 75 % min (Conventionally)
AS/ISO 9239-1:2003 Part 1 - Test	Passes requirements of BCA spec C1.10a Class 9a; 9b; 9c Buildings (Conventionally)
Product Features:	<ul style="list-style-type: none"> Increased thermal and acoustic comfort. Superior appearance retention when correctly maintained. Available in 6 standard colours. The use of chair pads is mandatory when used in commercial application. Must be laid in accordance with AS 2455, 1995. Subject to Tufmaster's 'Terms of Trading.'

Installation: All carpet installations are to be in accordance with AS2455, 1:1995 unless otherwise stated in writing by Tufmaster Carpets.

Carpet is a textile that is subjected to extreme variations in temperature and tension in the manufacturing process.

During this process variances may occur in both the width and length of this patterned carpet and as a result an exact pattern match cannot be guaranteed.

A reasonable pattern match may be obtained when installing carpet conventionally over an underlay and when installed by trained, experienced and professional carpet layers.

Pattern matching cannot be guaranteed when installed by the direct stick or dual bond method as this only allows for minor stretching and adjustments of the pattern during installation.

When installing patterned carpets on open floors it is a requirement that the carpet layers have unrestricted access to the entire floor being laid. The initial run of carpet on any type of installation is the most critical and ensures that the project is set out accurately prior to joining, to ensure the best possible pattern match over the entire floor area is achieved. No acceptable pattern match can be guaranteed if the carpet layers are only provided part floors at a time.

Carpet Joins: Tufmaster Carpets specify that when laying conventionally or dual bond that all cut edges to be joined must be tipped with an edge seaming latex adhesive (minimum 80% component) and be given sufficient time to cure properly prior to heat taping (time is dependant on site conditions and temperature). It is the installers responsibility to ensure that the correct heat tapes are used when installing carpet by both methods.

Dye variation: Shade or pattern variations may occur from sample and between dye lots and within production runs due to the many variances in the manufacturing of carpet, however these variations will be within recognized textile industry standards.

Cleaning: Carpet should be cleaned and maintained in accordance with AS 3733:1995.1.

Panning: Panning may be seen in some loop pile carpets. The effects of the slippage may appear as panning down the length of the carpet. This is not a manufacturing defect and will not effect the performance of the carpet.

LUMINARY 40

Product Specifications

Product:	Luminary 40
Date:	January 2007
Description:	Fine Gauge, High Density Level Loop Heather
Pile Fibre:	100% Pure New Selected Carpet Wools
Fibre Quality:	Semi Worsted, multi-ply, twisted and non set
*Pile Fibre:	92% Wool, 8% BCF Nylon
*Fibre Quality:	Semi Worsted plus Solution Dyed Nylon Accent
Gauge:	3.175 mm (1/8")
Stitch Rate:	39.5 per 100mm
Pile Mass:	1356 gm/m ² (40 oz/yd ²)
Pile Height:	4.4mm
Colouration:	Stock Dyed
Primary Backing:	114 g/m ² (3.3 oz/yd ²) Woven Polypropylene
Secondary Backing:	237 g/m ² (7 oz/yd ²) Woven Jute
Laminate:	956 g/m ² (28.2 oz/yd ²) Synthetic Latex
Total Weight:	9.7 kg/LM (86.6oz/yd ²)
Width:	3.66 metres
A.C.C.S. Reg. No.:	93038
A.C.C.S. Grade:	Residential Extra Heavy Duty (Stairs) - 6 Star Contract Extra Heavy Duty (Stairs) - 3 Star
Critical Radiant Flux: (Burning Behaviour)	CHF Mean Result 7.8 kw/m ² (Conventionally) Smoke Value 132 % min (Conventionally)
AS/ISO 9239-1:2003 Part 1 - Test	Passes requirements of BCA spec C1.10a Class 9a; 9b; 9c Buildings (Conventionally)
Product Features:	<ul style="list-style-type: none"> Increased thermal and acoustic comfort. Superior appearance retention when correctly maintained. Available in 6 standard colours. The use of chair pads is mandatory when used in commercial application. Must be laid in accordance with AS 2455, 1995. Subject to Tufmaster's 'Terms of Trading.'



HEAD OFFICE
TUFMASTER CARPETS
PTY. LTD.

A.G.N. 004 802 564

Cope Street, Preston, Victoria 3072.

Telephone: 61 3 9791 1388

Facsimile: 61 3 9780 0080

Email: email@tufmaster.com.au

Interstate Offices

N.S.W.
(02) 9555 2177

Queensland
0402 119 538
1800 062 076

S.A.

0402 119 538

W.A.
0402 119 545

Tasmanian Agent
(03) 6234 9855





Att Mr Don Considine
m/s Tuftmaster Carpets Pty Ltd,
8 Cope St, Preston, Vic 3072

TEST REPORT No. 000935

LABORATORY REF: P060935

CUSTOMER REFERENCE

LUMINARY 40

Sample description as provided by customer
Mass/unit area 40 oz/yd² 1356 g/m² Pile Fibre Content 100% WOOL
Construction Details Tufted Secondary Backing Jute
Style Level Loop

Order No. 31341

Colour Black/Grey
Pile Height 4.4 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 specification C1.10a of the Building Code of Australia.

Tested in accordance with the Carpet Institute Code of Practice for AS/ISO 9239 Testing Version 10 / 0805.

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. Clause 9 of AS/ISO 9239 Part 1

Conditioning as specified in BS EN 13238.2001

Sample submitted Date November 2006

Test Date 7/12/2006

ASSEMBLY SYSTEM DIRECT STICK details below.

The floor covering was directly stuck to the substrate using ROBERTS 95 SF adhesive.

Substrate : Non-combustible.

Substrate - 6mm Fibre Reinforced Cement Board to simulate a Non-Combustible Flooring.

Sample Cleaned as Specified in ISO 11379.1997

Initial Test Specimen 1 Length Direction Critical Radiant Flux 8.2 kW/m²
Specimen 1 Width Direction Critical Radiant Flux 10.0 kW/m²
Full tests carried out in the Length Direction


SPECIMEN	Length #1	Length #2	Length #3	Mean
Critical Radiant Flux (kW/m ²)	8.2	10.1	9.9	9.4
Smoke Development Rate (%.min)	29	39	31	33

The values quoted below are as required by Specification C1.10a Fire Hazard Properties (Floors) of the Building Code of Australia.
The Critical Radiant Flux quoted is the value at Flame-Out.


MEAN CRITICAL RADIANT FLUX 9.4 kW/m²

MEAN SMOKE DEVELOPMENT RATE 33 %.min

OBSERVATIONS The samples singed then ignited



Authorised Signatory M. B. Webb
Date 7/12/2006



NATA Reg. No. 15393
Heat and temperature measurement.

ACCREDITED FOR
TECHNICAL
COMPETENCE

PAGE 1 of 2

Page 2 only shows the time required in seconds for the flame front to reach each time marker, the total test time and the CHF value at 30 minutes (if applicable).

The laboratory allows the use of this page of the report without the use of page 2.

1001 01 06

APL Australia Pty Ltd
5 Carinish Rd, Oakleigh South
Victoria 3187 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



Att Mr Don Considine
m/s Tuftmaster Carpets Pty Ltd,
8 Cope St, Preston, Vic 3072

TEST REPORT No. 000934

LABORATORY REF: P060934

CUSTOMER REFERENCE

LUMINARY 40

Sample description as provided by customer

Mass/unit area 40 oz/yd² 1356 g/m² Pile Fibre Content 100% WOOL

Construction Details Tufted Secondary Backing Jute

Style Level Loop

Order No. 31341

Colour Black/Grey

Pile Height 4.4 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 specification C1.10a of the Building Code of Australia.

Tested in accordance with the Carpet Institute Code of Practice for AS/ISO 9239 Testing Version 10 / 0805.

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. Clause 9 of AS/ISO 9239 Part 1

Conditioning as specified in BS EN 13238.2001

Sample submitted Date November 2006

Test Date 6/12/2006

ASSEMBLY SYSTEM DOUBLE BOND (DOUBLE STICK) details below.

The underlay used was SENSI SLAB it was adhered to the substrate using ROBERTS 656 adhesive. The floor covering was adhered to the underlay using ROBERTS 95 SF adhesive.

Substrate : Non-combustible

Substrate - 6mm Fibre Reinforced Cement Board to simulate a Non-Combustible Flooring.

Sample Cleaned as Specified in ISO 11379.1997

Initial Test Specimen 1 Length Direction Critical Radiant Flux 8.2 kW/m²
Specimen 1 Width Direction Critical Radiant Flux 10.1 kW/m²
Full tests carried out in the Length Direction

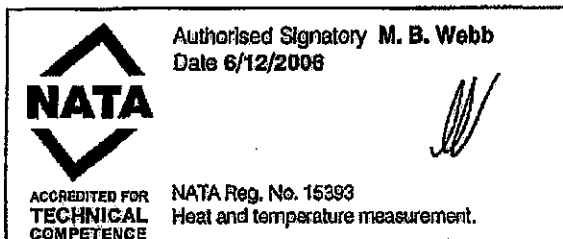
SPECIMEN	Length #1	Length #2	Length #3	Mean
Critical Radiant Flux (kW/m ²)	8.2	8.4	8.2	8.3
Smoke Development Rate (%.min)	61	62	90	71

The values quoted below are as required by Specification C1.10a Fire Hazard Properties (Floors) of the Building Code of Australia.
The Critical Radiant Flux quoted is the value at Flame-Out.

MEAN CRITICAL RADIANT FLUX 8.3 kW/m²

MEAN SMOKE DEVELOPMENT RATE 71 %.min

OBSERVATIONS The samples singed then ignited



PAGE 1 of 2

Page 2 only shows the time required in seconds for the flame front to reach each time marker, the total test time and the CHF value at 30 minutes (if applicable).

The laboratory allows the use of this page of the report without the use of page 2.

1001 01 06

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

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

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

AWTA TEXTILE TESTING

Australian Wool Testing Authority Ltd - trading as AWTA Textile Testing
A.B.N. 43 006 014 106
1st Floor, 191 Racecourse Road, Flemington, Victoria 3031
P.O. Box 240, North Melbourne, Victoria 3051
Phone (03) 9371 2400 Fax (03) 9371 2499

RECEIVED
22 DEC 2005
DANDY

TEST REPORT

CLIENT : TUFTMASTER CARPETS PTY LTD
1 BENNET STREET
DANDENONG VIC 3175

TEST NUMBER : 7-542086-AV
DATE : 19/12/2005
ORDER NUMBER : 20857

SAMPLE DESCRIPTION Clients Ref: Luminary 40
Level loop pile tufted carpet
Colour: dark grey/black stripe
Approximate pile height: 3mm

Material Specification:
Nominal Composition: 100% wool
Nominal Total pile mass: 1356g/m2
Nominal backing: Primary: woven polypropylene
Secondary: hessian

ASISO 9239.1-2003
Part 1

Reaction to Fire Tests for Floorings
Determination of the Burning Behaviour
using a Radiant Heat Source

Date of sample arrival: 06/12/2005
Date tested: 15/12/2005
Results: CHF (Critical Heat Flux / Critical Radiant Flux)

	1	2	3	Mean	
Length	8.5	-	-	-	kW/m2
Width	8.1	6.8	8.5	7.8	kW/m2

	1	2	3	Mean	
Length	92	-	-	-	% min
Width	113	192	191	132	% min

Observations: Melting
Blistering

Note: Sample was conditioned in accordance with BSEN 13238-2001 at a temperature of 23+/-2degC and Relative Humidity of 50+/-5% for a minimum of 48 hours prior to testing

Each specimen was tested over "Bridgestone Airstep Cushion Pad" reconstituted fibre underlay of nominal thickness 9.0 +/-0.8mm having a mass of 900 +/-50g/m2 and clamped to a substrate of 6mm thick fibre reinforced cement board

149736

1

(CONTINUED NEXT PAGE)

PAGE 1

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This Laboratory is accredited by the National Association of Testing Authorities, Australia, for:
- Chemical Testing of Textiles & Related Products : Accreditation No. 983
- Mechanical Testing of Textiles & Related Products : Accreditation No. 985
- Heat & Temperature Measurement : Accreditation No. 1356

The tests reported herein have been performed in accordance with its terms of accreditation. Samples, and their identifying descriptions have been provided by the client unless otherwise stated. AWTA Ltd makes no warranty, implied or otherwise, as to the source of the tested samples. The above test results relate only to the sample or samples tested. This document shall not be reproduced except in full and shall be rendered void if amended or altered. This document, the names AWTA Textile Testing and AWTA Ltd may be used in advertising providing the content and format of the advertisement have been approved in advance by the Managing Director of AWTA Ltd.



0204/5/05

APPROVED SIGNATORY

MICHAEL A. JACKSON B.Sc.(Hons)
MANAGING DIRECTOR

AWTA TEXTILE TESTING

Australian Wool Testing Authority Ltd - trading as AWTa Textile Testing
A.B.N. 43 006 014 106

1st Floor, 191 Racecourse Road, Flemington, Victoria 3031
P.O. Box 240, North Melbourne, Victoria 3051
Phone (03) 9371 2400 Fax (03) 9371 2499

22 DEC 2005

DANDY

TEST REPORT

CLIENT : TUFTMASTER CARPETS PTY LTD
1 BENNET STREET
DANDENONG VIC 3175

TEST NUMBER : 7-542086-AV
DATE : 19/12/2005
ORDER NUMBER : 20857

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

149736

PAGE 2

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This Laboratory is accredited by the National Association of Testing Authorities, Australia, for:
- Chemical Testing of Textiles & Related Products
- Mechanical Testing of Textiles & Related Products
- Heat & Temperature Measurement

Accreditation No. 993
Accreditation No. 995
Accreditation No. 1356

The tests reported herein have been performed in accordance with its terms of accreditation. Samples, and their identifying descriptions have been provided by the client unless otherwise stated. AWTa Ltd makes no warranty, implied or otherwise, as to the source of the tested samples. The above test results relate only to the sample or samples tested. This document shall not be reproduced except in full and shall be rendered void if amended or altered. This document, the names AWTa Textile Testing and AWTa Ltd may be used in advertising providing the content and format of the advertisement have been approved in advance by the Managing Director of AWTa Ltd.



0204/5/05

APPROVED SIGNATORY

MICHAEL A. JACKSON B.Sc.(Hons)
MANAGING DIRECTOR



Environmental Certification Scheme

Licensee TUFTMASTER CARPETS PTY LTD

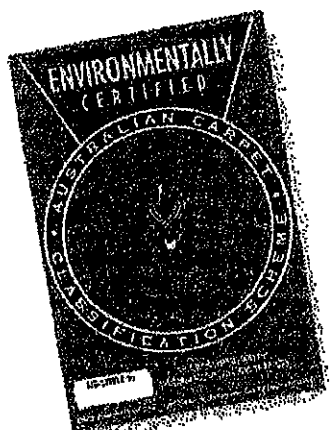
Licence Number 1018

Carpet Names LUMINARY 40, WENTWORTH 40

Label Number 93038

Environmental Certification
Approved 26/11/2008

ACCS Contract Grading	CHD	***
ACCS Residential Grading	REHD2	*****
Suitable for Stairs	<input checked="" type="checkbox"/>	



Office Number 01071

Certificate printed 26 November 2008

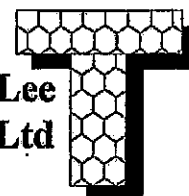
Allan Firth



Allan Firth
Secretary ACCS



Administered by the Carpet Institute of Australia Limited ABN 11 006 829 303
PO Box 7172, St Kilda Road, Melbourne Victoria 8004 Tel: (03) 9804 5559 • Fax: (03) 9804 5560
Email: info@carpetoz.com.au • www.carpetinstitute.com.au



Tony Lee
Tile Pty Ltd

Tiling Certificate of Compliance

Subcontractor: Tony Lee Tile Pty Ltd
ABN: 86 134 330 519

QUASAR CONSTRUCTIONS

20 JUL 2010

RECEIVED

Client:

Company Name: Quasar Construction

ABN: 86069 663 403

Project:

Name: The Corso Manly

Site Address: 15-15a-17 The Corso Manly NSW 2095

Subcontract works or products


Area	Product
wet Area wall	SKhemo 2310 KV (300x600)
Floor	SKhemo 25061 (150x150)
External wall	SKhemo 23351 (100x600)
Walk way and stair	SKhemo 20503 (500x500)

Warranty period is 5 years from the date of issue indicated on this certificate.

The subcontractor warrants that all work performed and materials supplied comply with the specifications and Australian Standards and the Building code of Australia; BS 6431, AS 2358, AS 3972, AS CA27.

The subcontractor promises to replace or make good to the reasonable satisfaction of the client, any of the works or products which, within the warranty period, are found to be of lower standard or quality.

Signed


Tony Lee
Lic. No. 163150C

Date of Issue 15 / 7 / 2010

Tony Lee
Tile Pty Ltd



Waterproofing Certificate of Compliance

Subcontractor: Tony Lee Tile Pty Ltd
ABN: 86 134 330 519

QUASAR CONSTRUCTIONS

20 JUL 2010

RECEIVED

Client:

Company Name: Quasar

ABN: 86 069 663 403

Project:

Name: The Corso manly

Site Address: _____

Waterproofing works and products:


Date	Area	Membrane	Recommended glue
15/6/2010	Wet Area	Thermco	Cement Base

Warranty period is twelve (12) years from the actual completion date of the whole of the works.

The subcontractor warrants that all waterproofing performed and materials used on the aforementioned projects on the specified dates conforms to the Australian Standards 3740.

The subcontractor promises to make good to the reasonable satisfaction of the client, any of the waterproofing which, within the warranty period, are found to be of lower standard or quality.

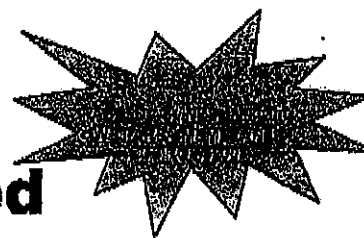
Signed


Tony Lee
Lic. No. 163150C

Date 15/7/2010

TREMCO

Vulkem Non-Exposed Membrane



02/05
2 Pages

PRODUCT
DATA
SHEET

ONE PART URETHANE WATERPROOFING MEMBRANE

Key Benefits Summary

- ☐ Permanently flexible 600%
- ☐ Meets requirements of AS3740-2004
- ☐ Compatible with TREMmix ceramic tile adhesive
- ☐ Primerless single pack product
- ☐ Fast curing
- ☐ Compatible with Metz C26 tile adhesive
- ☐ High strength and puncture resistant
- ☐ Vertical and horizontal applications
- ☐ Easy to apply
- ☐ Resistant to range of chemicals and pollutants

PRODUCT INFORMATION

DESCRIPTION

Vulkem Non-Exposed Membrane is a single pack elastomeric, moisture curing high tensile strength and tough curing polyurethane membrane. It cures to form a rubber membrane surface that provides watertight substrates.

Vulkem Non-Exposed Membrane may be used to apply a seamless, monolithic waterproof membrane to concrete substrates, AC sheeting, compressed, timber decks which are well anchored and primed. Simple, easy to follow procedures and use of conventional equipment and tools or spray equipment permit fast, sure and secure application.

BASIC USES

For :

- | | |
|--|--|
| <input type="checkbox"/> Wet Areas | <input type="checkbox"/> Laundries |
| <input type="checkbox"/> Roof Terraces | <input type="checkbox"/> Kitchens |
| <input type="checkbox"/> Decks | <input type="checkbox"/> Concrete Substrate Plazas |
| <input type="checkbox"/> Balconies | <input type="checkbox"/> Shower Recesses |

USAGE GUIDELINES

One part urethane, Vulkem Non-Exposed Membrane bonds firmly to clean, dry concrete and well anchored wood substrates. It retains its integrity even if substrate movement causes hairline cracks of up to 1.5mm. If cut or damaged, Vulkem Non-Exposed Membrane will prevent water migration between it and its substrate. Vulkem Non-Exposed Membrane can be finished after a 48-72 hours cure at temperatures over 15.6°C. A Quick Cure Catalyst can be utilized for a fast track application procedures.

SUBSTRATE PREPARATION

- ☐ Concrete should be cured for 21-28 days
- ☐ Remove all dirt, dust, plaster, cement droppings, protrusions, oil and other contaminants. Fill screw holes
- ☐ To the wall/floor junctions and the floor/hob, hob/wall joints within the shower tray, apply fillet bead of Tremco PU1 Polyurethane Sealant as a bond breaker. Apply sealant around floor penetrations, tap and shower rose and other discontinuities. Floor wastes in concrete shall be cut level with the floor. For sheet flooring, leak control flanges shall be fitted and fully sealed.
- ☐ Cracks: non movement and hairline cracks may be filled with a brush coat of Vulkem Non-Exposed Membrane. Movement cracks to be routed out, cleaned and filled with Tremco PU1 Polyurethane Sealant.

PRIMING

- ☐ Vulkem Non-Exposed Membrane is generally a primerless membrane on most clean substrates
- ☐ All wood surfaces are to be primed using Vulkem Primer 171
- ☐ All metal surfaces are to be primed using Vulkem Primer 181
- ☐ Existing urethane membrane surfaces are to be primed using Vulkem Primer 191.

METHOD OF APPLICATION

- ☐ Mix the Vulkem Non-Exposed Membrane to ensure no settlement of the material is in the bottom of the pail and the colour of the material is consistent with no streaks or striations
- ☐ All internal wet areas should be waterproofed to meet AS 3740-2004 requirements
- ☐ Apply one coat of Vulkem Non-Exposed Membrane at specified coverage rates using both brush, roller or squeegee
- ☐ Ensure the membrane is turned down into the floor waste or well sealed around the leak control flange and other penetrations. Ensure flashing angles are properly sealed across doorways. Check for cracks in the membrane when dry and rectify
- ☐ Tremco TREMmix Tile Adhesive should be used to adhere tiles directly to membrane
- ☐ A light broadcast of sand into the Vulkem Non-Exposed Membrane may be introduced when adhering directly to the membrane

COVERAGE

- ☐ Approximately 1.2L/m² at a dry film thickness of 1.0mm (approximately 16m² per 18.9L pail) to achieve the waterproof requirements as stated in AS 3740-2004
- ☐ Approximately 0.6L/m² at a dry film thickness of 0.5mm (approximately 32m² per 1.89L pail) to achieve water resistant requirements as stated in AS 3740-2004 (vertical applications).

TREMCO

Vulkem

Non-Exposed

Membrane

TECHNICAL INFORMATION

TYPICAL PHYSICAL PROPERTIES

Property	Test Method	Result
Tensile	ASTM D-412	2MPa
Elongation	ASTM D-412	600%
SI100	ASTM D-412	414kPa
Hardness (Shore A)	ASTM C-661	20
Peel Strength	ASTM C-784	30lbs, 100% coh on concrete
Permeability	E-96	0.12mtrdc perms

UL 790 CLASS A FIRE RATING

CAN/ULC - S102.2 - M88 CLASS A RATING

Wet Material Properties

Non Volatile Content	ASTM D-1353	76% min
Viscosity, cps	Brookfield HBT	8-10,000
Cure Time @ 25°C - 50% R.H	ASTM D-1840	48 Hours max.
Flash point	Seisflash	44.4°C

AVAILABILITY

Vulkem Non-Exposed Membrane is available through your nearest Tremco office.

HEALTH AND SAFETY PRECAUTIONS

Material Safety Data Sheet must be read and understood before use.

TECHNICAL SERVICE

TREMCO has a team of qualified Technical Sales Representatives who provide assistance in the selection and specifications of products. For more detailed information or service and advice call Customer Service on (02) 9638 2755 or fax (02) 9638 2955.

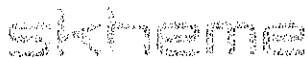
GUARANTEE/WARRANTY

We warrant our products to be free of defects and manufactured to meet published physical properties when tested according to applicable specifications and TREMCO standards.

Under this warranty we will provide at no charge, product to replace any product proven to be defective when applied in accordance with our written instructions and in applications recommended by TREMCO as being suitable for this product.

All claims concerning product defects must be made within 12 months of shipment. Absence of such claims in writing during this period will constitute a waiver of all claims with respect to such product. This warranty is in lieu of any and all other warranties expressed or implied.

TREMCO PTY LTD ABN 25 000 024 064
Unit 1, 2 Park Rd, RYDALMERE NSW 2116 Australia
Tel: (02) 9638 2755 Fax: (02) 9638 2955
tremco@tremco.com.au



To: Quasar Construction
Att: Eric
Date: Tuesday, July 20, 2010
Pages: 2 (including the cover page)

RE: TECHNICAL SPECIFICATIONS / SLIP RATINGS

Dear Eric,

We refer to your email seeking technical specifications in relation to the **SKM-80503-80483** series. Please find attached the test results providing slip ratings in relation to the tiles.

We note that we are providing this technical information without any information being provided by you as to the ultimate environment in which these tiles are to be placed. The suitability of these tiles for the environment in which they are to be placed is your responsibility.

While these tiles may achieve an acceptable rating in a laboratory test, it is quite probable that the performance in-situ will be less than expected due to grouting, wear and tear, build up of residue or unforeseen circumstances. These results are therefore to be seen as a relative guide to estimate the merits of one tile versus another. Please read the following carefully, and also refer to the Australian Standards (table 3), which indicates locations that correspond to the relevant Pendulum and/or Ramp ratings.

We note even if these results have a value which may appear acceptable, these results must not be viewed to mean that Skheme Pty Ltd is providing any sort of warranty against the damages for slipping on tiles when wet.

You should at all times provide your client with notification that all ceramics tiles can be slippery, especially when wet. Variables such as floor levels, water, fat, oil and other contaminants affecting the tiles are beyond the control of the supplier. Many tiles, which can be slippery when wet, are commonly used in wet areas, such as bathrooms. Customers should be aware of the potential danger of wet ceramic tiles and seek advice from the relevant consultants as to the level of slip-resistance of any particular tile, and its suitability for the intended application, as no liability can be accepted for personal injury or accidents arising from slipping or falling etc, under any circumstances.

Should you have any further enquiries please do not hesitate to contact the undersigned.

Kind regards,
Skheme Pty Ltd

Kim Lindsey
Commercial Sales Support

ABN 17 102 818 606
713 Darling Street Rozelle NSW 2039 Sydney Australia
T +612 8755 2300 F +612 8755 2350 www.skheme.com



Industrial Research Services

Manufacturing & Materials Technology, Graham Road (PO Box 56), Highett, Victoria, Australia 3190
Telephone: 61 3 9252 6000 Facsimile: 61 3 9252 6244 Email: tiles@csiro.au Web: <http://www.cmmt.csiro.au>

Registered Testing Authority - Building Code of Australia

26 March 2007

Our Ref. EN13 / 52 03/0212

TEST REPORT No. 3841.2s

Requested by: Pamesa Ceramics S.L.
on (date): 22 March 2007
Manufacturer: Pamesa
Product Desc.: Buxi Series, Dust-Pressed Ceramic Tiles, Bush Hammered Finish
500x500mm

Sampling details:
Where: Delivered
Date: 22 March 2007
By whom: 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/NZS 4586:2004	Slip resistance classification of new pedestrian surface materials Appendix A: WET Pendulum (Four S slider):		
	Mean BPN:	60	V
AS/NZS 4586:2004	Slip resistance classification of new pedestrian surface materials, Appendix D: OIL-WET Ramp		
	Mean overall acceptance angle:	34.1°	R 12

In order to interpret the classifications, please refer to Standards Australia Handbook 197, 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.



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Telephone: 61 3 9252 6000. Facsimile: 61 3 9252 6244. Email: tiles@csiro.au. Web: <http://www.cmnt.csiro.au>

REPORT NO: 3841.2s
ISSUE DATE: 26 March 2007
MANUFACTURER: Pamesa
PRODUCT DESC: Buxi Series, Dust-Pressed Ceramic Tiles, Bush Hammered Finish
500x500mm

Page 2 of 4

SLIP RESISTANCE CLASSIFICATION OF NEW PEDESTRIAN SURFACE MATERIALS

WET PENDULUM TEST METHOD

TEST CARRIED OUT IN ACCORDANCE WITH
AS/NZS 4586:2004 (Appendix A)

Test Date: 26 March 2007

RESULTS:	Location:	Slip Resistance Laboratory	Rubber slider used: Four S
	Sample:	Unfixed	Conditioned with grade P400 paper, dry.
	Cleaning:	Acetone	
	Temperature:	23°C	

Pendulum Friction Tester: Stanley (S/N: 9234, calibrated 13/6/05)
Test conducted by: David Weeks

	Specimen				
	1	2	3	4	5
Last 3 swings	61	59	62	60	61
	60	59	62	60	59
	60	59	61	60	59
Averages	60	59	62	60	60

Mean BPN : 60

CLASS :

V



Industrial Research Services

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Telephone: 61 3 9252 6000 Facsimile: 61 3 9252 6244 Email: tiles@csiro.au Web: <http://www.cmmt.csiro.au>

REPORT NO: 3841.2s
ISSUE DATE: 26 March 2007
MANUFACTURER: Pamesa
PRODUCT DESC: Buxi Series, Dust-Pressed Ceramic Tiles, Bush Hammered Finish
500x500mm

Page 3 of 4

SLIP RESISTANCE CLASSIFICATION OF NEW PEDESTRIAN SURFACE MATERIALS

OIL-WET RAMP TEST METHOD

TEST CARRIED OUT IN ACCORDANCE WITH
AS/NZS 4586:2004 (Appendix D)

Test Date: 26 March 2007

Location: Slip Resistance Laboratory

Sample Fixed

Joint width: mm

Surface structure: ☐ Smooth
☒ Profiled
☐ Structured

RESULTS

Mean overall acceptance angle: 34.1 °

Displacement space: not tested

CLASSIFICATION:

Slip Resistance Assessment Group:

R 12

Displacement Space Assessment Group:

-



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REPORT NO: 3841.2s
ISSUE DATE: 26 March 2007
MANUFACTURER: Pamesa
TILE DESC: Buxi Series, Dust-Pressed Ceramic Tiles, Bush Hammered Finish
500x500mm

Page 4 of 4

Date and Place 26 March 2007, Highett, Vic

Name, Title and Digital Signature:

A handwritten signature in black ink, appearing to read "David Weeks", written in a cursive style.

DAVID WEEKS
Technical Officer

Tel: 61 3 92526064
Fax: 61 3 92526011
Email: David.Weeks@csiro.au

Consulting services are available if further detailed analysis of the test results are required.

PR:W260307-12:43:45



Industrial Research Services

Manufacturing & Materials Technology, Graham Road (PO Box 56), Highett, Victoria, Australia 3190
Telephone: 61 3 9252 6000 Facsimile: 61 3 9252 6244 Email: tiles@csiro.au Web: <http://www.cmmt.csiro.au>

REPORT NO:	3841.2s	Page 4 of 4
ISSUE DATE:	26 March 2007	
MANUFACTURER:	Pamesa	
TILE DESC:	Buxi Series, Dust-Pressed Ceramic Tiles, Bush Hammered Finish 500x500mm	

Date and Place 26 March 2007, Highett, Vic

Name, Title and Digital Signature:

A handwritten signature in black ink, appearing to read 'David Weeks', written over a light grey rectangular background.

DAVID WEEKS
Technical Officer

Tel: 61 3 92526064
Fax: 61 3 92526011
Email: David.Weeks@csiro.au

Consulting services are available if further detailed analysis of the test results are required.

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REPORT NO: 3841.2s Addendum
ISSUE DATE: 26 March 2007
MANUFACTURER: Pamesa
PRODUCT DESC: Buxi Series, Dust-Pressed Ceramic Tiles, Bush Hammered Finish
500x500mm

DETERMINATION OF Rz SURFACE ROUGHNESS

(Using a Taylor-Hobson Surtronic Duo roughness meter using a 0.8mm cut off length)

Test Date: 26 March 2007

RESULTS

Location: Slip Resistance Laboratory

Rz values

1	52.5
2	37.5
3	39.0
4	47.3
5	53.6
6	51.9
7	48.9
8	68.1
9	52.9
10	57.6

Surface Roughness (Rz) mean = 50.9 microns

BS 7976:2002, Pendulum Testers, requires a different test foot preparation (lapping paper) for pedestrian surfaces that have a Rz roughness of less than 15 microns. This lapping paper tends to reduce the pendulum result, sometimes appreciably. CSIRO recommends the use of this procedure (CSIRO COF1) as an adjunct to AS/NZS 4586. It helps to discriminate among products that have marginal wet slip resistance and to identify those that may be dangerous if wet.

The measurement of the various aspects of surface roughness is complex given the number of potential roughness parameters. While there is still some uncertainty as to exactly what type of roughness needs to be measured, peak-to-trough roughness (Rz) gives a useful guide to the likely slip resistance in wet conditions. Research has suggested that hard floors need to have a slightly higher Rz roughness than polymeric floors for the same degree of safety in wet conditions, but whatever flooring material is used an Rz roughness value of at least 10 microns is required where wet slip resistance may be required. In circumstances where wetness is normal or expected, this figure should be increased by a factor of 2 or more.

Greater peak surface roughnesses are likely to be required where floors slope or where the floor is likely to become contaminated with high viscosity liquids.



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500x500mm

Page 2 of 4

SLIP RESISTANCE CLASSIFICATION OF NEW PEDESTRIAN SURFACE MATERIALS

WET PENDULUM TEST METHOD

TEST CARRIED OUT IN ACCORDANCE WITH
AS/NZS 4586:2004 (Appendix A)

Test Date: 26 March 2007

RESULTS:	Location:	Slip Resistance Laboratory	Rubber slider used: Four S
	Sample:	Unfixed	Conditioned with grade P400 paper, dry
	Cleaning:	Acetone	
	Temperature:	23°C	

Pendulum Friction Tester: Stanley (S/N: 9234, calibrated 13/6/05)
Test conducted by: David Weeks

	Specimen				
	1	2	3	4	5
Last 3 swings	61	59	62	60	61
	60	59	62	60	59
	60	59	61	60	59
Averages	60	59	62	60	60

Mean BPN : 60

CLASS :

V



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REPORT NO: 3841.2s
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MANUFACTURER: Pamesa
PRODUCT DESC: Buxi Series, Dust-Pressed Ceramic Tiles, Bush Hammered Finish.
500x500mm

Page 3 of 4

SLIP RESISTANCE CLASSIFICATION OF NEW PEDESTRIAN SURFACE MATERIALS

OIL-WET RAMP TEST METHOD

TEST CARRIED OUT IN ACCORDANCE WITH
AS/NZS 4586:2004 (Appendix D)

Test Date: 26 March 2007

Location: Slip Resistance Laboratory

Sample Fixed

Joint width: mm

Surface structure: ☐ Smooth
☒ Profiled
☐ Structured

RESULTS

Mean overall acceptance angle: 34.1 °

Displacement space: not tested

CLASSIFICATION:

Slip Resistance Assessment Group:

R 12

Displacement Space Assessment Group:

-



Industrial Research Services

Manufacturing & Materials Technology, Graham Road (PO Box 56), Highett, Victoria, Australia 3190
Telephone: 61 3 9252 6000 Facsimile: 61 3 9252 6244 Email: tiles@csiro.au Web: <http://www.cmmil.csiro.au>

REPORT NO:	3841.2s	Page 4 of 4
ISSUE DATE:	26 March 2007	
MANUFACTURER:	Pamesa	
TILE DESC:	Buxi Series, Dust-Pressed Ceramic Tiles, Bush Hammered Finish	
	500x500mm	

Date and Place 26 March 2007, Highett, Vic

Name, Title and Digital Signature:

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DAVID WEEKS
Technical Officer

Tel: 61 3 92526064
Fax: 61 3 92526011
Email: David.Weeks@csiro.au

Consulting services are available if further detailed analysis of the test results are required.

PR:W260307-12:43:45



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Telephone: 61 3 9252 6000 Facsimile: 61 3 9252 6244 Email: tiles@csiro.au Web: <http://www.cmmmt.csiro.au>

REPORT NO: 3841.2s Addendum
ISSUE DATE: 26 March 2007
MANUFACTURER: Pamesa
PRODUCT DESC: Buxi Series, Dust-Pressed Ceramic Tiles, Bush Hammered Finish
500x500mm

DETERMINATION OF Rz SURFACE ROUGHNESS

(Using a Taylor-Hobson Surtronic Duo roughness meter using a 0.8mm cut off length)

Test Date: 26 March 2007

RESULTS

Location: Slip Resistance Laboratory

Rz values

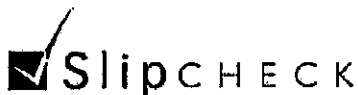
1	52.5
2	37.5
3	39.0
4	47.3
5	53.6
6	51.9
7	48.9
8	68.1
9	52.9
10	57.6

Surface Roughness (Rz) mean = 50.9 microns

BS 7976:2002, Pendulum Testers, requires a different test foot preparation (lapping paper) for pedestrian surfaces that have a Rz roughness of less than 15 microns. This lapping paper tends to reduce the pendulum result, sometimes appreciably. CSIRO recommends the use of this procedure (CSIRO COF1) as an adjunct to AS/NZS 4586. It helps to discriminate among products that have marginal wet slip resistance and to identify those that may be dangerous if wet.

The measurement of the various aspects of surface roughness is complex given the number of potential roughness parameters. While there is still some uncertainty as to exactly what type of roughness needs to be measured, peak-to-trough roughness (Rz) gives a useful guide to the likely slip resistance in wet conditions. Research has suggested that hard floors need to have a slightly higher Rz roughness than polymeric floors for the same degree of safety in wet conditions, but whatever flooring material is used an Rz roughness value of at least 10 microns is required where wet slip resistance may be required. In circumstances where wetness is normal or expected, this figure should be increased by a factor of 2 or more.

Greater peak surface roughnesses are likely to be required where floors slope or where the floor is likely to become contaminated with high viscosity liquids.



Slip Testing & Tile Consulting
ABN 80 118 534 768

27 Beverley Crescent
Marsfield NSW 2122
Phone 0416 224 460
Fax 02 9889 3004

19 November 2007

Slip Check Ref C81-R215

Test Report No. R215

Slip resistance classification of new pedestrian surface materials
AS/NZS 4586:2004 Appendix A (Wet Pendulum Test)

Requested by: Skheme Pty Ltd
Product Manufacturer: Studio Italia
Description: Uptown Series – Matt Finish (dark chocolate)
Dust pressed vitrified ceramic tile, 300 x 300mm

Note: Please refer to Standards Australia Handbook 197:1999, *An introductory guide to the slip resistance of pedestrian surface materials* for guidance on the interpretation of these results. This report relies on the samples and information provided by the client. Slip Check Pty Ltd cannot accept responsibility for the actions taken due to the information provided within this report. The slip resistance of new surfaces can change significantly by processes including but not limited to; installation, surface treatments, maintenance, wear and contamination. Regular monitoring is recommended to assess changes in slip resistance.

Results:

Test conducted according to: AS/NZS 4586:2004 Appendix A
Location: Slip Check Pty Ltd Test Facilities, Marsfield.
Pendulum Friction Tester: Stanley London (SN 0601; Calibrated 24 Jan 2006)
Conducted by: Carl Strautins

Date:	19 November 2007	Temperature:	24°C
Sample:	Unfixed	Cleaning:	Water
Rubber slider used:	Four S	Conditioned:	Grade P 400 paper dry

Specimen	1	2	3	4	5
Mean BPN of last 3 swings	39	39	38	40	36

Mean BPN of Sample: 39

Class: X

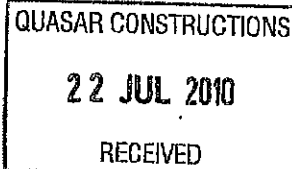
Carl Strautins
Principal Materials Scientist

Consulting services are available if further information is required

Project One Corporation Pty Ltd trading as PROJECT ONE CONTRACTING
798 Parramatta Rd
Lewisham, NSW 2049

Date: 22/07/2010

NBRSPartners
Level 3, 4 Glen Street
Milsons Point, Sydney 2061



15-17 The Corso, Manly
Roofing, Sarking/Insulation & Access Roof Hatch Installation Certification

ATTENTION:

Dear

I, JAY FOX of PROJECT ONE CONTRACTING hereby certify that the Roof Sheeting, Sarking & Insulation for the MANLY CORSO have been installed in accordance with the manufacturer's instructions, drawings, specifications and conform to Australian Standards and BCA Requirements. Installation of the access hatch and stair ladder conforms to AS1657. Refer to attached manufacturer's documentation for Fire Hazard Testing.

The information contained in this statement is true and accurate to the best of my knowledge

Regards,

Name of Contractor:

JAY FOX

Company:

PROJECT ONE CONTRACTING

Address:

798 PARRAMATTA ROAD
LEWISHAM

Phone Number:

02-9560 6274

Fax Number:

02 9560 6218

Signature



Date

22 JUL 2010

27th October 2009

Email ; cp@dixgardner.com.au

Att; Mr C Parkinson

Dear Carl,

**RE; BCA COMPLIANCE STATEMENT
15-17 THE CORSO MANLY
DA No; 17/09**

We have reviewed the construction documents issued for construction certificate approval and confirm their general compliance with the relevant sections of the BCA.

Included in this documentation is the provision for compliant disabled access to the retail tenancies and section J roof fabric and glazing.

Also note the windows have not been increased in area and no increase in fire load occurring. We have received no conditions or request from the council indicating any variance to this requirement.

Your independent detail inspection of the documentation should be undertaken to verify these statements prior to your certification.

Yours Sincerely
NBRS+ Partners



GRAHAM NICHOLAS
General Manager
Reg; Architect 3159