

4th September 2009

The General Manager
Manly Council
PO Box 82
Manly NSW 1655

Attention: Planning Department

Dear Sir/Madam,

**RE: DA NO: 196/08A (S96) & (10831 of 2008 LAND & ENVIRONMENT COURT
OF NSW)
IVANHOE HOTEL, 23-29 THE CORSO, MANLY NSW 2095**

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

The certificate relates to the alterations to the existing hotel facility at the above address and has been issued for - Stage 1: Internal alterations for part of the Ground Floor (No. 29) for a TAB/Gaming room and fitout of the bar.

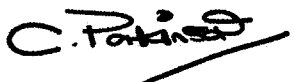
Together with the Certificate, we have enclosed the following for Council's record:

1. Interim Occupation Certificate Application Form
2. Interim Fire Safety Certificate
3. 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.

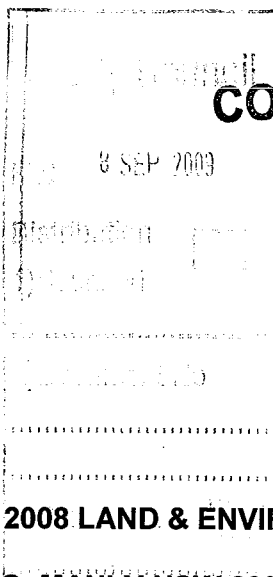
If you have any queries regarding the above please do not hesitate to contact the undersigned on 9279 3657 during business hours.

Yours faithfully,



Carl Parkinson
Dix Gardner Pty Ltd

CC:- - Hilrok Properties Pty Ltd.
- Ivanhoe Hotel, The Corso Manly



COUNCIL COPY

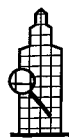
8 SEP 2009

ASSTANT

\$ 30

R. 641487

8-9-09



DixGardner

PTY. LTD.

Building Certifiers
Strata Plan Certifiers
Building Regulations
Consultants
Fire Safety Consultants

Occupation Certificate

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

COUNCIL COPY

Certificate No.:	334/09
Subject land: Lot and DP:	Ivanhoe Hotel, 23-29 The Corso, Manly NSW 2095 Lot 1, DP 877793 & Lot 9, Sec B, DP 192310
Applicant: Address:	Hilrok Properties Pty Ltd. C/- The Ivanhoe Hotel 23-29 The Corso, Manly NSW 2095
Owner:	Henroth Investments Pty Ltd.
Type of Certificate:	Interim
Determination: Date of Determination:	Approved 4/09/2009
Attachments:	1. Other certificates relied upon 2. Interim Fire Safety Certificate
Whole/Part of building works: Description of part (if applicable):	Part Ground Floor - No. 29 (partial area) for the TAB and Gaming Room only. (Stage 1)
BCA Classification:	Class 9b
DA No.:	196/08a (incorporating S.96 amendments – Council) & 10831 of 2008 (Land & Environment Court of NSW).
Issued by:	Manly Council
Construction Certificate No.: Date:	215/09 3/06/2009
Accreditation Level: Registration No.: Accreditation Body:	A1 - Accredited Certifier - Building Surveyor Grade 1 BPB0092 Building Professionals Board

I certify that:

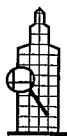
- the health and safety of the occupants of the building have been taken into consideration where an interim occupation certificate is being issued, and
- a current development consent or complying development certificate is in force for the building, and
- if any building work has been carried out, 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

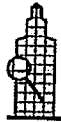
Date: 4/09/2009



INSPECTION RECORD (STAGE 1- No 29 ground floor)

Address:	Ivanhoe Hotel, 23-29 The Corso, Manly NSW 2095		
DA No.:	196/08 (S96) & 10831/08 L&EC	CC No.:	215/09
AC/PCA:	Lyll Dix - BPB0092	DG Project No:	09/0281
Inspection Type:	Pre / 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) Pre – CC inspection (Regulation 143b)	Yes ☒	Missed ☐	N/A ☐	01/06/2009	LD/CP
(b) prior to covering any stormwater drainage connections, and	Yes ☐	Missed ☐	N/A ☒		
(c) after the building work has been completed and prior to any occupation certificate.	Yes ☒	Missed ☐	N/A ☐	24/08/2009 03/09/2009	LD/CP



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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 HARROK HOTEL GROUP TRAS EVANHORE HOTEL.
Address 27 THE CORSO
MANLY 2095
Signature & Date A 20/8/09.

OWNER

Name HENROTH INVESTMENTS P/L.
Address SUITE 801 46-56 KIPPAY ST
SURRY HILLS 2010

SUBJECT LAND

Address 27 THE CORSO
MANLY 2095
Lot & DP _____

PROPOSAL

Description Ground floor - No 29 (partial)
for the TAB / GAMING ROOM
Part or Whole
of Building PART

DEVELOPMENT CONSENT

Not applicable for applications for CDC

DA No. 196/080 596/0000 Date of Determination 17/12/08
+ 10831/2008 (LIVE COURT)

CONSTRUCTION/COMPLYING DEVELOPMENT CERTIFICATE

Construction or
Complying
Development
Certificate No 215/09

Date 03/06/09

2nd September 2009

Dix Gardner Pty Ltd
Level 4, 155 Castlereagh St
Sydney NSW 2000

Attention: Carl Parkinson

Re: Ivanhoe Hotel 27 -29 The Corso, Manly

Dear Carl,



FDC Construction & Fitout Pty Ltd
ABN 44 120 295 034
22-24 Junction Street
Forest Lodge NSW 2037
P.O. Box 425
Camperdown NSW 1450
Telephone: 02 9566 2800
Facsimile: 02 9566 2922
Website: www.fdcbuilding.com.au



Please be advised that all works for the above development have been carried out in accordance with the following:

- development consent
- all relevant Australian Standards
- In accordance with the Building Code of Australia.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Gareth Wynne'.

Gareth Wynne
Project Manager
FDC Construction & Fitout Pty Ltd

Hilrok Hotel Group Pty Ltd

17 The Corso, Manly, Sydney, 2095 ABN: 57 001 173 673

Phone: 02 99772418 Fax: 02 99772410

Mobile: 0412 105566

Email: timpeterson@hilrokproperties.com.au

20th August 2008

Dix Gardner
PO box 1809
NEWCASTLE NSW 2300

RE: Interim Occupational Certificate stage 1(Ground Floor – No: 29, The Corso Manly - TAB & Gaming Room)

Dear Sir,

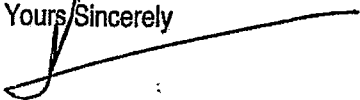
I confirm that all required Development Consent Conditions have been completed and the following conditions will be met.

15. (a) Condition 2: I confirm the final plan of management will be submitted to the council incorporating all of the requirements of this condition; in relation to this stage I confirm sound levels to the outdoor smoking area will be monitored after 10pm

(b) Condition 9; I confirm the entry doors and windows to the TAB area will be closed/locked during 11pm to 9am every day

(c) Condition 15: I confirm compliance with AS1428.1/2 for the gaming and TAB areas and compliant disabled access is maintained to the existing hotel part for the use of the disabled WC and lift to other floors.

Yours/Sincerely



Tim Peterson
Director

Fire Safety Schedule

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

Premises: 29-33 The Corso, Manly NSW 2095
(Existing Commonwealth Bank building, part ground floor use at No 29 for the Ivanhoe Hotel)

Development Consent No.: 196/08 / 10831 of 2008 Court Order

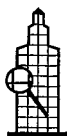
Construction Certificate No.: 215/09

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
A/C Trip	Standard of Performance to be obtained from Building Management	✓	✓
Automatic fire suppression system (sprinklers) Occupant Warning System	BCA Spec. E1.5, Clause 8 and AS 2118-1982/1999, BCA Spec E2.2a & E2.2b (ground floor part for the Ivanhoe Hotel)	✓	✓
Emergency Lighting	BCA Clauses E4.2/E4.4 & AS 2293.1-1987/2005.	✓	✓
Exit Signs (illuminated)	BCA Clauses E4.5/NSW E4.6/E4.8 and AS 2293.1-1987/2005	✓	✓
Fire Alarm Communication Link	AS 1670.3-1997 & AS 4428.6-1997 AS1670.1-2004, BCA CI C3.5 – (Smoke detectors for automatic closing of fire doors to fire walls)	✓	✓
Fire dampers	Standard of Performance to be obtained from Building Management	✓	
Fire doors	BCA CI C3.8, C3.5 (Fire doors to firewalls) and AS1905.1- 1982/2005	✓	✓
Fire seals (protecting openings in fire resisting components of the building)	Standard of Performance to be obtained from Building Management. BCA CI C3.15	✓	✓
Fire Hydrant systems (Street fire Hydrant)	BCA CI E1.3 & AS2419.1-2005		✓
Hose reel system	BCA Clause E1.4 & AS 2441-1988/2005	✓	✓
Mechanical air handling system	BCA CI E2.2 (Shutdown), F4.5(b) & AS1668.1/2 -1998/1991		✓
Paths of travel for stairways & Passageways	EP&A Regulations 2000, clauses 184-186.		✓
Portable fire extinguishers & Fire Blankets	BCA Clause E1.6 and AS 2444-1995/2001	✓	✓

Essential Fire and other Safety Measures	Standard of Performance	Existing	Proposed
Required (automatic) Exit Doors	BCA Clause D2.19/D2.21 & AS 4085-1992	✓	
Warning and Operational Signs	Standard of Performance to be obtained from Building Management	✓	



Fire Safety Schedule

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

Premises: Ivanhoe Hotel, 25-27 The Corso, Manly NSW 2095
(Existing Hotel – no works to this part for stage 1 CC
(215/09 apart from essential fire services adjustments
as below in relation the fire wall separation/openings
between No 27 -29).

Development Consent No.: 196/08 / 10831 of 2008 Court Order

Construction Certificate No.: 215/09

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	AS 1670-1995/2004, BCA CI C3.5 – (Smoke detection for automatic closing of fire doors to fire wall)	✓	✓
Automatic fire suppression system (sprinklers)	AS 2118.1-1995/1999, BCA Spec E1.5, Spec E2.2a & E2.2b	✓	✓
Emergency Lighting	AS 2293.1-1995	✓	
Exit Signs	AS 2293.1-1995	✓	
Fire Blankets	AS 2444-2001	✓	
Fire doors	AS1905.1-1997/2005, BCA CI C3.5 – (Fire doors to fire wall)	✓	✓
Hose reel system	AS 2441-1988	✓	
Portable fire extinguishers	AS 2444-2001	✓	

Fire Safety Certificate

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

Type of Certificate

☒ Interim Final

Owner / Agent

I, Gareth Wynne

Address

of 22-24 Junction St, Forest Lodge 2037

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

Street

No 29 (ground floor part) The Corso, Manly

House/Unit No. or Building Name

Side of Street

Nearest Cross Street

Particulars of Building

Scope

☐ Whole ☒ Part

Description of Part (where applicable)

Ground floor part to No 29 The Corso, Manly

House/Unit No. or Building Name

Date of Assessment

Owner's Details

Name

Henroth Investments Pty Ltd

Address

Level 8, 46-56 Kippax St, Surry Hills 2010

Essential Fire and other Safety Measures	Standard of Performance
A/C Trip	Standard of Performance to be obtained from Building Management
Automatic fire suppression system (sprinklers) Occupant Warning System	BCA Spec. E1.5, Clause 8 and AS 2118-1982/1999, BCA Spec E2.2a & E2.2b (ground floor part for the Ivanhoe Hotel)
Emergency Lighting	BCA Clauses E4.2/E4.4 & AS 2293.1-1987/2005.
Exit Signs (illuminated)	BCA Clauses E4.5/NSW E4.6/E4.8 and AS 2293.1-1987/2005
Fire Alarm Communication Link	AS 1670.3-1997 & AS 4428.6-1997 AS1670.1-2004, BCA CI C3.5 – (Smoke detectors for automatic closing)

	of fire doors to fire walls)
Fire doors	BCA CI C3.8, C3.5 (Fire doors to firewalls) and AS1905.1- 1982/2005
Fire seals (protecting openings in fire resisting components of the building)	Standard of Performance to be obtained from Building Management. BCA CI C3.15
Fire Hydrant systems (Street fire Hydrant)	BCA CI E1.3 & AS2419.1-2005
Hose reel system	BCA Clause E1.4 & AS 2441-1988/2005
Mechanical air handling system	BCA CI E2.2 (Shutdown), F4.5(b) & AS1668.1/2 -1998/1991
Paths of travel for stairways & Passageways	EP&A Regulations 2000, clauses 184-186.
Portable fire extinguishers & Fire Blankets	BCA Clause E1.6 and AS 2444-1995/2001

Date of Certificate dated this day of 2nd of September 2009

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 Certificate

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

Type of Certificate

☒ Interim Final

Owner / Agent

I, Gareth Wynne

Address

of 22-24 Junction St, Forest Lodge 2037

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

Street

25-27 The Corso, Manly

House/Unit No. or Building Name

Side of Street

Nearest Cross Street

Particulars of Building

Scope

☐ Whole ☒ Part

Description of Part (where applicable)

Part of Ground floor area, adjustment to Fire services to other side of fire wall in relation to the use of the ground floor, No 29 The Corso.

House/Unit No. or Building Name

Date of Assessment

Owner's Details

Name

Hilok Properties Pty Ltd

Address

17 The Corso, Manly 2095

Essential Fire and other Safety Measures	Standard of Performance
Automatic fire detection and alarm system	AS 1670-1995/2004, BCA CI C3.5 – (Smoke detection for automatic closing of fire doors to fire wall)
Automatic fire suppression system (sprinklers)	AS 2118.1-1995/1999, BCA Spec E1.5, Spec E2.2a & E2.2b
Fire doors	AS1905.1-1997/2005, BCA CI C3.5 – (Fire doors to fire wall)

Date of Certificate

dated this day of

2nd September 2009

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.



PO BOX 252, BALGOWLAH NSW 2093
MOBILE 0418 225 778 OFFICE 9949 7250 FAX 9949 3520 EMAIL nekode@bigpond.net.au

Manly Council
1 Belgrave Street
Manly NSW 2095

24/08/2009

FIRE SAFETY CERTIFICATION

☒ FINAL ☐ INTERIM

RE: THE IVANHOE OF MANLY

I, Phillip Fagan of Fagan's Electrics, hereby certify that the installation of the following new fire safety measures has been performed by myself and complies with the standards specified.

EMERGENCY LIGHTING and EXIT SIGNS, comply with the requirements of AS 2293 and with the relevant building codes.

P. G. Fagan

PHILLIP FAGAN
Licence No EC16898
for and on behalf of
NEKODE PTY LTD T/A FAGANS ELECTRICS

cc FDC Construction & Fitout Pty Ltd



ABN: 75067793506

Final/Interim Fire Safety Certificate (Form 15)

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

CERTIFICATE

type of certificate

see note 1

X final

certificate

name owner/agent

I, Josh Crowder

of, Precision Fire Protection Services P/L

address

Unit 6, 10 Enterprise Close, West Gosford NSW 2250

certify that:

see note 2 assessment
requirements

(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.

see note 3 relevant fire safety
schedule

(b) The information contained in this certificate is, to the best of my knowledge and belief, true and accurate.

Identification of building

Ivanhoe Hotel Manly

Particulars of building

Part

description of part (where applicable)

29 The Corso Manly (Ground Level)

Date of assessment

1/09/09

Owner's details

Name

Hilrok Properties Pty Ltd

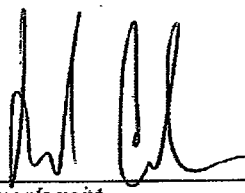
Address

27 The Corso Manly

Date of certificate

1/09/09

Signature


owner/agent

Essential Fire and Other Safety Measures		Standard of Performance
-	• Automatic fail safe devices	BCA-2006 Clause D2.21
-	• Automatic fire detection and alarm system	BCA-2006 Specification E2.2a
X	• Automatic fire suppression system (sprinklers)	BCA-2006 Clause E1.5 & AS 2118.1 – 1999
-	• Wall wetting sprinklers (drenchers)	AS 2118.2 - 1995
-	• Automatic fire suppression system (residential)	AS 2118.4 - 1995
-	• Combined sprinkler and hydrant system	AS2118.6 - 1995
-	• Electrical power to electrical operated essential fire and other safety measures	AS 3000 – 2000 and AS 1668.1 - 1998
-	• Emergency lifts	BCA-2006 Clause E3.4 and AS 1735.1 - 2003
-	• Emergency lighting	BCA-2006 Clause E4.2 & E4.4 & AS 2293.1 - 2005
-	• Emergency warning and intercommunication system	BCA-2006 Clause E4.9 and AS 1670.1 - 2004
-	• Exit Signs	BCA-2006 Clause E4.5 NSW E4.6, E4.8 & AS 2293.1 – 2005
-	• Fire control centres	BCA-2006 Clause E1.8
-	• Fire dampers	AS 1668.1, BCA C3.14 - 1998
-	• Fire doors	BCA-2006 Specification C3.4
-	• Fire hydrant systems	BCA-2006 Clause E1.3 and AS 2419.1 - 2005
-	• Fire seals (protecting openings in fire resisting components of the building)	BCA-2006 Clause C3.15
-	• Fire Shutters	BCA-2006 Part C3.4 and AS 1905.2 - 2005
-	• Fire Windows	BCA-2006 Clause C3.4
-	• Hose reel system	BCA-2006 Clause E1.4 and AS 2441 – 2005
-	• Lightweight construction	BCA-2006 Clause C1.8 and BCA Specification C1.8
-	• Mechanical air handling systems including pressurising systems	BCA-2006 Clause E2.2, NSW F4.5(b), F4.9, F4.11, F4.12
-	• Occupant Warning System	BCA-2006 Clause E2.2a, and AS1670 .1 2004
-	• Openings in fire-isolated lift shafts	BCA-2006 Clause C3.10
-	• Path of travel for stairways, passageway and ramps	BCA-2006 Part D1
-	• Portable fire extinguishers	BCA-2006 Clause E1.6 & AS 2444 – 2001
-	• Pressurising systems	BCA-2006 Table E2.2a and AS 1668.1 - 1998
-	• Required (automatic) exit doors	BCA-2006 Clause D2.19, D2.21 and D2.22
-	• Safety curtains in proscenium openings	BCA-2006 Clause NSW H101.10
-	• Smoke and heat vents	BCA-2006 Clause E2.4
-	• Smoke control systems	BCA-2006 Clause E2.2
-	• Smoke dampers	BCA-2006 Clause 2.5
X	• Smoke detectors and heat detectors	BCA-2006 Specification E2.2a and AS 1668.1 - 1998 and AS 1670 - 2004
-	• Smoke doors	BCA-2006 Specification C3.4
-	• Warning & operational signs	BCA-2006 Clause D2.23 & E3.3

- 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.
- Should you have any inquiries do not hesitate to contact **Precision Pty Ltd** on **43247088**.

Notes for completing Final/Interim 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,
- Complying development certificate for the erection of a building or a change of building use,
- 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.



NSW Office
PO Box 737
Balgowlah, NSW 2093

Unit 6, 252 Allambie Road,
Allambie Heights, NSW 2100

Phone: (02) 9907 0700
Fax: (02) 9907 0728

QLD Office
PO Box 562
Virginia BC, QLD 4014

Unit 5, 10 Fortune Street
Geebung, QLD 4034

Phone: (07) 3265 7781
Fax: (07) 3265 5976

18 August 2009
Our ref: AJ10-5442
ASJ:sb

600Z 9NV 6 L

Mr. Gareth Wynne
FDC Construction & Fitout
22-24 Junction Street
FOREST LODGE NSW 2037

Dear Gareth,

STATEMENT OF INSTALLATION COMPLIANCE RE: THE IVANHOE HOTEL MANLY

This is to verify that the Fire Stopping Materials listed below have been installed to the manufacturer's design & details and tested in accordance with AS1530.4-2005 Fire Resistance Test of Elements of Building Construction, AS4072.1-2005 and BCA Clause C3.15, providing a 120/120/120 FRL, (unless noted otherwise).

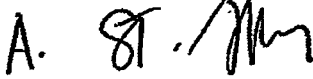
AREAS OF INSTALLATION:

LEVEL/AREA	METHOD USED	FRL	TEST REF.
GROUND FLOOR			
To fire spray nominated structural steel members	Cafco 300 Fire Spray to structural steel	120/-	BRANZ FRS414
BASEMENT LEVEL			
To fire seal nominated wall penetration containing Beer Pythons and PVC pipes	Firepro Pipe Wraps B305	-/180/180	Branz FP2210
	Hilti Intumescent CP611A Sealant	-/180/180	FSP 0670
	Trafalgar Fyreset mortar wall penetrations	-/180/-	Fire Research Pty Ltd NI 3589

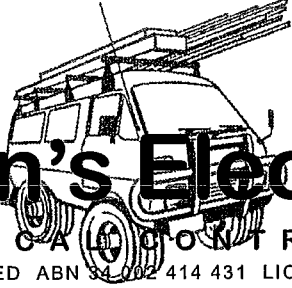
An inspection of the above was carried out on Tuesday 11th August 2009.
No responsibility will be taken for alterations, additions and/or damage caused
by other persons since the date of inspection.

The information contained in this document is, to the best of my knowledge
and belief, true and accurate.

For and on behalf of Fire Stopping Pty Ltd

A handwritten signature in black ink, appearing to read 'A. St. John' with a stylized flourish at the end.

Andrew St. John
SUPERVISOR



Fagan's Electrics

ELECTRICAL CONTRACTORS

NEKODE PTY LIMITED ABN 34 002 414 431 LICENCE NO. EC28761

PO BOX 252, BALGOWLAH NSW 2093

MOBILE 0418225778 OFFICE 02 9949 7250 FAX 02 9949 3520 EMAIL nekode@bigpond.net.au

FDC Construction & Fitout Pty Ltd
22-24 Junction Street
FOREST LODGE NSW 2037

03/09/2009

ELECTRICAL CERTIFICATION

Dear Sir/Madam

RE: THE IVANHOE HOTEL, 29 THE CORSO MANLY

It is conveyed that I, Phillip Fagan of Fagan's Electrics, hereby certify that the following works/installations have been performed by myself and comply with the standards specified.

WIRING; all new wiring complies with the requirements of AS/NZS 3000:2000 and with the relevant building codes.



PHILLIP FAGAN
Licence No EC28761
for and on behalf of
NEKODE PTY LTD T/A FAGANS ELECTRICS



Certificate No: AF1028

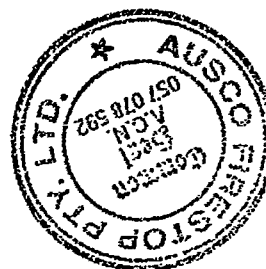
FIRE DOOR CERTIFICATE

Project Name: Ianhoe Hotel Manly
Address: 27 The Corso, Manly
Builder: FDC Constructions & Fitout Pty Ltd

Ausco Firestop Pty Ltd certifies that the Fire Doorsets for the above project have been inspected and labelled as required by the appropriate regulatory authorities in accordance with Australian/New Zealand standards AS/NZS 1905 Part 1 in respect to the Evidence of Compliance at Clause 6.3 or 6.4, BCA Clause 3.8 as appropriate, and Australian/New Zealand Standards.

AS/NZS 1530.4	Method for the test of building materials, component and structures, Part 4: Fire Resistance test of elements of building constructions.
AS/NZS 1905.1	Components for the protection of openings in Fire Resistant walls, Part 1: Fire resistant doorsets.

<u>Location</u>	<u>Rating</u>	<u>Tag No.</u>
Ivanhoe Hotel	- / 240 / 30	AF. 40450
Ivanhoe Hotel	- / 240 / 30	AF. 40451



Signature:

Name of Certifier:

Dane Russell

Date of Certificate:

2nd September 2009

AUSCO FIRESTOP PTY LTD ABN 23 057 078 592
UNIT 2, 7-9 GALLIPOLI STREET, SMEATON GRANGE, NSW 2567
PO BOX 3446, NARELLAN DC, NARELLAN NSW 2567 AUSTRALIA
PHONE: (02) 4648 3336 FAX: (02) 4648 3396 EMAIL: ausco@auscofirestop.com.au

Distributors of Pyropanel®
Fire Rated Products

PYROPANEL



FDC Construction & Fitout Pty Ltd
ABN 44 120 295 034
22-24 Junction Street
Forest Lodge NSW 2037
P.O. Box 425
Camperdown NSW 1450
Telephone: 02 9566 2800
Facsimile: 02 9566 2922
Website: www.fdcbuilding.com.au

3rd September 2009

Dix Gardner Pty Ltd
Level 4, 155 Castlereagh St
Sydney NSW 2000

Attention: Carl Parkinson

Re: Ivanhoe Hotel 29 The Corso, Manly

Dear Carl,



In reference to the above building it will utilize the existing Hose Reel and Hydrant. The Hydrant is located in Market lane between 29 and 30 The Corso Manly.

The Hose Reel is compliant with AS2441 and Hydrant is compliant with AS2419.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Gareth Wynne'.

Gareth Wynne
Project Manager
FDC Construction & Fitout Pty Ltd



COMPUTER AIR PTY LTD
A.B.N. 77 002 419 543
94 SOUTH STREET,
RYDALMERE 2116

PHONE: (02) 9638 6100
FAX: (02) 9638 4648

POSTAL ADDRESS
PO BOX 114,
RYDALMERE BC 2116

CPN7958

August 25th, 2009

FDC Construction & Fitout Pty Ltd
22-24 Junction Street
Forest Lodge NSW 2037

ATTENTION: Josh Cottle

Dear Josh,

RE: Ivanhoe Hotel - 27 The Corso Manly - part ground floor fitout.

We hereby certify that the new Mechanical Air Conditioning Systems and alterations installed at the above address has been installed as per the design specification, and complies and performs in accordance with the Local Government Act, AS 1668.1 and 2 and the BCA parts J4 & J5.

We trust that the information contained herein is to your requirements, but should you require further details or clarification, please do not hesitate to contact the undersigned.

Yours faithfully,

COMPUTER AIR



Wayne Cannings
Project Engineer

+ Comp Air
+ Precision
+ Fagan.

+ Nate bruch
+ fire stopping
+ Breckon & Jolly.

Fire Safety Certificate

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

Type of Certificate

☒ Interim Final

Owner / Agent

I, Wayne Cummings - Computer Air
of 94 South St Rydalmere NSW 2116

Address

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

Street

No 29 (ground floor part) The Corso, Manly

House/Unit No. or Building Name

Side of Street

Nearest Cross Street

Particulars of Building

Scope

☐ Whole ☒ Part

Description of Part (where applicable)

Ground floor part to No 29 The Corso, Manly

House/Unit No. or Building Name

Date of Assessment

Owner's Details

Name

Address

Essential Fire and other Safety Measures	Standard of Performance
A/C Trip	Standard of Performance to be obtained from Building Management
Automatic fire suppression system (sprinklers) Occupant Warning System	BCA Spec. E1.5, Clause 8 and AS 2118-1982/1999, BCA Spec E2.2a & E2.2b (ground floor part for the Ivanhoe Hotel)
Emergency Lighting	BCA Clauses E4.2/E4.4 & AS 2293.1-1987/2005.
Exit Signs (Illuminated)	BCA Clauses E4.6/NSW E4.6/E4.8 and AS 2293.1-1987/2005
Fire Alarm Communication Link	AS 1670.3-1997 & AS 4426.6-1997 AS1670.1-2004, BCA CI C3.5 - (Smoke detectors for automatic closing

5

5

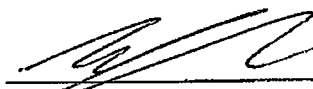
	of fire doors to fire walls)
Fire doors	BCA CI C3.8, C3.5 (Fire doors to firewalls) and AS1905.1- 1982/2005
Fire seals (protecting openings in fire resisting components of the building)	Standard of Performance to be obtained from Building Management. BCA-CTC3.15
Fire Hydrant systems (Street fire Hydrant)	BCA CI E1.3 & AS2419.1-2005
Hose reel system	BCA Clause E1.4 & AS 2441-1988/2005
Mechanical air handling system	BCA CI E2.2 (Shutdown), F4.5(b) & AS1668.1/2 -1998/1991
Paths of travel for stairways & Passageways	EP&A Regulations 2000, clauses 184-186
Portable fire extinguishers & Fire Blankets	BCA Clause E1.6 and AS 2444-1995/2001

Date of Certificate

dated this day of

25/8/09

Signature



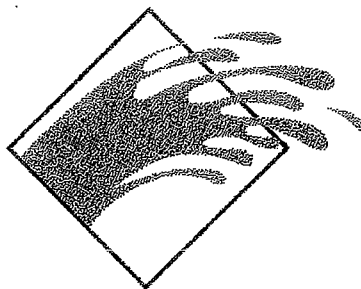
owner/agent

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.

6

6



BREDEN & JOLLY

PTY LTD
ACN 053 435 886

Licensed Commercial, Industrial, Domestic Plumbers & Builders

ABN 83 053 435 886

25th August 2009

FDC Construction & Fitout Pty Ltd
PO Box 425
CAMPERDOWN NSW 1450

ATTENTION: MR G WYNNE
REFERENCE: THE IVANHOE HOTEL, MANLY
JOB NO: 13509

Dear Sir,

We wish to confirm that all works were carried out in accordance with the following standards.

AS/NZS 3500.1.1 – 1998
Water Supply – Performance Requirements.

AS/NZS 3500.1.2:1998
Water Supply – Acceptable Solutions.

AS/NZS 3500.2.1 – 1996
Sanitary Plumbing and Drainage – Performance Requirements.

AS/NZS 3500.2.2:1996
Sanitary Plumbing and Drainage – Acceptable Solutions

Trusting the above meets your approval.

Yours faithfully

J BREDEN
DIRECTOR



Metal and Membrane Roofers • Building Reports • Vacuum Sewerage Systems
38 Robert Street, Rozelle NSW 2039 Australia
Telephone (02) 9555 1691 • Facsimile (02) 9555 8632 • Email: breden@ozemail.com.au
Contractor Licence Number 42608C



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

3 September 2009

Hilrok Property Group Pty Ltd
15 The Corso
Manly NSW

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

c/o
Paul Kelly Design
77 Bay St
Glebe NSW 2039

Attention: Mr Paul Kelly

Dear Paul,

Subject: Alterations (Stage 1) at the Ivanhoe Hotel, 27 The Corso, Manly
ENGINEERS CERTIFICATE FOR INSPECTIONS

I certify that I carried out the critical stage inspections of the structural work listed below for the stage 1 of the current 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 provided.

During construction, inspections were carried out on the following structural elements.

- **Structural steelwork to strengthen an existing concrete column on ground floor level**
- **Structural steel work to support a proposed large television**
- **Structural steel framing for front and rear façade at ground floor level**
- **Structural steel framing to support a new feature ceiling**
- **Reinforced concrete blockwall and slab surrounding fire door to achieve necessary fire rating**

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 concrete topping slabs were not inspected as we were not advised that the steel reinforcement was ready for inspection. These topping slabs however were 'non-structural' and the steel reinforcement was for shrinkage purposes only. Lintel

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



ADDRESS:

PROJECT:

Index

of

(Name)

(Firm)

(Address)

Qualifications and Experience:

Contractors Authority No: 42608C

**Phone
Numbers:**

Bus:

9555 1691

Fax:

9555 8632

Mob:

0425 277500

Hereby certify:

That the

Plumbing works carried out by Breden & Jolly Pty Ltd

have been installed and commissioned / tested to comply with:

- a. The relevant clauses of the Building Codes of Australia, as follows:
- b. The relevant Australian Standards listed in the Building Code of Australia (Specification A1.3) as follows:
- c. The following additional Australian Standards (if applicable): **AS:3500**
- d. Other practices, standards, reports or relevant Development Consent Conditions relied upon for this certification: **Plumbing standards NSW**
- e. Exclusions: **NIL**

Signature:

Best

Date:

25/08/2009



GROSVENOR
Solutions in Glass

26th August 2009

FDC Construction & Fit-out Pty Ltd

22-24 Junction Street

Forest Lodge NSW 2037

Attention: Mr. Josh Cottle

Certificate of Compliance

For

BCA Section J2.4 Compliance

Project: Ivanhoe Hotel

Ref Job No. 4149

23-29 The Corso, Manly NSW 2095

It is hereby certified that the glass work by Grosvenor Australia Pty Ltd for the abovementioned project has been installed in accordance with BCA Section J2.4 Compliance.

The Clear Laminated safety glass has been glazed using generally accepted codes of practice principals based on drawings & details provided by the architect, taking into account all of the relevant provisions contained within the standards listed above.

Trusting the above meets with your approval, we remain

Yours Faithfully

Grosvenor Australia Pty Ltd

Sam Kikitis

Director

INSTALLATION / INSPECTION CERTIFICATE – Glass Installation

Site Details:		Ivanhoe Hotel	
Level/Unit/Shop no.	Ground	Street no. / Street name:	23-29 The Corso
Suburb:	Manly	State: NSW	Postcode: 2095
Description of Work:		External Shopfronts & Doors	

Certification:

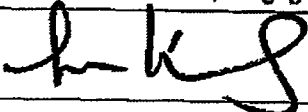
Item No.	Proposed Items of Work or Services installed, implemented and/or constructed in the building/development	Enter the intended design standard of performance (eg. BCA E2.2, AS1668.1, or DA Consent Condition No., etc) (Refer to relevant version of Australian Standards and other standards of performance applicable to this project.)
1.	Glass Installation	AS 1288 - 2006

I, the undersigned, certify that:

- a. The above work / services have been installed in the above building or development in accordance with design documentations and the relevant provisions of the Building Code of Australia, the relevant Australian Standards and manufacturers' specifications (where appropriate),

I also certify that I am an appropriately qualified and competent person practising in the relevant area of work. I have recognised relevant experience in the area of work being certified. Grosvenor Australia Pty Ltd is holding appropriate current insurance policy to the satisfaction of the building owner or the principal authorising the installation work being certified.

The following details must be provided in full:

Name:	Sam Kikitis	Qualification:	13 Years Experience
Company Name:	Grosvenor Australia Pty Ltd	ABN No:	70 003 332 376
Company Address:	59A Garema Circuit, Kingsgrove, NSW, 2208	Tel:	02 9758 2400
Signature:		Position Title:	Director
		Date:	26 th August 2009



LETTER OF COMPLIANCE

Att: Carl Parkinson
Dix Gardner
Level 4,
155 Castlereagh Street
Sydney NSW 2000

REF: IVANHOE OF MANLY HOTEL PHASE 1 SECTION J.

Wednesday the 26th August, 2009.

Carl,

In response to your request for section J compliance to the new works at the Ivanhoe of Manly Hotel, we believe that section J to the glazing does not apply to this project for the following reasons.

1. The new glazing is South East Facing, with a 2 storey building over.
2. The new glazing (The Corso) is under an awning that provides approx 4000mm of coverage to the complete width and beyond of the new facade.
3. No glazing is installed to the rear (market lane) as this is an outdoor smoking area.

If you have any further queries, please do not hesitate to contact...

Yours Faithfully,

A handwritten signature in black ink, consisting of a stylized, overlapping loop and a horizontal line.

Paul Kelly - Paul Kelly Design

www.paulkellydesign.com.au

77 Bay Street, Glebe NSW 2037 Australia. Phone (02) 9660 8299 facsimile: (02) 9660 8499



LETTER OF COMPLIANCE

Att: Carl Parkinson
Dix Gardner
Level 4,
155 Castlereagh Street
Sydney NSW 2000

REF: IVANHOE OF MANLY HOTEL PHASE 1 SLIP RESISTANCE FLOORS.

Wednesday the 26th August, 2009.

Carl,

In response to your IOC checklist we confirm the following.

The new flooring installed to the Ivanhoe of Manly has been designed and installed to comply with the slip resistance levels of AS3661, AS4585 and AS4663 (as applicable).

If you have any further queries, please do not hesitate to contact.

Yours Faithfully,

A handwritten signature in black ink, consisting of a stylized, cursive script that appears to read "Paul Kelly".

Paul Kelly - Paul Kelly Design

www.paulkellydesign.com.au

77 Bay Street, Glebe NSW 2037 Australia. Phone (02) 9660 8299 facsimile: (02) 9660 8499

Certificate of Assessment

HF07ANK4590

No. 624

"Copyright CSIRO 2005 ©"
Copying or alteration of this report
without written authorisation from CSIRO is forbidden.

This is to certify that the specimen described below was tested by the CSIRO Division of Manufacturing and Infrastructure Technology in accordance with Australian/ New Zealand Standard 3837, Method of test for heat and smoke release rates for materials and products using an oxygen consumption calorimeter, 1998, at 50 kW/m², on behalf of:

The Laminex Group
90-94 Tram Road,
DONCASTER VIC AUSTRALIA

A full description of the test specimen and the complete test results are detailed in the Division's sponsored investigation report numbered FNK 0301.

SAMPLE IDENTIFICATION: Squareform Laminate

DESCRIPTION OF SAMPLE:

The sponsor described the tested specimen as kraft paper core containing phenolic resin finished with a melamine face.

Nominal thickness: 0.5 mm
Nominal total mass: 0.6 kg/m²
Colour: white

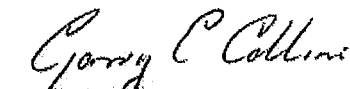
SAMPLE CLASSIFICATION:

Group Number: Group 1
(In accordance with Specification A2.4 of the Building Code of Australia.)

Average specific extinction area: 46.4 m²/kg
(Refer to Specification C1.10a section 3(c) of the Building Code of Australia.)

Testing Officer: Russell Collins Dates of Test: 30 March 2005, 14 April 2005

Issued on the 10th day of May 2005 without alterations or additions.


Garry E Collins

Manager, Fire Testing and Assessments



This laboratory is accredited (Accreditation No. 3632) by the National Association of Testing Authorities, Australia. The tests reported herein have been performed in accordance with its terms of accreditation.



CSIRO Manufacturing & Infrastructure Technology
14 Julius Avenue, Riverside Corporate Park, North Ryde NSW 2113 AUSTRALIA
Telephone: 61 2 9490 5444 Facsimile: 61 2 9490 5555



PROTECTIVE TREATMENTS

BERWICK CARPET & GENERAL CLEANING

P.O. BOX 427
BERWICK, 3806
PHONE: 9707 1866
FAX: 9796 1589

MACLAW No. 578 PTY. LTD. ACN 066 831 968

CERTIFICATE OF FIRE RETARDANCY

**CERTIFICATION IS HEREBY MADE THAT THE ARTICLE
DESCRIBED HEREUNDER HAVE BEEN TREATED WITH A FLAME
RETARDANT CHEMICAL AND THE TESTED ARTICLES COMPLY WITH AND
SATISFY THE REQUIREMENTS AS SPECIFIED.**

AS 1530 PARTS 2 AND 3

DATE:	010/07/2009
CLIENT:	BERWICK COMMERCIAL INTERIORS
AMOUNT TREATED:	32.0 METRES
USEAGE:	PUBLIC AREA
FABRIC:	TAHATI PACIFIC
COMPOSITION:	SYNTHETIC BLEND
PROCESS USED:	FLAME FIX F

**AS WE DO NOT HAVE CONTROL OVER FUTURE USE OR HANDLING
AFTER TREATMENT, NO RESPONSIBILITY IS ACCEPTED IN RESPECT OF
THAT USE OR HANDLING.**

COMPANY REPRESENTATIVE

**ACCEPTANCE OF THIS CERTIFICATE FOR THE ABOVE MENTIONED IS AT THE DISCRETION OF THE
RELEVANT GOVERNMENT AUTHORITY. TH COMPANY ACCEPTS NO LIABILITY REGARDING THEIR
DECISION.**

MAINTENANCE OF FURNITURE

As you have taken the precaution to have your furniture treated with Safe-Gard Fabric Protector you will be aware that soiling can occur readily and regular maintenance is a good preventative. Upholstery should be vacuumed on a regular basis to remove dust and particles and prevent a build up of soilage on your upholstery.

Before using any cleaning method, pre-test on a hidden area of the upholstery to be cleaned. Remember DO NOT RUB at your fabric as this will damage the fibres. Use cleaning methods a small amount at a time. Do not overwet any areas. Call Safe-Gard immediately you have a problem stain.

Type of Stain	Cleaning Solution
Oil, Margarine, Butter cooking oil, etc.	Use a safe solvent spot & stain remover or safe solvent.
Soft drink, alcoholic drinks, candy and water soluble spills	Use a solution of: one tablespoon mild detergent, one tablespoon white vinegar in 500ml of water.
For a stain of a combination of both oil and water base	Use both cleaning solutions – first to dilute the oil and second to dilute the water.

Cleaning Technique:

1. If a liquid spillage, use a dry sponge or dry, clean cloth to absorb the spill. Place the sponge on top of the spill and let the spill absorb into it. Clean the sponge or cloth and re-apply to the spill with a little pressure. Repeat until as much of the stain as possible is removed, then use one of the cleaning solutions as above or a proprietary brand spot and stain remover. DO NOT RUB.
2. If the spill is a solid or semi-solid, scrape with a spoon or blunt edge of a knife to remove as much as possible, then spot using one of the above suggested cleaning solutions or a proprietary brand spot cleaner. DO NOT RUB.

You will notice on tight weave fabrics the fabric protector will cause liquid spills to bead on the surface. After use fibres of your fabric relax thereby allowing spills to enter into the fabric however the fibres still remain coated with the protector. Open weave fabrics liquids do not bead as spills enter between the fibres, these fibres however are coated with the protector. Simply apply clean absorbent sponge to spill and apply light pressure to remove spill from fabric.



PLEASE RETURN TO:

SAFE-GARD
P.O. BOX 427
BERWICK, 3806



SAFE-GARD

CUSTOMER GUARANTEE

SAFE-GARD PROTECTIVE TREATMENTS

Safe-Gard Protective Treatments warrants the original purchaser of the furniture, that if the furniture has been professionally treated and correct application methods applied Safe-Gard Protector will continue to impart repellent characteristics to furniture fabrics treated with the product for a period of up to 5 years or for the life of the fabric (5 year maximum).

If during the period of the guarantee it is determined by the supplier that the fabric protector is not effective then the supplier or applicator will retreat the ineffective area free of charge.

The purchaser hereby agrees that the guarantee shall be void if it is determined that maintenance procedures as directed by the supplier within this guarantee are not strictly adhered to by the purchaser in the care of their furniture.

The Fabric Protector will not have a harmful effect on any fabric commonly used in the manufacture of furniture provided that the fabric is not affected by a chemical reaction and that no finishing agents remain in the fabric from the manufacturers.

Should stains remain after using recommended methods of cleaning, Safe-Gard Protective Treatments will provide cleaning advice - provide appropriate cleaning product - professionally remove stain at no charge and if unable to remove stain, will recover the stained area of fabric, dye lots being matched if available. Mattresses will be cleaned only.

This guarantee covers stains from domestic spills and should not be construed as a cleaning contract. The guarantee does not cover general day to day soiling from use, damage caused by cleaning products not recommended by Safe-Gard, flaws in fabric, fading, non-colourfast material, upholstery which has not been properly maintained, dye transfer from non-colourfast fabrics. The guarantee is not valid for furniture stored, on loan, rental furniture, damage caused by vandalism or wilful damage.

STORE Beverly Commercial Interiors

DATE 10.9.2009

TYPE OF FABRIC Tanapac Pacific 32115

APPLICATORS NAME L. B. B. B. B.

TREATED BY (SIGN) [Signature]

PURCHASERS NAME AND ADDRESS [Blank]

PURCHASERS SIGNATURE [Blank]

This Warranty is void unless the date and applicators signature is endorsed hereon. This section must be returned within 14 days of application or warranty becomes void.

Certificate of Assessment

No. 973

"Copyright CSIRO 2008 ©"

We have examined information submitted to us and appraised the suitability of the use of wool and some wool/nylon carpets, in Class 2 to 9 buildings without further fire testing to AS ISO 9239, Part 1, on behalf of:

Carpet Institute of Australia Limited
Level 2, 20 Queens Road
MELBOURNE VIC 3004

CSIRO Manufacturing and Materials Technology's Report CMMT(C)-2007 -120 (RevAA) describes a fire engineering assessment conducted to evaluate the compliance of the carpets with the BCA requirements. A statistical analysis was performed based on 198 test reports of tests to AS ISO 9239.1 from NATA or ILAC accredited test laboratories.

PRODUCT NAME & DESCRIPTION: 100% wool and wool/nylon blend carpet with no more than 20% nylon; of Total Pile Mass (TPM) no less than 1060g/m²; and limited to particular construction types and underlay combinations as described in the CSIRO report. This report is valid for carpet of the above description manufactured by Brintons, Feltex Carpets, Godfrey Hirst Australia, Quest Carpets, Tascot, Tuftmaster Carpets, Victoria Carpets, Cavalier Bremworth, Chaparral Carpet Mills and Supertuft. The assessment does not apply to:

- carpet of pile material other than wool/nylon
- carpet tiles
- PVC backed carpet
- carpet laid over FR Rubber.

CONCLUSION: The 'Critical Radiant Flux' (CRF) and Maximum 'Smoke Development Rate' (SDR) of certain wool rich carpets will satisfy Performance Requirement CP 4 of the BCA 2007 without further testing. The conclusion is limited to the values achieved by construction types assessed and listed in the table below. Refer to the CSIRO report CMMT(C)-2007 -120 (Rev AA) fire engineering assessment for the full descriptions of the limitations.

Installation Method	Underlay	TPM (g/m ²)	CRF (kW/m ²) by Pile Type				SDR (%.min)
			All	Loop	Cut/Loop	Cut	
Direct Stick	Nil	All	4.5				750
Conventional	Rubber, Felt, Reconstituted Fibre, Rebond Foam	All	2.2				750
Double Bond	Reconstituted Fibre	<1200		4.5	4.5	2.2	750
		>1200	4.5				750
	SBR Latex	<2000	4.5				750
		>2000	2.2				750
	Rebond Foam	All		4.5	4.5	2.2	750

Issued on 21st October 2008 without alterations or additions. This Certificate will expire on 21st October 2013. This certificate is issued in conjunction with CSIRO report number CMMT(C)-2007-120 (Rev AA), and must not be used separately to that report.

Alex K Webb
Fire Engineering Assessments



CSIRO Materials Science and Engineering
14 Julius Avenue, Riverside Corporate Park, North Ryde NSW 2113 AUSTRALIA
Telephone: 61 2 9490 5444 Facsimile: 61 2 9490 5555

CERTIFICATE

Customer: Hughes Commercial Furniture
Address: Mail Bag 1
Queanbeyan DC NSW 2620

Certification is hereby made that the articles described below have been treated with Flamefix F Flame Retardant. The treated articles comply with the requirements for early fire hazard properties of materials with reference to the Building Code of Australia, specification C1.10 Clauses 2(b), 4 and 6. Materials are tested to Australian Standard's AS1530 parts 2 and 3 by a NATA approved facility. Performance Indices; Smoke Evolved less than 5, Spread of Flame 0.

DESCRIPTION OF TREATED MATERIAL

Order No.: 4217

Invoice No.: 18798

Certificate No.: 8271

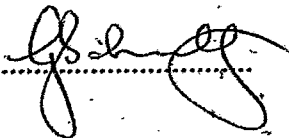
Project/Client:

Fabric Quantity/ Design/ Colour as follows:

1. 16m x Mokum Zimmer Rhode Ray
2. XXXXXXXXXXXX
3. XXXXXXXXXXXX
4. XXXXXXXXXXXX

Total Quantity: 16. metres Date Treated: 14-08-2009

Signature.....



FLAME FREE PTY LTD

*(A) As we do not have control over all future use and/or handling of all of the above once we have effected the treatment, no responsibility is accepted in respect of that use or handling.

(B) Acceptance of this certification for the above treatment is at the discretion of the relevant Government Authority. No liability regarding their discretion is accepted by this company.



P.O. Box 15 Erskineville NSW2043
Phone: (02) 9519 3110 Fax: (02) 9519 1220

FABRIC TREATMENT

FABRIC TREATMENT

AWTA TEXTILE TESTING

26 Robertson Street, Kensington, Victoria 3031
P.O. Box 240 North Melbourne, Victoria 3051
Phone (03) 9371 2126 Fax (03) 9371 2102
Australian Wool Testing Authority Ltd - A.C.N. 006 014 106
trading as AWTA Textile Testing

TEST REPORT

CLIENT : BIRRUS MATTING SYSTEMS

TEST NUMBER : 7-478215-CV
DATE : 24/08/98
ORDER NUMBER : 2864M

SAMPLE DESCRIPTION ENTRANCE MATTING SAMPLE
REF: DURAMAT/RUBBER/ALUMINIUM

AS 1530.3-1989
MODIFIED NUMBER
OF SAMPLES TESTED

EARLY FIRE HAZARD GUIDANCE TEST

THIS TEST IS FOR GUIDANCE ONLY

A REDUCED NUMBER OF SPECIMENS WERE TESTED TO
PROVIDE GUIDANCE ONLY AS TO THE LIKELY PERFORMANCE
OF THE PRODUCT TESTED

	SPECIMEN	1	2	
IGNITABILITY INDEX	12	13		RANGE 0-20
SPREAD OF FLAME INDEX	7	6		RANGE 0-10
HEAT EVOLVED INDEX	5	4		RANGE 0-10
SMOKE DEVELOPED INDEX	5	4		RANGE 0-10

TWO SPECIMENS ONLY WERE TESTED

EACH TEST SPECIMEN WAS RESTRAINED ON THE EXPOSED FACE BY A
LAYER OF GALVANISED WELDED SQUARE MESH MADE FROM WIRE OF
NOMINAL DIAMETER 0.8mm AND NOMINAL SPACE 12mm IN BOTH
DIRECTIONS AND THE ASSEMBLY CLAMPED ALONG ALL SIDES

84894

1

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THIS TEST REPORT APPLIES ONLY TO THE SAMPLE TESTED. UNLESS OTHERWISE STATED,
THE SAMPLE AND DESCRIPTION ARE PROVIDED BY THE CLIENT. AWTA Ltd makes no warranty, implied
or otherwise, as to the source of the tested sample. The above test results are designed to provide THE
CLIENT WITH GUIDANCE INFORMATION ONLY.

This document shall not be reproduced except in full and shall be rendered void if amended or altered.

This document, the name AWTA Textile Testing or 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.

D. J. Ward
AUTHORISED SIGNATORY

D. J. Ward
D.J. WARD B.Sc., M.A.S.
MANAGING DIRECTOR



AWTA PRODUCT TESTING

Australian Wool Testing Authority Ltd – trading as AWTA Product 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

TEST REPORT

CLIENT: THE LAMINEX GROUP
332 BAY ROAD
CHELTENHAM VIC 3192

TEST NUMBER: 7-562404-CV
DATE: 30/09/2008
ORDER NUMBER: 08247

SAMPLE DESCRIPTION: Clients Ref: "Laminex Redback Laminate"
Laminate panels
Colour: Sand Pebble Finish: Dimension
Nom. Comp: Kraft paper core containing phenolic resin
finished with a melamine face
Nom thickness: 0.7mm Nominal mass: 1.0kg/m²

AS/NZS 3837:1998 Method of Test for Heat and Smoke Release Rates
for Materials and Products Using an Oxygen
Consumption Calorimeter

Results:

	Specimen 1	Specimen 2	Specimen 3	Mean	
Average Heat Release Rate	52.9	57.6	51.3	53.9	kW/m ²

	Specimen 1	Specimen 2	Specimen 3	Mean	
Average Specific extinction area	103.3	96.1	117.2	105.5	m ² /kg

(according to Specification C1.10 of the Building Code of Australia)

BCA Classification:
Group Classification: 1 2 2
(according to Specification A2.4 of the Building Code of Australia)

170715

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

This document is issued in accordance with NATA's accreditation requirements. 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 Product 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.



**CARPET
INSTITUTE
- of -
AUSTRALIA
LIMITED**

Carpet Installation Details Pro forma

PO Box 7177 St. Kilda Rd.,
Melbourne VIC 3145
Tel: 03 9504 4100
Fax: 03 9504 4100
www.carpetinstitute.com.au

CARPET

IT JUST FEELS BETTER

Carpet Manufacturer Details To be filled out by the Manufacturer

Manufactured By TASCOT CARPETS

Carpet Installation requesting acceptance without testing by reference to the CSIRO Certificate of Assessment No: 373 and Fire Engineering Assessment Report No: CMMTIC-2007-120 (Rev A4).

Carpet Details

Carpet Name WELLINGTON
ACCS Registered Carpet Quality Number 93128 (if applicable)

Pile Type: ☒ Cut ☐ Loop ☐ Cut/Loop

Fibre Content 80 % Wool (Min 80%)

20 % Nylon (Max 20%)

Total Pile Mass 1275 (gsm) (Range 1060-3000 gsm)

I have read and accepted the conditions which apply to my use of the CSIRO report and certificate, as set out in the Carpet Institute document accompanying this form.

Signed [Signature] Date: 12/1/05

Manufacturer TASCOT CARPETS

ACCS Licence No 1015

Carpet Installation Details To be filled out by the Installer (Applicant)

Installation Company Master Carpets

Location of Carpet Installation Travhee Hotel Party

Method of Installation & Underlay Type (Select one underlay type only)

Conventional ☐ Rubber ☒ Felt ☐ Resinslitted Felt ☐ Rebonded Foam ☐ Rebonded Foam
Direct Stick ☐ None ☐ Recommended Fibre ☐ ISB Felt ☐ Rebonded Foam

Minimum Critical Radiant Flux (CRFI) value obtained for this carpet system according to the Certificate of Assessment 2.2 (W/m²)

Installation Details

Building Class/Sub-class

☐ Unsprinkled ☒ Sprinkled ☐ Fire Isolated

Minimum CRFI requirement for this installation according to BCA Schedule 4, Table 1.2 1.2 (W/m²)

I certify that the carpet detailed in this application will be installed as indicated in the specification.

I have read and accepted the conditions which apply to my use of the CSIRO report and certificate, as set out in the Carpet Institute document accompanying this form.

Signed [Signature] Date: 22/8/09

Building Permit Applicant

This pro forma is issued by the Carpet Institute of Australia Limited (CIAI) and completed by the Manufacturer and the Building Permit Applicant. CIAI does not in any way warrant or represent that the Carpet or Installation, the subject of this pro forma, conforms to the Building Code of Australia, nor does it accept any liability arising out of the use of the Carpet or the Installation. The CIAI has not evaluated any of the information supplied by the Manufacturer or the Building Permit Applicant in this application and does not guarantee, warrant or represent that CIAI has not evaluated any information supplied in this application as to the accuracy, sufficiency and reliability of such information.

Rapporto di Prova
Mod DPRO34/0

DATE : 2/09/2009

Technical data articles : Sundance

Our articles used combined with a PU filling standard not flame retardant with a density of $21/\text{Kg/m}^3$, fulfill the following inquiry:

European standard EN 1021-1

Furniture - Assessment of the ignitability of upholstered

Furniture - Ignition source: Smouldering cigarette (ISO 8191-1:1987 modified)

European standard EN 1021-2

Furniture - Assessment of the ignitability of upholstered

Furniture - Ignition source: Match flame equivalent (ISO 8191-2:1988 modified)

Head of Laboratory



Rapporto di Prova
Mod DPRO34/0

DATE : 2/09/2009

Technical data articles : Sundance

Our articles used combined with a PU filling standard not flame retardant with a density of 21/Kg/m³, fulfill the following inquiry:

European standard EN 1021-1

Furniture - Assessment of the ignitability of upholstered

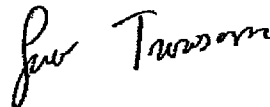
Furniture - Ignition source: Smouldering cigarette (ISO 8191-1:1987 modified)

European standard EN 1021-2

Furniture - Assessment of the ignitability of upholstered

Furniture - Ignition source: Match flame equivalent (ISO 8191-2:1988 modified)

Head of Laboratory

A handwritten signature in black ink, appearing to read "J. T. Tassoni", is written over the printed name of the Head of Laboratory.



Industrial Research Services

Manufacturing & Infrastructure 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.cmit.csiro.au>

Registered Testing Authority - Building Code of Australia

28 April 2006

Our Ref. EN13 / 485 03/0212

TEST REPORT No. 3541.1s

Requested by: Malaysian Mosaics Berhad
on (date): 21 April 2006
Manufacturer: Malaysian Mosaics Berhad
Product Desc.: Ridges Series, Colour J23 (Black, ASC), dust-pressed, unglazed homogeneous tiles
300 x 600mm

Sampling details:
Where: Delivered
Date: 24 April 2006
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 5 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:	55	V
AS/NZS 4586:2004	Slip resistance classification of new pedestrian surface materials Appendix C: WET/BAREFOOT Ramp Mean angle of inclination:	33°	C
AS/NZS 4586:2004	Slip resistance classification of new pedestrian surface materials, Appendix D: OIL-WET Ramp Mean overall acceptance angle:	31.0°	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.cmit.csiro.au

REPORT NO: 3541.1s
ISSUE DATE: 28 April 2006
MANUFACTURER: Malaysian Mosaics Berhad
PRODUCT DESC: Ridges Series, Colour J23 (Black, ASC), dust-pressed, unglazed homogeneous tiles
300 x 600mm

Page 2 of 5

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: 24 April 2006

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

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	54	54	54	58	54
	54	54	54	58	54
	54	54	54	57	54
Averages	54	54	54	58	54

Mean BPN : 55

CLASS :

V

Where products are to be used in wet barefoot areas, it is more appropriate to test to Appendix C of AS/NZS 4586 (which is technically equivalent to DIN 51097).

Comments:

Assessment of the tiles samples 90 degrees to the ridge pattern produces higher slip resistance.



Industrial Research Services

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

REPORT NO: 3541.1s Page 3 of 5
ISSUE DATE: 28 April 2006
MANUFACTURER: Malaysian Mosaics Berhad
PRODUCT DESC: Ridges Series, Colour J23 (Black, ASC), dust-pressed, unglazed homogeneous tiles
300 x 600mm

SLIP RESISTANCE CLASSIFICATION OF NEW PEDESTRIAN SURFACE MATERIALS

WET/BAREFOOT RAMP TEST METHOD

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

Test Date: 26 April 2006

Location: Slip Resistance Laboratory

Sample Fixed

Joint width: mm

Surface structure: ☐ Smooth
☒ Profiled
☐ Structured

RESULTS

		Actual mean	Reported mean
Mean angle of inclination:	Calibration Board A:	11.98 °	12 °
	Calibration Board B:	17.01 °	17 °
	Calibration Board C:	24.34 °	24 °
Mean angle of inclination of Test Board:		33.45 °	33 °

CLASSIFICATION:

Quality Group:

C



Industrial Research Services

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REPORT NO: 3541.1s Page 4 of 5
ISSUE DATE: 28 April 2006
MANUFACTURER: Malaysian Mosaics Berhad
PRODUCT DESC: Ridges Series, Colour J23 (Black, ASC), dust-pressed, unglazed homogeneous tiles
300 x 600mm

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 April 2006

Location: Slip Resistance Laboratory

Sample Fixed

Joint width: mm

Surface structure: ☐ Smooth
☒ Profiled
☐ Structured

RESULTS

Mean overall acceptance angle: 31.0 °

Displacement space: not tested

CLASSIFICATION:

Slip Resistance Assessment Group:

R 12

Displacement Space Assessment Group:

-



Industrial Research Services

Manufacturing & Infrastructure 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.cmit.csiro.au>

REPORT NO:	3541.1s	Page 5 of 5
ISSUE DATE:	28 April 2006	
MANUFACTURER:	Malaysian Mosaics Berhad	
TILE DESC:	Ridges Series, Colour J23 (Black, ASC), dust-pressed, unglazed homogeneous tiles 300 x 600mm	

Date and Place 28 April 2006, Highett, Vic

Name, Title and Digital Signature:

A digital signature of David Weeks, consisting of a stylized, handwritten-style script in black ink, overlaid on a faint, circular, dotted background pattern.

DAVID WEEKS
Technical Officer

Tel: 61 3 92526064
Fax: 61 3 92526244
Email: David.Weeks@csiro.au

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

PR:W280406-10:30:49



Industrial Research Services

Manufacturing & Infrastructure 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.cmit.csiro.au>

REPORT NO: 3541.1s Addendum
ISSUE DATE: 28 April 2006
MANUFACTURER: Malaysian Mosaics Berhad
PRODUCT DESC: Ridges Series, Colour J23 (Black, ASC), dust-pressed, unglazed homogeneous tiles
300 x 600mm

DETERMINATION OF Rz SURFACE ROUGHNESS

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

Test Date: 24 April 2006

RESULTS

Location: Slip Resistance Laboratory

Rz values

1	44.9
2	39.8
3	40.4
4	34.5
5	44.4
6	33.6
7	33.2
8	44.1
9	53.6
10	44.3

Surface Roughness (Rz) mean = 41.3 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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Telephone: 61 3 9252 6000 Facsimile: 61 3 9252 6244 Email: tiles@csiro.au Web: <http://www.cmit.csiro.au>

Registered Testing Authority - Building Code of Australia

18 July 2006

Our Ref. EN13 / 1153 03/0212

TEST REPORT No. 3610s

Product Desc.: Sandstone Porcelain
300 x 300mm

Sampling details:
Where: Delivered
Date: 11 July 2006
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:	43	X
AS/NZS 4586:2004	Slip resistance classification of new pedestrian surface materials, Appendix D: OIL-WET Ramp		
	Mean overall acceptance angle:	27.2°	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.



Industrial Research Services

Manufacturing & Infrastructure 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.cmit.csiro.au

REPORT NO: 3610s
ISSUE DATE: 18 July 2006

Page 2 of 4

PRODUCT DESC: Sandstone Porcelain
300 x 300mm

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: 11 July 2006

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: Peter Westgate

	Specimen				
	1	2	3	4	5
Last 3 swings	45	44	42	42	42
	45	44	42	42	42
	45	44	42	42	42
Averages	45	44	42	42	42

Mean BPN : 43

CLASS :

X

Where products are to be used in wet barefoot areas, it is more appropriate to test to Appendix C of AS/NZS 4586 (which is technically equivalent to DIN 51097).

Comments:

One tile available for testing. These results should be seen as being indicative rather than being definitive.



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REPORT NO: 3610s
ISSUE DATE: 18 July 2006
PRODUCT DESC: Sandstone Porcelain
300 x 300mm

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: 18 July 2006

Location: Slip Resistance Laboratory

Sample Fixed

Joint width: mm

Surface structure: ☒ Smooth
☐ Profiled
☐ Structured

RESULTS

Mean overall acceptance angle: 27.2°

Displacement space: not tested

CLASSIFICATION:

Slip Resistance Assessment Group:

R 12

Displacement Space Assessment Group:

-



Industrial Research Services

Manufacturing & Infrastructure 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.cmit.csiro.au>

REPORT NO: 3610s
ISSUE DATE: 18 July 2006

Page 4 of 4

PRODUCT DESC: Sandstone Porcelain
300 x 300mm

Date and Place 18 July 2006, Highett, Vic

Name, Title and Digital Signature:

A handwritten signature in black ink, appearing to read "Peter Westgate".

PETER WESTGATE
Senior Laboratory Technician

Tel: 61 3 92526108
Fax: 61 3 92526244
Email: Peter.Westgate@csiro.au

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

PR:W180706-15:58:43

Certificate of Assessment

No. 973

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We have examined information submitted to us and appraised the suitability of the use of wool and some wool/nylon carpets, in Class 2 to 9 buildings without further fire testing to AS ISO 9239, Part 1, on behalf of:

Carpet Institute of Australia Limited
Level 2, 20 Queens Road
MELBOURNE VIC 3004

CSIRO Manufacturing and Materials Technology's Report CMMT(C)-2007 -120 (RevAA) describes a fire engineering assessment conducted to evaluate the compliance of the carpets with the BCA requirements. A statistical analysis was performed based on 198 test reports of tests to AS ISO 9239.1 from NATA or ILAC accredited test laboratories.

PRODUCT NAME & DESCRIPTION: 100% wool and wool/nylon blend carpet with no more than 20% nylon; of Total Pile Mass (TPM) no less than 1060g/m²; and limited to particular construction types and underlay combinations as described in the CSIRO report. This report is valid for carpet of the above description manufactured by Brintons, Feltex Carpets, Godfrey Hirst Australia, Quest Carpets, Tascot, Tuftmaster Carpets, Victoria Carpets, Cavalier Bremworth, Chaparral Carpet Mills and Supertuft. The assessment does not apply to:

- carpet of pile material other than wool/nylon
- carpet tiles
- PVC backed carpet
- carpet laid over FR Rubber.

CONCLUSION: The 'Critical Radiant Flux' (CRF) and Maximum 'Smoke Development Rate' (SDR) of certain wool rich carpets will satisfy Performance Requirement CP 4 of the BCA 2007 without further testing. The conclusion is limited to the values achieved by construction types assessed and listed in the table below. Refer to the CSIRO report CMMT(C)-2007 -120 (Rev AA) fire engineering assessment for the full descriptions of the limitations.

Installation Method	Underlay	TPM (g/m ²)	CRF (kW/m ²) by Pile Type				SDR (%.min)
			All	Loop	Cut/Loop	Cut	
Direct Stick	Nil	All	4.5				750
Conventional	Rubber, Felt, Reconstituted Fibre, Rebond Foam	All	2.2				750
Double Bond	Reconstituted Fibre	<1200		4.5	4.5	2.2	750
		≥1200	4.5				750
	SBR Latex	<2000	4.5				750
		>2000	2.2				750
	Rebond Foam	All		4.5	4.5	2.2	750

Issued on 21st October 2008 without alterations or additions. This Certificate will expire on 21st October 2013. This certificate is issued in conjunction with CSIRO report number CMMT(C)-2007-120 (Rev AA), and must not be used separately to that report.

Alex K Webb
Fire Engineering Assessments



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Fire Hazard Requirements for Non-Domestic Fit-Out

SCOPE

This publication summarises the deemed-to-satisfy provisions for Cypress and hardwood timbers when used as components in interior fit-out within non-domestic buildings. It also lists the various timber species available for these applications along with their fire hazard indices (Ignitability, Heat Evolved, Smoke Developed, Spread of Flame, etc).

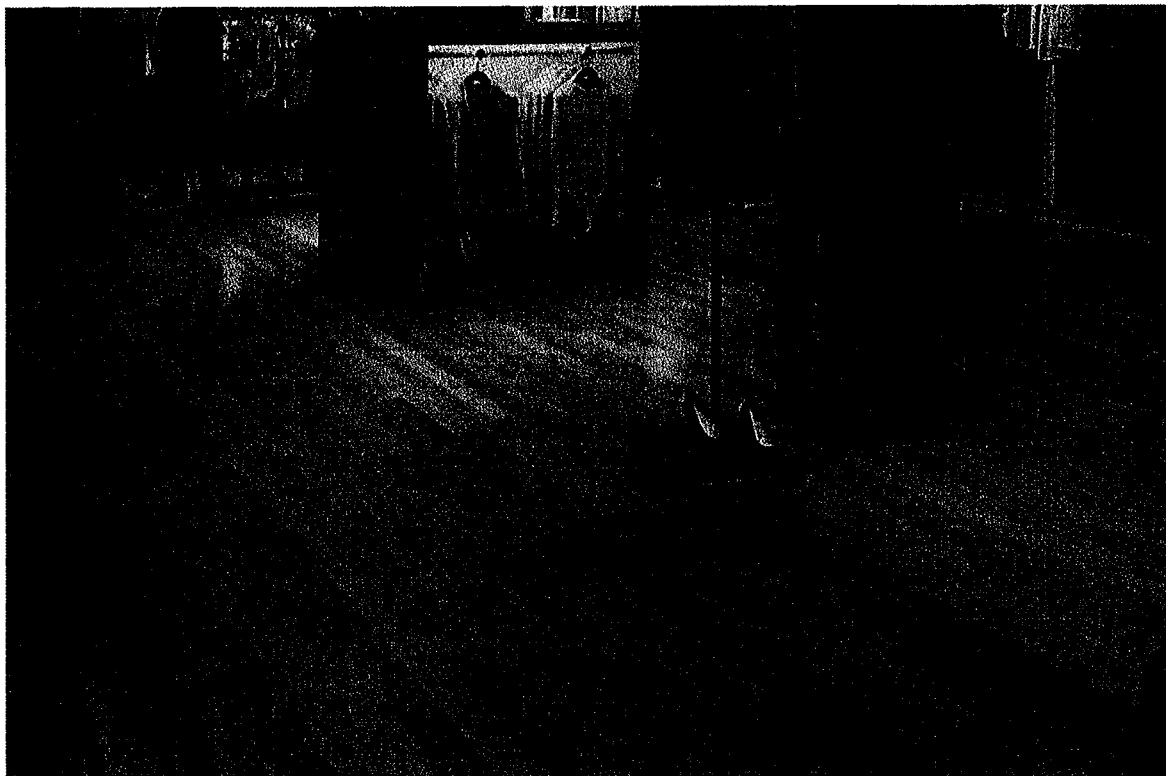
The materials and applications in this publication are for timber fit-out components such as:-

- timber panelling/lining materials;
- timber flooring;
- timber finishing elements (e.g. skirtings);
- timber framed windows and doors.

Sydney Blue Gum bar fit-out



Blackbutt shop fit-out



BUILDING CODE OF AUSTRALIA (BCA) REQUIREMENTS

The BCA contains various criteria relating to the performance of materials when exposed to fire. The deemed-to-satisfy provisions require certain materials or assemblies to be 'non-combustible' or have nominated fire hazard properties.

Where the deemed-to-satisfy provisions require a material, construction or part of a building to be 'non-combustible', the use of timber or timber products is not permitted as a deemed-to-satisfy solution. Timbers must be tested in accordance with AS1530.1 'Combustibility Tests for Materials'.

Non-combustibility requirements in the deemed-to-satisfy provisions do not prevent or influence the processing of an alternative solution under the performance requirements.

Table 1 lists the BCA requirements for Flammability Index, Spread-of-Flame Index and Smoke Developed Index for the various locations within the different building classifications.

Minimum Requirements

For all building types except for Class 1 – detached houses, and Class 10 – garages, sheds, etc., and other non-habitable buildings, all materials are required to have a minimum Spread of Flame Index of 9 and a minimum Smoke Development Index of 8 if Spread of Flame Index is greater than 5. Cypress and hardwood species listed in Table 2 all meet this criteria. Class 1 – detached houses and Class 10 – garages, sheds, etc., do not have to satisfy any Early Fire Hazard criteria.

Exempted Building Parts and Materials

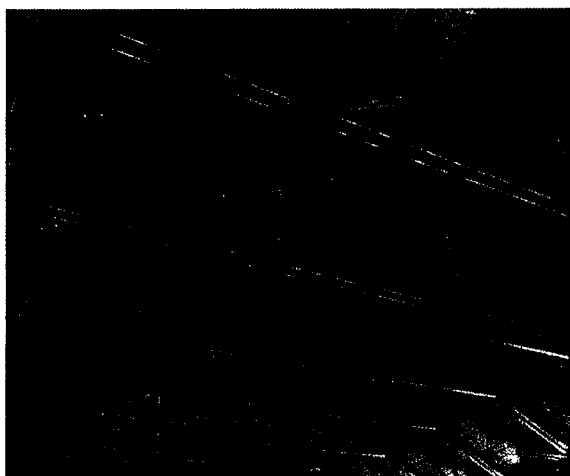
The requirements in the BCA for a Spread-of-Flame Index, Smoke-Developed Index or Flammability Index do not apply to the following building elements –

- timber-framed windows; or
- solid timber handrails or skirtings; or
- timber-faced solid-core or fire doors; or
- joinery units, cupboards, shelving and the like.

These provisions do not also apply to paint, varnish, lacquer or similar finishes (except nitrocellulose lacquers) or to any other material that does not significantly increase the hazards of fire.

The BCA gives no guidance on how to determine what will significantly increase the fire hazard.

Jarraah ceiling lining



Tallowwood library flooring



SOLID TIMBER DATA

Table 2 lists test results on samples of a number of native timber species according to AS/NZS1530.3 'Simultaneous determination of ignitability, flame propagation, heat release and smoke release'.

MANUFACTURED PRODUCTS DATA

Factory produced wood based products such as hardboard, medium density fibreboard (MDF), particleboard and plywood can also be assessed by AS1530.3. However, since such products may vary widely in formulation from time to time and between manufacturers (raw materials plus additives) the confirmation of specific indices, should be authenticated by the manufacturer of the particular named or branded products and/or a registered testing authority Certificate of Accreditation.

FIRE RETARDANTS TO IMPROVE FIRE HAZARD PROPERTIES

Timber based products which have been pressure impregnated with fire retardant chemicals may be used, provided they satisfy the fire hazard properties required by the BCA and AS/NZS1530.3.

Paints and fire-retardant coatings cannot be used in order to make the substrate comply with the BCA requirements.

Early Fire Hazard Properties required by the BCA may be achieved through pressure impregnation of the timber with a suitable fire retardant chemical. Surface coating with either a paint system or other fire resistant coating cannot be utilised to achieve compliance.

Where other Fire Resistant Properties (other than Early Fire Hazard) are required, the BCA does not exclude the use of appropriate paint and fire resistant coating systems.

Jarraah hotel flooring



FIRE HAZARD REQUIREMENTS FOR NON-DOMESTIC FIT-OUT

AUSTRALIAN HARDWOOD AND CYPRESS

Table 1 – BCA Requirements for Fire Hazard Properties

Building Classification and Type	Location	Surfaces	Flammability Index (FI)	Spread of Flame Index (SFI)	Smoke Developed Index (SDI)	Timber Permitted (refer to Table 2)	Comments
CLASS 1 Detached Houses and Attached Houses (Townhouses, Terraces Houses, Villas etc)	All locations	Ceilings Walls Floors	No BCA requirement (except roof sarking must be not more than 5)	No BCA requirement	No BCA requirement	All native timbers	
	Fire-isolated exits	Ceilings Walls Floors	No BCA requirement (except sarking type material must be 0)	Must be 0	Not more than 2	Timber not permitted	Timber unlikely to satisfy either the performance or deemed-to-satisfy requirements for an alternative solution
	Public Corridors providing egress to required fire isolated exits	Ceilings Walls Floors	No BCA requirement (except sarking type material must be not more than 5)	Must be 0	Not more than 5	Fire-Retardant Treated timbers	
CLASS 2 Apartments (2 or more sole occupancy units)	All other locations	Ceilings Walls Floors	No BCA requirement	Not more than 9	Not more than 8 if SOF more than 5.	All native timbers	
		Ceilings Walls Floors	No BCA requirement (except sarking type material must be 0)	Not more than 9	Not more than 8 if SOF more than 5.	All native timbers	
		Ceilings Walls Floors	No BCA requirement (except sarking type material must be 0)	Must be 0	Not more than 2	Timber not permitted	Timber unlikely to satisfy either the performance or deemed-to-satisfy requirements for an alternative solution
CLASS 3 Accommodation for aged, disabled and children Boarding houses, backpackers accommodation, residential parts of hotel/motels, etc	Fire-isolated exits	Ceilings Walls Floors	No BCA requirement (except sarking type material must be 0)	Must be 0	Not more than 5	Fire-Retardant Treated timbers	
	Public Corridors providing egress to required fire isolated exits	Ceilings Walls Floors	No BCA requirement (except sarking type material must be not more than 5)	Must be 0	Not more than 5	All native timbers	
	All other locations	Ceilings Walls Floors	No BCA requirement	Not more than 9	Not more than 8 if SOF more than 5.	All native timbers	
CLASS 4 A single dwelling in a Class 5, 6, 7, 8 or 9 building	Fire-isolated exits	Ceilings Walls Floors	No BCA requirement (except sarking type material must be 0)	Not more than 9	Not more than 8 if SOF more than 5.	Timber not permitted	Timber unlikely to satisfy either the performance or deemed-to-satisfy requirements for an alternative solution
	Public Corridors providing egress to required fire isolated exits	Ceilings Walls Floors	No BCA requirement (except sarking type material must be not more than 5)	Must be 0	Not more than 5	Fire-Retardant Treated timbers	
	All other locations	Ceilings Walls Floors	No BCA requirement	Not more than 9	Not more than 8 if SOF more than 5.	All native timbers	



Table 1 – BCA Requirements for Fire Hazard Properties (continued)

Building Classification and Type	Location	Surfaces	BCA Requirements (deemed-to-satisfy) Building			Timber Permitted (refer to Table 2)	Comments
			Flammability Index (FI)	Spread of Flame Index (SFI)	Smoke Developed Index (SDI)		
Class 5 Offices	Shaft containing non-required fire-isolated stairways and ramps	Ceilings Walls Floors	No BCA requirement (except sarking type material must be not more than 5)	Must be 0	Not more than 5	Fire-retardant timber	
	Fire-isolated exits	Ceilings Walls Floors	No BCA requirement (except sarking type material must be 0)	Must be 0	Not more than 2	Timber not permitted	Timber unlikely to satisfy either the performance or deemed-to-satisfy requirements for an alternative solution
	All other locations including public corridors providing egress to required fire isolated exits	Ceilings Walls Floors	No BCA requirement (except sarking type material must be not more than 5)	Not more than 9	Not more than 8 if SOF more than 5	All native timbers	
CLASS 6 Shops	Shaft containing non-required fire-isolated stairways and ramps	Ceilings Walls Floors	No BCA requirement (except sarking type material must be not more than 5)	Must be 0	Not more than 5	Fire-retardant timber	
	Fire-isolated exits	Ceilings Walls Floors	No BCA requirement (except sarking type material must be 0)	Must be 0	Not more than 2	Timber not permitted	Timber unlikely to satisfy either the performance or deemed-to-satisfy requirements for an alternative solution
	All other locations including public corridors providing egress to required fire isolated exits	Ceilings Walls Floors	No BCA requirement (except sarking type material must be not more than 5)	Not more than 9	Not more than 8 if SOF more than 5	All native timbers	
CLASS 7 Carports and Warehouses	Fire-isolated exits	Ceilings Walls Floors	No BCA requirement (except sarking type material must be 0)	Must be 0	Not more than 5	Fire-retardant timber	
	All other locations including public corridors providing egress to required fire isolated exits	Ceilings Walls Floors	No BCA requirement (except sarking type material must be not more than 5)	Not more than 9	Not more than 8 if SOF more than 5	Timber not permitted	

AUSTRALIAN HARDWOOD AND CYPRESS

Table 1 – BCA Requirements for Fire Hazard Properties (continued)

Building Classification and Type	Location	Surfaces	BCA Requirements (deemed-to-satisfy Building)			Timber Permitted (refer to Table 2)	Comments
			Flammability Index (FI)	Spread of Flame Index (SFI)	Smoke Developed Index (SDI)		
CLASS 8 Laboratories	Fire-isolated exits	Ceilings Walls Floors	No BCA requirement (except sarking type material must be 0)	Must be 0	Not more than 5	Fire-retardant timber	
	All other locations including public corridors providing egress to required fire isolated exits	Ceilings Walls Floors	No BCA requirement (except sarking type material must be not more than 5)	Not more than 9	Not more than 8 if SOF more than 5	Timber not permitted	
CLASS 9 (a) Health Care Building	Fire-isolated exits	Ceilings Walls Floors	No BCA requirement (except sarking type material must be 0)	Must be 0	Not more than 2	Timber not permitted	Timber unlikely to satisfy either the performance or deemed-to-satisfy requirements for an alternative solution
	All other locations including public corridors providing egress to required fire isolated exits	Ceilings Walls Floors	No BCA requirement (except sarking type material must be 0)	Must be 0	Not more than 5	Fire-retardant native timber	
	Patient Care Areas	Floors	No BCA requirement	Not more than 9	Not more than 8 if SOF more than 5	All native timbers	
		Ceiling	No BCA requirement (except sarking type material must be 0)	Must be 0	Not more than 3	Timber not permitted	
		Walls	No BCA requirement (except sarking type material must be 0)	Not more than 2	Not more than 5	Fire-retardant native timber	Including skirting up to 150 mm above floor as for floor
		Floors	No BCA requirement	Not more than 3	Not more than 5 if SOF is 1, 2 or 3. Can be 6 if SFO is 0	Brushbox Spotted gum	Including skirting up to 150 mm above floor. Other native timbers can be used if they are fire-retardant
	All other locations	Ceilings Walls Floors	No BCA requirement (except sarking type material must be 0)	Not more than 9	Not more than 8 if SOF more than 5	Fire-retardant native timber	



TABLE 2 – Fire Hazard Properties of Selected Hardwood Timbers

Common Name	Botanical Name	Ignitability Index	Spread of Flame Index	Heat Evolved Index	Smoke Developed Index	Report Reference
Alpine Ash	<i>Eucalyptus delegatensis</i>	14	8	7	3	E.4161
Australian Red Cedar	<i>Toona australis</i>	14	9	8	3	E.4230
Blackbutt	<i>Eucalyptus pilularis</i>	13	6	5	3	E.4233
Brush Box	<i>Lophostemon confertus</i>	14	3	4	2	*
Cypress	<i>Callitris columellaris</i>	13	8	7	3	E.4228
Messmate	<i>Eucalyptus obliqua</i>	13	5	5	3	*
Mountain Ash	<i>Eucalyptus regnans</i>	14	8	7	3	E.4161
Spotted Gum	<i>Corymbia citriodora</i>	13	3	4	3	E.4254
Tallowwood	<i>Eucalyptus microcorys</i>	12	5	5	4	E.4229
Tasmanian Oak	<i>E. regnans</i> <i>E. obliqua</i> <i>E. delegatensis</i>	14	8	7	3	E4161
Victorian Ash	<i>E. regnans</i> <i>E. delegatensis</i>	14	8	7	3	E.4161

NOTES:

1. Data on solid timber samples was obtained from published documents or from originals of the Certificates-of-Tests which were issued by the then Commonwealth Experimental Building Station (EBS). The relevant tests were carried out in 1978-1979 according to AS 1530.3 (1976).
2. Identifying number listed is for tests done by CEBS in 1978-79. Species with an asterisk are results reported in CSIRO Division of Building Research Technical Paper No. 6 (1974) by Beesley J., Keogh J. J., Moulen A. W.
3. Timber products may be available as special branded and accredited flame-retardant treated products which have been impregnated in pressure vessels with special chemicals which inhibit the spread of flame, often reducing the spread of flame index to zero (0).

AUSTRALIAN HARDWOOD AND CYPRESS

RELATED DOCUMENTS

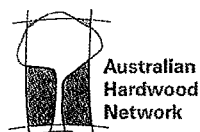
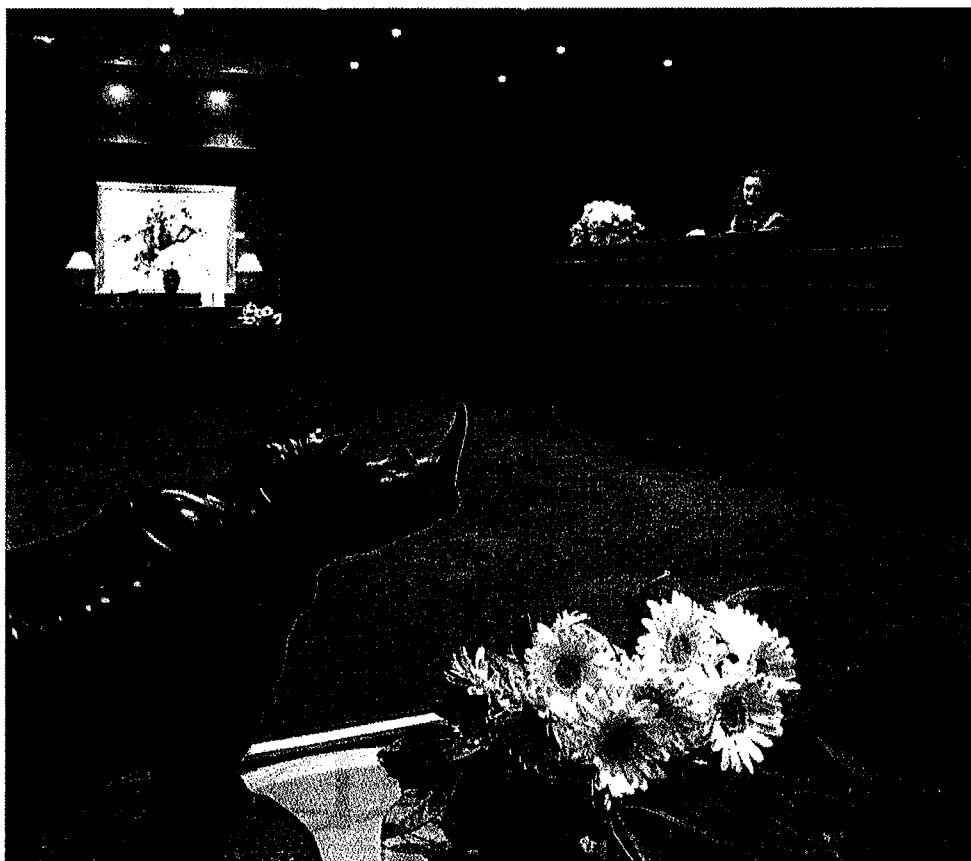
(From this Series of Timber Development Association Publications)

- Technical & Detailing Guide for Hardwoods and Cypress (including information on moisture management, durability, appearance and structural issues).

ACKNOWLEDGMENTS

- Timber Manual, National Association of Forest Industries Ltd., Canberra.
- Timber Promotion Council
www.tpc.vic.org.au
- Decorative Wood Veneers Association,
www.woodveneer.com.au
- Briggs Veneers Pty Ltd
www.briggs.com.au

Turpentine wall panelling in public lounge area



For additional assistance please contact the
Timber Advisory Service

1800 044 529

or visit the following websites:

www.timber.net.au

www.australianhardwood.net



Timber Development
Association (NSW) Ltd

Sponsored by the NSW Native Timber Industry Marketing and Development Fund



Department of
Infrastructure, Planning and Natural Resources



Australian Government
Department of Agriculture,
Fisheries and Forestry

**ATTAR**

Advanced Technology Testing and Research

ATTAR TEST REPORT NUMBER: 08/2653

This document is issued in accordance with NATA's accreditation requirements. The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards. Accredited for compliance with ISO/IEC 17025.

17 October 2008

Total Pages: 1**DRY SLIP RESISTANCE**

Job No: M08/2653

Prepared for:	Peerless Jal 10-12 Raglan Street PRESTON VIC 3072		
Attention:	Jovana Sobat		
Test Site:	ATTAR, Unit 27, 134 Springvale Road, Springvale.		
Test Date:	16 October 2008		
Test Specimens, Size and Quantity:	Hy-Shield high solid floor polish, applied to 2mm vinyl sheet flooring, 103 x 60cm 1 off.		
Sampling and Direction of Test:	Sampling conducted by client. Test direction not applicable.		
Test Personnel:	Callum Oakey		
Preparation:	As received, washed with tap water and ph neutral detergent and dried.		
Fixed/Unfixed:	Unfixed.		
Air Temperature:	19°C		
Test Equipment:	Tortus Floor Friction Tester; Tortus Model Mk 2 (with integral printer), Serial No: 233.		
Test Standard:	AS/NZS 4586: 2004 Slip resistance classification of new pedestrian surface materials – Appendix B.		
Slider Rubber:	Slider 96 (Four S) Batch No. 25		
Classification Criteria:	Refer Appendix 1 – Classification Criteria, attached.		
Dynamic Coefficient of Friction	Run 1	Run 2	Mean Rounded to 0.05
	0.84	0.84	0.85
Classification:	F		

These results apply only to the specimens tested and it is recommended that before selection of flooring or paving materials the effect of service conditions, including maintenance procedures and wear on their slip-resistance be checked.

NOTE: Any specimens supplied will be disposed of in two (2) months time, unless otherwise instructed.

ATTAR

Marcus Braché
Senior Engineering Technician
Approved Signatory

Callum Oakey
NDT & Engineering Assistant

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APPENDIX 1

**ATTAR**

Advanced Technology Testing and Research

CLASSIFICATION CRITERIA – AS/NZS 4586 - 2004**Compliance**

TABLE 1
TEST AND CLASSIFICATIONS COMBINATIONS

Test conditions	Test method	Classification table to be used
Wet pendulum	Appendix A	Table 2
Wet pendulum and dry floor friction	Appendices A and B	Tables 2 and 3
Dry floor friction	Appendix B	Table 3*

*Samples tested under dry conditions only are assumed to have a default wet classification of Z and shall be reported as classification ZF or ZG.

TABLE 2
CLASSIFICATION OF PEDESTRIAN SURFACE MATERIALS
ACCORDING TO THE WET PENDULUM TEST

Class	Pendulum* mean BPN	
	Slider 96 (Four S rubber)	Slider 55 (TRL rubber)
V	>54	>44
W	45-54	40-44
X	35-44	-
Y	25-34	-
Z	<25	-

*While either of these test methods may be used, the test report shall specify which method was used.

NOTE: It is expected that these surfaces will have greater slip resistance when dry.

TABLE 3
CLASSIFICATION OF PEDESTRIAN SURFACE MATERIALS
ACCORDING TO THE DRY FLOOR FRICTION TEST

Classification	Floor friction tester mean value
F	≥0.4
G	<0.4

Means of demonstrating compliance

Pedestrian surfaces that are classified in accordance with Table 2 and, where appropriate, Table 3 shall meet the following criteria:

- (a) The mean test results shall be as follows:
 - (i) For the classifications in Table 2, the mean of the test results shall be within the relevant criteria set out in the Table, and each individual result shall be equal to or above the lower limit for the classification or, if below the classification, within the mean of the result minus 20%. If either of these criteria is not met, the lot shall be considered to be a lower classification.
 - (ii) For Classification F in Table 3, the mean of the test results shall be equal to or greater than 0.4 and each individual result shall be equal to or greater than 0.35. If either of these criteria is not met, the lot shall be considered to be Classification G.
- (b) The classification in accordance with Table 2 or Table 3 shall be determined by –
 - (i) selecting and testing at least five specimens at random as defined in Appendices A and B; or
 - (ii) carrying out continuous testing and process control in accordance with AS 3942.
- (c) When testing individual lots, if a particular test fails to produce the expected classification it shall be permissible to:-
 - (i) disregard the first sample, re-sample a minimum of 10 specimens from the whole lot, retest and apply the criteria to the new sample; or
 - (ii) subdivide the lot into smaller lots of different quality, re-sample, retest and reclassify each of the smaller lots.