

BUILDING CODE OF AUSTRALIA & ACCESSIBILITY COMPLIANCE ASSESSMENT REPORT

ALTERATIONS AND ADDITIONS TO AN EXISTING MIXED USE BUILDING

19-23 THE CORSO, MANLY

DATE ► 04/04/2022

REPORT NO. ► 11784.1 Rev 2.0

PREPARED FOR ► Iris Capital

PREPARED BY ► AE&D



AEDGROUP

Innovation & expertise in building regulations

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REVISION STATUS				
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11784.1 Rev 1.0	10/03/2022	DRAFT FOR COMMENT	BM	
11784.1 Rev 1.1	11/03/2022	DRAFT FOR COMMENT – MINOR UPDATE	BM	
11784.1 Rev 2.0	04/04/2022	FINAL- FOR DA SUBMISSION	BM	TJ

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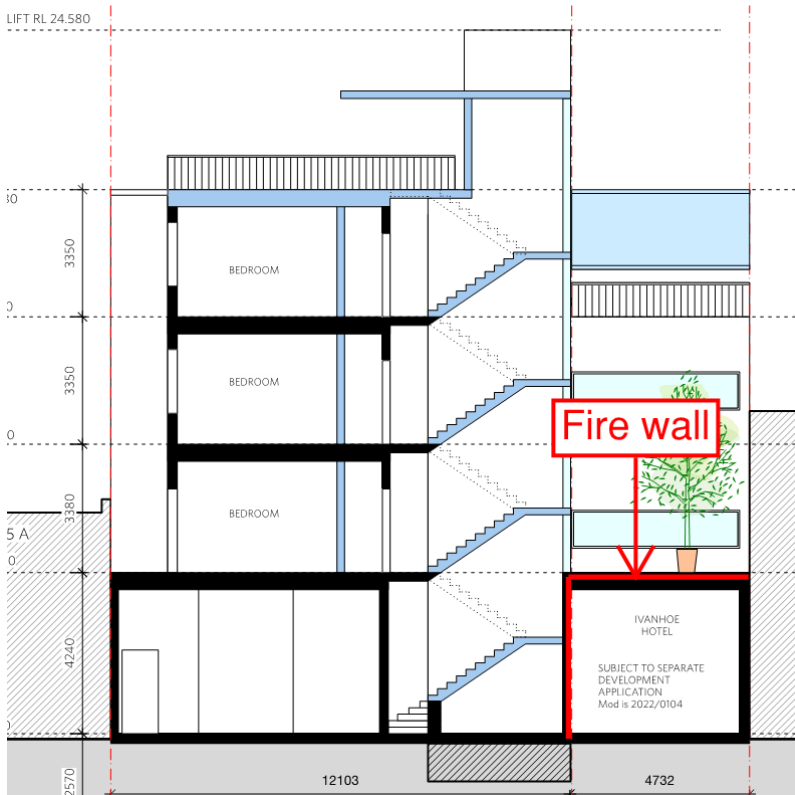
1.0 EXECUTIVE SUMMARY AND RECOMMENDATIONS

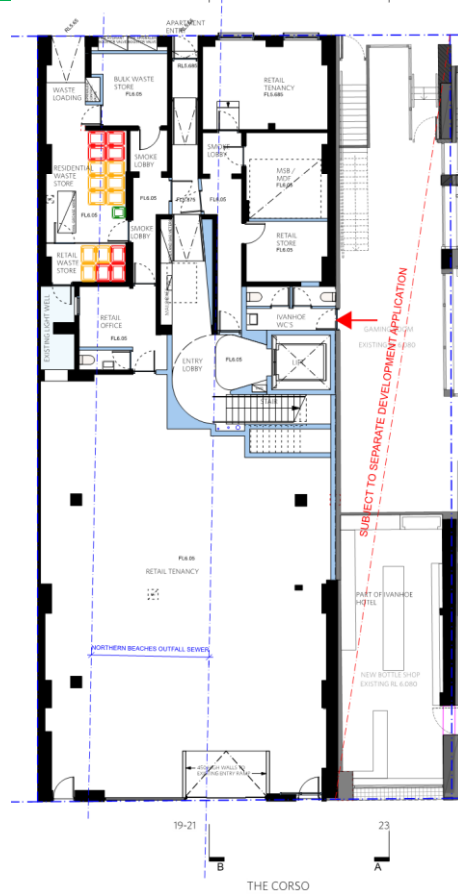
This report provides a Building Code of Australia (BCA) 2019 Amendment 1 assessment of the proposed alterations and additions to the existing mixed-use building, located at 19-23 The Corso, Manly

The primary purpose of this report is to identify the non-compliance matters contained in the proposed design against the current Deemed-to-Satisfy (DTS) Provisions of the BCA and to provide compliance recommendations to overcome the DTS non-compliances.

1.1 Recommendations

The following is a list of Deemed-to-Satisfy Provisions that should be addressed either by design amendments, additional information **OR** by way of an Alternative Solution:

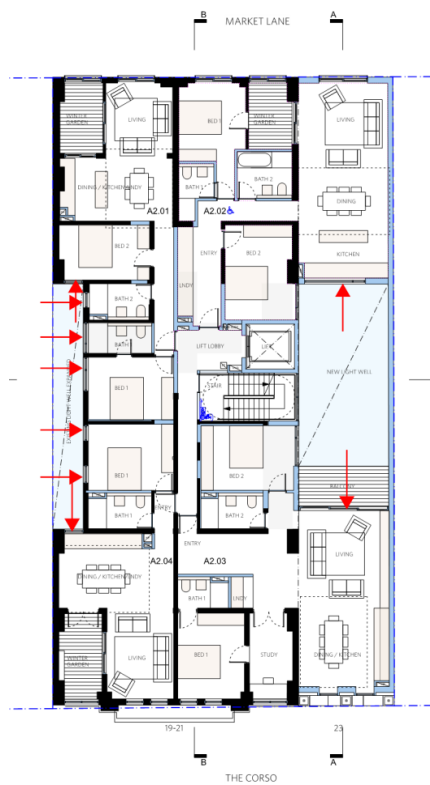
BCA Clause	Deemed-to-Satisfy Provision to be addressed
C2.7 Separation by Fire Walls	<p>The separation of building will utilise a horizontal fire wall which does not comply with C2.7(b).</p> <p><i>It is recommended this is addressed by a Fire Engineered Performance Solution.</i></p> 
C3.2 Protection of openings in external walls	<p>The following openings are located within 3m of the side boundary and not protected in accordance with C3.4.</p>



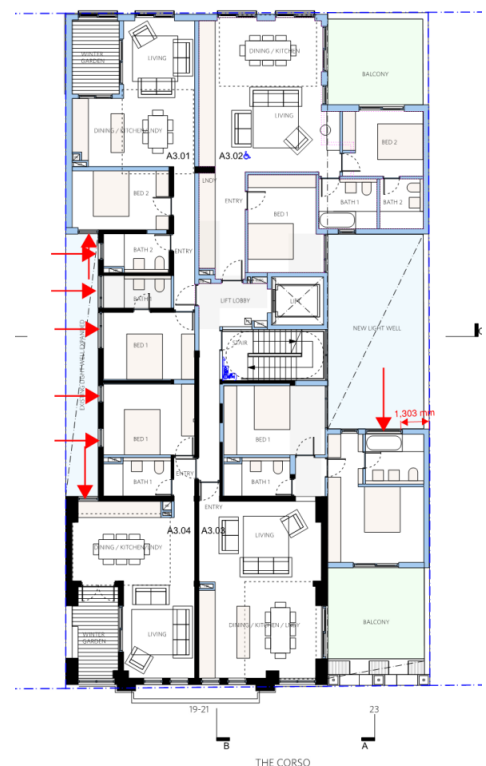
GROUND FLOOR PLAN - PROPOSED



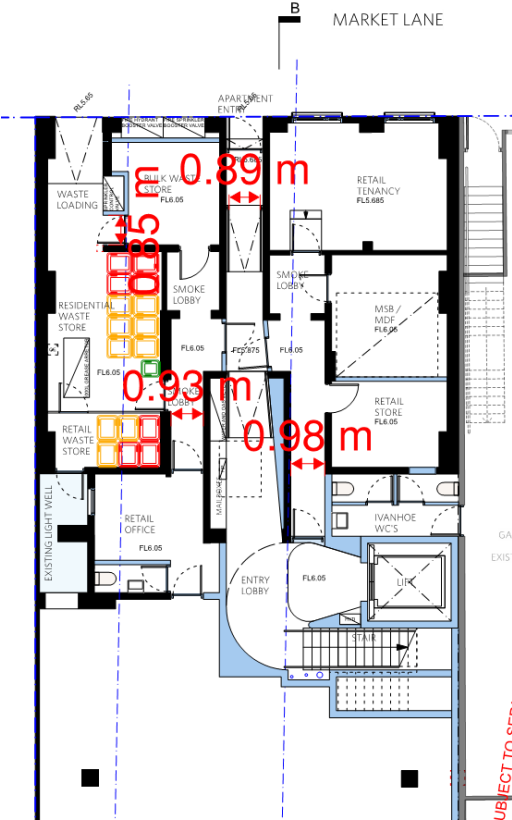

1ST FLOOR PLAN - PROPOSED

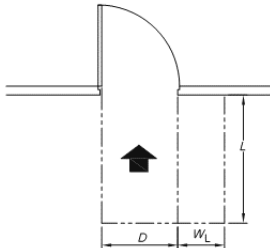
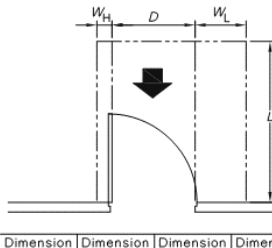



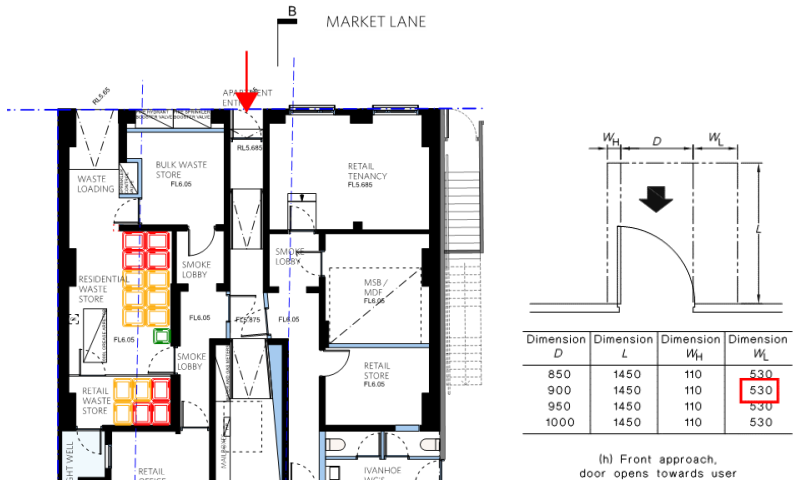
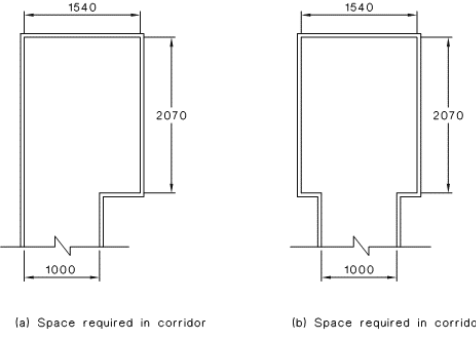

2ND FLOOR PLAN - PROPOSED

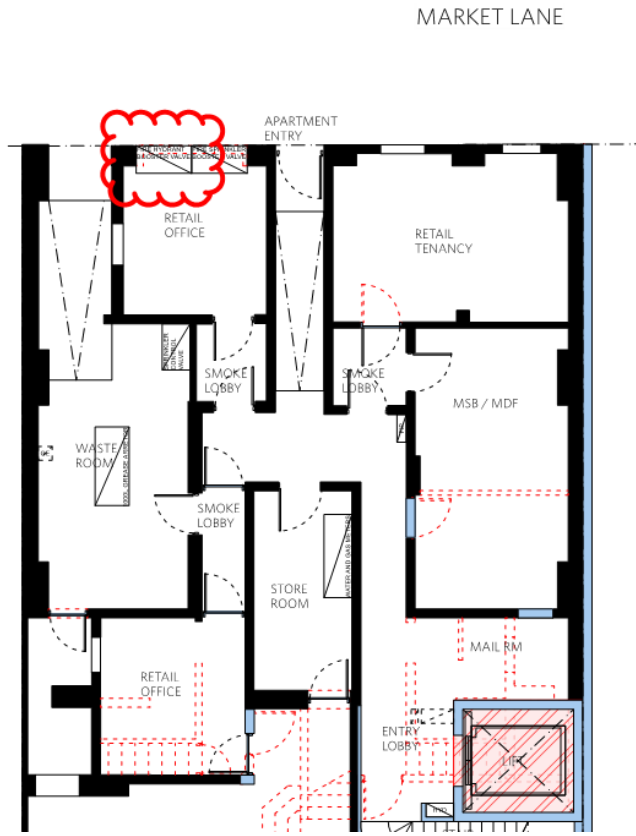


3RD FLOOR PLAN - PROPOSED

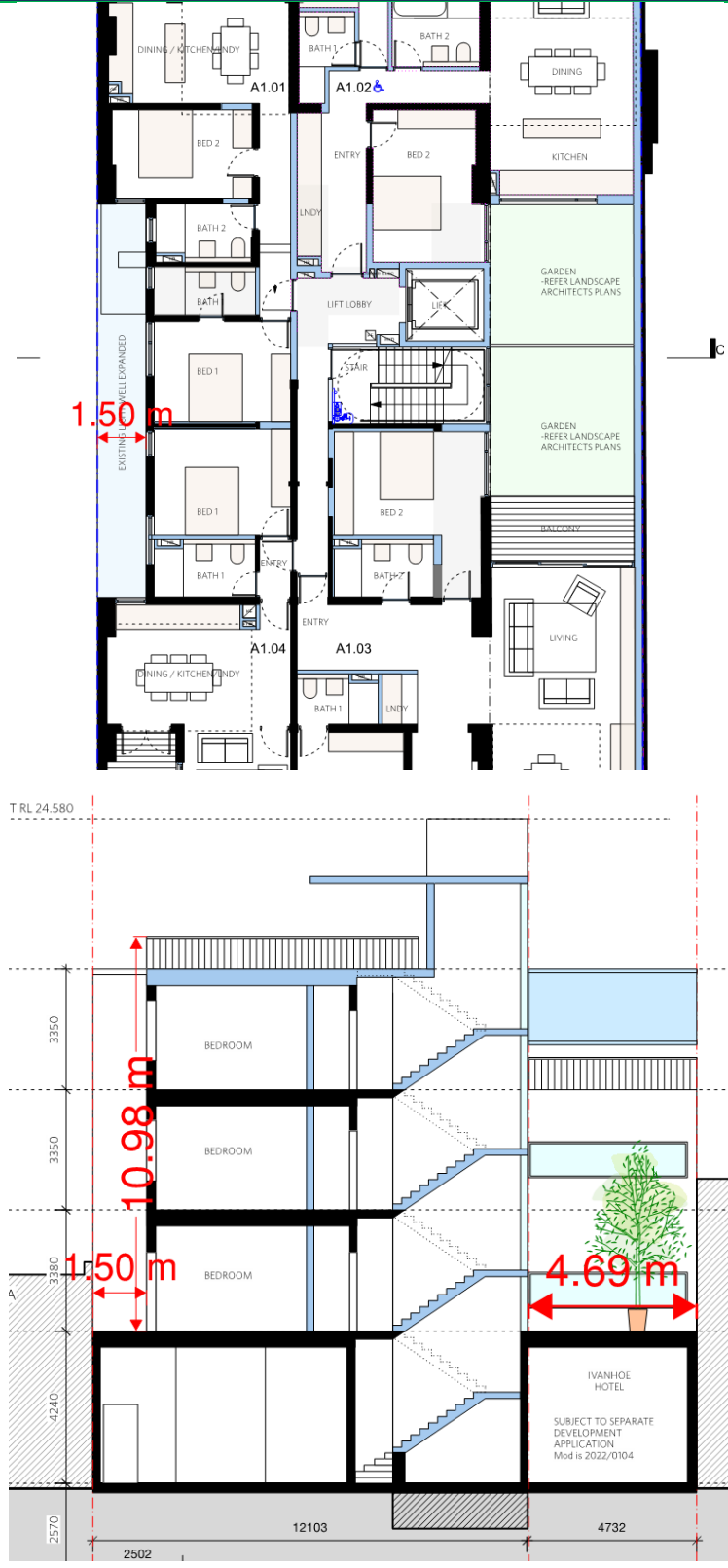
BCA Clause	Deemed-to-Satisfy Provision to be addressed
<p>D1.3 When Fire Isolated exits are required</p>	<p>The internal stairway serving the residential levels connects more than 3 consecutive storey and is not designed to be fire isolated.</p> <p><i>This will be addressed by a Fire Engineered Performance Solution at CC stage.</i></p>
<p>D1.6 Dimensions of Exits and paths of Travel to Exits</p>	<p>Ground – There are two points where the path of travel width is less than 1000mm in width, being 980 & 930mm.</p>  <p>First, Second & Third Floor – Path of travel width at the common corridor is less than 1000mm, being 960mm.</p>  <p><i>This will be addressed by a Fire Engineered Performance Solution at CC stage.</i></p>
<p>D3.1 General building access requirements</p>	<p>The following doorways do not have sufficient circulation space at the doorways in accordance with Clause 13.3 of AS 1428.1-2009.</p> <p><i>It is recommended that this is addressed by Performance Solution at CC stage.</i></p>

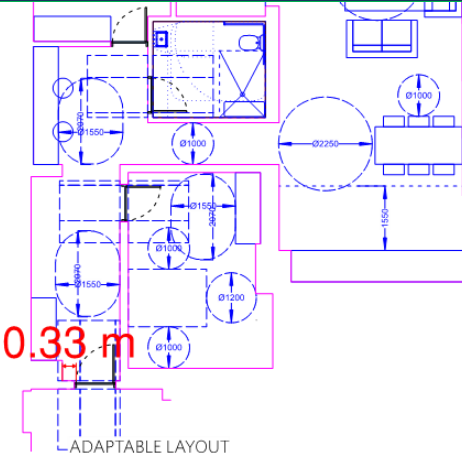
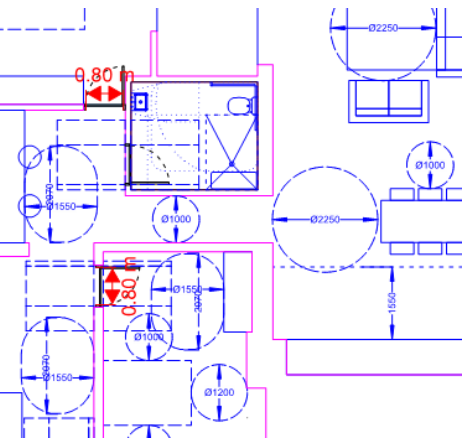
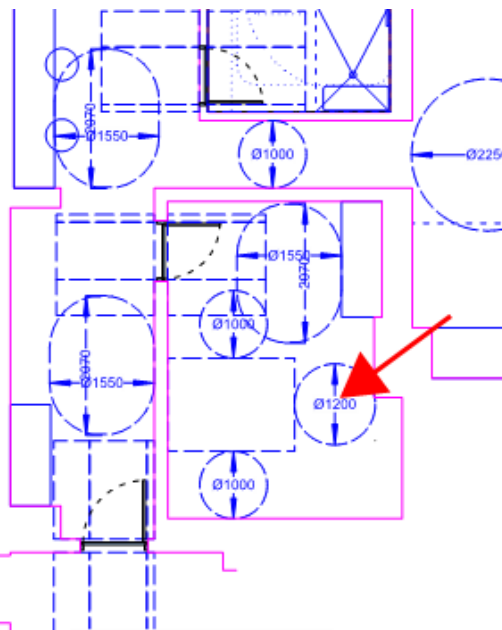
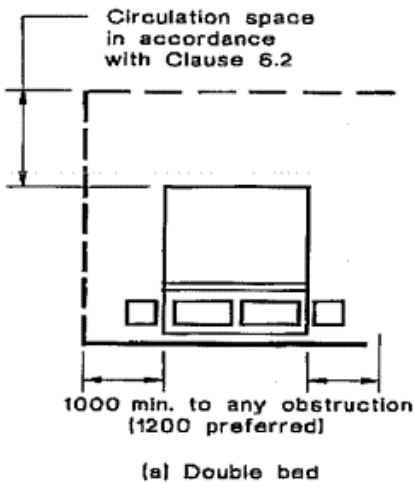
BCA Clause	Deemed-to-Satisfy Provision to be addressed																																								
	<div><div><table data-bbox="676 501 946 613"><thead><tr><th>Dimension D</th><th>Dimension L</th><th>Dimension W_H</th><th>Dimension W_L</th></tr></thead><tbody><tr><td>850</td><td>1450</td><td>0</td><td>510</td></tr><tr><td>900</td><td>1450</td><td>0</td><td>510</td></tr><tr><td>950</td><td>1450</td><td>0</td><td>510</td></tr><tr><td>1000</td><td>1450</td><td>0</td><td>510</td></tr></tbody></table><p>(d) Front approach, door opens away from user</p></div><div><table data-bbox="1003 501 1275 613"><thead><tr><th>Dimension D</th><th>Dimension L</th><th>Dimension W_H</th><th>Dimension W_L</th></tr></thead><tbody><tr><td>850</td><td>1450</td><td>110</td><td>530</td></tr><tr><td>900</td><td>1450</td><td>110</td><td>530</td></tr><tr><td>950</td><td>1450</td><td>110</td><td>530</td></tr><tr><td>1000</td><td>1450</td><td>110</td><td>530</td></tr></tbody></table><p>(h) Front approach, door opens towards user</p></div></div> <div></div>	Dimension D	Dimension L	Dimension W _H	Dimension W _L	850	1450	0	510	900	1450	0	510	950	1450	0	510	1000	1450	0	510	Dimension D	Dimension L	Dimension W _H	Dimension W _L	850	1450	110	530	900	1450	110	530	950	1450	110	530	1000	1450	110	530
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D3.2 Access to buildings	<ul style="list-style-type: none">No circulation space is provided for latchside clearance at the apartment entry doorways which does not comply with Clause 13.3 of AS 1428.1-2009.																																								

BCA Clause	Deemed-to-Satisfy Provision to be addressed
	 <p>(h) Front approach, door opens towards user</p> <p><i>It is recommended that this is addressed by Performance Solution at CC stage.</i></p>
<p>D3.3</p> <p>Parts of the building required to be accessible</p>	<ul style="list-style-type: none"> 1st Floor to 3rd Floor - A turning space in accordance with Clause 6.5.3 of AS 1428.1-2009 is not provided at the end of the corridors serving the SOUs. <p><i>It is recommended that this is addressed by a Performance Solution at CC stage.</i></p>  <p>(a) Space required in corridor (b) Space required in corridor</p> 
<p>E1.3</p> <p>Fire Hydrants</p>	<p>The location of the booster is not located within sight of the main entrance to the building which does not comply with Clause 7.3(c) of AS 2419.1-2005.</p>

BCA Clause	Deemed-to-Satisfy Provision to be addressed
	<p>AED believes the main entrance is the entrance to which the address applies. It is a technical non-compliance.</p> <p><i>This is required to be addressed by a Fire Engineered Performance Solution at CC stage.</i></p> <div data-bbox="667 421 1305 1254">  </div> <p>The following can be detailed on the architectural plans for CC stage:</p> <ul style="list-style-type: none"> - Hydrant valves
<p>F2.1 Facilities in residential buildings</p>	<p>Laundry is not detailed within all SOUs.</p>

BCA Clause	Deemed-to-Satisfy Provision to be addressed								
									
F4.2 Methods and extent of natural lighting	<p>Level 1 - The bedrooms on the western side faces a boundary of an adjoining allotment and is less than horizontal distance from the wall which does not comply with (b).</p> <p><i>It is recommended this is addressed by a Performance Solution at CC stage.</i></p> <table><tr><th>Level</th><th>Calc (50% of square root of sill height)</th><th>Metres to wall</th><th>Complies</th></tr><tr><td>Level 1</td><td>$0.5 \times \sqrt{10.98\text{m}}$ $= 1.66\text{m}$</td><td>1.5</td><td>No.</td></tr></table>	Level	Calc (50% of square root of sill height)	Metres to wall	Complies	Level 1	$0.5 \times \sqrt{10.98\text{m}}$ $= 1.66\text{m}$	1.5	No.
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Level 1	$0.5 \times \sqrt{10.98\text{m}}$ $= 1.66\text{m}$	1.5	No.						

BCA Clause	Deemed-to-Satisfy Provision to be addressed
	
AS 4299 – Technical Review Summary	
ACCESSIBLE ENTRY	<p>The entrance doorway post adaptation has a circulation space less than permitted in AS 1428.2 & AS 1428.1 which does not comply with Clause 4.3.1 of AS 4299-1995.</p> <p><i>It is recommended that this is addressed by a Performance Solution at CC stage.</i></p>

BCA Clause	Deemed-to-Satisfy Provision to be addressed
	 <p>0.33 m</p> <p>ADAPTABLE LAYOUT</p>
INTERIOR : GENERAL	<p>Internal doorways are not 820mm clear which does not comply with Clause 4.3.3 of AS 4299-1995.</p>  <p>0.80 m</p> <p>0.80 m</p> <p>ADAPTABLE LAYOUT</p>
MAIN BEDROOM	<p>A 2070 x 1540mm turning space is not provided at the base of the double bed in accordance with Figure 29(a) of AS1428.2-1992 which does not comply with 4.6.1 of AS 4299-1992.</p>  <p>ADAPTABLE LAYOUT</p>  <p>Circulation space in accordance with Clause 6.2</p> <p>1000 min. to any obstruction (1200 preferred)</p> <p>(a) Double bed</p>



BCA Clause	Deemed-to-Satisfy Provision to be addressed



2.0 INTRODUCTION

This report provides a Building Code of Australia (BCA) 2019 Amendment 1 assessment of the proposed alterations and additions to the existing mixed use building, located at 19-23 The Corso, Manly

This report provides a BCA assessment table in Section 3.0 that summarises the identified non-compliance matters and offers specific recommendations.

2.1 Basis of Report

The key basis of this report is to address compliance with the Building Code of Australia (BCA) 2019 Amendment 1. The scope of services is limited to Sections C – “Fire Resistance”, Section D – “Access & Egress”, Section E – “Services & Equipment”, Section F “Health and Amenity” and Section J “Energy Efficiency”

This report is based on a desktop assessment of the proposed plans, with specific reference to the following:

- Architectural plans prepared by Durbach Block Jaggers, Job No. 1733, Drawing Numbers:

Drawing Title	Drawing No.	Revision	Dated
Proposed – Ground and First Floor Plans	A-15	DA	01.04.22
Proposed – 2 nd and 3 rd Floor Plans	A-16	DA	01.04.22
Proposed – Roof Plan	A-17	DA	01.04.22
Proposed – North and South Elevations	A-18	DA	01.04.22
Proposed - East and West Elevations	A-19	DA	01.04.22
Proposed – Sections	A-20	DA	01.04.22

- The Building Code of Australia 2019 Amendment 1, prepared by the Australian Building Codes Board.
- The Guide to the BCA 2019 Amendment 1, prepared by the Australian Building Codes Board.
- Northern Beaches Development Control Plan 2013;
- AS 4299-1995 *Adaptable Housing*

2.2 Purpose of the Report

The purpose of this report is to assess the following:

- Assessment under the current Building Code of Australia 2019 Amendment 1, and list any departures from the BCA 2019 Amendment 1.
- Provide recommendations to address identified non-compliances, and/or identify potential alternative solutions.
- Assessment of Adaptable Housing Provisions of AS 4299-1995.

2.3 Limitations of the Report

This report does not assess the following:

- Access and facilities for people with disabilities is addressed however compliance with Disability Discrimination Act 1992 (DDA) is outside the scope of this report. It should be noted that BCA compliance does not necessarily meet the requirements of the Disability Discrimination Act (DDA).
- Reporting on hazardous materials, OH&S matters or site contamination
- Assessment of any structural elements or geotechnical matters relating to the building, including any structural or other assessment of the existing fire resistant levels of the building
- Consideration of any fire services operations (including hydraulic, electrical or other systems)

- Assessment of plumbing and drainage installations, including stormwater
- Assessment of mechanical plant operations, electrical systems or security systems
- Heritage significance
- Consideration of energy or water authority requirements
- Consideration of Council's local planning policies
- Environmental or planning issues
- Requirements of statutory authorities
- Pest inspection or assessment building damage caused by pests (general/visual pest invasion or damage will be reported, however invasive or intrusive inspections have not be carried out)
- Sections G, H, I & J of the BCA are not considered.
- Provision of any construction approvals or certification under Part 4A or Part 5 of the Environmental Planning & Assessment Act 1979.
- Glazing, shading, lighting calculations and the like required by Section J of the BCA not been carried out
- This assessment excludes BCA clauses D3.0-3.12 (Inclusive), E3.6 and F2.4. Refer to separate access consultant's report.
- BCA 2019 Amendment 1 does not directly specify slip-resistance classification(s) for all *accessible paths of travel*; however, we highlight the need under AS 1428.1-2009 for all *accessible paths of travel* to have a slip-resistant surface. We recommend you should seek surface finish advice from an independent specialist slip safety consultant.

3.0 BCA ASSESSMENT DATA

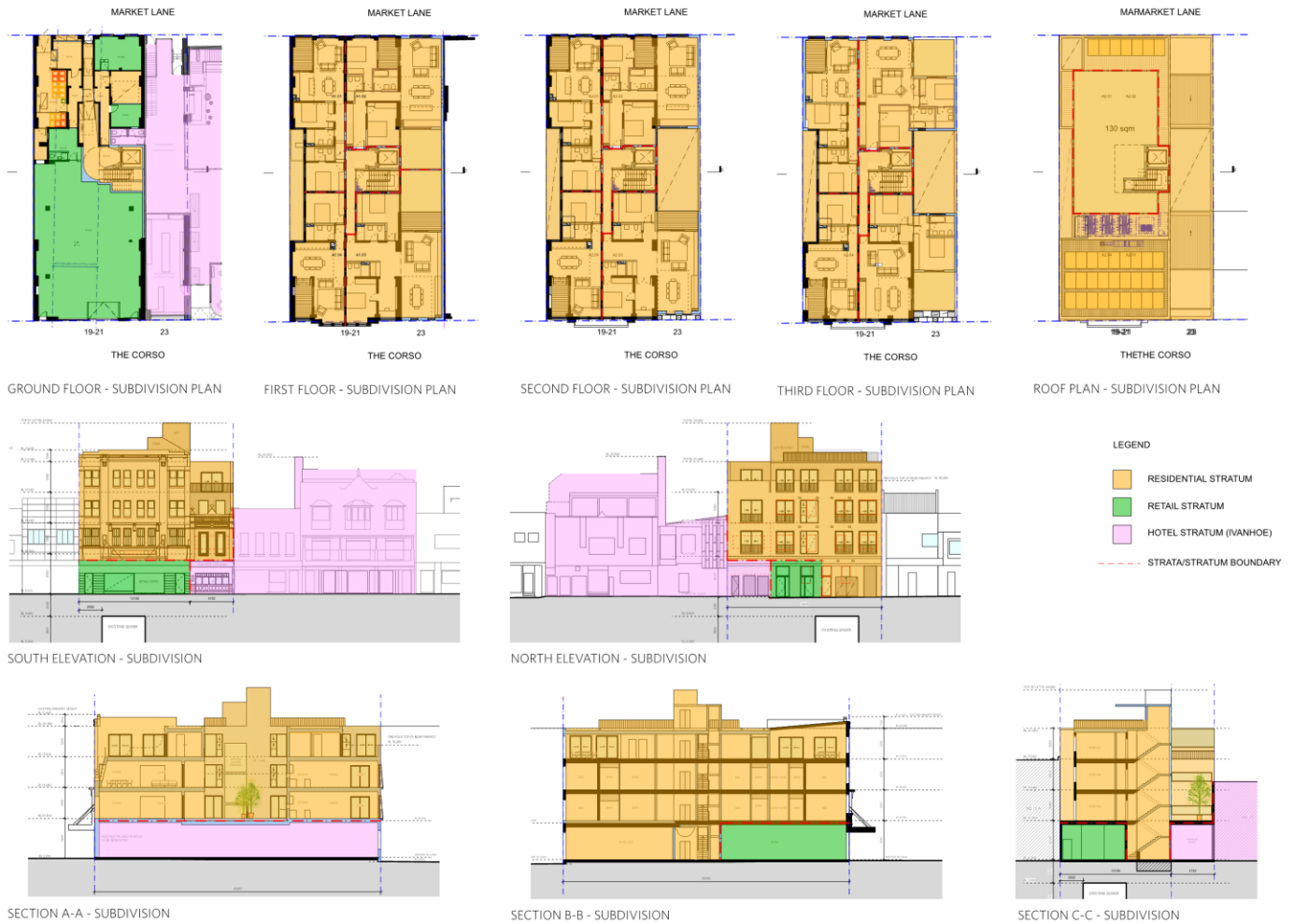
The following data is provided in respect to review of the building under the Building Code of Australia 2019 Amendment 1, in respect to the compliance assessment of the proposed alterations and additions to the existing mixed use building, located at 19-23 The Corso, Manly.

BCA Building Classifications:	<u>Ground Floor</u> : Class 2 (residential) & Class 6 (retail) <u>First Floor to Third Floor</u> : Class 2 (residential)
Building rise in storeys:	4 (determined in accordance with C1.2 of the BCA).
Type of Construction:	Type A (determined in accordance with C1.1 of the BCA)
General floor area limitations:	Class 6 part is <5,000m ² & < 30,000m ³
Effective height (m):	17.030 – 5.910 = 11.120m
Climate Zone (Thermal Design)	5 (determined in accordance with ABCB Climat Map Sept 2019)

3.1 Location of Fire Source features

The potential *fire source features* to be considered for this building are the external wall of another building on the allotment which is not a Class 10 building, the side or rear of the allotment boundary or the far side of the road.

It is recommended the allotments are amalgamated so that *fire source features* no longer exist within the building and fire separation provision of BCA Clause C1.1 & C3.2 can be determined DTS compliant.





3.2 Summary of Fire Services Required

Summarised below are the BCA deemed to satisfy fire services required for the building:

- Fire hydrants are required to serve all areas and be provided in accordance with BCA E1.3 and AS 2419.1-2005.
- A fire hose reel system complying with BCA E1.4 and AS 2441-2005 must be provided to serve all areas other than class 2 SOUs.
- A sprinkler system throughout all parts of the building complying with E1.5 and AS 2118.1-2017 and the Fire Engineering Report
- Portable fire extinguishers must be provided in accordance with BCA E1.6 & Table E1.6 and must be selected, located and distributed in accordance with Sections 1, 2, 3 and 4 of AS 2444-2001.
- Automatic smoke and fire detection to be provided throughout the building in accordance with Part E2 and BCA Specification E2.2a. and AS 1670.1-2018
- Smoke alarm system to be provided throughout the building in accordance with Part E2 and BCA Specification E2.2a. and AS 3786-2014
- An emergency lighting system must be installed throughout the building in accordance with BCA E4.2 of the BCA and AS 2293.1-2018.
- Exit signs must be installed throughout the building in accordance with BCA E4.5 and AS 2293.1-2018.

4.0 BCA ASSESSMENT SUMMARY

The following table details the BCA compliance of the assessed design.

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
SPECIFICATION A1.1 FIRE PROTECTED TIMBER					
Specification A1.1 has been introduced to allow fire-protective timber construction utilising a non-combustible fire protective covering for buildings not exceeding 25m which are sprinkler protected.					
2.1 General requirements			X		Not applicable. Fire protected timber is not proposed.
2.2 Massive Timber			X		❖ Not applicable. Fire protected timber is not proposed.
SECTION B STRUCTURE					
Part B1: Structural Provisions				X	<ul style="list-style-type: none"> ❖ Structural engineer to provide structural drawings/details and accompanying structural design certificate to demonstrate that all building elements will comply with Section B of the BCA. ❖ Glazing must comply with AS1288-2006 and AS2047-2014. ❖ Termite control must comply with AS3660.1-2000 where any primary building elements are timber. ❖ If the building is in a flood hazard area it is required to comply with BCA clause B1.6. <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification (and structural details)</i></p>
SECTION C FIRE RESISTANCE					
Part C1 - Fire Resistance & Stability					
C1.1 Type of Construction Required				X	<p>Refer to Spec C1.1 and Attachment B for Schedule of FRLs for Type A Construction. These are to be certified by the architect and structural engineer as having been met, based on the proposed design.</p> <p>Please note that specification C1.1 also requires design compliance with the following:</p> <ol style="list-style-type: none"> 1. Fire isolated shafts are required to be enclosed at the top and bottom of the shaft with fire rated construction as per specification C1.1. This fire rating is required in two directions. 2. The walls to fire rated shafts must achieve the fire rating from both directions i.e. from inside and outside the shaft. 3. Roof: The roof of the building does not need an FRL, provided the roof covering is non-combustible (as per the concession in Clause 3.5 of Specification C1.1 of the BCA). 4. Bounding construction to residential units must comply with the fire rating requirements of table 3. 8. Floors: see clause C2.9. In addition floors require an FRL of 90/90/90 where between residential levels.

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
					<p><i>Note – Concessions under Specification E1.5a (sprinklered building) for Class 2 & 3 buildings with an effective height of not more than 25m with a rise in storeys of 4 or more.</i></p> <ul style="list-style-type: none"> ❖ FRL's for non-loadbearing internal walls may be reduced to -/45/45 where a AS2118.1 or AS2118.4 sprinkler system installed. ❖ FRL's for non-loadbearing fire resisting lift and stair shafts may be reduced to -/60/15 where FPAA101D & FPAA101H sprinkler system <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification (and structural details)</p>
C1.2 Calculation of Rise In Storeys			X		Refer to Section 2.0 of this report for further details
C1.3 Buildings of Multiple Classifications			X		<p>Informational.</p> <p>In a building of multiple classifications, the type of construction required for the building is the most fire resisting Type resulting from the application of Table C1.1 on the basis that the classification applying to the top storey applies to all storeys.</p> <p>Separate requirements apply to a Class 4 building.</p>
C1.4 Mixed Types of Construction			X		Not applicable. Type A construction only.
C1.5 Two Storey Class 2, 3 or 9c buildings			X		Not applicable. Rise in storeys greater than 2.
C1.6 Class 4 Parts			X		Not applicable. No Class 4 parts.
C1.7 Open Spectator Stands			X		Not applicable. No open spectator stands.
C1.8 Lightweight Construction			X		<p>(a) Where it is proposed to use <i>lightweight construction</i> (within the meaning of the BCA) this must comply with Specification C1.8 if it is used in a wall system—</p> <ul style="list-style-type: none"> (i) that is required to have an FRL; or (ii) for a lift shaft, stair shaft or service shaft or an external wall bounding a public corridor including a non fire-isolated passageway or non fire-isolated ramp. <p>(b) If lightweight construction is used for the fire-resisting covering of a steel column or the like, and if —</p> <ul style="list-style-type: none"> (i) the covering is not in continuous contact with the column, then the void must be filled solid, to a height of not less than 1.2 m above the floor to prevent indenting; and (ii) the column is liable to be damaged from the movement of vehicles, materials or equipment, then the covering must be protected by steel or other suitable material.



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
C1.9 Non - combustible building elements				X	<p>(a) In a building <i>required</i> to be of Type A construction, the following building elements and their components must be <i>non-combustible</i>:</p> <ul style="list-style-type: none"> (i) External walls and <i>common walls</i>, including all components incorporated in them including the facade covering, framing and insulation. (ii) The flooring and floor framing of lift pits. (iii) <i>Non-loadbearing internal walls</i> where they are <i>required</i> to be <i>fire-resisting</i>. <p>(b) A shaft, being a lift, ventilating, pipe, garbage, or similar shaft that is not for the discharge of hot products of combustion, that is non-loadbearing, must be of non-combustible construction in—</p> <ul style="list-style-type: none"> (i) a building <i>required</i> to be of Type A construction; and <p>(c) A <i>loadbearing internal wall</i> and a <i>loadbearing fire wall</i>, including those that are part of a <i>loadbearing shaft</i>, must comply with Specification C1.1.</p> <p>(d) The requirements of (a) and (b) do not apply to gaskets, caulking, sealants, termite management systems, glass including laminated glass, thermal breaks associated with glazing systems, damp-proof courses.</p> <p>(e) The following materials may be used wherever a <i>non-combustible</i> material is <i>required</i>:</p> <ul style="list-style-type: none"> (i) Plasterboard. (ii) Perforated gypsum lath with a normal paper finish. (iii) Fibrous-plaster sheet. (iv) Fibre-reinforced cement sheeting. (v) Pre-finished metal sheeting having a <i>combustible</i> surface finish not exceeding 1 mm thickness and where the <i>Spread-of-Flame Index</i> of the product is not greater than 0. (vi) Sarking type materials that do not exceed 1mm in thickness and have a Flammability Index not greater than 5. (vii) Bonded laminated materials where— <ul style="list-style-type: none"> (A) each lamina, including any core, is <i>non-combustible</i>; and (B) each adhesive layer does not exceed 1 mm in thickness and the total thickness of the adhesive layers does not exceed 2mm; and (C) the <i>Spread-of-Flame Index</i> and the <i>Smoke-Developed Index</i> of the bonded laminated material as a whole do not exceed 0 and 3 respectively.





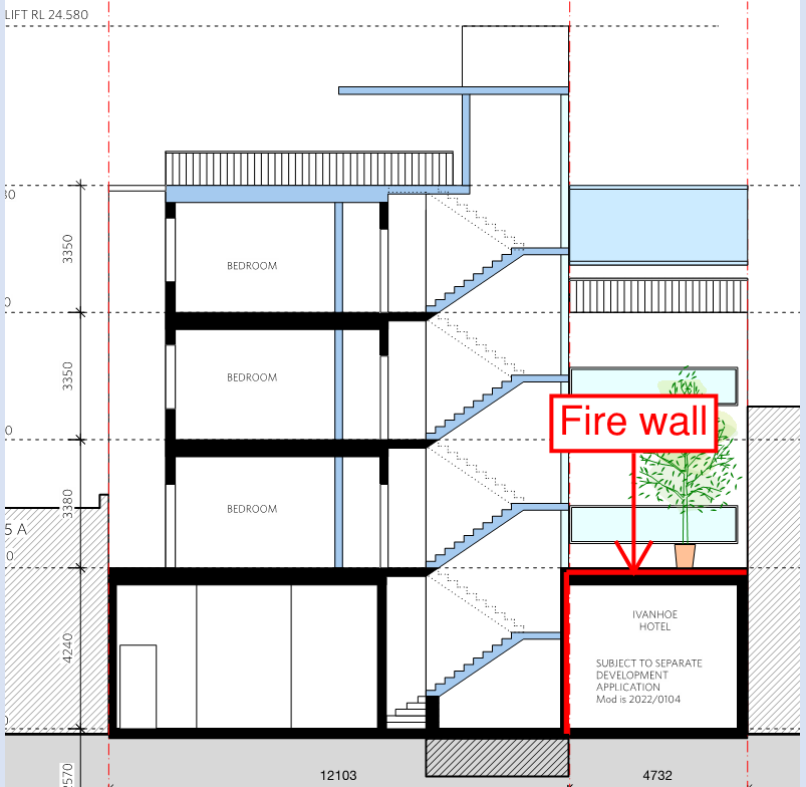
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
C1.10 Fire Hazard Properties				X	<p>(a) The fire hazard properties of the following internal linings, materials and assemblies must comply with Specification C1.10 by way of test reports / certificates provided from a <i>registered testing authority</i> (within the meaning of the BCA):</p> <ul style="list-style-type: none">(i) Floor linings and floor coverings.(ii) Wall linings and ceiling linings.(iii) Air-handling ductwork.(iv) Lift cars.(vii) Sarking type materials.(viii) Attachments to floors, ceilings, internal walls and the internal linings of external walls.(ix) Other materials including insulation materials other than <p>(c) The requirements of (a) do not apply to a material or assembly if it is –</p> <ul style="list-style-type: none">(i) plaster, cement render, concrete, terrazzo, ceramic tile or the like; or(ii) a fire protective covering; or(iii) a timber framed window; or(iv) a solid timber handrail or skirting; or(v) a timber-faced door; or(vi) an electrical switch, socket-outlet, cover plate or the like; or(vii) a material used –<ul style="list-style-type: none">(A) a roof insulating material applied in continuous contact with a substrate; or(B) an adhesive; or(C) a damp-proof course, flashing, caulking, sealing, ground moisture barrier or the like; or(viii) a paint, varnish, lacquer or similar finish, other than nitro-cellulose lacquer; or(ix) a clear or translucent roof light of glass fibre-reinforced polyester if –<ul style="list-style-type: none">(A) the roof in which it is installed forms part of a single storey building required to be Type C construction; and(B) the material is used as part of the roof covering; and(C) it is no closer than 1.5m from another roof light of the same type; and(D) each roof light is not more than 14m² in area; and

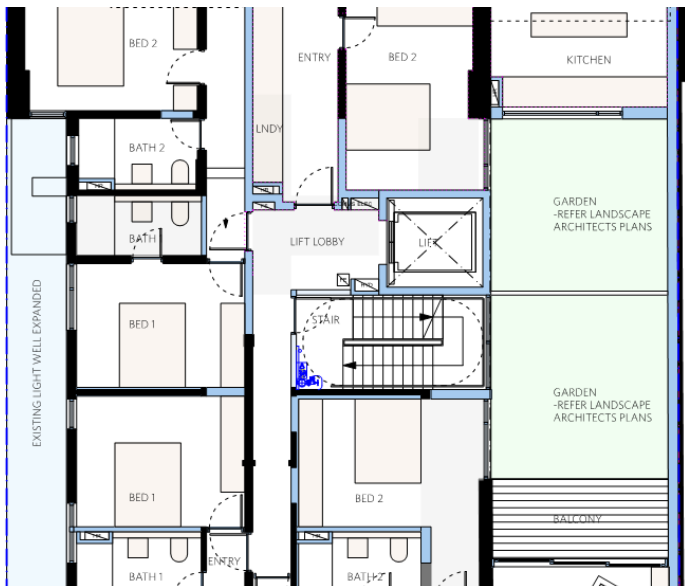


BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(E) the area of the roof lights per 70m² of roof surface is not more than 14m² in area; or</p> <p>(x) a face plate or neck adaptor of supply and return air outlets of an air handling system; or</p> <p>(xi) a face plate or diffuser plate of light fitting and emergency exit signs and associated electrical wiring and electrical components; or</p> <p>(xii) a joinery unit, cupboard, shelving or the like; or</p> <p>(xiv) Timber treads, risers, landings and associated supporting framework installed in accordance with D2.25 where the Spread-of-Flame Index and the Smoke-Developed Index of the timber does not exceed 9 and respectively; or</p> <p>(xv) Any other material that does not significantly increase the hazards of the fire.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
C1.11 Performance of External Walls in Fire				X	Concrete external walls that could collapse as complete panels (e.g. tilt-up and pre-cast concrete), in a building having a rise in storeys of not more than 2, must comply with Specification C1.11.
C1.12 *****			X		Clause deleted.
C1.13 Fire protected timber: concession			X		Not applicable. No fire-protected timber proposed.
C1.14 Ancillary elements				X	<p>An <i>ancillary element</i> must not be fixed, installed or attached to the internal parts or external face of an <i>external wall</i> that is <i>required</i> to be <i>non-combustible</i> unless it is one of the following:</p> <p>(a) An ancillary element that is non-combustible.</p> <p>(b) A gutter, downpipe or other plumbing fixture or fitting.</p> <p>(c) A flashing.</p> <p>(d) A grate or grill not more than 2m² in an area associated with a building service.</p> <p>(e) An electrical switch, socket outlet, cover plate or the like.</p> <p>(f) A light fitting.</p> <p>(g) A <i>required</i> sign.</p> <p>(h) A sign other than one provided under (a) or (g) that –</p> <p>(i) Achieves a group number 1 or 2; and</p> <p>(ii) Does not extend beyond one storey; and</p> <p>(iii) Does not extend beyond one fire compartment; and</p> <p>(iv) Is separated vertically from other signs permitted under (h) by at least 2 storeys.</p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
					<p>(i) An awning, sunshade, canopy, blind or shading hood other than one provided under (a) that –</p> <p>(i) Meets the requirements of Table 4 of Specification C1.10 as an internal element; and</p> <p>(ii) Serves a storey –</p> <p>(A) At ground level; or</p> <p>(B) Immediately above a storey at ground level; and</p> <p>(iii) Does not serve an exit, where it would render the exit unusable in a fire.</p> <p>(j) A part of a security, intercom or announcement system.</p> <p>(k) Wiring.</p> <p>(l) A paint, lacquer or similar finish,</p> <p>(m) A gasket, caulking, sealant or adhesive directly associated with (a) to (k).</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
Part C2 - Compartmentation & Separation					
C2.1 Application of Part			X		Informational. C2.2, C2.3 and C2.4 do not apply to a carpark provided with a sprinkler system (other than a FPAA101D or FPAA101H system complying with Specification E1.5, an open-deck carpark or an open spectator stand.
C2.2 General Floor Area & Volume Limitations	X				The size of any fire compartment or atrium in a Class 6 building does not exceed the relevant maximum floor area and maximum volume set out in Table C2.2 & C2.5, except as permitted in C2.3.
C2.3 Large Isolated Buildings			X		Not applicable. Not a large isolated building.
C2.4 Requirements for Open Space			X		Not applicable. Not a large isolated building.
C2.5 Class 9a & 9c Buildings			X		Not applicable. Not Class 9a or 9c building.
C2.6 Vertical Separation of openings in external walls	X				Proposed building will be sprinkler protected in accordance with BCA Clause E1.5.
C2.7 Separation by Fire Walls				X	<p>(a) Construction – a fire wall must be constructed in accordance with the following:</p> <p>(i) The fire wall has the relevant FRL prescribed by Specification C1.1 for each of the adjoining parts, and if these are different, the greater FRL; except where Tables 3.9, 4.2 and 5.2 of Specification C1.1 permit a lower FRL on the carpark side.</p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(ii) Any openings in the fire wall must not reduce the FRL required by Specification C1.1 for the fire wall, except where permitted by the Deemed-to-Satisfy Provisions of Part C3.</p> <p>(iii) Building elements, other than roof battens with dimensions of 75 mm x 50 mm or less or sarking-type material, must not pass through or cross the fire wall unless the required fire resisting performance of the fire wall is maintained.</p> <p>(b) Separation of buildings – a part of a building separated from the remainder of the building by a fire wall may be treated as a separate building for the DTS provisions of Sections C, D & E if it is constructed in accordance with (a) and the following:</p> <p>(i) The fire wall extends through all storeys and spaces in the nature of storeys that are common to that part and any adjoining part of the building.</p> <p>(ii) The fire wall is carried through to the underside of the roof covering.</p> <p>(iii) Where the roof of one of the adjoining parts is lower than the roof of the other part, the fire wall extends to the underside of –</p> <p>(A) The covering of the higher roof, or not less than 6m above the covering of the lower roof; or</p> <p>(B) The lower roof if it has an FRL not less than that of a fire wall and no openings closer than 3m to any wall above the lower roof; or</p> <p>(C) The lower roof if its covering is non combustible and the lower part has a sprinkler system (other than a FPAA101D or FPAA101H system complying with Specification E1.5.</p> <p>(c) Separation of fire compartments – a part of a building separated from the remainder of the building by a fire wall may be treated as a separate fire compartment if it is constructed in accordance with (a) and the fire wall extends to the underside of –</p> <p>(i) A floor having an FRL required for a fire wall; or</p> <p>(ii) The roof covering.</p> <p><u>DTS non-compliance</u></p> <p>The separation of building will utilise a horizontal fire wall which does not comply with C2.7(b).</p> <p><i>It is recommended this is addressed by a Fire Engineered Performance Solution.</i></p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					 <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
C2.8 Separation of Classifications in the same storey				X	<p>In a building containing different classifications located alongside one other in the same storey -</p> <ul style="list-style-type: none"> (a) each building element in that storey must have the higher FRL prescribed in Specification C1.1 for that element for the classifications concerned; or (b) the parts must be separated in that storey by a fire wall having – <ul style="list-style-type: none"> (i) the higher FRL prescribed in Table 3; or (ii) the FRL prescribed in Table 5, Specification C1.1, for that element for the Type of construction and classification concerned; or (c) where one part is a carpark complying with Table 3.9, 4.2 or 5.2 of Specification C1.1, the parts may be separated by a fire wall complying with the appropriate table. <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
C2.9 Separation of Classifications in different storeys				X	<p>If parts of different classification are situated one above the other in adjoining storeys they must be separated as follows –</p> <ul style="list-style-type: none"> (a) Type A construction - the floor between the adjoining parts must have an FRL of not less than that prescribed in Specification C1.1 for the classification of the lower storey.

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
C2.10 Separation of lifts shafts				X	<p>(a) Any lift connecting more than 2 storeys, or more than 3 storeys where the building is sprinkler protected must be separated from the remainder of the building by enclosure in a shaft in which –</p> <p>(i) For Type A construction – the walls have the FRL prescribed by Specification C1.1; and</p> <p>(d) Openings for lift landing doors and services must be protected in accordance with the DTS provisions of Part C3.</p> <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
C2.11 Stairways and lifts in one shaft	X				<p>A stairway and lift must not be in the same shaft if either the stairway or the lift is required to be in a fire-resisting shaft.</p>  <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
C2.12 Separation of Equipment				X	<p>(a) Equipment other than that described in (b) and (c) must be separated from the remainder of the building with construction complying with (d), if that equipment comprises –</p> <p>(i) lift motors and lift control panels or</p> <p>(ii) Emergency generators used to sustain emergency equipment operating in the emergency mode; or</p> <p>(iii) Central smoke control plant; or</p> <p>(iv) Boilers; or</p>



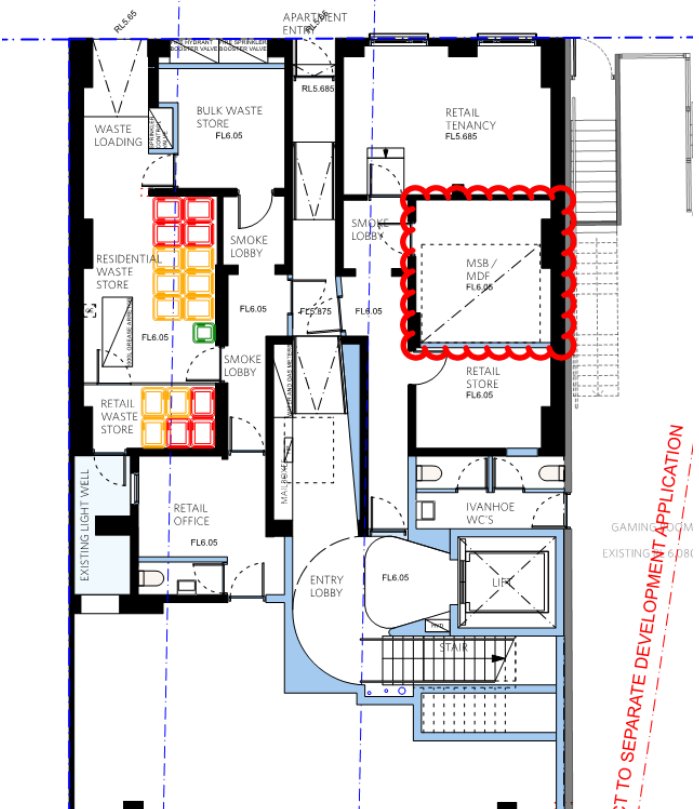
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(v) A battery system installed in that building that has a total voltage of 12 volts or more and a storage capacity of 200kWh or more.</p> <p>(b) Equipment need not be separated in accordance with (a) if the equipment comprises-</p> <p>(i) Smoke control exhaust fans located in the air stream which are constructed for high temperature operation in accordance with Specification E2.2b; or</p> <p>(ii) Stair pressurizing equipment installed in compliance with AS 1668.1; or</p> <p>(iii) A lift installation without a machine room; or</p> <p>(iv) Equipment otherwise adequately separated from the remainder of the building.</p> <p>(c) Separation of onsite fire pumps must comply with the requirements of AS2419.1.</p> <p>(d) Separating construction must have –</p> <p>(i) Except as provided by (ii) –</p> <p>(A) An FRL is required by Specification C1.1, but not less than 120/120/120; and</p> <p>(B) Any doorway protected with a -/120/30 self-closing fire door; or</p> <p>(ii) When separating a lift shaft and lift motor room, an FRL not less than 120/-/-.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification.</i></p>
C2.13 Electrical Supply				X	<p>(a) An electricity sub-station must be separated from the building in accordance with the Energy Authority Requirements (i.e. Ausgrid).</p> <p>(b) A main switchboard located within the building (and which sustains emergency equipment operating in the emergency mode) must –</p> <p>(i) be separated from any other part of the building by construction having an FRL of not less than 120/120/120; and</p> <p>(ii) have any doorway in that construction protected with a self-closing fire door having an FRL of not less than – /120/30.</p> <p>(c) Electrical conductors located within the building that supply –</p> <p>(i) a substation located within the building which supplies a main switchboard covered by (b); or</p> <p>(ii) a main switchboard covered by (b), must—</p> <p>(iii) have a classification in accordance with AS/NZS 3013-2005 of not less than—</p>



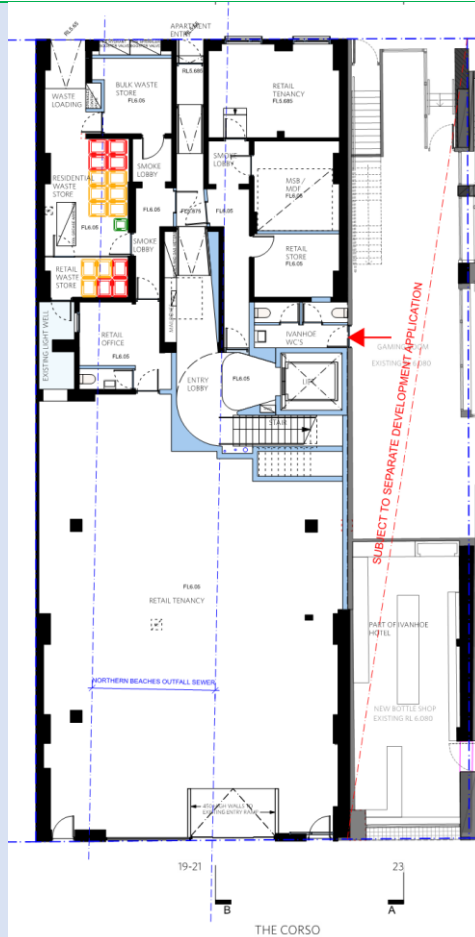


BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(A) if located in a position that could be subject to damage by motor vehicles — WS53W; or</p> <p>(B) otherwise — WS52W; or</p> <p>(iv) be enclosed or otherwise protected by construction having an FRL of not less than 120/120/120</p> <p>(d) where emergency equipment is required in a building, all switchboards in the electrical installation, which sustain the electricity supply to the emergency equipment, must be constructed so that emergency equipment switchgear is separated from non-emergency equipment switchgear by metal partitions designed to minimise the spread of a fault from the non-emergency equipment switchgear.</p> <p>(e) For the purposes of (d), emergency equipment includes but it is not limited to –</p> <p>(i) Fire hydrant booster pumps</p> <p>(ii) Pumps for automatic sprinkler systems, water spray, chemical fluid suppression systems or the like.</p> <p>(iii) Pumps for fire hose reels where such pumps and fire hose reels form the sole means of fire protection in the building.</p> <p>(iv) Air handling systems designed to exhaust and control the spread of fire and smoke.</p> <p>(v) Emergency lifts.</p> <p>(vi) Control and indicating equipment.</p> <p>(vii) Emergency warning and intercom systems (EWIS).</p> <p>Ground Floor – MSB/MDF room to be enclosed by construction having an FRL of not less than 120/120/120</p>

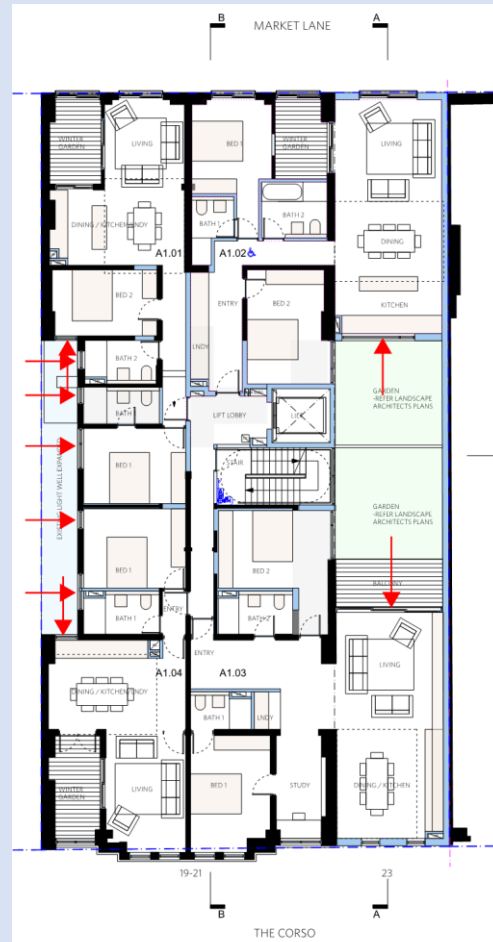


BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					 <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
C2.14 Public corridors in Class 2 & 3 Buildings	X				A public corridor is not more than 40 m in length.
Part C3 - Protection of Openings					
C3.1 Application of Part			X		<p>(a) The DTS provisions of this Part do not apply to-</p> <ul style="list-style-type: none"> (i) Control joints, weep holes and the like in external walls of masonry construction and joints between panels in external walls of pre-cast concrete panel construction if, in all cases they are not larger than necessary for the purpose; and (ii) Non-combustible ventilators for subfloor or cavity ventilation, if each does not exceed 45000mm² in face area and spaced not less than 2m from any other ventilator in the same wall; and (iii) Openings in the vertical plane formed between building elements at the construction edge or perimeter of a balcony or verandah, colonnade, terrace, or the like and (iv) In a carpark – <ul style="list-style-type: none"> (A) Service penetrations through; and (B) Openings formed by a vehicle ramp in, a floor other than a floor that separates a part not used as a

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>carpark, providing the connected floors comply as a single fire compartment for the purposes of all other requirements of the DTS provisions of Sections C, D & E.</p> <p>(b) For the purposes of DTS provisions of this Part, openings in building elements required to be fire resisting include doorways, windows (including any associated fanlight), infill panels and fixed or openable glazed areas that do not have the required FRL.</p> <p>(c) For the purposes of the DTS provisions of this part, openings other than those covered under (a)(iii), between building elements such as columns, beams and the like, in the plane formed at the construction edge of the perimeter of the building, are deemed to openings in the external wall.</p>
C3.2 Protection of openings in external walls			X		<p>(a) Openings in an external wall that is required to have an FRL must be protected in accordance with C3.4:</p> <p>(i) if the distance between the opening and the fire-source feature is less than 3 m from a side or rear boundary; or</p> <p>(ii) less than 6 m from the far boundary of a road, river, lake or the like adjoining the allotment, if not located in a storey at or near ground level; or</p> <p>(iii) less than 6 m from another building on the allotment that is not Class 10;</p> <p>If wall wetting sprinklers are to be used they are to be located externally.</p> <p>(b) if required to be protected under (a), not occupy more than 1/3 of the area of the external wall of the storey in which it is located.</p> <p><u>DTS non-compliance</u></p> <p>The following openings are located within 3m of the side boundary and not protected in accordance with C3.4.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>



GROUND FLOOR PLAN - PROPOSED



1ST FLOOR PLAN - PROPOSED

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	NA or Informational DOES NOT COMPLY	Compliance Required	COMMENTS
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>2ND FLOOR PLAN - PROPOSED</p> </div> <div style="text-align: center;"> <p>3RD FLOOR PLAN - PROPOSED</p> </div> </div>				

C3.3 Separation of external walls and associated openings in different fire compartments			X	Not applicable. No different fire compartments separated by a fire wall applicable to this clause.
C3.4 Acceptable Methods of Protection			X	<p>Informational.</p> <p>(a) Where protection is required to doorways and windows and other openings they must be protected as follows:</p> <p>(i) Doorways</p> <ul style="list-style-type: none"> ❖ Internal or external wall wetting sprinklers as appropriate used with doors that are self-closing or automatic closing; or ❖ -/60/30 fire doors that are self-closing or automatic closing <p>(ii) Windows</p> <ul style="list-style-type: none"> ❖ Internal or external wall wetting sprinklers as appropriate used with windows that are automatic closing or permanently fixed in the closed position or;



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<ul style="list-style-type: none"> ❖ -/60- fire windows that are automatic closing or permanently fixed in the closed position or ❖ -/60- automatic closing fire shutters. <p>(iii) Other openings –</p> <ul style="list-style-type: none"> ❖ Excluding voids – internal or external wall wetting sprinklers as appropriate or ❖ Construction having a FRL not less than -/60/-. <p>(b) Fire doors, fire windows and fire shutters must comply with Specification C3.4.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
C3.5 Doorways in Fire Walls				X	<p>(a) The aggregate width of openings for doorways in a fire wall, which are not part of a horizontal exit, must not exceed ½ the length of the fire wall, and each doorway must be protected by –</p> <ul style="list-style-type: none"> (i) 2 fire doors or fire shutters, one on each (ii) side of the doorway, each of which has an FRL not less than ½ that required by Specification C1.1 for the fire wall except that each door or shutter must have an insulation level of at least 30; or (iii) A fire door on one side and a fire shutter on the other side of the doorway, each of which complies with (i); or (iv) A single fire door or fire shutter which has an FRL of not less than that required by Specification C1.1 for the fire wall except that each door or shutter must have an insulation level of at least 30. <p>(b) A fire door or fire shutter required by (a)(i), (ii) or (iii) must be self-closing, or automatic closing in accordance with (c) & (d).</p> <p>(c) The automatic closing operation required by (b) must be initiated by the activation of a smoke detector, or any other detector deemed suitable in accordance with AS1670.1 if smoke detectors are unsuitable in the atmosphere, installed in accordance with AS1670.1 and located on each side of the fire wall not more than 1.5m horizontal distance from the opening.</p> <p>(d) Where any other required suitable fire alarm system, including a sprinkler system (other than a FPAA101D) complying with Specification E1.5, is installed in the building, activation of the system in either fire compartment separated by the fire wall must also initiate the automatic closing operation.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
C3.6			X		Not applicable. No sliding fire doors proposed or required.





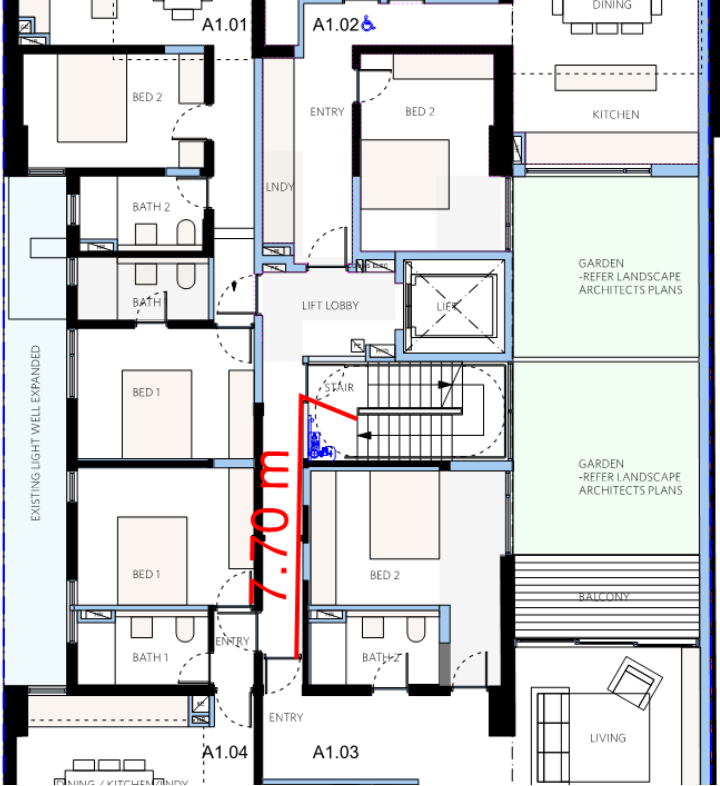
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Sliding Fire Doors					
C3.7 Protection of Doorways in horizontal exits			X		Not applicable. No horizontal exits proposed or required.
C3.8 Openings in fire isolated exits			X		Not applicable. No fire-isolated exits proposed.
C3.9 Service Penetrations in fire-isolated exits			X		Not applicable. No fire-isolated exits proposed.
C3.10 Openings in Fire isolated lift shafts			X		Not applicable. No fire-isolated exits proposed.
C3.11 Bounding Construction: Class 2, 3 buildings and Class 4 Parts.				X	<p>(a) A doorway in a Class 2 or 3 building must be protected if it provides access from a sole-occupancy unit to—</p> <ul style="list-style-type: none"> (i) a public corridor, public lobby, or the like; or (ii) a room not within a sole-occupancy unit; or (iii) the landing of an internal non fire-isolated stairway that serves as a required exit; or (iv) another sole-occupancy unit. <p>(b) A doorway in a Class 2 or 3 building must be protected if it provides access from a room not within a sole-occupancy unit to—</p> <ul style="list-style-type: none"> (i) a public corridor, public lobby, or the like; or (ii) the landing of an internal non fire-isolated stairway that serves as a required exit. <p>(d) Protection for a doorway required under (a), (b) or (c) must be at least—</p> <ul style="list-style-type: none"> (i) in a building of Type A construction — a self-closing – /60/30 fire door; and (ii) in a building of Type B or C construction — a self-closing, tight fitting, solid core door not less than 35 mm thick, except— (iii) in a Class 3 building used as a residential care building protected with a sprinkler system complying with Specification E1.5, a tight fitting solid core door not less than 35 mm thick that is— <ul style="list-style-type: none"> (A) self-closing; or (B) fitted with a free-arm action closing device which closes the door or causes the door to remain closed (without preventing manual re-opening), upon the detection of smoke by a detector located within the room.



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(e) Other openings in internal walls which are required to have an FRL with respect to integrity and insulation must not reduce the fire-resisting performance of the wall.</p> <p>(f) A door required by (d) may be automatic-closing in accordance with the following:</p> <p>(i) The automatic-closing operation must be initiated by the activation of a smoke detector, or any other detector deemed suitable in accordance with AS 1670.1 if smoke detectors are unsuitable in the atmosphere, installed in accordance with the relevant provisions of AS 1670.1 and located not more than 1.5 m horizontal distance from the approach side of the doorway.</p> <p>(ii) Where any other required suitable fire alarm system, including a sprinkler system (other than a FPAA101D system) complying with Specification E1.5, is installed in the building, activation of the system must also initiate the automatic-closing operation.</p> <p>(g) In a Class 2 or 3 building where a path of travel to an exit does not provide a person seeking egress with a choice of travel in different directions to alternative exits and is along an open balcony, landing or the like and passes an external wall of—</p> <p>(i) another sole-occupancy unit; or</p> <p>(ii) a room not within a sole-occupancy unit, then that external wall must—</p> <p>(iii) be constructed of concrete or masonry, or be lined internally with a fire-protective covering; and</p> <p>(iv) have any doorway fitted with a self-closing, tight-fitting solid core door not less than 35 mm thick; and</p> <p>(v) have any windows or other openings—</p> <p>(A) protected internally in accordance with C3.4; or</p> <p>(B) located at least 1.5 m above the floor of the balcony, landing or the like.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
C3.12 Openings in floors and ceilings for services				X	<p>Where services pass through a floor which is required to achieve a FRL or a ceiling required to have a RISF, the service must be enclosed within a fire resisting shaft or fire protected in accordance with Clause C3.15.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
C3.13 Openings in Shafts				X	<p>In a building of Type A construction, an opening in a wall providing access to a ventilating, pipe, garbage or other service shaft must be fire protected in accordance with this clause.</p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
C3.15 Openings for Service Installations				X	Where services pass through an element which is required to achieve a FRL (other than an external wall or roof), the service must be fire stopped by a tested system or Specification C3.15. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
C3.16 Construction Joints				X	Construction joints, spaces and the like in and between building elements required to be fire-resisting with respect to integrity and insulation must be protected in a manner identical with a prototype tested in accordance with AS 1530.4 to achieve the required FRL. The requirements above do not apply where joints, spaces and the like between fire protected timber elements are provided with cavity barriers in accordance with Specification C1.13. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
C3.17 Columns protected in lightweight construction to achieve an FRL			X		Any column protected by lightweight construction to achieve an FRL which passes through a building element that is required to have an FRL or a resistance to the incipient spread of fire, must be installed using a method and materials identical with a prototype assembly of construction which has achieved the required FRL or resistance to the incipient spread of fire. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
SECTION D					
ACCESS & EGRESS					
Part D1 - Provision for Escape					
D1.1 Application of Part			X		The DTS provisions of this Part do not apply to the internal parts of a sole occupancy unit in a Class 2 or 3 building or Class 4 part of a building.
D1.2 Number of Exits required	X				(a) All buildings — Every building must have at least one exit from each storey. (g) Access to exits — Without passing through another sole-occupancy unit every occupant of a storey or part of a storey must have access to— (i) an exit; or (ii) at least 2 exits, if 2 or more exits are required. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D1.3		X			(a) Class 2 and 3 buildings — Every stairway or ramp serving as a required exit must be fire-isolated unless it connects, passes through or passes by not more than—

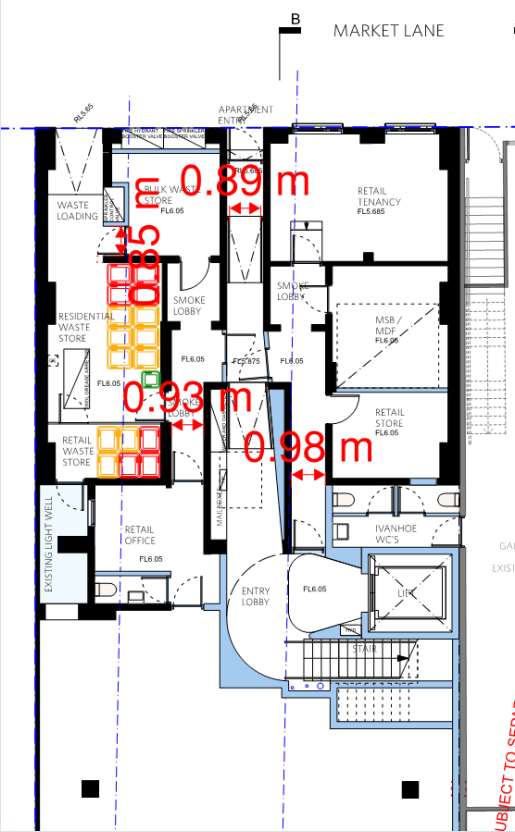

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
When Fire Isolated exits are required					<ul style="list-style-type: none"> (i) 3 consecutive storeys in a Class 2 building; (ii) or 2 consecutive storeys in a Class 3 building, and one extra storey of any classification may be included if— (iii) it is only for the accommodation of motor vehicles or for other ancillary purposes; or (iv) the building has a sprinkler system (other than a FPAA101D system) complying with Specification E1.5 installed throughout; or (v) the required exit does not provide access to or egress for, and is separated from, the extra storey by construction having— <ul style="list-style-type: none"> (A) an FRL of –/60/60, if non-loadbearing; & (B) an FRL of 90/90/90, if loadbearing; & (C) no opening that could permit the passage of fire or smoke. <p>DTS non-compliance</p> <p>The internal stairway serving the residential levels connects more than 3 consecutive storey and is not designed to be fire-isolated.</p> <p><i>This will be addressed by a Fire Engineered Performance Solution at CC stage.</i></p>
D1.4 Exit Travel Distances	X				<ul style="list-style-type: none"> (a) Class 2 and 3 buildings— <ul style="list-style-type: none"> (i) The entrance doorway of any sole-occupancy unit must be not more than— <ul style="list-style-type: none"> (A) 6 m from an exit or from a point from which travel in different directions to 2 exits is available; or <p><i>Note – except in a residential care building, the maximum distance of travel, may be increased from 6m to 12m under Specification E1.5a (AS 2118.1, AS 2118.4, FPAA101D or FPAA101H sprinkler system) in buildings with an effective height of not more than 25m with rise in storeys of 4 or more.</i></p> <ul style="list-style-type: none"> (B) 20 m from a single exit serving the storey at the level of egress to a road or open space; and <p><i>Note – the maximum distance of travel from a single exit serving the storey at the level of egress to the road or open space may be increased from 20m to 30m under Specification E1.5a (AS2118.1, AS2118.4, FPAA101D or FPAA101H sprinkler system) in buildings with an effective height of not more than 25m with rise in storeys of 4 or more.</i></p> <ul style="list-style-type: none"> (ii) no point on the floor of a room which is not in a sole-occupancy unit must be more than 20 m from an exit or from a point at which travel in different directions to 2 exits is available. <ul style="list-style-type: none"> (c) Class 5, 6, 7, 8 or 9 buildings — Subject to (d), (e) and (f)— <ul style="list-style-type: none"> (i) no point on a floor must be more than 20 m from an exit, or a point from which travel in different directions to 2 exits is available, in which case the maximum distance to one of those exits must not exceed 40 m; and

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(ii) in a Class 5 or 6 building, the distance to a single exit serving a storey at the level of access to a road or open space may be increased to 30 m.</p> <p>NB. First, Second & Third Floor – Where an AS 2118.1-2017 sprinkler system is proposed in accordance with E1.5, the travel distance to 12m is DTS compliant.</p>  <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
D1.5 Distance Between Alternative Exits	X				<p>Exits that are required as alternative means of egress must be—</p> <p>(a) distributed as uniformly as practicable within or around the storey served and in positions where unobstructed access to at least 2 exits is readily available from all points on the floor including lift lobby areas; and</p> <p>(b) not less than 9 m apart; and</p> <p>(c) not more than—</p> <p>(i) in a Class 2 or 3 building — 45 m apart; or</p> <p>(iii) in all other cases — 60 m apart; and</p> <p>(d) located so that alternative paths of travel do not converge such that they become less than 6 m apart.</p>
D1.6 Dimensions of Exits and paths of Travel to Exits		X			<p>In a required exit or path of travel to an exit—</p> <p>(a) the unobstructed height throughout must be not less than 2 m, except the unobstructed height of any doorway may be reduced to not less than 1980 mm; and</p>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(b) the unobstructed width of each exit or path of travel to an exit, except for doorways, must be not less than—</p> <p>(i) 1 m; or</p> <p>(iii) the unobstructed width of each exit provided to comply with (b), (c), (d) or (e), minus 250 mm; or</p> <p>(v) in any other case except where it opens to a sanitary compartment or bathroom — 750 mm wide; and</p> <p>(g) the unobstructed width of a required exit must not diminish in the direction of travel to a road or open space, except where the width is increased in accordance with (b)(ii) or (f)(i); and</p> <p>(h) the required width of a stairway or ramp must—</p> <p>(i) be measured clear of all obstructions such as handrails, projecting parts of balustrades or other barriers and the like; and</p> <p>(ii) extend without interruption, except for ceiling cornices, to a height not less than 2 m vertically above a line along the nosings of the treads or the floor surface of the ramp or landing.</p> <p>(i) to determine the aggregate unobstructed width, the number of persons accommodated must be calculated according to D1.13; and</p> <p><u>DTS non-compliance</u></p> <p>Ground – There are two points where the path of travel width is less than 1000mm in width, being 980 & 930mm.</p>



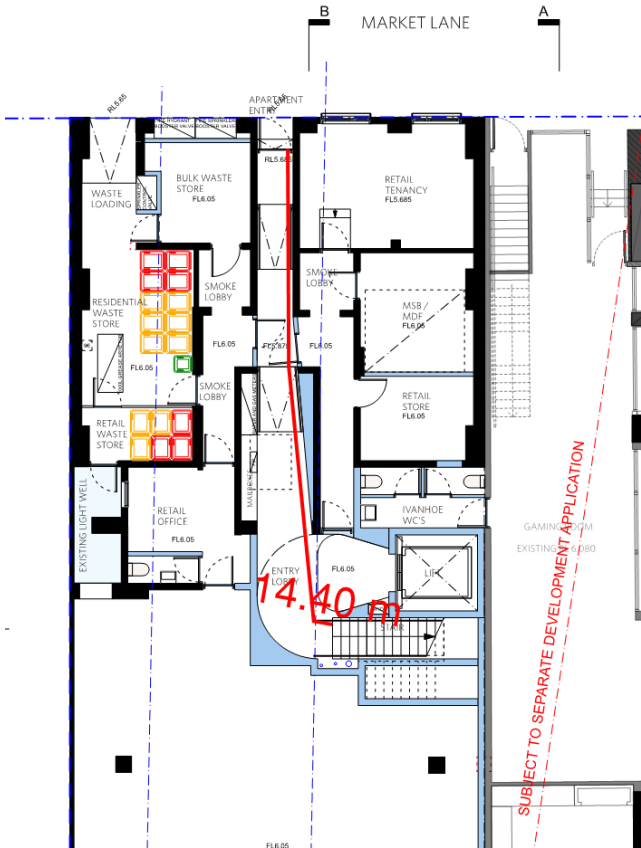
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					 <p>First, Second & Third Floor – Path of travel width at the common corridor is less than 1000mm, being 960mm.</p>  <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
D1.7 Travel via Fire Isolated Stairs	X				<p>(a) A doorway from a room must not open directly into a stairway, passageway or ramp that is required to be fire-isolated unless it is from—</p> <ul style="list-style-type: none"> (i) a public corridor, public lobby or the like; or (ii) a sole-occupancy unit occupying all of a storey; or (iii) a sanitary compartment, airlock or the like.

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(b) Each fire-isolated stairway or fire-isolated ramp must provide independent egress from each storey served and discharge directly, or by way of its own fire-isolated passageway—</p> <p>(i) to a road or open space; or</p> <p>(ii) to a point—</p> <p>(A) in a storey or space, within the confines of the building, that is used only for pedestrian movement, car parking or the like and is open for at least 2/3 of its perimeter; and</p> <p>(B) from which an unimpeded path of travel, not further than 20 m, is available to a road or open space; or</p> <p>(iii) into a covered area that—</p> <p>(A) adjoins a road or open space;</p> <p>(B) and is open for at least 1/3 of its perimeter; and</p> <p>(C) has an unobstructed clear height throughout, including the perimeter openings, of not less than 3 m; and</p> <p>(D) provides an unimpeded path of travel from the point of discharge to the road or open space of not more than 6 m.</p> <p>(c) Where a path of travel from the point of discharge of a fire-isolated exit necessitates passing within 6 m of any part of an external wall of the same building, measured horizontally at right angles to the path of travel, that part of the wall must have—</p> <p>(i) an FRL of not less than 60/60/60; and</p> <p>(ii) any openings protected internally in accordance with C3.4,</p> <p>for a distance of 3 m above or below, as appropriate, the level of the path of travel, or for the height of the wall, whichever is the lesser.</p> <p>(d) If more than 2 access doorways, not from a sanitary compartment or the like, open to a required fire-isolated exit in the same storey—</p> <p>(i) a smoke lobby in accordance with D2.6 must be provided; or</p> <p>(ii) the exit must be pressurised in accordance with AS/NZS 1668.1.</p> <p>(e) A ramp must be provided at any change in level less than 600 mm in a fire-isolated passageway in a Class 9 building.</p> <p>Not applicable. Although a fire-isolated stairway is required by D1.3, a non-fire-isolated stairway is provided.</p>
D1.8			X		Not applicable. No external stairways or ramps in lieu of fire isolated stairs is proposed or required.



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
External Stairways or ramps in lieu of Fire Isolated Stairs					
D1.9 Travel by non-fire-isolated stairs	X				<p>(a) A non-fire-isolated stairway or non-fire-isolated ramp serving as a required exit must provide a continuous means of travel by its own flights and landings from every storey served to the level at which egress to a road or open space is provided.</p> <p>(b) In a Class 2, 3 or 4 building, the distance between the doorway of a room or sole occupancy unit and the point of egress to a road or open space by way of a stairway or ramp that is not fire-isolated and is required to serve that room or sole-occupancy unit must not exceed—</p> <p>(ii) 60 m in all other cases.</p> <p>(d) In a Class 2, 3 or 9a building, a required non-fire-isolated stairway or non-fire-isolated ramp must discharge at a point not more than—</p> <p>(i) 15 m from a doorway providing egress to a road or open space or from a fire isolated passageway leading to a road or open space; or</p> <p>(ii) 30 m from one of 2 such doorways or passageways if travel to each of them from the non-fire-isolated stairway or non-fire-isolated ramp is in opposite or approximately opposite directions.</p> <p>(f) In a Class 2 or 3 building, if 2 or more exits are required and are provided by means of internal non-fire-isolated stairways or non-fire-isolated ramps, each exit must—</p> <p>(i) provide separate egress to a road or open space;</p> <p>(ii) and be suitably smoke-separated from each other at the level of discharge.</p>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					 <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
D1.10 Discharge from Exits				X	<p>(a) An exit must not be blocked at the point of discharge and where necessary, suitable barriers must be provided to prevent vehicles from blocking the exit, or access to it.</p> <p>(b) If a required exit leads to an open space, the path of travel to the road must have an unobstructed width throughout of not less than—</p> <ul style="list-style-type: none"> (i) the minimum width of the required exit; (ii) or 1 m, <p>whichever is the greater.</p> <p>(c) If an exit discharges to open space that is at a different level than the public road to which it is connected, the path of travel to the road must be by—</p> <ul style="list-style-type: none"> (i) a ramp or other incline having a gradient not steeper than 1:8 at any part, or not steeper than 1:14 if required by the Deemed-to-Satisfy Provisions of Part D3; or <p>(d) The discharge point of alternative exits must be located as far apart as practical.</p> <p>(g) The number of persons accommodated must be calculated according to D1.13.</p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D1.11 Horizontal Exits			X		Not applicable. No horizontal exits proposed or required.
D1.12 Non-required stairways, ramps or escalators			X		Not applicable. No escalator, moving walkway or non-required non-fire-isolated stairway or pedestrian ramp proposed.
D1.13 Number of Persons Accommodated Note NSW Table D1.13 Area per person according to use			X		<p>For the purpose of the Deemed-to-Satisfy provisions, the number of persons accommodated in a storey, room or mezzanine must be determined with consideration to the purpose for which it is used and the layout of the floor area by—</p> <ul style="list-style-type: none"> (a) calculating the sum of the numbers obtained by dividing the floor area of each part of the storey by the number of square metres per person listed in Table D1.13 according to the use of that part, excluding spaces set aside for— <ul style="list-style-type: none"> (i) lifts, stairways, ramps and escalators, corridors, hallways, lobbies and the like; and (ii) service ducts and the like, sanitary compartments or other ancillary uses; or (b) reference to the seating capacity in an assembly building or room; or (c) any other suitable means of assessing its capacity. <p><i>Refer NSW Table D1.13 to calculate area per person according to use.</i></p> <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
D1.14 Measurement of Distances			X		<p>Informational.</p> <p>The nearest part of an exit means in the case of—</p> <ul style="list-style-type: none"> (a) a fire-isolated stairway, fire-isolated passageway, or fire-isolated ramp, the nearest part of the doorway providing access to them; and (b) a non-fire-isolated stairway, the nearest part of the nearest riser; and (c) a non-fire-isolated ramp, the nearest part of the junction of the floor of the ramp and the floor of the storey; and (d) a doorway opening to a road or open space, the nearest part of the doorway; and (e) a horizontal exit, the nearest part of the doorway. <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
D1.15 Method of Measurement			X		<p>Informational.</p> <p>The following rules apply:</p>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(a) In the case of a room that is not a sole occupancy unit in a Class 2 or 3 building or Class 4 part of a building, the distance includes the straight-line measurement from any point of the floor of the room to the nearest part of the doorway leading from it, together with the distance from the part of the doorway to the single required exit or point from which travel in different directions to 2 required exits is available.</p> <p>(b) Subject to (d), the distance from the doorway of a sole occupancy unit in a Class 2 or 3 building is measured in a straight line to the nearest part of the required single exit or point from which travel in different directions to 2 required exits is available.</p> <p>(c) Subject to (d), the distance between exits is measured in a straight line between the nearest parts of those exits.</p> <p>(d) Only the shortest distance is taken along a corridor, hallway, external balcony or other path of travel that curves or changes direction.</p> <p>(e) If more than one corridor, hallway, or other internal path of travel connects required exits, for the purposes of D1.5(c) the measurement is along the path of travel through the point at which travel in different directions to those exits is available, as determined in accordance with D1.4.</p> <p>(f) If a wall (including a demountable internal wall) that does not bound –</p> <p>(i) A room; or</p> <p>(ii) A corridor, hallway or the like, causes a change in direction in proceeding to a required exit, the distance is measured along the path of travel past the wall.</p> <p>(iii) If permanent fixed seating is provided, the distance is measured along the path of travel between the rows of seats.</p> <p>(iv) In the case of a non-fire isolated stairway or non-fire isolated ramp, the distance is measured along a line connecting the nosings of the treads, along the slope of the ramp, together with the distance connecting those lines across any intermediate landing.</p>
D1.16 Plant Rooms and lift Motor Rooms: Concession			X		<p>(a) A ladder may be used in lieu of a stairway to provide egress from—</p> <p>(i) a plant room with a floor area of not more than 100 m²; or</p> <p>(ii) all but one point of egress from a plant room, a lift machine room or a Class 8 electricity network substation with a floor area of not more than 200 m².</p> <p>(b) A ladder permitted under (a)—</p> <p>(i) may form part of an exit provided that in the case of a fire-isolated stairway it is contained within the shaft; or</p> <p>(ii) may discharge within a storey in which case it must be considered as forming part of the path of travel; and</p>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(iv) for a lift machine room, where access is provided from within a machine room to a secondary floor, a fixed rung type ladder complying with AS 1657 may be used, provided that—</p> <p>(A) the height between the floors is not more than 2800 mm; and</p> <p>(B) the ladder is inclined at an angle to the horizontal not less than 65 degrees nor more than 75 degrees; and</p> <p>(C) the distance between the front face of the ladder and any adjacent obstruction is not less than—</p> <p>(aa) 960 mm, where the ladder is inclined 65 degrees to the horizontal; or</p> <p>(bb) 760 mm, where the ladder is inclined 75 degrees to the horizontal; or</p> <p>(cc) a distance that is determined by interpolating the values in (aa) and (bb), where the ladder is inclined at any angle between 65 degrees and 75 degrees to the horizontal; and</p> <p>(D) a clear space not less than 600 mm exists between the foot of the ladder and any equipment.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
D1.17 Access to lift pits				X	<p>Access to lift pits must—</p> <p>(a) where the pit depth is not more than 3 m, be through the lowest landing doors; or</p> <p>(b) where the pit depth is more than 3 m, be provided through an access doorway complying with the following:</p> <p>(i) In lieu of D1.6, the doorway must be level with the pit floor and not be less than 600 mm wide by 1980 mm high clear opening, which may be reduced to 1500 mm where it is necessary to comply with (ii).</p> <p>(ii) No part of the lift car or platform must encroach on the pit doorway entrance when the car is on a fully compressed buffer.</p> <p>(iii) Access to the doorway must be by a stairway complying with AS 1657.</p> <p>(iv) In lieu of D2.21, doors fitted to the doorway must be—</p> <p>(A) of the horizontal sliding or outwards opening hinged type; and</p> <p>(B) self-closing and self-locking from the outside; and</p> <p>(C) marked on the landing side with the letters not less than 35 mm high:</p>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					“DANGER LIFTWELL – ENTRY OF UNAUTHORIZED PERSONS PROHIBITED – KEEP CLEAR AT ALL TIMES”
Part D2 - Construction of Exits					
D2.1 Application of Part			X		Informational. Except for D2.13, D2.14 (a), D2.16, D2.17(d), D2.17(e) and D2.18, the Deemed-to-Satisfy Provisions of this Part do not apply to the internal parts of the Class 2 sole-occupancy units. Note NSW D2.1 (entertainment venues)
D2.2 Fire-Isolated stairways and ramps			X		Not applicable. No fire-isolated stairways proposed.
D2.3 Non-fire Isolated stairways and ramps				X	In a building having a rise in storeys of more than 2, required stairs and ramps (including any landings and any supporting building elements) which are not required to be within a fire resisting shaft, must be constructed according to D2.2, or only of - (a) reinforced or prestressed concrete; or (b) steel in no part less than 6 mm thick; or (c) timber that— (i) has a finished thickness of not less than 44 mm; and (ii) has an average density of not less than 800 kg/m ³ at a moisture content of 12%; and (iii) has not been joined by means of glue unless it has been laminated and glued with resorcinol formaldehyde or resorcinol phenol formaldehyde glue”. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
D2.4 Separation of Rising and Descending Stairs			X		Not applicable. No flight rising from a storey below the lowest level of access to a road or open space
D2.5 Open Access ramps and balconies			X		Not applicable. No open access ramps or balconies provided to meet the smoke hazard management requirements of Table E2.
D2.6 Smoke Lobbies			X		Not applicable. No smoke lobbies required by D1.7
D2.7 Installations in Exits and Paths of Travel				X	(a) Access to service shafts and services other than to fire-fighting or detection equipment as permitted in the Deemed-to-Satisfy Provisions of Section E, must not be provided from a fire-isolated stairway. (b) An opening to any chute or duct intended to convey hot products of combustion from a boiler, incinerator, fireplace or the like must not be located in any part of a required exit or any corridor, hallway, lobby or the like leading to a required exit.

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(c) Gas or other fuel services must not be installed in a required exit</p> <p>(d) Services or equipment comprising –</p> <ul style="list-style-type: none"> (i) Electricity meters, distribution boards or cuts; or (ii) Central telecommunications distribution boards or equipment; or (iii) Electrical motors or other motors service equipment in the building, <p>May be installed in –</p> <ul style="list-style-type: none"> (i) A required exit, except for fire-isolated exits specified in (a); or (ii) In any corridor, hallway, lobby or the like leading to a required exit, <p>If the services or equipment are enclosed by non-combustible construction or a fire-protective covering with doorways or openings suitably sealed against smoke spreading from the enclosure</p> <p>(e) Electrical wiring may be installed in a fire-isolated exit if the wiring is associated with;</p> <ul style="list-style-type: none"> (i) A lighting, detection, or pressurization system serving the exit; or (ii) A security, surveillance or management system serving the exit; or (iii) An intercommunication system or an audible or visual alarm system in accordance with D2.22; or (iv) The monitoring of hydrant or sprinkler isolating valves. <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
D2.8 Enclosure of Space Under Stairs and ramps			X		Not applicable. No space underneath the stairway forms a cupboard.
D2.9 Width of Stairs			X		Not applicable. No stairway is required to be greater than 2m in width.
D2.10 Pedestrian Ramps				X	<p>(a) A fire isolated ramp may be substituted for a fire isolated stairway if the construction enclosing the ramp and the width and ceiling height comply with the requirements for a fire isolated stairway.</p> <p>(b) A ramp serving as a required exit must –</p> <ul style="list-style-type: none"> (i) Where the ramp is also serving as an accessible ramp under Part D3, be in accordance with AS1428.1; or (ii) In any other case, have a gradient not steeper than 1:8. <p>(c) The floor surface of a ramp must have a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS4586.</p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
D2.11 Fire-Isolated Passageways			X		Not applicable. No fire-isolated passageways proposed or required.
D2.12 Roof as Open Space			X		Not applicable. No exit discharges to the roof of a building the roof
D2.13 Goings & Risers				X	<p>(a) A stairway must have—</p> <ul style="list-style-type: none"> (i) not more than 18 and not less than 2 risers in each flight; and (ii) going (G), riser (R) and quantity (2R + G) in accordance with Table D2.13, except as permitted by (b) and (c); and (iii) constant goings and risers throughout each flight, except as permitted by (b) and (c), and the dimensions of goings (G) and risers (R) in accordance with (a)(ii) are considered constant if the variation between— <ul style="list-style-type: none"> (A) adjacent risers, or between adjacent goings, is no greater than 5 mm; and (B) the largest and smallest riser within a flight, or the largest and smallest going within a flight, does not exceed 10 mm; and (iv) risers which do not have any openings that would allow a 125 mm sphere to pass through between the treads; and (v) treads which have— <ul style="list-style-type: none"> (A) a surface with a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS 4586; or (B) a nosing strip with a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS 4586; and (vi) treads of solid construction (not mesh or other perforated material) if the stairway is more than 10 m high or connects more than 3 storeys; and (viii) in the case of a required stairway, no winders in lieu of a landing. <p>(b) In the case of a non-required stairway—</p> <ul style="list-style-type: none"> (i) the stairway must have— <ul style="list-style-type: none"> (A) not more than 3 winders in lieu of a quarter landing; and (B) not more than 6 winders in lieu of a half landing; and (ii) the going of all straight treads must be constant throughout the same flight and the dimensions of goings (G) is considered constant if the variation between—


BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(A) adjacent goings, is no greater than 5 mm; and</p> <p>(B) the largest and smallest going within a flight, does not exceed 10 mm; and</p> <p>(iii) the going of all winders in lieu of a quarter or half landing may vary from the going of the straight treads within the same flight provided that the going of all such winders is constant.</p> <p>(c) Where a stairway discharges to a sloping public walkway or public road—</p> <p>(i) the riser (R) may be reduced to account for the slope of the walkway or road; and</p> <p>(ii) the quantity (2R+G) may vary at that location.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
D2.14 Landings				X	<p>In a stairway</p> <p>(a) Landings having a maximum gradient of 1:50 may be used in any building to limit the number of risers in each flight and each landing must –</p> <p>(i) Be not less than 750 mm long, and where this involves a change in direction, the length is measured 500 mm from the inside edge of the landing; and</p> <p>(ii) Have –</p> <p>(A) A surface with a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS4586; or</p> <p>(B) A strip at the edge of the landing with a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS4586, where the edge leads to a flight below; and</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
D2.15 Thresholds				X	<p>The threshold of a doorway must not incorporate a step or ramp at any point closer to the doorway than the width of the door leaf unless—</p> <p>(c) in a building required to be accessible by Part D3, the doorway—</p> <p>(i) opens to a road or open space; and</p> <p>(ii) is provided with a threshold ramp or step ramp in accordance with AS 1428.1; or</p> <p>(e) in other cases—</p> <p>(i) the doorway opens to a road or open space, external stair landing or external balcony; and</p>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(ii) the door sill is not more than 190 mm above the finished surface of the ground, balcony, or the like, to which the doorway opens.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
D2.16 Balustrades and other Barriers Note NSW D2.16				X	<p>(a) A continuous barrier must be provided along the side of—</p> <p>(i) a roof to which general access is provided; and</p> <p>(ii) a stairway or ramp; and</p> <p>(iii) a floor, corridor, hallway, balcony, deck, verandah, mezzanine, access bridge or the like; and</p> <p>(iv) any delineated path of access to a building, if the trafficable surface is 1 m or more above the surface beneath.</p> <p>(b) The requirements of (a) do not apply to—</p> <p>(iii) a retaining wall unless the retaining wall forms part of, or is directly associated with a delineated path of access to a building from the road, or a delineated path of access between buildings; or</p> <p>(iv) a barrier provided to an openable window covered by D2.24.</p> <p>(c) A barrier required by (a) must be constructed in accordance with NSW Table D2.16a 1.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
D2.17 Handrails				X	<p>(a) Except for handrails referred to in D2.18, handrails must be—</p> <p>(i) located along at least one side of the ramp or flight; and</p> <p>(iii) located along each side if the total width of the stairway or ramp is 2 m or more; and</p> <p>(iv) in any other case, fixed at a height of not less than 865 mm measured above the nosings of stair treads and the floor surface of the ramp, landing, or the like; and</p> <p>(v) continuous between stair flight landings and have no obstruction on or above them that will tend to break a hand-hold; and</p> <p>(vi) in a required exit serving an area required to be accessible, designed and constructed to comply with clause 12 of AS 1428.1, except that clause 12(d) does not apply to a handrail required by (a)(iii)(B).</p> <p>(c) Handrails required to assist people with a disability must be provided in accordance with D3.3.</p> <p>(d) Handrails to a stairway or ramp within a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building must—</p>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<ul style="list-style-type: none"> (i) be located along at least one side of the flight or ramp; and (ii) be located along the full length of the flight or ramp, except in the case where a handrail is associated with a barrier, the handrail may terminate where the barrier terminates; and (iii) have the top surface of the handrail not less than 865 mm vertically above the nosings of the stair treads or the floor surface of the ramp; and (iv) have no obstruction on or above them that will tend to break a handhold, except for newel posts, ball type stanchions, or the like. <p>(e) The requirements of (d) do not apply to—</p> <ul style="list-style-type: none"> (i) handrails referred to in D2.18; or (ii) a stairway or ramp providing a change in elevation of less than 1 m; or (iii) a landing; or (iv) a winder where a newel post is installed to provide a handhold. <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification.</i></p>
D2.18 Fixed Platforms, walkways and ladders				X	<p>A fixed platform, walkway, stairway, ladder and any going and riser, landing, handrail or barrier attached thereto may comply with AS1657 in lieu of D2.13, D2.14 D2.16 and D2.17 if it only serves:</p> <ul style="list-style-type: none"> (a) Machinery rooms, boiler houses, lift machine rooms, plant-rooms and the like; or (b) Non-habitable rooms, such as attics, storerooms and the like that are not used on a frequent or daily basis in the internal parts of a sole occupancy unit in a Class 2 building or Class 4 part of the building. <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification.</i></p>
D2.19 Doorways & Doors				X	<p>(b) A doorway serving as a required exit or forming part of a required exit—</p> <ul style="list-style-type: none"> (i) Must not be fitted with a revolving door; and (ii) Must not be fitted with a roller shutter or tilt-up door unless — <ul style="list-style-type: none"> (A) It serves a Class 6, 7 or 8 building or part with a floor area not more than 200m²; and (B) The doorway is the only required exit from the building or part; and (C) It is held in the open position while the building or part is lawfully occupied; and

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(iii) Must not be fitted with a sliding door unless –</p> <p>(A) It leads directly to a road or open space; and</p> <p>(B) The door is able to be opened manually under a force of not more than 110 N; and</p> <p>(iv) If fitted with a door which is power-operated –</p> <p>(A) It must be able to be opened manually under a force of not more than 110 N if there is a malfunction or failure of the power source; and</p> <p>(B) If it leads directly to a road or open space it must open automatically if there is a power failure to the door or on the activation of a fire or smoke alarm anywhere in the fire compartment served by the door.</p> <p>(c) A power-operated door in a path of travel to a required exit, must be able to open manually under a force of not more than 110 N if there is a malfunction or failure of the power source.</p> <p>AED note – the roller shutter doorway is not a <i>required</i> exit.</p>  <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification.</p>
D2.20 Swinging Doors				X	<p>A swinging door in a required exit or forming part of a required exit –</p> <p>(a) Must not encroach –</p>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(i) At any part of its swing by more than 500mm of the required width (including any landings) of a required –</p> <p>(A) Stairway; or</p> <p>(B) Ramp; or</p> <p>(C) Passageway,</p> <p>If it is likely to impede the path of travel of the people already using the exit; and</p> <p>(ii) When fully open, by more than 100 mm on the required width of the required exit, and</p> <p>The measurement of encroachment in each case is to include door handles or other furniture or attachments to the door; and</p> <p>(b) Must swing in the direction of egress unless</p> <p>(i) It serves a building part with a floor area not more than 200m², it is the only required exit from the building part and it is fitted with a device for holding it in the open position; or</p> <p>(ii) It serves a sanitary compartment or airlock (in which case it may swing in either direction; and</p> <p>(c) Must not otherwise impede the path or direction of egress.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification.</i></p>
D2.21 Operation of Latch				X	<p>(a) A door in a required exit, forming part of a required exit or in the path of travel to a required exit must be readily openable without a key from the side that faces a person seeking egress by –</p> <p>(i) A single hand downward action or pushing action on a single device which is located between 900mm and 1.1 m from the floor and if serving an area required to be accessible by Part D3 –</p> <p>(A) be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch; and</p> <p>(B) have a clearance between the handle and the back plate or door face at the center grip section of the handle of not less than 35mm and not more than 45mm; or</p> <p>(ii) a single hand pushing action on a single device which is located between 900mm and 1.2m from the door; and</p> <p>(iii) where the latch operation device referred to in (ii) is not located on the door leaf itself –</p> <p>(A) manual controls to power operated doors must be at least 25mm wide, proud of the surrounding surface and located –</p>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(aa) not less than 500mm from an internal corner; and</p> <p>(bb) for a hinged door, between 1m and 2m from the door leaf in any position; and</p> <p>(cc) for a sliding door, within 2m of the doorway and clear of a surface mounted door in the open position.</p> <p>(B) Braille and tactile signage complying with Clause 3 and 6 of Specification D3.6 must identify the latch operation device.</p> <p>(b) The requirements of (a) do not apply to a door that –</p> <p>(i) Serves a vault, strong-room, sanitary compartment, or the like; or</p> <p>(ii) Serves only, or is within –</p> <p>(A) A sole occupancy unit in a Class 2 or 4 building or part; or</p> <p>(C) A sole occupancy unit with a floor area not more than 200m² in a Class 5, 6, 7 or 8 building; or</p> <p>(D) A space which is otherwise inaccessible to persons at all times when the door is locked; or</p> <p>(iii) Serves –</p> <p>(C) By operating a fail-safe control switch, not contained within the protective enclosure, to actuate a device to unlock the door; or</p> <p>(D) By hand by a person or persons, specifically nominated by the owner, properly instructed as to the duties and responsibilities involved and available at all times when the building is lawfully occupied so that persons in the building or part may immediately escape if there is a fire; or</p> <p>(iv) Is fitted with a fail-safe device which automatically unlocks the door upon the activation of any sprinkler system (other than a FPAA101D system) complying with Specification E1.5, or smoke , or any other detector system deemed suitable in accordance with AS1670.1 installed throughout the building, and is readily operable when unlocked; or</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
D2.22 Re-entry from Fire isolated exits			X		Not applicable. Not a fire-isolated exit or effective height greater than 25m.
D2.23 Signs on Doors				X	(a) A sign, to alert persons that the operation of certain doors must not be impaired, must be installed where it can readily be seen on, or adjacent to—





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(i) a required—</p> <p>(A) fire door providing direct access to a fire-isolated exit, except a door providing direct egress from a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building; and</p> <p>(B) smoke door,</p> <p>on the side of the door that faces a person seeking egress and, if the door is fitted with a device for holding it in the open position, on either the wall adjacent to the doorway or both sides of the door; and</p> <p>(ii) a—</p> <p>(A) fire door forming part of a horizontal exit; and</p> <p>(B) smoke door that swings in both directions; and</p> <p>(C) door leading from a fire isolated exit to a road or open space, on each side of the door.</p> <p>(b) A sign referred to in (a) must be in capital letters not less than 20 mm high in a colour contrasting with the background and state—</p> <p>(i) for an automatic door held open by an automatic hold-open device—</p> <p>“FIRE SAFETY DOOR—DO NOT OBSTRUCT”; or</p> <p>(ii) for a self-closing door—</p> <p>“FIRE SAFETY DOOR DO NOT OBSTRUCT DO NOT KEEP OPEN”; or</p> <p>(iii) for a door discharging from a fire-isolated exit—</p> <p>“FIRE SAFETY DOOR—DO NOT OBSTRUCT”.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
D2.24 Protection of openable windows				X	<p>(a) A window opening must be provided with protection, if the floor below the window is 2 m or more above the surface beneath in—</p> <p>(i) a bedroom in a Class 2 or 3 building or Class 4 part of a building;</p> <p>(b) Where the lowest level of the window opening is less than 1.7 m above the floor, a window opening covered by (a) must comply with the following:</p> <p>(i) The openable portion of the window must be protected with—</p> <p>(A) a device capable of restricting the window opening; or</p> <p>(B) a screen with secure fittings.</p> <p>(ii) A device or screen required by (i) must—</p>



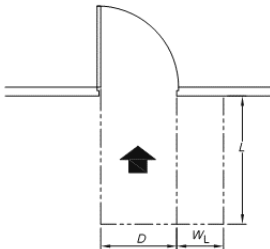
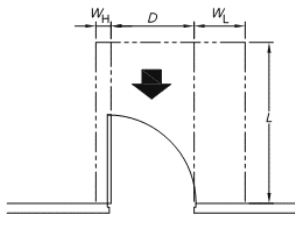


BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(A) not permit a 125 mm sphere to pass through the window opening or screen; and</p> <p>(B) resist an outward horizontal action of 250 N against the—</p> <p>(aa) window restrained by a device; or</p> <p>(bb) screen protecting the opening; and</p> <p>(C) have a child resistant release mechanism if the screen or device is able to be removed, unlocked or overridden.</p> <p>(c) A barrier with a height not less than 865 mm above the floor is required to an openable window—</p> <p>(i) in addition to window protection, when a child resistant release mechanism is required by (b)(ii)(C); and</p> <p>(ii) where the floor below the window is 4 m or more above the surface beneath if the window is not covered by (a).</p> <p>(d) A barrier covered by (c) except for (e) must not—</p> <p>(i) permit a 125 mm sphere to pass through it; and</p> <p>(ii) have any horizontal or near horizontal elements between 150 mm and 760 mm above the floor that facilitate climbing.</p> <p>(e) A barrier required by (c) to an openable window in—</p> <p>(i) fire-isolated stairways, fire-isolated ramps and other areas used primarily for emergency purposes, excluding external stairways and external ramps; and</p> <p>(ii) Class 7 (other than car parks) and Class 8 buildings and parts of buildings containing those classes,</p> <p>must not permit a 300 mm sphere to pass through it.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
D2.25 Timber stairways concession			X		Not applicable. No timber stairways proposed.

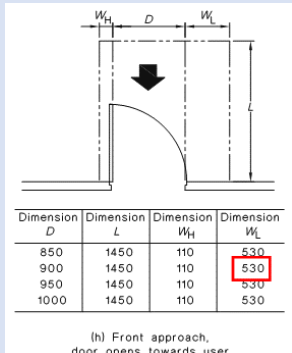
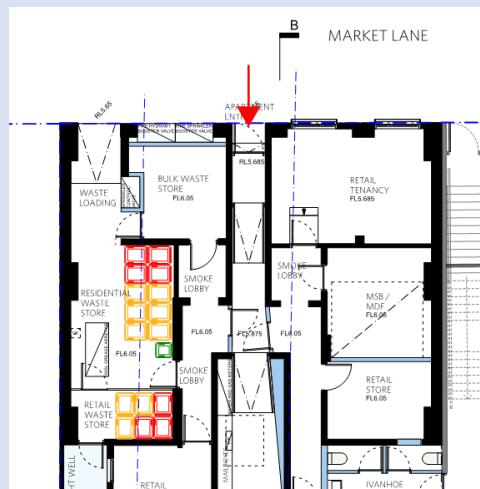
Part D3 - Access for People with Disabilities

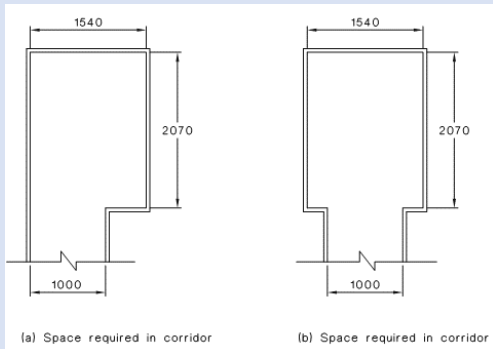
D3.1 General building access requirements		X			<p>Class 2</p> <p>Common areas</p> <p>From a pedestrian entrance required to be accessible to at least 1 floor containing sole-occupancy units and to the entrance doorway of each sole-occupancy unit located on that level.</p> <p>To and within not less than 1 of each type of room or space for use in common by the residents.</p> <p>Where a ramp complying with AS 1428.1 or a passenger lift is installed—</p> <p>(a) to the entrance doorway of each sole-occupancy unit; and</p>
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BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS																																								
					<div>(b) to and within rooms or spaces for use in common by the residents, located on the levels served by the lift or ramp.</div> <div>Class 6</div> <div>To and within all areas normally used by the occupants.</div> <div>Class 7b</div> <div>To and within all areas normally used by the occupants</div> <div>All doors that are required for disabled access are to be a minimum of 850mm clear width. This also includes doors into fire stairs.</div> <div>DTS non-compliance</div> <div>The following doorways do not have sufficient circulation space at the doorways in accordance with Clause 13.3 of AS 1428.1-2009.</div> <div>It is recommended that this is addressed by Performance Solution at CC stage.</div> <div><div><table><thead><tr><th>Dimension D</th><th>Dimension L</th><th>Dimension W_H</th><th>Dimension W_L</th></tr></thead><tbody><tr><td>850</td><td>1450</td><td>0</td><td>510</td></tr><tr><td>900</td><td>1450</td><td>0</td><td>510</td></tr><tr><td>950</td><td>1450</td><td>0</td><td>510</td></tr><tr><td>1000</td><td>1450</td><td>0</td><td>510</td></tr></tbody></table><p>(d) Front approach, door opens away from user</p></div><div><table><thead><tr><th>Dimension D</th><th>Dimension L</th><th>Dimension W_H</th><th>Dimension W_L</th></tr></thead><tbody><tr><td>850</td><td>1450</td><td>110</td><td>530</td></tr><tr><td>900</td><td>1450</td><td>110</td><td>530</td></tr><tr><td>950</td><td>1450</td><td>110</td><td>530</td></tr><tr><td>1000</td><td>1450</td><td>110</td><td>530</td></tr></tbody></table><p>(h) Front approach, door opens towards user</p></div></div>	Dimension D	Dimension L	Dimension W _H	Dimension W _L	850	1450	0	510	900	1450	0	510	950	1450	0	510	1000	1450	0	510	Dimension D	Dimension L	Dimension W _H	Dimension W _L	850	1450	110	530	900	1450	110	530	950	1450	110	530	1000	1450	110	530
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BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
D3.2 Access to buildings		X			<p>An AS 1428.1-2009 compliant accessway:</p> <ul style="list-style-type: none"> ❖ from the main points of a pedestrian entry at the allotment boundary; and ❖ from other accessible buildings on the same allotment; and ❖ from any accessible residential carparking space on the allotment. <p>In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance, and—</p> <ol style="list-style-type: none"> through not less than 50% of all pedestrian entrances including the principal pedestrian entrance; and in a building with a total floor area more than 500 m², a pedestrian entrance which is not accessible must not be located more than 50 m from an accessible pedestrian entrance, <p><u>DTS non-compliance</u></p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS																				
					<ul style="list-style-type: none">No circulation space is provided for latchside clearance at the apartment entry doorways which does not comply with Clause 13.3 of AS 1428.1-2009. <div><table><thead><tr><th>Dimension D</th><th>Dimension L</th><th>Dimension W_H</th><th>Dimension W_L</th></tr></thead><tbody><tr><td>850</td><td>1450</td><td>110</td><td>530</td></tr><tr><td>900</td><td>1450</td><td>110</td><td>530</td></tr><tr><td>950</td><td>1450</td><td>110</td><td>530</td></tr><tr><td>1000</td><td>1450</td><td>110</td><td>530</td></tr></tbody></table><p>(h) Front approach, door opens towards user</p></div> <p><i>It is recommended that this is addressed by Performance Solution at CC stage.</i></p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>	Dimension D	Dimension L	Dimension W _H	Dimension W _L	850	1450	110	530	900	1450	110	530	950	1450	110	530	1000	1450	110	530
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D3.3 Parts of the building required to be accessible		X			<p>In a building required to be accessible—</p> <ul style="list-style-type: none">(a) every ramp and stairway, except for ramps and stairways in areas exempted by D3.4, must comply with—<ul style="list-style-type: none">(i) for a ramp, except a fire-isolated ramp, clause 10 of AS 1428.1; and(ii) for a stairway, except a fire-isolated stairway, clause 11 of AS 1428.1; and(iii) for a fire-isolated stairway, clause 11.1(f) and (g) of AS 1428.1; and(a) every passenger lift must comply with E3.6; and(b) accessways must have—<ul style="list-style-type: none">(i) passing spaces complying with AS 1428.1 at maximum 20 m intervals on those parts of an accessway where a direct line of sight is not available; and(ii) turning spaces complying with AS 1428.1—<ul style="list-style-type: none">(A) within 2 m of the end of accessways where it is not possible to continue travelling along the accessway; and(B) at maximum 20 m intervals along the accessway; and(c) an intersection of accessways satisfies the spatial requirements for a passing and turning space; and(d) a passing space may serve as a turning space; and																				

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(e) a ramp complying with AS 1428.1 or a passenger lift need not be provided to serve a storey or level other than the entrance storey in a Class 5, 6, 7b or 8 building—</p> <p>(i) containing not more than 3 storeys; and</p> <p>(ii) with a floor area for each storey, excluding the entrance storey, of not more than 200 m²; and</p> <p>(f) clause 7.4.1(a) of AS 1428.1 does not apply and is replaced with 'the pile height or pile thickness shall not exceed 11 mm and the carpet backing thickness shall not exceed 4 mm'; and</p> <p>(g) the carpet pile height or pile thickness dimension, carpet backing thickness dimension and their combined dimension shown in Figure 8 of AS 1428.1 do not apply and are replaced with 11 mm, 4 mm and 15 mm respectively.</p> <p><i>Note: BCA 2019 Amendment 1 does not directly specify slip-resistance classification(s) for all accessible paths of travel; however, we highlight the need under AS 1428.1-2009 for all accessible paths of travel to have a slip-resistant surface. We recommend you should seek surface finish advice from an independent specialist slip safety consultant.</i></p> <p><u>DTS non-compliance</u></p> <ul style="list-style-type: none"> 1st Floor to 3rd Floor - A turning space in accordance with Clause 6.5.3 of AS 1428.1-2009 is not provided at the end of the corridors serving the SOUs. <p><i>It is recommended that this is addressed by a Performance Solution at CC stage.</i></p> <div data-bbox="699 1205 1193 1552">  <p>(a) Space required in corridor</p> <p>(b) Space required in corridor</p> </div>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					 <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification.</p>
D3.4 Exemptions			X		Parts of buildings that are not required to be accessible include: <ul style="list-style-type: none"> - Plant areas; - Fire pump rooms - Main switch board room.
D3.5 Carparking			X		Not applicable. No carparking proposed.
D3.6 Signage				X	The provision of braille and tactile signage complying with Specification D3.6 to identify: <ul style="list-style-type: none"> ❖ sanitary facilities; and ❖ each door required by Clause E4.5 to be provided with an exit sign, inclusive of the requirement to state "EXIT" and "Level" followed by the floor level number on such doors. ❖ signage to identify an ambulant accessible sanitary facility in accordance with AS 1428.1 must be located on the door of the facility <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
D3.7 Hearing augmentation			X		Not applicable. Hearing augmentation is not proposed or required.
D3.8 Tactile indicators				X	Tactile ground surfaced indicators complying with AS/NZS 1428.4.1-2009 to: <ul style="list-style-type: none"> ❖ a stairway, other than a fire-isolated stairway; and

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<ul style="list-style-type: none"> ❖ a ramp, other than a fire-isolated ramp, step ramp, kerb ramp, or swimming pool ramp; and ❖ warn of overhead obstructions; and ❖ warn of an accessway that intersects with a vehicular way adjacent to any pedestrian entrance to a building. <p>To be detailed on the architectural plans at CC stage.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
D3.9 Wheelchair seating spaces in Class 9b assembly buildings			X		Not applicable. No Class 9b parts proposed.
D3.10 Swimming Pools			X		Not applicable. No swimming pool proposed.
D3.11 Ramps	X				On an accessway— <ul style="list-style-type: none"> (a) a series of connected ramps must not have a combined vertical rise of more than 3.6 m; and (b) a landing for a step ramp must not overlap a landing for another step ramp or ramp
D3.12 Glazing on an accessway				X	On an accessway, where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights and any glazing capable of being mistaken for a doorway or opening, must be clearly marked in accordance with AS 1428.1. <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>

SECTION SERVICES & EQUIPMENT

E

Part E1 - Fire Fighting Equipment

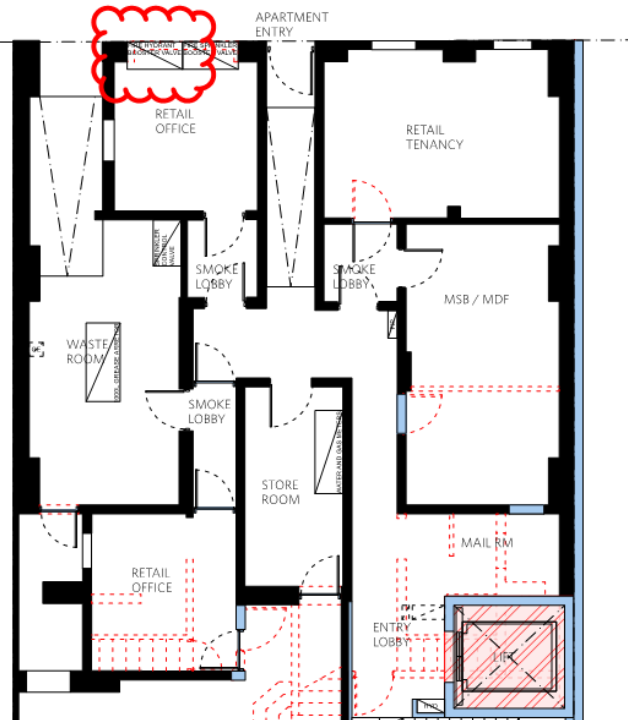
E1.3 Fire Hydrants		X			<ul style="list-style-type: none"> (a) A hydrant system must be provided to serve a building – <ul style="list-style-type: none"> (i) Having a total floor area greater than 500m²; and (ii) Where a fire brigade station is – <ul style="list-style-type: none"> (A) No more than 50 km from the building as measured along roads; and (B) Equipped with equipment capable of utilising a fire hydrant. (b) The fire hydrant system- <ul style="list-style-type: none"> (i) Must be installed in accordance with AS2419.1, except– (B) Where a sprinkler system is installed throughout a building in accordance with AS 2118.1, AS 2118.4, AS 2118.6, FPAA101H or FPAA101D the fire hydrant booster protection requirements of Clause
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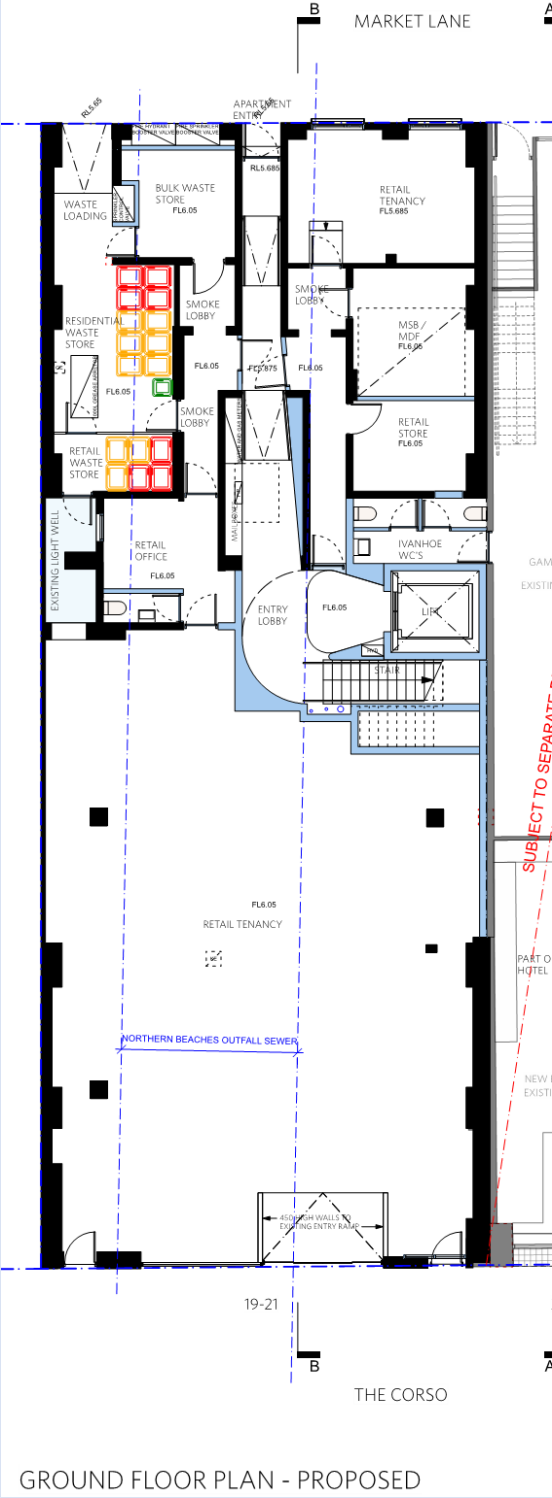
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>7.3(c)(ii) and 7.3(d)(iii) of AS 2419.1 do not apply, and</p> <p>(C) A fire hydrant booster assembly may be located between 3.5m and 10m of the building, and need not comply with Clause 7.3(d)(iii) of AS 2419.1 where the assembly is protected by an adjacent fire rated freestanding wall that –</p> <p>(aa) achieves an FRL of not less than 90/90/90; and</p> <p>(bb) extends not less than 1m each side of the outermost fire hydrant booster risers within the assembly and is not less than 3m wide; and</p> <p>(cc) extends to a height of not less than 2m above finished ground level; and</p> <p>(ii) Where internal fire hydrants are provided, they must serve only the storey on which they are located except that a sole occupancy unit –</p> <p>(A) In a Class 2 or 3 building or Class 4 part may be served by a single fire hydrant located at the level of egress from the sole occupancy unit; or</p> <p>(B) Of not more than 2 storeys in a Class 5, 6, 7, 8 or 9 building may be served by a single fire hydrant located at the level of egress from that sole occupancy unit provided the fire hydrant can provide coverage to the whole of the sole occupancy unit.</p> <p><i>Note – Concessions under Specification E1.5a (AS 2118.1, AS2118.4 sprinkler system) for Class 2 & 3 buildings with an effective height of not more than 25m with a rise in storeys of 4 or more.</i></p> <p><i>Internal fire hydrants need not be provided where -</i></p> <ul style="list-style-type: none"> ❖ <i>The building is served by external fire hydrants that provide compliant coverage, except that in a residential care building the nozzle at the end of the length of hose need only reach the entry door of any sole occupancy unit to be considered as covering the area within the sole occupancy unit; or</i> ❖ <i>A dry fire hydrant system that otherwise complies with AS 2419.1 is installed in the building and –</i> <ul style="list-style-type: none"> - <i>Each fire hydrant head is located in accordance with E1.3 and fitted with a blank end cap or plug; and</i> - <i>The pipe work is installed in accordance with E1.3 (as for a required fire main) except that it need not be connected to a water supply; and</i> - <i>A hydrant booster inlet connection is provided in accordance with E1.3; and</i> ❖ <i>An external street or feed hydrant capable of providing the required system flow is located within 60m of the hydrant booster connection.</i> <p><i>Note – Concessions under Specification E1.5a (FPAA101D sprinkler system) for Class 2 & 3 buildings with an effective height of not more than 25m with a rise in storeys of 4 or more.</i></p> <p><i>Internal fire hydrants need not be provided where -</i></p>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<ul style="list-style-type: none"> ❖ A dry fire hydrant system that otherwise complies with AS 2419.1 is installed in the building except - <ul style="list-style-type: none"> - The system pipework is not connected to the water supply; and - An on-site fire pump set is not required; and - The minimum fire hydrant outlet flow of 6 L/s may be achieved when boosted by a fire brigade pumping appliance; and - The minimum pipe sizes specified in AS 2419.1 do not apply, and - Each fire hydrant head is located in accordance with E1.3 and fitted with a blank end cap or plug; and - A hydrant booster inlet connection is provided in accordance with E1.3; and - An external street or feed hydrant capable of providing the required system flow is located within 60m of the hydrant booster connection. - A hydrant booster inlet connection is provided in accordance with E1.3; and ❖ An external street or feed hydrant capable of providing the required system flow is located within 60m of the hydrant booster connection. <p><u>DTS non-compliance</u></p> <p>The location of the booster is not located within sight of the main entrance to the building which does not comply with Clause 7.3(c) of AS 2419.1-2005.</p> <p>AED believes the main entrance is the entrance to which the address applies. It is a technical non-compliance.</p> <p><i>This is required to be addressed by a Fire Engineered Performance Solution at CC stage.</i></p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>MARKET LANE</p>  <p>The following can be detailed on the architectural plans for CC stage:</p> <ul style="list-style-type: none"> - Hydrant valves <p>Hydraulic Services Design Certification and associated plans must be incorporated into the construction certificate specification</p>
E1.4 Fire Hose Reels		X			<p>(a) E1.4 does not apply to –</p> <p>(i) A Class 2 building; or</p> <p>(b) A fire hose reel system must be provided –</p> <p>(i) to serve the whole building where one or more internal fire hydrants area installed; or</p> <p>(ii) where internal fire hydrants are not installed, to serve any fire compartment with a floor area greater than 500m².</p> <p>(c) The fire hose reel system must –</p> <p>(i) Have hose reels installed in accordance with AS 2441; and</p> <p>(ii) Provide hose reels to serve only the storey in which they are located except a sole occupancy unit of not more than 2 storeys in a Class 6, 7, 8 and 9 building may be served by a single fire hose reel located at the level of egress from that sole occupancy unit provided the fire</p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>hose reel can provide coverage to the whole of the sole occupancy unit.</p> <p>(d) Fire hose reels must be located internally, externally or in combination, to achieve the system coverage as specified in AS2441.</p> <p>(e) In achieving system coverage, one or a combination of the following criteria for individual internally located fire hose reels must be met in determining the layout of any fire hose reel system:</p> <p>(i) Fire hose reels must be located adjacent to an internal hydrant (other than one in a fire isolated exit). Except that a fire hose reel need not be located adjacent to every fire hydrant, provided system coverage can be achieved.</p> <p>(ii) Fire hose reels must be located within 4m of an exit, except that a fire hose reel need not be located adjacent to every exit, provided system coverage can be achieved.</p> <p>(iii) Where system coverage is not achieved by compliance with (i) and (ii), additional fire hose reels may be located in paths of travel to an exit to achieve the required coverage.</p> <p>(f) Fire hose reels must be located so that the fire hose will not pass through doorways fitted with fire or smoke doors, except</p> <p>(i) Doorways in walls referred to in C2.5(a)(v) in a Class 9a building and C2.5(b)(iv) in a Class 9c building, separating ancillary use areas of high potential fire hazard; and</p> <p>(ii) Doorways in walls referred to in C2.12 or C2.13 separating equipment or electrical supply systems; and</p> <p>(iii) Doorways opening into shafts referred to in C3.13.</p> <p>(g) Where the normal water supply cannot achieve the flow and pressures required by AS 2441, or is unreliable –</p> <p>(i) A pump; or</p> <p>(ii) Water storage facility; or</p> <p>(iii) Both a pump and water storage facility,</p> <p>Must be installed to provide the minimum floor and pressures required by clause 6.1 of AS 2441.</p> <p><u>DTS non-compliance</u></p> <p>Details of the location of the fire hose reels in accordance with this clause are required at CC stage.</p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					 <p>GROUND FLOOR PLAN - PROPOSED</p> <p><i>Hydraulic Services Design Certification and associated plans must be incorporated into the construction certificate specification</i></p>
E1.5				X	A sprinkler system must-



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Sprinklers					<p>(a) Be installed in a building or part of a building when required by Table E1.5; and</p> <p>(b) Comply with Specification E1.5 and Specification E1.5a as applicable as summarised below –</p> <ul style="list-style-type: none"> ❖ <i>Class 2 & 3 – Throughout the whole building, including any part of another class, if any part of the building has a rise in storeys of 4 or more and an effective height of not more than 25m</i> <p>An automatic sprinkler system in accordance with Specification E1.5a is required to comply with E1.5.</p> <p>AED understands that a sprinkler system in accordance with Spec E1.5 and AS 2118.1-2017 is proposed in the building to address the proposed Fire Engineered Performance Solutions.</p> <p><i>Hydraulic Services Design Certification must be incorporated into the construction certificate specification</i></p>
E1.6 Portable Fire Extinguishers				X	<p>(a) Portable fire extinguishers must be –</p> <ul style="list-style-type: none"> (i) Provided as listed in Table E1.6; (ii) For a Class 2, 3, or 5 building or Class 4 part of a building, provided – <ul style="list-style-type: none"> (A) To serve the whole Class 2, 3, or 5 building or Class 4 part of a building where one or more internal fire hydrants are installed; or (B) Where internal fire hydrants are not installed, to serve any fire compartment with a floor area greater than 500m², and for the purpose of this clause, a sole occupancy unit in a Class 2 or 3 building or Class 4 part of a building is considered to be a fire compartment; and (iii) Subject (b), selected, located and distributed in accordance with Sections 1, 2, 3 and 4 of AS 2444. <p>(b) Portable fire extinguishers provided in a Class 2 or 3 building or Class 4 part of a building must be –</p> <ul style="list-style-type: none"> (i) An ABE type fire extinguisher; and (ii) A minimum size of 2.5kg; and (iii) Distributed outside a sole occupancy unit – <ul style="list-style-type: none"> (A) To serve only the storey on which they are located; and (B) So that the travel distance from the entrance doorway of any sole occupancy unit to the nearest fire extinguisher is not more than 10m. <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
E1.8 Fire Control Centre				X	Not applicable. A Fire Control Centre facility is not required.
E1.9				X	In a building under construction –





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Fire Precautions during construction					<p>(a) not less than one portable fire extinguisher to suit Class A, B and C fires and electrical fires must be provided at all times on each storey adjacent to each required / temporary exit; and</p> <p>(b) After the building has reach an effective height of 12m –</p> <p>(i) the required fire hydrants and fire hose reels must be operational on all floor / roof covered storeys, except for the 2 uppermost storeys; and</p> <p>(ii) Any required booster connections must be installed.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
E1.10 Provision for Special Hazards			X		Not applicable. Not a special hazard.
Part E2 Smoke Hazard Management					
E2.2 General Requirements (inclusive of Table E2.2a / Table E2.2b & NSW amendments)				X	<p><u>General smoke hazard management requirements</u></p> <p>(a) A building must comply with (b), (c), (d) and—</p> <p>(i) Table E2.2a as applicable to Class 2 to 9 buildings such that each separate part complies with the relevant provisions for the classification; and</p> <p>(ii) Table E2.2b as applicable to Class 6 and 9b buildings such that each separate part complies with the relevant provisions for the classification.</p> <p>(b) An air-handling system which does not form part of a smoke hazard management system in accordance with Table E2.2a or Table E2.2b and which recycles air from one fire compartment to another fire compartment or operates in a manner that may unduly contribute to the spread of smoke from one fire compartment to another fire compartment must—</p> <p>(i) be designed and installed to operate as a smoke control system in accordance with AS 1668.1; or</p> <p>(ii)</p> <p>(A) incorporate smoke dampers where the air-handling ducts penetrate any elements separating the fire compartments served; and</p> <p>(B) be arranged such that the air-handling system is shut down and the smoke dampers are activated to close automatically by smoke detectors complying with clause 7.5 of AS 1670.1; and</p> <p>for the purposes of this provision, each sole-occupancy unit in a Class 2 or 3 building is treated as a separate fire compartment.</p> <p>(c) Miscellaneous air-handling systems covered by Sections 5 and 6 of AS 1668.1 serving more than one fire compartment (other than a carpark ventilation system) and not forming part</p>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>of a smoke hazard management system must comply with that Section of the Standard.</p> <p>(d) A smoke detection system must be installed in accordance with Clause 6 of Specification E2.2a to operate AS 1668.1 systems that are provided for zone pressurisation and automatic air pressurisation for fire-isolated exits.</p> <p><i>Note: Smoke alarms in sole occupancy units are required to be interconnected.</i></p> <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification.</p>
E2.3 Provision for Special Hazards			X		Not applicable. Not a special hazard.
Part E3 - Lift Installations					
E3.1 Lift installations				X	<p>An electric passenger lift installation and an electrohydraulic passenger lift installation must comply with Specification E3.1</p> <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
E3.2 Stretcher Facility in Lifts			X		Not applicable. Effective height is less than 12.
E3.3 Warning Against the use of lifts in Fire				X	<p>A warning sign must—</p> <p>(a) be displayed where it can be readily seen—</p> <p>(i) near every call button for a passenger lift or group of lifts throughout a building; except</p> <p>(ii) a small lift such as a dumb-waiter or the like that is for the transport of goods only; and</p> <p>(b) comply with the details and dimensions of Figure E3.3 and consist of—</p> <p>(i) incised, inlaid or embossed letters on a metal, wood, plastic or similar plate securely and permanently attached to the wall; or</p> <p>(ii) letters incised or inlaid directly into the surface of the material forming the wall.</p> <p>“DO NOT USE LIFTS IF THERE IS A FIRE”</p> <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
E3.4 Emergency Lifts			X		Not applicable. Effective height is less than 25m.
E3.5 Landings				X	Access and egress to and from lift-well landings must comply with the Deemed-to-Satisfy Provisions of Section D.



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
E3.6 Facilities for People with Disabilities				X	In an accessible building, every passenger lift must be one of the types specified in Table E3.6a, have accessible features in accordance with Table E3.6b, and not rely on a constant pressure device for its operation if the lift car is fully enclosed. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
E3.7 Fire Service Controls				X	Where lifts serve any storey above an effective height of 12 m, the following must be provided: (a) A fire service recall control switch complying with E3.9 for— (i) a group of lifts; or (ii) a single lift not in a group that serves the storey. (b) A lift car fire service drive control switch complying with E3.10 for every lift. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
E3.8 Residential Care Buildings			X		Not applicable. Not a Class 9c residential care building
E3.9 Fire service recall operation switch				X	(a) Each group of lifts must be provided with one fire service recall control switch required by E3.7 that activates the fire service recall operation at (e). The switch must— (i) be located at the landing nominated by the appropriate authority; and (ii) be labelled “FIRE SERVICE” in indelible white lettering on a red background; and (iii) have two positions with an “OFF” and an “ON” position identified; and (iv) be operable only by the use of a key that is removable in either the “OFF” position or the “ON” position. (b) Adhesive labels must not be used for compliance with (a)(ii) and (a)(iii). (c) The key in (a)(iv) must be able to turn all fire service recall control switches in the building and must have a different key combination to other keys used for lifts in the building. (d) The fire service recall operation must be activated by— (i) switching the fire service recall control switch in (a) to “ON”; or (ii) a signal from a fire management system approved by the appropriate authority. (e) The activation of the fire service recall operation at (d) must— (i) cancel all registered car and landing calls; and (ii) inactivate all door reopening devices that may be affected by smoke; and



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(iii) ensure lift cars travelling toward the nominated floor continue to the nominated floor without stopping; and</p> <p>(iv) ensure lift cars travelling away from the nominated floor stop at or before the next available floor without opening the doors (either automatically or by the door open button), reverse direction and travel without stopping to the nominated floor; and</p> <p>(v) for lifts stopped at a floor other than the nominated floor, close the doors and travel without stopping to the nominated floor; and</p> <p>(vi) ensure that lifts stay at the nominated floor with doors open; and</p> <p>(vii) permit all lifts to return to normal service if the fire service recall control switch at (a) is switched to the “OFF” position during or after the fire service recall operation.</p> <p>(f) The requirements of (e) do not apply to lifts on inspection service or when the lift car fire service control switch required by E3.10 is in the “ON” position.</p> <p>(g) Lifts having manual controls must signal an alert to the lift for the lift to return to the nominated floor containing the recall switch that activated the signal.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
E3.10 Lift car fire service drive control switch				X	<p>(a) The lift car fire service drive control switch required by E3.7 must be activated from within the lift car. The switch must—</p> <p>(i) be located between 600 mm and 1500 mm above the lift car floor; and</p> <p>(ii) be labelled “FIRE SERVICE” by indelible white lettering on a red background; and</p> <p>(iii) have two positions with an “OFF” and an “ON” position identified; and</p> <p>(iv) operate only by the use of a key that is removable in either the “OFF” position or the “ON” position.</p> <p>(b) Adhesive labels must not be used for compliance with (a)(ii) or (a)(iii).</p> <p>(c) When the lift car fire service drive control switch at (a) is turned to the “ON” position, the lift must—</p> <p>(i) not respond to the fire service recall control switch; and</p> <p>(ii) cancel all registered lift car and landing calls; and</p> <p>(iii) override all lift car call access control systems; and</p> <p>(iv) inactivate all door reopening devices that may be affected by smoke; and</p> <p>(v) allow the registration of lift car call by lift car call buttons, however the lift doors must not close in response to the registration of lift car calls; and</p> <p>(vi) activate door closing by constant pressure being applied on the “door close” button unless the button is released before the doors are fully closed, in which case the doors must reopen and any registered lift car calls must be cancelled; and</p>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(vii) when the doors are closed, move the lift in response to registered lift car calls while allowing additional lift car calls to also be registered; and</p> <p>(viii) travel to the first possible floor in response to registered lift car calls and cancel all registered lift car calls after the lift stops; and</p> <p>(ix) ensure doors do not open automatically, rather by constant pressure being applied on the “door open” button unless the button is released before the doors are fully open, in which case the doors must re-close; and the requirements of (c)(i) to (c)(ix) do not apply to a lift operating on inspection service.</p> <p>(d) A multi-deck lift installation must have systems in place that—</p> <p>(i) are able to communicate to the fire officer that the fire service drive control switch will not operate until all decks have been cleared of passengers; and</p> <p>(ii) ensure there is an appropriate method of clearing all deck landings of passengers; and</p> <p>(iii) maintain all doors to deck landings not containing the fire service control switch closed and inoperative while the lift is on fire service drive control.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
Part E4 - Visibility in an Emergency, Exit signs and Warning Systems					
E4.2 Emergency Lighting Requirements				X	<p>An emergency lighting system must be installed—</p> <p>(a) in every fire-isolated stairway, fire-isolated passageway or fire-isolated ramp; and</p> <p>(b) in every storey of a Class 5, 6, 7, 8 or 9 building where the storey has a floor area more than 300 m²—</p> <p>(i) in every passageway, corridor, hallway, or the like, that is part of the path of travel to an exit; and</p> <p>(ii) in any room having a floor area more than 100 m² that does not open to a corridor or space that has emergency lighting or to a road or open space; and</p> <p>(iii) in any room having a floor area more than 300 m²; and</p> <p>(c) in every passageway, corridor, hallway, or the like, having a length of more than 6 m from the entrance doorway of any sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building to the nearest doorway opening directly to—</p> <p>(i) a fire-isolated stairway, fire-isolated passageway or fire-isolated ramp; or</p> <p>(ii) an external stairway serving instead of a fire-isolated stairway under D1.8; or</p> <p>(iii) an external balcony leading to a fire-isolated stairway, fire-isolated passageway or fire-isolated ramp; or</p> <p>(iv) a road or open space; and</p> <p>(d) in every required non-fire-isolated stairway; and</p>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(e) in a sole-occupancy unit in a Class 5, 6 or 9 building if—</p> <p>(i) the floor area of the unit is more than 300 m²; and</p> <p>(ii) an exit from the unit does not open to a road or open space or to an external stairway, passageway, balcony or ramp, leading directly to a road or open space; and</p> <p>(f) in every room or space to which there is public access in every storey in a Class 6 or 9b building if—</p> <p>(i) the floor area in that storey is more than 300 m²; or</p> <p>(ii) any point on the floor of that storey is more than 20 m from the nearest doorway leading directly to a stairway, ramp, passageway, road or open space; or</p> <p>(iii) egress from that storey involves a vertical rise within the building of more than 1.5 m, or any vertical rise if the storey concerned does not admit sufficient light; or</p> <p>(iv) the storey provides a path of travel from any other storey required by (i), (ii) or (iii) to have emergency lighting; and</p> <p>Electrical Design Certification must be incorporated into the construction certificate specification</p>
E4.3 Measurement of Distance			X		Distances, other than vertical rise, must be measured along the shortest path of travel whether by straight lines, curves or a combination of both.
E4.4 Design and Operation of Emergency Lighting			X		The emergency lighting system must comply with AS/NZS 2293.1-2018
E4.5 Exit Signs				X	<p>An exit sign must be clearly visible to persons approaching the exit, and must be installed on, above or adjacent to each—</p> <p>(a) door providing direct egress from a storey to—</p> <p>(i) an enclosed stairway, passageway or ramp serving as a required exit; and</p> <p>(ii) an external stairway, passageway or ramp serving as a required exit; and</p> <p>(iii) an external access balcony leading to a required exit; and</p> <p>(b) door from an enclosed stairway, passageway or ramp at every level of discharge to a road or open space; and</p> <p>(c) horizontal exit; and</p> <p>(d) door serving as, or forming part of, a required exit in a storey required to be provided with emergency lighting in accordance with E4.2.</p> <p>Electrical design plans and certification must be incorporated into the construction certificate specification</p>
E4.6 Direction Signs (inclusive of NSW E4.6)				X	If an exit is not readily apparent to persons occupying or visiting the building, then exit signs must be installed—

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(a) in appropriate positions in corridors, hallways, lobbies, foyers, auditoria, and the like, indicating the direction to a required exit; and</p> <p>(b) in a Class 9b building used as an entertainment venue — in any external egress path to a road where the exit does not open directly onto a road</p> <p>Electrical Design Certification must be incorporated into the construction certificate specification and directional exit sign locations must be illustrated on the architectural floor plans</p>
E4.7 Class 2 & 3 Buildings & Class 4 Parts: Exemption			X		<p>Exit doors in Class 2 parts need not comply with E4.5 provided every exit door is clearly and legibly labelled on the side remote from the exit with the word "EXIT" in capital letters 25mm high in a colour contrasting with that of the background or some other suitable method.</p> <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
E4.8 Design & Operation of Exit Signs				X	<p>Exit signs must comply with:</p> <p>(a) AS/NZS 2293.1-2018; or</p> <p>(b) For a photoluminescent exit sign, Specification E4.8.</p> <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
E4.9 Emergency Warning & Intercom Systems			X		Not applicable. Emergency warning and intercom system is not required.
SECTION F					
HEALTH & AMENITY					
Part F1 - Damp & Weatherproofing					
F1.0 Deemed -to-Satisfy Provisions				X	<p>Performance Requirements FP1.4, for the prevention of the penetration of water through external wall, must be complied.</p> <p>There are no Deemed -to Satisfy Provisions for this Performance Solution in respect to external walls.</p> <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
F1.1 Stormwater Drainage				X	<p>Stormwater drainage must comply with AS/NZS 3500.3-2018.</p> <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
F1.4 External above ground membranes				X	<p>Any external above ground membranes must be waterproofed as per AS 4654 Parts 1 and 2-2012.</p> <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
F1.5 Roof coverings				X	<p>A roof must be covered with—</p> <ul style="list-style-type: none"> (a) concrete roofing tiles complying with AS 2049 and fixed, except in cyclonic areas, in accordance with AS 2050, as appropriate; or (b) terracotta roofing tiles complying with AS 2049 and fixed, except in cyclonic areas, in accordance with AS 2050; or (c) cellulose cement corrugated sheeting complying with AS/NZS 2908.1 and installed in accordance with AS/NZS 1562.2; or (d) metal sheet roofing complying with AS 1562.1; or (e) plastic sheet roofing designed and installed in accordance with AS/NZS 4256 Parts 1, 2, 3 and 5 and AS/NZS 1562.3; or (f) Terracotta, fibre-cement and timber slates and shingles designed and installed to complying with AS 4597 except in cyclonic areas <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
F1.6 Sarking				X	<p>Sarking-type materials used for weatherproofing must comply with AS/NZS 4200.1 and AS 4200.2.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
F1.7 Waterproofing of wet area				X	<ul style="list-style-type: none"> (a) In a Class 2 and 3 building and a Class 4 part of a building, building elements in wet areas must— <ul style="list-style-type: none"> (i) be water resistant or waterproof in accordance with Table F1.7; and (ii) comply with AS 3740. (b) In a Class 5, 6, 7, 8 or 9 building, building elements in the bathroom or shower room, a slop hopper or sink compartment, a laundry or sanitary compartment must— <ul style="list-style-type: none"> (i) be water resistant or waterproof in accordance with Table F1.7; and (ii) comply with AS 3740, <p>as if they were in a Class 2 or 3 building or a Class 4 part of a building.</p> (c) Where a slab or stall type urinal is installed— <ul style="list-style-type: none"> (i) the floor surface of the room containing the urinal must— <ul style="list-style-type: none"> (A) be an impervious material; and (B) where no step is installed— <ul style="list-style-type: none"> (aa) be graded to the urinal channel for a distance of 1.5 m from the urinal channel; and (bb) the remainder of the floor be graded to a floor waste; and





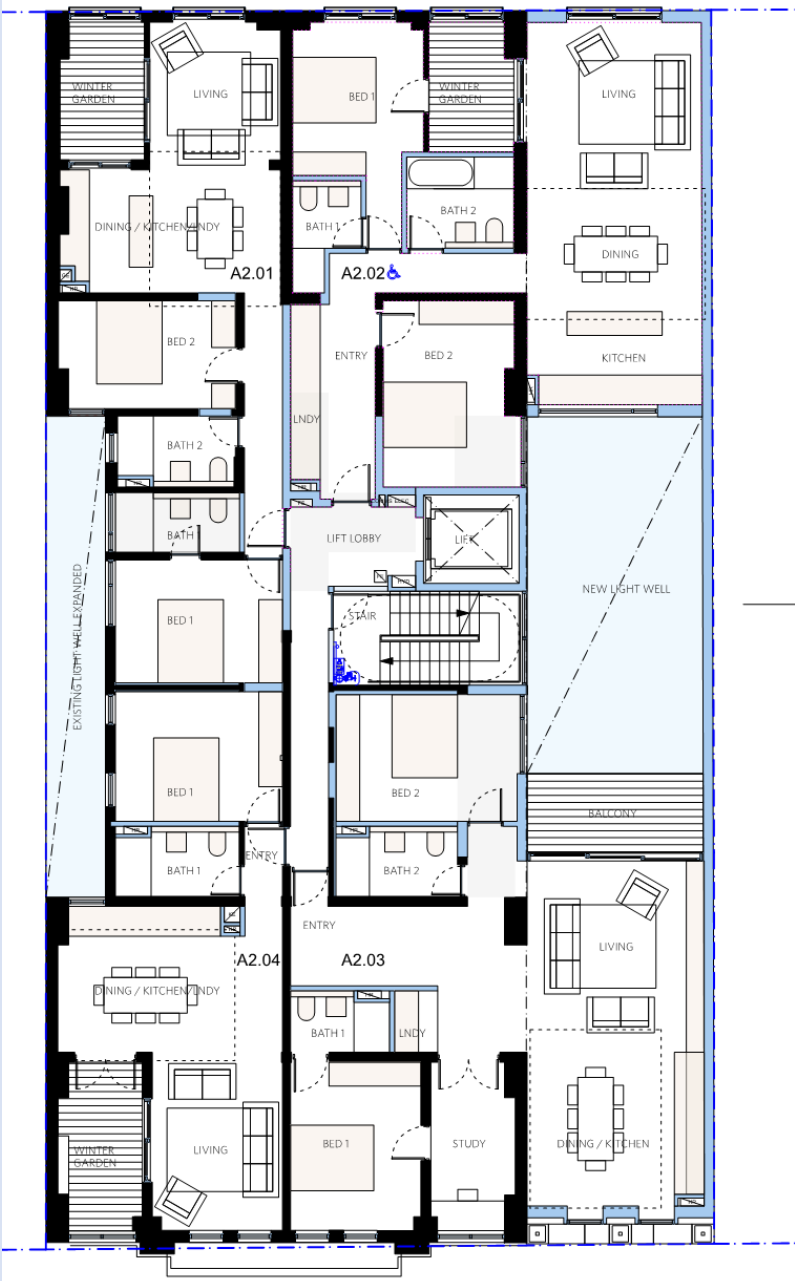
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(C) where a step is installed—</p> <p>(aa) the step must have an impervious surface and be graded to the urinal channel; and</p> <p>(bb) the floor behind the step must be graded to a floor waste; and</p> <p>(ii) the junction between the floor surface and the urinal channel must be impervious.</p> <p>(d) Where a wall hung urinal is installed—</p> <p>(i) the wall must be surfaced with impervious material extending from the floor to not less than 50 mm above the top of the urinal and not less than 225 mm on each side of the urinal.</p> <p>(ii) the floor must be surfaced with impervious material and graded to a floor waste.</p> <p>(e) In a room with timber or steel-framed walls and containing a urinal—</p> <p>(i) the wall must be surfaced with an impervious material extending from the floor to not less than 100 mm above the floor surface; and</p> <p>(ii) the junction of the floor surface and the wall surface must be impervious.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
F1.9 Damp-proofing				X	<p>Where a damp-proof course is required, it must consist of a material that complies with AS/NZS 2904-1995; or impervious sheet material in accordance with AS 3660.1-2000</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
F1.10 Damp-proofing of floors on the ground				X	<p>If a floor of a room is laid on the ground or on fill, moisture from the ground must be prevented from reaching the upper surface of the floor and adjacent walls by the insertion of a vapour barrier in accordance with AS 2870-2011 (N/A to areas that do not require weatherproofing – refer specific clause exemptions).</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
F1.11 Provision of Floor Wastes				X	<p>Bathrooms and laundries in Class 2 buildings must be provided with a floor waste, and the floor of such areas must be graded to such floor waste.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
F1.12 Sub Floor Ventilation			X		Not applicable. No sub-floor space proposed.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
F1.13 Glazed Assemblies				X	Glazed assemblies within external walls in accordance with AS 2047-2014. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
Part F2 - Sanitary & Other Facilities					
F2.1 Facilities in residential buildings		X			Within each sole-occupancy unit, provide— (A) a kitchen sink and facilities for the preparation and cooking of food; and (B) a bath or shower; and (C) a closet pan; and (D) a washbasin (E) laundry facilities <u>DTS non-compliance</u> Laundry is not detailed within all SOUs.

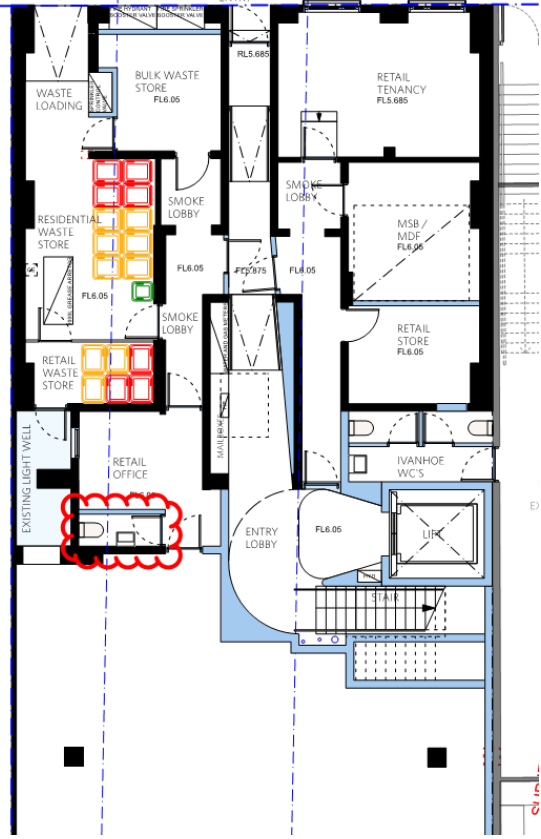


BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					 <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
<p>F2.2</p> <p>Calculation of number of occupants and fixtures</p>			X		<p>Informational.</p> <ul style="list-style-type: none"> ❖ The number of persons accommodated must be calculated according to D1.13 if it cannot be more accurately determined by other means. ❖ Unless the premises are used predominantly by one sex, sanitary facilities must be provided on the basis of equal numbers of males and females.



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<ul style="list-style-type: none">❖ In calculating the number of sanitary facilities to be provided under F2.1 and F2.3, a unisex facility required for people with a disability may be counted once for each sex.❖ For the purposes of this Part, a unisex facility comprises one closet pan, one washbasin and means for the disposal of sanitary towels.
F2.3 Facilities for Class 3 to 9 Buildings				X	<ul style="list-style-type: none">(a) Except where permitted by (b), (c), (f), F2.4(a) and F2.4(b), separate sanitary facilities for males and females must be provided for Class 3, 5, 6, 7, 8 or 9 buildings in accordance with Table F2.3.(b) If not more than 10 people are employed, a unisex facility may be provided instead of separate facilities for each sex.(c) If the majority of employees are of one sex, not more than 2 employees of the other sex may share toilet facilities if the facilities are separated by means of walls, partitions and doors to afford privacy.(d) Employees and the public may share the same facilities in a Class 6 and 9b building (other than a school or early childhood centre) provided the number of facilities provided is not less than the total number of facilities required for employees plus those required for the public.(e) Adequate means of disposal of sanitary towels must be provided in sanitary facilities for use by females.(f) Separate sanitary facilities for males and females need not be provided for patients in a ward area of a class 9a building.



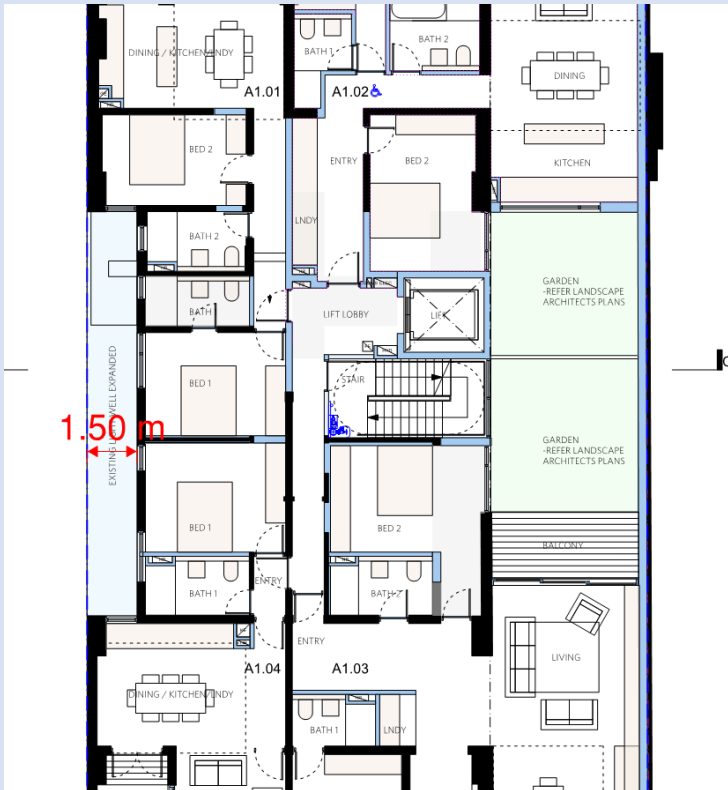
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					
<p>F2.4</p> <p>Facilities for People with Disabilities</p>				<p>X</p>	<p>In a building required to be accessible— SA F2.4(a)</p> <ul style="list-style-type: none"> (a) accessible unisex sanitary compartments must be provided in accessible parts of the building in accordance with Table F2.4(a); and (b) accessible unisex showers must be provided in accordance with Table F2.4(b); and (c) at each bank of toilets where there is one or more toilets in addition to an accessible unisex sanitary compartment at that bank of toilets, a sanitary compartment suitable for a person with an ambulant disability in accordance with AS 1428.1 must be provided for use by males and females; and (d) an accessible unisex sanitary compartment must contain a closet pan, washbasin, shelf or bench top and adequate means of disposal of sanitary towels; and (e) the circulation spaces, fixtures and fittings of all accessible sanitary facilities provided in accordance with Table F2.4(a) and Table F2.4(b) must comply with the requirements of AS 1428.1; and (f) an accessible unisex sanitary facility must be located so that it can be entered without crossing an area reserved for one sex only; and (g) where two or more of each type of accessible unisex sanitary facility are provided, the number of left and right handed

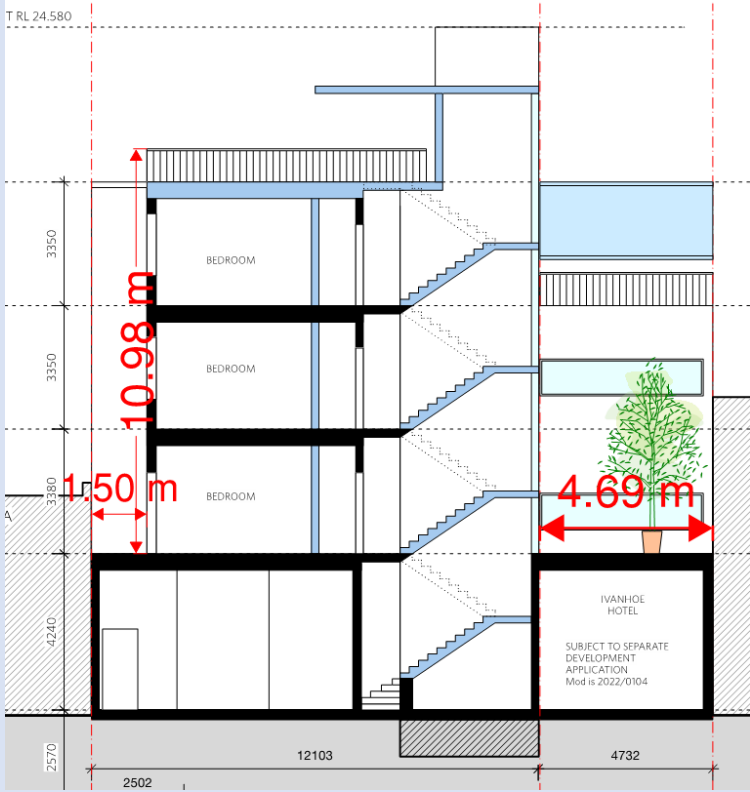
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>mirror image facilities must be provided as evenly as possible; and</p> <p>(h) where male sanitary facilities are provided at a separate location to female sanitary facilities, accessible unisex sanitary facilities are only required at one of those locations; and</p> <p>(i) an accessible unisex sanitary compartment or an accessible unisex shower need not be provided on a storey or level that is not required by D3.3(f) to be provided with a passenger lift or ramp complying with AS 1428.1.</p>
F2.5 Construction of Sanitary Compartments				X	<p>Sanitary compartments must have:</p> <p>(a) Doors and partitions that separate adjacent compartments; and</p> <p>(b) the door to a fully enclosed sanitary compartment must open outwards, or slide, or be removable from outside of the compartment, unless there is a clear space of at least 1.2m between the closet pan within the compartment and the doorway.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
F2.6 Interpretation: Urinals and washbasins			X		Information relevant to urinal and washbasin design.
F2.7 Microbial Control Note NSW F2.7 (Clause Deleted)			X		Not applicable. Clause deleted in NSW.
F2.8 Waste Management			X		Not applicable. Not Class 9a & 9c.
F2.9 Accessible adult change facilities			X		Not applicable.
Part F3 Room Sizes					
F3.1 Height of Rooms and other spaces				X	<p>The ceiling height must be not less than—</p> <p>(a) in a Class 2 or 3 building or Class 4 part of a building—</p> <p>(i) a kitchen, laundry, or the like — 2.1 m;</p> <p>(ii) and a corridor, passageway or the like — 2.1 m; and</p> <p>(iii) a habitable room excluding a kitchen — 2.4 m; and</p> <p>(iv) in a room or space with a sloping ceiling or projections below the ceiling line within -</p> <p>(A) a habitable room—</p>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>(aa) in an attic — a height of not less than 2.2 m for not less than two thirds of the floor area of the room or space; and</p> <p>(bb) in other rooms — a height of not less than 2.4 m for not less than two thirds of the floor area of the room or space; and</p> <p>(B) a non-habitable room — a height of not less than 2.1 m for not less than two thirds of the floor area of the room or space; and</p> <p>when calculating the floor area of a room or space, any part that has a ceiling height of less than 1.5 m is not included; and</p> <p>(b) in a Class 5, 6, 7 or 8 building—</p> <p>(i) except as allowed in (ii) and (f) — 2.4 m; and</p> <p>(ii) a corridor, passageway, or the like — 2.1 m; and</p> <p>(f) In any building—</p> <p>(i) a bathroom, shower room, sanitary compartment, airlock, tea preparation room, pantry, store room, garage, car parking area, or the like — 2.1 m; and</p> <p>(ii) a commercial kitchen & required accessible change room facility — 2.4 m; and</p> <p>(iii) above a stairway, ramp, landing or the like — 2 m measured vertically above the nosing line of stairway treads or the floor surface of the ramp, landing or the like.</p>
Part F4 - Light & Ventilation					
F4.1 Provision of natural light				X	<p>Natural lighting must be provided to:</p> <ul style="list-style-type: none"> ❖ all habitable rooms in Class 2 buildings, and Class 4 parts of a building; <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
F4.2 Methods and extent of natural lighting		X			<p>(a) Required natural lighting must be provided by—</p> <p>(i) windows, excluding roof lights, that—</p> <p>(A) have an aggregate light transmitting area measured exclusive of framing members, glazing bars or other obstructions of not less than 10% of the floor area of the room; and</p> <p>(B) are open to the sky or face a court or other space open to the sky or an open verandah, carport or the like; or</p> <p>(ii) roof lights, that—</p> <p>(A) have an aggregate light transmitting area measured exclusive of framing members, glazing bars or other obstructions of not less than 3% of the floor area of the room; and</p>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS								
					<p>(B) are open to the sky; or</p> <p>(iii) a proportional combination of windows and roof lights required by (i) and (ii).</p> <p>(b) In a Class 2 building a required window that faces a boundary of an adjoining allotment or a wall of the same building or another building on the allotment must not be less than a horizontal distance from that boundary or wall that is the greater of—</p> <p>(i) generally — 1 m; and</p> <p>(iii) 50% of the square root of the exterior height of the wall in which the window is located, measured in metres from its sill.</p> <p>DTS non-compliance</p> <p>Level 1 - The bedrooms on the western side faces a boundary of an adjoining allotment and is less than horizontal distance from the wall which does not comply with (b).</p> <p><i>It is recommended this is addressed by a Performance Solution at CC stage.</i></p> <table><tr><th>Level</th><th>Calc (50% of square root of sill height)</th><th>Metres to wall</th><th>Complies</th></tr><tr><td>Level 1</td><td>0.5 x $\sqrt{10.98\text{m}}$ = 1.66m</td><td>1.5</td><td>No.</td></tr></table> 	Level	Calc (50% of square root of sill height)	Metres to wall	Complies	Level 1	0.5 x $\sqrt{10.98\text{m}}$ = 1.66m	1.5	No.
Level	Calc (50% of square root of sill height)	Metres to wall	Complies										
Level 1	0.5 x $\sqrt{10.98\text{m}}$ = 1.66m	1.5	No.										

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					 <p>T RL 24.580</p> <p>3350</p> <p>3350</p> <p>3380</p> <p>4240</p> <p>2570</p> <p>2502</p> <p>12103</p> <p>4732</p> <p>BEDROOM</p> <p>BEDROOM</p> <p>BEDROOM</p> <p>IVANHOE HOTEL</p> <p>SUBJECT TO SEPARATE DEVELOPMENT APPLICATION Mod is 2022/0104</p> <p>10.98 m</p> <p>1.50 m</p> <p>4.69 m</p>
<p>F4.3</p> <p>Natural light borrowed from adjoining room</p>				X	<p>(a) Natural lighting to a room in a Class 2 building, may come through a glazed panel or opening from an adjoining room (including an enclosed verandah) if—</p> <ul style="list-style-type: none"> (i) both rooms are within the same sole-occupancy unit or the enclosed verandah is on common property; and (ii) the glazed panels or openings have an aggregate light transmitting area of not less than 10% of the floor area of the room to which it provides light; and the adjoining room has— <ul style="list-style-type: none"> (A) windows, excluding roof lights, that— <ul style="list-style-type: none"> (aa) have an aggregate light transmitting area of not less than 10% of the combined floor areas of both rooms; and (bb) are open to the sky or face a court or other space open to the sky or an open verandah, carport or the like; or (B) roof lights, that— <ul style="list-style-type: none"> (aa) have an aggregate light transmitting area of not less than 3% of the combined floor areas of both rooms; and (bb) are open to the sky; or (C) a proportional combination of windows and roof lights required by (A) and (B).



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(B) The areas specified in (a)(ii) and (a)(iii) may be reduced as appropriate if direct natural light is provided from another source.
F4.4 Artificial lighting				X	Artificial lighting in accordance with AS/NZS 1680.0-2009 to specific building areas. <i>Electrical Design Certification must be incorporated into the construction certificate specification</i>
F4.5 Ventilation of Rooms				X	All rooms to be provided with Clause F4.6 compliant natural ventilation OR a mechanical ventilation or air-conditioning system complying with AS 1668.2-2012. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
F4.6 Natural Ventilation			X		(a) Natural ventilation provided in accordance with F4.5(a) must consist of permanent openings, windows, doors or other devices which can be opened— (i) with ventilating area not less than 5% of the floor area of the room required to be ventilated; and (ii) open to— (A) a suitably sized court, or space open to the sky; or (B) an open verandah, carport, or the like; or (C) an adjoining room in accordance with F4.7. (b) The requirements of (a)(i) do not apply to a Class 8 electricity network substation. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
F4.7 Ventilation borrowed from adjoining room				X	Natural ventilation to a room may come through a window, opening, ventilating door or other device from an adjoining room (including an enclosed verandah) if both rooms are within the same sole-occupancy unit or the enclosed verandah is common property, and— (a) in a Class 2 building, a sole-occupancy unit of a Class 3 building or Class 4 part of a building— (i) the room to be ventilated is not a sanitary compartment; and (ii) the window, opening, door or other device has a ventilating area of not less than 5% of the floor area of the room to be ventilated; and (iii) the adjoining room has a window, opening, door or other device with a ventilating area of not less than 5% of the combined floor areas of both rooms; and (b) in a Class 5, 6, 7, 8 (except a Class 8 electricity network substation) or 9 building— (i) the window, opening, door or other device has a ventilating area of not less than 10% of the floor area of



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>the room to be ventilated, measured not more than 3.6 m above the floor; and</p> <p>(ii) the adjoining room has a window, opening, door or other device with a ventilating area of not less than 10% of the combined floor areas of both rooms; and</p> <p>(c) the ventilating areas specified in (a) and (b) may be reduced as appropriate if direct natural ventilation is provided from another source.</p> <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
F4.8 Restriction of position of water closets and urinals				X	<p>Rooms containing closet pans or urinals must not open directly into kitchen / pantry areas, public dining areas, Class 3 dormitory areas, public assembly areas (excluding early childhood centres, primary schools and open spectator stands) and a workplace normally occupied by more than one person.</p> <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
F4.9 Airlocks				X	Information relevant to the provision of airlocks and the like to separate rooms prohibited under Clause F4.8 from opening directly into another room.
F4.11 Carparks			X		Not applicable. No carparks proposed.
F4.12 Kitchen local exhaust			X		Not applicable. No commercial kitchen proposed.
Part F5 - Sound Transmission					
F5.1 Application of Part				X	The provisions of this Part apply to Class 2, 3 and 9c buildings only.
F5.2 Determination of airborne sound insulation ratings			X		<p>A form of construction required to have an airborne sound insulation rating must—</p> <p>(a) have the required value for weighted sound reduction index (R_w) or weighted sound reduction index with spectrum adaptation term (R_w + C_{tr}) determined in accordance with AS/NZS 1276.1 or ISO 717.1 using results from laboratory measurements; or</p> <p>(b) comply with Specification F5.2.</p> <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
F5.3 Determination of impact sound insulation ratings				X	<p>(a) A floor in a building required to have an impact sound insulation rating must—</p> <p>(i) have the required value for weighted normalised impact sound pressure level (L_{n,w}) determined in accordance</p>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<p>with AS/ISO 717.2 using results from laboratory measurements; or</p> <p>(ii) comply with Specification F5.2.</p> <p>(b) A wall in a building required to have an impact sound insulation rating must—</p> <p>(i) for a Class 2 or 3 building be of discontinuous construction; and</p> <p>(c) For the purposes of this Part, discontinuous construction means a wall having a minimum 20 mm cavity between 2 separate leaves, and</p> <p>(i) for masonry, where wall ties are required to connect leaves, the ties are of the resilient type; and</p> <p>(ii) for other than masonry, there is no mechanical linkage between leaves except at the periphery.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
F5.4 Sound Insulation of floors between units				X	<p>(a) A floor in a Class 2 or 3 building must achieve an $R_w + C_{tr}$ (airborne) not less than 50, and an $L_{n,w}$ (impact) not more than 62, if separating:</p> <p>(i) SOU's; or</p> <p>(ii) An SOU from a plant room, lift shaft, stairway, public corridor, public lobby or parts of a different classification.</p> <p><i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i></p>
F5.5 Sound insulation of walls between units				X	<p>(a) A wall in a Class 2 or 3 building must—</p> <p>(i) have an $R_w + C_{tr}$ (airborne) not less than 50, if it separates sole-occupancy units; and</p> <p>(ii) have an R_w (airborne) not less than 50, if it separates a sole-occupancy unit from a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification; and</p> <p>(iii) comply with F5.3(b) if it separates—</p> <p>(A) a bathroom, sanitary compartment, laundry or kitchen in one sole-occupancy unit from a habitable room (other than a kitchen) in an adjoining unit; or</p> <p>(B) a sole-occupancy unit from a plant room or lift shaft.</p> <p>(b) A door may be incorporated in a wall in a Class 2 or 3 building that separates a sole occupancy unit from a stairway, public corridor, public lobby or the like, provided the door assembly has an R_w not less than 30.</p> <p>(e) Where a wall required to have sound insulation has a floor above, the wall must continue to—</p> <p>(i) the underside of the floor above; or</p>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<ul style="list-style-type: none"> (ii) a ceiling that provides the sound insulation required for the wall. (f) Where a wall required to have sound insulation has a roof above, the wall must continue to— <ul style="list-style-type: none"> (i) the underside of the roof above; or (ii) a ceiling that provides the sound insulation required for the wall. <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
F5.6 Sound insulation rating of services				X	<p>Ducts and pipes must achieve an $R_w + C_{tr}$ (airborne) of no less than 40 if the adjacent room is habitable or 25 if non-habitable.</p> <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
F5.7 Sound isolation of pumps				X	<p>A flexible coupling must be used at the point of connection between the service pipes in a building and any circulating pump.</p> <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
Part F6 – Condensation Management					
F6.1 Application of Part				X	<p>The Deemed-to-Satisfy Provisions of this Part only apply to a sole-occupancy unit of a Class 2 building and a Class 4 part of a building.</p>
F6.2 Pliable building membrane				X	<ul style="list-style-type: none"> (a) Where a pliable building membrane is installed in an external wall, it must— <ul style="list-style-type: none"> (i) comply with AS/NZS 4200.1; and (ii) be installed in accordance with AS 4200.2; and (iii) be a vapour permeable membrane for climate zones 6, 7 and 8; and (iv) be located on the exterior side of the primary insulation layer of wall assemblies that form the external envelope of a building. (b) Except for single skin masonry and single skin concrete, where a pliable building membrane is not installed in an external wall, the primary water control layer must be separated from water sensitive materials by a drained cavity. <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
F6.3 Flow rate and discharge of exhaust systems				X	<ul style="list-style-type: none"> (a) An exhaust system installed in a kitchen, bathroom, sanitary compartment or laundry must have a minimum flow rate of— <ul style="list-style-type: none"> (i) 25 L/s for a bathroom or sanitary compartment; and (ii) 40 L/s for a kitchen or laundry.



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(b) Exhaust from a kitchen must be discharged directly or via a shaft or duct to outdoor air. (c) Exhaust from a bathroom, sanitary compartment, or laundry must be discharged— (i) directly or via a shaft or duct to outdoor air; or (ii) to a roof space that is ventilated in accordance with F6.4. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
F6.4 Ventilation of roof spaces				X	(a) Where an exhaust system covered by F6.3 discharges directly or via a shaft or duct into a roof space, the roof space must be ventilated to outdoor air through evenly distributed openings. (b) Openings required by (a) must have a total unobstructed area of 1/300 of the respective ceiling area if the roof pitch is greater than 22°, or 1/150 of the respective ceiling area if the roof pitch is less than or equal to 22°. (c) 30% of the total unobstructed area required by (b) must be located not more than 900 mm below the ridge or highest point of the roof space, measured vertically, with the remaining required area provided by eave vents. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>

SECTION G ANCILLIARY PROVISIONS

Part G1 - Minor Structures and Components

G1.1 Swimming Pools			X		Not applicable. No swimming pool
NSW G1.101 Provision for cleaning windows				X	A safe manner for cleaning of windows located 3 or more storeys above ground level must be provided, and compliance is achieved where: (a) The windows can be cleaned wholly from within the building; or (b) Via a method complying with the Work Health and Safety Act 2011 and regulations made under that Act. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
G1.2 Refrigeration chambers, strong-rooms and vaults			X		Not applicable. No refrigerated or cooling chamber
G1.3 Outdoor play areas			X		Not applicable. No outdoor play areas proposed



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Part G2 - Boilers, Pressure Vessels, Heating Appliances, Fireplaces, Chimneys and Flues					
G2.2 Installation of appliances			X		Not applicable. No stove, heater or similar appliance proposed.
G2.3 Open fire places			X		Not applicable. No open fire places proposed.
G2.4 Incinerator rooms			X		Not applicable. No Incinerator rooms proposed.
Part G3 - Atrium Construction					
G3.1 Application of Part			X		This part does not apply to an atrium which: (a) Connects only 2 storeys; or (b) Connects only 3 storeys, (i) if each storey is sprinkler protected (other than a FPAA101D or FPAA101H system) complying with specification E1.5 throughout; and (ii) one of those storeys is situated at a level at which there is direct egress to a road or open space.
G3.2 Dimensions of atrium well			X		Not applicable. No atrium.
G3.3 Separation of atrium by bounding walls			X		Not applicable. No atrium.
G3.4 Construction of bounding walls			X		Not applicable. No atrium.
G3.5 Construction at balconies			X		Not applicable. No atrium.
G3.6 Separation at roof			X		Not applicable. No atrium.
G3.7 Means of egress			X		Not applicable. No atrium.
G3.8 Fire and smoke control systems			X		Not applicable. No atrium.
Part G4 - Construction in Alpine Areas					
G4.1 Application of Part			X		Not applicable. Not alpine.
G4.3 External doorways			X		Not applicable. Not alpine.

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
G4.4 Emergency lighting			X		Not applicable. Not alpine.
G4.5 External ramps			X		Not applicable. Not alpine.
G4.6 Discharge of exits			X		Not applicable. Not alpine.
G4.7 External trafficable structures			X		Not applicable. Not alpine.
G4.8 Fire-fighting services and equipment			X		Not applicable. Not alpine.
G4.9 Fire orders			X		Not applicable. Not alpine.
Part G5 - Construction in Bushfire Prone Areas					
G5.1 Application of Part			X		Not applicable. Not bushfire prone.
G5.2 Protection			X		Not applicable. Not bushfire prone.
Part G6 - Occupiable Outdoor Areas					
G6.1 Application of Part			X		<p>The DTS provisions of this part apply to buildings containing an outdoor area in addition to the other DTS provisions of the BCA. It does not apply to such areas within a sole occupancy unit.</p> <div> <p><i>Note – occupiable outdoor area is defined as a space on a roof, balcony, or similar part of a building that is open to the sky; and to which access is provided, other than access only for maintenance; and that is not open space or directly connected to open space</i></p> </div>
G6.2 Fire hazard properties				X	<p>(a) A lining, material or assembly in an occupiable area must comply with C1.10 as for an internal element.</p> <p>(b) The following fire hazard properties of a lining, material or assembly in an occupiable area are not required to comply with C1.10:</p> <ul style="list-style-type: none"> (i) Average specific extinction area. (ii) Smoke-development Index. (iii) Smoke development rate. <p>(c) Smoke growth rate index.</p> <p>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</p>
G6.3 Fire separation			X		For the purposes of DTS provisions of C2.7, C2.8 and C2.9, a reference to a storey includes an occupiable outdoor area, however



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					a fire wall cannot be used to separate an occupiable area into different fire compartments.
G6.4 Provision for escape				X	For the purposes of the DTS provisions of Part D1, a reference to a storey or room includes an occupiable outdoor area.
G6.5 Construction of exits				X	For the purposes of the DTS provisions of Part D2, a reference to a storey includes an occupiable outdoor area.
G6.6 Firefighting equipment				X	For the purposes of the DTS provisions of Part E1, a reference to a storey includes an occupiable outdoor area.



5.0 AS4299 – Technical Review Summary

The purpose of this report part is to identify any areas of non-compliance with the architectural design in terms of the AS4299-1995 (Adaptable Housing) *Essential Class C* Requirements. The following table details the compliance status of the architectural design against the aforementioned criteria.

The table identifies compliance assessment outcomes into one of four (4) categories, as follows:

Complies	Design compliance is achieved.
Satisfied	Compliance is achieved through compliance with requirements detailed in Section 2.0 of this assessment report (BCA requirements).
Does Not Comply	A compliance departure requires rectification. Resolution options are provided.
Complies: subject to	Commentary is provided. Such should not be considered deficiencies, but matters for compliance at relevant design and/or construction stage.

Note/s:

1. Adaptable (AS4299) sole-occupancy units are to be indicated on plan as required by Northern Beaches Council DCP2013, Section 3.6.3.1. The building is required to have 25% of the total number of units to be adaptable, therefore requiring a total of **3 adaptable units** (12 units in total proposed).
2. No carparking spaces are proposed & therefore no carparking spaces for adaptable units are proposed.
3. Readily moveable furniture has been treated as indicative only. The person/s responsible for furnishing the building (parts) should ensure their furnishing layout/s do not cause AS1428.1 circulation deficiencies.
4. Rather than repeating Access criteria in the below summary; where cross-over occurs between the Access requires of BCA and AS4299, then a simple comment is made. *Satisfied by AED Access Report.*

3.6.3 Certain Design Criteria

3.6.3.1 Accessible (Adaptable) Accommodation Requirements

Access in accordance with AS4299 - Adaptable Housing must be provided to at least 25 percent of dwellings within residential accommodation containing 4 or more dwellings.

- a) The provision of any required Adaptable Housing need to be demonstrated in the DA drawings. In particular, the following building features are to be included for adaptable housing:
 - i) Provision of plans showing the dwelling in its pre-adaptation and post adaptation stages;
 - ii) A continuous accessible path of travel from the car space to and within the adaptable dwelling and to common facilities;
 - iii) Provision of an adaptable parking space of at least 3.8m wide;
 - iv) Circulation space to allow potential wheelchair manoeuvrability externally and internally;
 - v) Modular kitchen cabinetry;
 - vi) Easily adjustable bathroom facilities;
 - vii) Easy to use laundry facilities;
 - viii) Easy use of Garbage facilities by mobility impaired residents; and
 - ix) Easy egress in case of emergency.
- b) Council's DA determination may condition that the required adaptable units be certified to meet the essential design elements listed in Australian Standard - AS4299. In this regard, applicants will need to submit sufficient design and construction details with the DA that demonstrate that the development is capable of satisfying future levels of access - post adaptation to meet access requirements including full wheelchair accessibility.
- c) In relation to Backpackers' Accommodation at least 1 room capable of accommodating 4 people should be adaptable for access to a person with a disability. Kitchen facilities should also be capable of being used by a person with a disability. Toilet and shower rooms should be provided of

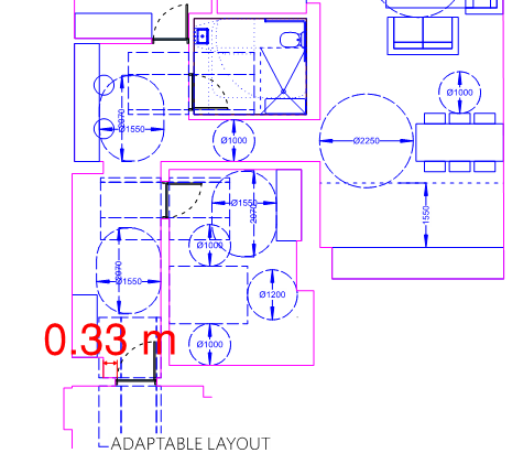
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suitable design and dimension to allow ease of use by a person with a disability as required by Australian Standard - AS 1482.

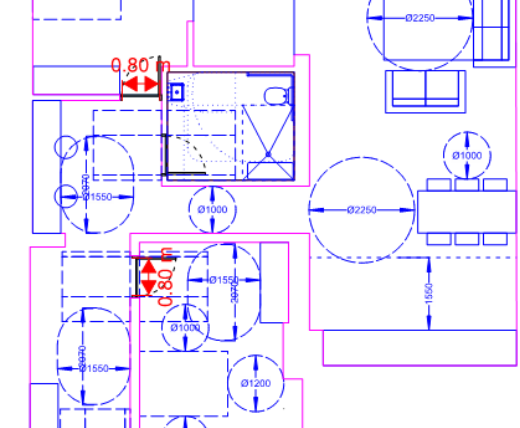
AS4299 – ADAPTABLE HOUSING ESSENTIAL CLASS C REQUIREMENTS	COMPLIES	DOES NOT COMPLY	SATISFIED; BY AED	COMPLIANCE SUBJECT TO NOTES	COMMENTS
DRAWINGS					
Provision of drawings showing the housing unit in its pre-adaption and post-adaption stages along with a description of how the adaptation is to be achieved shall also be provided.	X				Pre and post adaptation have been provided.
SITING					
A continuous accessible path of travel from street frontage and vehicle parking to entry complying with AS1428.1	X				Refer to comments raised in BCA Part D3.
LETTERBOXES					
Letterboxes to be on hard standing area connected to an accessible pathway.	X				Mailboxes provided.
PRIVATE CAR ACCOMMODATION					
Carparking space or garage min. area 6.0m x 3.8m.			X		Not applicable.
ACCESSIBLE ENTRY					
<ul style="list-style-type: none"> Accessible entry. Entry protected by porch or similar. Accessible entry to be provided with a landing outside the door with a maximum fall 		X			<p>Non-compliance</p> <p>The entrance doorway post adaptation has a circulation space less than permitted in</p>

AS4299 – ADAPTABLE HOUSING ESSENTIAL CLASS C REQUIREMENTS	COMPLIES	DOES NOT COMPLY	SATISFIED BY AFD	COMPLIANCE SUBJECT TO AFD	COMMENTS
<p>of 1:40 with a low threshold if not protected from weather by a minimum of 1,600mm overhang.</p> <ul style="list-style-type: none"> Threshold to be low-level. Landing to enable wheelchair manoeuvrability. Accessible entry door to have 850mm min. clearance. Door lever handles and hardware to AS1428.1 clause 11.1 door to be unlocked and opened with one hand. Where lever handles are provided, the clearance between the handle and the back plate or door face at the centre of the handle shall be not less than 35 mm and not more than 45 mm. 					<p>AS 1428.2 & AS 1428.1 which does not comply with Clause 4.3.1 of AS 4299-1995.</p> <p><i>It is recommended that this is addressed by a Performance Solution at CC stage.</i></p> 

4.3.1 Accessible entrance At least one accessible entry door complying with AS 1428.2 shall be provided.

11.5.2 Circulation spaces at doorways The circulation spaces at doorways shall comply with AS 1428.1 except that 100 mm shall be added to all length (L) values and 50 mm shall be added to all width (W) values.

INTERIOR : GENERAL

Internal doors of each of the adaptable housing units shall have a clear door opening width greater than 820mm.		X			<p>Non-compliance</p> <p>Internal doorways are not 820mm clear which does not comply with Clause 4.3.3 of AS 4299-1995.</p> 
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LIVING ROOM & DINING ROOM

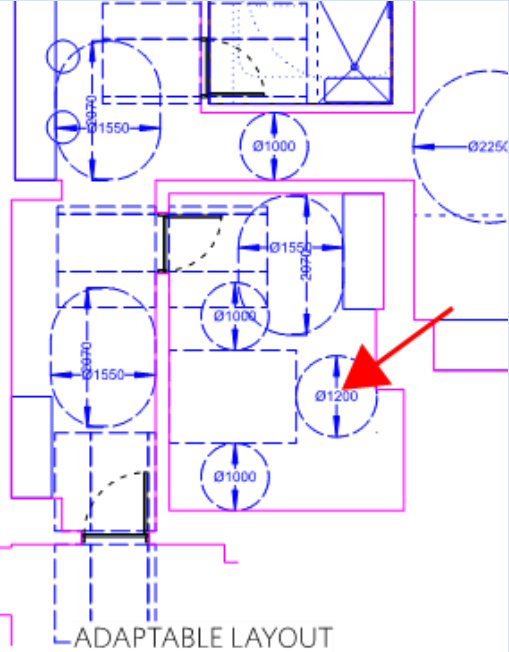
<ul style="list-style-type: none"> Provision for circulation space of min. 2250mm diameter. A telephone outlet shall be provided adjacent to a GPO. 				X	<p>To be detailed in the CC plans/specifications.</p>
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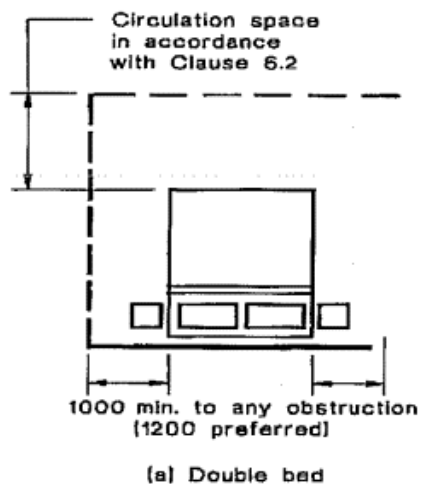
KITCHEN



AS4299 – ADAPTABLE HOUSING ESSENTIAL CLASS C REQUIREMENTS	COMPLES	DOES NOT COMPLY	SATISFIED; RY A/FD	COMPLIANCE; SUBJECT TO	COMMENTS
<ul style="list-style-type: none"> Minimum width 2.7m (1,550mm clear between benches). Provision for circulation at doors to comply with AS1428.1. Provision for benches planned to include at least one work surface of 800mm length, adjustable in height from 750mm to 850mm or replaceable. Refer to Figure 4.8. Refrigerator adjacent to work surface. Kitchen sink adjustable to heights from 750mm to 850mm or replaceable. Kitchen sink bowl max. 150mm deep. Tap set capstan or lever handles or lever mixer. Tap set located within 300mm of front of sink. Installation of thermostatic mixing valve. Cooktops to include either front or side controls with raised cross bars. Cooktops to include isolating switch or gas. stop valves which can be easily and safely operated while the cooktop is in use. Worksurface min. 800mm length adjacent to cooktop at same height. Oven located adjacent to an adjustable height or replaceable work surface. Locate handles towards the top of below bench cupboards and towards the bottom of overhead cupboards. Provide 'D' pull handles. At least one double GPO within 300mm of front of worksurface. GPO for refrigerator to be easily reachable when the refrigerator is in its operating position. Slip-resistant floor surface. 				X	<i>To be detailed in the CC plans/specifications.</i>
MAIN BEDROOM					
At least one bedroom of area sufficient to accommodate queen size bed and wardrobe and circulation space requirements of AS1428.2.		X			<p><u>Non-compliance</u></p> <p>A 2070 x 1540mm turning space is not provided at the base of the double bed in accordance with Figure 29(a) of AS1428.2-1992 which does not comply with 4.6.1 of AS 4299-1992.</p>



AS4299 – ADAPTABLE HOUSING ESSENTIAL CLASS C REQUIREMENTS	COMPLIES	DOES NOT COMPLY	SATISFIED, RYA/AFD	COMPLIANCE: SUBJECT TO RYA/AFD	COMMENTS
					 <p>ADAPTABLE LAYOUT</p>



AS 1428.2—1992

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6.2 Circulation space for 180° wheelchair turn The space required for a wheelchair to make a 180° turn shall be not less than 2070 mm in the direction of travel and not less than 1540 mm wide.

NOTE: A space of 2270 mm in the direction of travel and 1740 mm wide is preferred.

BATHROOM					
<ul style="list-style-type: none"> Provision for bathroom area to comply with AS1428.1; circulation spaces at doors and around WC pans, washbasins and showers shall be able to be provided without major plumbing changes. Slip-resistant floor surface. Shower recess-no hob. Minimum size 1,160mm x 1,100mm to comply with AS1428.1 (refer Figures 4.6 and 4.7). 			X	To be detailed in the CC plans/specifications.	

AS4299 – ADAPTABLE HOUSING ESSENTIAL CLASS C REQUIREMENTS	COMPLES	DOES NOT COMPLY	SATISFIED; RY A/F	COMPLIANCE; SUBJECT TO	COMMENTS
<ul style="list-style-type: none"> Shower area waterproofed to AS3740 with floor to fall to waste. Recessed soap holder. Shower waste min. 80mm diameter. Provision for adjustable, detachable hand held shower rose mounted on a slider grabrail or fixed hook (plumbing and wall-strengthening provision). Provision for grabrail in shower (refer to Figure 4.7 in AS4299) to comply with AS1428.1. Provision for folding seat in shower to comply with AS 1428.1. Taps sets to be capstan or lever handles with single outlet. Installation of thermostatic mixing valve. Provision for washbasin with clearances to comply with AS1428.1. Wall cabinet with light over or similar. Double GPO beside mirror. Potential illumination level 300 lux generally with 600 lux task lighting. 					
LAUNDRY					
<ul style="list-style-type: none"> To have a slip-resistant floor surface and where practicable, extend under cabinets to allow later adaptation. Task lighting above workspaces should be installed. Double GPO. 				X	<i>To be detailed in the CC plans/specifications.</i>
DOOR LOCKS					
<ul style="list-style-type: none"> Doorways to feature door hardware installed at between 900mm - 1100mm above the finished floor. Doorways to feature lever or D-pull style door hardware. All cupboard doors to have D-pull hardware. 				X	<i>To be detailed in the CC plans/specifications.</i>

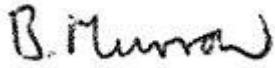
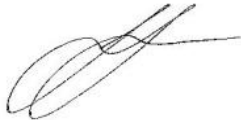
6.0 CONCLUSION

This report provides a Building Code of Australia 2019 Amendment 1 (BCA) assessment of the proposed alterations and additions to the existing mixed use building, located at 19-23 The Corso, Manly

The primary purpose of this report was to identify the non-compliance matters contained in the proposed design philosophy against the current Deemed-to-Satisfy (DTS) Provisions of the BCA and to provide compliance recommendations to overcome the DTS non-compliances.

This report provided a BCA assessment table in Section 3.0 that summarises the identified non-compliance matters and offers specific recommendations that are also outlined in the Executive Summary.

Further, if compliance with the deemed-to-satisfy provisions is not achievable or desirable, Alternative Solutions could be further developed and verified by an appropriately qualified BCA Consultant or Fire Safety Engineer.

<p>Prepared by:</p>  <p>Ben Murrow Senior Associate for AE&D</p>	<p>Reviewed by:</p>  <p>Trenton Jones Director for AE&D</p>
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7.0 ATTACHMENT A - INSPECTION & MAINTENANCE

7.1 Fire Safety Measures

The fire safety measures within the building must be maintained to ensure correct operation at all times the building is occupied. All firefighting equipment should be tagged when tested/inspected and log books kept up-to-date for all smoke detection, warning systems and sprinkler systems (where installed).

An annual fire safety certificate must be submitted to the local consent authority and the NSW Fire Brigade each year indicating satisfactory performance of the fire safety measures contained within the building. The annual fire safety statement should be displayed in a prominent place within the building (i.e. the main entry foyer)

The correct operation and maintenance of the buildings fire safety measures is critical in affording an adequate level of fire safety.

7.2 Good Housekeeping

The ongoing management of the building should ensure good housekeeping procedures. The following matters should be considered by building management:

- ❖ Ensure exits and paths of travel to exits remain unobstructed (in particular stairways)
- ❖ Avoid storage of materials in unoccupied areas
- ❖ Limit storage of flammable/combustible materials to designated and approved areas
- ❖ Prevent chocking open fire/smoke doors
- ❖ Prevent storage of materials that could hinder access to firefighting equipment

8.0 ATTACHMENT B – REQUIREMENTS TYPE A CONSTRUCTION

3.1 Fire-resistance of Building Elements

In a building required to be of Type A construction—

- (a) each building element listed in Table 3 and any beam or column incorporated in it, must have an FRL not less than that listed in the Table for the particular Class of building concerned; and
- (b) * * * *
- (c) any internal wall required to have an FRL with respect to integrity and insulation must extend to—
 - (i) the underside of the floor next above; or
 - (ii) the underside of a roof complying with Table 3; or
 - (iii) if under Clause 3.5 the roof is not required to comply with Table 3, the underside of the non-combustible roof covering and, except for roof battens with dimensions of 75 mm x 50 mm or less or sarking-type material, must not be crossed by timber or other combustible building elements; or
 - (iv) a ceiling that is immediately below the roof and has a resistance to the incipient spread of fire to the roof space between the ceiling and the roof of not less than 60 minutes; and
- (d) a loadbearing internal wall and a loadbearing fire wall (including those that are part of a loadbearing shaft) must be constructed from—
 - (i) concrete; or
 - (ii) masonry; or
 - (iii) fire-protected timber, provided that—
 - (A) the building is—
 - (aa) a separate building; or
 - (ee) a part of a building—
 - (AA) which only occupies part of a storey, and is separated from the remaining part by a fire wall; or
 - (BB) which is located above or below a part not containing fire-protected timber and the floor between the adjoining parts is provided with an FRL not less than that prescribed for a fire wall for the lower storey; and
 - (B) the building has an effective height of not more than 25 m; and
 - (C) the building has a sprinkler system (other than a FPAA101D or FPAA101H system) throughout complying with Specification E1.5; and
 - (D) any insulation installed in the cavity of the timber building element required to have an FRL is non-combustible; and
 - (E) cavity barriers are provided in accordance with Specification C1.13; or
 - (iv) any combination of (i) to (iii); and
 - (e) * * * * *
 - (f) the FRLs specified in Table 3 for an external column apply also to those parts of an internal column that face and are within 1.5 m of a window and are exposed through that window to a fire-source feature.

Table 3 Type A Construction: FRL of Building Elements

Building Element	Class of building – FRL: (in minutes)			
	<i>Structural adequacy/Integrity/Insulation</i>			
	2, 3 or 4 part	5, 7a or 9	6	7b or 8
EXTERNAL WALL (including any column and other building element incorporated within it) or other external building element, where the distance from any fire-source feature to which it is exposed is—				
For loadbearing parts—				
Less than 1.5m	90/90/90	120/120/120	180/180/180	240/240/240
1.5 to less than 3m	90/60/60	120/90/90	180/180/120	240/240/180
3m or more	90/60/30	120/60/30	180/120/90	240/180/90

Building Element	Class of building – FRL: (in minutes) <i>Structural adequacy/Integrity/Insulation</i>			
For non-loadbearing parts—				
Less than 1.5m	-/90/90	-/120/120	-/180/180	-/240/240
1.5 to less than 3m	-/60/60	-/90/90	-/180/120	-/240/180
3m or more	-/-/-	-/-/-	-/-/-	-/-/-
EXTERNAL COLUMN not incorporated in an external wall—				
For loadbearing columns -	90/-/-	120/-/-	180/-/-	240/-/-
For non-loadbearing columns -	-/-/-	-/-/-	-/-/-	-/-/-
COMMON WALLS AND FIRE WALLS	90/90/90	120/120/120	180/180/180	240/240/240
INTERNAL WALLS				
Fire-resisting lift and stair shafts				
Loadbearing	90/90/90	120/120/120	180/120/120	240/120/120
Non-loadbearing	-/90/90	-/120/120	-/120/120	-/120/120
Bounding public corridors, public lobbies and the like -				
Loadbearing	90/90/90	120/-/-	180/-/-	240/-/-
Non-loadbearing	-/60/60	-/-/-	-/-/-	-/-/-
Between or bounding sole-occupancy units				
Loadbearing	90/90/90	120/-/-	180/-/-	240/-/-
Non-loadbearing	-/60/60	-/-/-	-/-/-	-/-/-
Ventilating, pipe, garbage, and like shafts not used for the discharge of hot products of combustion -				
Loadbearing	90/90/90	120/90/90	180/120/120	240/120/120
Non-loadbearing	-/90/90	-/90/90	-/120/120	-/120/120
OTHER LOADBEARING INTERNAL WALLS, INTERNAL BEAMS, TRUSSES				
And Columns -	90/-/-	120/-/-	180/-/-	240/-/-
Floors	90/90/90	120/120/120	180/180/180	240/240/240
Roofs	90/60/30	120/60/30	180/60/30	240/90/60

3.2 Concessions for floors

A floor need not comply with Table 3 if—

- it is laid directly on the ground; or
- in a Class 2, 3, 5 or 9 building, the space below is not a storey, does not accommodate motor vehicles, is not a storage or work area, and is not used for any other ancillary purpose; or
- it is a timber stage floor in a Class 9b building laid over a floor having the required FRL and the space below the stage is not used as a dressing room, store room, or the like; or
- it is within a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building; or
- it is an open-access floor (for the accommodation of electrical and electronic services and the like) above a floor with the required FRL.

3.3 Floor loading of Class 5 and 9b buildings: Concession

If a floor in a Class 5 or 9b building is designed for a live load not exceeding 3 kPa—

- the floor next above (including floor beams) may have an FRL of 90/90/90; or
- the roof, if that is next above (including roof beams) may have an FRL of 90/60/30.

3.4 Roof superimposed on concrete slab: Concession

A roof superimposed on a concrete slab roof need not comply with Clause 3.1 as to fire-resisting construction if—

- (a) the superimposed roof and any construction between it and the concrete slab roof are non-combustible throughout; and
- (b) the concrete slab roof complies with Table 3.

3.5 Roof: Concession

A roof need not comply with Table 3 if its covering is non-combustible and the building—

- (a) has a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification E1.5 installed throughout; or
- (b) has a rise in storeys of 3 or less; or
- (c) is of Class 2 or 3; or
- (d) has an effective height of not more than 25 m and the ceiling immediately below the roof has a resistance to the incipient spread of fire to the roof space of not less than 60 minutes.

3.6 Roof lights

If a roof is required to have an FRL or its covering is required to be non-combustible, roof lights or the like installed in that roof must—

- (a) have an aggregate area of not more than 20% of the roof surface; and
- (b) be not less than 3 m from—
 - (i) any boundary of the allotment other than the boundary with a road or public place; and
 - (ii) any part of the building which projects above the roof unless that part has the FRL required of a fire wall and any openings in that part of the wall for 6 m vertically above the roof light or the like are protected in accordance with C3.4; and
 - (iii) any roof light or the like in an adjoining sole-occupancy unit if the walls bounding the unit are required to have an FRL; and
 - (iv) any roof light or the like in an adjoining fire-separated section of the building; and
- (c) if a ceiling with a resistance to the incipient spread of fire is required, be installed in a way that will maintain the level of protection provided by the ceiling to the roof space.

3.7 Internal columns and walls: Concession

For a building with an effective height of not more than 25 m and having a roof without an FRL in accordance with Clause 3.5, in the storey immediately below that roof, internal columns other than those referred to in Clause 3.1(f) and internal walls other than fire walls and shaft walls may have—

- (a) in a Class 2 or 3 building: FRL 60/60/60; or
- (b) in a Class 5, 6, 7, 8 or 9 building—
 - (i) with rise in storeys exceeding 3: FRL 60/60/60; or
 - (ii) with rise in storeys not exceeding 3: no FRL.

3.8 Open spectator stands and indoor sports stadiums: Concession

In an open spectator stand or indoor sports stadium, the following building elements need not have the FRL specified in Table 3:

- (a) The roof if it is non-combustible.
- (b) Columns and loadbearing walls supporting only the roof if they are non-combustible.
- (c) Any non-loadbearing part of an external wall less than 3 m—
 - (i) from any fire-source feature to which it is exposed if it has an FRL of not less than –/60/60 and is non-combustible; or
 - (ii) from an external wall of another open spectator stand if it is non-combustible.

3.9 Carparks

- (a) Notwithstanding Clause 3.1, a carpark may comply with Table 3.9 if it is an open-deck carpark or is protected with a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification E1.5 and is—

- (i) a separate building; or
 - (ii) a part of a building—

- (A) which only occupies part of a storey, and is separated from the remaining part by a fire wall; or
 - (B) which is located above or below another classification, and the floor separating the classifications complies with C2.9; or
 - (C) which is located above another Class 7 part of the building not used for carparking, and the floor separating the parts complies with Table 3 for a Class 7 part other than a carpark; or
 - (D) which is located below another Class 7 part of the building not used for carparking, and the floor separating the parts complies with Table 3.9.
- (b) For the purposes of this Clause, a carpark—
- (i) includes—
 - (A) an administration area associated with the functioning of the carpark; and
 - (B) where the carpark is sprinklered, is associated with a Class 2 or 3 building and provides carparking for separate sole-occupancy units, each carparking area with an area not greater than 10% of its floor area for purposes ancillary to the sole-occupancy units; but
 - (ii) excludes—
 - (A) except for (b)(i), any area of another classification, or other part of a Class 7 building not used for carparking; and
 - (B) a building or part of a building specifically intended for the parking of trucks, buses, vans and the like.

Table 3.9 - Requirements for carparks

Building Element			FRL (not less than) <i>Structural adequacy/Integrity/Insulation</i> ESA/M (not greater than)
Wall			
(a)	External Wall		
	(i)	Less than 3m from a fire-source feature to which it is exposed:	
			Loadbearing
		Non-loadbearing	-/60/60
(ii)	3m or more from a fire-source feature to which it is exposed		-/-
(b)	Internal Wall		
	(i)	Loadbearing, other than one supporting only the roof (not used for carparking)	60/-
	(ii)	Supporting only the roof (not used for carparking).	-/-
	(iii)	Non-loadbearing	-/-
(c)	Fire wall		
	(i)	From the direction used as a carpark	60/60/60
	(ii)	From the direction not used as a carpark	As required by Table 7.1
Column			
(a)	Supporting only the roof (not used for carparking) and 3m or more from a fire-source to which it is exposed		-/-
(b)	Steel column other than one covered by (a) and one that does not support a part of a building that is not used as a carpark		60/- or 25m ² /tonne
(c)	Any other column not covered by (a) or (b)		60/-
Beam			

Building Element		FRL (not less than) <i>Structural adequacy/Integrity/Insulation</i> ESA/M (not greater than)
(a)	Steel floor beam in continuous contact with a concrete floor slab	60/-/- or 30m ² /tonne
(b)	Any other beam	60/-/-
Fire resisting lift and stair shaft (within the carpark only)		60/60/60
Floor slab and vehicle ramp		60/60/60
Roof (not used for carparking)		-/-/-

Notes to Table 3.9:

1. ESA/M means the ratio of exposed surface area to mass per unit length.

2. Refer to Specification E1.5 for special requirements for a sprinkler system in a carpark complying with Table 3.9 and located within a multi-classified building.

3.10 Class 2 and 3 buildings: Concession

- (a) A Class 2 or 3 building having a rise in storeys of not more than 3 need not comply with Clause 3.1(d) of Specification C1.1 and the requirements of C1.9(a), (b) and C2.6 for non-combustible material, if it is constructed using—
 - (i) timber framing throughout; or
 - (ii) non-combustible material throughout; or
 - (iii) a combination of (i) and (ii), provided—
 - (iv) * * * * *
 - (v) any insulation installed in the cavity of a wall required to have an FRL is non-combustible; and
 - (vi) the building is fitted with an automatic smoke alarm system complying with Specification E2.2a.
- (b) A Class 2 or 3 building having a rise in storeys of not more than 4 may have the top three storeys constructed in accordance with (a) provided—
 - (i) the lowest storey is used solely for the purpose of parking motor vehicles or for some other ancillary purpose; and
 - (ii) the lowest storey is constructed of concrete or masonry including the floor between it and the Class 2 or 3 part of the building above; and
 - (iii) the lowest storey and the storey above are separated by construction having an FRL of not less than 90/90/90 with no openings or penetrations that would reduce the fire-resisting performance of that construction except that a doorway in that construction may be protected by a -/60/30 self-closing fire door.
- (c) In a Class 2 or 3 building complying with (a) or (b) and fitted with a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification E1.5, any FRL criterion prescribed in Table 3—
 - (i) for any floor and any loadbearing wall, may be reduced to 60, except any FRL criterion of 90 for an external wall must be maintained when tested from the outside; and
 - (ii) for any non-loadbearing internal wall, need not apply if—
 - (A) it is lined on each side with 13 mm standard grade plasterboard or similar non-combustible material; and
 - (B) it extends—
 - (aa) to the underside of the floor next above; or
 - (bb) to the underside of a ceiling with a resistance to the incipient spread of fire of 60 minutes; or
 - (cc) to the underside of a non-combustible roof covering; and
 - (C) any insulation installed in the cavity of the wall is non-combustible; and
 - (D) any construction joint, space or the like between the top of the wall and the floor, ceiling or roof is smoke sealed with intumescent putty or other suitable material; and
 - (E) any doorway in the wall is protected by a self-closing, tight fitting, solid core door not less than 35 mm thick.

