BCA REPORT

Lot 202 Goonoo Goonoo Rd, Tamworth (Tenancy 3 & 4)

Report No. BCA-25004-1 dated 05.02.2025

Prepared for:

BROADEN MANAGEMENT

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1. Executive Summary

STAC Consulting (NSW) Pty Ltd (STACC) have been engaged by Gnoo Gnoo Road Pty Ltd c/- Broaden Management Pty Ltd to carry out a review of the proposed development at Lot 202, Goonoo Goonoo Road, Tamworth, against the relevant provisions of the National Construction Code 2022 Volume One – Building Code of Australia 2022 (the BCA). It is understood the proposed development involves the development of Lot 202, including the construction of a single storey retail building comprising Tenancy 3 & 4, with ancillary office / amenities, back of house, carparking (including 14 spaces covered by a shade sail structure), loading areas and landscaping.

Leffler Simes Drawing No. DA302, Rev. A dated 04.02.2025

Note: The assessment contained within this report relates to Lot 202 only. A separate report has been prepared which contains an assessment of Lot 201, including the western Covered Carpark Structure.

The following Tables identify a summary of the Performance Solutions that have been identified as being required as part of the assessment. For detailed requirements associated with the proposed development, refer to Table 3.1 in Section 3 of this report.

Table 1.1

Fire Engineered Performance Solutions Identified			
Item	**DtS Clause**	**Performance Requirements**	**Description of DtS Non-Compliance**
1.	D2D5 & D2D6	D1P4 & E2P2	A Performance Solution is required from a Fire Engineer to address the following non-compliances measured on an **open plan basis:** • Distance to the nearest exit in Tenancy 3 – 43m • Distance between alternative exits in Tenancy 3 – 78m Note 1: The above travel distances are measured to the construction edge of the awnings where there is a minimum 1m wide path that is open to the sky. In this regard, the travel distances could be reduced if the footpath along the southern elevation was open to the sky for a min. unobstructed width of 1m.

			Note 2: The above assessment assumes customers can egress through the Back of House areas which will need to be confirmed at CC Application Stage.
Note: Consideration may also need to be given to a Performance Solution for combustible façade signage (refer to Clause C2D14), protection of openings to the Back of House roller shutter in Tenancy 4 (refer to Clause C4D5), fire hydrant booster (refer to Clause E1D2) and increased mounting heights of exit & directional signs (refer to Clause E4D8).			

Table 1.2

Other Possible Performance Solutions Identified			
Item	**DtS Clause**	**Performance Requirements**	**Description of DtS Non-Compliance**
1.	N/A	F3P1	A Performance Solutions is required from a suitably qualified consultant to demonstrate how the external walls (particularly the precast panels and FC cladding) prevent the penetration of water.

Report History		
Revision	**Date**	**Status**
0	31.01.2025	Draft for Client Review
1	05.02.2025	Issue for DA Submission

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Contents

1. Executive Summary 1

2. Introduction 4

2.1 Aim 4

2.2 Development 4

2.3 Reviewed Documents 4

2.4 Legislative Framework 4

2.5 BCA Compliance Structure 4

2.6 Limitations & Exclusions 5

3. Compliance Assessment 6

3.1 Applicable BCA Edition 6

3.2 Building Characteristics 6

3.3 BCA Assessment 7

4. Conclusion 54

Appendix 1 – Proposed Fire Safety Measures 55

Appendix 2 – Required FRLs for Type B Construction in accordance with Specification 5 – Retail Building 56

Appendix 3 – Definitions 58

2. Introduction

2.1 Aim

The aim of this report is to carry out a review of the proposed development at the subject premises to:

- Identify any BCA compliance issues that require resolution / attention or a Performance Solution.
- Provide appropriate recommendations to achieve an acceptable level of compliance with the provisions of the BCA, having regard to minimum legislative requirements and desired outcomes for the project.
- Confirm that the DA architectural documentation has been reviewed by an appropriately qualified Registered Building Surveyor to enable the Consent Authority to be satisfied that the provisions required under the BCA have been met in the design or are capable of being met.

2.2 Development

We understand the proposal involves the development of Lot 202, including the construction of a single storey retail building comprising Tenancy 3 & 4, with ancillary office / amenities, back of house, carparking (including 14 spaces covered by a shade sail structure), loading areas and landscaping.

2.3 Reviewed Documents

- National Construction Code 2022 Volume One – Building Code of Australia (the BCA)
- Emails from Leffler Simes to Broaden Management dated 22.01.2025 regarding Occupancies of Excessive Hazard
- Subdivision Plan prepared by ADW Johnson, Drawing No. 240363-PSK-018-E dated 30.07.2024
- Architectural Plans prepared by Leffler Simes Pty Ltd:

Drawing No.	Revision	Date	Drawing No.	Revision	Date
DA001	A	04.02.2025	DA152	A	04.02.2025
DA015	A	04.02.2025	DA161	A	04.02.2025
DA020	A	04.02.2025	DA162	A	04.02.2025
DA101	A	04.02.2025	DA171	A	04.02.2025
DA102	A	04.02.2025	DA172	A	04.02.2025
DA111	A	04.02.2025	DA301	A	04.02.2025
DA112	A	04.02.2025	DA302	A	04.02.2025
DA151	A	04.02.2025			

2.4 Legislative Framework

Pursuant to Section 19 of the *Environmental Planning & Assessment (Development Certification and Fire Safety) Regulation 2021* and *Section 146 of the Environmental Planning & Assessment Regulation 2021,* all new building work must comply with the current BCA, however the existing features of an existing building need not comply with the BCA unless upgrade is required by other legislation.

2.5 BCA Compliance Structure

Clause A2G1 – Compliance

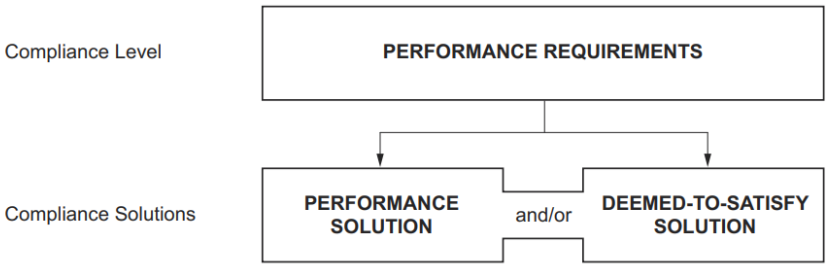
Compliance with the NCC is achieved by complying with—

(a) the Governing Requirements of the NCC; and
(b) the Performance Requirements.

Performance Requirements are satisfied by one of the following, as shown in Figure A2G1:

(a) Performance Solution.
(b) Deemed-to-Satisfy Solution.
(c) A combination of (a) and (b).

Figure A2G1: NCC compliance structure



2.6 Limitations & Exclusions

- While every reasonable effort has been made to ensure that this document is correct at the time of issue, STAC Consulting (NSW) Pty Ltd (STACC) disclaim all liability to any third party in respect of anything or the consequences of anything done or omitted to be done in reliance or upon the whole or any part of this document.
- STACC do not guarantee acceptance of any advice, reports or the like by the Principal Certifier, Consent Authority, FRNSW or other relevant authorities or project stakeholders.
- No part of this document may be reproduced in any form or by any means without written permission from STACC. This report is based solely on client instructions, and therefore, should not be used by any third party without prior knowledge of such instructions.
- This report does not contain an assessment of BCA Part D4 or Clauses F4D5, F4D6 & F4D12 (including AS1428.1-2009, AS1428.4.1-2009 & AS2890.6-2009) as relevant to access for people with a disability, or the Disability (Access to Premises – Buildings) Standards 2010. In this regard, a separate access report which includes an assessment of an assessment of BCA Part D4 or Clauses F4D5, F4D6 & F4D12 and the Disability (Access to Premises – Buildings) Standards 2010 has been prepared for the proposed development.
- This report does not include assessment or advice in relation to specialised engineering and building services including but not limited to the requirements of Australian Standards related to structural engineering, civil engineering, mechanical services, electrical services, hydraulic services, fire services, lift services, acoustic services, audio-visual services (including hearing augmentation), food safety legislation and requirements, flood requirements and bushfire protection requirements (including BCA Part G5).
- This report does not include assessment or advice in relation to passive fire protection, waterproofing, damp and weatherproofing, sound transmission and insulation (Part F7) or energy efficiency (Section J).
- STACC are unable to confirm compliance with the Disability Discrimination Act 1992 (DDA) as this is a complaints-based piece of legislation and does not contain prescriptive compliance requirements. In this regard, the Client is to be satisfied that they have addressed their requirements under the DDA.
- No assessment has been undertaken to consider the equitable evacuation of occupants.
- This report does not include assessment or advice in relation to safety in design or requirements of the Work Health and Safety Act 2011 (WHSA).
- This report does not constitute certification or approval under Part 4 or 6 of the Environmental Planning and Assessment Act 1979 (EPAA).
- No assessment has been carried out of any conditions of a Development Consent unless expressly referenced.

3. Compliance Assessment

3.1 Applicable BCA Edition

Pursuant to Section 19 of the Environmental Planning & Assessment (Development Certification and Fire Safety) Regulation 2021, all new building work must comply with the current BCA as in force on the 'Relevant Date'. At the date of issue of this report, the BCA in force is BCA 2022, however a new edition is expected to come into effect on 1 May 2025, which may be applicable to the proposed development, subject to the date of construction certificate application. In this regard, it is noted the following review has been carried out against the relevant provisions of **BCA 2022.**

3.2 Building Characteristics

The following table presents a summary of the key BCA characteristics for the proposed development:

BCA Classification:	Retail Building: Class 6 (Retail) & Class 7b (Storage / Back of House) Covered Carpark (Beneath Shade Sail): Class 7a
Type of Construction:	Retail Building: Type B Construction Note: The exact floor area and volume of Tenancy 4 is required to be confirmed by the Architect to confirm Type B Construction is applicable, however it is noted it appears to be over 2,000m^2 and 12,000m^3. Covered Carpark (Beneath Shade Sail): Type C Construction
Rise in Storeys:	Retail Building: One Covered Carpark (Beneath Shade Sail): One
Effective Height:	Retail Building: 0m Covered Carpark (Beneath Shade Sail): 0m
Max. Permitted Floor Area:	Class 6 & 7b Retail Building: 3,500m^2 Class 7a Covered Carpark (Beneath Shade Sail): 3,500m^2 Note: The exact floor area of each Fire Compartment is required to be confirmed by the Architect.
Max. Permitted Volume:	Class 6 & 7b Retail Building: 21,000m^3 Class 7a Covered Carpark (Beneath Shade Sail): 21,000m^3 Note: The exact volume of each Fire Compartment is required to be confirmed by the Architect.
Climate Zone:	Four

Based upon a review of the referenced plans, it is noted that each elevation of the **Retail Building** is located within the following distances from fire source features on the site:

Elevation	Fire Source Feature	Distance
North	Side allotment boundary	<18m
South	Far side of Proposed Road	>18m (see **Note 1**)
East	Side allotment boundary	<18m (see **Note 2**)
West	Covered Carpark (Beneath Shade Sail)	<18m
Note 1: It is assumed the Proposed Road will be dedicated as a public road, which is required to be confirmed at CC application stage. **Note 2:** It appears the distance between the eastern elevation and the eastern boundary is less than 18m (approximately 17m), which is required to be confirmed at CC application stage.		

Based upon a review of the referenced plans, it is noted that each elevation of the **Covered Carpark (Beneath Shade Sail)** is located within the following distances from fire source features on the site:

Elevation	Fire Source Feature	Distance
North	Sire allotment boundary	>3m
South	Far side of Proposed Road	>3m
East	Lot 202 Retail Building	>3m
West	Adjacent Covered Carpark (Beneath Shade Sail)	>3m

3.3 BCA Assessment

The following includes a summary of our assessment based on the referenced documentation against the relevant provisions of the **BCA 2022**. The following is a summary of the key BCA Clauses applicable to the project and should read in conjunction with these provisions.

Table 3.1 – Compliance Assessment

BCA Clause	Summary of Requirement	Comment
Section B – Structure		
Part B1 – Structural Provisions		
B1D2 ***Resistance to actions***	The resistance of a building or structure must be greater than the most critical action effect resulting from different combinations of actions, where: (a) the most critical action effect on a building or structure is determined in accordance with B1D3 and the general design procedures contained in AS/NZS 1170.0; and (b) the resistance of a building or structure is determined in accordance with B1D4.	**Compliance Readily Achievable** Details and design certification from Structural Engineer to be submitted with the CC application demonstrating compliance.
B1D3 ***Determination of individual actions***	The magnitude of individual actions must be determined in accordance with this clause by a suitability qualified, Practising Structural Engineer. Note: For a Class 7b building, a national additional roof load of not less than 0.15 kPa to support the addition of solar photovoltaic panels must be applied.	**Compliance Readily Achievable** Details and design certification from Structural Engineer to be submitted with the CC application demonstrating compliance for all new structural works. Note: Details and design certification are also required from the Architect and Services Consultants to confirm compliance with Section 8 of AS1170.4-2007 with regard to the design of non-structural parts and components and their fastenings for horizontal and vertical earthquake forces and inter-storey drift.
B1D4 ***Determination of structural***	This clause refers to the determination of the structural resistance of material and forms of	**Compliance Readily Achievable**

resistance of materials and forms of construction	construction, to be determined by a suitability qualified, Practising Structural Engineer.	Details and design certification from Structural Engineer to be submitted with the CC application demonstrating compliance.
Section C – Fire Resistance		
Part C2 – Fire Resistance and Stability		
C2D2 ***Type of construction required***	Sets out the minimum type of fire resisting construction required which must be determined in accordance with Table C2D2. Except as allowed for certain Class 2, 3 or 9c buildings and a Class 4 part on the top storey or open spectator stands and indoor sports stadiums. **FRLs of Building elements shall comply with Specification 5. Refer to Appendix 2 for further details regarding FRLs applicable to the Retail Building.**	**Note** The Retail Building is required to be of Type B Construction, and the Covered Carpark Structure is required to be of Type C Construction. Refer to additional comments under C3D3 below regarding fire compartmentation.
C2D3 ***Calculation of rise in storeys***	The rise in storeys (RIS) is the sum of the greatest number of storeys at any part of the external walls of the building and any storeys within the roof space: (a) above the finished ground next to that part; or (b) if part of the external wall is on the boundary of the allotment, above the natural ground level at the relevant part of the boundary. Certain exemptions / considerations are provided for ancillary areas on the top of a building and below ground or partly below ground, Class 7 or 8 buildings with an average internal height of more than 6m and mezzanine levels.	**Note** The Retail Building and the Covered Carpark Structure each have a RIS of one.
C2D5 ***Mixed types of construction***	A building may be of mixed Types of construction where it is separated in accordance with C3D8 and the Type of construction is determined in accordance with C2D2 or C2D4.	**Note** Consideration could be given to assessing Tenancy 3 as a separate building for the purposes of BCA Parts C, D and E in accordance with Clause C3D8(2), and applying Type C Construction to Tenancy 3 (upon verifying the floor area and volume comply with Table C3D3), however the assessment contained within this report is based on Type B Construction applying to both tenancies. Further assessment may be carried out at CC Application Stage.
C2D9	Lightweight construction must comply with Specification 6.	**Compliance Readily Achievable**

Lightweight construction		Details and design certification from the Architect to be submitted with the CC application demonstrating compliance.
C2D10 ***Non-combustible building elements***	• In a building required to be of Type A or B construction, the following building elements and their components must be non-combustible: (a) External walls and common walls, including all components incorporated in them including the facade covering, framing and insulation. (b) The flooring and floor framing of lift pits. (c) Non-loadbearing internal walls where they are required to be fire-resisting. • 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 (a) a building required to be of Type A construction; and (b) a building required to be of Type B construction, subject to C3D11, in: (i) a Class 2, 3 or 9 building; and (ii) a Class 5, 6, 7 or 8 building if the shaft connects more than 2 storeys • There are concessions for some building elements which are listed in C2D10(4), C2D10(5) & C2D10(6).	**Further Information / Clarification Required at CC Application Stage** The external walls (including all elements incorporated in the walls) and non-loadbearing internal walls that are required to be fire rated associated with the Retail Building are required to be of non-combustible construction in accordance with C2D10(1) & (2). Details (including a materials schedule of each of the above-mentioned elements) and test reports / certificates to be provided with the CC application and design certification to be provided from the Architect demonstrating compliance.

The below table provides a summary of the primary building elements which are required to be non-combustible in accordance with C2D10:

Type B Construction	
External wall	Non-combustible
Common wall	Non-combustible
Floor and floor framing of lift pit	Non-combustible
All loadbearing internal walls (including those of shafts)	Concrete, masonry or fire-protected timber
Loadbearing fire walls	Concrete, masonry or fire-protected timber
Non-loadbearing internal walls required to be fire-resistant	Non-combustible
Non-loadbearing lift, ventilating, pipe, garbage and the like shafts which do not discharge hot products of combustion.	Non-combustible (subject to conditions outlined in C2D10(2))

C2D11 ***Fire hazard properties***	The fire hazard properties of internal linings, materials and assemblies in a Class 2 to 9 building as outlined in this clause must comply with Specification 7**.**	**Compliance Readily Achievable** Details and design certification from the Architect to be submitted

	For additional detailed requirements relating to additional building elements, refer to the relevant clause of Spec 7. as outlined below: • Floor linings and coverings – S7C3 (a) In a building not protected by a sprinkler system (other than a FPAA101D or FPAA101H system), floor linings and coverings must have a maximum smoke development rate of 750 percent-minutes. (b) A floor lining or covering must have a group number complying with S7C6(b), for any portion of the floor covering that is continued more than 150 mm up a wall. • Wall linings and ceiling linings – S7C4 (a) Buildings not fitted with a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17 must have: (i) a smoke growth rate index not more than 100; or (ii) an average specific extinction area less than 250 m^2 / kg. • Air-handling ductwork – S7C5 • Lift Cars – S7C6 • Fire control rooms and fire-isolated exits – S7C7 • Escalators, moving walkways, and non-required non-fire-isolated stairways and ramps – S7C7 • Lift Cars – S7C6 • Sarking-type materials – S7C7 • Attachments to internal floors, walls, and ceilings – S7C7 • Other materials – S7C7	with the CC application demonstrating compliance.

Table S7C3: Critical radiant flux (CHF in kW/m2) of floor linings and floor coverings:

Class of building	Building not fitted with a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17	Building fitted with a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17	Fire-isolated exits and fire control rooms
Class 2, 3, 5, 6, 7, 8 or 9b, excluding Class 3 accommodation for the aged and Class 9b as specified below	2.2 kW/m2	1.2 kW/m2	2.2 kW/m2

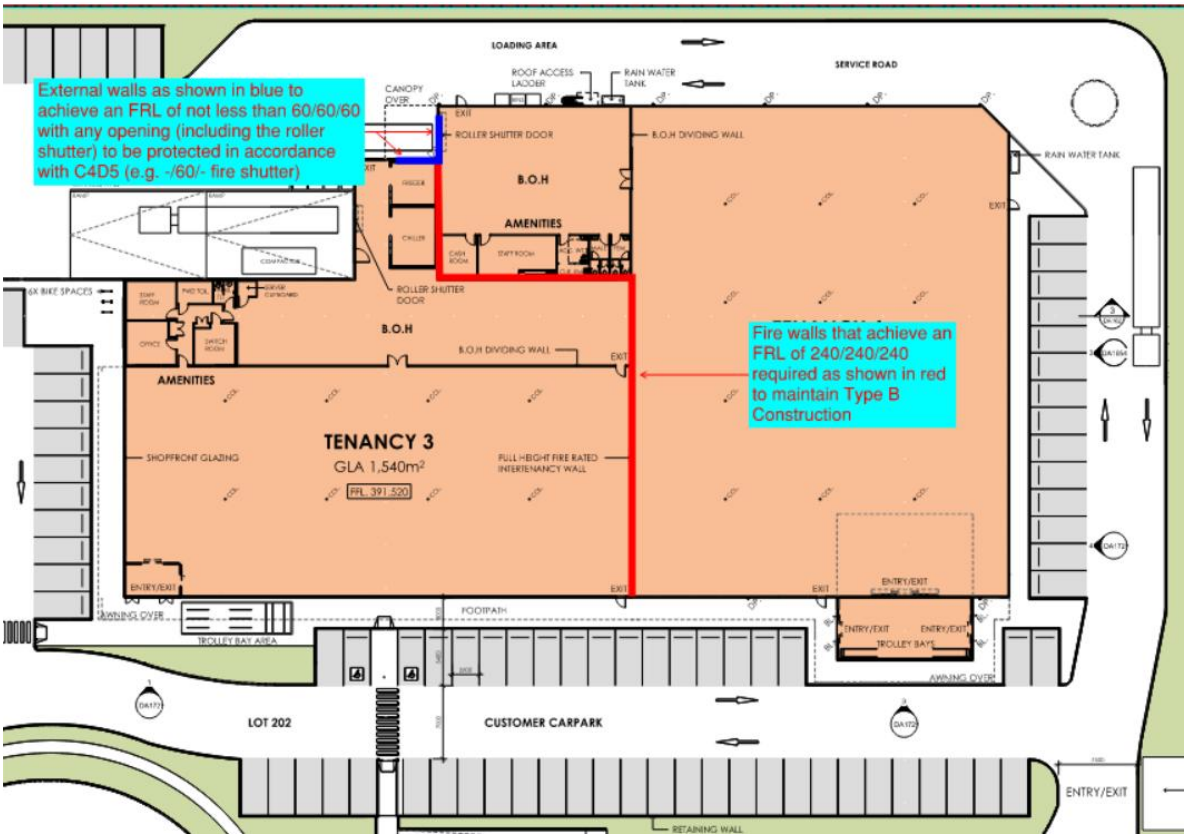
Table S7C4: Wall and ceiling lining materials (material groups permitted):

Class of building	Fire-isolated exits and fire control rooms	Public corridors	Specific areas	Other areas

Class 5, 6, 7, 8 or 9b schools, **UNSPRINKLERED**	Walls: 1 Ceilings: 1	Walls: 1, 2 Ceilings: 1, 2	Walls: 1, 2, 3 Ceilings: 1, 2	Walls: 1, 2, 3 Ceilings: 1, 2, 3
Class 9b other than schools, **UNSPRINKLERED**	Walls: 1 Ceilings: 1	Walls: 1 Ceilings: 1	Walls: 1, 2 Ceilings: 1, 2	Walls: 1, 2, 3 Ceilings: 1, 2, 3

C2D12 & Specification 8 ***Performance of external walls in fire***	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 8.	**Compliance Readily Achievable** Details and design certification from Structural Engineer to be submitted with the CC application demonstrating compliance.
C2D14 ***Ancillary elements***	An ancillary element must not be fixed, installed, attached to or supported by the concealed internal parts or external face of an external wall that is required to be non-combustible unless it is deemed non-combustible or it is one of the following: (b) A gutter, downpipe or other plumbing fixture or fitting. (c) A flashing. A grate, grille or similar cover not more than 2 m^2 (d) in area associated with a building service. (e) An electrical switch, socket-outlet, cover plate or the like. (f) A light fitting. (g) A required sign. (h) A sign other than one provided under (a) or (g) that: (i) achieves a group number of 1 or 2; and (ii) does not extend beyond one storey; and (iii) does not extend beyond one fire compartment; and (iv) is separated vertically from other signs permitted under (h) by at least 2 storeys. (i) An awning, sunshade, canopy, blind or shading hood other than one provided under (a) that: (i) meets the relevant requirements of Table S7C7 as for an internal element; and (ii) serves a storey: (A) at ground level; or (B) immediately above a storey at ground level; and (iii) does not serve an exit, where it would render the exit unusable in a fire.	**Further Information / Clarification Required at CC Application Stage** Any attachments associated with the Retail Building that do not meet one of the concessions in C2D14(b)-(p) will need to be non-combustible. Attention is drawn to the vertical timber look battens and the façade signage which are required to be non-combustible or comply with C2D14(h) (as relevant to signage), or a **Performance Solution** will be required from a Fire Engineer. Details (including a materials schedule of each of the attachments to the external walls) and test reports / certificates to be provided with the CC application and design certification to be provided from the Architect demonstrating compliance.

	(j) A part of a security, intercom or announcement system. (k) Wiring. (l) Waterproofing material installed in accordance with AS 4654.2 and applied to an adjacent floor surface, including vertical upturn, or a roof surface. (m) Collars, sleeves and insulation associated with service installations. (n) Screens applied to vents, weepholes and gaps complying with AS 3959. (o) Wiper and brush seals associated with doors, windows or other openings. (p) A gasket, caulking, sealant or adhesive directly associated with (a) to (o).	
C2D15 ***Fixing of bonded laminated cladding panels***	In a building required to be of Type A or B construction, externally located bonded laminated cladding panels must have all layers of cladding mechanically supported or restrained to the supporting frame except where exempted by C2D15(2).	**Note**
Part C3 – Compartmentation and Separation		
C3D3 ***General floor area and volume limitations***	The size of any fire compartment or atrium in a Class 5, 6, 7, 8 or 9 building must not exceed the relevant maximum floor area nor the relevant maximum volume set out in Table C3D3 and C3D6 except as permitted in C3D4.	**Further Information / Clarification Required at CC Application Stage** The exact floor area and volume of Tenancy 4 is required to be confirmed by the Architect to confirm Type B Construction is applicable, however it is noted it appears to be over 2,000m^2 and 12,000m^3. In this regard, and subject to the provision of fire walls between Tenancy 3 & 4 as identified under Clause C3D8 below, the Retail Building complies with the maximum fire compartment size for Class 6 & 7b buildings of Type B Construction.
C3D8 ***Separation by fire walls***	• A fire wall must be constructed in accordance with the following: (a) The fire wall has the relevant FRL prescribed by Specification 5 for each of the adjoining parts, and if these are different, the greater FRL. (b) Any openings in a fire wall must not reduce the FRL required by Specification 5 for the fire wall, except where permitted by the Deemed-to-Satisfy Provisions of Part C4.	**Further Information / Clarification Required at CC Application Stage** Fire walls that achieve an FRL of 240/240/240 are required to be provided between Tenancy 3 & 4 as identified under Figure 1 below. Details and design certification from the Architect & Structural Engineer to be submitted

	(c) 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. • 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: (a) a floor having an FRL required for a fire wall; or (b) the roof covering.	with the CC application demonstrating compliance.
 *Figure 1 – Fire Wall Locations*		
C3D9 ***Separation of classifications in the same storey***	Where different classifications are located alongside each other in the same storey, each building element must have the higher prescribed FRL of the different classifications. Alternatively, they shall be separated by a fire wall complying Specification 5 as applicable for the Type of construction and the higher FRL for the classifications concerned.	**Further Information / Clarification Required at CC Application Stage** The higher FRLs of the Class 7b Back of House / Storage areas (typically 240 minutes) are required to be applied throughout Ground Floor. Details and design certification from the Architect & Structural Engineer to be submitted with the CC application demonstrating compliance.

C3D13 ***Separation of equipment***	• Equipment (other than that described in the next dot point below) must be separated from the remainder of the building, if that equipment comprises: (a) lift motors and lift control panels; or (b) emergency generators used to sustain emergency equipment operating in the emergency mode; or (c) central smoke control plant; or (d) boilers; or (e) a battery system installed in the building that has a total voltage of 12 volts or more and a storage capacity of 200 kWh or more. • Equipment need not be separated in accordance with if the equipment comprises; (a) smoke control exhaust fans located in the air stream which are constructed for high temperature operation in accordance with Specification 21; or (b) stair pressurising equipment installed in compliance with the relevant provisions of AS 1668.1; or (c) a lift installation without a machine-room; or (d) equipment otherwise adequately separated from the remainder of the building. • Separation of on-site fire pumps must comply with the requirements of AS 2419.1. • Separating construction must have an FRL as required by Specification 5 and not less than FRL 120/120/120.	**Further Information / Clarification Required at CC Application Stage** Confirmation is required if any equipment as listed in this Clause, in particular any battery or UPS system in the Server Room, are located within the building. If so, it shall be fire separated from the remainder of the building by construction having an FRL not less than 120/120/120, or as required by AS2419.1 in the case of fire pumps. Details and design certification from the Architect to be submitted with the CC application demonstrating compliance.
C3D14 ***Electricity supply system***	• An electricity substation located within a building and a main switchboard located within the building which sustains emergency equipment operating in the emergency mode must be separated from any other part of the building by construction having an FRL of not less than 120/120/120 and self-closing fire door/s having an FRL of not less than –/120/30. • Electrical conductors shall comply with requirements of this Clause. • Where emergency equipment (refer to C3D14(6)) 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.	**Further Information / Clarification Required at CC Application Stage** Confirmation is required if there are any main switch boards which sustain emergency equipment located within the building. If so, they shall be fire separated from the remainder of the building by construction having an FRL not less than 120/120/120, and as otherwise required by this Clause. Details and design certification from the Architect to be submitted with the CC application demonstrating compliance.
Part C4 – Protection of Openings		

<table>
<tr>
<td>C4D3
Protection of openings in external walls</td>
<td>• Openings in an external wall that is required to have an FRL must be protected in accordance with C4D5, and if wall-wetting sprinklers are used they must be located externally.
• The requirements above only apply if the distance between the opening and the fire-source feature to which it is exposed is less than:
(a) 3 m from a side or rear boundary of the allotment; or
(b) 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
(c) 6 m from another building on the allotment that is not Class 10.
• Openings in an external wall that is required to have an FRL, if required to be protected, must not occupy more than 1/3 of the area of the external wall of the storey in which it is located unless they are in a Class 9b building used as an open spectator stand.</td>
<td>Note
There are no openings in the external walls of the Retail Building that are required to be protected in accordance with this Clause.</td>
</tr>
<tr>
<td>C4D4
Separation of external walls and associated openings in different fire compartments</td>
<td>The distance between parts of external walls and any openings within them in different fire compartments separated by a fire wall must not be less than that set out in Table C4D4, unless
(a) those parts of each wall have an FRL not less than 60/60/60; and
(b) any openings protected in accordance with C4D5.</td>
<td>Further Information / Clarification Required at CC Application Stage
The external walls identified in Figure 1 under Clause C3D8 above are required to achieve an FRL of not less than 60/60/60, and the openings are required to be protected in accordance with Clause C4D5 below. Details and design certification from the Architect to be submitted with the CC application demonstrating compliance.</td>
</tr>
<tr>
<td colspan="3">Table C4D4: Distance between external walls and associated openings in different fire compartments:
<table>
<tr><th>Angle between walls</th><th>Minimum distance (m)</th></tr>
<tr><td>0° (walls opposite)</td><td>6</td></tr>
<tr><td>more than 0° to 45°</td><td>5</td></tr>
<tr><td>more than 45° to 90°</td><td>4</td></tr>
<tr><td>more than 90° to 135°</td><td>3</td></tr>
<tr><td>more than 135° to less than 180°</td><td>2</td></tr>
<tr><td>180° or more</td><td>Nil</td></tr>
</table>
</td>
</tr>
<tr>
<td>C4D5
Acceptable methods of protection</td>
<td>• Where protection is required, doorways, windows and other openings must be protected as follows:
(a) Doorways:
(i) internal or external wall-wetting sprinklers as appropriate used with doors that are self-closing or automatic closing; or</td>
<td>Further Information / Clarification Required at CC Application Stage
Refer to comments under Clause C4D3 above. Any openings in the external walls (including the Back of House roller shutter in</td>
</tr>
</table>

	(ii) –/60/30 fire doors that are self-closing or automatic closing. (b) Windows: (i) internal or external wall-wetting sprinklers as appropriate used with windows that are automatic closing or permanently fixed in the closed position; or (ii) –/60/– fire windows that are automatic closing or permanently fixed in the closed position; or (iii) –/60/– automatic closing fire shutters. (c) Other openings: (i) excluding voids — internal or external wall-wetting sprinklers, as appropriate; or (ii) construction having an FRL not less than –/60/–. • Fire doors, fire windows and fire shutters must comply with Specification 12.	Tenancy 4) are to be protected in accordance with this Clause (e.g. -/60/- fire shutter), or a **Performance Solution** will be required from a Fire Engineer. Details and design certification from the Architect to be submitted with the CC application demonstrating compliance.
C4D6 ***Doorways in fire walls***	• The aggregate width of openings for doorways in a fire wall, which are not part of a horizontal exit, must not exceed ½ of the length of the fire wall, and each doorway must be protected by— (a) 2 fire doors or fire shutters, one on each side of the doorway, each of which has an FRL of not less than ½ that required by Specification 5 for the fire wall except that each door or shutter must have an insulation level of at least 30; or (b) a fire door on one side and a fire shutter on the other side of the doorway, each of which complies with (a); or (c) a single fire door or fire shutter which has an FRL of not less than that required by Specification 5 for the fire wall except that each door or shutter must have an insulation level of at least 30. • A fire door or fire shutter required by (1)(a), (b) or (c) must be self-closing, or automatic closing in accordance with (3) and (4). • The automatic closing operation required by (2) 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 on each side of the fire wall not more than 1.5 m horizontal distance from the opening. • Where any other required suitable fire alarm system, including a sprinkler system (other than a FPAA101D system) complying with Specification 17, is installed in the building, activation of the system in either fire	**Note**

	compartment separated by the fire wall must also initiate the automatic closing operation.	
C4D7 ***Sliding fire doors***	• If doorway in a fire wall is fitted with a sliding fire door which is held in the open position whilst the building is occupied, the door must: (a) Be held open with an electromagnetic device, which upon de-activation, must close the door in not less than 20 seconds and not more than 30 seconds after release; and (b) In the event of power failure to the door, fail-safe to the closed position; and (c) Be provided with an audible warning device and a red flashing warning device on each side of the doorway; and (d) Signs must be installed on each side of the doorway over the opening stating: **'WARNING – SLIDING FIRE DOOR'** (Capital letters. 50mm high. Colour contrasting with background) • Electromagnetic hold open devices are required to be de-activated by heat or smoke detector activation and the activation of any other fire alarm system including a sprinkler system in either fire compartment, in accordance with this clause.	**Note**
C4D13 ***Openings in floors and ceilings for services***	• Where a service passes through: (a) a floor that is required to have an FRL with respect to integrity and insulation; or (b) a ceiling required to have a resistance to the incipient spread of fire, the service must be installed in accordance with the below. • A service must be protected; (a) in a building of Type A Construction, by a shaft complying with Specification 5; or (b) in a building of Type B or C construction, by a shaft that will not reduce the fire performance of the building elements it penetrates; or (c) in accordance with C4D15. • Where a service passes through a floor which is required to be protected by a fire-protective covering, the penetration must not reduce the fire performance of the covering.	**Note**
C4D15 ***Openings for service installations***	When a service penetrates a building element that is required to have an FRL with respect to integrity or insulation or a resistance to the incipient spread of fire, that penetration must comply with one of the following: • Be identical to a tested prototype assembly, tested in accordance with AS4072.1 and AS1530.4.	**Compliance Readily Achievable** If there are any proposed internal fire rated walls, floors or ceilings (refer to Clauses C3D13 & C3D14), details and certification for fire stopping of service penetrations shall be submitted with the CC

	• In the case of ventilating or air-conditioning ducts/equipment, the installation must comply with AS1668.1. • Be installed in accordance with Specification 13.	application demonstrating compliance.
C4D16 ***Construction joints***	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: (a) identical with a prototype tested in accordance with AS 4072.1 and AS 1530.4 to achieve the required FRL; or (b) that differs from a prototype in accordance with Section 4 of AS 4072.1 and achieves the required FRL. The above requirements do not apply to joints and spaces between fire protected timber elements provided with cavity barriers.	**Compliance Readily Achievable** If there are any proposed fire rated walls, floors or ceilings (refer to Clauses C3D13, C3D14), details and certification for protection of construction joints shall be submitted with the CC application demonstrating compliance.
C4D17 ***Columns protected with lightweight construction to achieve an FRL***	A 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 the construction which has achieved the required FRL or resistance to the incipient spread of fire.	**Compliance Readily Achievable** Details and design certification from the Architect to be submitted with the CC application demonstrating compliance.
Specification 5 – Fire-resisting Construction		
S5C2 ***Exposure to fire-source features***	This Clause defines how a building element may or may not be exposed to a fire-source feature.	**Note**
S5C3 ***Fire protection for support of another part***	Where a part of a building required to have an FRL depends upon direct vertical or lateral support from another part to maintain its FRL, that supporting part must have an FRL not less than that required by other provisions of this Specification; and if located within the same fire compartment as the part it supports have an FRL in respect of structural adequacy the greater of that required for the supporting part itself and for the part it supports; and be non-combustible if the part it supports is required to be non-combustible. Exemptions / considerations are provided for certain building elements in accordance with S5C3(2).	**Compliance Readily Achievable** Details and design certification from Structural Engineer to be submitted with the CC application demonstrating compliance.
S5C4 ***Lintels***	A lintel must have the FRL required for the part of the building in which it is situated. Exemptions are available if it does not contribute to the support of a fire door, fire window or fire shutter in accordance with S5C4(2).	**Compliance Readily Achievable** Details and design certification from Structural Engineer to be submitted with the CC application demonstrating compliance.
S5C5	The method of attaching or installing a finish, lining, ancillary element or service installation to	**Compliance Readily Achievable**

Method of attachment not to reduce the fire-resistance of building elements	the building element must not reduce the fire-resistance of that element to below that required.	Details and design certification from Structural Engineer to be submitted with the CC application demonstrating compliance.
S5C6 ***General concessions***	This Clause sets out requirements for concessions relating to steel columns, timber columns, structures on roofs, curtain walls and panel walls and balconies and verandas.	**Compliance Readily Achievable** Details and design certification from Structural Engineer to be submitted with the CC application demonstrating compliance.
S5C8 ***Enclosure of shafts***	• Shafts required to have an FRL must be enclosed at the top and bottom by construction having an FRL not less than that required for the walls of a non-loadbearing shaft in the same building. • The above provisions do not apply to the top of a shaft extending beyond the roof covering other than a fire-isolated stairway or ramp or the bottom of a shaft if laid directly on the ground.	**Note**
S5C21 ***Type B fire-resisting construction — fire-resistance of building elements***	In a building required to be of Type B Construction— • building elements shall have prescribed FRLs as listed in Tables S5C21a, S5C21b, S5C21c, S5C21d, S5C21e, S5C21f and S5C21g, including any beams or columns incorporated in it. • if a stair shaft supports any floor or a structural part of it— (i) the floor or part must have an FRL of 60/–/– or more; or (ii) the junction of the stair shaft must be constructed so that the floor or part will be free to sag or fall in a fire without causing structural damage to the shaft; and • any internal wall which is required to have an FRL with respect to integrity and insulation, except a wall that bounds a sole-occupancy unit in the topmost (or only) storey and there is only one unit in that storey, must extend to: (i) the underside of the floor next above if that floor has an FRL of at least 30/30/30; or (ii) the underside of a ceiling having a resistance to the incipient spread of fire to the space above itself of not less than 60 minutes; or (iii) the underside of the roof covering if it is non-combustible 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	**Further Information / Clarification Required at CC Application Stage** Building elements associated with the Retail Building are required to achieve compliance with this Clause, with particular attention drawn to the following: • Fire walls separating Tenancy 3 & 4 to achieve an FRL of 240 minutes and extend to the underside of a non-combustible roof covering; • Loadbearing internal walls and a loadbearing fire walls (including those that are part of a loadbearing shaft) must be constructed from concrete and / or masonry; • Loadbearing external walls (including any columns within or attached to the external walls) and any loadbearing external columns within 18m of the northern and eastern allotment

	(iv) 450 mm above the roof covering if it is combustible; and • 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) subject to (2), fire-protected timber; or (iv) any combination of (i) to (iii); and • in a Class 5, 6, 7, 8 or 9 building, in the storey immediately below the roof, internal columns and internal walls other than fire walls and shaft walls, need not comply with Tables S5C21d, S5C21e, S5C21f and S5C21g; and • in a Class 2 or 3 building, except where within the one sole-occupancy units, or a Class 9a health-care building or a Class 9b building, a floor separating storeys or above a space for the accommodation of motor vehicles or used for storage or any other ancillary purpose, must: (i) be constructed so that it is at least of the standard achieved by a floor/ceiling system incorporating a ceiling which has a resistance to the incipient spread of fire to the space above itself of not less than 60 minutes; or (ii) have an FRL of at least 30/30/30; or (iii) have a fire-protective covering on the underside of the floor, including beams incorporated in it, if the floor is combustible or of metal; and • in a Class 9c building a floor above a space for the accommodation of motor vehicles or used for storage or any other ancillary purpose, and any column supporting the floor must: (i) be constructed so that it is at least of the standard achieved by a floor/ceiling system incorporating a ceiling which has a resistance to the incipient spread of fire to the space above itself of not less than 60 minutes; or (ii) have an FRL of at least 30/30/30; or (iii) have a fire-protective covering on the underside of the floor, including beams incorporated in it, if the floor is combustible or of metal. • Fire-protected timber may be used in accordance with S5C21(2). • For the purposes of Table S5C21a and Table S5C21b, external wall includes any column and other building element incorporated within it or other external building element. **Refer to Appendix 2 for further details regarding FRLs applicable to the Retail Building.**	boundary and the Covered Carpark Structure to achieve an FRL of 240 minutes Details and design certification from Structural Engineer to be submitted with the CC application demonstrating compliance.

S5C24 ***Type C Construction***	• Building elements shall have prescribed FRLs as listed in Tables S5C24a, S5C24b, S5C24c, S5C24d and S5C24e and any beam or column incorporated in it, must have an FRL not less than that listed in those Tables for the particular Class of building concerned. • An external wall that is required by Table S5C24a to have an FRL need only be tested from the outside to satisfy the requirement	**Complies** Noting the columns associated with the Covered Carpark Structure are located greater than 3m from a fire source feature, there are no fire rating requirements under this clause. Notwithstanding the above, it is also noted steel columns in a single storey building (other than those in a fire wall) are not required to achieve an FRL in accordance with the concession under S5C6 above.
Section D – Access and Egress		
Part D2 – Provisions for Escape		
D2D3 ***Number of exits required***	• All buildings - Every building must have at least one exit from each storey • Access to exits — Without passing through another sole-occupancy unit every occupant of a storey or part of a storey must have access to (a) an exit; or (b) at least 2 exits if 2 or more exits are required.	**Complies** Not less than 1 exit is provided from all parts of the Retail Building & Covered Carpark Structure.
D2D4 ***When fire-isolated stairways and ramps are required***	Class 5, 6, 7 or 9 buildings - Every stairway or ramp serving as a required exit must be fire-isolated unless: (a) in a Class 9a health-care building — it connects, or passes through or passes by not more than 2 consecutive storeys in areas other than patient care areas; or (b) it is part of an open spectator stand; or (c) in any other case, except in a Class 9b early childhood centre or a Class 9c building, it connects, passes through or passes by not more than 2 consecutive storeys and one extra storey of any classification may be included if: (i) the building has a sprinkler system (other than a FPAA101D system) complying with Specification 17 installed throughout; or (ii) the required exit does not provide access to or egress for, and is separated from, the extra storey by construction having: (A) an FRL of –/60/60, if non-loadbearing; and (B) an FRL of 90/90/90 for Type A construction or 60/60/60 for Type B or C construction, if loadbearing; and	**Note** The buildings are both single storey.

	(C) no opening that could permit the passage of fire or smoke.	
D2D5 ***Exit travel distances***	In Class 5, 6, 7, 8 or 9 buildings: (a) Maximum 20m to an exit or to a point of choice between alternative exits. (b) 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 30m. (c) Maximum distance to one of those exits is 40m.	**Performance Solution Required** A Performance Solution is required from a Fire Engineer to address the distance to the nearest exit in Tenancy 3 on an **open plan basis** being approximately 43m. Any future fitout will require reassessment as it is considered likely the distance to the nearest exit will be increased beyond 43m. Note 1: The above travel distances are measured to the construction edge of the awnings where there is a minimum 1m wide path that is open to the sky. In this regard, the travel distances could be reduced if the footpath along the southern elevation was open to the sky for a min. unobstructed width of 1m. Note 2: The above assessment assumes customers can egress through the Back of House areas which will need to be confirmed at CC Application Stage.
D2D6 ***Distance between alternative exits***	Exits that are required as alternative means of egress must be: (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 (b) not less than 9 m apart; and (c) not more than: (i) in a Class 2 or 3 building — 45 m apart; or (ii) in a Class 9a health-care building, if such required exit serves a patient care area — 45 m apart; or (iii) in all other cases — 60 m apart; and (d) located so that alternative paths of travel do not converge such that they become less than 6 m apart.	**Performance Solution Required** A Performance Solution is required from a Fire Engineer to address the distance between alternative exits in Tenancy 3 on an **open plan basis** being approximately 78m. Any future fitout will require reassessment as it is considered likely the distance between alternative exits will be increased beyond 78m. Note 1: The above travel distances are measured to the construction edge of the awnings where there is a minimum 1m wide path that is open to the sky. In this

		regard, the travel distances could be reduced if the footpath along the southern elevation was open to the sky for a min. unobstructed width of 1m. Note 2: The above assessment assumes customers can egress through the Back of House areas which will need to be confirmed at CC Application Stage.
D2D7 ***Height of exits, paths of travel to exits and doorways***	In a required exit or path of travel to an exit 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.	**Compliance Readily Achievable** Details and design certification from the Architect to be submitted with the CC application demonstrating compliance.
D2D8 ***Width of exits and paths of travel to exits***	• The unobstructed width of each required exit or path of travel to an exit, except for ladders provided in accordance with D2D21, D3D23 or I3D5, and doorways, must be not less than; (a) 1 m; • If the storey, mezzanine or open spectator stand accommodates more than 100 persons but not more than 200 persons, the aggregate unobstructed width of each required exit or path of travel to an exit, except for doorways, must be not less than; (a) 1 m plus 250 mm for each 25 persons (or part) in excess of 100; or (b) 1.8 m in a passageway, corridor or ramp normally used for the transportation of patients in beds within a treatment area or ward area. • If the storey, mezzanine or open spectator stand accommodates more than 200 persons, the aggregate unobstructed width of each required exit or path of travel to an exit, except for doorways, must be not less than: (a) 2 m plus 500 mm for every 60 persons (or part) in excess of 200 persons if egress involves a change in floor level by a stairway or ramp with a gradient steeper than 1 in 12;or (b) in any other case, 2 m plus 500 mm for every 75 persons (or part) in excess of 200.	**Further Information / Clarification Required at CC Application Stage** The total population that can be accommodated in each Tenancy as a result of the proposed aggregate egress width is as follows which is required to be confirmed at CC Application Stage: • Tenancy 3 – 500 persons based on 4m egress width • Tenancy 4 – 800 persons based on 6m egress width Note: The above assessment assumes customers can egress through the Back of House areas which will need to be confirmed at CC Application Stage.
D2D9 ***Width of doorways in exits or paths of travel to exits***	In a required exit or path of travel to an exit, the unobstructed width of a doorway must be not less than 750 mm wide except where it opens to a sanitary compartment or bathroom	**Further Information / Clarification Required at CC Application Stage** The egress doors from the entry airlock in Tenancy 3

		must achieve an unobstructed width of not less than 750mm. Details and design certification from the Architect to be submitted with the CC application demonstrating compliance. Note: Reference to Clause D4D3 and AS1428.1 should be made for requirements associated with doorways in accessible parts of the building, which typically requires an unobstructed width of not less than 850mm, except for doorways on an accessway that have multiple leaves and are automatic opening.
D2D10 ***Exit width not to diminish in direction of travel***	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 D2D8(1)(b) or D2D9(a)(i).	**Compliance Readily Achievable** Details and design certification from the Architect to be submitted with the CC application demonstrating compliance.
D2D15 ***Discharge from exits***	• The discharge point of alternative exits must be located as far apart as practical and they 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. • 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: (a) the minimum width of the required exit; or (b) 1 m, whichever is the greater. • 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: (a) 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 D4; or (b) except if the exit is from a Class 9a building, a stairway complying with the Deemed-to-Satisfy Provisions of the BCA.	**Further Information / Clarification Required at CC Application Stage** If the sliding doors in the airlock of either Tenancy are required to be relied upon to achieve compliance with Clause D2D8 above for aggregate exit width for the proposed population, then the path of travel to the road must have an unobstructed width of not less than that exit. Confirmation of the proposed population of each tenancy are therefore required to be confirmed at CC Application Stage:
D2D18	Outlines the number of persons accommodated in a storey as per Table D2D18.	**Further Information / Clarification Required at CC Application Stage**

Number of persons accommodated		The staff and customer population of tenancy is required to be confirmed at CC Application Stage to assess compliance with Clause D2D8, D2D15 & F4D4.
D2D21 ***Plant rooms, lift machine rooms and electricity network substations: Concession***	A ladder may be used in lieu of a stairway to provide egress from a plant room with a floor area of not more than 100m^2 or all but one point of egress from a plant room or a lift machine room with a floor area not more than 200m^2. Sub-clause (b) sets out the parameters for the ladders permitted to be used in this circumstance.	**Note**
Part D3 – Construction of Exits		
D3D8 ***Installations in exits and paths of travel***	• 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, fire-isolated passageway or fire-isolated ramp. • 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. • Gas or other fuel services must not be installed in a required exit. • Except for in a fire-isolated exit, equipment comprising of electricity meters, distribution boards or ducts, central telecommunications distribution boards or equipment, electrical motors or other motors serving equipment in the building may be installed in a required exit, or in any corridor, hallway, lobby or the like leading to a required exit, provided that service or equipment is suitably sealed against smoke spreading from the enclosure by non-combustible construction or a fire-protective covering. • Electrical wiring may be installed in a fire-isolated exit if the wiring is associated with: (a) a lighting, detection, or pressurisation system serving the exit; or (b) a security, surveillance or management system serving the exit; or (c) an intercommunication system or an audible or visual alarm system in accordance with D3D27; or (d) the monitoring of hydrant or sprinkler isolating valves	**Compliance Readily Achievable** Details and design certification from the Architect to be submitted with the CC application demonstrating compliance.
D3D11	• A ramp serving as a required exit must—	**Compliance Readily Achievable**

Pedestrian ramps	(a) where the ramp is also serving as an accessible ramp under Part D4, be in accordance with AS 1428.1; or (b) in any other case, have a gradient not steeper than 1:8. • The floor surface of a ramp must have a slip-resistance classification not less than that listed in Table D3D15 when tested in accordance with AS 4586.	Details and design certification from the Architect to be submitted with the CC application demonstrating compliance. Note: Confirmation is required to be provided at CC Application Stage that the ramp serving the Back of House area of Tenancy 3 is for vehicle use only.
D3D14 ***Goings and risers***	This clause sets out the detailed requirements for the construction and geometry of the goings and risers in stairways. These details are set out in sub-clauses (1) to (3) and Table D3D14 Riser and Going Dimensions.	**Note**

Table D3D14 Riser and going dimensions:

Stairway location	Riser (R)		Going (G)[Note 3]		Quantity (2R + G)	
	Max	Min	Max	Min	Max	Min
Public	190	115	355	250	700	550
Private [Note 1]	190	115	355	240	700	550

D3D15 ***Landings***	In a stairway: (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: (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 (ii) have— (A) a surface with a slip-resistance classification not less than that listed in Table D3D15 when tested in accordance with AS 4586; or (B) a strip at the edge of the landing with a slip-resistance classification not less than that listed in Table D3D15 when tested in accordance with AS 4586, where the edge leads to a flight below.	**Note**

Table D3D15 Slip Resistance Classification:

Application	Dry Surface conditions	Wet surface conditions
Ramp steeper than 1:14	P4 or R11	P5 or R12
Ramp steeper than 1:20 but not steeper than 1:14	P3 or R10	P4 or R11
Tread or *landing* surface	P3 or R10	P4 or R11
Nosing or *landing* edge strip	P3	P4

D3D16 ***Thresholds***	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:	**Further Information / Clarification Required at CC Application Stage**

	(a) in patient care areas in a Class 9a health-care building, the door sill is not more than 25 mm above the finished floor level to which the doorway opens; or (b) in resident use areas in a Class 9c building, a ramp is provided with a maximum gradient of 1:8 for a maximum height of 25 mm over the threshold; or (c) in a building required to be accessible by Part D4, the doorway: (i) opens to a road or open space; and (ii) is provided with a threshold ramp or step ramp in accordance with AS 1428.1; or (d) in a Class 9b building used as an entertainment venue, the door sill of a doorway opening to a road, open space, external stair landing or external balcony is not more than 50 mm above the finished floor level to which the doorway opens; or (e) in other cases: (i) the doorway opens to a road or open space, external stair landing or external balcony; and (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.	The door from the Back of House area to the vehicle ramp must not incorporate a step unless that area is subject to a D4D5 access exemption. Details and design certification from the Architect to be submitted with the CC application demonstrating compliance.
D3D17 ***Barriers to prevent falls***	• A continuous barrier must be provided along the side of— (a) a roof to which general access is provided; and (b) a stairway or ramp; and (c) a floor, corridor, hallway, balcony, deck, verandah, mezzanine, access bridge or the like; and (d) any delineated path of access to a building, if the trafficable surface is 1 m or more above the surface beneath. • The requirements above do not apply to: (a) the perimeter of a stage, rigging loft, loading dock or the like; or (b) areas referred to in D3D23; or (c) 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 (d) a barrier provided to an openable window covered by D3D29. • A barrier required above must be constructed in accordance with D3D18,	**Compliance Readily Achievable** Details and design certification from the Architect to be submitted with the CC application demonstrating compliance where applicable.

	D3D19, D3D20 and, if a wire barrier is used, D3D21.	
D3D18 ***Height of barriers***	• The height of a barrier required by D3D17 must be not less than the following: (a) For stairways or ramps with a gradient of 1:20 or steeper — 865 mm. (b) For landings to a stair or ramp where the barrier is provided along the inside edge of the landing and does not exceed 500 mm in length — 865 mm. (c) In front of fixed seating on a mezzanine or balcony within an auditorium in a Class 9b building, where the horizontal projection extends not less than 1 m outwards from the top of the barrier — 700 mm. (d) For all other locations — 1 m. • For a barrier required above (a) barrier heights are measured vertically from the surface beneath, except that for stairways the height must be measured above the nosing line of the stair treads; and (b) a transition zone may be incorporated where the barrier height changes from 865 mm on a stair flight or ramp to 1 m at a landing or floor.	**Compliance Readily Achievable** Details and design certification from the Architect to be submitted with the CC application demonstrating compliance where applicable.
D3D19 ***Openings in barriers***	• Openings in a required balustrade must not allow a 125 mm sphere (measured above the nosing line of the stair treads) to pass through. In a fire-isolated stairway, fire-isolated ramp or other area used primarily for emergency purposes (this does not apply to a class 9b early childhood centre), openings in a required balustrade – (a) must not allow a 300mm sphere to pass through; or (b) where rails are used – (i) a 150 mm sphere must not be able to pass through the opening between the nosing line of the stair treads and the rail or between the rail and the floor of the landing, balcony, or the like; and; (ii) the opening between rails must not be more than 460 mm. • In the internal parts of a Class 7 (other than carparks) and Class 8 buildings, opening in a required balustrade – (a) must not allow a 300 mm sphere to pass through; or (b) where rails are used - (i) a 150 mm sphere must not be able to pass through the opening between the nosing line of the stair treads and the rail	**Compliance Readily Achievable** Details and design certification from the Architect to be submitted with the CC application demonstrating compliance where applicable.

	or between the rail and the floor of the landing, balcony or the like; and (ii) the opening between the rails must not be more than 460 mm. • Where a required balustrade is fixed to the vertical face forming an edge of a landing, balcony, deck, stairway or the like, the opening formed between the balustrade and the face must not exceed 40 mm. The opening is measured horizontally from the edge of the surface to the nearest internal face of the balustrade	
D3D20 ***Barrier climbability***	• A barrier required by D3D17, located on a floor more than 4 m above the surface beneath, must not incorporate horizontal or near horizontal elements that could facilitate climbing between 150 mm and 760 mm above the floor. • The requirements above do not apply to: (a) fire-isolated stairways, fire-isolated ramps and other areas used primarily for emergency purposes, other than: (i) external stairways; and (ii) external ramps; and (b) Internal parts of Class 7 (other than carparks) and Class 8 buildings.	**Compliance Readily Achievable** Details and design certification from the Architect to be submitted with the CC application demonstrating compliance where applicable.
D3D21 ***Wire barriers***	Where a required barrier is constructed of wire, it shall comply with the requirements of this clause.	**Note**
D3D22 ***Handrails***	• Except for handrails referred to in D3D23, and subject to other requirements below, handrails must: (a) be located along at least one side of the ramp or flight; and (b) be located along each side if the total width of the stairway or ramp is 2 m or more; and (d) in any other case, be fixed at a height of not less than 865 mm; and (e) be continuous between stair flight landings and have no obstruction on or above them that will tend to break a hand-hold; and (f) in a required exit serving an area required to be accessible, be 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 (1)(c)(ii). • The height required above measured above the nosings of stair treads and the floor surface of the ramp, landing or the like.	**Compliance Readily Achievable** Details and design certification from the Architect to be submitted with the CC application demonstrating compliance where applicable.
D3D23 ***Fixed platforms, walkways,***	A fixed platform, walkway, stairway, ladder and any going and riser, landing, handrail or barrier attached thereto may comply with AS 1657 in	**Note**

stairways and ladders	lieu of D3D14, D3D15, D3D17, D3D18, D3D19, D3D20, D3D21 and D3D22 if it only serves: (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 a building.	
D3D24 ***Doorways and doors***	• A doorway serving as a required exit or forming part of a required exit, or a doorway in a patient care area of a Class 9a health-care building: (a) must not be fitted with a revolving door; and (b) must not be fitted with a roller shutter or tilt-up door unless: (i) it serves a Class 6, 7 or 8 building or part with a floor area not more than 200 m^2, and (ii) the doorway is the only required exit from the building or part; and (iii) it is held in the open position while the building or part is lawfully occupied; and (c) must not be fitted with a sliding door unless: (i) it leads directly to a road or open space; and (ii) the door is able to be opened manually under a force of not more than 110 N; and (d) if fitted with a door which is power-operated: (i) 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 (ii) 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. • A power-operated door in a path of travel to a required exit, except for a door in a patient care area of a Class 9a health-care building as provided above, 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.	**Compliance Readily Achievable** Details and design certification from the Architect to be submitted with the CC application demonstrating compliance.
D3D25 ***Swinging doors***	A swinging door in a required exit or forming part of a required exit:	**Compliance Readily Achievable** Details and design certification from the Architect to be submitted

	(a) must not encroach (include door handles or other furniture or attachments to the door): (i) at any part of its swing by more than 500 mm on the required width (including any landings) of a required stairway, ramp or passageway if it is likely to impede the path of travel of the people already using the exit; and (ii) when fully open, by more than 100 mm on the required width of the required exit; and (b) must swing in the direction of egress unless (i) it serves a building or part with a floor area not more than 200m^2, it is the only required exit from the building or part and it is fitted with a device for holding it in the open position; or (ii) it serves a sanitary compartment or airlock (in which case it may swing in either direction); and (c) must not otherwise impede the path or direction of egress.	with the CC application demonstrating compliance.
D3D26 ***Operation of latch***	• 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— (a) a single hand downward action on a single device which is located between 900 mm and 1.1 m from the floor and if serving an area required to be accessible by Part D4— (i) be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch; and (ii) have a clearance between the handle and the back plate or door face at the centre grip section of the handle of not less than 35 mm and not more than 45 mm; or (b) a single hand pushing action on a single device which is located between 900 mm and 1.2 m from the floor. • Where the latch operation device referred to above is not located on the door leaf itself— (a) manual controls to power-operated doors must be at least 25 mm wide, proud of the surrounding surface and located— (i) not less than 500 mm from an internal corner; and (ii) for a hinged door, between 1 m and 2 m from the door leaf in any position; and	**Compliance Readily Achievable** Details and design certification from the Architect to be submitted with the CC application demonstrating compliance.

	(iii) for a sliding door, within 2 m of the doorway and clear of a surface mounted door in the open position; and (b) braille and tactile signage complying with S15C3 and S15C6 must identify the latch operation device. Concessions or alternative requirements apply to secure areas, doors within Sole Occupancy Units, doors fitted with an automatic fail safe device, doors in Class 9a and 9c buildings and Class 9b buildings.	
Part D4 – Access for People with a Disability		
D4D2 ***General building access requirements***	Buildings and parts of buildings must be accessible as required by this clause, unless exempted by D4D5.	**Note** Compliant access is required to and within all parts of the Retail Building in accordance with Clauses D4D3-D4D9, D4D12 & D4D13 (as relevant), except for areas that are exempted by D4D5. Refer to separate Access Report for further information associated with this Part.
Section E – Services and Equipment		
Part E1 – Fire Fighting Equipment		
E1D2 ***Fire hydrants***	• A fire hydrant system must be provided to serve a building— (a) having a total floor area greater than 500m²; and (b) where a fire brigade station is— (i) no more than 50 km from the building as measured along roads; and (ii) equipped with equipment capable of utilising a fire hydrant. • The fire hydrant system must be installed in accordance with AS 2419.1-2021. • Where internal fire hydrants are provided, they must serve only the storey on which they are located except that a sole-occupancy unit— (a) in a Class 2 or 3 building or Class 4 part of a building may be served by a single fire hydrant located at the level of egress from that sole-occupancy unit; or (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.	**Further Information / Clarification Required at CC Application Stage** The Retail Building is required to be provided with a fire hydrant system throughout in accordance with this Clause. Confirmation of the fire hydrant booster location will be required at CC Application Stage to determine if a **Performance Solution** is required from a Fire Engineer. If a single booster is proposed to serve Lots 201 & 202, it is also considered a **Performance Solution** will be required from a Fire Engineer, as they are separate allotments which if sold or managed separately could cause issues regarding maintenance obligations. Details and certification from the Hydraulic (Fire Services) Consultant to be submitted

		with the CC application demonstrating compliance.
E1D3 ***Fire hose reels***	• E1D3 does not apply to— (a) a Class 2, 3 or 5 building or Class 4 part of a building; or (b) a Class 8 electricity network substation; or (c) a Class 9c building; or (d) classrooms and associated corridors in a primary or secondary school. • A fire hose reel system must be provided— (a) to serve the whole 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 500 m2. • The fire hose reel system must— (a) have fire hose reels installed in accordance with AS 2441; and (b) provide fire hose reels to serve only the storey at which they are located, except a sole-occupancy unit of not more than 2 storeys in a Class 6, 7, 8 or 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 hose reel can provide coverage to the whole of the sole-occupancy unit. • Fire hose reels must be located internally, externally or in combination, to achieve the system coverage specified in AS 2441. • 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: (a) Fire hose reels must be located adjacent to an internal fire hydrant (other than one within 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. (b) Fire hose reels must be located within 4 m of an exit, except that a fire hose reel need not be located adjacent to every exit, provided system coverage can be achieved. (c) Where system coverage is not achieved by compliance with (a) and (b), additional fire hose reels may be located in paths of travel to an exit to achieve the required coverage. • Fire hose reels must be located so that the fire hose will not need to pass through	**Compliance Readily Achievable** The Retail Building is required to be provided with a fire hose reel system throughout in accordance with this Clause. Details and certification from the Hydraulic (Fire Services) Consultant to be submitted with the CC application demonstrating compliance.

	doorways fitted with fire or smoke doors, except— (a) doorways in walls referred to in C3D6(1)(e) in a Class 9a building and C3D6(5)(d) in a Class 9c building, separating ancillary use areas of high potential fire hazard; and (b) doorways in walls referred to in C3D13 or C3D14 separating equipment or electrical supply systems; and (c) doorway openings to shafts referred to in C4D14. • Where the normal water supply cannot achieve the flow and pressures required by AS 2441, or is unreliable— (a) a pump; or (b) water storage facility; or (c) both a pump and water storage facility, must be installed to provide the minimum flow and pressures required by clause 6.1 of AS 2441	
E1D4 ***Sprinklers***	A sprinkler system must— (a) be installed in a building or part of a building when required by E1D5 to E1D12 as applicable; and (b) comply with Specification 17 and Specification 18 as applicable.	**Note**
E1D8 ***Where sprinklers are required: Class 6 building***	In a Class 6 building, sprinklers are required in fire compartments where either of the following apply: (a) a floor area of more than 3,500m^2; and (b) a volume more than 21,000m^3.	**Note** Subject to the provision of fire walls as identified under Clause C3D8 above, the Retail Building is split into two fire compartments that are each less than 3,500m^2 and 21,000m^3.
E1D9 ***Where sprinklers are required: Class 7a building, other than an open-deck carpark***	In a Class 7a building, other than an open-deck carpark, sprinklers are required in fire compartments where more than 40 vehicles are accommodated.	**Note** The Covered Carpark Structure accommodates not more than 40 vehicles.
E1D13 ***Where sprinklers are required: occupancies of excessive hazard***	In occupancies of excessive hazard, as described in E1D13(2)(a) & (b), sprinklers are required in fire compartments where the floor area exceeds 2,000m^2 or the volume exceeds 12,000m^3.	**Further Information / Clarification Required at CC Application Stage** Confirmation has been provided from Leffler Simes via email dated 22.01.2025 that none of the Tenants in the Retail Building will be classified as being occupancies of excessive hazard, and that nothing will be stored above a

		height of 4m. Notwithstanding, this should be reconfirmed by the occupant of each Tenancy at CC Application Stage.
E1D14 ***Portable fire extinguishers***	• Portable fire extinguishers must be— (a) provided as listed below; and (b) for a Class 2, 3 or 5 building or Class 4 part of a building, provided— (i) 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 (ii) where internal fire hydrants are not installed, to serve any fire compartment with a floor area greater than 500 m2, and for the purposes 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 selected, located and distributed in accordance with Sections 1, 2, 3 and 4 of AS 2444. • In Class 2 to 9 buildings (except within sole-occupancy units of a Class 9c building), portable fire extinguishers must be provided as follows: (a) To cover Class AE or E fire risks associated with emergency services switchboards. (b) To cover Class F fire risks involving cooking oils and fats in kitchens. (c) To cover Class B fire risks in locations where flammable liquids in excess of 50 litres are stored or used (not including that held in fuel tanks of vehicles). To cover Class A fire risks in normally occupied fire compartments less than 500 m2 (d) not provided with fire hose reels (excluding open-deck carparks). (e) To cover Class A fire risks in classrooms and associated corridors in primary and secondary schools not provided with fire hose reels. (f) To cover Class A fire risks associated with a Class 2, 3 or 5 building or Class 4 part of a building.	**Compliance Readily Achievable** Details and design certification from the Fire Services Consultant to be submitted with the CC application demonstrating compliance.
E1D16 ***Fire precautions during construction***	In a building under construction— • Not less than one 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 exit or temporary stairway or exit; and	**Note** Head Contractor to note regarding the requirements for portable fire extinguishers during construction.

	• After the building has reached an effective height of 12 m— (i) the required fire hydrants and fire hose reels must be operational in at least every storey that is covered by the roof or the floor structure above, except the 2 uppermost storeys; and (ii) any required booster connections must be installed.	
E1D17 ***Provision for special hazards***	Suitable additional provision must be made if special problems of fighting fire could arise because of— (a) the nature or quantity of materials stored, displayed or used in a building or on the allotment; or (b) the location of the building in relation to a water supply for fire-fighting purposes.	**Note** Consideration will need to be given to provision for special hazards by the Fire Engineer and Fire Services Consultant associated with any hazardous processes, storage or uses.
Part E2 – Smoke Hazard Management		
E2D3 ***General requirements***	• An air-handling system which does not form part of a smoke hazard management system in accordance with E2D4 to E2D20 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, subject to (2), be designed and installed— (a) to operate as a smoke control system in accordance with AS 1668.1; or (b) such that it— (i) incorporates smoke dampers where the air-handling ducts penetrate any elements separating the fire compartments served; and (ii) is 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. • 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 of a smoke hazard management system must comply with these Sections of the Standard. • A smoke detection system must be installed in accordance with S20C6 to operate AS 1668.1 systems that are provided for zone pressurisation and automatic air pressurisation for fire-isolated exits.	**Compliance Readily Achievable** Any air handling system in the Retail Building 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 (refer to Figure 1 above for fire compartments) is required to comply with this Clause. Details and design certification from the Mechanical Consultant to be submitted with the CC application demonstrating compliance.
E2D9 ***Buildings not more than 25 m in effective height: Class 5,***	• A building not more than 25 m in effective height that— (a) is a Class 5 or 9b school building or part of a building having a rise in storeys of more than 3; or	**Note**

6, 7b, 8 and 9b buildings	(b) is Class 6, 7b, 8 or 9b building (other than a school) or part of a building having a rise in storeys of more than 2; or (c) has a rise in storeys of more than 2, and contains— (i) a Class 5 or 9b school part; and (ii) a Class 6, 7b, 8 or 9b (other than a school) part, must meet the requirements below. • A building referred to above must be provided with— (a) in each required fire-isolated stairway, including any associated fire-isolated passageway or fire-isolated ramp, an automatic air pressurisation system for fire-isolated exits in accordance with AS 1668.1; or (b) a zone pressurisation system between vertically separated fire compartments in accordance with AS 1668.1, if the building has more than one fire compartment; or (c) an automatic smoke detection and alarm system complying with Specification 20; or (d) a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17. • For the purposes of (2), vertically separated fire compartments are fire compartments above and below each other, and not fire compartments within the same storey	
E2D12 ***Class 7a buildings***	A Class 7a building, including a basement, provided with a mechanical ventilation system in accordance with AS 1668.2, must comply with clause 5.5 of AS 1668.1.	**Note**
E2D14 ***Class 6 buildings – in fire compartments more than 2000 m2: Class 6 building (not containing an enclosed common walkway or mall serving more than one Class 6 sole-occupancy unit)***	• This clause applies to a Class 6 building not containing an enclosed common walkway or mall serving more than one Class 6 sole-occupancy unit, except for— (a) a Class 6 sole-occupancy unit that— (i) has a floor area of not more than 2000 m^2; and (ii) is single storey with a main public entrance opening to a road or open space; and (iii) is separated from other parts of the fire compartment by construction, including openings, penetrations and junctions with other building elements, that prevents the free passage of smoke; and (b) parts of any other classification that are smoke separated from a Class 6 part by construction complying with (a)(iii).	**Further Information / Clarification Required at CC Application Stage** The floor area of the Class 6 part of each Tenancy in the Retail Building is required to be confirmed by the Architect, however it is noted it appears to be less than 2,000m^2, in which case the provisions of this Clause are not applicable.

	• Where the floor area of a Class 6 part of a fire compartment referred to in (1) is more than 2000 m^2, the fire compartment must be provided with— (a) an automatic smoke exhaust system complying with Specification 21; or (b) if the building is single storey, automatic smoke-and-heat vents complying with Specification 22; or (c) if the floor area of the fire compartment is not more than 3500 m^2 and the building— (i) is single storey, an automatic smoke detection and alarm system complying with Specification 20; or (ii) has a rise in storeys of not more than 2, a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17.	
E2D15 ***Class 6 buildings – in fire compartments more than 2000 m2: Class 6 building (containing an enclosed common walkway or mall serving more than one Class 6 sole-occupancy unit)***	• This clause applies to a Class 6 building containing an enclosed common walkway or mall serving more than one Class 6 sole-occupancy unit, except for— (a) a Class 6 sole-occupancy unit that— (i) opens onto the enclosed common walkway or mall if the Class 6 sole-occupancy unit has a floor area of not more than 1000 m^2; or (ii) does not open onto the enclosed common walkway or mall if the Class 6 sole-occupancy unit— (A) has a floor area of not more than 2000 m^2; and (B) is single storey with a main entrance opening to a road or open space; and (C) is separated from other parts of the fire compartment by construction, including openings, penetrations and junctions with other building elements, that prevents the free passage of smoke; and (b) parts of any other classification that are smoke separated from a Class 6 part by construction complying with (a)(ii)(C). • Where the floor area of a Class 6 part of a fire compartment referred to in (1) is more than 2000 m^2, the fire compartment, including the enclosed common walkway or mall, must be provided with— (a) an automatic smoke exhaust system complying with Specification 21; or	**Note**

	(b) if the building is single storey, automatic smoke-and-heat vents complying with Specification 22; or (c) if the floor area of the fire compartment is not more than 3500 m^2 and the building has a rise in storeys of not more than 2, a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17.	
E2D21 ***Provision for special hazards***	Additional smoke hazard management measures may be necessary due to the— (a) special characteristics of the building; or (b) special function or use of the building; or (c) special type or quantity of materials stored, displayed or used in a building; or (d) special mix of classifications within a building or fire compartment, which are not addressed in E2D4 to E2D20.	**Note** Consideration will need to be given to provision for special hazards by the Fire Engineer and Mechanical Consultant associated with any hazardous processes, storage or uses.
Part E4 – Visibility in an Emergency, Exit Signs and Warning Systems		
E4D2 ***Emergency lighting requirements***	An emergency lighting system must be installed— (a) in every fire-isolated stairway, fire-isolated passageway or fire-isolated ramp; and (b) in every storey of a Class 5, 6, 7, 8 or 9 building where the storey has an area more than 300m^2— (i) in every passageway, corridor, hallway, or the like, that is part of the path of travel to an exit; and in any room having a floor area more than 100m^2; (ii) that does not open to a corridor or space that has emergency lighting or to a road or open space; and (iii) in any room having a floor area more than 300m^2 and (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— (i) a fire-isolated stairway, fire-isolated passageway or fire-isolated ramp; or (ii) an external stairway serving instead of a fire-isolated stairway under D2D13; or (iii) an external balcony leading to a fire-isolated stairway, fire-isolated passageway or fire-isolated ramp; or (iv) a road or open space; and (d) in every required non-fire-isolated stairway; and	**Compliance Readily Achievable** Details and design certification from the Electrical Consultant to be submitted with the CC application demonstrating compliance.

	(e) in a sole-occupancy unit in a Class 5, 6 or 9 building if— (i) the floor area of the unit is more than 300m² and (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 (f) in every room or space to which there is public access in every storey in a Class 6 or 9b building if— (i) the floor area in that storey is more than 300m²; or (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 (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 (iv) the storey provides a path of travel from any other storey required by (i), (ii) or (iii) to have emergency lighting.	
E4D4 ***Design and operation of emergency lighting***	Every required emergency lighting system must comply with AS/NZS 2293.1.	**Compliance Readily Achievable** Details and design certification from the Electrical Consultant to be submitted with the CC application demonstrating compliance.
E4D5 ***Exit signs***	An exit sign must be clearly visible to persons approaching the exit, and must be installed on, above or adjacent to each— (a) door providing direct egress from a storey to— (i) an enclosed stairway, passageway or ramp serving as a required exit; and (ii) an external stairway, passageway or ramp serving as a required exit; and (iii) an external access balcony leading to a required exit; and (b) door from an enclosed stairway, passageway or ramp at every level of discharge to a road or open space; and (c) horizontal exit; and (d) door serving as, or forming part of, a required exit in a storey required to be provided with emergency lighting in accordance with E4D2.	**Compliance Readily Achievable** Details and design certification from the Electrical Consultant to be submitted with the CC application demonstrating compliance.

E4D6 ***Direction signs***	If an exit is not readily apparent to persons occupying or visiting the building, then exit signs must be installed— (a) in appropriate positions in corridors, hallways, lobbies, foyers, auditoria, and the like, indicating the direction to a required exit.	**Compliance Readily Achievable** Details and design certification from the Electrical Consultant to be submitted with the CC application demonstrating compliance.
E4D8 ***Design and operation of exit signs***	Every required exit sign must— (a) comply with— (i) AS/NZS 2293.1; or (ii) for a photoluminescent exit sign, Specification 25; and (b) be clearly visible at all times when the building is occupied by any person having the right of legal entry to the building.	**Further Information / Clarification Required at CC Application Stage** Consideration may need to be given to a **Performance Solution** from a Fire Engineer for increasing the mounting height of exit & direction signs in the Retail Building, subject to input from the Principal Certifier, Fire Engineer & Electrical Consultant at CC Application Stage. Details and design certification from the Electrical Consultant to be submitted with the CC application demonstrating compliance.
Section F – Health and Amenity		
Part F1 – Surface Water Management, Rising Damp and External Waterproofing		
F1D3 ***Stormwater drainage***	Stormwater drainage must be designed and constructed in accordance with AS/NZS 3500.3	**Compliance Readily Achievable** Details and design certification from the Civil Engineer to be submitted with the CC application demonstrating compliance.
F1D4 ***Exposed joints***	Exposed joints in the drainage surface on a roof, balcony, podium or similar horizontal surface part of a building must— (a) be protected in accordance with Section 2.9 of AS 4654.2; and (b) not be located beneath or run through a planter box, water feature or similar part of the building.	**Note**
F1D5 ***External waterproofing membranes***	A roof, balcony, podium or similar horizontal surface part of a building must be provided with a waterproofing membrane— (a) consisting of materials complying with AS 4654.1; and (b) designed and installed in accordance with AS 4654.2.	**Note**
F1D6 ***Damp-proofing***	• Except for a building covered by (3), moisture from the ground must be prevented from reaching—	**Compliance Readily Achievable** Details and design certification from the Civil /

	(a) the lowest floor timbers and the walls above the lowest floor joists; and (b) the walls above the damp-proof course; and (c) the underside of a suspended floor constructed of a material other than timber, and the supporting beams or girders. • Where a damp-proof course is provided, it must consist of— (a) a material that complies with AS/NZS 2904; or (b) impervious sheet material in accordance with AS 3660.1. • The following buildings need not comply with (1): (a) A Class 7 or 8 building where in the particular case there is no necessity for compliance. (b) A garage, tool shed, sanitary compartment, or the like, forming part of a building used for other purposes. (c) An open spectator stand or open-deck carpark.	Structural Engineer to be submitted with the CC application demonstrating compliance.
F1D7 ***Damp-proofing of floors on the ground***	• 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. • The requirements of (1) do not apply where— (a) weatherproofing is not required; or (b) the floor is the base of a stair, lift or similar shaft which is adequately drained by gravitation or mechanical means.	**Compliance Readily Achievable** Details and design certification from the Civil / Structural Engineer to be submitted with the CC application demonstrating compliance.
F1D8 ***Subfloor ventilation***	• Subfloor spaces must— (a) be provided with openings in external walls and internal subfloor walls in accordance with Table F1D8 for the climatic zones given in Figure F1D8; and (b) have clearance between the ground surface and the underside of the lowest horizontal member in the subfloor in accordance with Table F1D8. • In addition to (1), a subfloor space must— (a) be cleared of all building debris and vegetation; and (b) have the ground beneath the suspended floor graded to prevent surface water ponding under the building; and (c) contain no dead air spaces; and (d) have openings evenly spaced as far as practicable; and (e) have openings placed not more than 600 mm in from corners.	**Compliance Readily Achievable** Details and design certification from the Architect & Civil Engineer to be submitted with the CC application demonstrating compliance where applicable.

	• In double leaf masonry walls, openings specified in (1) must be provided in both leaves of the masonry, with openings being aligned to allow an unobstructed flow of air. • Openings in internal subfloor walls specified in (1) must have an unobstructed area equivalent to that required for the adjacent external openings. • Where the ground or subfloor space is excessively damp or subject to frequent flooding, in addition to the requirements of (1) to (4)— (a) the subfloor ventilation required in (1) must be increased by 50%; or (b) the ground within the subfloor space must be sealed with an impervious membrane; or (c) subfloor framing must be— (i) where above ground, above-ground durability Class 1 or 2 timbers or H3 preservative treated timbers in accordance with AS 1684.2, AS 1684.3 or AS 1684.4; or (ii) where in ground, in-ground durability Class 1 or 2 timbers or H5 preservative treated timbers in accordance with AS 1684.2, AS 1684.3 or AS 1684.4; or (iii) steel in accordance with NASH Standard 'Residential and Low-Rise Steel Framing' Part 2	
Part F2 – Wet Areas and Overflow Protection		
F2D2 ***Wet area construction***	In a Class 5, 6, 7, 8 or 9 building, building elements in a bathroom or shower room, a slop hopper or sink compartment, a laundry or sanitary compartment must— (a) be water resistant or waterproof in accordance with Specification 26; and (b) comply with AS 3740, as if they were in a Class 2 or 3 building or a Class 4 part of a building.	**Compliance Readily Achievable** Details and design certification from the Architect to be submitted with the CC application demonstrating compliance.
F2D3 ***Rooms containing urinals***	• Where a slab or stall type urinal is installed— (a) the floor surface of the room containing the urinal must be an impervious material; and (i) where no step is installed, must— (A) be graded to the urinal channel for a distance of 1.5 m from the urinal channel; and (B) have the remainder of the floor graded to a floor waste; and (ii) where a step is installed— (A) the step must have an impervious surface and be graded to the urinal channel; and (B) the floor behind the step must be graded to a floor waste; and	**Note**

	(b) the junction between the floor surface and the urinal channel must be impervious. • Where a wall hung urinal is installed— (a) the wall must be surfaced with impervious material extending from the floor to the top of the urinal and not less than 225 mm on each side of the urinal; and (b) the floor must be surfaced with an impervious material and be graded to a floor waste. • In a room with timber or steel-framed walls and containing a urinal— (a) the wall must be surfaced with an impervious material extending from the floor to not less than 100 mm above the floor surface; and (b) the junction of the floor surface and the wall surface must be impervious.	
F2D4 ***Floor wastes***	Where a floor waste is installed— (a) the minimum continuous fall of a floor plane to the waste must be 1:80; and (b) the maximum continuous fall of a floor plane to the waste must be 1:50.	**Compliance Readily Achievable** Where a new floor waste is installed within the building (regardless of whether it is required under the BCA), it must have falls to the waste between 1:50 and 1:80. Details and design certification from the Architect to be submitted with the CC application demonstrating compliance. Note: As AS1428.1 states the fall to an accessible sanitary facility must be 1:80 to 1:100 (except within the shower recess which must be 1:60 to 1:80), the falls the accessible sanitary facility must be exactly 1:80.
Part F3 – Roof and Wall Cladding		
F3P1 ***Weatherproofing***	A roof and external wall (including openings around windows and doors) must prevent the penetration of water that could cause— (a) unhealthy or dangerous conditions, or loss of amenity for occupants; and (b) undue dampness or deterioration of building elements.	**Performance Solution Required** A Performance Solutions is required from a suitably qualified consultant to demonstrate how the external walls (particularly the precast panels and FC cladding) prevent the penetration of water.
F3D2 ***Roof coverings***	A roof must be covered with— (a) roof tiles complying with AS 2049, fixed in accordance with AS 2050; or	**Compliance Readily Achievable**

	(b) metal sheet roofing complying with AS 1562.1; or (c) plastic sheet roofing designed and installed in accordance with AS 1562.3; or (d) terracotta, fibre-cement and timber slates and shingles designed and installed in accordance with AS 4597, except in cyclonic areas; or (e) an external waterproofing membrane complying with F1D5.	Details and design certification from the Architect to be submitted with the CC application demonstrating compliance.
F3D3 ***Sarking***	Sarking-type material used for weatherproofing of roofs and walls must comply with AS 4200.1 and AS 4200.2.	**Compliance Readily Achievable** Details and design certification from the Architect to be submitted with the CC application demonstrating compliance.
F3D4 ***Glazed assemblies***	• Subject to (2) and (3), the following glazed assemblies in an external wall, must comply with AS 2047 requirements for resistance to water penetration: (a) Windows. (b) Sliding and swinging glazed doors with a frame, including French and bi-fold doors with a frame. (c) Adjustable louvres. (d) Shopfronts. (e) Window walls with one piece framing. • The following buildings need not comply with (1): (a) A Class 7 or 8 building where in the particular case there is no necessity for compliance. (b) A garage, tool shed, sanitary compartment, or the like, forming part of a building used for other purposes, except where the construction of the garage, tool shed, sanitary compartment or the like contributes to the weatherproofing of the other part of the building. (c) An open spectator stand or open-deck carpark. • The following glazed assemblies need not comply with (1): (a) All glazed assemblies not in an external wall. (b) Revolving doors. (c) Fixed louvres. (d) Skylights, roof lights and windows in other than the vertical plane. (e) Sliding and swinging glazed doors without a frame.	**Compliance Readily Achievable** Details and design certification from the Architect to be submitted with the CC application demonstrating compliance.

	(f) Windows constructed on site and architectural one-off windows, which are not design tested in accordance with AS 2047. (g) Second-hand windows, re-used windows and recycled windows. (h) Heritage windows.	
F3D5 ***Wall cladding***	• External wall cladding must comply with one or a combination of the following: (a) Masonry, including masonry veneer, unreinforced and reinforced masonry: AS 3700. (b) Autoclaved aerated concrete: AS 5146.3. (c) Metal wall cladding: AS 1562.1. • The following buildings need not comply with (1): (a) A Class 7 or 8 building where in the particular case there is no necessity for compliance. (b) A garage, tool shed, sanitary compartment, or the like, forming part of a building used for other purposes, except where the construction of the garage, tool shed, sanitary compartment or the like contributed to the weatherproofing of another part of the building that is required to be weatherproofed. (c) An open spectator stand or open deck carpark.	**Compliance Readily Achievable** Details and design certification from the Architect to be submitted with the CC application demonstrating compliance.
Part F4 - Sanitary and Other Facilities		
F4D3 ***Calculation of number of occupants and facilities***	• The number of persons accommodated must be calculated according to D2D18 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. • In calculating the number of sanitary facilities to be provided under F4D2 and F4D4, a unisex facility required for people with a disability (other than a facility provided under F4D12) 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 products.	**Note** Refer to Clause D2D18 above.
F4D4 ***Facilities in Class 3 to 9 buildings***	• Except where permitted by Clauses below, separate sanitary facilities for males and females must be provided for Class 3, 5, 6, 7, 8 or 9 buildings in accordance with Tables F4D4a, F4D4b, F4D4c, F4D4d, F4D4e, F4D4f, F4D4g, F4D4h, F4D4i, F4D4j, F4D4k and F4D4l, as appropriate.	**Further Information / Clarification Required at CC Application Stage** The proposed sanitary facilities can cater to the following staff populations:

	• If not more than 10 people are employed, a unisex facility may be provided instead of separate facilities for each sex. • 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. • 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. • Adequate means of disposal of sanitary products must be provided in sanitary facilities for use by females.	• Tenancy 3 – 5 Male staff and 5 Female staff (see **Note 1** below) • Tenancy 4 – 25 Male staff and 25 Female staff (see **Note 2** below) In this regard, the staff population of tenancy is required to be confirmed at CC Application Stage to determine if sufficient sanitary facilities are proposed. **Note 1:** Only the accessible unisex sanitary facility has been relied upon for assessing the above staff populations in Tenancy 3, noting only 1 ambulant cubicle is proposed which is non-compliant with F4D5 (which requires separate Male and Female ambulant cubicles) and F4D3(2) (which requires equal provision for Males and Females). Where an additional ambulant cubicle is provided, it will cater to 20 Male staff and 20 Female staff. **Note 2:** Although the Female sanitary facilities in Tenancy 4 can cater to a greater population than that listed above, the max. Male population has been applied to the Female population in accordance with F4D3(2), which states "Unless the premises are used predominantly by one sex, sanitary facilities must be provided on the basis of equal numbers of males and females". Note 3: In accordance with Clause F4D9, some Male pans have been counted in place of urinals.
F4D5 ***Accessible sanitary facilities***	In a building required to be accessible— • accessible unisex sanitary compartments must be provided in accessible parts of the building in accordance with F4D6; and • accessible unisex showers must be provided in accordance with F4D7; and	**Note** Compliant accessible and ambulant sanitary facilities are required in Retail Building. Refer to separate Access Report for further

	• 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, not less than one sanitary compartment suitable for a person with an ambulant disability for use by males and one sanitary compartment suitable for a person with an ambulant disability for use by females, must be provided; and • an accessible unisex sanitary compartment must contain a closet pan, washbasin, shelf or bench top and adequate means of disposal of sanitary products; and • the circulation spaces, fixtures and fittings of all accessible sanitary facilities provided in accordance with F4D6 and F4D7 must comply with the requirements of AS 1428.1; and • an accessible unisex sanitary facility must be located so that it can be entered without crossing an area reserved for one sex only; and • where two or more of each type of accessible unisex sanitary facility are provided, the number of left and right handed mirror image facilities must be provided as evenly as possible; and • 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 • an accessible unisex sanitary compartment or an accessible unisex shower need not be provided on a storey or level that is not required by D4D4(f) to be provided with a passenger lift or ramp complying with AS 1428.1.	information associated with this Clause.
F4D6 ***Accessible unisex sanitary compartments***	The minimum number of accessible unisex sanitary compartments for each class of building is required to achieve compliance with the requirements of this clause.	**Note** Compliant accessible and ambulant sanitary facilities are required in the Retail Building. Refer to separate Access Report for further information associated with this Clause.
F4D8 ***Construction of sanitary compartments***	• Other than in an early childhood centre, sanitary compartments must have doors and partitions that separate adjacent compartments and extend— (a) from floor level to the ceiling in the case of a unisex facility; or (b) to a height of not less than 1.5 m above the floor if primary school children are the principal users; or (c) 1.8 m above the floor in all other cases.	**Compliance Readily Achievable** Details and design certification from the Architect to be submitted with the CC application demonstrating compliance.

	• The door to a fully enclosed sanitary compartment must— (a) open outwards; or (b) slide; or (c) be readily removable from the outside of the sanitary compartment, unless there is a clear space of at least 1.2 m, measured in accordance with Figure F4D8, between the closet pan within the sanitary compartment and the doorway.	
F4D9 ***Interpretation: urinals and washbasins***	• A urinal may be— (a) an individual stall or wall-hung urinal; or (b) each 600 mm length of a continuous urinal trough; or (c) a closet pan used in place of a urinal. • A washbasin may be— (a) an individual basin; or (b) a part of a hand washing trough served by a single water tap.	**Note**
F4D12 ***Accessible adult change facilities***	• One unisex accessible adult change facility must be provided in an accessible part of a— (a) Class 6 building that is a shopping centre having a design occupancy of not less than 3,500 people, calculated on the basis of the floor area and containing a minimum of 2 sole-occupancy units; and (b) Class 9b sports venue or the like that— (i) has a design occupancy of not less than 35,000 spectators; or (ii) contains a swimming pool that has a perimeter of not less than 70 m and that is required by D4D2 to be accessible; and (c) museum, art gallery or the like having a design occupancy of not less than 1,500 patrons; and (d) theatre or the like having a design occupancy of not less than 1,500 patrons; and (e) passenger use area of an airport terminal building within an airport that accepts domestic and/or international flights that are public transport services as defined in the Disability Standards for Accessible Public Transport 2002. • Accessible adult change facilities required by (1)— (a) must be constructed in accordance with Specification 27; and (b) cannot be combined with another sanitary compartment. • For the purposes of (1), design occupancy must be calculated in accordance with D2D18, but excluding any area that— (a) can only be accessed by staff, employees, contractors, maintenance personnel and the like; or	**Note** The population calculated in accordance with Table D2D18 for the floor area (other than areas that can only be accessed by staff, employees, contractors, maintenance personnel and the like) is approximately 920 persons.

	(b) is subject to an exemption under D4D5.	
Part F5 – Room Heights		
F5D2 ***Height of rooms and other spaces***	• The height of rooms and other spaces in a Class 5, 6, 7 or 8 building must be not less than— (a) except as allowed below - 2.4 m; and (b) a corridor, passageway, or the like - 2.1m. • The height of rooms and other spaces in any building must not be less than— (a) for a bathroom, shower room, sanitary compartment, other than an accessible adult change facility, airlock, tea preparation room, pantry, store room, garage, car parking area, or the like — 2.1 m; and (b) for a commercial kitchen — 2.4 m; and (c) 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; and (d) for a required accessible adult change facility — 2.4 m.	**Compliance Readily Achievable** Details and design certification from the Architect to be submitted with the CC application demonstrating compliance.
Part F6 – Light and Ventilation		
F6D5 ***Artificial lighting***	• Artificial lighting must be provided— (a) in required stairways, passageways, and ramps; and (b) if natural light of a standard equivalent to that required by F6D3 is not available, and the periods of occupation or use of the room or space will create undue hazard to occupants seeking egress in an emergency, in— (i) a Class 4 part of a building — to sanitary compartments, bathrooms, shower rooms, airlocks and laundries; and (ii) a Class 2 building — to sanitary compartments, bathrooms, shower rooms, airlocks, laundries, common stairways and other spaces used in common by the occupants of the building; and (iii) Class 3, 5, 6, 7, 8 and 9 buildings — to all rooms that are frequently occupied, all spaces required to be accessible, all corridors, lobbies, internal stairways, other circulation spaces and paths of egress. • The artificial lighting system must comply with AS/NZS 1680.0.	**Compliance Readily Achievable** Details and design certification from the Electrical Consultant to be submitted with the CC application demonstrating compliance.
F6D6	A habitable room, office, shop, factory, workroom, sanitary compartment, bathroom,	**Compliance Readily Achievable**

Ventilation of rooms	shower room, laundry and any other room occupied by a person for any purpose must have— (a) natural ventilation complying with F6D7; or (b) a mechanical ventilation or air-conditioning system complying with AS 1668.2.	Details and design certification from the Mechanical Consultant to be submitted with the CC application demonstrating compliance.
F6D7 ***Natural ventilation***	Natural ventilation provided in accordance with F6D6(a) must consist of openings, windows, doors or other devices which can be opened— (a) with a ventilating area not less than 5% of the floor area of the room required to be ventilated and open to— (i) a suitably sized court, or space open to the sky; or (ii) an open verandah, carport, or the like; or (iii) an adjoining room in accordance with F6D8.	**Compliance Readily Achievable** Details and design certification from the Mechanical Consultant / Architect to be submitted with the CC application demonstrating compliance where applicable.
F6D8 ***Ventilation borrowed from adjoining room***	Natural ventilation to a room may come through a window, opening, 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— • 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 • 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 the room to be ventilated, measured not more than 3.6 m above the floor; and (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 • the ventilating areas specified in (a) and (b) may be reduced as appropriate if direct natural ventilation is provided from another source.	**Note** Refer comments under Clause F6D6 above.

F6D9 ***Restriction on location of sanitary compartments***	A sanitary compartment must not open directly into— (a) a kitchen or pantry; or (b) a public dining room or restaurant; or (c) a dormitory in a Class 3 building; or (d) a room used for public assembly (which is not an early childhood centre, primary school or open spectator stand); or (e) a workplace normally occupied by more than one person.	**Further Information / Clarification Required at CC Application Stage** The amenities in the Back of House area of Tenancy 4 opens directly into a workplace, and will require an airlock, hallway or screen in accordance with F6D10 below. Details and design certification from the Architect to be submitted with the CC application demonstrating compliance.
F6D10 ***Airlocks***	If a sanitary compartment is prohibited under F6D9 from opening directly to another room— (a) in a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building— (i) access must be by an airlock, hallway or other room; or (ii) the sanitary compartment must be provided with mechanical exhaust ventilation; and (b) in a Class 5, 6, 7, 8 or 9 building (which is not an early childhood centre, primary school or open spectator stand)— (i) access must be by an airlock, hallway or other room with a floor area of not less than 1.1 m2 and fitted with self-closing doors at all access doorways; or (ii) the sanitary compartment must be provided with mechanical exhaust ventilation and the doorway to the room adequately screened from view.	**Further Information / Clarification Required at CC Application Stage** Refer to comments under Clause F6D9 above.
F6D11 ***Carparks***	Every storey of a carpark, except an open-deck carpark, must have— (a) a system of mechanical ventilation complying with AS 1668.2; or (b) a system of natural ventilation complying with Section 4 of AS 1668.4.	**Compliance Readily Achievable** Details and design certification from the Mechanical Consultant to be submitted with the CC application demonstrating compliance.
Part G1 – Minor Structures and Components		
G1D3 ***Refrigerated chambers, strong-rooms and vaults***	• A refrigerated or cooling chamber, strongroom or vault that is of sufficient size for a person to enter must have— (a) a door which is capable of being opened by hand from inside without a key; and (b) internal lighting controlled only by a switch which is located adjacent to the entrance doorway inside the chamber, strongroom or vault; and	**Compliance Readily Achievable** Details and design certification from the Architect to be submitted with the CC application demonstrating compliance for the Freezer & Chiller in Tenancy 3.

	(c) an indicator lamp positioned outside the chamber, strongroom or vault which is illuminated when the interior lights required by (b) are switched on; and (d) an alarm that is— (i) located outside but controllable only from within the chamber, strongroom or vault; and (ii) able to achieve a sound pressure level outside the chamber, strongroom or vault of 90 dB(A) when measured 3 m from the sounding device. • A door required by (1)(a) in a refrigerated or cooling chamber must have a doorway with a clear width of not less than 600 mm and a clear height not less than 1.5 m.	
Section J – Energy Efficiency		
Part J1 ***Energy efficiency performance requirements***	This Part sets the thermal performance properties of building fabric, the energy efficiency of key energy using equipment and the features a building must have to facilitate the future installation of distributed energy resources.	**Detailed Assessment Required by Others at CC Application Stage** Section J Consultant to advise on specific requirements to achieve compliance.
Part J2 ***Energy efficiency***	This Part sets out the application of the Deemed-to-Satisfy Provisions in Parts J3 to J9.	**Detailed Assessment Required by Others at CC Application Stage** Section J Consultant to advise on specific requirements to achieve compliance.
Part J4 ***Building fabric***	This part sets out provisions for the building envelope including roofs, ceilings, roof lights, walls, glazing and floors.	**Detailed Assessment Required by Others at CC Application Stage** Section J Consultant to advise on specific requirements to achieve compliance.
Part J5 ***Building sealing***	This part sets out provisions for the sealing of a building's glazing, doors, exhaust fans and the like in order to increase thermal comfort for occupants and reduce the energy consumption of any installed air conditioning systems.	**Detailed Assessment Required by Others at CC Application Stage** Section J Consultant to advise on specific requirements to achieve compliance.
Part J6 ***Air-conditioning and ventilation***	This part sets out the provisions for the efficiency and control of air-conditioning, space heating and ventilation equipment, the efficiency, sealing and insulation requirements for ductwork systems containing fans, and for the efficiency and insulation of pipework and pump systems.	**Detailed Assessment Required by Others at CC Application Stage** Section J / Mechanical Consultant to advise on requirements associated with this Part.

Part J7 ***Artificial lighting and power***	This part sets out provisions for the design and configuration of artificial lighting and power, boiling and chilled water units, lifts and escalators and moving walkways.	**Detailed Assessment Required by Others at CC Application Stage** Section J / Electrical Consultant to advise on requirements associated with this Part.
Part J8 ***Heated water supply and swimming pool and spa pool plant***	This part out provisions for ensuring water heaters, swimming pool and spa heaters and pump systems use energy efficiently.	**Detailed Assessment Required by Others at CC Application Stage** Section J / Hydraulic Consultant to advise on requirements associated with this Part.
Part J9 **Energy monitoring and on-site distributed energy resources**	This part sets out provisions that enable the monitoring of energy use (other than for billing purposes) and facilitate easy retrofit of renewable energy and electric vehicle charging equipment.	**Detailed Assessment Required by Others at CC Application Stage** Section J / Electrical Consultant to advise on requirements associated with this Part. Note Consideration should be given to the requirements of JDJ4 for Facilities for electric vehicle charging equipment associated with the Covered Carpark Structure.

4. Conclusion

This report contains a review of the proposed development at Lot 202, Goonoo Goonoo Road, Tamworth, against the relevant provisions of BCA 2022. Arising from the review, it is considered that the proposed development can readily achieve compliance with the relevant provisions of the BCA, subject to the requirements of this report being implemented and further detailed review at CC application stage. Where compliance matters are proposed to comply with the Performance Requirements (rather than DtS Provisions), the development of a Performance Solution Report will be required.

Appendix 1 – Proposed Fire Safety Measures

The following table is a list of the proposed fire safety measures within the building. These measures may be subject to further change pending the outcomes of the final Fire Safety Engineering Report. Additionally, it is recommended that a copy of the current Annual Fire Safety Schedule be provided for review & inclusion in the below table.

It is recommended that the below table is issued to the relevant contractors / consultants for review to confirm the 'Proposed' Fire Safety Measures are consistent with the measures proposed as part of their scope of works. Fire Safety Measures which are incorrectly listed or omitted will create an inconsistency with the Construction Certificate (CC) and Occupation Certificate (OC) schedules and may require an amended CC to be issued by the Principal Certifier.

Statutory Fire Safety Measure	Standard of Performance	Proposed
Emergency Lighting	BCA Clause E4D2 & E4D4 AS 2293.1 – 2018	✓
Exit Signs	BCA Clauses E4D5, NSW E4D6 & E4D8 AS 2293.1 – 2018	✓
Fire Dampers	BCA Clause C4D15 AS 1668.1 – 2015 & AS 1682.1 & 2 – 2015 and Manufacturer's Specification	TBC
Fire Doors	BCA Clauses C3D13 & C3D14 AS 1905.1 – 2015 and Manufacturer's Specification	TBC
Fire Hose Reels	BCA Clause E1D3 AS 2441 – 2005	✓
Fire Hydrant Systems	BCA Clause E1D2 AS 2419.1 – 2021	✓
Fire Seals	BCA Clause C4D15 AS 1530.4 – 2014 & AS 4072.1 – 2014 and Manufacturer's Specification	TBC
Fire Shutters	BCA Clause C4D5 & Spec 12 AS 1905.2 – 2005	TBC
Lightweight Construction	BCA Clause C2D9 AS 1530.4 – 2014 and Manufacturer's Specification	TBC
Mechanical Air Handling Systems (Automatic Shutdown)	BCA Clause E2D3	TBC
Paths of Travel	EP&A Regulation Clause 109	✓
Portable Fire Extinguishers	BCA Clause E1D14 AS 2444 – 2001	✓
Required Exit Doors (Power Operated)	BCA Clause D3D24	TBC
Smoke Dampers	BCA Clause E2D3 AS/NZS 1668.1 – 2015	TBC
Smoke Detectors	BCA Clauses E2D3 AS 1670.1 – 2018	TBC
Warning & Operational Signs	BCA Clause D4D7 AS 1905.1 – 2015	✓
Fire Engineered Performance Solutions	TBC	TBC

Appendix 2 – Required FRLs for Type B Construction in accordance with Specification 5 – Retail Building

Type B Construction

Table S5C21a: Type B construction: FRL of loadbearing parts of external walls

Distance from a *fire-source feature*	FRL (in minutes) *Structural adequacy / Integrity / Insulation*			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Less than 1.5 m	90/90/90	120/120/120	180/180/180	240/240/240
1.5 to less than 3 m	90/60/30	120/90/60	180/120/90	240/180/120
3 m to less than 9 m	90/30/30	120/30/30	180/90/60	240/90/60
9 m to less than 18 m	90/30/–	120/30/–	180/60/–	240/60/–
18 m or more	–/–/–	–/–/–	–/–/–	–/–/–

Table S5C21b: Type B construction: FRL of non-loadbearing parts of external walls

Distance from a *fire-source feature*	FRL (in minutes): *Structural adequacy / Integrity / Insulation*			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Less than 1.5 m	–/90/90	–/120/120	–/180/180	–/240/240
1.5 m to less than 3 m	–/60/30	–/90/60	–/120/90	–/180/120
3 m or more	–/–/–	–/–/–	–/–/–	–/–/–

Table S5C21c: Type B construction: FRL of external columns not incorporated in an external wall

Distance from a *fire-source feature*	FRL (in minutes): *Structural adequacy / Integrity / Insulation*			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Loadbearing column — less than 18 m	90/–/–	120/–/–	180/–/–	240/–/–
Loadbearing column — 18 m or more	–/–/–	–/–/–	–/–/–	–/–/–
Non-*loadbearing* column	–/–/–	–/–/–	–/–/–	–/–/–

Table S5C21d: Type B construction: FRL of common walls and fire walls

Wall type	FRL (in minutes): *Structural adequacy / Integrity / Insulation*			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Loadbearing or non-*loadbearing*	90/90/90	120/120/120	180/180/180	240/240/240

Table S5C21e: Type B construction: FRL of loadbearing internal walls

Location	FRL (in minutes): *Structural adequacy / Integrity / Insulation*			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Fire-resisting lift and stair *shafts*	90/90/90	120/120/120	180/120/120	240/120/120
Bounding *public corridors*, public lobbies and the like	60/60/60	120/–/–	180/–/–	240/–/–
Between or bounding *sole-occupancy units*	60/60/60	120/–/–	180/–/–	240/–/–

Table S5C21f: Type B construction: FRL of non-loadbearing internal walls

Location	FRL (in minutes): *Structural adequacy / Integrity / Insulation*			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Fire-resisting lift and stair *shafts*	–/90/90	–/120/120	–/120/120	–/120/120
Bounding *public corridor*, public lobbies and the like	–/60/60	–/–/–	–/–/–	–/–/–
Between or bounding *sole-occupancy units*	–/60/60	–/–/–	–/–/–	–/–/–

Table S5C21g: Type B construction: FRL of other building elements not covered by Tables S5C21a to S5C21f

Building element	FRL (in minutes): *Structural adequacy / Integrity / Insulation*			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Other *loadbearing* internal walls and columns	60/–/–	120/–/–	180/–/–	240/–/–
Roofs	–/–/–	–/–/–	–/–/–	–/–/–

Appendix 3 – Definitions

Accessible

Means having features to enable use by people with a disability.

Accessway

A continuous accessible path of travel (as defined in AS 1428.1) to, into or within a building.

Aluminium Composite Panel (ACP)

Flat or profiled aluminium sheet material in composite with any type of materials.

Construction Certificate (CC)

Building Approval issued by the Certifying Authority pursuant to Part 6 of the EP&A Act 1979.

Deemed to Satisfy Provisions (DtS)

BCA Provisions which are deemed to satisfy the Performance Requirements.

Effective height

The vertical distance between the floor of the lowest storey included in the calculation of rise in storeys and the floor of the topmost storey (excluding the topmost storey if it contains only heating, ventilating, lift or other equipment, water tanks or similar service units).

Exit

Means—

(a) Any, or any combination of the following if they provide egress to a road or open space:

(i) An internal or external stairway.

(ii) A ramp.

(iii) A fire-isolated passageway.

(iv) A doorway opening to a road or open space; or

(b) A horizontal exit or a fire-isolated passageway leading to a horizontal exit.

Fire Compartment

Either—

(a) the total space of a building; or

(b) when referred to in—

(i) the Performance Requirements — any part of a building separated from the remainder by barriers to fire such as walls and/or floors having an appropriate resistance to the spread of fire with any openings adequately protected; or

(ii) the Deemed-to-Satisfy Provisions — any part of a building separated from the remainder by walls and/or floors each having an FRL not less than that required for a fire wall for that type of construction and where all openings in the separating construction are protected in accordance with the Deemed-to-Satisfy Provisions of the relevant Part.

Fire Resistance Level

The grading periods in minutes determined in accordance with Specifications 1 and 2, for the following criteria—

(a) structural adequacy; and

(b) integrity; and

(c) insulation, and expressed in that order

Fire Source Feature

Any one or more of the following:

(a) The far boundary of a road, river, lake or the like adjoining the allotment.

(b) A side or rear boundary of the allotment.

(c) An external wall of another building on the allotment which is not a Class 10 building.

National Construction Code 2022 Volume One – Building Code of Australia (the BCA)

Document published on behalf of the Australian Building Codes Board. The BCA contains technical design and construction requirements for all Class 2 to 9 buildings (multi-residential, commercial, industrial, and public assembly buildings) and their associated structures. throughout Australia and is adopted in New South Wales (NSW) under the provisions of the EPA Act and Regulation. Building regulatory legislation stipulates that compliance with the BCA Performance Requirements must be attained and hence this reveals BCA's performance-based format.

Occupation Certificate (OC)

Building Occupation Approval issued by the Principal Certifying Authority pursuant to Part 6 of the EPA Act 1979.

Occupiable Outdoor Area

A space on a roof, balcony or similar part of a building—

(a) that is open to the sky; and

(b) to which access is provided, other than access only for maintenance; and

(c) that is not open space or directly connected with open space.

Open Space

A space on the allotment, or a roof or similar part of a building adequately protected from fire, open to the sky and connected directly with a public road.

Performance Solution

An alternative design solution that demonstrates compliance with the Performance Requirements of the BCA in lieu of compliance with the Deemed to Satisfy provisions.

Performance Requirement

A Building Solution will comply with the BCA if it satisfies the Performance Requirements. A Performance requirement states the level of performance that a Building Solution must meet.

Compliance with the Performance Requirements can only be achieved by-

(a) complying with the DtS Provisions; or
(b) formulating an Alternative Solution which-
    i. complies with the Performance Requirements; or
    ii. is shown to be at least equivalent to the DtS Provisions; or
(c) a combination of (a) and (b).

Relevant Date

In relation to Section 19 of the Environmental Planning & Assessment (Development Certification and Fire Safety) Regulation 2021 is—

(a) the day on which the application for the construction certificate was made, or
(b) if the building is a multi storey building and a construction certificate has been issued under the same development consent for building work involving the entrance floor—the day on which the application for that construction certificate was made.

Rise in Storeys

The greatest number of storeys calculated in accordance with C2D3 of Volume One.

Soul Occupancy Unit

A room or other part of a building for occupation by one or joint owner, lessee, tenant, or other occupier to the exclusion of any other owner, lessee, tenant, or other occupier and includes—

(a) a dwelling; or

(b) a room or suite of rooms in a Class 3 building which includes sleeping facilities; or

(c) a room or suite of associated rooms in a Class 5, 6, 7, 8 or 9 building; or

(d) a room or suite of associated rooms in a Class 9c building, which includes sleeping facilities and any area for the exclusive use of a resident.

Storey

A space within a building which is situated between one floor level and the floor level next above, or if there is no floor above, the ceiling or roof above, but not—

(a) a space that contains only—
  (i) a lift shaft, stairway or meter room; or
  (ii) a bathroom, shower room, laundry, water closet, or other sanitary compartment; or
  (iii) accommodation intended for not more than 3 vehicles; or
  (iv) a combination of the above; or
(b) a mezzanine.