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# 29 Dobroyd Road, Balgowlah

# Mixed Commercial / Boarding House Building

# NCC 2022 (BCA Volume 1) Assessment Report for DA Submission

Prepared for: Woodhouse & Danks Pty Ltd
Project No: M711, Rev 3
**12 May 2023**

# I N D E X

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**Page No.**

| REPORT REVISION STATUS | | |
|---|---|---|
| **REVISION** | **DATE** | **STATUS** |
| 1 | 8 November 2021 | Draft for DA Submission |
| 2a | 19 January 2022 | Review Updated plans for DA Submission |
| 3 | 12 May 2023 | Update assessment to BCA 2022 and review Updated plans for DA Submission |

Signature ……..

Graham Scheffers
GRS Building Reports Pty Ltd
Department of Fair Trading – Registered Certifier (unrestricted)
Accreditation No. 0364 (BDC)
Date: 12 May 2023

# Executive Summary

The building works proposed comprise a 3 storey Mixed Commercial / Boarding House building located at 29 Dobroyd Road, Balgowlah.

The site is situated with a street frontage to Dobroyd Road to the north, to Commerce Lane to the south and east, with adjoining premises to the western boundary. The building has pedestrian access from Dobroyd Road, with vehicle access and an additional pedestrian access from Commerce Lane.

The proposal contains 3 storeys as follows:

- Ground Floor - Single Retail tenancy, parking for 3 vehicles, motor bike parking, storage areas, accessible sanitary facility, lift lobby.
- Upper (middle) Floor - Six (6) Boarding House Rooms.
- First (top) Floor - Four (4) Boarding House Rooms and a Common Room.

A stairway connects the Ground Floor entry lobby accessed from Dobroyd Road to the Upper (middle) Floor and the First (top) Floor. A separate stairway provides a means of access and egress from the Ground Floor carpark to Commerce Lane at the rear of the building. Adjacent to this stairway is a separate gate that provides a means of access and egress from the Upper (middle) Floor to Commerce Lane at the rear of the building. A lift connects each level of the building.

An assessment of the proposed building works has been undertaken in accordance with the relevant provisions of the NCC / Building Code of Australia 2022 Volume 1 (BCA).

Provisions where further clarification or documentation is necessary for submission with the Construction Certificate Documentation is detailed in Annexure A of this Report.

Section 3.1 of this Report provides details of the fire rating required for Type A Construction.

The Report includes the following Annexures:

1. Annexure A – BCA Clause by Clause Deemed-To-Satisfy Assessment (DtS) of the subject building.
2. Annexure B – Schedule of Essential Fire Safety Measures.

# 1. Introduction

## 1.1 Background

The building works proposed comprise a 3 storey Mixed Commercial / Boarding House building located at 29 Dobroyd Road, Balgowlah.

GRS Building Reports Pty Ltd has been engaged by Woodhouse & Danks Pty Ltd to undertake a BCA Assessment Report for the subject building works for the purposes of reviewing the Development Application Architectural Design Drawings.

## 1.2 Aim

The aim of this Report is to:

1. Undertake an assessment of the proposed building works as detailed in the Development Application Architectural Design Drawings for the purposes of submission with the DA in accordance with the relevant provisions of the NCC / Building Code of Australia 2022, Volume 1 (BCA), i.e. Undertake a BCA Clause-by-Clause assessment as detailed in Annexure A.
2. Identify proposed Essential Fire Safety Measures applicable to the subject building as detailed in Annexure B.

## 1.3 Documentation

The following documentation was relied upon when preparing this Report:

- NCC / Building Code of Australia 2022, Volume 1 (BCA).
- Architectural documentation prepared by Woodhouse & Danks Pty Ltd, Drawing Nos. CD-02e, CD-03.1d, CD-04.1c, CD-04g, CD-05.1b, CD-05f, CD-06.1c, CD-06g, CD-10f, CD-12e, CD20j, CD-21j, CD-22j, CD-23j, CD-24i, CD-25d, CD-26a, CD-30g, CD-31g, CD-32g, CD-33g, CD-34f, CD-35e, CD-36b, CD-37 dated 1 March 2023 and CD-03i dated 28 March 2023.

## 1.4 Reporting Team

This Report was prepared on behalf of GRS Building Reports Pty Ltd by Graham Scheffers, an unrestricted Registered Certifier (NSW BDC) and Building Code Consultant.

## 1.5 BCA Terms and Definitions

The following terms are based on BCA definitions;

- ***Fire Source Feature:*** means-
  (a) The far boundary of a road, river, lake or the like adjoining the allotment; or
  (b) A side or rear boundary of the allotment; or
  (c) An external wall of another building on the allotment which is not a Class 10 building.
- ***Open Space*** means 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.
- ***Public corridor*** means an enclosed corridor, hallway or the like which—
  (a) serves as a means of egress from 2 or more sole-occupancy units to a required exit from the storey concerned; or
  (b) is required to be provided as a means of egress from any part of a storey to a required exit.
- ***Sole Occupancy Unit (SOU)*** means 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.

- ***Rise in Storeys*** means the greatest number of storeys calculated in accordance with C2D3.

## 1.6 Limitations and Exclusions

The limitations of this report are as follows:

- The Report is based on the new works only as detailed herein and is issued for the purpose of reviewing the Development Application Architectural Design Drawings.
- The Certifying Authority is to determine that the relevant documentation satisfies the BCA for the purposes of issuing a Construction Certificate. This BCA Report is an assessment of the Development Application Architectural Design Drawings only, therefore is not intended to provide verification that the entire design documents satisfy the BCA as this is beyond the scope of GRS Building Report Pty Ltd and must be undertaken by the Certifying Authority.
- The details of individual BCA clauses detailed in Annexure A of this Report are for background information only and the full details of each of the provisions should be obtained from the version of the BCA Volume 1 2022 available from the Australian Building Codes Board website at www.abcb.gov.au.

The Report does not address issues in relation to the following:

1. Assessment of documentation other than the Development Application Architectural Design Drawings.
2. Design Compliance Declaration, Principal Design Practitioner Declaration or other documentation under the Design and Building Professionals Act 2020.
3. The structural adequacy of the building including the fire resistance levels of any building elements (unless specifically referred to).
4. The design, maintenance or operation of any electrical, mechanical, hydraulic or fire protection services.
5. Review or acceptance of any Performance Solution Reports to address the Performance Requirements of the BCA. Where required these Reports are to be submitted and reviewed by the Registered Certifier at the time of consideration of the Construction Certificate.
6. Works outside the boundaries /lease area, building elements or services that extend outside the boundaries and works associated with external ancillary services, structures or civil works required by relevant authorities.
7. Development Consent conditions of approval issued by the Local Authority or Land & Environment Court.
8. Environmental Planning and Assessment Act and Regulations, Local Government Act and Regulations unless where nominated.
9. Work Health and Safety Act and Regulations.
10. WorkCover Authority requirements.
11. Water, drainage, gas, telecommunications and electricity supply authority requirements.
12. The provisions of the Disability Discrimination Act, National Premises Standards as this is beyond the scope of this Report and is to be undertaken by an Access Consultant.
13. Council Policy relating to Access for People with Disabilities.
14. GRS Building Reports Pty Ltd cannot guarantee acceptance of this Report by the Statutory Authorities such as Local Council, Fire & Rescue NSW or other approval authorities.

# 2. Building Description

## 2.1 Building

The building works proposed comprise a 3 storey Mixed Commercial / Boarding House building located at 29 Dobroyd Road, Balgowlah.

The site is situated with a street frontage to Dobroyd Road to the north, to Commerce Lane to the south and east, with adjoining premises to the western boundary. The building has pedestrian access from Dobroyd Road, with vehicle access and an additional pedestrian access from Commerce Lane.

The proposal contains 3 storeys as follows:

- Ground Floor - Single Retail tenancy, parking for 3 vehicles, motor bike parking, storage areas, accessible sanitary facility, lift lobby.
- Upper (middle) Floor - Six (6) Boarding House Rooms.
- First (top) Floor - Four (4) Boarding House Rooms and a Common Room.

A stairway connects the Ground Floor entry lobby accessed from Dobroyd Road to the Upper (middle) Floor and the First (top) Floor. A separate stairway provides a means of access and egress from the Ground Floor carpark to Commerce Lane at the rear of the building. Adjacent to this stairway is a separate gate that provides a means of access and egress from the Upper (middle) Floor to Commerce Lane at the rear of the building. A lift connects each level of the building.

## 2.2 Classification

For the purposes of the BCA, the building is classified as follows based on the proposed use:

- Class 3 (Boarding House Sole Occupancy Units)
- Class 6 (Retail Tenancy)
- Class 7a (Carparking)

Note: The Class 6 classification need not apply where the Class 6 (Retail Tenancy) is less than 10% of the Ground Floor level.

## 2.3 Climate Zone (energy efficiency)

Development Site is in Energy Efficiency Zone 5.

## 2.4 Rise in Storeys

The building has a rise in storeys of three (3).

## 2.5 Type of Construction

The building is required to be of Type A Construction.

## 2.6 Effective Height

The building has an effective height of less than 25m.

## 2.7 Floor Area / Volume

No floor area and volume limitations apply to the Class 3 portions of the building. Maximum size of other fire compartments are: -

| **Classification** | | **Type A** |
|---|---|---|
| 6 or 7 | Max floor area | 5,000m² |
| | Max volume | 30,000m³ |

## 2.8 Fire Source Feature

The building distances to the nearest boundary (Fire Source Feature) are estimated to be:

- Northern - < 6.0 metres to far side of Commerce Lane, i.e. ? Distance requires verification at CC Stage.
- Southern - > 6.0 metres to far side of Dobroyd Road
- Eastern - < 6.0 metres to far side of Commerce Lane, i.e. ? Distance requires verification at CC Stage.
- Western - < 3.0 metres to boundary.

Note: External walls beneath finished Ground Level are not exposed to a Fire Source Feature.

# 3. BCA Assessment

An assessment of the proposed building works has been undertaken in accordance with the provisions of the NCC / Building Code of Australia 2022 Volume 1, (BCA).

A detailed assessment is contained in Annexure A. To assist with Design Development items marked 'DNC", or '?' in Annexure A are areas either requiring clarification for compliance with the BCA or non-compliances with the BCA that have been identified. Where compliance is not able to satisfy the BCA DtS provisions this may need to be included in an Alternative Solution Report for consideration at the Construction Certificate Stage.

Section 3.1 below details the relevant Fire Resistance Levels.

## 3.1 Section C – Fire Resistance Levels

As a result of the proposed works, the building elements are required to contain a certain Fire Resistance Level (FRL) in minutes: Structural adequacy / Integrity / Insulation, as required for Type A Construction as set out in BCA Specification 5 (Fire-resisting construction) and BCA Tables S5C11a to S5C11g, as follows:

| Distance from a fire source feature | Class 2 | Class 6 | Class 5, 7a or 9 |
|---|---|---|---|
| Less than 1.5m | 90/90/90 | 180/180/180 | 120/120/120 |
| 1.5m to less than 3m | 90/60/60 | 180/180/120 | 120/90/90 |
| 3m or more | 90/60/30 | 180/120/90 | 120/60/30 |

**NCC Table S5C11a – Type A FRL of Loadbearing parts of External Walls**

| Distance from a fire source feature | Class 2 | Class 6 | Class 5, 7a or 9 |
|---|---|---|---|
| Less than 1.5m | -/90/90 | -/180/180 | -/120/120 |
| 1.5 to less than 3m | -/60/60 | -/180/120 | -/90/90 |
| 3m or more | -/-/- | -/-/- | -/-/- |

**BCA Table S5C11b – Type A FRL of Non-loadbearing parts of External Walls**

| Column Type | Class 2 | Class 6 | Class 5, 7a or 9 |
|---|---|---|---|
| Loadbearing parts | 90/-/- | 180/-/- | 120/-/- |
| Non-loadbearing parts | -/-/- | -/-/- | -/-/- |

**BCA Table S5C11c – Type A FRL of External Columns not incorporated in an External Wall**

| Wall Type | Class 2 | Class 6 | Class 5, 7a or 9 |
|---|---|---|---|
| Loadbearing parts or Non-loadbearing | 90/90/90 | 180/180/180 | 120/120/120 |

**BCA Table S5C11d – Type A FRL of Common Walls and Fire Walls**

| Location | Class 2 | Class 6 | Class 5, 7a or 9 |
|---|---|---|---|
| Fire resisting Lift and stair shafts | 90/90/90 | 180/120/120 | 120/120/120 |
| Bounding public corridors, public lobby or the like | 90/90/90 | 180/-/- | 120/-/- |
| Between or bounding SOU's. | 90/90/90 | 180/-/- | 120/-/- |
| Ventilation, pipe, garbage and like shafts not used for hot products of combustion | 90/90/90 | 180/120/120 | 120/90/90 |

**BCA Table S5C11e – Type A FRL of Loadbearing Internal Walls**

| Location | Class 2 | Class 6 | Class 5, 7a or 9 |
|---|---|---|---|
| Fire resisting Lift and stair shafts | -/90/90 | -/120/120 | -/120/120 |
| Bounding public corridors, public lobby or the like | -/60/60 | -/-/- | -/-/- |
| Between or bounding SOU's. | -/60/60 | -/-/- | -/-/- |
| Ventilation, pipe, garbage and like shafts not used for hot products of combustion | -/90/90 | -/120/120 | -/90/90 |

**BCA Table S5C11f – Type A FRL of Non-loadbearing Internal Walls**

| Building Element | Class 2 | Class 6 | Class 5, 7a or 9 |
|---|---|---|---|
| Other loadbearing internal walls, internal beams, trusses and columns | 90/-/- | 180/-/- | 120/-/- |
| Floors | 90/90/90 | 180/180/180 | 120/120/120 |
| Roofs | 90/60/30 | 180/60/30 | 120/60/30 |

**BCA Table S5C11g – Type A FRL of other Building Elements not covered by Tables S5C11a to S5C11f**

The following additional information is provided:

(a) Each building element listed in the above Tables, 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, and

(b) Internal walls required to have an FRL with respect to integrity and insulation, must extend to the underside of the floor next above, or the underside of a roof complying with Table S5C11g, or the underside of a ceiling with a resistance to the incipient spread of fire of not less than 60 minutes or to the underside of a non-combustible roof covering in accordance with subclause (f) and (h) below, and

(c) Internal loadbearing walls must be of concrete or masonry construction or fire protected timber (subject to satisfying Specification 5), and

(d) The FRLs specified in Table S5C11c for an external column apply also to those parts of an internal column that face and are within 1.5 m of a window and are exposed through that window to a fire-source feature, and

(e) External walls must be of non-combustible construction in accordance with BCA Clauses C2D10 and C2D14, and

(f) Roof need not have an FRL where its covering is non-combustible and the building has: -

(i) A sprinkler system throughout (other than FPAA101D or FPAA101H system), or

(ii) A rise in storeys of 3 or less, or

(iii) Is of Class 2 or 3, or

(iv) The ceiling immediately below the roof has a resistance to the incipient spread of fire to the roof space of not less than 60 minutes.

(g) In the storey immediately below the roof, internal columns and internal walls (other than shaft and stair walls) may have an FRL of 60/60/60 (i.e. applies to Class 2 or 3 buildings or to Class 5 to 9 buildings with RIS exceeding 3) or no FRL (i.e. applies to Class 5 to 9 buildings with RIS not exceeding 3).

(h) Where the top floor fire rated walls are proposed to extend to the underside of the roof covering that is non-combustible, then except for roof battens with dimensions of 75mm x 50mm or less or sarking material, must not be crossed by timber or other combustible building elements.

(i) For the purposes of Table S5C11a and Table S5C11b, external wall includes any column and other building element incorporated within it or other external building element.

(j) Internal non-loadbearing walls required to have an FRL must be non-combustible construction in accordance with BCA Clause C2D10.

# 4. Conclusion

An assessment of the proposal has been undertaken in accordance with the provisions of the NCC / Building Code of Australia 2022 Volume 1 (BCA) . This assessment is contained in Annexure A. To assist with the Construction Certificate; items marked ‘DNC’, ‘FI’, ‘CR”, or ‘?’ in Annexure A are areas where additional information or clarification may be provided for consideration at the Construction Certificate Documentation Stage.

Annexure A also contains an assessment of the proposed works. It should be noted the new works are subject to compliance with the BCA to be reviewed and confirmed by the Accredited Certifier prior to issuing the Construction Certificate.

It is therefore concluded that the proposal is capable of readily achieving compliance with the BCA either by satisfying the BCA Deemed-to-Satisfy Provisions or addressed in a Building (Alternative) Solution Report for consideration at the Construction Certificate Stage.

# ANNEXURE A (DtS Assessment)

## NCC / Building Code of Australia 2022, Volume 1

## Deemed-To-Satisfy Assessment (Clause by Clause)

## (Class 2-9 Buildings)

| | |
|---|---|
| **Classification of Building or Part:** | 3, 6, 7a |
| **Rise in Storeys:** | Three (3) |
| **Type of Construction:** | Type A |
| **Effective height** | < 25m |

**Key:**

Complies The building works proposed generally complies with this Clause or there are no significant deficiencies.

DNC The works proposed does not comply with this Clause or proposed works impacts on the existing building.

? Further documentation/ investigation required.

CR Certification or verification required that the building works proposed complies with this Clause prior to BCA Certification being issued.

(**Note: BCA Certification will require Structural, architectural and services drawings, specification with certification nominating all relevant BCA Clauses and the Australian Standards including the year of the standard**).

NA This Clause is not applicable to the building works proposed or to this assessment.

Noted The contents of this Clause is noted for reference.

AS. Alternative Solution using Performance Requirements is relevant in relation to the works proposed.

| **Section A** | **Governing Requirements** | |
|---|---|---|
| **Part A6** | **BUILDING CLASSIFICATION** | Class 3 (Boarding House Sole Occupancy Units), Class 6 (Retail) , Class 7a (Carpark) |

| **Section B** | **Structure** | **Comment** |
|---|---|---|
| **Part B1** | **STRUCTURAL PROVISIONS** | |
| B1D2 | **Resistance to actions**<br>Resistance must be greater than the most critical action resulting from different combinations of actions, where<br>• The most critical action effect on a building is in accordance with B1D3 and general design procedures of AS/NZS1170.0-2002; and<br>• The resistance of a building is determined in accordance with B1D4. | CR subject to Structural Engineering drawings, specification and certification of the proposed works at Construction Certificate stage. |

| Section B | Structure | Comment |
|---|---|---|
| B1D3 | **Determination of individual actions**<br>The magnitude of individual actions must be determined in accordance with various action, eg:<br>• Permanent actions, including design of building, unit weight of the construction, AS/NZS1170.1-2002; and<br>• Imposed actions, including known imposed loads, construction activity actions, AS/NZS1170.1-2002; and<br>• Wind, snow and earthquake actions, including applicable annual probability of design event determined by Tables B1D3a & B1D3b, AS/NZS1170.2-2021, AS1170.3-2003, AS1170.4-2007; and<br>• Other actions detailed | CR subject to Structural Engineering drawings, specification and certification of the proposed works at Construction Certificate stage. |
| B1D4 | **Determination of Structural Resistance of Materials and Forms of Construction**<br>The structural resistance of materials and forms of construction must be determined in accordance with the following, as appropriate:<br>• Masonry: AS3700-2018,<br>• Concrete Construction: AS3600-2018, AS5146.1-2015, AS5146.3-2018 or AS5216-2021,<br>• Steel construction – Steel structures: AS4100-2020, Cold formed structures: AS/NZS4600-2018, Residential & low-rise steel: NASH Standard,<br>• Composite steel structures: AS2327.1-2017,<br>• Aluminium construction: AS/NZS1664.1-1997 or AS/NZS1664.2-1997,<br>• Timber construction – Design of structures: AS1720.1-2010, Timber structures: AS1684 Parts 2, 3-2021 or AS1684.4-2010, Nailplated roof trusses: AS1720.5-2015,<br>• Piling: AS2159-2009,<br>• Glazing Assemblies – AS2047–2014 or AS1288-2021,<br>• Termite risk management – AS3660.1-2014 including durable notice requirements,<br>• Roof construction – Roofing tiles AS2050-2018; Cellulose cement corrugated sheets: AS/NZS 2908.1-2000 with safety mesh to AS/NZS1562.3-2006; Metal Roofing: AS1562.1-2018.<br>• Garage doors & other large access doors in openings not > 3m in height determined as being in wind region C or D in accordance with AS/NZS 1170.2-2021, AS/NZS4505-2012.<br>• Lift Shafts (where FRL not required): must be enclosed with non-perforated materials, and be of non-brittle material and glazing must comply with Table B1D4 or not fail the deflection criteria required by SC11 (c) (iii). | CR subject to Structural Engineering drawings, architectural drawings, specification and certification of the proposed works at Construction Certificate stage. |
| B1D5 | **Structural Software**<br>Must comply with ABCB protocols.<br>Only applies to structural software used to design steel or timber trussed roof and floor systems and framed building systems for buildings within certain geometric limits.<br>Does not apply to design software for individual frame members such as electronic tables similar to those provided in AS1684 or NASH Residential and Low-Rise Steel Framing Part 2. | Noted |

| | | |
|---|---|---|
| B1D6 | **Construction of buildings in Flood Hazard Areas**<br>Class 2, 3, 9a (health-care), 9c (aged care) or Class 4 part of a building in a flood hazard area must comply with ABCB Standard for Construction of Buildings in Flood Hazard Areas. | Noted |

| Section C | Fire Resistance | Comment |
|---|---|---|
| **Part C1** | **PERFORMANCE REQUIREMENTS** | Noted |
| **Part C2** | **FIRE RESITANCE AND STABILITY** | |
| C2D1 | **Deemed-to-Satisfy Provisions**<br>Where a DtS Solution is proposed, Performance Requirements C1P1 to C1P9 are satisfied by complying with C2D2 to C2D15, C3D2 to C3D15 & C4D2 to C4D17; & Part G3 (atrium), & Part G6 (occupiable outdoor area), & Part I1 (Class 9b), Part I3 (farm sheds). | Noted |
| C2D2 | **Type of Construction**<br>The minimum Type of fire-resisting construction of a building must be determined in accordance with Table C2D2, except as allowed for in C2D6 (certain Class 2, 3 or 9c buildings), C2D4(2) (Class 4 part on top storey), & C2D8 (open spectator stands & indoor sports stadiums).<br>Each building element must comply with Specification 5 as applicable. | CR. Building elements to satisfy Type A requirements as detailed in Specification 5. See Section 3.1 of this Report for extract of BCA Tables S5C11a to S5C11g. Subject to Structural Engineering drawings, architectural drawings, specification and certification of the proposed works at Construction Certificate stage |
| C2D3 | **Calculation of Rise In Storeys**:-<br>Greatest number of storeys at any part of the external walls of the building above the finished ground at that part. | Three (3) |
| C2D4 | **Buildings of Multiple Classification:-**<br>Type of construction required is determined by the classification of the top storey applies to all storeys. | Noted. |
| C2D5 | **Mixed Types of Construction:-**<br>Separation of the building by a fire wall (complying with clause C3D8) may permit mixed type of construction for a building. | Noted. Entire building to satisfy FRL's required for designated Type of Construction, i.e. Type A. |
| C2D6 | **Two Storey Class 2, 3 or 9c buildings:-**<br>A building with a rise in storeys of 2 may be Type C construction where:<br>• Each SOU of Class 2 or 3 building has access to at least 2 exits; or its own access to road or open space; | NA |
| C2D7 | **Class 4 Parts of Buildings**:- | NA |
| C2D8 | **Open Spectator Stands & Indoor Sports Stadiums**:- | NA |
| C2D9 | **Lightweight Construction**:-<br>May be used for fire rating of elements if it is in accordance with Specification 6. | NA |

| Section C | Fire Resistance | Comment |
|---|---|---|
| C2D10 | **Non-combustible Building Elements:-**<br>In a building required to be of Type A or B construction, the following building elements and their components must be non-combustible:<br>(i) External walls and common walls, including all components incorporated in them including the facade covering, framing and insulation.<br>(ii) The flooring and floor framing of lift pits.<br>(iii) Non-loadbearing internal walls where they are required to be fire-resisting.<br>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—<br>(i) a building required to be of Type A construction; and<br>(ii) a building required to be of Type B construction, subject to C3D11, in—<br>• a Class 2, 3 or 9 building; and<br>• a Class 5, 6, 7 or 8 building if the shaft connects more than 2 storeys.<br>The following materials, when entirely composed of itself, are non-combustible and may be used wherever a non-combustible material is required:<br>• Concrete.<br>• Steel, including metallic coated steel.<br>• Masonry, including mortar.<br>• Aluminium, including aluminium alloy.<br>• Autoclaved aerated concrete, including mortar.<br>• Iron.<br>• Terracotta.<br>• Porcelain.<br>• Ceramic.<br>• Natural stone.<br>• Copper.<br>• Zinc.<br>• Lead. Bronze.<br>• Brass.<br>The following materials may be used where non-combustible materials are required:<br>• Plasterboard;<br>• Perforated gypsum;<br>• Fibrous plaster sheeting;<br>• Fire reinforced cement sheeting;<br>• Pre-finished metal sheeting having a combustible surface finish 1 mm or less thickness & where the Spread-of-Flame Index of the product is not > 0;<br>• Sarking type materials 1 mm or less thickness & a Flammability Index not > 5;<br>• Bonded laminate materials, where each lamina including core is non-combustible, and each adhesive layer is not > 1mm & total thickness of adhesive layers does is not >2mm, plus Spread of Flame Index & Smoke Developed Index of the bonded laminate product as a whole is not > 0 & 3 respectively. | CR. Details to be provided with Construction Certificate documentation. |

| Section C | Fire Resistance | Comment |
|---|---|---|
| C2D11 | **Early Fire Hazard Properties**:-<br>Materials and assemblies used in the building must comply with the requirements of Specification 7. | CR. Details to be provided with Construction Certificate documentation. |
| C2D12 | **Performance of External Walls**:-<br>Concrete external walls that could collapse as complete panels in building of 2 storeys or less must comply with Specification 8. | NA |
| C2D13 | **Fire Protected Timber: Concession –** | Noted |
| C2D14 | **Ancillary Elements –**<br>An ancillary element must not be fixed, installed or 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 one of the following:<br>(a) An ancillary element that is non-combustible.<br>(b) A gutter, downpipe or other plumbing fixture or fitting.<br>(c) A flashing.<br>(d) A grate or grille not more than 2 $m^2$ in area associated with a building service.<br>(e) An electrical switch, socket-outlet, cover plate, etc.<br>(f) A light fitting.<br>(g) A required sign.<br>(h) A sign other than one provided under (a) or (g) that—<br>(i) achieves a group number of 1 or 2; and<br>(ii) does not extend beyond one storey; and<br>(iii) does not extend beyond one fire compartment; &<br>(iv) is separated vertically from other signs permitted under (h) by at least 2 storeys.<br>(i) An awning, sunshade, canopy, blind or shading hood other than one provided under (a) that—<br>(i) meets the relevant requirements of Table S7C7 as for an internal element; and<br>(ii) serves a storey—<br>(A) at ground level; or<br>(B) immediately above a storey at ground level; &<br>(iii) does not serve an exit, where it would render the exits unusable in a fire.<br>(j) Part of a security, intercom or announcement system.<br>(k) Wiring.<br>(l) Waterproofing materials installed as per AS4654.2 & applied to adjacent floor surface, including vertical upturn, or roof surface.<br>(m) Collars, sleeves & insulation associated with service installations.<br>(n) Screens applied to vents, weepholes & gaps as per AS359.<br>(o) Wiper & brush seals for doors, windows etc.<br>(p) A gasket, caulking, sealant or adhesive directly associated with (a) to (o). | CR. Details to be provided with Construction Certificate documentation. |

<table>
<tr><th>Section C</th><th>Fire Resistance</th><th>Comment</th></tr>
<tr><td>C2D15</td><td>Fixing of Bonded Laminated Cladding Panels:-<br>(1) In a building 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.<br>(2) An externally located bonded laminated cladding panel need not satisfy (1) if it is one of:<br>(a) A laminated glass system.<br>(b) Layered plasterboard product.<br>(c) Perforated gypsum lath with a normal paper finish.<br>(d) Fibrous-plaster sheet.<br>(e) Fibre-reinforced cement sheeting.<br>(f) A component of a garage door.</td><td>CR. Details to be provided with Construction Certificate documentation.</td></tr>
<tr><td>Part C3</td><td colspan="2">COMPARTMENTATION AND SEPARATION</td></tr>
<tr><td>C3D1</td><td>Deemed-to-Satisfy Provisions<br>Where a DtS Solution is proposed, Performance Requirements C1P1 to C1P9 are satisfied by complying with C2D2 to C2D15, C3D2 to C3D15 & C4D2 to C4D17; & Part G3 (atrium), & Part G6 (occupiable outdoor area), & Part I1 (Class 9b), Part I3 (farm sheds).</td><td>Noted.</td></tr>
<tr><td>C3D2</td><td>Application of Part<br>C3D3, C3D4 and C3D5 do not apply to a carpark provided with a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17, an open-deck carpark or an open spectator stand.<br>C3D13(1)(e) does not apply to a Class 8 electricity network substation.</td><td>Noted</td></tr>
<tr><td>C3D3</td><td>General Floor Area Limitations:<br><table><tr><th colspan="2">Classification</th><th>Type A</th></tr><tr><td rowspan="2">6, 7a</td><td>Max floor area</td><td>5,000m²</td></tr><tr><td>Max volume</td><td>30,000m³</td></tr></table>Table C3D3 – Floor Area and Volume Limitations</td><td>Complies.</td></tr>
<tr><td>C3D4</td><td>Large Isolated Buildings:-</td><td>NA</td></tr>
<tr><td>C3D5</td><td>Requirements for open space:-<br>Open space and vehicular access capable of supporting emergency vehicles, area 6m wide and not more than 18m from the building.</td><td>NA</td></tr>
<tr><td>C3D6</td><td>Class 9 buildings:-</td><td>NA</td></tr>
<tr><td>C3D7</td><td>Vertical separation of openings in external walls:-<br>Applicable to buildings of Type A construction and not sprinkler protected (other than a FPAA101D or FPAA101H system).<br>Openings in external walls of a building of Type A Construction must be separated from openings in the storey next below either by 900mm high vertical spandrel panels or 1100mm horizontal projections no less than 450mm beyond the relevant openings.<br>Spandrel construction must be fire rated to achieve an FRL of 60/60/60.</td><td>?. Spandrel Construction requirements is NA, as the building is proposed to be sprinkler protected with AS2118.1 system.<br>Details to be provided with Construction Certificate documentation.</td></tr>
</table>

| Section C | Fire Resistance | Comment |
|---|---|---|
| C3D8 | **Separation by fire walls**:-<br>A fire wall must be construction in accordance with Spec. 5, opening protected in accordance with Part C4 and building elements, other than roof battens (75mm x 50mm or less) must not pass through or cross the wall, unless the fire-resisting performance of the wall is maintained. | NA |
| C3D9 | **Separation of classifications in the same storey**:-<br>Building parts to be separated in the storey by a fire wall or each building element to adopt the higher FRL as required in Specification 5 of the BCA. | CR. Entire Ground Floor to have FRL's for Class 6, unless this SOU is less than 10% of the Ground Floor area or Class 6 part separated by a fire wall. Details to be provided with Construction Certificate documentation. |
| C3D10 | **Separation of classifications in different storeys**:-<br>The separating floors must have an FRL;<br>• Type A Construction – not less than that required for the lower storey use. | CR. Ground Floor FRL's applies for Type A Construction throughout building unless fire separated from levels above. Details to be provided with Construction Certificate documentation. |
| C3D11 | **Separation of lift shafts**:-<br>Lift to be enclosed in a fire rated shaft when connecting more than 2 storeys (or more than 3 storeys in a sprinklered building);<br>• Type A Construction – not less than that required by Specification 5.<br>Lift doors and services to be protected as per Part C4. | CR. FRL's applies for Type A Construction, unless building is sprinkler protected throughout. Details to be provided with Construction Certificate documentation. |
| C3D12 | **Stairways and lifts in one shaft**:-<br>Not to be in the same shaft if either is to be fire isolated. | CR. Details to be provided with Construction Certificate documentation. |
| C3D13 | **Separation of equipment**:-<br>Lift motors, emergency generators, smoke control exhaust fans, boilers or batteries are to be enclosed by construction achieving an FRL as required by Specification 5 and not less than 120/120/120.<br>On-site fire pumps to be separated as per AS2419.1. | CR. Details to be provided with Construction Certificate documentation. |
| C3D14 | **Electricity supply system**:-<br>If the electrical substation is to be located within the building it must be separated from another part of the building by construction achieving an FRL of 120/120/120 with self-closing -/120/30 fire doors.<br>The main switchboard that houses the emergency equipment operating in emergency mode must be separated from another part of the building by construction achieving an FRL of 120/120/120 with self-closing -/120/30 fire doors.<br>Where emergency equipment is required in a building, all switchboards in the electrical installation, which sustain the electricity supply to the emergency equipment, must be constructed so that emergency equipment switchgear is separated from non-emergency equipment switchgear by metal partitions designed to minimise the spread of a fault from the non-emergency equipment switchgear. | CR. Details to be provided with Construction Certificate documentation. |
| C3D15 | **Public corridors in Class 2 & 3 buildings**:-<br>Public corridor >40m long to be divided into intervals of <40m by smoke proof walls complying with S11C2. | Complies |

| Section C | Fire Resistance | Comment |
|---|---|---|
| **Part C4** | **PROTECTION OF OPENINGS** | |
| C4D1 | **Deemed-to-Satisfy Provisions**<br>Where a DtS Solution is proposed, Performance Requirements C1P1 to C1P9 are satisfied by complying with C2D2 to C2D15, C3D2 to C3D15 & C4D2 to C4D17; & Part G3 (atrium), & Part G6 (occupiable outdoor area), & Part I1 (Class 9b), Part I3 (farm sheds). | Noted |
| C4D2 | **Application of Part**<br>(1) The DtS Provisions of this Part do not apply to:<br>(a) Control joints, weep holes and the like in external walls of masonry construction and joints between panels in external walls of pre-cast concrete panel construction if, not larger than necessary.<br>(b) Non-combustible ventilators for subfloor or cavity ventilation, if each is not > 45 000 $mm^2$ in face area and spaced not <2 m from any ventilator in the same wall.<br>(c) Openings in the vertical plane formed between building elements at the construction edge or perimeter of a balcony or verandah, colonnade, terrace, or the like.<br>(d) In a carpark floor other than a floor that separates a part not used as a carpark, and subject to (e), the following openings in a carpark floor:<br>(i) Service penetrations.<br>(ii) Openings formed by a vehicle ramp.<br>(e) The requirements of (d) only apply where the connected carpark levels comply as a single fire compartment for the purposes of all other requirements of the DtS Provisions of Sections C, D and E.<br>(2) For the purposes of the DtS Provisions of this Part, openings in building elements required to be fire resisting include doorways, windows (including any associated fanlight), infill panels and fixed or openable glazed areas that do not have the required FRL.<br>(3) For the purposes of the DtS Provisions of this Part, openings, other than those covered under (1)(c), between building elements such as columns, beams and the like, in the plane formed at the construction edge or perimeter of the building, are deemed to be openings in an external wall. | Noted |

| Section C | Fire Resistance | Comment |
|---|---|---|
| C4D3 | **Protection of openings in external walls**:-<br>Openings in external walls that are required to have an FRL are to be protected if they are exposed to a fire source feature in accordance with Clause C3.4 if:<br>• Wall is less than 3m from a side or rear boundary;<br>• Less than 6m from the far boundary of a road, if not located in a storey at or near ground level; or<br>• Less than 6m from another building on the same allotment | ? / AS. Openings in external walls within 3.0m of adjacent western boundary require protection: -<br>• Ground Floor entry colonnade walls & Retail tenancy openings.<br>• Upper Floor Unit 6 openings (including terrace) & Common stairway / walkway openings.<br>• First Floor Unit 7 openings, Unit 10 openings (including terrace) & Common stairway openings.<br>NA where openings shielded by blade walls to balconies and the like.<br>?. Openings in external walls if not located in a storey at or near ground level, if within 6.0m of far boundary of road (i.e. Commerce Lane) require protection.<br>Details to be provided with Construction Certificate documentation. |
| C4D4 | **Separation of openings in different fire compartments**:-<br>External walls of different fire compartments are to be separated by a fire wall with FRL not less than 60/60/60 and any openings protected in accordance with Clause C4D5, within the prescribed distances in Table C4D4. | NA |
| C4D5 | **Acceptable methods of protection**:-<br>Fixed fire rated glass; self-closing or automatic closing windows with drenchers; automatic fire shutters; automatic closing fire rated windows.<br>Doors to be self-closing or automatic closing. | CR/?/AS. Openings as outlined in C4D3 require protection.<br>Details to be provided with Construction Certificate documentation. |
| C4D6 | **Doorways in fire walls**:-<br>Doorways in a fire wall (that is not part of an horizontal exit) must not exceed ½ the length of the fire wall, and<br>• Have the FRL required for the fire wall, and<br>• Be self-closing or automatic closing upon activation of a smoke/fire detector, any other fire alarm system, including sprinkler system. | CR. Required where Ground Floor retail space is to be fire separated as per C3D9.<br>Details to be provided with Construction Certificate documentation. |
| C4D7 | **Sliding fire doors in fire walls**:-<br>If open when the building is in use they must fail safe in the closed position and be provided with warning devices, signage and flashing lights | NA. |
| C4D8 | **Protection of doorways in horizontal exits**:-<br>To be self-closing or automatic closing fire doors | NA |
| C4D9 | **Openings in fire isolated exits**:-<br>To be -/60/30 self-closing fire doors.<br>Windows in external walls of fire-isolated exits to be protected in accordance with C3.4 if within 6.0m and exposed to another opening in the same building. | NA. Note: stairs not required to be fire-isolated as building is proposed to be sprinkler protected.<br>Details to be provided with Construction Certificate documentation. |

| Section C | Fire Resistance | Comment |
|---|---|---|
| C4D10 | **Service penetrations in fire Isolated exits**:-<br>Fire isolated exits must not be penetrated by services other than electrical wiring permitted by clause D3D8(6); mechanical ducting for pressurisation systems; and for fire services, water supply and test drain pipes. | NA |
| C4D11 | **Openings in fire isolated lift shafts**:-<br>• Doors to be -/60/- fire doors in accordance with AS 1735.11;<br>• Lift indicator panels to be constructed with -/60/60 backing if the lift exceeds 35,000mm$^2$ | NA. Note: lift not required to be fire-isolated as building is proposed to be sprinkler protected.<br>Details to be provided with Construction Certificate documentation. |
| C4D12 | Bounding construction Class 2, 3 and 4 buildings:-<br>Doors from sole occupancy units, and doors from rooms not within a SOU that open to an enclosed public corridor landing of non fire-isolated stairway, are to be:<br>• -/60/30 for Type A construction;In a Class 2 or 3 building where a path of travel to an exit does not provide a person seeking egress with a choice of travel in different directions to alternative exits and is along an open balcony, landing or the like and passes an external wall of—<br>(i) another sole-occupancy unit; or<br>(ii) a room not within a sole-occupancy unit,<br>then that external wall must—<br>(iii) be constructed of concrete or masonry, or be lined internally with a fire-protective covering; and<br>(iv) have any doorway fitted with a self-closing, tight-fitting solid core door not less than 35 mm thick; and<br>(v) have any windows or other openings—<br>(A) protected internally in accordance with C4D5; or<br>(B) located at least 1.5 m above the floor of the balcony, landing or the like. | CR/AS. The following is to be considered;<br>• The entry doors to each SOU (Nos. 1 to 10), the FF common room are to be provided with a self-closing fire door.<br>• Doors / windows to Retail tenancy requires protection where central stair / lobby used for egress from Units 1 to 10.<br>• Doorway separating carparking area from Ground Floor lift lobby.<br>Details to be provided with Construction Certificate documentation. |
| C4D13 | **Openings in floors and ceilings for services**:-<br>To be enclosed in fire rated shaft with FRL in accordance with Specification 5 (Type A Construction), or shaft that does not reduce the fire performance of the building element it penetrates (Type B or C Construction), or in accordance with C4D15. | CR. Details to be provided with Construction Certificate documentation. |
| C4D14 | **Openings in shafts**:-<br>Openings to shafts must be protected with a non-combustible door / panel (sanitary compartment), or self-closing -/60/30 fire door or hopper, or -/60/30 access panel, or non-combustible door / hopper (garbage shaft). | CR. Details to be provided with Construction Certificate documentation. |

| Section C | Fire Resistance | Comment |
|---|---|---|
| C4D15 | **Openings for service installations:-**<br>Electrical, plumbing, mechanical ventilation shafts not to impair the FRL of fire rated building elements<br>(1) Requirements of (2) apply where an electrical, electronic, plumbing, mechanical ventilation, air-conditioning or other service penetrates a building element (other than an external wall or roof)required to have an FRL with respect to integrity or insulation or a resistance to the incipient spread of fire.<br>(2) An installation detailed in (1) must comply with one of:<br>(a) Tested systems — the following applies:<br>(i) The service, building element and any method at the penetration—<br>(A) identical to prototype assembly of service, building element & method of protection tested as per AS4072.1 & AS1530.4 & has an FRL or incipient spread of fire; or<br>(B) differ from a prototype assembly of the service, building element and protection method as per Section 4 of AS 4072.1.<br>(ii) It complies with (i) except for the insulation criteria relating to the service if—<br>(A) a pipe system comprised entirely of metal (excluding pipe seals or the like); and<br>(B) any combustible building element is not located within 100mm of the service for at least 2m from the penetration; and<br>(C) combustible material is not able to be located within 100 mm of the service for at least 2 m from the penetration; and<br>(D) it is not located in a required exit.<br>(iii) Required FRL confirmed in Accredited Testing Lab report as per Specifications. 1 and 2.<br>(b) Ventilation and air-conditioning — ventilating or air-conditioning ducts or equipment, installed as per AS 1668.1.<br>(c) Specification 13 Compliance — Is as follows:<br>(i) A pipe system entirely of metal (excluding pipe seals or the like), installed as per Spec. 13 & it—<br>(A) penetrates a wall, floor or ceiling, but not a incipient spread of fire ceiling; and<br>(B) connects not > 2 fire compartments in addition to any fire-resisting service shafts; &<br>(C) has no flammable / combustible liquid or gas.<br>(ii) Sanitary plumbing service as per Spec. 13 &—<br>(A) is of metal or UPVC pipe; and<br>(B) penetrates floors of Class 5, 6, 7, 8 or 9b building; and<br>(C) is in a sanitary compartment separated from other building parts by walls with FRL as per Spec. 5 for a stair shaft & a –/60/30 fire door.<br>(iii) Service is wire or cable, or a cluster of wires or cables installed as per Spec.13 & it—<br>(A) penetrates a wall, floor or ceiling, but not a incipient spread of fire ceiling; and<br>(B) connects not > 2 fire compartments in addition to any fire-resisting service shafts.<br>(iv) The service is an electrical switch, outlet, or the like, and installed as per Spec. 13. | CR. Details to be provided with Construction Certificate documentation. |

| Section C | Fire Resistance | Comment |
|---|---|---|
| C4D16 | **Construction Joints**:-<br>Fire retardant materials to be provided to construction joints to be identical with prototype tested in accordance with AS4072.1-2005 and AS1530.4-2014 to achieve the required FRL | CR. Details to be provided with Construction Certificate documentation. |
| C4D17 | **Columns protected with lightweight construction to achieve an FRL**<br>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 | NA |
| Specification 5 | **Fire Resisting Construction:-**<br>The building is required to be designed in accordance with Tables S5C11a to S5C11g (Type A Construction) of the BCA. | CR. Confirmation of fire rating and materials (See Section 3.1 of this Report) to be incorporated in Structural Engineering drawings or architectural plans, specification and certification of the proposed works. Details required with Construction Certificate documentation. |

| Section D | Access and Egress | Comment |
|---|---|---|
| **Part D1** | **PERFORMANCE REQUIREMENTS** | Noted |
| **Part D2** | **PROVISION FOR ESCAPE** | |
| D2D1 | **Deemed-to-Satisfy Provisions**<br>Where a DtS Solution is proposed, Performance Requirements D1P1 to D1P6, D1P8 & D1P9 are satisfied by complying with D2D2 to D2D23, D3D2 to D3D30 & D4D2 to D4D13; & Part G3 (atrium), & Part G4 (alpine area), & Part G6 (occupiable outdoor area), & Part I1 (Class 9b) & Part I2 (public transport), Part I3 (farm sheds). | Noted |
| D2D2 | **Application of part**:-<br>DtS provisions do not apply to internal parts of a SOU in Class 2, 3 or 4 | Noted. |
| D2D3 | **Number of exits required**:-<br>Every building must have a least one exit from each storey, and a minimum of 2 exits are required in particular circumstances.<br>Without passing through another sole occupancy unit every occupant of a storey or part must have access to either an exit, or at least 2 exits if 2 or more are required. | Complies. Egress from the carpark is provided with 2 means of egress. Single exit only required from upper levels, subject to travel distances and door swing / latching requirements being met. |
| D2D4 | **When Fire isolated exits are required**:-<br>Generally, every required exit must be fire isolated if it connects, passes by or passes through:<br>• more than 3 storeys of a class 2;<br>• more than 2 storeys of a classes 3 to 9.<br>And one additional storey may be included if it is solely for motor vehicles or other ancillary purposes. | CR. Stairs not required to be fire-isolated as building is proposed to be sprinkler protected. Details to be provided with Construction Certificate documentation. |

| Section D | Access and Egress | Comment |
|---|---|---|
| D2D5 | **Exit Travel Distances**:-<br>Class 2, 3 buildings – Entrance doorway of SOU to be not more than 6m from an exit, or 6m from a point of choice between 2 exits. A single exit serving the storey at the level of egress to a road or open space may be 20m.<br>Class 5 – 9 buildings. No point on a floor must be more than 20m from an exit or a point from which travel in different directions to 2 exits is available, in which case the maximum travel distance to 1 of those exits not to exceed 40m.<br>Class 5/6 building – the distance to a single exit serving the storey at the level of access to a road or open space may be increased to 30m. | Complies. |
| D2D6 | **Distances between alternative exits**:-<br>Exits required as alternative exits must be distributed as uniformly as possible; not less than 9m apart; not more than 60m apart (45m apart for class 2, 3 and 9a health care); located so alternative paths do not converge to less than 6m. | Complies. |
| D2D7 | **Height of exits, paths of travel to exits and doorways**:-<br>Unobstructed height must be not less than 2m (1980mm for doorways); | CR. Egress ceiling height including via stairs to ensure at least 2.0m clear height, except 1980mm for doors is provided. Details to be provided with Construction Certificate documentation. |
| D2D8 | **Width of exits and paths of travel to exits**:-<br>1m minimum width of a single exit; and increased where applicable for populations, e.g.;<br>• if the storey or mezzanine accommodates not more than 200 persons the aggregate unobstructed width of the exit must not be less than 1m plus 250mm for every 25 persons (or part) in excess of 100 persons.required width of a stairway or ramp is to be measured clear of all obstructions and extend a minimum 2m above line of nosings or ramp | CR. Egress width including via stairs and external pathway to ensure at least 1.0m clear width is provided clear of handrails. Details to be provided with Construction Certificate documentation. |
| D2D9 | **Width of doorways in exits or paths of travel to exits**:-<br>Unobstructed width of a doorway must be not less than:<br>• the unobstructed width provided to comply with D2D8, minus 250mm. In any other case, except where it opens to a sanitary compartment or bathroom 750mm clear width except 850mm clear unobstructed area (in accordance with AS 1428.1. | CR. Egress width of doors to be provided with at least 750mm clear width except 850mm clear unobstructed area (in accordance with AS 1428.1). Details to be provided with Construction Certificate documentation. |
| D2D10 | **Exit width not to diminish in direction of travel**:-<br>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 by D2D8(1)(b) or D2D9(a)(i) | CR. Details to be provided with Construction Certificate documentation. |

| Section D | Access and Egress | Comment |
|---|---|---|
| D2D11 | **Determination and measurement of exits and paths of travel to exits**:-<br>For the purposes of D2D7 to D2D10 the following apply:<br>(a) The required width of a stairway or ramp in a required exit or path of travel to an exit must—<br>(i) be measured clear of all obstructions such as handrails, projecting parts of barriers and the like; &<br>(ii) extend without interruption, except for ceiling cornices, to a height not less than 2 m vertically above a line along the nosings of the treads or the floor surface of the ramp or landing.<br>(b) To determine the aggregate unobstructed width, the number of persons accommodated must be calculated according to D2D18. | CR. Details to be provided with Construction Certificate documentation. |
| D2D12 | **Travel via fire isolated exits**:- | NA |
| D2D13 | **External stairways or ramps in lieu of a fire isolated exit**:-<br>External stairs may be used instead of a fire isolated exit in buildings under 25m in effective height, subject to being non-combustible throughout and protected as set out in D2D13. | NA |
| D2D14 | **Travel by non fire isolated stairways or ramps**:-<br>• must provide continuous means of travel by its own flights of stairs to the level at which egress to a road or open space is provided;<br>• Class 2, 3 or 4: distance between SOU and point of egress to road/open space not to exceed 60m.<br>• In a Class 2 or 3 building, if more than 2 exits are required and provided via internal non-fire-isolated exits, each must provide separate egress to a road or open space and be smoke separated at the level of discharge.Class 5-9: stair to discharge at a point no more than 20m from a door providing egress to a road or open space; or 40m from one of 2 exits if travel is in opposite directions. Total distance travelled – 80m maximum. | CR. Details to be provided with Construction Certificate documentation. |
| D2D15 | **Discharge from exits**:-<br>• Not to be blocked at the point of discharge.<br>• Path of travel to the road to be via a stair or by a ramp with gradients no steeper than 1:8 (or 1:14 of ramp required for disabled access).<br>• Path of travel to the road to have unobstructed width not < the minimum required for the exit or 1.0m. | CR. Details to be provided with Construction Certificate documentation. |
| D2D16 | **Horizontal exits**:-<br>Not counted as required exits between SOUs or in a class 9b primary/secondary school, early child hood centre. | NA |
| D2D17 | **Non-Required stairways, ramps and escalators**:-<br>Generally, unsprinklered buildings can connect 3 stories in a class 2 building and 2 storeys in a class 3-9 building.<br>An additional storey may be connected in some cases where the building is sprinkler protected (other than a FPAA101D System). | CR, subject to sprinkler system proposed, therefore stairs not required to be fire-isolated. Details to be provided with Construction Certificate documentation. |

| Section D | Access and Egress | Comment |
|---|---|---|
| D2D18 | **Number of persons accommodated**:-<br>In accordance with Table D2D18, unless confirmation from building owner is more accurate. | Noted. |
| D2D19 | **Measurement of distances**:-<br>Identifies the nearest part of the exit to measure travel distance. | Noted |
| D2D20 | **Method of measurement**:-<br>Specifies the method of measuring the distance of travel to an exit | Noted |
| D2D21 | **Plant rooms, lift machine rooms and electrical network substations: Concession**:-<br>A ladder may be used in lieu of a stair for egress from:<br>• A plant room with a floor area not > 100m$^2$; or<br>• All but 1 point of egress from a plant room, a lift machine room or a Class 8 electrical network substation with a with a floor area of not > 200m$^2$. | NA. Nil proposed if motor room-less lift provided. |
| D2D22 | **Access to lift pits**:-<br>Where the pit depth not more than 3m, access to be through the lowest landing doors.<br>Where the pit depth is > 3m access to be through an access doorway:<br>• In lieu of D2D7 to D2D11, doorway to be level with pit floor and not less than 600mm wide by 1980mm high (reduced to 1500mm if necessary to comply with following dot point).<br>• No part of lift car or platform encroach on pit doorway entrance when car is on fully compressed buffer.<br>• Stairway complying with AS1657.<br>• In lieu of D3D26, doors must be horizontal sliding or outwards opening hinged; self-closing; self-locking from the outside; marked on landing side with letters not < 35mm high stating DANGER LIFTWELL – ENTRY OF UNAUTHORISED PERSONS PROHIBITED – KEEP CLEAR AT ALL TIMES. | CR. Details to confirm depth of lift pit. Details to be provided with Construction Certificate documentation. |
| D2S23 | **Egress from primary schools**:- | NA |
| **Part D3** | **CONSTRUCTION OF EXITS** | |
| D3D1 | **Deemed-to-Satisfy Provisions**<br>Where a DtS Solution is proposed, Performance Requirements D1P1 to D1P6, D1P8 & D1P9 are satisfied by complying with D2D2 to D2D23, D3D2 to D3D30 & D4D2 to D4D13; & Part G3 (atrium), & Part G4 (alpine area), & Part G6 (occupiable outdoor area), & Part I1 (Class 9b) & Part I2 (public transport), Part I3 (farm sheds). | Noted |
| D3D2 | **Application of Part**:-<br>Except for clauses D3D14, D3D15(a), D3D17, D3D18, D3D19, D3D20, D3D21, D3D22(5), D3D22(6), D3D26 and D3D29 do not apply to the internal parts of a SOU of a class 3 building.<br>Except for clauses D3D14, D3D15(a), D3D17, D3D18, D3D19, D3D20, D3D21, D3D22(5), D3D22(6), D3D23 and D3D29 do not apply to the internal parts of a SOU of a class 2 or class 4 part of a building. | Noted |

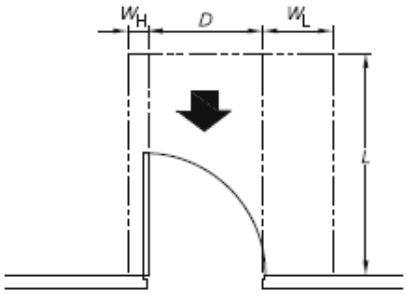
| Section D | Access and Egress | Comment |
|---|---|---|
| D3D3 | **Fire-Isolated stairways & ramps**:-<br>Must be within fire resisting shaft and be constructed of non-combustible materials | NA. |
| D3D4 | **Non-Fire-Isolated stairways and ramps**:-<br>Rise in Storeys > 2, to be constructed from either:<br>• Reinforced or prestressed concrete<br>• 6mm thick steel<br>• 44mm thick timber & an average density of not less than 800 kg/$m^3$ at a moisture content of 12% | CR. Details of stairway construction to be confirmed. Details to be provided with Construction Certificate documentation. |
| D3D5 | **Separation of rising and descending stair flights**:-<br>A required fire isolated stair must have no direct connection between a flight of stairs rising from below the level of access to the road and a flight of stairs descending from a storey above that level. | CR. NA, subject to sprinkler system proposed, therefore stairs not required to be fire-isolated. Details to be provided with Construction Certificate documentation. |
| D3D6 | **Open access ramps and balconies**:- | NA |
| D3D7 | **Smoke lobbies**:- | NA |
| D3D8 | **Installations in exits and paths of travel**:-<br>• Access to service shafts must not be from fire exit (unless for fire fighting services);<br>• No openings to ducts conveying hot products of combustion;<br>• Gas or fuel services not permitted within exit;<br>• Electrical or service equipment not permitted within fire exit – however can be in a path of travel to an exit if provided with fire protective covering and smoke seals | CR. Details on location of main switch and any sub boards or services proposed to be confirmed. Details to be provided with Construction Certificate documentation. |
| D3D9 | **Enclosure of space under stairs and ramps**:-<br>• No enclosures/cupboards permitted in a fire stair shaft;<br>• Space below a non-fire isolated stair to remain unenclosed unless construction with FRL of 60/60/60 with -/60/30 fire door. | CR. NA, subject to no enclosures proposed. Details to be provided with Construction Certificate documentation. |
| D3D10 | **Width of required stairways and ramps**:-<br>A stairway that exceeds 2m in width is counted as having a width of only 2m unless divided by handrail. | Noted. Stairs required to be 1.0m clear width only. |
| D3D11 | **Pedestrian ramps**:-<br>Ramp serving as a required exit must:<br>Be maximum 1:14 gradient if required for disabled access (in accordance with AS 1428.1);<br>Maximum 1:8 gradient in other cases;<br>Floor surfaces to have slip resistance classification in accordance with Table D2.14 and AS4586-2013 | CR. Details of ramps with slip resistance to be confirmed. Details to be provided with Construction Certificate documentation. |
| D3D12 | **Fire Isolated passageways**:- | NA. |
| D3D13 | **Roof as open space**:-<br>If an exit discharges to a roof of a building, the roof must:<br>• Have an FRL of 120/120/120, &<br>• Not have rooflights or other openings within 3m of the path of travel | CR. Ground Floor level slab with areas used as a roof for egress from building is required to achieve an FRL of 120/120/120 with any supporting columns / walls achieving an FRL of 120/-/-. Details to be provided with Construction Certificate documentation. |

<table>
<tr><th>Section D</th><th>Access and Egress</th><th>Comment</th></tr>
<tr><td>D3D14</td><td>Goings and risers:-<ul><li>Minimum 2 risers & maximum of 18 risers in any flight;</li><li>Riser 115mm minimum, 190mm maximum dimensions – treads 250mm going to 355 maximum going. 2R+G 550mm min and 700 maximum.</li><li>Goings and risers to be constant throughout. Constant means within each flight that variations between;<ul><li>a) adjacent risers, or between adjacent goings is no more than 5mm, and</li><li>b) the largest and smallest riser, or largest and smallest going does not exceed 10mm.</li></ul></li><li>Risers not to permit a 125mm sphere to pass through;</li><li>Treads or nosings to have slip resistance classification in accordance with Table D3D15 and AS4586-2013;</li><li>No winders in lieu of a quarter landing</li></ul></td><td>CR. Details of stairway construction required. Details to be provided with Construction Certificate documentation.</td></tr>
<tr><td>D3D15</td><td>Landings:-<br>In a stairway – maximum gradient of 1:50 and minimum of 750mm long.<br>Landings to have slip resistance classification in accordance with Table D3D15 and AS4586-2013;<table><tr><th rowspan="2">Application</th><th colspan="2">Surface Condition</th></tr><tr><th>Dry</th><th>Wet</th></tr><tr><td>Ramp steeper than 1:14</td><td>P4 or R11</td><td>P5 or R12</td></tr><tr><td>Ramp steeper than 1:20 but not steeper than 1:14</td><td>P3 or R10</td><td>P4 or R11</td></tr><tr><td>Tread or landing surface</td><td>P3 or R10</td><td>P4 or R11</td></tr><tr><td>Nosing or landing edge strip</td><td>P3</td><td>P4</td></tr></table>D3D15</td><td>CR. Details of landings to stairways required. Details to be provided with Construction Certificate documentation.</td></tr>
<tr><td>D3D16</td><td>Thresholds:-<br>No step or ramp at any point closer to the doorway than the width of the door leaf, unless:<ul><li>Door opens to road or open space (and door sill not more than 190mm high);</li></ul></td><td>?. Internal doorways with steps closer that the width of the door leaf, i.e. doorway to the GF rubbish & recycle bin room has a ramp at the sliding door that is to be removed. Details to be provided with Construction Certificate documentation.</td></tr>
<tr><td>D3D17</td><td>Barriers to prevent falls:-<br>A continuous barrier to be provided along the side of any roof to with public access is provided, any stairway or ramp, any floor, corridor, hallway, balcony, verandah, mezzanine, access bridge or the like and along the side of any access path to a building if it is not bounded by a wall and if the trafficable surface is 1m or more above the surface beneath.<br>This does not apply to-<ul><li>the perimeter of a stage, rigging loft, loading dock or the like, or</li><li>areas referred to in D3D23, or</li><li>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 building, or</li><li>openable windows covered by D3D29.</li></ul></td><td>CR. Details to be provided with Construction Certificate documentation.</td></tr>
</table>

| Section D | Access and Egress | Comment |
|---|---|---|
| D3D18 | **Height of barriers**:-<br>Barriers height to be at least 1.0m above level surfaces, 865mm above stair nosings or ramps with gradient steeper than 1:20. | CR. Details to be provided with Construction Certificate documentation. |
| D3D19 | **Openings in barriers**:-<br>Openings in barriers to be not greater than 125mm (ie 125mm sphere must not pass through it) measured above the line of nosings for stairs, except:<br>• Barriers for fire-isolated stairs to be constructed so as to provide rail at not more 150mm above the stair, landing / line of nosings and not more than 460mm openings where rails provided.<br>• Barriers for Class 7 (other than carparks) or Class 8 buildings, openings of not more than 300mm, or where rails used not more than 150mm above the floor / landing & line of nosings and 460mm openings where rails provided.<br>• Where a required barrier is fixed to the vertical face forming an edge of a landing, balcony, deck, stairway or the like, the opening formed between the barrier and the face must not exceed 40mm. | CR. Details to be provided with Construction Certificate documentation. |
| D3D20 | **Barrier climbability**:-<br>A barrier located on a floor more than 4m above the surface beneath any horizontal or near horizontal elements between 150mm and 760mm must not facilitate climbing.<br>This does not apply to fire-isolated stairways / ramps and other areas used primarily for emergency purposes, other than external stairways, external ramps or Class 7 (other than carparks) or Class 8 buildings. | CR. Details to be provided with Construction Certificate documentation. |
| D3D21 | **Wire barriers**:-<br>Where a required barrier is constructed of wire, it must be measured in accordance with D3D21 and Tables D3D21a to D3D21c. | CR. Details to be provided with Construction Certificate documentation. |
| D3D22 | **Handrails**:-<br>• Located on at least one side of ramp or stairs;<br>• Located on two sides of stairs when in excess of 2m in width (and where required by Clause D3.3 and AS1428.1);<br>• 865mm above the stair nosings ;<br>• continuous between stair flight landings. | CR. Details of handrails to stairways and ramps required. Details to be provided with Construction Certificate documentation. |
| D3D23 | **Fixed platforms, walkways stairways and ladders**:<br>Going, risers, handrails and balustrades in plant rooms, lift motor rooms or non-habitable parts of a class 2/4 SOU etc to comply with AS 1657 | NA |

| Section D | Access and Egress | Comment |
|---|---|---|
| D3D24 | **Doorways and doors**:-<br>Doors in exits (or in patient care areas of class 9a) must not be fitted with revolving door; roller shutter or tilt up door, unless for a roller shutter or tilt up door it serves a Class 6, 7 or 8 part < 200m$^2$, is the only required exit doorway from the building or part and is held open when occupied.<br>Can only be fitted with a sliding door if it leads directly to open space and the door is able to be opened manually under a force of not more than 110N, or.<br>If fitted with a power operated door must be opened manually under a force of not more than 110N and automatic fail safe open device on power failure or on activation of a smoke detector in the fire compartment served by the door. | Complies. |
| D3D25 | **Swinging doors**:-<br>Must not encroach more than 500mm into the required width of the stair, or when fully open not more than 100mm into the width of the exit. These measurements are to include door handles and other door furniture.<br>Door in exit to swing in the direction of egress unless the door serves a part of the building having an area not more than 200m$^2$ and the door is fitted with a hold open device. | DNC. The exit door from the Upper Floor opening to the common open space (adjacent to Unit 1) swings inwards, in lieu of the direction of egress. The door swing is to be reversed.<br>Details to be provided with Construction Certificate documentation. |
| D3D26 | **Operation of latch**:-<br>Exit doors and doors in the path of travel to an exit to be provided with lever latch handle device located between 900mm and 1100mm above the floor and openable with a single handed downward action without recourse to a key and if serving an area required to be accessible by Part D3 of the BCA and:<br>• be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch; and<br>• have a clearance between the handle and the back plate or door face at the centre grip section of the handle of not < 35mm and not > 45mm.<br>Concessions apply to a Class 5, 6, 7 or 8 building or part with a floor area not more than 200m$^2$ or other areas subject to certain other conditions being met. | CR. Details to be provided with Construction Certificate documentation. |
| D3D27 | **Re-entry from fire isolated exits**:-<br>Doors in a fire isolated exit within a class 9a health care building, a class 9c aged care building or a building with effective height of > 25m must not be locked from the inside to prevent re-entry | NA |
| D3D28 | **Signs on doors**:- | NA. |

| Section D | Access and Egress | Comment |
|---|---|---|
| D3D29 | **Protection of openable windows**:-<br>(a) A window opening must be provided with protection if the floor below the window is 2m or more above the surface beneath in a Class 9b early childhood centre or in a bedroom of a Class 2, 3 or 4 part.<br>(b) Where the lower level of the window opening is less than 1.7m above the floor, a window must be protected with a device to restrict the window opening or a screen with secure fittings.<br>(c) A barrier with a height not less than 865mm above the floor is required to an openable window:-<br>• In addition to window protection when a child resistant screen release mechanism is required, &<br>• For openable windows 4m or more above the surface of the window if not included in (a) above.<br>(d) A barrier required by (c), except for (e) above must not permit a 125mm sphere to pass through and must have no horizontal or near elements between 150mm and 760mm above the floor that facilitates climbing. | CR. Details to be provided with Construction Certificate documentation. |
| D3D30 | **Timber Stairways: Concession –** | Noted. NA as stairs are not fire-isolated. |
| **Part D4** | **ACCESS FOR PEOPLE WITH DISABILITIES** | |
| D4D1 | **Deemed-to-Satisfy Provisions**<br>Where a DtS Solution is proposed, Performance Requirements D1P1 to D1P6, D1P8 & D1P9 are satisfied by complying with D2D2 to D2D23, D3D2 to D3D30 & D4D2 to D4D13; & Part G3 (atrium), & Part G4 (alpine area), & Part G6 (occupiable outdoor area), & Part I1 (Class 9b) & Part I2 (public transport). | Noted |
| D4D2 | **General building access requirements**:-<br>Buildings are required to be accessible in accordance with AS 1428.1-2009, to include:<br>Class 2 buildings;<br>• Access is required to at least 1 floor containing Sole Occupancy Units (SOU's) and to the entrance doorway of each SOU on that floor, and<br>• Where a ramp or lift is provided to the entrance doorway of each SOU and any common rooms on each level served by the lift.<br>Class 5, 6, 7b, 8 & 9b buildings;<br>• Access must be provided to all areas normally used by occupants. | ? Access for people with disabilities is required in accordance with AS1428.1-2009. See D4D3 & D4D5 below. Refer to Access Consultants Report.<br>Details to be provided with Construction Certificate documentation. |

| Section D | Access and Egress | Comment |
|---|---|---|
| D4D3 | **Access to buildings**<br>Access is required from:<br>• the main points of pedestrian entry at the allotment boundary. If building is > 500m$^2$ the secondary entrance must be accessible if more than 50m from the accessible entrance.<br>• other accessible buildings connected by a pedestrian link.<br>• any required accessible carparking space.<br>In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance and through not less than 50% of all pedestrian entrances including the principal entrance.<br><br>Access doors must be minimum clear opening width of 850mm with door latch circulation space in accordance with AS1428.1-2009, e.g. for front approach.<br>  <br><br>(h) Front approach, door opens towards user<br><br>Dimension D / Dimension L / Dimension $W_H$ / Dimension $W_L$<br>850 / 1450 / 110 / 530<br>900 / 1450 / 110 / 530<br>950 / 1450 / 110 / 530<br>1000 / 1450 / 110 / 530 | DNC / ?. Access is required from the main points of a pedestrian entry at the allotment boundary. Access must be in accordance with AS1428.1-2009. This is to include:<br>a) Access through the principal pedestrian entrance. (ie min. clear opening width of 850mm) with 530mm door latch circulation space - GF entry door to lift lobby for external approach to doorway requires corridor width at least 1490mm.<br>b) Building is > 500m$^2$ therefore the secondary entrance from Commerce Lane must be accessible if more than 50m from the accessible entrance.<br>c) GF door from lift lobby to carpark has no door latch circulation space for lift lobby side of doorway.<br>d) GF accessible WC has insufficient door latch circulation space<br>e) GF bin room doors. NA if confirmed at CC stage to be exempt.<br>f) GF retail entry door has a seat structure external and adjacent to the door. Structure needs moving so as not to encroach on door latch circulation space.<br>g) UF exit door from the covered walkway to the common open space (adjacent to Unit 1) for the covered walkway side of the doorway that would require 1450mm space from doorway.<br>h) UF gate to Commerce Lane has no door latch circulation space for the common open space side of the gate.<br>i) FF corridor area outside the Common Room requires 1240mm width clear of the service cupboard.<br>j) Accessible Unit No. 1. Door latch circulation space for the inside of the unit, needs 1670mm space within and opposite entry door to Unit 1, need circulation space outside bathroom door to Unit 1 clear of kitchen cupboards.<br>Refer to Access Consultants Report.<br><br>Details to be provided with Construction Certificate documentation. |

| Section D | Access and Egress | Comment |
|---|---|---|
| D4D4 | **Parts to be accessible**:-<br>Ramps and stairways, except where exempt by D4D5, are to satisfy: -<br>• for a ramp, except fire-isolated ramp, Clause 10 of AS1428.1-2009, and<br>• for a stairway, except fire-isolated stairway, Clause 11 of AS1428.1-2009, and<br>• for a fire-isolated stairway, Clause 11.1 (f) and (g) of AS1428.1-2009.<br>Lift access must comply with E3D7 and E3D8.<br>Accessways must have passing spaces, turning spaces as required.<br>Carpet pile height to be in accordance with AS1428.1-2009, except as modified by D4D4 (g) and D4D4 (h).<br>Doorways to have minimum luminance contrast of 30% between;<br>• Door leaf & door jamb;<br>• Door leaf & adjacent wall;<br>• Architrave & wall;<br>• Door lead & architrave; or<br>• Door jamb & adjacent wall.<br>Minimum width area of contrast must be 50mm. | ? Details as per AS1428.1-2009 required.<br>Refer to Access Consultants Report.<br>Details to be provided with Construction Certificate documentation. |
| D4D5 | **Exemptions**:-<br>Not necessary to provide access to:<br>• An area that would pose a health or safety risk; or,<br>• any area that is inappropriate due to its use and<br>• any path of travel providing access to one of these areas. | Noted. |
| D4D6 | **Car Parking**:-<br>Spaces to be provided in accordance with AS/NZS 2890.6-2009 at the rate specified in D4D6. | CR. Carparking to be in accordance with AS/NZS 2890.6-2009. Details to be provided with Construction Certificate documentation. |
| D4D7 | **Signage**:-<br>Clear and legible Braille and tactile signage complying with Spec 15 is required to identify each accessible sanitary facility, each accessible space with a hearing augmentation system and each door required by E4D5 having an exit sign.<br>Signage / symbols in accordance with AS1428.1-2009. | CR. Signage to be as per AS1428.1-2009. Details to be provided with Construction Certificate documentation. |
| D4D8 | **Hearing augmentation**:-<br>Where an inbuilt amplification system (other than one used for emergency warning) is provided a hearing augmentation system is to be provided in the following locations:<br>• an auditorium, conference room, meeting room or room for judicatory purposes, or<br>• in a room in a class 9b building, or<br>• ticket office, tellers booths, reception area or the like where the public screened from the service provider | NA |

| Section D | Access and Egress | Comment |
|---|---|---|
| D4D9 | **Tactile indicators**:-<br>TGSI required:<br>• when "public" are approaching a stair, escalator, travelator, and ramp (other than step ramp),<br>• overhead obstructions less than 2m high<br>• paths of travel meeting a vehicular way adjacent to the main entrance of the building – if there is no kerb or kerb ramp at that point.<br>• TGSI required to comply with AS/NZS 1428.4.1-2009 | CR. TGSI required to be detailed to comply with AS/NZS 1428.4.1-2009. Details to be provided with Construction Certificate documentation. |
| D4D10 | **Wheelchair seating spaces in a Class 9b assembly buildings**:- | NA |
| D4D11 | **Swimming pools**: - | NA |
| D4D12 | **Ramps**: -<br>An accessway must not have a series of ramps that have a combined vertical rise of more than 3.6m and a landing for a step ramp must not overlap a landing for another step ramp. | CR. Details to be provided with Construction Certificate documentation. |
| D4D13 | **Glazing on an accessway**: -<br>On an accessway where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights and any glazing capable of being mistaken for a doorway opening must be clearly marked in accordance with AS1428.1-2009 | CR. Glazing marking to comply with AS 1428.1-2009. Details to be provided with Construction Certificate documentation. |

| Section E | Services and Equipment | Comment |
|---|---|---|
| **Part E1** | **FIRE FIGHTING EQUIPMENT** | |
| E1D1 | **Deemed-to-Satisfy Provisions**<br>Where a DtS Solution is proposed, Performance Requirements E1P1 to E1P16 are satisfied by complying with E1D2 to E2D17; & Part G3 (atrium), & Part G4 (alpine area), & Part G6 (occupiable outdoor area), & Part I1 (Class 9b) & Part I3 (farm sheds). | Noted |
| E1D2 | **Fire Hydrants**:-<br>Hydrant system required to serve a building with a floor area >500m$^2$ and where the fire brigade is available to attend the fire. System must satisfy AS2419.1 – 2021. | ?. Building floor area including carparking level appears to exceed 500m$^2$, therefore a fire hydrant system is required in accordance with AS2419.1 – 2021. Where this necessitates internal hydrants or a booster connection this may impact the design. Design details by FPAS Accredited designer to be provided with Construction Certificate documentation. |

| Section E | Services and Equipment | Comment |
|---|---|---|
| E1D2 | **Hose Reels**:-<br>Fire hose reel system to be provided (in accordance with AS 2441 – 2005) to:<br>• does not apply to Class 2, 3 or 5 building or Class 4 part of a building, or Class 9c building, or classrooms and associated corridors in a primary or secondary school;<br>• serve the whole building where internal fire hydrant have been installed;<br>• serve any fire compartment >500m$^2$ (where internal hydrants are not installed);<br>• Hose reels to be located:<br>(a) Externally; or<br>(b) Internally within 4m of an exit; or<br>(c) Internally adjacent to a fire hydrant (other than one in fire isolated exit); or<br>(d) Combination of the above<br>• Achieve system coverage and<br>(a) Need not be adjacent to every fire hydrant,<br>(b) Need not be adjacent to every exit,<br>(c) System coverage not achieved by (a) and (b), additional fire hose reels may be located in paths of travel to an exit.<br>• Hose reels not to pass through fire or smoke doors | NA to Class 3 building part.<br>CR. NA to Class 6 / 7a part of building if less than 500m$^2$. Details to be confirmed with Construction Certificate documentation. |
| E1D4 | **Sprinklers**:-<br>Sprinkler system must be provided in a building or part required by E1D5 to E1D13 complying with Specification 17 and 18. | CR. Sprinkler system proposed as noted in Parts C & D review. Subject to Fire Services drawings, specification and certification of the design details by FPAS Accredited designer being in accordance with BCA Specification 17. Details to be provided with Construction Certificate documentation. |
| E1D5 | **Where sprinklers are required: all classifications**:-<br>Sprinklers are required throughout all buildings >25m effective height, including open deck carparks within a multi-classified building. | NA |
| E1D6 | **Where sprinklers are required: Class 2 or 3 buildings other than residential care buildings**:-<br>Sprinklers are required throughout all Class 2 or 3 buildings (except residential care buildings as per E1D7) if any part of the building has a RIS > 4 or more or effective height >25m. | NA |
| E1D7 | **Where sprinklers are required: Class 3 buildings used as residential care buildings**:-<br>Sprinklers are required throughout all Class 3 residential care buildings and any Class 3 part used for residential care. | NA |
| E1D8 | **Where sprinklers are required: Class 6 building**:-<br>Sprinklers are required throughout all Class 6 buildings in fire compartments with a floor area of more than 3,500m$^2$ or volume of more than 21,000m$^3$. | NA |

| Section E | Services and Equipment | Comment |
|---|---|---|
| E1D9 | **Where sprinklers are required: Class 7a building, other than open-deck carpark**:-<br>Sprinklers are required throughout all carparks with fire compartments accommodating > 40 vehicles | NA |
| E1D10 | **Where sprinklers are required: Class 9a health-care building used as residential care building and Class 9c buildings**:- | NA |
| E1D11 | **Where sprinklers are required: Class 9b buildings**:- | NA |
| E1D12 | **Where sprinklers are required: additional requirements**:-<br>Sprinkler requirements for atriums as per Part G3.<br>Sprinkler requirements for large isolated buildings as per C3D4. | NA |
| E1D13 | **Where sprinklers are required: occupancies of excessive hazard**:-<br>Sprinklers are required throughout occupancies of excessive hazard in fire compartments with a floor area of more than 2,000m$^2$ or volume of more than 12,000m$^3$. Occupancies of excessive hazard are as listed in E1D13(2). | NA |
| E1D14 | **Portable Extinguishers**:-<br>To be installed to AS2444-2001.<br>For Class 2 or 3 or 4 part, as follows: -<br>(i) an ABE type fire extinguisher; and<br>(ii) a minimum size of 2.5 kg; and<br>(iii) distributed outside a sole-occupancy unit—<br>A. to serve only the storey at which they are located; &<br>B. so that the travel distance from the entrance doorway of any sole-occupancy unit to the nearest fire extinguisher is not more than 10 m.<br>In Class 2 to 9 buildings (except within sole-occupancy units of a Class 9c building), portable fire extinguishers must be provided as follows:<br>(a) To cover Class AE or E fire risks associated with emergency services switchboards.<br>(b) To cover Class F fire risks involving cooking oils and fats in kitchens.<br>(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).<br>(d) To cover Class A fire risks in normally occupied fire compartments less than 500 m$^2$ not provided with fire hose reels (excluding open-deck carparks).<br>(e) To cover Class A fire risks in classrooms and associated corridors in primary and secondary schools not provided with fire hose reels.<br>(f) To cover Class A fire risks associated with a Class 2, 3 or 5 building or Class 4 part of a building. | CR. Design details by FPAS Accredited designer to be provided with Construction Certificate documentation. |
| E1D15 | **Fire Control Centres**:-<br>Required in a building > 25m effective height or in a class 6, 7, 8 or 9 building that exceeds 18,000m$^2$ in floor area. | NA |

| Section E | Services and Equipment | Comment |
|---|---|---|
| E1D16 | **Fire precautions during construction**:-<br>• Not less than one fire extinguisher to suit Class A, B and C fires and electrical fires at each exit (temporary) form each storey;<br>• Booster connections, hydrants and FHR to be operational when building >12m effective height | CR. Design details by FPAS Accredited designer to be provided with Construction Certificate documentation. |
| E1D17 | **Provision for special hazards**<br>Suitable additional provision must be made if special problems of fighting fire could arise because of—<br>(a) the nature or quantity of materials stored, displayed or used in a building or on the allotment; or<br>(b) the location of the building in relation to a water supply for fire-fighting purposes | NA |
| **Part E2** | **SMOKE HAZARD MANAGEMENT** | |
| E2D1 | **Deemed-to-Satisfy Provisions**<br>Where a DtS Solution is proposed, Performance Requirements E2P1 & E2P2 are satisfied by complying with E2D2 to E2D21; & Part G3 (atrium), & Part G4 (alpine area), & Part I1 (Class 9b). | Noted |
| E2D2 | **Application of Part**:-<br>DtS provisions do not apply to-<br>• open deck carparks, or<br>• open spectator stand, or<br>• Class 8 (electrical network substation not > 200m$^2$ in a multi classified building.<br>DtS smoke and heat vent provisions do not apply to any area not used by occupants for an extended period of time such as a storeroom < 30m$^2$, sanitary compartment, plant room or the like. | Noted |
| E2D3 | **General requirements**:-<br>(1) 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—<br>(a) to operate as a smoke control system in accordance with AS 1668.1; or<br>(b) such that it—<br>(i) incorporates smoke dampers where the air-handling ducts penetrate any elements separating the fire compartments served; and<br>(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.<br>(2) For the purposes of (1), each SOU in a Class 2 or 3 building is treated as a separate fire compartment.<br>(3) Miscellaneous air-handling systems covered by Sections 5 & 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. | CR. Details to be provided with Construction Certificate documentation. |

| Section E | Services and Equipment | Comment |
|---|---|---|
| E2D4 | **Fire-isolated exits**:- | NA |
| E2D5 | **Buildings more than 25m in effective height: Class 2 and 3 buildings and Class 4 part of a building**:- | NA |
| E2D6 | **Buildings more than 25 m in effective height: Class 5, 6, 7b, 8 and 9b buildings**:- | NA |
| E2D7 | **Buildings more than 25 m in effective height: Class 9a buildings**:- | NA |
| E2D8 | **Buildings not more than 25m in effective height: Class 2 and 3 buildings and Class 4 part of a building**:-<br>In a Class 2 & 3 building or part of a building, or Class 4 part of a building, if the building is not >25 m effective height—<br>(a) it must be provided with an automatic smoke detection and alarm system complying with Specification 20;<br>(b) Note: Note: See C3D15 for division of public corridors > 40m in length.<br>Note: See E2D14 to E2D20 for specific provisions applicable to a Class 6 (in a fire compartment having a floor area of > 2000m$^2$) & Class 9b building or part of a building. | CR. Design details by FPAS Accredited designer to be provided with Construction Certificate documentation. |
| E2D9 | **Buildings not more than 25 m in effective height: Class 5, 6, 7b, 8 and 9b buildings**:-<br>(1) A building not > 25 m effective height that—<br>(a) is a Class 5 or 9b school building or part of a building having a rise in storeys of > 3; or<br>(b) is a Class 6, 7b, 8 or 9b building (other than a school) or part of a building having a rise in storeys of > 2; or<br>(c) has a rise in storeys of more than 2 and contains—<br>(i) a Class 5 or 9b school part; and<br>(ii) a Class 6, 7b, 8 or 9b (other than a school) part, must meet the requirements of (2).<br>(2) A building referred to in (1) must be provided with—<br>(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<br>(b) a zone pressurisation system between vertically separated fire compartments as per AS 1668.1, if the building has more than one fire compartment; or<br>(c) an automatic smoke detection and alarm system complying with Spec. 20; or<br>(d) a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Spec. 17.<br>(3) For the purposes of (2), vertically separated fire compartments are fire compartments above & below each other, & not fire compartments within the same storey. | CR. Design details by FPAS Accredited designer to be provided with Construction Certificate documentation. |
| E2D10 (NSW) | **Buildings not more than 25 m in effective height: large isolated buildings subject to C3D4**:- | NA |
| E2D11 | **Buildings not more than 25 m in effective height: Class 9a and 9c buildings**:- | NA |
| E2D12 | **Class 7a buildings**:-<br>Class 7a building including a basement provided with mechanical ventilation in accordance with AS1668.2, must comply with Clause 5.5 of AS1668.1-2015. | CR. Design details by FPAS Accredited designer to be provided with Construction Certificate documentation. |

| Section E | Services and Equipment | Comment |
|---|---|---|
| E2D13 | **Basements (other than Class 7a buildings)**:- | NA |
| E2D14 | **Class 6 buildings – in fire compartments more than 2000m$^2$: Class 6 building (not containing an enclosed common walkway or mall serving more than one Class 6 sole-occupancy unit)**:- | NA |
| E2D15 | **Class 6 buildings – in fire compartments more than 2000m$^2$: Class 6 building (containing an enclosed common walkway or mall serving more than one Class 6 sole-occupancy unit)**:- | NA |
| E2D16 (NSW) | **Class 9b – assembly buildings: all**:- | NA |
| E2D17 (NSW) | **Class 9b – assembly buildings: night clubs, discotheques and the like**:- | NA |
| E2D18 (NSW) | **Class 9b – assembly buildings: exhibition halls, museums and art galleries**:- | NA |
| E2D19 (NSW) | **Class 9b – assembly buildings: other assembly buildings (not listed in NSW E2D16 to E2D18)**:- | NA |
| E2D20 (NSW) | **Class 9b assembly buildings: other assembly buildings (not listed in E2D16 to E2D19)**:- | NA |
| E2D21 (NSW) | **Provision for special hazard**:-<br>Additional measures to be provided due to the special characteristics, function; use; type of materials stored; or special mix of classifications within a building | NA |
| **Part E3** | **LIFT INSTALLATIONS** | |
| E3D1 | **Deemed-to-Satisfy Provisions**<br>Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements E3P1 to E3P4 are satisfied by complying with E3D2 to E2D12; & Part G6 (occupiable outdoor area), & Part I2 (public transport buildings). | Noted |
| E3D2 | **Lift installations**:-<br>An electric passenger lift installation and electrohydraulic passenger lift installation must comply with Spec. 24. | CR. Details to be provided with Construction Certificate documentation. |
| E3D3 | **Stretcher facility in lifts**:-<br>(1) A stretcher facility as per (2) must be provided—<br>(a) in at least one emergency lift required by E3D5; or<br>(b) where an emergency lift is not required, if passenger lifts are installed to serve any storey above an effective height of 12 m, in at least one of those lifts to serve each floor served by the lifts. | NA. |
| E3D4 | **Warning against use of lifts in fire**:-<br>Signs to be provided at each lift landing located near every call button complying with figure E3D5 | CR. Details of signage required. Details to be provided with Construction Certificate documentation. |
| E3D5 | **Emergency lifts**:-<br>Required in some class 9a buildings and also buildings with effective height >25m. An emergency lift must be contained within a fire resisting shaft as per C3D11. | NA |
| E3D6 | **Landings**:-<br>Access and egress to and from liftwell landings must comply with BCA Parts D2, D3, & D4. | CR. Details to be provided with Construction Certificate documentation. |

| Section E | Services and Equipment | Comment |
|---|---|---|
| E3D7 | **Passenger lift types and their limitations**: -<br>Access and egress to and from liftwell landings must comply with BCA Parts D2, D3, & D4.<br>(1) In an accessible building, every passenger lift must be one of the following lift types, subject to the limitations (if any) of each lift type:<br>(a) There are no limitations on the use of electric passenger lifts, electrohydraulic passenger lifts or inclined lifts.<br>(b) Stairway platform lifts must not—<br>(i) be used to serve a space in a building accommodating > 100 persons calculated as per D2D18; or<br>(ii) be used in a high traffic public use area such as a theatre, cinema, auditorium, transport interchange, shopping centre or the like; or<br>(iii) be used where it is possible to install another type of passenger lift; or<br>(iv) connect > 2 storeys; or<br>(v) where > 1 stairway lift is installed, serve > 2 consecutive storeys; or<br>(vi) when in the folded position, encroach on the min. width of a stairway required by D2D8 to D2D11.<br>(c) A low-rise platform lift must not travel > 1000 mm.<br>(d) A low-rise, low-speed constant pressure lift must not—<br>(i) for an enclosed type, travel > 4m; or<br>(ii) for an unenclosed type, travel > 2m; or<br>(iii) be used in a high traffic public use areas, e.g. a theatre, cinema, auditorium, transport interchange, shopping complex or the like.<br>(e) A small-sized, low-speed automatic lift must not travel > 12m.<br>(2) A passenger lift referred to in (1) must not rely on a constant pressure device for its operation if the lift car is fully enclosed. | CR. Details to be provided with Construction Certificate documentation. |

| Section E | Services and Equipment | Comment |
|---|---|---|
| E3D8 | **Accessible features required for passenger lifts**:-<br>In an accessible building, every passenger lift must have the following features where applicable:<br>(a) A handrail as per AS 1735.12 for all lifts except—<br>(i) a stairway platform lift; and<br>(ii) a low-rise platform lift.<br>(b) Lift floor dimensions of not < 1400mm wide x 1600mm deep for all lifts which travel > 12m.<br>(c) Lift floor dimensions of not < 1100mm wide x 1400mm deep for all lifts which travel not > 12m, except a stairway platform lift.<br>(d) Lift floor dimensions of not < 810mm wide x 1200mm deep for a stairway platform lift.<br>(e) Minimum clear door opening as per AS1735.12 for all lifts except a stairway platform lift.<br>(f) Passenger protection system as per AS1735.12 for all lifts with power-operated doors.<br>(g) Lift landing doors at the upper landing for all lifts except a stairway platform lift.<br>(h) Lift car and landing control buttons complying with AS 1735.12 for all lifts except—<br>(i) a stairway platform lift; and<br>(ii) a low-rise platform lift.<br>(i) Lighting as per AS1735.12 for all enclosed lift cars.<br>(j) For all lifts serving > 2 levels—<br>(i) automatic audible information within the lift car to identify the level each time the car stops; and<br>(ii) audible and visual indication at each lift landing to indicate the arrival of the lift car; and<br>(iii) audible information and audible indication required by (i) and (ii) is to be provided in a range of between 20 - 80 dB(A) at a maximum frequency of 1500 Hz.<br>(k) Emergency hands-free communication, including a button that alerts a call centre of a problem and a light to signal that the call has been received, for all lifts except a stairway platform lift. | CR. Details to be provided with Construction Certificate documentation. |
| E3D9 | **Fire Service Controls**:-<br>Lift serving any storey above an effective height of 12m, must be provided with fire service control switch in accordance with E3D11 and lift car fire service drive control switch in accordance with E3D12. | NA. |
| E3D10 | **Residential Care Buildings**:- | NA |
| E3D11 | **Fire Service Recall Operation Switch**<br>Where required, switch. Labelling, key and operation procedures for a fire service recall control switch are to be provided. | NA. |
| E3D12 | **Lift Car Fire Service Drive Control Switch**<br>Where required switch initiation, labelling and operation for the fire service drive control switch is to be provided. | NA. |
| **Part E4** | **EMERGENCY LIGHTING, EXIT SIGNS AND WARNING SYSTEMS** | |

| Section E | Services and Equipment | Comment |
|---|---|---|
| E4D1 | **Deemed-to-Satisfy Provisions**<br>Where a DtS Solution is proposed, Performance Requirements E4P1 to E4P3 are satisfied by complying with E4D2 to E4D9; & Part G3 (atrium), & Part G4 (alpine area), & Part G6 (occupiable outdoor area), & Part I1 (Class 9b) & Part I3 (farm sheds). | Noted |
| E4D2 | **Emergency Lighting**:-<br>Required (in accordance with AS/NZS 2293.1) in:<br>• Every fire isolated exit;<br>• Every Class 5 to 9 storey >300m$^2$ in area, i.e. path of travel to an exit and in any room with floor area > 100m$^2$ that does not open to a corridor/space with emergency lighting and any room having a floor area in excess of 300m$^2$;<br>• In every hallway or the like > 6m from the entrance floor of a SOU of Class 2, 3 or 4 part to the nearest door opening to a fire-isolated exit, or external stairway or road or open space,<br>• Every non-fire isolated stairway,<br>• Every SOU of Class 5, 6 or 9 if the SOU area is >300m$^2$; and the exit from the unit does not open to a road or open space or external stairway etc leading to a road or open space.<br>• Every room or space to which there is public access in every storey in a Class 6 or 9b building if that storey has a floor area >300m$^2$, or any point more than 20m from a doorway leading directly to stairway or open space, or egress involves a rise within the building > 1.5m. | CR. Design details by FPAS Accredited designer to be provided with Construction Certificate documentation. |
| E4D3 | **Measurement of distances**:-<br>Using the shortest path of travel. | Noted |
| E4D4 | **Design and operation of emergency lighting**:-<br>To comply with AS/NZS 2293.1-2018. | CR. Design details by FPAS Accredited designer to be provided with Construction Certificate documentation. |
| E4D5 | **Exit signs**:-<br>Clearly visible to persons approaching an exit, above or adjacent to doors to each:<br>• enclosed or external stairs, passageways and ramps<br>• external access balcony,<br>• from an enclosed stair, passageway or ramp at the level of discharge to the road;<br>• acting as horizontal exits;<br>• serving as or forming part of a required exit in a storey with emergency lighting. | CR. Design details by FPAS Accredited designer to be provided with Construction Certificate documentation. |
| E4D6 | **Direction signs**:-<br>Where an exit is not apparent exit signs with directional arrows are required | CR. Design details by FPAS Accredited designer to be provided with Construction Certificate documentation. |
| E4D7 | **Class 2 and 3 Buildings and Class 4 parts exemptions:-**<br>Illuminated exit signs not applicable to:<br>• doors of SOUs of class 2, 3 or 4;<br>• class 2 building where “EXIT” is clearly labelled on the side remote from the exit/balcony | Noted |

| Section E | Services and Equipment | Comment |
|---|---|---|
| E4D8 | **Design and operation of exit signs**:-<br>To comply with AS/NZS 2293.1-2018 or photoluminescent exit sign in accordance with BCA Specification 25. | CR. Design details by FPAS Accredited designer to be provided with Construction Certificate documentation. |
| E4D9 | **Sound systems and intercom systems for emergency purposes**:-<br>To be installed to comply with AS 1670.4-2018 in:<br>• class 3 residential part of a school or aged/ disabled children accommodation with RIS > 2; | NA. |

| Section F | Health and Amenity | Comment |
|---|---|---|
| **Part F1** | **DAMP & WEATHER PROOFING** | |
| F1D1 | **Deemed-to-Satisfy Provisions**<br>Where a DtS Solution is proposed, Performance Requirements F1P1 to F1P4 are satisfied by complying with F1D2 to F1D8. | Noted |
| F1D2 | **Application of Part**:-<br>(1) F1D4 and F1D5 do not apply to a roof with a covering complying with F3D2(a) to (d).<br>(2) F1D3 to F1D5 do not apply to a balcony, podium or similar horizontal surface part of a building—<br>(a) where the flooring is of timber decking or other perforated flooring; or<br>(b) which is located directly above ground. | CR. Details to be provided with Construction Certificate documentation. |
| F1D3 | **Stormwater drainage**:-<br>Stormwater drainage is to be designed and constructed as per AS/NZS3500.3-2021. | CR. Details to be provided with Construction Certificate documentation. |
| F1D4 | **Exposed joints**:-<br>Exposed joints in the drainage surface on a roof, balcony, podium or similar horizontal surface part of a building must—<br>(a) be protected as per Section 2.9 of AS 4654.2-2012; and<br>(b) not be located beneath or run through a planter box, water feature or similar part of the building.<br>Notes:<br>• For the purposes of F1D4, an exposed joint is a construction joint, control joint, expansion joint, contraction joint or movement joint and includes an exposed joint which is directly below a drainage surface.<br>• To minimise the potential of water ingress, the exposed joint should be located at a ridge or high point of the structural substrate, where possible.<br>• Where an exposed joint is subject to excessive movement, such as more than 10 mm, additional measures should be considered to ensure protection of the exposed joint. These additional measures may include use of a hob with a minimum height of 50 mm formed within the structural substrate for the full length of both sides of the exposed joint, and the exposed joint protected by a discontinuous membrane in accordance with Section 2.9 of AS 4654.2. | CR. Details to be provided with Construction Certificate documentation. |

| Section F | Health and Amenity | Comment |
|---|---|---|
| F1D5 | **External waterproofing membranes**:-<br>A roof, balcony, podium or similar horizontal surface part of a building must be provided with a waterproofing membrane—<br>(a) consisting of materials as per AS 4654.1-2012; & and<br>(b) designed and installed as per AS 4654.2-2012. | CR. Details to be provided with Construction Certificate documentation. |
| F1D6 | **Damp-proofing**:-<br>Moisture from the ground must be prevented from reaching—<br>(a) the lowest floor timbers and the walls above the lowest floor joists; and<br>(b) the walls above the damp-proof course; and<br>(c) the underside of a suspended floor constructed of a material other than timber, and the supporting beams or girders.<br>To be installed in accordance with AS/NZS 2904-1995 or AS3660.1- 2014.<br>Some concessions apply to class 7, 8 and 10 buildings. | CR. Details to be provided with Construction Certificate documentation. |
| F1D7 | **Damp-proofing of floors on the ground**:-<br>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 as per AS 2870-2011. | CR. Details to be provided with Construction Certificate documentation. |
| F1D8 | **Sub-floor ventilation**:-<br>Subfloor spaces must—<br>(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<br>(b) have clearance between the ground surface and the underside of the lowest horizontal member in the subfloor as per Table F1D8. | NA. |
| **Part F2** | **WET AREAS & OVERFLOW** | |
| F2D1 | **Deemed-to-Satisfy Provisions**<br>Where a DtS Solution is proposed, Performance Requirements F2P1 & F2P2 are satisfied by complying with F2D2 to F2D4. | Noted |
| F2D2 | **Waterproofing of wet areas in buildings**:-<br>Building elements in wet areas of Class 2, 3 or 4 part of a building, must be water resistant or waterproof as per Specification 26 and AS 3740-2010,<br>Building elements in a bathroom, shower room., slop hoper or sink compartment, a laundry or sanitary compartment of a Class 5 to 9 building must be water resistant or waterproof as per Specification 26 and AS 3740-2010, as if they were in a Class 2 to 4 building. | CR. Details to be provided with Construction Certificate documentation. |
| F2D3 | **Rooms containing urinals**:- | Noted |
| F2D4 | **Floor wastes**:-<br>Class 2, 3 or 4 part to have floor wastes in bathrooms, laundries located at any level above an SOU / public space.<br>The floor waste must have a min. continuous fall to the waste of 1:80 and max. continuous fall to the waste of 1:50. | CR. Details to be provided with Construction Certificate documentation. |
| **PART F3** | **ROOF & WALL CLADDING** | |

| Section F | Health and Amenity | Comment |
|---|---|---|
| F3D1 | **Deemed-to-Satisfy Provisions**<br>Where a DtS Solution is proposed, Performance Requirements F3P1 is satisfied by complying with F3D2 to F3D5. | Noted |
| F3D2 | **Roof coverings**:-<br>• Roofing tiles to AS2049-2002, AS2050-2018; or,<br>• Metal Roofing to AS1562.1-2018; or,<br>• Plastic Sheet Roofing to AS1562.1-2006;<br>• Terracotta fibre-cement and timber slates and shingles designed and installed in accordance with AS4597-1999, except in cyclonic areas; or,<br>• An external waterproofing membrane as per F1D5. | CR. Details to be provided with Construction Certificate documentation. |
| F3D3 | **Sarking**:-<br>Where used for weatherproofing for roofs and walls must comply with AS/NZS 4200 parts 1 & 2 – 2017. | CR. Details to be provided with Construction Certificate documentation. |
| F3D4 | **Glazed Assemblies**:-<br>Windows, sliding doors, adjustable louvres, shopfronts; window walls must comply with AS2047 -2014 if located in an external wall for resistance to water penetration.<br>Some concessions apply to class 7 & 8 buildings. | CR. Details to be provided with Construction Certificate documentation. |
| F3D5 | **Wall cladding**:-<br>Where used for weatherproofing for roofs and walls must comply with AS/NZS 4200 parts 1 & 2 – 2017<br>(1) External wall cladding must comply with one or a combination of the following:<br>(a) Masonry, including masonry veneer, unreinforced and reinforced masonry: AS 3700-2018.<br>(b) Autoclaved aerated concrete: AS 5146.3-2018.<br>(c) Metal wall cladding: AS 1562.1-2018.<br>(2) The following buildings need not comply with (1):<br>(a) A Class 7 or 8 building where in the particular case there is no necessity for compliance.<br>(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 another part of the building that is required to be weatherproofed.<br>(c) An open spectator stand or open deck carpark. | CR. Details to be provided with Construction Certificate documentation. |
| **Part F4** | **SANITARY & OTHER FACILITIES** | |
| F4D1 | **Deemed-to-Satisfy Provisions**<br>Where a DtS Solution is proposed, Performance Requirements F4P1 to F4P6 are satisfied by complying with F4D2 to F4D12; & Part I2 (public transport buildings) & Part I3 (farm sheds). | Noted |

| Section F | Health and Amenity | Comment |
|---|---|---|
| F4D2 | **Facilities in residential buildings:-**<br>Class 3 buildings other than residential care buildings, facilities to be:<br>(a) For residents in each building or group of buildings, for each 10 residents for whom private facilities are not provided, provide—<br>(i) a bath or shower; and<br>(ii) a closet pan; and<br>(iii) a washbasin.<br>(b) Notwithstanding (a), if one urinal is provided for each 25 males up to 50 and one additional urinal for each additional 50 males or part thereof, one closet pan for each 12 males may be provided.<br>(c) Facilities for employees must be provided in accordance with F4D4.<br>(d) Facilities required by (a), (b) or (c) need not be situated in the same building. | CR. Details to be provided with Construction Certificate documentation. |
| F4D3 | **Calculation of number of occupants and fixtures**:-<br>Sanitary facilities to be determined by Clause D2D18 of the BCA unless it cannot be more accurately determined by other means.<br>Unless the premises are used predominantly by one sex, sanitary facilities must be provided on the basis of equal numbers of males and females.<br>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.<br>For the purposes of this Part, a unisex facility comprises one closet pan, one washbasin and means for the disposal of sanitary products. | Noted |
| F4D4 | **Facilities in Class 3 to 9 Buildings**:-<br>Except where permitted by F4D4(3), (4), (7), F4D5(a), F4D5(b) and F4D12(1), 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.<br>If not more than 10 people are employed, a unisex facility may be provided instead of separate facilities for each sex.<br>If the majority of employees are of one sex, not > 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.<br>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.<br>Adequate means of disposal of sanitary products must be provided in sanitary facilities for use by females.<br>Not less than one washbasin must be provided where closet pans or urinals are provided. | CR. Details to be provided with Construction Certificate documentation. |

| Section F | Health and Amenity | Comment |
|---|---|---|
| F4D5 | **Accessible sanitary facilities**:-<br>Accessible unisex sanitary facilities to be provided in accessible parts of the building as per F4D6.<br>Accessible showers in accordance with F4D7,<br>At each bank of toilets where there is 1 or more toilets in addition to an accessible unisex sanitary compartment at that bank, an ambulant facility suitable for males and females.<br>Accessible unisex sanitary facility must contain a closet pan, washbasin, shelf or bench top and means of disposing sanitary products.<br>Accessible unisex sanitary facility must be entered without crossing an area reserved for one sex only.<br>The circulation spaces, fixtures and fittings of all accessible sanitary facilities provided in accordance with F4D6 & F4D7 must comply with the requirements of AS 1428.1-2009. | ?. Refer to Access Consultants Report.<br>Details to be provided with Construction Certificate documentation. |
| F4D6 | **Accessible unisex sanitary compartments**:-<br>(1) Where required by F4D5(a), the minimum number of accessible unisex sanitary compartments for each class of building is as follows:<br>(a) For Class 3 and Class 9c buildings—<br>(i) in every accessible SOU provided with sanitary compartments within the accessible SOU, not < 1; and<br>(ii) at each bank of sanitary compartments containing male & female sanitary compartments provided in common areas, not < 1.<br>(b) For Class 5, 6, 7, 8 or 9 buildings, where F4D4 requires closet pans—<br>(i) 1 on every storey containing sanitary compartments; and<br>(ii) where a storey has > 1 bank of sanitary compartments containing male and female sanitary compartments, at not < 50% of those banks. | ?. Refer to Access Consultants Report.<br>Details to be provided with Construction Certificate documentation. |
| F4D7 | **Accessible unisex showers**:-<br>(1) Where required by F4D5(b), the min. number of accessible unisex showers for each class of building is as follows:<br>(a) Class 3 and 9c buildings—<br>(i) in every accessible SOU provided with showers within the accessible SOU, not < 1; and<br>(ii) 1 for every 10 showers or part thereof provided in common areas.<br>(b) Class 5, 6, 7, 8 or 9 buildings, where F4D4 requires 1 or more showers, not < 1 for every 10 showers or part thereof. | ?. Refer to Access Consultants Report.<br>Details to be provided with Construction Certificate documentation. |
| F4D8 | **Construction of sanitary compartments**:-<br>Doors to fully enclosed sanitary compartments must be constructed at least 1.2m from the pan measured as per Figure F4D8, or be outward opening, or removal from the outside. | CR. Details to be provided to be provided with Construction Certificate documentation. |

| Section F | Health and Amenity | Comment |
|---|---|---|
| F4D9 | **Interpretation urinals and washbasins**: -<br>A urinal may be an individual stall or wall-hung urinal, or per 600mm length of urinal, or a closet pan.<br>A wash basin may be an individual basin, or part of a trough served by a single tap. | Noted |
| F4D10 | **Microbial (legionella) control**:-<br>F4D10 does not apply in NSW as the installation of hot water, warm water and cooling water systems (and their operation and maintenance) is regulated in the Public Health Regulation 2012, under the Public Health Act 2010. | NA. |
| F4D11 | **Waste Management**:-<br>Slop-hoppers to be provided in class 9a and class 9c buildings. | NA |
| F4D12 | **Accessible adult change facilities**:- | NA |
| **Part F5** | **ROOM HEIGHTS** | |
| F5D1 | **Deemed-to-Satisfy Provisions**<br>Where a DtS Solution is proposed, Performance Requirements F5P1 is satisfied by complying with F5D2; & Part I3 (farm sheds). | Noted |
| F5D2 | **Height of rooms**:-<br>• 2.4m high generally for habitable rooms and 2.1m high for non-habitable rooms, corridors, kitchen. Note: In rooms with a sloping ceiling, reduced heights apply.<br>• Class 9b Classrooms or other parts that accommodate not more than 100 persons – 2.4m and parts that accommodate more than 100 persons – 2.7m.<br>• Commercial kitchens minimum 2.4m high. | CR. Design details showing 2.4m to habitable rooms and 2.1m to non-habitable rooms to be provided with Construction Certificate documentation. |
| **Part F6** | **LIGHT AND VENTILATION** | |
| F6D1 | **Deemed-to-Satisfy Provisions**<br>Where a DtS Solution is proposed, Performance Requirements F6P1 to F6P5 are satisfied by complying with F6D2 to F6D12; & Part I2 (public transport buildings) & Part I3 (farm sheds). | Noted |
| F6D2 | **Provision of Natural light**:-<br>• Class 2 and 4 – all habitable rooms;<br>• Class 3 – all bedrooms and dormitories; | CR. Design details to be provided with Construction Certificate documentation. |
| F6D3 | **Methods and extent of natural lighting**:-<br>• Provided by windows with light transmission and are open to sky or face a courtyard;<br>• Natural lighting must be via windows required that are not less than 10% of the floor area of the room, or by rooflights that are not less than 3% of the floor area of the room.<br>• Setbacks to obstructions/boundary generally 1m – exceptions apply to class 2, 3, 4, 9a and 9c.<br>• In a Class 9b early childhood centre, the sills of 50% of windows in children's rooms must be located not > 500mm above the floor level. | CR. Details to be provided with Construction Certificate documentation. |

| Section F | Health and Amenity | Comment |
|---|---|---|
| F6D4 | **Natural light borrowed from adjoining room**:-<br>Applies in some instances in class 2, 3 and class 4 parts, e.g. balcony if part of the same SOU or if part of common property. | Noted |
| F6D5 | **Artificial lighting**:-<br>Artificial lighting must be provided to the building to all rooms that are frequently occupied and all corridors, lobbies, internal stairways and circulation spaces and paths of egress.<br>The lighting system must comply with AS/NZS 1680.0 – 2009. | CR. Details to be provided with Construction Certificate documentation. |
| F6D6 | **Ventilation of rooms**:-<br>A habitable room, office, shop, factory, workroom, sanitary compartment, bathroom, shower room, laundry and any other room occupies by a person for any purpose must have either natural or mechanical ventilation.<br>Mechanical Ventilation for occupants of the building is required to comply with AS 1668.2 – 2012 and AS/NZS 3666.1 – 2011. | CR. Details to be provided with Construction Certificate documentation. |
| F6D7 | **Natural ventilation**:-<br>Relates to methods of providing natural ventilation through openings in the building, ie openings 5% of floor area of room. | CR. Details to be provided with Construction Certificate documentation. |
| F6D8 | **Ventilation borrowed from adjoining rooms**:-<br>Ventilation can be borrowed if both rooms are within the same SOU or an enclosed veranda is common property | Noted |
| F6D9 | **Restriction on position of water closets and urinals**:-<br>A room containing a closet pan/urinal must not open directly into a kitchen; pantry; restaurant; public dining room; dormitory in a class 3; public assembly room; workplace used by more than 1 person. | CR. Details to be provided with Construction Certificate documentation. |
| F6D10 | **Airlocks**:<br>Airlocks, mechanical ventilation and screens can be utilised where WCs open into rooms as indicated in clause F6D10. | CR. Details to be provided with Construction Certificate documentation. |
| F6D11 | **Carparks**:-<br>Every storey of a carpark, except an open deck carpark, must be provided with either mechanical ventilation as per AS1668.2-2012 or permanent natural ventilation as per clause 4 of AS1668.4-2012. | CR. Details to be provided with Construction Certificate documentation. |
| F6D12 | **Kitchen local exhaust ventilation**:-<br>Commercial kitchen to be provided with kitchen exhaust hood complying with AS/NZS1668.1 and AS1668.2 :-<br>• Any cooking apparatus has a total max. electrical power input > 8kW or a total gas power input exceeding 29MJ/h; or<br>• The total max. power input to >1 apparatus exceeds 0.5kW electrical power or 1.8MJ gas per $m^2$ of floor area of the room or enclosure. | NA |
| **Part F7** | **SOUND TRANSMISSION AND INSULATION** | |

| Section F | Health and Amenity | Comment |
|---|---|---|
| F7D1 | **Deemed-to-Satisfy Provisions**<br>Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements F7P1 to F7P4 are satisfied by complying with F7D2 to F7D8. | Noted |
| F7D2 | **Application of Part**:<br>The DTS provisions of this part apply to class 2, 3 and 9c buildings | Noted. Applies to Class 3 parts of building only. |
| F7D3 | **Determination of airborne sound insulation ratings**:-<br>Relates to form of construction required to have airborne sound insulating rating determined as per AS/NZS ISO 717.1-2004 or Spec 28. | Noted. |
| F7D4 | **Determination of impact sound insulation ratings**:-<br>This clause intends to clarify the means of determining the impact sound insulation ratings, ie<br>Floor required to have impact sound insulation pressure level with spectrum term (Ln,w) to be in accordance with AS/ISO 717.2-2004 or Spec. 28.<br>Wall required to have impact sound insulation in a Class 2 or 3 building must be discontinuous construction.<br>Discontinuous construction means a wall having a minimum 20mm cavity between separate leaves and for masonry (resilient ties if required) and other than masonry have no mechanical linkage between leaves except at the periphery. | CR. Details to be provided with Construction Certificate documentation. |
| F7D5 | **Sound Insulation rating of floors**:-<br>A floor in a Class 2 or 3 building must have an Rw + Ctr (airborne) not less than 50 and an Ln,w (impact) not more than 62 if it separates—<br>• SOU's; or<br>• a SOU from a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification.<br>A floor in a Class 9c aged care building separating SOUs must have an Rw not less than 45. | CR. Details to be provided with Construction Certificate documentation. |

| Section F | Health and Amenity | Comment |
|---|---|---|
| F7D6 | **Sound insulation rating of walls**:-<br>a) A wall in a Class 2 or 3 building must —<br>i. have an $R_w + C_{tr}$ (airborne) not less than 50, if it separates SOU's; and<br>ii. have an $R_w$ (airborne) not less than 50, if it separates a SOU from a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification; and<br>iii. comply with F7D4(2) if it separates:<br>A. a bathroom, sanitary compartment, laundry or kitchen in one SOU from a habitable room (other than a kitchen) in an adjoining unit; or<br>B. a SOU from a plant room or lift shaft.<br>b) A door may be incorporated in a wall in a Class 2 or 3 building that separates a SOU from a stairway, public corridor, public lobby or the like, provided the door assembly has an Rw not less than 30.<br>c) A wall in a Class 9c aged care building must have an $R_w$ not less than 45 if it separates—<br>i. SOUs; or<br>ii. a SOU from a kitchen, bathroom, sanitary compartment (not an associated ensuite), laundry, plant room or utilities room.<br>d) In addition to c), a wall separating a SOU in a Class 9c aged care building from a kitchen or laundry must comply with F7D4(2).<br>e) Where a wall required to have sound insulation has a floor above, the wall must continue to—<br>i. the underside of the floor above; or<br>ii. a ceiling that provides the sound insulation required for the wall.<br>f) Where a wall required to have sound insulation has a roof above, the wall must continue to—<br>i. the underside of the roof above; or<br>ii. a ceiling that provides the sound insulation required for the wall. | CR. Details to be provided with Construction Certificate documentation. |
| F7D7 | **Sound insulating rating of services**:-<br>If a duct, soil, waste or water supply pipe, including a duct or pipe that is located in a wall or floor cavity, serves or passes through more than one SOU, the duct or pipe must be separated from the rooms of any SOU by construction with an $R_w + C_{tr}$ (airborne) not less than—<br>• 40 if the adjacent room is a habitable room (other than a kitchen); or<br>• 25 if the adjacent room is a kitchen or non- habitable room.<br>If a storm water pipe passes through a SOU it must be separated in accordance with F7D7(1). | CR. Details to be provided with Construction Certificate documentation. |
| F7D8 | **Sound isolation of Pumps**:-<br>Flexible coupling must be used at the point of connection between service pipes in a building and any pump. | CR. Details to be provided with Construction Certificate documentation. |
| **Part F8** | **CONDENSATION MANAGEMENT** | |
| F8D1 | **Deemed-to-Satisfy Provisions**<br>Where a DtS Solution is proposed, Performance Requirements F8P1 is satisfied by complying with F8D2 to F8D5. | |

| Section F | Health and Amenity | Comment |
|---|---|---|
| F8D2 | **Application of Part**:<br>The DtS provisions of this part apply to a SOU of a class 2 building and a class 4 part of a building | Noted. Applies to Class 2 parts of building only. |
| F8D3 | **External wall construction**: | Noted. Applies to Class 2 parts of building only. |
| F8D4 | **Exhaust systems**: | Noted. Applies to Class 2 parts of building only. |
| F8D5 | **Ventilation of roof spaces**: | Noted. Applies to Class 2 parts of building only. |

| Section G | Ancillary Provisions | Comment |
|---|---|---|
| **Part G1** | **MINOR STRUCTURES AND COMPONENTS** | |
| G1D1 | **Deemed-to-Satisfy Provisions**<br>Performance Requirements G1P1 must be satisfied.<br>Where a DtS Solution is proposed, Performance Requirements G1P2 to G1P5 are satisfied by complying with G1D2 to G1D4. | Noted |
| G1D2 NSW | **Swimming pools**:- | NA |
| G1D3 | **Refrigerated chambers, strong-rooms and vaults**:- | NA |
| G1D4 | **Outdoor play spaces**:- | NA |
| NSW G1D5 | **Provision for cleaning windows:-**<br>(1) A building must provide for a safe manner of cleaning any windows located 3 or more storeys above ground level.<br>(2) A building satisfies (1) where—<br>(a) the windows can be cleaned wholly from within the building; or<br>(b) provision is made for the cleaning of the windows by a method as per the Work Health & Safety Act 2011 and regulations made under that Act. | CR. Design details to be provided with Construction Certificate documentation. |
| **Part G2** | **BOILERS, PRESSURE VESSELS, HEATING APPLIANCES, FIREPLACES, CHIMNEYS & FLUES** | |
| G2D1 | **Deemed-to-Satisfy Provisions**<br>Where a DtS Solution is proposed, Performance Requirements GP2 & G2P2 are satisfied by complying with G2D2 to G2D4. | Noted |
| G2D2 | **Installation of appliances**:- | NA. Assumed nil proposed. |
| G2D3 | **Open fireplaces**:- | NA. Assumed nil proposed. |
| G2D4 | **Incinerator Rooms**:- | NA |
| **Part G3** | **ATRIUM CONSTRUCTION** | |

| Section G | Ancillary Provisions | Comment |
|---|---|---|
| G3D1 | **Application of part**:-<br>Does not apply to an atrium which—<br>(a) connects only 2 storeys; or<br>(b) connects only 3 storeys if—<br>(i) each storey is provided with a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Spec. 17 throughout; and<br>(ii) one of those storeys is situated at a level at which there is direct egress to a road or open space. | NA |
| **Part G4** | **ALPINE AREAS** | NA |
| **Part G5** | **CONSTRUCTION IN BUSHFIRE ZONES** | NA, unless in a designated bushfire prone area and / or required by DA. |
| **Part G6** | **OCCUPIABLE OUTDOOR AREAS** | |
| G6D1 | **Application of part**:-<br>(1) The DtS Provisions of this Part apply to buildings containing an occupiable outdoor area in addition to the other DtS Provisions of NCC Volume One.<br>(2) The DtS Provisions of this Part take precedence where there is a difference to the DtS Provisions of Sections C, D, E, F and G.<br>(3) Except for G6D2, the DtS Provisions of this Part do not apply to—<br>(a) an occupiable outdoor area of a SOU in a Class 2 or 3 building, Class 9c building or Class 4 part of a building; or<br>(b) an occupiable outdoor area with an area < $10m^2$. | Noted |
| G6D2 | **Fire hazard properties**:-<br>A lining, material or assembly in an occupiable outdoor area must comply with C2D11 as for an internal material, except the fire hazard properties are not required to comply with following provisions of C2D11:<br>• Average specific extinction area.<br>• Smoke-Developed Index.<br>• Smoke development rate.<br>• Smoke growth rate index ($SMOGRA_{RC}$). | CR. Details to be provided with Construction Certificate documentation. |
| **NSW Part G7** | **LIVABLE HOUSING DESIGN**<br>This Part has deliberately been left blank. Part G7 does not apply in NSW as livable housing design requirements do not apply to sole-occupancy units in a Class 2 building in NSW. | NA |

| Section I | Special use Buildings | Comment |
|---|---|---|
| **Part I1** | **CLASS 9b BUILDINGS** | |
| **PART I2** | **PUBLIC TRANSPORT BUILDINGS** | NA |
| **PART I3** | **FARM BUILDINGS AND FARM SHEDS** | NA |
| **NSW Part I4** | **ENTERTAINMENT VENUES OTHER THAN TEMPORARY STRUCTURES & DRIVE-IN THEATRES** | |
| NSW I4D1 | **Application of Part**:-<br>This Part applies to every Entertainment Venue as described in the Environmental Planning and Assessment Regulation 2021. | NA |

| Section I | Special use Buildings | Comment |
|---|---|---|
| **NSW Part I5** | **TEMPORARY STRUTURES** | NA |
| **NSW Part I6** | **DRIVE-IN THEATRES** | NA |

| Section J | Energy Efficiency | Comment |
|---|---|---|
| **Notes**<br>From 1 May 2023 to 30 September 2023 Section J of NCC 2019 Volume One Amendment 1 may apply instead of Section J of NCC 2022 Volume One. From 1 October 2023 Section J of NCC 2022 Volume One applies.<br>**Notes: New South Wales Section J Energy Efficiency**<br>(1) For a Class 3 building or Class 5 to 9 building:<br>(i) From 1 May 2023 to 30 September 2023 NSW Section J of NCC 2019 Volume One Amendment 1 may apply instead of Section J of NCC 2022 Volume One.<br>(ii) From 1 October 2023 Section J of NCC 2022 Volume One applies. | | |
| **Part J1** | **ENERGY EFFICIENCY PERFORMANCE REQUIREMENTS** | Noted |
| **Part J2** | **ENERGY EFFICIENCY** | |
| NSW J2D1 | **Deemed-to-Satisfy Provisions**:-<br>Where a DtS Solution is proposed, Performance Requirements NSW J1P1 to NSW J1P7 are satisfied by complying with—<br>(a) NSW J2D2; and<br>(b) NSW J3D2 to J3D10; and<br>(c) NSW J4D2 to J4D7; and<br>(d) NSW J5D2 to J5D8; and<br>(e) NSW J6D2 to J6D13; and<br>(f) NSW J7D2 to J7D9; and<br>(g) J8D2 to NSW J8D4; and<br>(h) J9D2 to J9D5. | Noted |
| NSW J2D2 | **Application of Section J**:-<br>(1) For a Class 3 and 5 to 9 building, Performance Requirement NSW J1P1 is satisfied by complying with—<br>(a) Part J4, for the building fabric; and<br>(b) Part J5, for building sealing; and<br>(c) Part J6, for air-conditioning and ventilation; and<br>(d) Part J7, for artificial lighting and power; and<br>(e) Part J8, for heated water supply and swimming pool and spa pool plant; and<br>(f) J9D3, for facilities for energy monitoring.<br>(2) For a Class 2 to 9 building, Performance Requirement NSW J1P4 is satisfied by complying with J9D4 & J9D5. | ?. Outside the scope of this report. Details to be provided with Construction Certificate documentation. |
| **Part J3** | **ELEMENTAL PROVISIONS FOR A SOLE-OCCUPANCY UNIT OF A CLASS 2 BUILDING OR A CLASS 4 PART OF A BUILDING** | NA |
| **Part J4** | **BUILDING FABRIC** | |
| NSW J4D1 | **Deemed-to-Satisfy Provisions**:-<br>Where a DtS Solution is proposed, Performance Requirements NSW J1P1 to NSW J1P7 are satisfied by complying with (a) to (h) as listed in J2D1. | Noted |

| Section J | Energy Efficiency | Comment |
|---|---|---|
| NSW J4D2 | **Application of Part**:-<br>The DtS Provisions of this Part apply to building elements forming the envelope of a Class 3 & Class 5 to 9 building.<br>NSW J4D3, applies to building elements forming the envelope of a sole-occupancy unit in a Class 2 building and a Class 4 part of a building. This only applies to thermal insulation in a sole-occupancy unit in a Class 2 building and a Class 4 part of a building where a development consent specifies that the insulation is to be provided as part of the development. | Noted |
| NSW J4D3 | **Thermal Construction – General**<br>(a) Where required, insulation must comply with AS/NZS 4859.1 and be installed so that it—<br>(i) abuts or overlaps adjoining insulation other than at supporting members such as studs, noggings, joists, furring channels & the like where the insulation must be against the member; &<br>(ii) forms a continuous barrier with ceilings, walls, bulkheads, floors or the like that inherently contribute to the thermal barrier; and<br>(iii) does not affect the safe or effective operation of a service or fitting.<br>(b) Where required, reflective insulation must be installed with—<br>(i) the necessary airspace to achieve the required R-Value between a reflective side of the reflective insulation and a building lining or cladding; &<br>(ii) reflective insulation closely fitted against any penetration, door or window opening; &<br>(iii) the reflective insulation adequately supported by framing members; &<br>(iv) each adjoining sheet of roll membrane being—<br>(A) overlapped not < 50mm, or<br>(B) taped together.<br>(c) Where required, bulk insulation must be installed so that—<br>(i) it maintains its position and thickness, other than where it is compressed between cladding & supporting members, water pipes, electrical cabling or the like; and<br>(ii) in a ceiling, with no bulk insulation or reflective insulation in the wall beneath, it overlaps the wall by not < 50 mm.<br>(d) Roof, ceiling, wall and floor materials, and associated surfaces are deemed to have the thermal properties listed in Specification 36.<br>(e) The required Total R-Value and Total System U-Value, including thermal bridging allowance, must be—<br>(i) calculated in accordance with AS/NZS 4859.2 for a roof or floor; or<br>(ii) determined in accordance with Specification 37 for wall-glazing construction; or<br>(iii) determined in accordance with Spec 39 or Section 3.5 of CIBSE Guide A for soil or sub-floor spaces. | ?. Outside the scope of this report. Details to be provided with Construction Certificate documentation. |

| Section J | Energy Efficiency | Comment |
|---|---|---|
| J4D4 | **Roof and Ceiling Construction**:-<br>(1) A roof or ceiling must achieve a Total R-Value greater than or equal to—<br>(a) in climate zones 1, 2, 3, 4 and 5, R3.7 for a downward direction of heat flow; and<br>(2) In climate zones 1, 2, 3, 4, 5, 6 and 7, the solar absorptance of the upper surface of a roof must be not more than 0.45. | ?. Outside the scope of this report. Details to be provided with Construction Certificate documentation. |
| J4D5 | **Roof lights**:-<br>Roof lights must have—<br>(a) a total area of not more than 5% of the floor area of the room or space served; and<br>(b) transparent and translucent elements, including any imperforate ceiling diffuser, with a combined performance of—<br>(i) for Total system SHGC, in accordance with Table J4D5; and<br>(ii) for Total system U-Value, not more than U3.9. | ?. Outside the scope of this report. Details to be provided with Construction Certificate documentation. |
| NSW J4D6 | **Walls and glazing**:-<br>(1) The Total System U-Value of wall-glazing construction, including wall-glazing construction which wholly or partly forms the envelope internally, must not be > —<br>(a) for a Class 5, 6, 7building , U2.0; and<br>(b) for a Class 3 building —<br>(ii) in climate zones 2 or 5, U2.0.<br>(2) The Total System U-Value of display glazing must not be > U5.8.<br>(3) The Total System U-Value of wall-glazing construction must be calculated in accordance with Specification 37.<br>(4) Wall components of a wall-glazing construction must achieve a minimum Total R-Value of—<br>(a) where the wall is < 80% of the area of the wall-glazing construction, R1.0; or<br>(b) where the wall is 80% or > of the area of the wall-glazing construction, the value specified in NSW Table J4D6a.<br>(5) The solar admittance of externally facing wall-glazing construction, excluding wall-glazing construction which is wholly internal, must not be > —<br>(a) for a Class 5, 6, 7, 8 or 9b building or a Class 9a building other than a ward area, the values specified in NSW Table J4D6b; and<br>(b) for a Class 3 building or a Class 9a ward area, the values specified in NSW Table J4D6c.<br>(6) The solar admittance of a wall-glazing construction must be calculated in accordance with Specification 37.<br>(7) The Total system SHGC of display glazing must not be > 0.81 divided by the applicable shading factor specified in S37C7. | ?. Outside the scope of this report. Details to be provided with Construction Certificate documentation. |

| Section J | Energy Efficiency | Comment |
|---|---|---|
| J4D7 | **Floors**:-<br>(1) A floor must achieve the Total R-Value specified in Table J4D7.<br>(2) For the purposes of (1), a slab-on-ground that does not have an in-slab heating or cooling system is considered to achieve a Total R-Value of R2.0, except—<br>(a) a Class 3, Class 9a ward area or Class 9b building in climate zone 7 that has a floor area to floor perimeter ratio of < or equal to 2.<br>(3) A floor must be insulated around the vertical edge of its perimeter with insulation having an R-Value > or equal to 1.0 when the floor—<br>(a) is a concrete slab-on-ground in climate zone 8; or<br>(b) has an in-slab or in-screed heating or cooling system, except where used solely in a bathroom, amenity area or the like.<br>(4) Insulation required by (3) for a concrete slab-on-ground must—<br>(a) be water resistant; and<br>(b) be continuous from the adjacent finished ground level—<br>(i) to a depth not < 300 mm; or<br>(ii) for the full depth of the vertical edge of the concrete slab-on-ground. | ?. Outside the scope of this report. Details to be provided with Construction Certificate documentation. |
| **Part J5** | **BUILDING SEALING** | |
| NSW J5D1 | **Deemed-to-Satisfy Provisions**:-<br>Where a DtS Solution is proposed, Performance Requirements NSW J1P1 to NSW J1P7 are satisfied by complying with (a) to (h) as listed in J2D1. | Noted |
| NSW J5D2 | **Application of part**<br>The DtS Provisions of this Part apply to elements forming the envelope of a Class 2 to 9 building, other than—<br>(a) a building in climate zones 1, 2, 3 and 5 where the only means of air-conditioning is by using an evaporative cooler; or<br>(b) a permanent building opening, in a space where a gas appliance is located, that is necessary for the safe operation of a gas appliance; or<br>(c) in a Class 3 or Class 5 to 9 building, a building or space where mech. ventilation required by Part F6 provides sufficient pressurisation to prevent infiltration; or<br>(d) parts of buildings that cannot be fully enclosed. | ?. Outside the scope of this report. Details to be provided with Construction Certificate documentation. |
| J5D3 | **Chimneys and Flues**<br>The chimney or flue of an open solid-fuel burning appliance must be provided with a damper or flap that can be closed to seal the chimney or flue. | NA |
| J5D4 | **Roof Lights**<br>A roof light serving a conditioned space or habitable room in Climate zones 4 to 8 must be sealed or capable of being sealed, constructed with;<br>• An imperforate ceiling diffuser or the like installed at the ceiling or internal lining level; or<br>• A weatherproof seal; or<br>• A shutter system readily operated either manually, mechanically or electronically by the occupant. | NA. Nil propsoed. |

| Section J | Energy Efficiency | Comment |
|---|---|---|
| NSW J5D5 | **Windows and Doors**<br>(1) A door, openable window or the like must be sealed—<br>(a) when forming part of the envelope; or<br>(b) in climate zones 4, 5, 6, 7 or 8.<br>(2) The requirements of (1) do not apply to—<br>(a) a window complying with AS 2047; or<br>(b) a fire door or smoke door; or<br>(c) a roller shutter door, roller shutter grille or other device installed only for out-of- hours security.<br>(3) A seal to restrict air infiltration—<br>(a) for the bottom edge of a door, must be a draft protection device; and<br>(b) for the other edges of a door or the edges of an openable window or other such opening, may be a foam or rubber compression strip, fibrous seal, etc.<br>(4) An entrance to a building, if leading to a conditioned space must have an airlock, self-closing door, rapid roller door revolving door or the like, other than—<br>(a) conditioned space floor area of not > 50 $m^2$; or<br>(b) where a café, restaurant, open front shop, etc—<br>(i) a 3m deep un-conditioned zone between the main entrance, including an open front, and the conditioned space; and<br>(ii) at all other entrances to the café, restaurant, open front shop or the like, self-closing doors. | ?. Outside the scope of this report. Details to be provided with Construction Certificate documentation. |
| J5D6 | **Exhaust Fans**<br>Miscellaneous exhaust fans where proposed are to be fitted with a sealing device such as self-closing damper or the like when serving the envelope of the *'conditioned space'* of the building, or a habitable room in climate zones 4, 5, 6, 7 or 8. | ?. Outside the scope of this report. Details to be provided with Construction Certificate documentation. |
| J5D7 | **Construction of Roofs, Walls and Floors**<br>Ceilings, walls, floors and any opening such as a window frame, door frame, roof light frame or the like must be constructed to minimize air leakage when forming part of the envelope, or in climate zones 4, 5, 6, 7 or 8. This necessitates construction around openings are to be:<br>• enclosed by internal lining systems that are close fitting at ceiling, wall and floor junctions; or<br>• sealed by caulking, skirting, architraves, cornices, etc. | ?. Outside the scope of this report. Details to be provided with Construction Certificate documentation. |
| J5D8 | **Evaporative Coolers**<br>An evaporative cooler must be fitted with a self-closing damper or the like; when serving a heated space; or in climate zones 4, 5, 6, 7 or 8. | ?. Outside the scope of this report. Details to be provided with Construction Certificate documentation. |
| **Part J6** | **AIR-CONDITIONING AND VENTILATION** | |
| NSW J6D1 | **Deemed-to-Satisfy Provisions**:-<br>Where a DtS Solution is proposed, Performance Requirements NSW J1P1 to NSW J1P7 are satisfied by complying with (a) to (h) as listed in J2D1. | Noted |
| NSW J6D2 | **Application of part**:-<br>(1) The DtS Provisions of this Part do not apply to a Class 8 electricity network substation.<br>(2) J6D10 does not apply to a Class 2 building or a Class 4 part of a building. | Noted |

| Section J | Energy Efficiency | Comment |
|---|---|---|
| J6D3 to J6D9, J6D11 to J6D13 and NSW J6D10 | **Air-conditioning system control, Mechanical ventilation system control, Fans & duct systems, Ductwork insulation, Ductwork sealing, Pump systems, Pipework insulation, Space heating, Refrigerant chillers, unitary air-conditioning equipment and Heat rejection equipment**:-<br>Refer to text in BCA 2022. | CR. Details to be provided with Construction Certificate documentation. |
| **Part J7** | **ARTIFICIAL LIGHTING AND POWER** | |
| NSW J7D1 | **Deemed-to-Satisfy Provisions**:-<br>Where a DtS Solution is proposed, Performance Requirements NSW J1P1 to NSW J1P7 are satisfied by complying with (a) to (h) as listed in J2D1. | Noted |
| NSW J7D2 | **Application of part**:-<br>(1) The DtS Provisions of this Part do not apply to a Class 2 building or a Class 4 part of a building.<br>(2) J7D3, J7D4 & J7D6(1)(b) does not apply to a Class 8 electricity network substation | Noted |
| J7D5 to J7D9, NSW J7D3 and NSW J7D4 | **Artificial lighting,-Interior artificial lighting & power control, Interior decorative & display lighting, Exterior artificial lighting, Boiling water & chilled water storage units, Lifts, Escalators & moving walkways**:-<br>Refer to text in BCA 2022. | CR. Details to be provided with Construction Certificate documentation. |
| **Part J8** | **HEATED WATER SUPPLY AND SWIMMING POOL AND SPA POOL PLANT** | |
| NSW J8D1 | **Deemed-to-Satisfy Provisions**:-<br>Where a DtS Solution is proposed, Performance Requirements NSW J1P1 to NSW J1P7 are satisfied by complying with (a) to (h) as listed in J2D1. | Noted |
| J8D2 | **Application of part**:-<br>A heated water supply system for food preparation and sanitary purposes must be designed and installed in accordance with Part B2 of NCC Volume Three — Plumbing Code of Australia. | CR. Details to be provided with Construction Certificate documentation. |
| NSW J8D3 and NSW J8D4 | **Swimming pool heating & pumping Spa pool heating & pumping**:-<br>Refer to text in BCA 2022. | NA |
| **Part J9** | **ENERGY MONITORING AND ON-SITE DISTRIBUTED ENERGY RESOURCES** | |
| NSW J9D1 | **Deemed-to-Satisfy Provisions**:-<br>Where a DtS Solution is proposed, Performance Requirements NSW J1P1 to NSW J1P7 are satisfied by complying with (a) to (h) as listed in J2D1. | Noted |
| J9D2 | **Application of part**:-<br>The DtS Provisions of this Part do not apply-<br>(1) within a Class 2 SOU or a Class 4 part of a building, or<br>(2) to a Class 8 electricity network substation | Noted |
| J9D3 to J9D5 | **Facilities for energy monitoring**, **Facilities for electric vehicle charging equipment**, **Facilities for solar photovoltaic and battery systems**:-<br>Refer to text in BCA 2022. | CR. Details to be provided with Construction Certificate documentation. |

# ANNEXURE B (Fire Safety Schedule)

## Schedule of Essential Fire Safety Measures (Proposed)

It is recommended that the building be provided with the following proposed essential fire safety measures, capable of performing and being maintained to the standard listed in the Schedule below. For the purposes of Sections 78 and 79 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021, these standards will be considered to be the current fire safety schedule for the building.

## SCHEDULE

| Measure | Design/ Installation Standard | Proposed Installation |
|---|---|---|
| Automatic Fire Detection and Alarm System | BCA 2022 Clauses E2D8, E2D9 & Clauses S20C2 & S20C4 of Specification 20 and AS1670.1-2018 | ✓ |
| Automatic Sprinkler System | BCA 2022 Clauses C3D7, C3D11, D2D4 and Specification 17 and AS2118.1-2017 | ✓ |
| Building Occupant Warning System | BCA 2022 Clause S20C7 of Specification 20 and AS1670.1-2018 | ✓ |
| Emergency Lighting | BCA 2022 Clauses E4D2, E4D4 and AS/NZS2293.1-2018 | ✓ |
| Exit Signs | BCA 2022 Clauses E4D5, E4D6, E4D8 and AS/NZS2293.1-2018 | ✓ |
| Fire Doors | BCA 2022 Clause C4D12 and AS1905.1-2015 | ✓ |
| Fire Hose Reel System | BCA 2022 Clause E1D3 & AS2441 – 2005 | **?** |
| Fire Hydrant System | BCA 2022 Clause E1D2 & AS2419.1 – 2021 | ✓ |
| Fire Seals | BCA 2022 Clauses C4D13, C4D14, C4D15, Specification 13 and AS4072.1-2005 & AS1530.4-2014 | ✓ |
| Mechanical Ventilation System (carpark) | BCA 2022 Clause E2D12 and Clause 5.5 of AS1668.1-2015 | ✓ |
| Paths of Travel | EP&A (Development Certification and Fire Safety) Reg 2021 Section 109 | ✓ |
| Protection of Openings in External Walls (Method of Protection to be Confirmed) | BCA 2022 Clauses C4D3 & C4D5 and standards based on method of protection proposed | ✓ |
| Portable Fire Extinguishers | BCA 2022 Clause E1D14 & AS2444 – 2001 | ✓ |