

17 May 2023

Our Reference: **J23-014A**

Attention: Simon Goold

Covenant Christian School  
C/- Bow Goold Architects  
107 Smith Street  
SUMMER HILL NSW 2130



**National Construction Code -Building Code of Australia Capability Report  
Proposed 2 Storey Building – Redevelopment of Block D  
Covenant Christian School - No. 212 Forest Way Belrose NSW 2085**

Dear Simon,

Please find the National Construction Code - Building Code of Australia Capability Report for the proposed (2) storey “Block D” school building for submission to Council.

Do not hesitate to contact me should you wish to discuss any aspect of the report.

Yours faithfully,



Robert Valades  
**Benchmark Building Certifiers**

***Encl.***

- BUILDING APPROVALS
- BASIX / SECTION J ENERGY RATINGS
- BUILDING / FIRE SAFETY CONSULTANTS
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BUILDING CERTIFIERS

# **BUILDING CODE OF AUSTRALIA COMPLIANCE REPORT**

**PREPARED FOR:**

***“Covenant Christian School”  
C/- Bow Goold Architects***

**BY**

***Benchmark Building Certifiers***

**REGARDING**

***Proposed two storey ‘Block D’ school building  
Covenant Christian School***

**17 May 2023**

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Version	Date	Description
-	24 April 2023	Initial Report- BCA2019
		<div> <div>Prepared by <u><i>RV</i></u></div> <div>Robert Valades (MAAC)</div> </div> <div> <div>Checked by <u><i>AK</i></u></div> <div>Anthony Krilich (MAAC)</div> </div>
A	17 May 2023	Final Report – BCA2022
		<div> <div>Prepared by <u><i>RV</i></u></div> <div>Robert Valades (MAAC)</div> </div> <div> <div>Checked by <u><i>AK</i></u></div> <div>Anthony Krilich (MAAC)</div> </div>

# INDEX

CONTENTS	PAGE
<b>1.0 Building Description.....</b>	<b>4</b>
<b>2.0 Basis of Assessment.....</b>	<b>6</b>
2.1 General.....	6
2.2 Purpose of this Report.....	6
2.3 Exclusions.....	6
2.4 Building Code of Australia.....	6
2.5 Building Description.....	6
2.6 Documents Relied Upon.....	6
2.7 Location.....	7
<b>3.0 Building Code of Australia.....</b>	<b>8</b>
3.1 Building Code of Australia “Key Criteria” .....	8
3.2 Deemed-to-Satisfy Compliance Issues.....	8
<b>4.0 Environmental Planning and Assessment (Development Certification and Fire Safety Regulation 2021).....</b>	<b>53</b>
<b>5.0 Conclusion and Verification.....</b>	<b>60</b>
<b>APPENDIX A Type B Construction Specification C1.1.....</b>	<b>61</b>
<b>APPENDIX B... Proposed Fire Safety Schedule.....</b>	<b>63</b>

# PART 1

## BUILDING DESCRIPTION

The building description refers to the proposed building works at the property only.

<i>Address</i>	Covenant Christian School 212 Forest Way Belrose
<i>Classification</i>	Class 9b – School Building
<i>Rise-in-Storeys</i>	Two storeys
<i>Floor Area</i>	Total floor area new building – Approximately 1,705 m <sup>2</sup> .
<i>Required Type of Construction</i>	Type B Construction for the two- storey building.
<i>Building Design Basis</i>	Assessment based on BCA2022 adopted 1 May 2023.
<i>Effective Height</i>	<25 m and < 12 m – Section E
<i>Section B ‘Structure’</i>	Assessed
<i>Section C ‘Fire Resistance’</i>	Assessed
<i>Section D ‘Access and Egress’</i>	Assessed
<i>Section E “Services and Equipment”</i>	Assessed
<i>Section F ‘Health and Amenity’</i>	Assessed
<i>Section G ‘Ancillary Provisions’</i>	Assessed
<i>Refer to next page...</i>	

***Section H***

***'Class 1 and 10 buildings***

Not Applicable.

***Section I***

***'Special use buildings***

Assessed.

***Section J***

***'Energy Efficiency'***

Noted for report purposes.

# PART 2

## BASIS OF ASSESSMENT

### 2.0 BASIS OF ASSESSMENT

#### 2.1 General

This report relates to the capability of the proposed development regarding the relevant provisions of the BCA2019 Amendment 1. The development involves the demolition of existing part of the school building and construction of a new large two storey building. The school building will accommodate school students. The building will be located at the centrally within the property and connect to existing nearby school buildings.

#### 2.2 Purpose of this Report

This report has been prepared for the Covenant Christian School and Bow Goold Architects. This report assesses capability compliance with the provisions of the BCA for the submission of a Development Application to The Northern Beaches Council.

#### 2.3 Exclusions

This report should not be construed to infer that an assessment of compliance with the following has been undertaken:

- Structural adequacy and/or integrity of members or design of components,
- Quality of construction as required by the NSW Fair Trading,
- The individual requirements of other service providers & local authorities,
- The Disability Discrimination Act and Disability Access to Premises (Buildings) Standards 2010.
- The Building and Design Practitioners Act 2020.
- The adequacy of existing services.
- Health related matters and associated legislation.

#### 2.4 Building Code of Australia

This report is based on the Building Code of Australia 2019–Volume One, adopted 1 May 2019.

The report will identify any non-compliance with the deemed-to-satisfy provisions of the Building Code of Australia.

#### 2.5 Building Description

The proposed school building is best described as follows:

External Walls:	Masonry and lightweight cladding.
Internal Walls:	Brick, concrete and framed plasterboard walls.
Structural Framework:	Concrete and steel structural columns and beams.
Floors:	On ground and suspended concrete slab floors.
Roof:	Metal deck roofing.

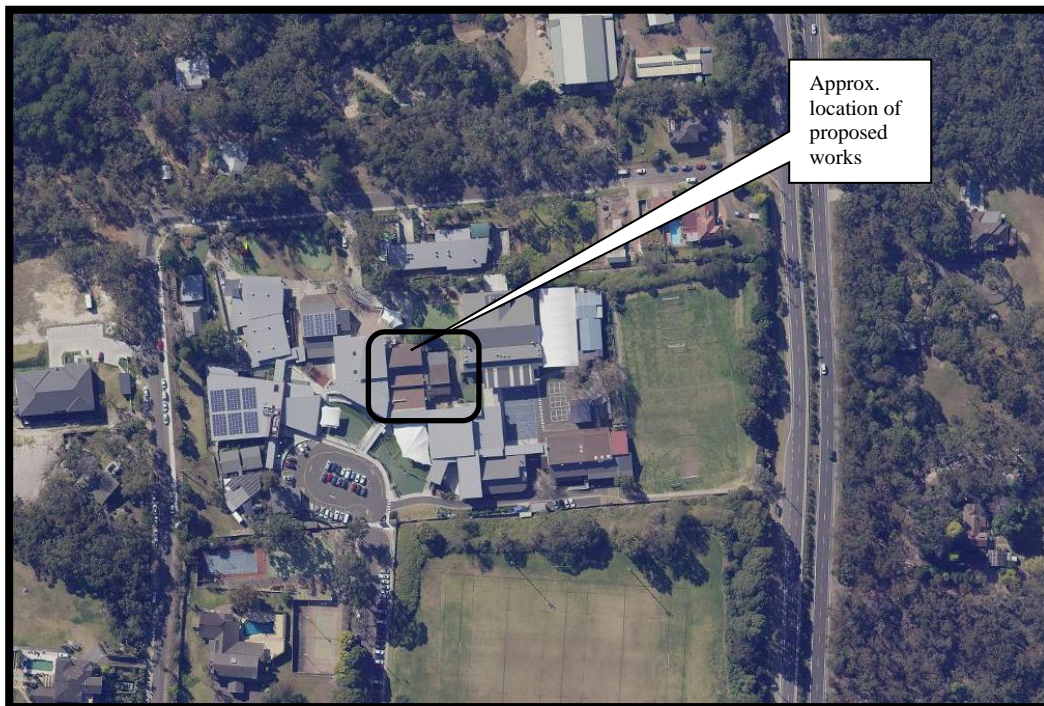
## 2.6 Documents Relied Upon

The report is based on the following plans by Bow Gould Architects, Project Number 2222:

<u>Description</u>	<u>Drawing No./Issue</u>	<u>Date</u>
▪ Cover Page Construction Management Plan		27/02/2023
▪ PRE DA – GF Existing	01	27/02/2023
▪ PRE DA – FF Existing	02	27/02/2023
▪ PRE DA – GF Demolition	03	27/02/2023
▪ PRE DA– FF Demolition	04	27/02/2023
▪ PRE DA – GF Proposed	05	27/02/2023
▪ PRE DA – FF Proposed	06	27/02/2023
▪ PRE DA – Section & Perspective	07	27/02/2023

## 2.7 Location

The proposed works are located school property, as shown in the aerial map below:



Source: - Six Maps 2023

## PART 3

### NCC BCA 2019 – VOLUME ONE Class 2 to 9 Buildings

#### **3.1 BUILDING CODE OF AUSTRALIA ‘KEY CRITERIA’**

##### **FIRE SOURCE FEATURES**

The property is irregular shaped and contains numerous boundaries, the fire source features are as follows:

North:	–	Ancillary school buildings and commercial property
East:	–	Ancillary school buildings and Forest Way
South:	–	School building, Del Street and Sports fields.
West:	–	Ancillary school buildings and Linen Avenue

A 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”.

##### **RISE-IN-STOREYS**

Proposed works – 2 storeys

##### **FLOOR AREA**

Two storey building – Approx. 1,705 m<sup>2</sup>.

##### **EFFECTIVE HEIGHT**

< 25 metres and <12 metres

##### **CLASSIFICATION**

Class 9b – an ‘*assembly building*’ (school).

#### **3.2 DEEMED-TO-SATISFY COMPLIANCE ISSUES**

### **SECTION A – GOVERNING REQUIREMENTS**

BCA Clause	Title	Assessment and Comment	Status
A2G3	Deemed-to-satisfy solution	(1) A solution that complies with the Deemed-to-Satisfy Provisions is deemed to have met the Performance Requirements. (2) A Deemed-to-Satisfy Solution can show compliance with the Deemed-to-Satisfy Provisions through one or more of the following Assessment Methods: (a) Evidence of suitability in accordance with Part A5 that shows the use of a material, product, plumbing and drainage product, form of construction or design meets a Deemed-to-Satisfy Provision. (b) Expert Judgement.	For Information Purposes

BCA Clause	Title	Assessment and Comment	Status
A2G4	<b>A combination of solutions</b>	<p>(1) Performance Requirements may be satisfied by using a combination of Performance Solutions and Deemed-to-Satisfy Solutions.</p> <p>(2) When using a combination of solutions, compliance can be shown through the following, as appropriate:</p> <ul style="list-style-type: none"> <li>(a) A2G2 for assessment against the relevant Performance Requirements.</li> <li>(b) A2G3 for assessment against the relevant Deemed-to-Satisfy Provisions.</li> </ul> <p>(3) Where a Performance Requirement is satisfied by a Performance Solution in combination with a Deemed-to-Satisfy Solution, in order to comply with (1), the following method must be used to determine the Performance Requirement or Performance Requirements relevant to the Performance Solution:</p> <ul style="list-style-type: none"> <li>(a) Identify the relevant Deemed-to-Satisfy Provisions of each Section or Part that are to be the subject of the Performance Solution.</li> <li>(b) Identify the Performance Requirements from the same Sections or Parts that are relevant to the identified Deemed-to-Satisfy Provisions.</li> </ul> <p>Identify Performance Requirements from other Sections or Parts that are relevant to any aspects of any</p> <ul style="list-style-type: none"> <li>(c) Performance Solution proposed or that are affected by the application of the Deemed-to-Satisfy Provisions that are the subject of the Performance Solution.</li> </ul>	<b>For Information Purposes</b>
A6G10	<b>Class 9 buildings</b>	<p>A Class 9b building is an assembly building including a trade workshop or laboratory in a primary or secondary school.</p> <p><b><u>Comment:</u></b> The use of the building would make it a school building and there for a Class 9b building.</p>	<b>For Information Purposes</b>
A7G1	<b>United buildings</b>	<p>Buildings are deemed united when two or more buildings adjoining each other are connected and used as one building.</p> <p><b><u>Comment:</u></b> For A7G1, two or more buildings are a united building if they are connected through openings in the walls dividing them and together comply with all the requirements of the NCC as though they are a single building.</p> <p>Consideration should be given connection and relationship to the existing adjoining buildings with the application for a construction certificate.</p>	<b>For Information Purposes</b>

## SECTION B – STRUCTURE

BCA Clause	Title	Assessment and Comment	Status
B1D2 & B1D3	<b>Resistance to actions / Determination of individual actions</b>	Structural details, specifications and engineering details are to be checked by the appointed building certifier for compliance.	<b>For Information Purposes</b>
B1D4	<b>Determination of structural resistance of materials and forms of construction</b>	<p>The appointed building certifier is required to check the following forms of construction and that they will comply with applicable Australian Standards, including:</p> <ul style="list-style-type: none"> <li>▪ <i>Concrete construction</i> – Footings/concrete slab system details required.</li> <li>▪ <i>Masonry construction</i> – Face brick wall construction details required.</li> <li>▪ <i>Steel construction</i> – Steel columns, and steel beam details required.</li> <li>▪ <i>Timber construction</i> – Wall and roof frame construction details required (if relevant).</li> <li>▪ <i>Glazed assemblies</i> – Windows and glazed doors details required. Existing glazed assemblies should be checked.</li> <li>▪ <i>Termite risk management</i> – Under slab and perimeter treatment methods details required.</li> <li>▪ <i>Roof construction</i> – Metal and glazed roofing details are required.</li> </ul> <p><b>Comment:</b> Details confirming compliance are to be checked by the appointed building certifier.</p>	<b>For Information Purposes</b>
B1D5	<b>Structural software</b>	<p>(a) Structural software used in computer aided design of a building or structure, that uses design criteria based on the <i>Deemed-to-Satisfy Provisions</i> of the BCA, including its referenced documents, for the design of steel or timber trussed roof and floor systems and framed building systems, must comply with the ABCB Protocol for Structural Software.</p> <p>(b) Structural software referred to in (a) can only be used for buildings within the following geometrical limits:</p> <ul style="list-style-type: none"> <li>(i) The distance from ground level to the underside of eaves must not exceed 6 m.</li> <li>(ii) The distance from ground level to the highest point of the roof, neglecting chimneys must not exceed 8.5 m.</li> <li>(iii) The building width including roofed verandahs, excluding eaves, must not exceed 16 m.</li> <li>(iv) The building length must not exceed five times the building width.</li> <li>(v) The roof pitch must not exceed 35 degrees.</li> </ul> <p>(c) The requirements of (a) do not apply to design software for individual frame members such as electronic tables similar to those provided in—</p> <ul style="list-style-type: none"> <li>(i) AS 1684; or</li> <li>(ii) NASH Standard Residential and Low-Rise Steel Framing Part 2.</li> </ul>	<b>For Information Purposes</b>
B1D6	<b>Construction of buildings in flood hazard areas</b>	<p>Not applicable – The building is a Class 9b building. Construction requirements of the flood proof land is determined by the local authority.</p> <p>The property is not flood prone.</p>	<b>Not Applicable</b>

## SECTION C – FIRE RESISTANCE

### Part C2 – Fire Resistance and Stability

BCA Clause	Title	Assessment and Comment	Status
C2D2  Spec 5	<b>Type of construction required and Specification 5 – Fire-resisting construction</b>	<p>In determining the requirements for construction, the definition of ‘fire-source feature’ needs to be noted:</p> <p><i><b>Fire-source feature means-</b></i></p> <p>(a) the far boundary of a road adjoining the allotment; or</p> <p>(b) a side or rear boundary of the allotment; or</p> <p>(c) an external wall of another building on the allotment which is not a Class 10 building.</p> <p>The property is irregular shaped and contains numerous boundaries, the fire source features are as follows:</p> <p>North: – School property</p> <p>East: – School building</p> <p>South: – Heath Rd</p> <p>West: – Future school development</p> <p><b><u>Comment:</u></b></p> <p>The rise-in-storeys of two would require Type B Construction.</p> <p>In this regard, the key requirement is that <u>loadbearing elements of the building located within 18 m of another fire source feature will require an FRL of not less than 2 hrs. It is important to note that an element that provides structural support to a part of the building which requires an FRL also requires an FRL.</u> The distance to the existing and proposed adjoining buildings should be checked and confirmed.</p> <p>Specification 5 in Appendix A provides a copy of the Table with details of the required fire resistance levels of the building elements for Type B fire resisting construction.</p> <p>Details confirming compliance are to be checked by the appointed building certifier. Final details should be checked by the appointed building certifier.</p>	<b>Compliance subject to Certification</b>
C2D3	<b>Calculation of rise-in-storeys</b>	The rise-in-storeys is two (2).	<b>For Information</b>
C2D4	<b>Buildings of multiple classification</b>	<p>(1) In a building of multiple classifications, the Type of construction required for the building is the most fire-resisting Type resulting from the application of Table C2D2 on the basis that the classification applying to the top storey applies to all storeys.</p> <p>(2) In a building containing a Class 4 part on the top storey, for the purpose of (1), the classification applying to the top storey must be—</p> <p>(a) when the Class 4 part occupies the whole of the top storey, the classification applicable to the next highest storey; or</p> <p>(b) when the Class 4 part occupies part of the top storey, the classification applicable to the adjacent part.</p>	<b>For Information</b>
C2D5	<b>Mixed types of construction</b>	<p>A building may be of mixed Types of construction where it is separated in accordance with C3D8 and the Type of construction is determined in accordance with C2D2 or C2D4.</p> <p><b><u>Comment:</u></b></p> <p>This clause is not applicable in this case.</p>	<b>For Information</b>
C2D6	<b>Two storey Class 2, 3 &amp; 9c buildings</b>	Not applicable – The building is of Class 9b classification.	<b>Not Applicable</b>
C2D7	<b>Class 4 parts of building</b>	Not Applicable – The building is not Class 4.	<b>Not Applicable</b>

BCA Clause	Title	Assessment and Comment	Status
C2D8	<b>Open spectator stands and indoor sports stadiums</b>	Not applicable – The building is not an open spectator stand of indoor sports stadium.	<b>Not Applicable</b>
C2D9	<b>Lightweight construction</b>	<p>(1) Lightweight construction must comply with Specification 6 if it is used in a wall system—</p> <ul style="list-style-type: none"> <li>(a) that is required to have an FRL; or</li> <li>(b) for a lift shaft, stair shaft or service shaft or an external wall bounding a public corridor including a non fire-isolated passageway or non fire-isolated ramp, in a spectator stand, sports stadium, cinema or theatre, railway station, bus station or airport terminal.</li> </ul> <p>(2) If lightweight construction is used for the fire-resisting covering of a steel column or the like, and if—</p> <ul style="list-style-type: none"> <li>(a) the covering is not in continuous contact with the column, then the void must be filled solid, to a height of not less than 1.2 m above the floor to prevent indenting; and</li> <li>(b) the column is liable to be damaged from the movement of vehicles, materials or equipment, then the covering must be protected by steel or other suitable material.</li> </ul> <p><b>Comment:</b> The building may be provided with elements of steel which requires fire protective coverings. Where proposed the lightweight construction that is proposed is to be provided is to comply with Specification 6. Refer to Specification 6 for specific details.</p>	<b>Compliance subject to Certification</b>
C2D10	<b>Non-combustible building elements</b>	<p>(1) In a building required to be of Type A or B construction, the following building elements and their components must be non-combustible:</p> <ul style="list-style-type: none"> <li>(i) External walls and common walls, including all components incorporated in them including the facade covering, framing and insulation.</li> <li>(ii) The flooring and floor framing of lift pits.</li> <li>(iii) Non-loadbearing internal walls where they are required to be fire-resisting.</li> </ul> <p>(2) A shaft, being a lift, ventilating, pipe, garbage, or similar shaft that is not for the discharge of hot products of combustion, that is non-loadbearing, must be of non-combustible construction in—</p> <ul style="list-style-type: none"> <li>(i) a building required to be of Type A construction; and</li> <li>(ii) a building required to be of Type B construction, subject to C3D11, in— <ul style="list-style-type: none"> <li>(A) a Class 2, 3 or 9 building; and</li> <li>(B) a Class 5, 6, 7 or 8 building if the shaft connects more than 2 storeys.</li> </ul> </li> </ul> <p>(3) A loadbearing internal wall and a loadbearing fire wall, including those that are part of a loadbearing shaft, must comply with Specification 5.</p> <p>(4) The requirements of (a) and (b) do not apply to the following:</p> <ul style="list-style-type: none"> <li>(a) Gaskets.</li> <li>(b) Caulking.</li> <li>(c) Sealants.</li> <li>(d) Termite management systems.</li> <li>(d) Glass, including laminated glass.</li> <li>(f) Thermal breaks associated with glazing systems.</li> <li>(g) Damp-proof courses.</li> <li>(h) wider than 50 mm.</li> <li>(i) Isolated— construction packers and shims; or blocking for fixing fixtures; or Fixings, including fixing accessories; or acoustic mounts.</li> <li>(j) Waterproofing materials applied to the external face, used below ground level and up to 250 mm above ground level.</li> <li>(k) Joint trims and joint reinforcing tape and mesh of a width not greater than 50 mm.</li> <li>(l) Weather sealing materials, applied to gaps not wider than 50 mm, used within and between concrete elements.</li> <li>(m) Wall ties and other masonry components complying with AS 2699 Part 1 and Part 3 as appropriate, and</li> <li>(n) associated with masonry wall construction.</li> </ul>	

BCA Clause	Title	Assessment and Comment	Status
C2D10	<b>Non-combustible building elements</b>  <b>Continued...</b>	<p>Reinforcing bars and associated minor elements that are wholly or predominately encased in concrete or grout.</p> <p>(o) A paint, lacquer or a similar finish or coating.</p> <p>(p) Adhesives, including tapes, associated with stiffeners for cladding systems.</p> <p>(q) Fire-protective materials and components required for the protection of penetrations.</p> <p>(5) The following materials, when entirely composed of itself, are non-combustible and may be used wherever a non-combustible material is required:</p> <p>(a) Concrete.</p> <p>(b) Steel, including metallic coated steel.</p> <p>(c) Masonry, including mortar.</p> <p>(d) Aluminium, including aluminium alloy.</p> <p>(e) Autoclaved aerated concrete, including mortar.</p> <p>(f) Iron.</p> <p>(g) Terracotta.</p> <p>Porcelain.</p> <p>(h) Ceramic.</p> <p>(i) Natural stone.</p> <p>(j) Copper.</p> <p>(k) Zinc.</p> <p>(l) Lead.</p> <p>(m) Bronze.</p> <p>(n) Brass.</p> <p>(6) The following materials may be used wherever a non-combustible material is required:</p> <p>(a) Plasterboard.</p> <p>(b) Perforated gypsum lath with a normal paper finish.</p> <p>(c) Fibrous-plaster sheet.</p> <p>(d) Fibre-reinforced cement sheeting.</p> <p>(e) Pre-finished metal sheeting having a combustible surface finish not exceeding 1 mm thickness and where the Spread-of-Flame Index of the product is not greater than 0.</p> <p>(f) Sarking-type materials that do not exceed 1 mm in thickness and have a Flammability Index not greater than 5.</p> <p>(g) Bonded laminated materials where—</p> <p>each lamina, including any core, is non-combustible; and</p> <p>(i) each adhesive layer does not exceed 1 mm in thickness and the total thickness of the adhesive layers does</p> <p>(ii) not exceed 2 mm; and</p> <p>the Spread-of-Flame Index and the Smoke-Developed Index of the bonded laminated material as a whole</p> <p>(iii) do not exceed 0 and 3 respectively; and</p> <p>(iv) when located externally, are fixed in accordance with C2D15.</p> <p><b><u>Comment:</u></b></p> <p>The building must be provided with the elements which comply with as specified above. There are no material specifications at this stage. Full details must be provided to the appointed building certifier.</p>	<b>Compliance subject to Certification</b>

BCA Clause	Title	Assessment and Comment	Status
C2D11	<b>Fire hazard properties</b>	<p>(1) The fire hazard properties of the following internal linings, materials and assemblies within a Class 2 to 9 building must comply with Specification 7: (a) Floor linings and floor coverings.</p> <p>(b) Wall linings and ceiling linings.</p> <p>(c) Air-handling ductwork.</p> <p>(d) Lift cars.</p> <p>(e) In Class 9b buildings used as a theatre, public hall or the like— (i) fixed seating in the audience area or auditorium; and (ii) a proscenium curtain required by Specification 32.</p> <p>(f) Escalators, moving walkways and non-required non fire-isolated stairways or pedestrian ramps subject to Specification 14.</p> <p>(g) Sarking-type materials.</p> <p>(h) Attachments to floors, ceilings, internal walls, common walls, fire walls and to internal linings of external walls.</p> <p>(i) Other materials including insulation materials other than sarking-type materials.</p> <p>(2) Paint or fire-retardant coatings must not be used to achieve compliance with the required fire hazard properties.</p> <p>(3) The requirements of (1) do not apply to a material or assembly if it is one of the elements listed (a) to (o) in this clause.</p> <p><b>Comment:</b> All cladding and lining materials must comply with this clause. This includes ceiling, roofing material, wall lining and floor linings. Certification must be submitted to the appointed building certifier prior to approval of the works.</p>	<b>Compliance subject to Certification</b>
C2D12	<b>Performance of external walls in fire</b>	Not applicable – No concrete panel construction is proposed.	<b>Not Applicable</b>
C2D13	<b>Fire protected timber - Concession</b>	Fire protective timber is not proposed for this type of building at this stage.	<b>Not Applicable</b>
C2D14	<b>Ancillary Elements</b>	<p>An ancillary element must not be fixed, installed or attached to the internal parts or external face of an external wall that is required to be non-combustible unless as specified in Clause C2D14.</p> <p><b>Comment:</b> The plans do not currently show any cladding systems likely to be affected at this stage on the external façade of the building.</p> <p>Final details should be checked by the appointed building certifier.</p>	<b>Compliance subject to Certification</b>
C2D15	<b>Fixing of bonded laminated cladding panels</b>	<p>(1) In a building required to be of Type A or B construction, externally located bonded laminated cladding panels must have all layers of cladding mechanically supported or restrained to the supporting frame.</p> <p>(2) An externally located bonded laminated cladding panel need not comply with (1) if it is one of the following:</p> <p>(a) A laminated glass system.</p> <p>(b) Layered plasterboard product.</p> <p>(c) Perforated gypsum lath with a normal paper finish.</p> <p>(d) Fibrous-plaster sheet.</p> <p>(e) Fibre-reinforced cement sheeting.</p> <p>(f) A component of a garage door.</p> <p><b>Comment:</b> The building must be provided with the elements which comply with as specified above. It is understood that these type of materials are not proposed at this stage.</p> <p>Final details should be checked by the appointed building certifier.</p>	<b>Compliance subject to Certification</b>

## Part C3 – Compartmentation & Separation

BCA Clause	Title	Assessment and Comment	Status
C3D2	Application of part	(1) 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. (2) C3D13(1)(e) does not apply to a Class 8 electricity network substation.	For information purposes
C3D3	General floor area and volume limitations	<p>(1) The size of any fire compartment or atrium in a Class 5, 6, 7, 8 or 9 building must not exceed the relevant maximum floor area nor the relevant maximum volume set out in Table C3D3 and C3D6 except as permitted in C3D4.</p> <p>(2) A part of a building which contains only heating, ventilating, or lift equipment, water tanks, or similar service units is not counted in the floor area or volume of a fire compartment or atrium if it is situated at the top of the building.</p> <p>(3) In a building containing an atrium, the part of the atrium well bounded by the perimeter of the openings in the floors and extending from the level of the first floor above the atrium floor to the roof covering is not counted in the volume of the atrium for the purposes of this clause.</p> <p><b>Comment:</b> The plans show that the floor area of the proposed building will be about 1705 m<sup>2</sup> and complies. However, the connection to adjoining buildings via the walkways must also be considered as the overall floor areas of Blocks C, D, E, F and H appear to exceed the maximum compartment size for Type B Fire Resisting Construction. Further details should be provided with the application for a construction certificate.</p>	Complies Subject to Certification

**Table C3D3: Maximum size of fire compartments or atria**

FIRE COMPARTMENT SIZE		Type A Construction	Type B Construction	Type C Construction
Class 5 or 9b	max. floor area	8,000 m <sup>2</sup>	5,500 m <sup>2</sup>	3,000 m <sup>2</sup>
	max. volume	48,000 m <sup>3</sup>	33,000 m <sup>3</sup>	18,000 m <sup>3</sup>
Class 6,7,8 or 9a (except for patient care areas)	max. floor area	5,000 m <sup>2</sup>	3,500 m <sup>2</sup>	2,000 m <sup>2</sup>
	max. volume	30,000 m <sup>3</sup>	21,000 m <sup>3</sup>	12,000 m <sup>3</sup>

BCA Clause	Title	Assessment and Comment	Status
C3D4	Large isolated buildings	<p>The size of a fire compartment in a building may exceed that specified in Table C3D3 where—</p> <p>(a) the building does not exceed 18 000 m<sup>2</sup> in floor area nor exceed 108 000 m<sup>3</sup> in volume, if—</p> <ul style="list-style-type: none"> <li>(i) the building is Class 7 or 8 and— <ul style="list-style-type: none"> <li>(A) contains not more than 2 storeys; and</li> <li>(B) is provided with open space complying with C3D5(1) not less than 18 m wide around the building; or</li> </ul> </li> <li>(ii) the building is Class 5, 6, 7, 8 or 9 and is— <ul style="list-style-type: none"> <li>(A) protected throughout with a sprinkler system complying with Specification E1.5; and</li> <li>(B) provided with a perimeter vehicular access complying with C3D5(2); or</li> </ul> </li> </ul> <p>(b) the building is Class 5, 6, 7, 8 or 9 &amp; exceeds 18000 m<sup>2</sup> in floor area or 108 000 m<sup>3</sup> in volume, if it is—</p> <ul style="list-style-type: none"> <li>(i) protected throughout with a sprinkler system complying with Specification E1.5; and</li> <li>(ii) provided with a perimeter vehicular access complying with C3D5(2); or</li> </ul> <p>(c) there is more than one building on the allotment and—</p> <ul style="list-style-type: none"> <li>(i) each building complies with (a) or (b); or</li> <li>(ii) if the buildings are closer than 6 m to each other they are regarded as one building and collectively comply with (a) or (b)</li> </ul> <p><b>Comment:</b> This clause is not applicable at this stage.</p>	Not Applicable

BCA Clause	Title	Assessment and Comment	Status
C3D5	<b>Requirements for open space and vehicular access</b>	<p>(1) An open space required by C2.3 must—</p> <ul style="list-style-type: none"> <li>(a) be wholly within the allotment except that any road, river, or public place adjoining the allotment, but not the farthest 6 m of it may be included; and</li> <li>(b) include vehicular access in accordance with (b); and</li> <li>(c) not be used for the storage or processing of materials; and</li> <li>(d) not be built upon, except for guard houses and service structures (such as electricity substations and pump houses) which may encroach upon the width of the space if they do not unduly impede fire-fighting at any part of the perimeter of the allotment or unduly add to the risk of spread of fire to any building on an adjoining allotment.</li> </ul> <p>(2) Vehicular access required by this Part—</p> <ul style="list-style-type: none"> <li>(a) must be capable of providing continuous access for emergency vehicles to enable travel in a forward direction from a public road around the entire building; and</li> <li>(b) must have a minimum unobstructed width of 6 m with no part of its furthest boundary more than 18 m from the building and in no part of the 6 m width be built upon or used for any purpose other than vehicular or pedestrian movement; and</li> <li>(c) must provide reasonable pedestrian access from the vehicular access to the building; and</li> <li>(d) must have a load bearing capacity and unobstructed height to permit the operation and passage of fire brigade vehicles; and</li> <li>e) must be wholly within the allotment except that a public road complying with (a), (b), (c) and (d) may serve as the vehicular access or part thereof.</li> </ul> <p><b>Comment:</b> Not Applicable.</p>	<b>Not Applicable</b>
C3D6	<b>Class 9a and 9c buildings</b>	The provisions of this clause are not applicable.	<b>Not Applicable</b>
C3D7	<b>Vertical separation of openings in external walls</b>	<p>(1) If in a building of Type A construction, any part of a window or other opening in an external wall is above another opening in the storey next below and its vertical projection falls no further than 450 mm outside the lower opening (measured horizontally), the openings must be separated by—</p> <ul style="list-style-type: none"> <li>(a) a spandrel which— <ul style="list-style-type: none"> <li>(i) is not less than 900 mm in height; and</li> <li>(ii) extends not less than 600 mm above the upper surface of the intervening floor; and</li> <li>(ii) is of non-combustible material having an FRL of not less than 60/60/60; or</li> </ul> </li> <li>(b) part of a curtain wall or panel wall that complies with (i); or</li> <li>(c) construction that complies with (i) behind a curtain wall or panel wall and has any gaps packed with a non-combustible material that will withstand thermal expansion and structural movement of the walling without the loss of seal against fire and smoke; or</li> <li>(d) a slab or other horizontal construction that— <ul style="list-style-type: none"> <li>(i) projects outwards from the external face of the wall not less than 1100 mm; and</li> <li>(ii) extends along the wall not less than 450 mm beyond the openings concerned; and</li> <li>(iii) is non-combustible and has an FRL of not less than 60/60/60.</li> </ul> </li> </ul>	<b>Not Applicable</b>

BCA Clause	Title	Assessment and Comment	Status
C3D7	<b>Vertical separation of openings in external walls</b>  <b>Continued...</b>	<p>(2) The requirements of (a) do not apply to—</p> <ul style="list-style-type: none"> <li>(a) an open-deck carpark; or</li> <li>(b) an open spectator stand; or</li> <li>(c) a building which has a sprinkler system complying with Specification E1.5 installed throughout; or</li> <li>(d) openings within the same stairway; or</li> <li>(e) openings in external walls where the floor separating the storeys does not require an FRL with respect to integrity and insulation.</li> </ul> <p>(3) For the purposes of C3D7, window or other opening means that part of the external wall of a building that does not have an FRL of 60/60/60 or greater.</p> <p><b>Comment:</b> The provisions of this clause are not applicable at this stage as the building is required to comply with Type B Construction.</p>	<b>Not Applicable</b>
C3D8	<b>Separation of fire walls</b>	The provisions of this clause are not applicable as fire walls are not proposed.	<b>Not Applicable</b>
C3D9	<b>Separation of classifications in same storey</b>	The provisions of this clause are not applicable. At this stage each storey has the same classification.	<b>Not Applicable</b>
C3D10	<b>Separation of classifications in different storeys</b>	<p>If parts of different classification are situated one above the other in adjoining storeys they must be separated as follows:</p> <p>Type A construction — The floor between the adjoining parts must have an FRL of not less than that prescribed</p> <ul style="list-style-type: none"> <li>(a) in Specification 5 for the classification of the lower storey.</li> </ul> <p>Type B or C construction — If one of the adjoining parts is of Class 2, 3 or 4, the floor separating the part from the storey below must—</p> <ul style="list-style-type: none"> <li>(b) be a floor/ceiling system incorporating a ceiling which has a resistance to the incipient spread of fire to the <ul style="list-style-type: none"> <li>(i) space above itself of not less than 60 minutes; or</li> <li>have an FRL of at least 30/30/30; or</li> <li>(ii) have a fire-protective covering on the underside of the floor, including beams incorporated in it, if the floor</li> <li>(iii) is combustible or</li> <li>(iv) metal.</li> </ul> </li> </ul> <p><b>Comment:</b> The provisions of this clause are not applicable.</p>	<b>Not Applicable</b>
C3D11	<b>Separation of lift shafts</b>	<p>(1) Any lift connecting more than 2 storeys, or more than 3 storeys if the building is sprinklered, (other than lifts which are wholly within an atrium) must be separated from the remainder of the building by enclosure in a shaft in which—</p> <ul style="list-style-type: none"> <li>(a) in a building required to be of Type A construction—the walls have the relevant FRL prescribed by Specification 5; and</li> <li>(b) in a building required to be of Type B construction — the walls— <ul style="list-style-type: none"> <li>(i) if loadbearing, have the relevant FRL prescribed by S5C21a, S5C21b, S5C21c, S5C21d, S5C21e and S5C21f of Specification 5; or (ii) if non-loadbearing, be of non-combustible construction.</li> </ul> </li> </ul> <p>(2) Any lift in a patient care area in a Class 9a health-care building or a resident use area in Class 9c building must be separated from the remainder of the building by a shaft having an FRL of not less than—</p> <ul style="list-style-type: none"> <li>(i) in a building of Type A or B construction — 120/120/120; or</li> <li>(ii) in a building of Type C construction — 60/60/60.</li> </ul> <p>(3) An emergency lift must be contained within a fire-resisting shaft having an FRL of not less than 120/120/120.</p> <p>(4) Openings for lift landing doors and services must be protected in accordance with the Deemed-to-Satisfy Provisions of Part C4.</p> <p><b>Comment:</b> The lift is not required to be separated as it does not connect more than 2 storeys.. The clause is not applicable.</p>	<b>Not Applicable</b>

BCA Clause	Title	Assessment and Comment	Status
C3D12	Stairways and lifts in one shaft	<p>A stairway and lift must not be in the same shaft if either the stairway or the lift is required to be in a fire-resisting shaft.</p> <p><b>Comment:</b> The provisions of this clause are not applicable. The lift is not part of a fire resisting shaft at this stage.</p>	Not Applicable
C3D13	Separation of equipment	<p>(1) Equipment other than that described in (2) and (3) must be separated from the remainder of the building with construction complying with (4), if that equipment comprises—</p> <ul style="list-style-type: none"> <li>(a) lift motors and lift control panels; or</li> <li>(b) emergency generators used to sustain emergency equipment operating in the emergency mode; or</li> <li>(c) central smoke control plant; or</li> <li>(d) <i>boilers</i>; or</li> <li>(e) a <i>battery system</i> installed in the building that has a total voltage of 12 volts or more and a storage capacity of 200 kWh or more.</li> </ul> <p>(2) Equipment need not be separated in accordance with (a) if the equipment comprises—</p> <ul style="list-style-type: none"> <li>(i) smoke control exhaust fans located in the air stream which are constructed for high temperature operation in accordance with Specification E2.2b; or</li> <li>(ii) stair pressurising equipment installed in compliance with the relevant provisions of AS 1668.1; or</li> <li>(iii) a lift installation without a machine-room; or</li> <li>(iv) equipment otherwise adequately separated from the remainder of the building.</li> </ul> <p>(3) Separation of on-site fire pumps must comply with the requirements of AS 2419.1.</p> <p>(4) Separating construction must have—</p> <ul style="list-style-type: none"> <li>(a) except as provided by (b)— <ul style="list-style-type: none"> <li>(i) an FRL as <i>required</i> by Specification C1.1, but not less than 120/120/120; and</li> <li>(ii) any doorway protected with a self-closing fire door having an FRL of not less than –/120/30; or</li> </ul> </li> <li>(b) when separating a lift shaft &amp; lift motor room, an FRL not less than 120/–/–.</li> </ul> <p><b>Comment:</b> There are no essential equipment proposed as described above to be installed in the building. The provisions of this clause are not applicable at this stage.</p>	Not Applicable
C3D14	Electricity supply system	<p>(1) An electricity substation located within a building must—</p> <ul style="list-style-type: none"> <li>(a) be separated from any other part of the building by construction having an FRL of not less than 120/120/120; and (b) have any doorway in that construction protected with a self-closing fire door having an FRL of not less than –/120/30.</li> </ul> <p>(2) Where a main switchboard is to be located within the building which sustains emergency equipment operating in the emergency mode, it must</p> <ul style="list-style-type: none"> <li>(a) be separated from any other part of the building by construction having an FRL of not less than 120/120/120 and (b) have any doorway in that construction protected with a self-closing fire door having an FRL of not less than –/120/30.</li> </ul> <p>(3) Subject to (4), electrical conductors must—</p> <ul style="list-style-type: none"> <li>(a) have a classification in accordance with AS/NZS 3013 of not less than— (i) if located in a position that could be subject to damage by motor vehicles — WS53W; or (ii) otherwise — WS52W; or</li> <li>(b) be enclosed or otherwise protected by construction having an FRL of not less than 120/120/120.</li> </ul> <p>(4) The requirements of (3) only apply to electrical conductors located within a building that supply—</p> <ul style="list-style-type: none"> <li>(a) a substation located within the building which supplies a main switchboard covered by (2); or</li> <li>(b) a main switchboard covered by (2).</li> </ul> <p>(5) Where emergency equipment is required in a building, all switchboards in the electrical installation, which sustain the electricity supply to the emergency equipment, must be constructed so that emergency equipment switchgear is separated from non-emergency equipment switchgear by metal partitions designed to minimise the spread of a fault from the non-emergency equipment switchgear.</p>	

BCA Clause	Title	Assessment and Comment	Status
C3D14	Electricity supply system  Continued...	<p>(6) For the purposes of (5), emergency equipment includes but is not limited to the following:</p> <ul style="list-style-type: none"> <li>(a) Fire hydrant booster pumps.</li> <li>(b) Pumps for automatic sprinkler systems, water spray, chemical fluid suppression systems or the like.</li> <li>(c) Pumps for fire hose reels where such pumps and fire hose reels form the sole means of fire protection in the building.</li> <li>(d) Air handling systems designed to exhaust and control the spread of fire and smoke.</li> <li>(e) Emergency lifts.</li> <li>(f) Control and indicating equipment. Emergency warning and intercom systems.</li> </ul> <p><b>Comment:</b> At this stage there does not appear to be a main switch which sustains emergency equipment.</p> <p>Further details can be checked with the submission of the construction certificate.</p>	Compliance subject to Certification
C3D15	Public corridors in Class 2 & 3 building	The provisions of this clause are not applicable.	Not Applicable

## **Part C4 –Protection of Openings**

BCA Clause	Title	Assessment and Comment	Status
C4D3	Protection of openings in external walls	<p>(1) Subject to (2), openings in an external wall that is required to have an FRL must be protected in accordance with C4D5, and if wall-wetting sprinklers are used they must be located externally.</p> <p>(2) The requirements of (1) only apply if the distance between the opening and the fire-source feature to which it is exposed is less than—</p> <ul style="list-style-type: none"> <li>(a) 3 m from a side or rear boundary of the allotment; or</li> <li>(b) 6 m from the far boundary of a road, river, lake or the like adjoining the allotment, if not located in a storey at or near ground level; or</li> <li>(c) 6 m from another building on the allotment that is not Class 10.</li> </ul> <p>(3) Openings in an external wall that is required to have an FRL, if required to be protected under (1), must not occupy more than 1/3 of the area of the external wall of the storey in which it is located unless they are in a Class 9b building used as an open spectator stand.</p> <p><b>Comment:</b> The distance to the edge of the nearest building will need to be confirmed on plan. At this stage the building appears to be adequately separated from the adjoining fire source features.</p>	Complies  For information purposes
C4D4	Separation of external walls and openings in different compartments	<p>The distance between parts of external walls and any openings within them in different fire compartments separated by a fire wall must not be less than that set out in Table C4D4, unless—</p> <ul style="list-style-type: none"> <li>(a) those parts of each wall have an FRL not less than 60/60/60; and</li> <li>(b) any openings protected in accordance with C4D5.</li> </ul> <p><b>Comment:</b> The clause is not applicable at this stage.</p>	Not Applicable

BCA Clause	Title	Assessment and Comment	Status
C4D5	Acceptable methods of protection	<p>(1) Where protection is required, doorways, windows and other openings must be protected as follows:</p> <p>(a) Doorways— (i) internal or external wall-wetting sprinklers as appropriate used with doors that are self-closing or automatic closing; or (ii) –/60/30 fire doors that are self-closing or automatic closing.</p> <p>(b) Windows— (i) internal or external wall-wetting sprinklers as appropriate used with windows that are automatic closing or permanently fixed in the closed position; or (ii) –/60/– fire windows that are automatic closing or permanently fixed in the closed position; or (iii) –/60/– automatic closing fire shutters.</p> <p>(c) Other openings— (i) excluding voids — internal or external wall-wetting sprinklers, as appropriate; or (ii) construction having an FRL not less than –/60/–.</p> <p>(2) Fire doors, fire windows and fire shutters must comply with Specification 12.</p>	For Information Purposes Only
C4D6	Doors in fire walls	The provisions of this clause are not applicable.	Not Applicable
C4D7	Sliding fire doors	The provisions of this clause are not applicable.	Not Applicable
C4D8	Protection of doorways in horizontal exists	The provisions of this clause are not applicable.	Not Applicable
C4D9	Openings in fire-isolated exits	The provisions of this clause are not applicable.	Not Applicable
C4D10	Service penetrations in fire isolated exits	The provisions of this clause are not applicable.	Not Applicable
C4D11	Openings in fire-isolated lift shafts	The provisions of this clause are not applicable.	Not Applicable
C4D12	Bounding construction: Class 2 and 3 buildings and Class 4 parts	The provisions of this clause are not applicable.	Not Applicable
C4D13	Openings in floors and ceilings for services	<p>(1) Where a service passes through—</p> <p>ai) a floor that is required to have an FRL with respect to integrity and insulation; or</p> <p>(b) a ceiling required to have a resistance to the incipient spread of fire, the service must be installed in accordance with (b).</p> <p>(2) A service must be protected—</p> <p>(a) in a building of Type A construction, by a shaft complying with Specification 5; or</p> <p>(b) in a building of Type B or C construction, by a shaft that will not reduce the fire performance of the building elements it penetrates; or</p> <p>(c) in accordance with C4D15.</p> <p>(c) Where a service passes through a floor which is required to be protected by a fire-protective covering, the penetration must not reduce the fire performance of the covering.</p> <p><b>Comment:</b></p> <p>Protection of openings in fire elements are required for Type B fire resisting construction and is to be specified for construction.</p> <p>Final details should be checked by the appointed building certifier.</p>	Compliance subject to Certification

BCA Clause	Title	Assessment and Comment	Status
C4D14	Openings in shafts	<p>In a building of Type A construction, an opening in a wall providing access to a ventilating, pipe, garbage or other service shaft must be protected by—</p> <p>(a) if it is in a sanitary compartment — a door or panel which, together with its frame, is non-combustible or has an FRL of not less than –/30/30; or</p> <p>(b) a self-closing –/60/30 fire door or hopper; or</p> <p>(c) an access panel having an FRL of not less than –/60/30; or</p> <p>(d) if the shaft is a garbage shaft — a door or hopper of non-combustible construction.</p> <p><b>Comment:</b> The provisions of this clause are not applicable.</p>	Not Applicable
C4D15	Openings for service installations	<p>(1) The 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) that is required to have an FRL with respect to integrity or insulation or a resistance to the incipient spread of fire.</p> <p>(2) An installation mentioned in (1) must comply with any one of the following:</p> <p>(a) Tested systems — the following applies:</p> <p>(i) The service, building element and any protection method at the penetration— (A) are identical with a prototype assembly of the service, building element and protection method which has been tested in accordance with AS 4072.1 and AS 1530.4 and has achieved the required FRL or resistance to the incipient spread of fire; or (B) differ from a prototype assembly of the service, building element and protection method in accordance with Section 4 of AS 4072.1.</p> <p>(ii) It complies with (i) except for the insulation criteria relating to the service if— (A) the service is a pipe system comprised entirely of metal (excluding pipe seals or the like); and (B) any combustible building element is not located within 100 mm of the service for a distance of 2 m from the penetration; (C) and combustible material is not able to be located within 100 mm of the service for a distance of 2 m from the penetration; and (D) it is not located in a required exit.</p> <p>(iii) The determination of the required FRL must be confirmed in a report from an Accredited Testing Laboratory in accordance with Specifications 1 and 2.</p> <p>(b) Ventilation and air-conditioning — in the case of ventilating or air-conditioning ducts or equipment, the installation is in accordance with AS 1668.1.</p> <p>(c) Compliance with Specification 13 — the following applies:</p> <p>(i) The service is a pipe system comprised entirely of metal (excluding pipe seals or the like) and is installed in accordance with Specification 13 and it— of fire; and penetrates a wall, floor or ceiling, but not a ceiling required to have a (A) resistance to the incipient spread (B) connects not more than 2 fire compartments in addition to any fire-resisting service shafts; and (C) does not contain a flammable or combustible liquid or gas. (ii) The service is sanitary plumbing installed in accordance with Specification 13 and it— (A) is of metal or UPVC pipe; and (B) penetrates the floors of a Class 5, 6, 7, 8 or 9b building; and (C) is in a sanitary compartment separated from other parts of the building by walls with the FRL required by Specification 5 for a stair shaft in the building and a self-closing –/60/30 fire door.</p> <p>(iii) The service is a wire or cable, or a cluster of wires or cables installed in accordance with Specification 13 and it— of fire; and penetrates a wall, floor or ceiling, but not a ceiling required to have a (A) resistance to the incipient spread (B) connects not more than 2 fire compartments in addition to any fire-resisting service shafts. (iv) The service is an electrical switch, outlet, or the like, and it is installed in accordance with Specification 13.</p> <p><b>Comment:</b> Protection of openings are required as specified. Final details should be checked by the appointed building certifier.</p>	Compliance subject to Certification

BCA Clause	Title	Assessment and Comment	Status
C4D16	<b>Construction joints</b>	<p>Construction joints, spaces and the like in and between building elements required to be fire-resisting with respect to integrity and insulation must be protected in a manner identical with a prototype tested in accordance with AS 1530.4 to achieve the required FRL.</p> <p><b><u>Comment:</u></b> All new building work must be constructed to comply with this requirement.</p>	<b>Compliance subject to Certification</b>
C4D17	<b>Columns protected with lightweight construction to achieve an FRL</b>	<p>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.</p> <p><b><u>Comment:</u></b> Loadbearing steel columns supporting the storey above will require protection. Refer to Specification 5 for more information on what elements require an FRL.</p> <p>Details are type of protection of the columns are to be checked by the appointed building certifier.</p>	<b>Compliance subject to Certification</b>

## SECTION D – ACCESS AND EGRESS

### Part D1 - Access and Egress

BCA Clause	Title	Assessment and Comment	Status
D2D3	Number of exits required	<p>Two exits are required from each storey in a school with a rise-in-storeys of more 2 or more and also <u>in any storey</u>, which accommodates more than 50 persons.</p> <p><b>Comment:</b> The building is provided with two exits on the ground floor and 1<sup>st</sup> floor and therefore complies.</p>	Complies
D2D4	When fire-isolated stairways and ramps are required	<p>Every stairway or ramp serving as a required exit must be fire-isolated unless it connects, passes through or passes by not more than 2 consecutive storeys and one extra storey of any classification may be included if the required exit does not provide access to or egress for, and is separated from, the extra storey by construction having an FRL of – /60/60, if non-loadbearing; and an FRL of 90/90/90 for Type A construction and no opening that could permit the passage of fire or smoke.</p> <p><b>Comment:</b> As it is only a two-storey building, fire-isolated stairs are not required and therefore this clause is not applicable.</p>	Not Applicable
D2D5	Exit travel distances	<p>Travel distance must comply with the following:</p> <ul style="list-style-type: none"> <li>(i) no point on a floor must be more than 20 m from an exit, or a point from which travel in different directions to 2 exits is available, in which case the maximum distance to one of those exits must not exceed 40 m; and</li> <li>(ii) in a Class 5 or 6 building, the distance to a single exit serving a storey at the level of access to a road or open space may be increased to 30 m.</li> </ul> <p><b>Comment:</b> Travel distances to the required exits can comply. Further details demonstrating compliance should be provided with the application for a construction certificate.</p>	Complies subject to certification
D2D6	Distance between alternative exits	<p>Exits that are required as alternative means of egress must be</p> <ul style="list-style-type: none"> <li>(a) distributed as uniformly as practicable within or around the storey served and in positions where unobstructed access to at least 2 exits is readily available from all points on the floor including lift lobby areas; and</li> <li>(b) not less than 9m apart; and</li> <li>(c) not more than 60 apart;</li> <li>(d) located so that alternative paths of travel do not converge such that they become less than 6m apart.</li> </ul> <p><b>Comment:</b> The travel distances between the exits comply.</p>	Complies
D2D7	Height of exits, paths of travel to exits and doorways	<p>In a required exit or path of travel to an exit the unobstructed height throughout must be not less than 2 m, except the unobstructed height of any doorway may be reduced to not less than 1980 mm.</p> <p><b>Comment:</b> Paths of travel to the required exit must have a minimum height of 2 m to the exit and this can be reduced to 1980 mm at a doorway. Insufficient details are provided on the plans at this stage but can comply.</p> <p>Further details demonstrating compliance should be provided with the application for a construction certificate.</p>	Complies subject to certification

BCA Clause	Title	Assessment and Comment	Status
D2D8	<b>Width of exits and paths of travel to exits</b>	<p>The unobstructed width of each exit or path of travel to an exit must be not less than 1m. If the storey, mezzanine or open spectator stand accommodates more than 100 persons but not more than 200 persons, the aggregate unobstructed width, except for doorways, must be not less than 1 m plus 250 mm for each 25 persons (or part) in excess of 100.</p> <p>If the storey, mezzanine or open spectator stand accommodates more than 200 persons, the aggregate unobstructed width, except for doorways, must be increased to 2 m plus 500 mm for every 60 persons (or part) in excess of 200 persons. If egress involves a change in floor level by a stairway or ramp with a gradient steeper than 1 in 12; or in any other case, 2 m plus 500 mm for every 75 persons (or part) in excess of 200.</p> <p><b>Comment:</b> This clause should be read in conjunction with other clauses of the Part D. The 1<sup>st</sup> floor is estimated to capable of accommodating about 300 persons. The 1<sup>st</sup> floor stairs can accommodate the total 1<sup>st</sup> floor population. Final dimensions should be provided with the application for the construction certificate.</p>	<b>Complies subject to certification</b>
D2D9	<b>Width of doorways in exits or paths of travel to exits</b>	<p>In a required exit or path of travel to an exit, the unobstructed width of a doorway must be not less than the unobstructed width of each exit provided to comply with D2D8(1), (2), (3) or (4), minus 250 mm; in any other case except where it opens to a sanitary compartment or bathroom — 750 mm wide.</p> <p><b>Comment:</b> Final dimensions should be provided with the application for the construction certificate.</p>	<b>Complies subject to certification</b>
D2D10	<b>Exit width not to diminish in direction of travel</b>	<p>The unobstructed width of a required exit must not diminish in the direction of travel to a road or open space, except where the width is increased in accordance with D2D8(1)(b) or D2D9(a)(i).</p> <p><b>Comment:</b> As stated, egress width cannot diminish in the path of travel to road or open space. Final dimensions should be provided with the application for the construction certificate.</p>	<b>Complies subject to certification</b>
D2D11	<b>Determination and measurement of exits and paths of travel to exits</b>	<p>For the purposes of D2D7 to D2D10 the following apply:</p> <p>(a) The required width of a stairway or ramp in a required exit or path of travel to an exit must—</p> <ul style="list-style-type: none"> <li>(i) be measured clear of all obstructions such as handrails, projecting parts of barriers and the like; and</li> <li>(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.</li> </ul> <p>(b) To determine the aggregate unobstructed width, the number of persons accommodated must be calculated according to D2D18.</p>	<b>For Information Purposes</b>
D2D12	<b>Travel via fire-isolated exits</b>	The provisions of this clause are not applicable.	<b>Not Applicable</b>
D2D13	<b>External stairways or ramp in lieu of fire-isolated exits</b>	The provisions of this clause are not applicable.	<b>Not Applicable</b>
D2D14	<b>Travel by non-fire-isolated stair or ramps</b>	<p>A non-fire-isolated stairway or non-fire-isolated ramp serving as a required exit must provide a continuous means of travel by its own flights and landings from every storey served to the level at which egress to a road or open space is provided.</p> <p>In a Class 5, 6, 7, 8 or 9 building, the distance from any point on a floor to a point of egress to a road or open space by way of a required non-fire-isolated stairway or non fire-isolated ramp must not exceed 80 m.</p> <p>In a Class 5 to 8 or 9b building, a required non-fire-isolated stairway or non-fire-isolated ramp must discharge at a point not more than—</p>	

BCA Clause	Title	Assessment and Comment	Status
D2D14	<b>Travel by non-fire-isolated stair or ramps</b>  <b>continued..</b>	<p>(i) 20 m from a doorway providing egress to a road or open space or from a fire-isolated passageway leading to a road or open space; or</p> <p>(ii) 40 m from one of 2 such doorways or passageways if travel to each of them from the non-fire-isolated stairway or non-fire-isolated ramp is in opposite or approximately opposite directions.</p> <p><b>Comment:</b> The travel distance from within the building to the non-fire isolated exits comply.</p>	<b>Complies</b>
D2D5	<b>Discharge from exits</b>	<p>(1) An exit must not be blocked at the point of discharge and where necessary, suitable barriers must be provided to prevent vehicles from blocking the exit, or access to it.</p> <p>(2) If a required exit leads to an open space, the path of travel to the road must have an unobstructed width throughout of not less than—</p> <p>(i) the minimum width of the required exit; or</p> <p>(ii) 1 m, which ever is the greater.</p> <p>(3) If an exit discharges to open space that is at a different level than the public road to which it is connected, the path of travel to the road must be by—</p> <p>(i) a ramp or other incline having a gradient not steeper than 1:8 at any part, or not steeper than 1:14 if required by the Deemed-to-Satisfy Provisions of Part D4; or</p> <p>(ii) except if the exit is from a Class 9a building, a stairway complying with the Deemed-to-Satisfy Provisions of the BCA.</p> <p>(4) The discharge point of alternative exits must be located as far apart as practical.</p> <p>(5) In a Class 9b building which is an open spectator stand that accommodates more than 500 persons, a required stairway or required ramp must not discharge to the ground in front of the stand.</p> <p>(6) In a Class 9b building containing an auditorium which accommodates more than 500 persons, not more than 2/3 of the required width of exits must be located in the main entrance foyer.</p> <p>(7) The number of persons accommodated must be calculated according to D2D18.</p> <p><b>Comment:</b> Discharges from all required exits must comply with the provisions of BCA2022. A path of travel from the egress stairs to the street must be provided with an unobstructed path having the minimum aggregate width of the required exit. Details confirming compliance are to be checked by the appointed building certifier.</p>	<b>Complies</b>
D2D16	<b>Horizontal exits</b>	The provisions of this clause are not applicable.	<b>Not Applicable</b>
D2D17	<b>Non required stairways, ramps or escalators</b>	The provisions of this clause are not applicable.	<b>Not Applicable</b>
D2D18	<b>Number of persons accommodated</b>	<p>For the purposes of the Deemed-to-Satisfy Provisions, the number of persons accommodated in a storey, room or mezzanine must be determined with consideration to the purpose for which it is used and the layout of the floor area by—</p> <p>(a) calculating the sum of the numbers obtained by dividing the floor area of each part of the storey by the number of square metres per person listed in Table D2D18 according to the use of that part, excluding spaces set aside for—</p> <p>(i) lifts, stairways, ramps and escalators, corridors, hallways, lobbies and the like; and</p> <p>(ii) service ducts and the like, sanitary compartments or other ancillary uses; or</p> <p>(b) reference to the seating capacity in an assembly building or room; or</p> <p>(c) any other suitable means of assessing its capacity.</p> <p><b>Comment:</b> General classrooms are measured at a rate of 2 m<sup>2</sup> per person. A trade and practical area are measured at a rate of 4 m<sup>2</sup> for a primary school per person.</p>	<b>For information purposes</b>

BCA Clause	Title	Assessment and Comment	Status
D2D18	<b>Number of persons accommodated</b>  <b>Continued...</b>	<p>Information has been provided that the estimated number of persons occupying the building would be approximately as follows:</p> <p style="text-align: center;"><u>Ground floor</u></p> <p>Staff – 14 Students – 128</p> <p style="text-align: center;"><u>1st floor</u></p> <p>Staff – 65 Students – 99</p> <p style="text-align: center;">Total – 306</p> <p>The occupant numbers have been used to determine the requirements for egress and amenities based on the floor plans that have been provided. As stated, the school can provide confirmation of specific details of the number of occupants based on the actual occupants of the new building.</p>	<b>For information purposes</b>
D2D19	<b>Measurement of distances</b>	<p>The nearest part of an exit means in the case of—</p> <p>(a) a fire-isolated stairway, fire-isolated passageway, or fire-isolated ramp, the nearest part of the doorway providing access to them; and</p> <p>(b) a non-fire-isolated stairway, the nearest part of the nearest riser; and</p> <p>(c) a non-fire-isolated ramp, the nearest part of the junction of the floor of the ramp and the floor of the storey; and</p> <p>(d) a doorway opening to a road or open space, the nearest part of the doorway; and</p> <p>(e) a horizontal exit, the nearest part of the doorway.</p>	<b>For information purposes</b>
D2D20	<b>Method of measurement</b>	<p>The following rules apply:</p> <p>(a) In the case of a room that is not a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building, the distance includes the straight-line measurement from any point on the floor of the room to the nearest part of a doorway leading from it, together with the distance from that part of the doorway to the single required exit or point from which travel in different directions to 2 required exits is available.</p> <p>(b) Subject to (d), the distance from the doorway of a sole-occupancy unit in a Class 2 or 3 building or a Class 4 part of a building is measured in a straight line to the nearest part of the required single exit or point from which travel in different directions to 2 required exits is available.</p> <p>(c) Subject to (d), the distance between exits is measured in a straight line between the nearest parts of those exits.</p> <p>(d) Only the shortest distance is taken along a corridor, hallway, external balcony or other path of travel that curves or changes direction.</p> <p>(e) If more than one corridor, hallway, or other internal path of travel connects required exits, for the purposes of D2D6(c) the measurement is along the path of travel through the point at which travel in different directions to those exits is available, as determined in accordance with D2D5.</p> <p>(f) If a wall (including a demountable internal wall) that does not bound—</p> <p style="padding-left: 40px;">(i) a room; or</p> <p style="padding-left: 40px;">(ii) a corridor, hallway or the like, causes a change of direction in proceeding to a required exit, the distance is measured along the path of travel past that wall.</p> <p>(g) If permanent fixed seating is provided, the distance is measured along the path of travel between the rows of seats.</p> <p>(h) In the case of a non-fire-isolated stairway or non-fire-isolated ramp, the distance is measured along a line connecting the nosings of the treads, or along the slope of the ramp, together with the distance connecting those lines across any intermediate landings.</p>	<b>For information purposes</b>
D2D21	<b>Plant rooms and lift motor rooms: Concession</b>	The provisions of this clause are not applicable.	<b>Not Applicable</b>
D2D22	<b>Access to lift pits</b>	<p>The provisions of this clause are not applicable.</p> <p>The type of lift proposed should not be affected by this clause.</p>	<b>Not Applicable</b>

BCA Clause	Title	Assessment and Comment	Status
D2D23	Egress from primary schools	<p>(1) Every part of a Class 9b primary school must be wholly within a storey that provides direct egress to a road or open space.</p> <p>(2) The requirements of (1) do not apply to a building with a rise in storeys of 4 or less, where the primary school is the only use in that building.</p> <p><b>Comment</b> This clause is not applicable as the rise in storeys is less than 4.</p> <p><b>Explanatory Information</b> D2D23(1) recognises the difficulties associated with evacuation of primary schools. Should a primary school be proposed within a storey that does not meet the requirements of D2D23, a Performance Solution is to be used to demonstrate compliance with the relevant Performance Requirements.</p>	Complies

### **Part D3 - Construction of exits**

BCA Clause	Title	Assessment and Comment	Status
D3D3	Fire-isolated stairways and ramps	The provisions of this clause are not applicable.	Not Applicable
D3D4	Non-fire-isolated stairways and ramps	<p>In a building having a rise in storeys of more than 2, required stairs and ramps (including landings and any supporting building elements) which are not required to be within a fire-resisting shaft, must be constructed according to D3D3, or only of—</p> <p>(a) reinforced or prestressed concrete; or</p> <p>(b) steel in no part less than 6 mm thick; or</p> <p>(c) timber that—</p> <p>(i) has a finished thickness of not less than 44 mm; and</p> <p>(ii) has an average density of not less than 800 kg/m<sup>3</sup> at a moisture content of 12%; and</p> <p>(iii) has not been joined by means of glue unless it has been laminated and glued with resorcinol formaldehyde or resorcinol phenol formaldehyde glue.</p> <p><b>Comment:</b> Not Applicable. The building affected by the proposed work is two storeys only.</p>	Not Applicable
D3D5	Separation of rising and descending stair flights	The provisions of this clause are not applicable.	Not Applicable
D3D6	Open access ramps and balconies	The provisions of this clause are not applicable as a open access ramp and balcony is not required to meet the smoke hazard management requirements of E2D4 to E2D13.	Not Applicable
D3D7	Smoke lobbies	The provisions of this clause are not applicable.	Not Applicable

BCA Clause	Title	Assessment and Comment	Status
D3D8	Installation in paths of travel	<p>(1) Access to service shafts and services other than to fire-fighting or detection equipment as permitted in the Deemed-to-Satisfy Provisions of Section E, must not be provided from a fire-isolated stairway, fire-isolated passageway or fire-isolated ramp.</p> <p>(2) An opening to any chute or duct intended to convey hot products of combustion from a boiler, incinerator, fireplace or the like, must not be located in any part of a required exit or any corridor, hallway, lobby or the like leading to a required exit.</p> <p>(3) Gas or other fuel services must not be installed in a required exit.</p> <p>(4) Except for in a fire-isolated exit specified in (1), services or equipment enclosed in accordance with (5) may be installed in a required exit, or in any corridor, hallway, lobby or the like leading to a required exit, where that service or equipment comprises—</p> <ul style="list-style-type: none"> <li>(a) electricity meters, distribution boards or ducts; or</li> <li>(b) central telecommunications distribution boards or equipment; or</li> <li>(c) electrical motors or other motors serving equipment in the building.</li> </ul> <p>(5) An enclosure for the purposes of (4) must be suitably sealed against smoke spreading from the enclosure and be—</p> <ul style="list-style-type: none"> <li>(a) non-combustible construction; or a (b) fire-protective covering.</li> </ul> <p>(6) Electrical wiring may be installed in a fire-isolated exit if the wiring is associated with—</p> <ul style="list-style-type: none"> <li>(a) a lighting, detection, or pressurisation system serving the exit; or</li> <li>(b) a security, surveillance or management system serving the exit; or</li> <li>(c) an intercommunication system or an audible or visual alarm system in accordance with D3D27; or</li> <li>(d) the monitoring of hydrant or sprinkler isolating valves.</li> </ul> <p><b>Comment:</b> Distribution boards and telco boards in the path of travel to an exit must be suitably smoke sealed. Gas or other fuel services must not be installed in a required exit.</p> <p>Details confirming compliance are to be checked by the appointed building certifier.</p>	Compliance subject to Certification
D3D9	Enclosure of space under stairs and ramps	<p>(a) Fire-isolated stairways and ramps — If the space below a required fire-isolated stairway or fire-isolated ramp is within the fire-isolated shaft, it must not be enclosed to form a cupboard or similar enclosed space.</p> <p>(b) Non fire-isolated stairways and ramps — The space below a required non fire-isolated stairway (including an external stairway) or non-fire-isolated ramp must not be enclosed to form a cupboard or other enclosed space unless—</p> <ul style="list-style-type: none"> <li>(i) the enclosing walls and ceilings have an FRL of not less than 60/60/60; and</li> <li>(ii) any access doorway to the enclosed space is fitted with a self-closing –/60/30 fire door.</li> </ul> <p><b>Comment:</b> At this stage, there does not appear to be any storage space or cupboards shown under the stairs.</p>	Compliance subject to Certification
D3D10	Width of stairways or ramps	<p>A required stairway or ramp that exceeds 2 m in width is counted as having a width of only 2 m unless it is divided by a handrail or barrier continuous between landings and each division has a width of not more than 2 m.</p> <p><b>Comment:</b> The stair widths comply with this clause.</p>	Complies
D3D11	Pedestrian ramps	<p>All proposed pedestrian ramps must have a non-slip finish and where the ramp is also serving as an accessible ramp under Part D4 is in accordance with AS1428.1 or have a grade not steeper than 1:8.</p> <p>The floor surface of a ramp must have a slip-resistance classification not less than that listed in Table D3D15 when tested in accordance with AS 4586.</p> <p><b>Comment:</b> All ramps must be wheelchair accessible and in this case the ramps should be assessed in relation to the access report also. Details confirming compliance are to be checked by the appointed building certifier.</p>	Compliance subject to Certification
D3D12	Fire-isolated passageways	The provisions of this clause are not applicable.	Not Applicable

BCA Clause	Title	Assessment and Comment	Status																		
D3D13	Roof as open space	The provisions of this clause are not applicable.	Not Applicable																		
D3D14	Goings and risers	<p>A stairway must have—</p> <ul style="list-style-type: none"><li>(i) not more than 18 and not less than 2 risers in each flight; and</li><li>(ii) going (G), riser (R) and quantity (2R + G) in accordance with Table D3D15, except as permitted by (b) and (c); and</li><li>(iii) constant goings and risers throughout each flight, except as permitted by (b) and (c), and the dimensions of goings (G) and risers (R) in accordance with (a)</li></ul> <p>(ii) are considered constant if the variation between—</p> <ul style="list-style-type: none"><li>(A) adjacent risers, or between adjacent goings, is no greater than 5 mm; and</li><li>(B) the largest and smallest riser within a flight, or the largest and smallest going within a flight, does not exceed 10 mm; and</li></ul> <p>(iv) risers which do not have any openings that would allow a 125 mm sphere to pass through between the treads; and</p> <p>(v) treads which have—</p> <ul style="list-style-type: none"><li>(A) a surface with a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS 4586; or</li><li>(B) a nosing strip with a slip-resistance classification not less than that listed in Table D2.14 when tested in accordance with AS 4586; and</li></ul> <p>(vi) treads of solid construction (not mesh or other perforated material) if the stairway is more than 10 m high or connects more than 3 storeys; and</p> <p>(vii) in a Class 9b building, not more than 36 risers in consecutive flights without a change in direction of at least 30°; and</p> <p>(viii) in the case of a required stairway, no winders in lieu of a landing.</p> <p>All goings and risers are to comply with Table D3D15.</p> <p><b>Comment:</b> The number of risers proposed for the stairways can comply. Risers are not permitted to allow openings greater than 125 mm to pass between treads.</p> <p>All treads are to have a non-slip finish or an adequate non-skid strip near the edge of the nosings that complies with Table D3D15 of the BCA in relation to AS4586.</p> <p>Details confirming compliance are to be checked by the appointed building certifier.</p>	Compliance subject to Certification																		
D2.15	Landings	<p>The provisions of this clause are applicable. Proposed landings generally comply with this clause.</p> <p>Landings having a maximum gradient of 1:50 may be used in any building to limit the number of risers in each flight and each landing must—</p> <ul style="list-style-type: none"><li>(i) be not less than 750 mm long, and where this involves a change in direction, the length is measured 500 mm from the inside edge of the landing; and</li><li>(ii) have a non-slip finish throughout or an adequate non-skid strip near the edge of the landing where it leads to a flight below.</li></ul> <p>Complies in relation to AS4586 is also required.</p> <p><b>Comment:</b> Landings must also comply with Table D3D15 Slip- Resistance Classification.</p> <table><tr><th colspan="3">Table D3D15: Slip-resistance classification</th></tr><tr><th>Application</th><th>Dry Surface conditions</th><th>Wet surface conditions</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> <p>Consideration should be given to possible wet conditions to the finish of the nosing due to the openness of the design of the building. Details confirming compliance are to be checked by the appointed building certifier.</p>	Table D3D15: Slip-resistance classification			Application	Dry Surface conditions	Wet surface conditions	Ramp steeper than 1:14	P4 or R11	P5 or R12	Ramp steeper than 1:20 but not steeper than 1:14	P3 or R10	P4 or R11	Tread or landing surface	P3 or R10	P4 or R11	Nosing or landing edge strip	P3	P4	Compliance subject to Certification
Table D3D15: Slip-resistance classification																					
Application	Dry Surface conditions	Wet surface conditions																			
Ramp steeper than 1:14	P4 or R11	P5 or R12																			
Ramp steeper than 1:20 but not steeper than 1:14	P3 or R10	P4 or R11																			
Tread or landing surface	P3 or R10	P4 or R11																			
Nosing or landing edge strip	P3	P4																			

BCA Clause	Title	Assessment and Comment	Status
D3D16	Thresholds	<p>The threshold of a doorway must not incorporate a step or ramp at any point closer to the doorway than the width of the door leaf unless—</p> <p>In a building required to be accessible by Part D4, the doorway—</p> <ul style="list-style-type: none"> <li>(i) opens to a road or open space; and</li> <li>(ii) is provided with a threshold ramp or step ramp in accordance with AS 1428.1; or</li> </ul> <p>In other cases—</p> <ul style="list-style-type: none"> <li>(i) the doorway opens to a road or open space, external stair landing or external balcony; and</li> <li>(ii) the door sill is not more than 190 mm above the finished surface of the ground, balcony, or the like, to which the doorway opens.</li> </ul> <p><b>Comment:</b> The door thresholds can comply. Further details should be provided with the application for a construction certificate.</p>	Compliance subject to Certification
D3D17	Barriers to prevent falls	<p>(1) A continuous barrier must be provided along the side of—</p> <ul style="list-style-type: none"> <li>(a) a roof to which general access is provided; and</li> <li>(b) a stairway or ramp; and</li> <li>(c) a floor, corridor, hallway, balcony, deck, verandah, mezzanine, access bridge or the like; and</li> <li>(d) any delineated path of access to a building, if the trafficable surface is 1 m or more above the surface beneath.</li> </ul> <p>(2) The requirements of (a) do not apply to—</p> <ul style="list-style-type: none"> <li>(a) the perimeter of a stage, rigging loft, loading dock or the like; or</li> <li>(b) areas referred to in D3D23; or</li> <li>(c) a retaining wall unless the retaining wall forms part of, or is directly associated with a delineated path of access to a building from the road, or a delineated path of access between buildings; or</li> <li>(d) a barrier provided to an openable window covered by D3D29.</li> </ul> <p>(3) A barrier required by (1) must be constructed in accordance with D3D18, D3D19, D3D20 and, if a wire barrier is used, D3D21.</p> <p><b>Comment:</b> Barriers are required as specified. Insufficient details are provided at this stage. Details confirming compliance are to be checked by the appointed building certifier.</p>	Compliance subject to Certification
D3D18	Height of barriers	<p>(1) The height of a barrier required by D3D17 must be not less than the following:</p> <ul style="list-style-type: none"> <li>(a) For stairways or ramps with a gradient of 1:20 or steeper — 865 mm.</li> <li>(b) For landings to a stair or ramp where the barrier is provided along the inside edge of the landing and does not exceed 500 mm in length — 865 mm.</li> <li>(c) In front of fixed seating on a mezzanine or balcony within an auditorium in a Class 9b building, where the horizontal projection extends not less than 1 m outwards from the top of the barrier — 700 mm.</li> <li>(d) For all other locations — 1 m.</li> </ul> <p>(2) For a barrier provided under (1) —</p> <ul style="list-style-type: none"> <li>(a) barrier heights are measured vertically from the surface beneath, except that for stairways the height must be measured above the nosing line of the stair treads; and</li> <li>(b) a transition zone may be incorporated where the barrier height changes from 865 mm on a stair flight or ramp to 1 m at a landing or floor.</li> </ul> <p><b>Comment:</b> Details confirming compliance are to be checked by the appointed building certifier.</p>	Compliance subject to Certification

BCA Clause	Title	Assessment and Comment	Status
D3D19	<b>Openings in barriers</b>	<p>(1) Except where allowed by (2), openings in a required barrier must not allow a 125 mm sphere to pass through.</p> <p>(2) In a fire-isolated stairway, fire-isolated ramp or other area used primarily for emergency purposes, openings in a required barrier—</p> <p>(a) must not allow a 300 mm sphere to pass through; or</p> <p>(b) where rails are used— (i) a 150 mm sphere must not be able to pass through the opening between the nosing line of the stair treads and the rail or between the rail and the floor of the landing, balcony or the like; and</p> <p>(ii) the opening between rails must not be more than 460 mm.</p> <p>(3) In Class 7 (other than carparks) and Class 8 buildings, openings in a required barrier—</p> <p>(a) must not allow a 300 mm sphere to pass through; or</p> <p>(b) where rails are used— (i) a 150 mm sphere must not be able to pass through the opening between the nosing line of the stair treads and the rail or between the rail and the floor of the landing, balcony or the like; and</p> <p>(ii) the opening between the rails must not be more than 460 mm.</p> <p>(4) The requirements of (2) do not apply to external stairways, external ramps, or fire-isolated stairways or fire-isolated ramps serving Class 9b early childhood centres.</p> <p>(5) For a barrier provided under (1), the maximum 125 mm barrier opening for a stairway, such as a non fire-isolated stairway, is measured above the nosing line of the stair treads.</p> <p>(6) 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 40 mm.</p> <p>(7) For the purposes of (6), the opening is measured horizontally from the edge of the trafficable surface to the nearest internal face of the barrier.</p> <p><b><u>Comment:</u></b> Insufficient details are provided at this stage. Details confirming compliance are to be checked by the appointed building certifier.</p>	<b>Compliance subject to Certification</b>
D3D20	<b>Barrier climbability</b>	<p>(1) A barrier required by D3D17, located on a floor more than 4 m above the surface beneath, must not incorporate horizontal or near horizontal elements that could facilitate climbing between 150 mm and 760 mm above the floor.</p> <p>(2) The requirements of (1) do not apply to —</p> <p>(a) fire-isolated stairways, fire-isolated ramps and other areas used primarily for emergency purposes, other than — (i) external stairways; and (ii) external ramps; and</p> <p>(b) Class 7 (other than carparks) and Class 8 buildings.</p> <p><b><u>Comment:</u></b> Insufficient details are provided at this stage. Non-climbable barriers will be required where the surface below is greater than 4 m.</p>	
D3D21	<b>Wire barriers</b>	<p>Where a required barrier is constructed of wire, it is deemed to meet the requirements of D3D19(1) if it is constructed in accordance with the specifications of D3D21.</p> <p><b><u>Comment:</u></b> Wire barriers are unlikely to be used in this case. Final confirmation will be provided with the application for a construction certificate.</p> <p>Refer to the clause for more information.</p>	<b>Compliance subject to Certification</b>

BCA Clause	Title	Assessment and Comment	Status
D3D22	<b>Handrails</b>	<p>Handrails are required to be provided on each side of a ramp or flight. Note: Handrails required to assist persons with disabilities must be provided in accordance with D4D4.</p> <p>In primary schools and early childhood centres, stairs must be provided with a handrail at both not less than 865 mm and a second handrail at a height between 665 mm and 750 mm. It must have a cross-sectional dimension not less than 16 mm and not greater than 45 mm as measured in any direction across its centre, fixed at a height between 450 mm and 700 mm in a Class 9b early childhood centre.</p> <p>It must be continuous between stair flight landings and have no obstruction on or above them that will tend to break a handhold; and in a required exit serving an area required to be accessible, be designed and constructed to comply with clause 12 of AS 1428.1, except that clause 12(d) does not apply to a handrail required by (1)(c)(ii) of D3D22.</p> <p><b>Comment:</b> A handrail will also be required on each side of the stair if used for primary school students and in addition to AS1428.1.</p> <p>Details confirming compliance are to be checked by the appointed building certifier.</p>	<b>Compliance subject to Certification</b>
D3D23	<b>Fixed platforms, walkways, stairways, and ladders</b>	The provisions of this clause are not applicable.	<b>Not Applicable</b>
D3D24	<b>Doorways and doors</b>	<p>(1) A doorway in a resident use area of a Class 9c building must not be fitted with—</p> <ul style="list-style-type: none"> <li>(i) a sliding fire door; or</li> <li>(ii) a sliding smoke door; or</li> <li>(iii) a revolving door; or</li> <li>(iv) a roller shutter door; or</li> <li>(v) a tilt-up door.</li> </ul> <p>(2) A doorway serving as a required exit or forming part of a required exit, or a doorway in a patient care area of a Class 9a health-care building—</p> <ul style="list-style-type: none"> <li>(i) must not be fitted with a revolving door; and</li> <li>(ii) must not be fitted with a roller shutter or tilt-up door unless— <ul style="list-style-type: none"> <li>(A) it serves a Class 6, 7 or 8 building or part with a floor area not more than 200 m<sup>2</sup>; and</li> <li>(B) the doorway is the only required exit from the building or part; and</li> <li>(C) it is held in the open position while the building or part is lawfully occupied; and</li> </ul> </li> </ul> <p>(3) A power-operated door in a path of travel to a required exit, except for a door in a patient care area of a Class 9a health-care building as provided in (b), must be able to be opened manually under a force of not more than 110N if there is a malfunction or failure of the power source.</p> <p><b>Comment:</b> The proposed doors appear to comply.</p>	<b>Complies subject to certification</b>

BCA Clause	Title	Assessment and Comment	Status
D3D25	Swinging doors	<p>(1) A swinging door in a required exit or forming part of a required exit</p> <p>(a) must not encroach—</p> <p>(i) at any part of its swing by more than 500 mm on the required width (including any landings) of a required (A) stairway; or (B) ramp; or (C) passageway, if it is likely to impede the path of travel of the people already using the exit; and</p> <p>(ii) when fully open, by more than 100 mm on the required width of the required exit and the measurement of encroachment in each case is to include door handles or other furniture or attachments to the door.</p> <p>(b) must swing in the direction of egress unless—</p> <p>it serves a building or part with a floor area not more than 200 m<sup>2</sup>, it is the only required exit from the building</p> <p>(i) or part and it is fitted with a device for holding it in the open position; or</p> <p>(ii) it serves a sanitary compartment or airlock (in which case it may swing in either direction); and</p> <p>(c) must not otherwise impede the path or direction of egress.</p> <p><b>Comment:</b> The proposed doors comply. The measurement of encroachment referred to in (1)(a) in each case is to include door handles or other furniture or attachments to the door. Final details are to be confirmed with the application for a construction certificate.</p>	Compliance subject to certification
D3D26	Operation of latch	<p>(1) A door in a required exit, forming part of a required exit or in the path of travel to a required exit must be readily openable without a key from the side that faces a person seeking egress, by—</p> <p>(a) a single hand downward action on a single device which is located between 900 mm and 1.1 m from the floor and if serving an area required to be accessible by Part D4—</p> <p>(i) be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch; and</p> <p>(ii) have a clearance between the handle and the back plate or door face at the centre grip section of the handle of not less than 35 mm and not more than 45 mm; or</p> <p>(b) a single hand pushing action on a single device which is located between 900 mm and 1.2 m from the floor.</p> <p>(2) Where the latch operation device referred to in (1)(b) is not located on the door leaf itself—</p> <p>(a) manual controls to power-operated doors must be at least 25 mm wide, proud of the surrounding surface and located—</p> <p>(i) not less than 500 mm from an internal corner; and</p> <p>(ii) for a hinged door, between 1 m and 2 m from the door leaf in any position; and</p> <p>(iii) for a sliding door, within 2 m of the doorway and clear of a surface mounted door in the open position; and</p> <p>(b) braille and tactile signage complying with S15C3 and S15C6 must identify the latch operation device.</p> <p><b>Comment:</b> Door furniture is required as specified. Final details confirming compliance are to be checked by the appointed building certifier.</p>	Compliance subject to certification
D3D27	Re-entry from fire isolated exits	The provisions of this clause are not applicable for this is type of building.	Not Applicable
D3D28	Signs on doors	The provisions of this clause are not applicable for this is type of building.	Not Applicable

BCA Clause	Title	Assessment and Comment	Status
D3D29	<b>Protection of openable windows</b>	<p>(1) A window opening must be provided with protection, if the floor below the window is 2 m or more above the surface beneath in— (a) a bedroom in a Class 2 or 3 building or Class 4 part of a building; or (b) a Class 9b early childhood centre.</p> <p>(2) Where the lowest level of the window opening is less than 1.7 m above the floor, a window opening covered by (1) must comply with the following:</p> <p>(a) The openable portion of the window must be protected with—</p> <p>(i) a device capable of restricting the window opening; or</p> <p>(ii) a screen with secure fittings.</p> <p>(b) A device or screen required by (a) must—</p> <p>(i) not permit a 125 mm sphere to pass through the window opening or screen; and</p> <p>(ii) resist an outward horizontal action of 250 N against the—</p> <p>(A) window restrained by a device; or (B) screen protecting the opening; and (iii) have a child resistant release mechanism if the screen or device is able to be removed, unlocked or overridden.</p> <p>(3) A barrier with a height not less than 865 mm above the floor is required to an openable window— (a) in addition to window protection, when a child resistant release mechanism is required by (2)(b)(iii); and where the floor below the window is 4 m or more above the surface beneath if the window is not covered by (1).</p> <p>(4) A barrier covered by (3) except for (5) must not—</p> <p>(a) permit a 125 mm sphere to pass through it; and</p> <p>(b) have any horizontal or near horizontal elements between 150 mm and 760 mm above the floor that facilitate climbing.</p> <p><b>Comment:</b> The windows will require a child safe design to prevent injury from falling where the levels between storeys are estimated to be greater than 4 m.</p> <p>Details confirming compliance are to be checked by the appointed building certifier</p>	<b>Compliance subject to Certification</b>
D3D30	<b>Timber stairways: Concession</b>	The provisions of this clause are not applicable for this is type of building.	<b>Not Applicable</b>

#### Part D4 – Access for people with a disability

BCA Part	Title	Assessment and Comment	Status
D4D2	<b>General building access requirements</b>	<p>BCA2022 requires access for persons with disabilities to these classes of buildings to and with all areas normally used by the occupants.</p> <p><b>Comment:</b> It is understood that the design will be assessed by the accredited access consultants, Vista Access Architects. and amended accordingly.</p> <p>The building will require accessible connection to the other parts of the school property.</p> <p>Details confirming compliance with the Part D4 and AS14281, including circulation spaces and the like are to be checked by the appointed building certifier. T</p>	<b>Compliance subject to Certification</b>
D4D3	<b>Access to buildings</b>	<p>(1) An accessway must be provided to a building required to be accessible—</p> <p>(a) from the main points of a pedestrian entry at the allotment boundary; and</p> <p>(b) from another accessible building connected by a pedestrian link; and</p> <p>(c) from any required accessible carparking space on the allotment.</p> <p>(2) In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance, and –</p>	

BCA Part	Title	Assessment and Comment	Status
D3.3	<b>Parts of buildings to be accessible</b>  <b>Continued...</b>	<p>a) through not less than 50% of all pedestrian entrances including the principal pedestrian entrance; and</p> <p>(b) in a building with a total floor area more than 500 m<sup>2</sup>, a pedestrian entrance which is not accessible must not be located more than 50 m from an accessible pedestrian entrance, except for pedestrian entrances serving only areas exempted by D4D5.</p> <p>(3) Where a pedestrian entrance required to be accessible has multiple doorways—</p> <p>(a) if the pedestrian entrance consists of not more than 3 doorways — not less than 1 of those doorways must be accessible; and</p> <p>(b) if a pedestrian entrance consists of more than 3 doorways — not less than 50% of those doorways must be accessible.</p> <p>(4) For the purposes of (3)—</p> <p>(a) an accessible pedestrian entrance with multiple doorways is considered to be one pedestrian entrance where— (i) all doorways serve the same part or parts of the building; and (ii) the distance between each doorway is not more than the width of the widest doorway at that pedestrian entrance (see Figure D4D3); and</p> <p>(b) a doorway is considered to be the clear, unobstructed opening created by the opening of one or more door leaves (see Figure D4D3).</p> <p>(5) Where a doorway on an accessway has multiple leaves, (except an automatic opening door) one of those leaves must have a clear opening width of not less than 850 mm in accordance with AS 1428.1.</p> <p><b>Comment:</b> Details confirming compliance with the Part D4 and AS14281, are to be checked by the appointed building certifier. T</p>	For Information Purposes
D4D4	<b>Parts of the building to be accessible</b>	<p>In a building required to be accessible—</p> <p>(a) every ramp and stairway, except for ramps and stairways in areas exempted by D4D5, must comply with—</p> <p>(i) for a ramp, except a fire-isolated ramp, clause 10 of AS 1428.1; and</p> <p>(ii) for a stairway, except a fire-isolated stairway, clause 11 of AS 1428.1; and</p> <p>(iii) for a fire-isolated stairway, clause 11.1(f) and (g) of AS 1428.1; and</p> <p>(b) every passenger lift must comply with E3D7; and</p> <p>(c) accessways must have—</p> <p>(i) passing spaces complying with AS 1428.1 at maximum 20 m intervals on those parts of an accessway where a direct line of sight is not available; and (ii) turning spaces complying with AS 1428.1—</p> <p>(A) within 2 m of the end of accessways where it is not possible to continue travelling along the accessway; and</p> <p>(B) at maximum 20 m intervals along the accessway; and</p> <p>(d) an intersection of accessways satisfies the spatial requirements for a passing and turning space; and</p> <p>(e) a passing space may serve as a turning space; and</p> <p>(f) a ramp complying with AS 1428.1 or a passenger lift need not be provided to serve a storey or level other than the entrance storey in a Class 5, 6, 7b or 8 building—</p> <p>(i) containing not more than 3 storeys; and</p> <p>(ii) with a floor area for each storey, excluding the entrance storey, of not more than 200 m<sup>2</sup>; and</p> <p>(g) clause 7.4.1(a) of AS 1428.1 does not apply and is replaced with 'the pile height or pile thickness shall not exceed 11 mm and the carpet backing thickness shall not exceed 4 mm'; and</p> <p>(h) the carpet pile height or pile thickness dimension, carpet backing thickness dimension and their combined dimension shown in Figure 8 of AS 1428.1 do not apply and are replaced with 11 mm, 4 mm and 15 mm respectively.</p> <p><b>Comment:</b> Details confirming compliance with the Part D4 and AS14281, are to be checked by the appointed building certifier.</p>	

BCA Part	Title	Assessment and Comment	Status
D4D5	Exemptions	The following areas are not required to be accessible: (a) An area where access would be inappropriate because of the particular purpose for which the area is used. (b) An area that would pose a health or safety risk for people with a disability. (c) Any path of travel providing access only to an area exempted by (a) or (b).	For Information Purposes
D4D6	Accessible carparking	Accessible carparking is required to the development to AS2890.6 and D3.5.  <b>Comment:</b> It is assumed the existing carpark complies. There is no work proposed to the existing carpark at this stage. This is to be confirmed with the application for a construction certificate.	Complies subject to certification
D4D7	Signage	In every building required to be accessible, clear and legible Braille and tactile signage complying with Specification 15 and incorporating the international symbol of access must be provided each exit at each level, accessible service, entrance and lift facilities, area provided with hearing augmentation and accessible and ambulant facilities.  <b>Comment:</b> Details confirming compliance with Part D4 and AS14281, are to be checked by the appointed building certifier.	
D4D8	Hearing augmentation	A hearing augmentation system must be provided where an inbuilt amplification system, other than one used only for emergency warning, is installed — in a room in a Class 9b building.  <b>Comment:</b> The provisions of this clause are not applicable except if the space in the classrooms use sound amplification systems, electric boards or the like. GLA's are not usually provided with such systems. This issue should be assessed by an access consultant.	Complies subject to Certification
D4D9	Tactile indicators	Type B tactile ground surface indicators must be provided to warn people with vision impairment that they are approaching a stairway or ramp and are to be installed in accordance with AS/NZS1428.4.1. Tactile indicators are also required where there is an obstruction in the path of travel that is less than 2 m above the floor.  <b>Comment:</b> Tactile indicators are required as specified in the BCA and AS1428.4. Details confirming compliance are to be checked by the appointed building certifier.	Complies subject to Certification
D4D10	Wheelchair seating spaces in Class 9b assembly buildings	The provisions of this clause are not applicable for this is type of building.	Not Applicable
D4D11	Swimming pools	The provisions of this clause are not applicable for this is type of building. A pool is not proposed.	Not Applicable
D4D12	Ramps	On an accessway— (a) a series of connected ramps must not have a combined vertical rise of more than 3.6 m; and (b) a landing for a step ramp must not overlap a landing for another step ramp or ramp.  <b>Comment:</b> The proposed ramps can comply.	Complies
D4D13	Glazing on an accessway	On an accessway, where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights and any glazing capable of being mistaken for a doorway or opening, must be clearly marked in accordance with AS 1428.1.  <b>Comment:</b> Details confirming compliance are to be checked by the appointed building certifier	For Information Purposes  Complies subject to certification

## SECTION E – SERVICES AND EQUIPMENT

### Part E1 – Fire Fighting Equipment

BCA Part	Title	Assessment and Comment	Status
E1D2	Fire hydrants	<p>A fire hydrant system must be provided to serve a building—</p> <ul style="list-style-type: none"> <li>(i) having a total floor area greater than 500 m<sup>2</sup>; and</li> <li>(ii) where a fire brigade station is— <ul style="list-style-type: none"> <li>(A) no more than 50 km from the building as measured along roads; and</li> <li>(B) equipped with equipment capable of utilising a fire hydrant.</li> </ul> </li> </ul> <p><b>Comment:</b> There are hydrants distributed throughout the property and a booster assembly is located at the front of the building. The new work must be provided with coverage from a compliant fire hydrant system designed and endorsed by an ‘accredited practitioner (fire safety)’.</p> <p>Details confirming compliance are to be checked by the appointed building certifier.</p>	Compliance subject to Certification
E1D3	Fire hose reels	<p>A fire hose reel system must be provided—</p> <ul style="list-style-type: none"> <li>(a) to serve the whole building where one or more internal fire hydrants are installed; or</li> <li>(b) where internal fire hydrants are not installed, to serve any fire compartment with a floor area greater than 500 m<sup>2</sup>.</li> </ul> <p>E1.4 does not apply to—</p> <ul style="list-style-type: none"> <li>(i) a Class 2, 3 or 5 building or Class 4 part of a building; or</li> <li>(ii) a Class 8 electricity network substation; or</li> <li>(iii) a Class 9c building; or</li> <li>(iv) classrooms and associated corridors in a primary or secondary school.</li> </ul> <p><b>Comment:</b> Classrooms and associated corridors in schools are exempt and therefore fire hose reels are not required in the building were used as classrooms. However, an opinion should be sought as to whether fire hose reels are required to areas to be used for staff and administrative purposes.</p> <p>Details confirming compliance are to be checked by the appointed building certifier.</p>	Complies
E1D4 to E1D13	Sprinklers	The provisions of this clause are not applicable. Sprinklers are not required.	Not Applicable
E1D14	Portable fire extinguishers	<p>The type of portable fire extinguisher must be suitable to cover Class A fire risks in classrooms and corridors not provided with fire hose reels to AS2444.</p> <p><b>Comment:</b> Due to the absence of fire hose reels, Class A portable fire extinguishers are required to cover fires that would have been extinguished by a fire hose reel.</p> <p>Details confirming compliance are to be checked by the appointed building certifier.</p>	Compliance subject to Certification
E1D15	Fire control centres	The provisions of this clause are not applicable.	Not Applicable

BCA Part	Title	Assessment and Comment	Status
E1D16	<b>Fire precautions during construction</b>	<p>In a building under construction—</p> <p>(a) not less than one fire extinguisher to suit Class A, B and C fires and electrical fires must be provided at all times on each storey adjacent to each required exit or temporary stairway or exit; and</p> <p>(b) after the building has reached an effective height of 12 m—</p> <p>(i) the required fire hydrants and fire hose reels must be operational in at least every storey that is covered by the roof or the floor structure above, except the 2 uppermost storeys; and</p> <p>(ii) any required booster connections must be installed.</p> <p><b>Comment:</b> Compliance should be checked by the appointed building certifier as the adjoining buildings will be occupied whilst the new work is under construction.</p>	<b>For Information Purposes</b>
E1.10	<b>Provision for special hazard</b>	The provisions of this clause are not applicable.	<b>Not Applicable</b>

## **Part E2 – Smoke Hazard Management**

BCA Part	Title	Assessment and Comment	Status
E2D9	<b>Buildings not more than 25 m in effective height: Class 5, 6, 7b, 8 and 9b buildings</b>	<p>(1) A building not more than 25 m in effective height that —</p> <p>(a) is a Class 5 or 9b school building or part of a building having a rise in storeys of more than 3; or</p> <p>(b) is Class 6, 7b, 8 or 9b building (other than a school) or part of a building having a rise in storeys of more than 2; or</p> <p>(c) has a rise in storeys of more than 2, and contains—</p> <p>(i) a Class 5 or 9b school part; and</p> <p>(ii) a Class 6, 7b, 8 or 9b (other than a school) part, must meet the requirements of (2).</p> <p>(2) A building referred to in (1) must be provided with—</p> <p>(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</p> <p>(b) a zone pressurisation system between vertically separated fire compartments in accordance with AS 1668.1, if the building has more than one fire compartment; or</p> <p>(c) an automatic smoke detection and alarm system complying with Specification 20; or</p> <p>(d) a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17.</p> <p>(3) For the purposes of (2), vertically separated fire compartments are fire compartments above and below each other, and not fire compartments within the same storey.</p> <p><b>Comment:</b> The rise-in-storeys of this building does not require a specific smoke hazard management system. Refer also to Clause ED20 and the NSW Variation.</p>	<b>For information purposes</b>
NSW E2D16	<b>Class 9b – assembly buildings: all</b>	<p>The following provisions apply to all Class 9b assembly buildings:</p> <p>(a) A building or part of a building used as an assembly building must be provided with automatic shutdown of any air-handling system (other than non-ducted individual room units with a capacity not more than 1000 L/s and miscellaneous exhaust air systems installed in accordance with Sections 5 and 6 of AS 1668.1) which does not form part of the smoke hazard management system, on the activation of—</p> <p>(i) smoke detectors installed complying with S20C6; and</p> <p>(ii) any other installed fire detection and alarm system, including a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17.</p>	

BCA Part	Title	Assessment and Comment	Status
NSW E2D16	<b>Class 9b – assembly buildings: all</b>  <b>Continued..</b>	<p>(b) A basement not counted in the rise in storeys in accordance with C2D3, less than 2000 m<sup>2</sup> used as an assembly (b)building or part of an assembly building containing an auditorium or other public area, must be equipped with—</p> <ul style="list-style-type: none"> <li>(i) an automatic smoke detection system in accordance with Specification 20; or an automatic zone pressurisation system in accordance with AS 1668.1 if the basement has more than one</li> <li>(ii) fire compartment; or if the basement forms part of a multi fire compartmented building served by the zone pressurisation system; or</li> <li>(iii) a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17.</li> </ul> <p>(c) Stages and backstages:</p> <ul style="list-style-type: none"> <li>(i) For the purposes of this clause, where a stage is separated from the auditorium by a proscenium wall incorporating a proscenium opening, a backstage room or area that is not separated from the stage by construction having an FRL of not less than 60/60/60, is taken to form part of the stage.</li> </ul> <p><b><u>Comment:</u></b> A ducted air conditioning system or larger single units must be provided with an automatic shutdown of the system as prescribed. Details to be provided for approval.</p>	<b>Complies subject to Certification</b>
NSW E2D19	<b>Class 9b assembly buildings: other assembly buildings (not listed in E2D16 to E2D18)</b>	<p>(1) Unless otherwise described in (2), in a building or part of a building used as an assembly building (not being a night club, discotheque or the like; or an exhibition hall, museum or art gallery) where the floor area of a fire compartment is more than 2000 m<sup>2</sup>, the fire compartment must be provided with—</p> <ul style="list-style-type: none"> <li>(a) an automatic smoke exhaust system complying with Specification 21; or</li> <li>(b) roof mounted automatic smoke-and-heat vents complying with Specification 22, in a single storey building or the top storey of a multi storey building; or</li> <li>(c) if the floor area of the fire compartment is not more than 5000 m<sup>2</sup> and the building has a rise in storeys of not more than 2 — <ul style="list-style-type: none"> <li>(i) an automatic smoke detection and alarm system complying with Specification 20; or</li> <li>(ii) a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17.</li> </ul> </li> </ul> <p>(2) The following buildings are exempt from the provisions of (1):</p> <ul style="list-style-type: none"> <li>(a) Sporting complexes, (including sports halls, gymnasiums, swimming pools, ice and roller rinks, and the like) other than indoor sports stadiums with total spectator seating for more than 1000 persons.</li> <li>(b) Churches and other places used solely for religious worship.</li> <li>(c) School classrooms.</li> </ul> <p>(3) A building containing a Class 9b early childhood centre must be provided with an automatic smoke detection and alarm system complying with Specification 20 throughout the whole building, including any part of another class.</p> <p><b><u>Comment:</u></b> The NSW Variation provides for an exemption from the provisions of Section 1 in the case of school classrooms. Note the provisions of NSW E2D16 still apply.</p>	<b>Complies</b>
NSW E2D20	<b>Class 9b assembly buildings: other assembly buildings (not listed in E2D16 to E2D19)</b>	E2D20 does not apply in NSW. This clause is deleted from the BCA in NSW, as requirements for Class 9b – Assembly buildings in NSW are covered under NSW E2D16 to NSW E2D19.	<b>For information purposes</b>
E2D1	<b>Provision for special hazards</b>	<p>Additional smoke hazard management measures may be necessary due to the—</p> <ul style="list-style-type: none"> <li>(a) special characteristics of the building; or</li> <li>(a) special function or use of the building; or</li> <li>(b) special type or quantity of materials stored, displayed or used in a building; or</li> <li>(c) special mix of classifications within a building or fire compartment,</li> <li>(d) which are not addressed in E2D4 to E2D20.</li> </ul>	<b>For information purposes</b>

## Part E3 – Lift Installations

BCA Part	Title	Assessment and Comment	Status
E3D2	<b>Lift Installations</b>	An electric passenger lift installation and an electrohydraulic passenger lift installation must comply with Specification 24.	<b>For information purposes</b>
E3D3	<b>Stretcher facility in lifts</b>	<p>(a) A stretcher facility in accordance with (b) must be provided—</p> <p>(i) in at least one emergency lift required by E3D5; or</p> <p>(ii) 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.</p> <p>(b) A stretcher facility must accommodate a raised stretcher with a patient lying on it horizontally by providing a clear space not less than 600 mm wide x 2000 mm long x 1400 mm high above the floor level.</p> <p><b>Comment:</b> The building does not have an effective height greater than 12 m.</p>	<b>Not Applicable</b>
E3D4	<b>Warning against use of lifts in fire</b>	<p>A warning sign must—</p> <p>(a) be displayed where it can be readily seen—</p> <p>(i) near every call button for a passenger lift or group of lifts throughout a building; except</p> <p>(ii) a small lift such as a dumb-waiter or the like that is for the transport of goods only; and</p> <p>(b) comply with the details and dimensions of Figure E3D4 and consist of—</p> <p>(i) incised, inlaid or embossed letters on a metal, wood, plastic or similar plate securely and permanently attached to the wall; or</p> <p>(ii) letters incised or inlaid directly into the surface of the material forming the wall.</p> <p><b>Comment:</b> Details confirming compliance are to be checked by the appointed building certifier.</p>	<b>Complies subject to certification</b>
E3D5	<b>Emergency lifts</b>	The provisions of this clause are not applicable as the effective height of the proposed building is less than 25 m.	<b>Not Applicable</b>
E3D6	<b>Landings</b>	<p>Access and egress to and from lift well landings must comply with the Deemed-to-Satisfy Provisions of Part D, D3 and D4 of Section D.</p> <p><b>Comment:</b> Details confirming compliance are to be checked by the appointed building certifier.</p>	<b>Complies subject to certification</b>
E3D7	<b>Passenger lifts and their limitations</b>	<p>The lift must be accessible and selected in accordance with the requirements Clause E3.6.</p> <p><b>Comment:</b> The lift must be designed and selected to comply with Subclause 1 (a) to (d) of E3.6. Details confirming compliance are to be checked by the appointed building certifier.</p>	<b>Complies subject to certification</b>
E3D8	<b>Accessible features required for passenger lifts</b>	<p>In an accessible building, every passenger lift must have the following features where applicable:</p> <p>(a) A handrail complying with the provisions for a mandatory handrail in AS 1735.12 for all lifts except—</p> <p>(i) a stairway platform lift; and</p> <p>(ii) a low-rise platform lift.</p> <p>(b) Lift floor dimensions of not less than 1400 mm wide x 1600 mm deep for all lifts which travel more than 12 m.</p> <p>(c) Lift floor dimensions of not less than 1100 mm wide x 1400 mm deep for all lifts which travel not more than 12 m, except a stairway platform lift.</p>	

BCA Part	Title	Assessment and Comment	Status
E3D8	<b>Accessible features required for passenger lifts</b>  <b>Continued..</b>	<p>(d) Lift floor dimensions of not less than 810 mm wide x 1200 mm deep for a stairway platform lift.</p> <p>(e) Minimum clear door opening complying with AS 1735.12 for all lifts except a stairway platform lift.</p> <p>(f) Passenger protection system complying with AS 1735.12 for all lifts with power-operated doors.</p> <p>(g) Lift landing doors at the upper landing for all lifts except a stairway platform lift.</p> <p>(h) Lift car and landing control buttons complying with AS 1735.12 for all lifts except—</p> <ul style="list-style-type: none"> <li>(i) a stairway platform lift; and</li> <li>(ii) a low-rise platform lift.</li> </ul> <p>(i) Lighting in accordance with AS 1735.12 for all enclosed lift cars.</p> <p>For all lifts serving more than 2 levels—</p> <p>(j) automatic audible information within the lift car to identify the level each time the car stops; and</p> <ul style="list-style-type: none"> <li>(i) audible and visual indication at each lift landing to indicate the arrival of the lift car; and</li> <li>(ii) audible information and audible indication required by (i) and (ii) is to be provided in a range of between 20</li> <li>(iii)- 80 dB(A) at a maximum frequency of 1500 Hz.</li> </ul> <p>(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.</p> <p><b><u>Comment:</u></b> The lift must be designed and installed as specified.</p>	<b>Complies subject to certification</b>
E3D9	<b>Fire service controls</b>	<p>Where lifts serve any storey above an effective height of 12 m, the following must be provided:</p> <p>(a) A fire service recall control switch complying with E3D11 for—</p> <ul style="list-style-type: none"> <li>(i) a group of lifts; or</li> <li>(ii) a single lift not in a group that serves the storey.</li> </ul> <p>(b) A lift car fire service drive control switch complying with E3D12 for every lift.</p> <p><b><u>Comment:</u></b> The building does not have an effective height greater than 12 m.</p>	<b>Not Applicable</b>
E3D10	<b>Residential care buildings</b>	The provisions of this clause are not applicable as it is not an aged care building.	<b>Not Applicable</b>
E3D11	<b>Fire service recall control switch</b>	The provisions of this clause are not applicable in this case as Clause E3D9 does not apply.	<b>Not Applicable</b>
E3.10	<b>Lift car fire service drive control switch</b>	The provisions of this clause are not applicable in this case as Clause E3D9 does not apply.	<b>Not Applicable</b>

## Part E4 – Visibility in an emergency, exit signs and warning systems

BCA Part	Title	Assessment and Comment	Status
E4D2, E4D3 and E4D4	<b>Emergency lighting requirements</b>	<p>An emergency lighting system must be installed—</p> <ul style="list-style-type: none"> <li>(a) in every fire-isolated stairway, fire-isolated passageway or fire-isolated ramp; and in every storey of a Class 5, 6, 7, 8 or 9 building where the storey has an area more than 300 m<sup>2</sup>—</li> <li>(b) in every passageway, corridor, hallway, or the like, that is part of the path of travel to an exit; and <ul style="list-style-type: none"> <li>(i) in any room having a floor area more than 100 m<sup>2</sup> that does not open to a corridor or space that has</li> <li>(ii) emergency lighting or to a road or open space; and</li> <li>(iii) in any room having a floor area more than 300 m<sup>2</sup>; and</li> </ul> </li> <li>(d) in every fire-isolated stairway, fire-isolated passageway or fire-isolated ramp; and</li> <li>(e) in a sole-occupancy unit in a Class 5, 6 or 9 building if— <ul style="list-style-type: none"> <li>(i) the floor area of the unit is more than 300 m<sup>2</sup>; and an exit from the unit does not open to a road or open space or to an external stairway, passageway, balcony</li> <li>(ii) or ramp, leading directly to a road or open space; and</li> </ul> </li> <li>(f) in every room or space to which there is public access in every storey in a Class 6 or 9b building if— <ul style="list-style-type: none"> <li>(i) the floor area in that storey is more than 300 m<sup>2</sup>; or</li> <li>(ii) any point on the floor of that storey is more than 20 m from the nearest doorway leading directly to a stairway,</li> <li>(iii) ramp, passageway, road or open space; or</li> <li>(iv) egress from that storey involves a vertical rise within the building of more than 1.5 m, or any vertical rise if</li> <li>(v) the storey concerned does not admit sufficient light; or</li> <li>(vi) the storey provides a path of travel from any other storey required by (i), (ii) or (iii) to have emergency</li> <li>(vii) lighting.</li> </ul> </li> </ul> <p>Every required emergency lighting system must comply with AS/NZS 2293.1.</p> <p><b>Comment:</b> The building will require emergency lighting over every stair, to every passageway, corridor or hallway that is part of a path of travel to an exit and in every room if the room has a floor area of 300 m<sup>2</sup>.</p> <p>Details on emergency lighting provisions are to be provided to the appointed building certifier for approval.</p>	<b>Compliance subject to Certification</b>
E4D5 & E4D6	<b>Exit signs and Direction signs</b>	<p>An exit sign must be clearly visible to persons approaching the exit, and must be installed on, above or adjacent to each—</p> <ul style="list-style-type: none"> <li>(a) door providing direct egress from a storey to— <ul style="list-style-type: none"> <li>(i) an enclosed stairway, passageway or ramp serving as a required exit; and</li> <li>(ii) an external stairway, passageway or ramp serving as a required exit; and</li> <li>(iii) an external access balcony leading to a required exit; and</li> </ul> </li> <li>(b) door from an enclosed stairway, passageway or ramp at every level of discharge to a road or open space; and</li> <li>(c) horizontal exit; and</li> <li>(d) door serving as, or forming part of, a required exit in a storey required to be provided with emergency lighting in accordance with E4D2.</li> </ul> <p>If an exit is not readily apparent to persons occupying or visiting the building then exit signs must be installed in appropriate positions in corridors, hallways, lobbies, and the like, indicating the direction to a required exit.</p> <p><b>Comment:</b> Details on exit signs are to be provided to the appointed building certifier for approval.</p>	<b>Compliance subject to Certification</b>
E4D7	<b>Class 2, 3&amp; Class 4 parts: exemptions</b>	The provisions of this clause are not applicable.	<b>Not Applicable</b>

BCA Part	Title	Assessment and Comment	Status
E4D8	<b>Design and operation of exit signs</b>	<p>Every required exit sign must comply with—</p> <p>(a)AS/NZS 2293.1; or</p> <p>(b)for a photoluminescent exit sign, Specification 25; and be clearly visible at all times when the building is occupied by any person having the right of legal entry to the building.</p> <p><b><u>Comment:</u></b> The exit signs must be designed as prescribed. Details are to be provided with the application for a construction certificate.</p>	<b>Compliance subject to Certification</b>
E4D9	<b>Emergency warning and intercom systems</b>	<p>An emergency warning and intercom system complying, where applicable, with AS 1670.4 must be installed—</p> <p>(a) in a building with an effective height of more than 25 m; and</p> <p>(b) in a Class 3 building having a rise in storeys of more than 2 and used as—</p> <p>(i) the residential part of a primary or secondary school; or</p> <p>(ii) accommodation for the aged, children or people with a disability; and</p> <p>(c) in a Class 3 building used as a residential care building, except that the system—</p> <p>(i) must be arranged to provide a warning for occupants; and</p> <p>(ii) in areas used by the residents, may have its alarm adjusted in volume and content to minimise trauma consistent with the type and condition of residents; and</p> <p>(d) in a Class 9a building having a floor area of more than 1000 m<sup>2</sup> or a rise in storeys of more than 2, and the system—</p> <p>(i) must be arranged to provide a warning for occupants; and</p> <p>(ii) in a ward area, may have its alarm adjusted in volume and content to minimise trauma consistent with the type and condition of patients; and</p> <p>(e) in a Class 9b building —</p> <p>(i) used as a school and having a rise in storeys of more than 3; or</p> <p>(ii) used as a theatre, public hall, or the like, having a floor area more than 1000 m<sup>2</sup> or a rise in storeys of more than 2.</p> <p><b><u>Comment:</u></b> The rise in storeys of less than 3 does not require a EWIS system in this instance.</p>	<b>Not Applicable</b>

## SECTION F – HEALTH AND AMENITY

### Part F1 – Surface water management, rising damp and external waterproofing

BCA Part	Title	Assessment and Comment	Status
F1D3	Stormwater drainage	Plans or specifications must indicate that stormwater drainage will comply with AS/NZS 3500.3.  <b>Comment:</b> Details confirming compliance are to be checked by the appointed building certifier.	Compliance subject to Certification
F1D4	Exposed joints	Exposed joints in the drainage surface on a roof, balcony, podium or similar horizontal surface part of a building must— (a) be protected in accordance with Section 2.9 of AS 4654.2; and (b) not be located beneath or run through a planter box, water feature or similar part of the building.  <b>Comment:</b> Details confirming compliance are to be checked by the appointed building certifier.	Compliance subject to Certification
F1D5	External waterproofing membranes	A roof, balcony, podium or similar horizontal surface part of a building must be provided with a waterproofing membrane— (a) consisting of materials complying with AS 4654.1; and (b) designed and installed in accordance with AS 4654.2.  <b>Comment:</b> Details confirming compliance are to be checked by the appointed building certifier	Compliance subject to Certification
F1D6	Damp-proofing	Moisture from the ground must be prevented from reaching the walls above the damp proof course. Plans or specifications must indicate that damp proofing will be in accordance with AS/NZS 2904. Refer to F1D7 also.  <b>Comment:</b> Details confirming compliance are to be checked by the appointed building certifier.	Compliance subject to Certification
F1D7	Damp-proofing of floor on the ground	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. Plans or specifications must indicate compliance with AS 2870.  <b>Comment:</b> Details confirming compliance are to be checked by the appointed building certifier.	Compliance subject to Certification
F1D8	Sub-floor ventilation	The provisions of this clause are not applicable (principally slab on ground construction).	Not Applicable

### Part F2 – Wet areas and overflow protection

BCA Part	Title	Assessment and Comment	Status
F2D2	Wet area construction	(1) In a Class 2 and 3 building and a Class 4 part of a building, building elements in wet areas must— (a) be water resistant or waterproof in accordance with Specification 26; and (b) comply with AS 3740. (2) In a Class 5, 6, 7, 8 or 9 building, building elements in a bathroom or shower room, a slop hopper or sink compartment, a laundry or sanitary compartment must— (a) be water resistant or waterproof in accordance with Specification 26; and (b) comply with AS 3740, as if they were in a Class 2 or 3 building or a Class 4 part of a building.  <b>Comment:</b> Details confirming compliance are to be checked by the appointed building certifier.	Compliance subject to Certification

BCA Part	Title	Assessment and Comment	Status
D2D3	<b>Rooms containing urinals</b>	<p>(1) Where a slab or stall type urinal is installed—</p> <p>(a) the floor surface of the room containing the urinal must be an impervious material; and</p> <p>(i) where no step is installed, must—</p> <p>(A) be graded to the urinal channel for a distance of 1.5 m from the urinal channel; and</p> <p>(B) have the remainder of the floor graded to a floor waste; and</p> <p>(ii) where a step is installed—</p> <p>(A) the step must have an impervious surface and be graded to the urinal channel; and (B) the floor behind the step must be graded to a floor waste; and</p> <p>(b) the junction between the floor surface and the urinal channel must be impervious.</p> <p>(2) Where a wall hung urinal is installed—</p> <p>(a) the wall must be surfaced with impervious material extending from the floor to the top of the urinal and not less than 225 mm on each side of the urinal; and</p> <p>(b) the floor must be surfaced with an impervious material and be graded to a floor waste.</p> <p>(3) In a room with timber or steel-framed walls and containing a urinal—</p> <p>(a) the wall must be surfaced with an impervious material extending from the floor to not less than 100 mm above the floor surface; and</p> <p>(b) the junction of the floor surface and the wall surface must be impervious.</p> <p><b>Comment:</b> There are no details to confirm urinals are proposed. The provision of urinals would require compliance as specified.</p>	<b>Not Applicable</b>
F2D4	<b>Floor wastes</b>	<p>(1) In a Class 2 or 3 building or Class 4 part of a building, a bathroom or laundry located at any level above a sole-occupancy unit or public space must have a floor waste.</p> <p>(2) Where a floor waste is installed—</p> <p>(a) the minimum continuous fall of a floor plane to the waste must be 1:80; and</p> <p>(b) the maximum continuous fall of a floor plane to the waste must be 1:50.</p> <p><b>Comment:</b> Where a floor waste installed, the floor waste must be installed with the minimum fall as specified.</p>	<b>For information purposes</b>

### **Part F3 – Roof and wall cladding**

BCA Part	Title	Assessment and Comment	Status
F3D2	<b>Roof coverings</b>	<p>A roof must be covered with—</p> <p>(a) roof tiles complying with AS 2049, fixed in accordance with AS 2050; or</p> <p>(b) metal sheet roofing complying with AS 1562.1; or</p> <p>(c) plastic sheet roofing designed and installed in accordance with AS 1562.3; or</p> <p>(d) terracotta, fibre-cement and timber slates and shingles designed and installed in accordance with AS 4597, except in cyclonic areas; or</p> <p>(e) an external waterproofing membrane complying with F1D5.</p> <p><b>Comment:</b> Details confirming compliance are to be checked by the appointed building certifier.</p>	<b>Compliance subject to Certification</b>
F3D3	<b>Sarking</b>	<p>Plans or specifications must indicate that all sarking material to be installed will comply with AS/NZS 4200 Parts 1 and 2.</p> <p><b>Comment:</b> Details confirming compliance are to be checked by the appointed building certifier.</p>	<b>Compliance subject to Certification</b>

BCA Part	Title	Assessment and Comment	Status
F3D4	<b>Glazed assemblies</b>	<p>All external wall windows and glazed doors must comply with AS 2047 for water penetration. Specifications must state compliance with this standard. Hinged doors are exempt from the requirements of this clause.</p> <p><b>Comment:</b> Details confirming compliance are to be checked by the appointed building certifier.</p>	<b>Compliance subject to Certification</b>
F3D5	<b>Wall cladding</b>	<p>(1) External wall cladding must comply with one or a combination of the following:            (a) Masonry, including masonry veneer, unreinforced and reinforced masonry: AS 3700.            (b) Autoclaved aerated concrete: AS 5146.3.            (c) Metal wall cladding: AS 1562.1.</p> <p>(2) The following buildings need not comply with (1):            (a) A Class 7 or 8 building where in the particular case there is no necessity for compliance.            (b) A garage, tool shed, sanitary compartment, or the like, forming part of a building used for other purposes, except where the construction of the garage, tool shed, sanitary compartment or the like contributed to the weatherproofing of another part of the building that is required to be weatherproofed.            (c) An open spectator stand or open deck carpark.</p> <p><b>Comment:</b> Where a cladding system is proposed other than a performance solution apply in accordance with A2G2 (3) and A2G4 (3) as applicable. Details confirming compliance are to be checked by the appointed building certifier.</p>	<b>Compliance subject to Certification</b>

## **Part F2 – Sanitary and Other Facilities**

BCA Part	Title	Assessment and Comment	Status
F4D3	<b>Calculation of number of occupants and facilities</b>	<p>(1) The number of persons accommodated must be calculated according to D2D18 if it cannot be more accurately determined by other means.            (2) Unless the premises are used predominantly by one sex, sanitary facilities must be provided on the basis of equal numbers of males and females.            (3) 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.            (4) For the purposes of this Part, a unisex facility comprises one closet pan, one washbasin and means for the disposal of sanitary products.</p>	<b>For information purposes</b>
F4D4	<b>Facilities in Class 3 to 9 buildings</b>	<p>The following relevant subclauses of D4D4 have been highlighted for a Class 9b school buildings.</p> <p>(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.            (3) If not more than 10 people are employed, a unisex facility may be provided instead of separate facilities for each sex.            (4) If the majority of employees are of one sex, not more than 2 employees of the other sex may share toilet facilities if the facilities are separated by means of walls, partitions and doors to afford privacy.            (5) 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.            (6) Adequate means of disposal of sanitary products must be provided in sanitary facilities for use by females.            (11) Not less than one washbasin must be provided where closet pans or urinals are provided.</p>	

BCA Part	Title	Assessment and Comment	Status																																																																																																											
F4D4	<div>Facilities in Class 3 to 9 buildings</div> <div>Continued...</div>	<div>Table F4D4f: Sanitary facilities in Class 9b buildings – schools</div> <table><tr><th rowspan="2">User group</th><th colspan="2">Closet pans</th><th colspan="2">Urinals</th><th colspan="2">Washbasins</th></tr><tr><th>Design occupancy</th><th>Number</th><th>Design occupancy</th><th>Number</th><th>Design occupancy</th><th>Number</th></tr><tr><td rowspan="4">Male employees</td><td>1 - 20</td><td>1</td><td>1 - 10</td><td>0</td><td>1 - 30</td><td>1</td></tr><tr><td>&gt;20</td><td>Add 1 per 20</td><td>11 - 20</td><td>1</td><td>&gt;30</td><td>Add 1 per 30</td></tr><tr><td>-</td><td>-</td><td>21 - 45</td><td>2</td><td>-</td><td>-</td></tr><tr><td>-</td><td>-</td><td>&gt;45</td><td>Add 1 per 30</td><td>-</td><td>-</td></tr><tr><td rowspan="2">Female employees</td><td>1 - 5</td><td>1</td><td>N/A</td><td>N/A</td><td>1 - 30</td><td>1</td></tr><tr><td>&gt;5</td><td>Add 1 per 15</td><td>N/A</td><td>N/A</td><td>&gt;30</td><td>Add 1 per 30</td></tr><tr><td rowspan="5">Male students</td><td>1 - 25</td><td>1</td><td>1 - 50</td><td>1</td><td>1 - 10</td><td>1</td></tr><tr><td>26 - 75</td><td>2</td><td>51 - 100</td><td>2</td><td>11 - 50</td><td>2</td></tr><tr><td>76 - 150</td><td>3</td><td>&gt;100</td><td>Add 1 per 100</td><td>51 - 100</td><td>3</td></tr><tr><td>151 - 200</td><td>4</td><td>-</td><td>-</td><td>&gt;100</td><td>Add 1 per 75</td></tr><tr><td>&gt;200</td><td>Add 1 per 100</td><td>-</td><td>-</td><td>-</td><td>-</td></tr><tr><td rowspan="4">Female students</td><td>1 - 10</td><td>1</td><td>N/A</td><td>N/A</td><td>1 - 10</td><td>1</td></tr><tr><td>11 - 25</td><td>2</td><td>N/A</td><td>N/A</td><td>11 - 50</td><td>2</td></tr><tr><td>26 - 100</td><td>Add 1 per 25</td><td>N/A</td><td>N/A</td><td>51 - 100</td><td>3</td></tr><tr><td>&gt;100</td><td>Add 1 per 50</td><td>N/A</td><td>N/A</td><td>&gt;100</td><td>Add 1 per 75</td></tr></table> <div><b>Comment:</b> The following measures are proposed: Ground Floor – 1 Accessible WC; 4 Unisex Female/Male WCs. 1<sup>st</sup> floor – 1 Accessible WC; 2 standard WC’s. .  It is also noted that urinals are not provided in this case. Note: An accessible WC is counted as both a female and male WC.  For the purposes of the BCA, an accessible WC is counted as both a female and male WC.  The number of required amenities can be assessed as part of the whole property, relying on the provision of other nearby amenities. Final details of the total school number of occupants and amenities distributed through the school campus should be provided to the appointed building certifier with the application for a construction certificate.</div>	User group	Closet pans		Urinals		Washbasins		Design occupancy	Number	Design occupancy	Number	Design occupancy	Number	Male employees	1 - 20	1	1 - 10	0	1 - 30	1	>20	Add 1 per 20	11 - 20	1	>30	Add 1 per 30	-	-	21 - 45	2	-	-	-	-	>45	Add 1 per 30	-	-	Female employees	1 - 5	1	N/A	N/A	1 - 30	1	>5	Add 1 per 15	N/A	N/A	>30	Add 1 per 30	Male students	1 - 25	1	1 - 50	1	1 - 10	1	26 - 75	2	51 - 100	2	11 - 50	2	76 - 150	3	>100	Add 1 per 100	51 - 100	3	151 - 200	4	-	-	>100	Add 1 per 75	>200	Add 1 per 100	-	-	-	-	Female students	1 - 10	1	N/A	N/A	1 - 10	1	11 - 25	2	N/A	N/A	11 - 50	2	26 - 100	Add 1 per 25	N/A	N/A	51 - 100	3	>100	Add 1 per 50	N/A	N/A	>100	Add 1 per 75	Compliance subject to Certification
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	26 - 100	Add 1 per 25	N/A	N/A	51 - 100	3																																																																																																								
	>100	Add 1 per 50	N/A	N/A	>100	Add 1 per 75																																																																																																								
F4D5	Accessible sanitary facilities	<div>The following is required in relation to facilities for people with disabilities:</div> <div>(a) accessible unisex sanitary compartments must be provided in accessible parts of the building in accordance with Table F4D6;</div> <div>(c) at each bank of toilets where there is one or more toilets in addition to an accessible unisex sanitary compartment at that bank of toilets, a sanitary compartment suitable for a person with an ambulant disability in accordance with AS 1428.1 must be provided for use by males and females; and</div> <div>(d) an accessible unisex sanitary compartment must contain a closet pan, washbasin, shelf or bench top and adequate means of disposal of sanitary towels; and</div> <div>(e) the circulation spaces, fixtures and fittings of all accessible sanitary facilities provided in accordance with Table F4D6 and F4D7 must comply with the requirements of AS 1428.1; and</div> <div>(f) an accessible unisex sanitary facility must be located so that it can be entered without crossing an area reserved for one sex only; and</div> <div>(g) where two or more of each type of accessible unisex sanitary facility are provided, the number of left and right-handed mirror image facilities must be provided as evenly as possible; and</div> <div>(h) where male sanitary facilities are provided at a separate location to female sanitary facilities, accessible unisex sanitary facilities are only required at one of those locations; and</div> <div>(i) an accessible unisex sanitary compartment or an accessible unisex shower need not be provided on a storey or level that is not required by D4D4(f) to be provided with a passenger lift or ramp complying with AS 1428.1.</div> <div><b>Comment:</b> A new accessible sanitary facility is proposed to the 1st floor area. One or both of the standard WC’s on the first floor are required to be designed and constructed as an ambulant facility. Final design details confirming compliance should be checked by the appointed building certifier.</div>	Compliance subject to Certification																																																																																																											

BCA Part	Title	Assessment and Comment	Status
F4D7	Accessible unisex showers	The provisions of this clause are not applicable for this building.	Not Applicable
F4D8	Construction of sanitary compartments	<p>(1) Other than in an early childhood centre, sanitary compartments must have doors and partitions that separate adjacent compartments and extend—</p> <p>(a) from floor level to the ceiling in the case of a unisex facility; or</p> <p>(b) to a height of not less than 1.5 m above the floor if primary school children are the principal users; or</p> <p>(c) 1.8 m above the floor in all other cases.</p> <p>(2) The door to a fully enclosed sanitary compartment must—</p> <p>(a) open outwards; or</p> <p>(b) slide; or</p> <p>(c) be readily removable from the outside of the sanitary compartment, unless there is a clear space of at least 1.2 m, measured in accordance with Figure F4D8, between the closet pan within the sanitary compartment and the doorway.</p> <p><b>Comment:</b> The new water closets with inward swinging doors must comply if the distance to the pan is less than 1.2 m. Final details to be confirmed.</p>	Complies
F4D9	Interpretation: Urinals and washbasins	<p>(1) A urinal may be—</p> <p>(a) an individual stall or wall-hung urinal; or</p> <p>(b) each 600 mm length of a continuous urinal trough; or</p> <p>(c) a closet pan used in place of a urinal.</p> <p>(2) A washbasin may be—</p> <p>(a) an individual basin; or</p> <p>(b) a part of a hand washing trough served by a single water tap.</p>	For information purposes
F4D10	Microbial (Legionella) control.	The provisions of this clause are not applicable. As it is understood that cooling towers or the like will not be installed.	Not Applicable
F4D11	Waste Management	The provisions of this clause are not applicable in this class of building.	Not Applicable
F4D12	Accessible adult change facilities	The provisions of this clause are not applicable in this class of building.	Not Applicable

## **Part F5 – Room Heights**

BCA Part	Title	Assessment and Comment	Status
F5D2	Height of rooms and other spaces	<p>The height of rooms and other spaces in a Class 9b building must be not less than—</p> <p>(a) for a school classroom or other assembly building or part that accommodates not more than 100 persons — 2.4 m; and</p> <p>(b) for a theatre, public hall or other assembly building or part that accommodates more than 100 persons — 2.7 m; and</p> <p>(c) for a corridor—</p> <p>(i) that serves an assembly building or part that accommodates not more than 100 persons — 2.4 m; or</p> <p>(ii) that serves an assembly building or part that accommodates more than 100 persons — 2.7 m.</p> <p>The height of rooms and other spaces in any building must be not less than—</p> <p>(a) for a bathroom, shower room, sanitary compartment, other than an accessible adult change facility, airlock, tea preparation room, pantry, storeroom, garage, car parking area, or the like — 2.1 m; and</p> <p>(b) for a commercial kitchen — 2.4 m; and above a stairway, ramp, landing or the like — 2 m measured vertically above the nosing line of stairway treads or the floor surface of the ramp, landing or the like; and</p> <p>(c) for a required accessible adult change facility — 2.4 m.</p> <p><b>Comment:</b> Confirmation of final ceiling heights should be provided with the application for a construction certificate.</p>	Complies subject to Certification

## **Part F6 – Light and Ventilation**

<b>BCA Part</b>	<b>Title</b>	<b>Assessment and Comment</b>	<b>Status</b>
F6D2	<b>Provision of natural light</b>	<p>Natural lighting must be provided to all general purpose classrooms in primary or secondary schools and all playrooms or the like for the use of children in an early childhood centre.to all general-purpose classrooms.</p> <p><b><u>Comment:</u></b> Natural lighting appears to be provided to the classrooms as required.</p>	<b>Complies</b>
F6D3	<b>Method and extent of natural lighting</b>	<p>Natural lighting must be provided to all general-purpose classrooms. The extent of natural lighting can be provided through windows (10%) or skylights (3%) of not less than the floor area of the room and in the case of windows, are open to the sky or face a court or other space open to the sky or an open verandah, carport or the like.</p> <p><b><u>Comment:</u></b> Natural light to the school classrooms is provided via the external windows. The minimum percentage of not less than 10% of the floor areas of the rooms should confirmed with the application for a construction certificate.</p>	<b>Complies subject to Certification</b>
F6D4	<b>Natural light borrowed from adjoining room</b>	Not for assessment purposes but not applicable in this case.	<b>Not Applicable</b>
F6D5	<b>Artificial lighting</b>	<p>Artificial lighting is required to the rooms used by the staff and students. The artificial lighting system must comply with AS/NZS 1680.0.</p> <p><b><u>Comment:</u></b> Specifications must indicate that the provision of artificial lighting complying with AS/NZS 1680.0.</p>	<b>Compliance subject to certification</b>
F6D6	<b>Ventilation of rooms / natural ventilation / borrowed ventilation</b>	<p>A habitable room, office, workroom, sanitary compartment and any other room occupied by a person for any purpose must have natural ventilation complying with F6D6; or a mechanical ventilation or air-conditioning system complying with AS 1668.2.</p> <p>Natural ventilation provided in accordance with F6D7 must consist of permanent openings, windows, doors or other devices which can be opened with an aggregate opening or openable size not less than 5% of the floor area of the room required to be ventilated.</p> <p><b><u>Comment:</u></b> The plans do not provide sufficient details to confirm if the classrooms are provided with adequate ventilation via the external glazed sections. Further details should be provided with the application for a construction certificate. Natural ventilation or mechanical venation is required to all habitable areas of the building.</p>	<b>Compliance subject to Certification</b>
F6D9	<b>Restriction on position of water closets and urinals</b>	<p>Sanitary compartments must not open directly into— (a) a kitchen or pantry; or (b) a public dining room or restaurant; or (c) a dormitory in a Class 3 building; or (d) a room used for public assembly (which is not an early childhood centre, primary school or open spectator stand); or (e) a workplace normally occupied by more than one person.</p> <p><b><u>Comment:</u></b> The facilities open to common areas and therefore can comply with the provision of a mechanical exhaust system.</p>	<b>Complies</b>

BCA Part	Title	Assessment and Comment	Status
F6D10	<b>Airlocks</b>	<p>If a sanitary compartment is prohibited under F6D9 from opening directly to another room—</p> <p>(a) in a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building—</p> <p>(i) access must be by an airlock, hallway or other room; or</p> <p>(ii) the sanitary compartment must be provided with mechanical exhaust ventilation; and</p> <p>(b) in a Class 5, 6, 7, 8 or 9 building (which is not an early childhood centre, primary school or open spectator (b)stand) —</p> <p>(i) access must be by an airlock, hallway or other room with a floor area of not less than 1.1 m<sup>2</sup> and fitted with self-closing doors at all access doorways; or</p> <p>(ii) the sanitary compartment must be provided with mechanical exhaust ventilation and the doorway to the room adequately screened from view.</p> <p><b>Comment:</b> Airlocks can comply.</p>	<b>Complies</b>
F46D11	<b>Carparks</b>	<p>Every storey of a carpark, except an open-deck carpark, must have—</p> <p>(a) a system of mechanical ventilation complying with AS 1668.2; or</p> <p>(b) a system of natural ventilation complying with Section 4 of AS 1668.4.</p> <p><b>Comment:</b> Not applicable. A carpark is not proposed.</p>	<b>Not Applicable</b>
F46D12	<b>Kitchen local exhaust ventilation</b>	The provisions of this part are not applicable. A commercial kitchen is not proposed	<b>Not Applicable</b>

## **Part F7 – Sound Transmission and Insulation**

BCA Part	Title	Assessment and Comment	Status
Part F7	<b>Sound transmission and insulation</b>	The provisions of this part are not applicable for a Class 9b school building.	<b>Not Applicable</b>

## **Part F8 – Condensation management (not applicable until 1 October 2023)**

BCA Part	Title	Assessment and Comment	Status
Part F8	<b>External wall construction</b>	<p>(1) Where a pliable building membrane is installed in an external wall, it must—</p> <p>(a) comply with AS 4200.1; and</p> <p>(b) be installed in accordance with AS 4200.2; and</p> <p>(c) be located on the exterior side of the primary insulation layer of wall assemblies that form the external envelope of a building.</p> <p>(2) Where a pliable building membrane, sarking-type material or insulation layer is installed on the exterior side of the primary insulation layer of an external wall it must have a vapour permeance of not less than—</p> <p>(a) in climate zones 4 and 5, 0.143 µg/N.s; and</p> <p>(b) in climate zones 6, 7 and 8, 1.14 µg/N.s.</p> <p>(3) Except for single skin masonry and single skin concrete, where a pliable building membrane is not installed in an external wall, the primary water control layer must be separated from water sensitive materials by a drained cavity.</p> <p><b>Comment:</b> Final design details confirming compliance should be checked by the appointed building certifier if the clause is applicable at the time of application for a construction certificate.</p>	<b>Compliance subject to Certification</b>

BCA Part	Title	Assessment and Comment	Status
F8D4	<b>Exhaust systems</b>	<p>(1) An exhaust system installed in a kitchen, bathroom, sanitary compartment or laundry must have a minimum flow rate of—</p> <p>(a) 25 L/s for a bathroom or sanitary compartment; and</p> <p>(b) 40 L/s for a kitchen or laundry.</p> <p>(2) Exhaust from a kitchen, kitchen range hood, bathroom, sanitary compartment or laundry must discharge directly or via a shaft or duct to outdoor air.</p> <p>(3) Where space for a clothes drying appliance is provided in accordance with F4D2(1)(b), space must also be provided for ducting from the clothes drying appliance to outdoor air.</p> <p>(4) (3) does not apply if a condensing-type clothes drying appliance is installed.</p> <p>(5) An exhaust system that is not run continuously and is serving a bathroom or sanitary compartment that is not ventilated in accordance with F6D7 must—</p> <p>(a) be interlocked with the room's light switch; and</p> <p>(b) include a run-on timer so that the exhaust system continues to operate for 10 minutes after the light switch is turned off.</p> <p>(6) Except for rooms that are ventilated in accordance with F6D7, a room with space for ducting a clothes drying appliance to outdoor air in accordance with (3) must be provided with make-up air in accordance with AS 1668.2</p> <p><b>Comment:</b> Final design details confirming compliance should be checked by the appointed building certifier.</p>	<b>Compliance subject to Certification</b>
F8D5	<b>Ventilation of roof spaces</b>	<p>(1) In climate zones 6, 7 and 8, a roof must have a roof space that—</p> <p>(a) is located—</p> <p>(i) immediately above the primary insulation layer; or</p> <p>(ii) immediately above sarking with a vapour permeance of not less than 1.14 µg/N.s, which is immediately above the primary insulation layer; or</p> <p>(iii) immediately above ceiling insulation which meets the requirements of J3D7(3) and J3D7(4); and</p> <p>(b) has a height of not less than 20 mm; and</p> <p>(c) is either—</p> <p>(i) ventilated to outdoor air through evenly distributed openings in accordance with Table F8D5; or</p> <p>(ii) located immediately underneath roof tiles of an unsarked tiled roof.</p> <p>(2) The requirements of (1) do not apply to a—</p> <p>(a) concrete roof; or</p> <p>(b) roof that is made of structural insulated panels; or roof that is subject to Bushfire Attack Level FZ requirements in accordance with AS 3959.</p>	

## **SECTION G – ANCILLARY PROVISIONS**

BCA Part	Title	Assessment and Comment	Status
NSW G1.101	<b>Provision for cleaning windows</b>	The provisions of this part are not applicable as the building is less than 3 storeys in height.	<b>Not Applicable</b>

BCA Part	Title	Assessment and Comment	Status
Part G5 & NSW G5D4	<b>Protection – Class 9 buildings used as a special fire protection purpose</b>	<p>In a designated bushfire prone area, a Class 9 building that is a special fire protection purpose or a Class 10a building or deck immediately adjacent or connected to a such a building or part, must comply with—</p> <p>(a) for a Class 9 building that is special fire protection purpose, Specification 43 except as amended by Planning for Bushfire Protection.</p> <p>(b) for a Class 10a building or deck immediately adjacent or connected to a Class 9 building that is a (b)special fire</p> <p>(i)AS 3959 except as amended by Planning for Bush Fire Protection; and</p> <p>(ii) S43C13; or</p> <p>(c) the requirements of (a) or (b) above as modified by the development consent with a bushfire safety authority issued under section 100B of the Rural Fires Act 1997 for the purposes of integrated development.</p> <p><b>Comment:</b> The BCA defines a “school” as a “special fire protection purpose” and therefore is subject to the requirements of the local authority.</p> <p>The property is located in a well-known bushfire prone area and a report has been obtained from bushfire consultants Bushfire Code &amp; Bushfire Hazard Solutions Pty Ltd. The report makes reports recommends including compliance with the Rural Fire Service Planning for Bushfire Protection (2019) and Australian Standard AS3959 to Building Attack Level 12.5. The report may be referred to the Rural Fire Services for comment.</p> <p>The building must comply with Specification 43 except as amended from 1 May 2023, by the NSW Rural Fire Service “Planning for Bushfire Protection” Addendum November 2022. In addition, conditions will be imposed by Council on the development consent for consideration by the appointed building certifier with the application for a construction. Plans and specifications must show compliance with those requirements of Council, RFS and the BCA.</p>	<b>For information purposes</b>

## **SECTION H – CLASS 1 AND 10 BUILDINGS**

BCA Part	Title	Assessment and Comment	Status
Section H		Section H is now part of Volume Two of the NCC in relation to Class 1 and 10 buildings which are not applicable at this stage.	<b>Compliance subject to Certification</b>

## **SECTION I – SPECIAL USE BUILDINGS**

BCA Part	Title	Assessment and Comment	Status
Section I	<b>Special use buildings</b>	The provisions of Section H are not applicable.	<b>Not Applicable</b>
Part I1	<b>Application of part</b>	<p>NSW Part IID1 advises that Part H applies to a Class 9b building that is not an entertainment venue where a stage or any backstage area in a hall is proposed.</p> <p>However, as the development involves no stage or backstage, as the main provisions of Part H are not applicable.</p>	<b>Not Applicable</b>

## **SECTION J – ENERGY EFFICIENCY**

<b>BCA Part</b>	<b>Title</b>	<b>Assessment and Comment</b>	<b>Status</b>
NSW J2D2	<b>NSW Section J(A) Energy Efficiency – Class 2 building and Class 4 parts</b>	This clause of Section J only applies to Clause 2, 3 and 4 buildings in NSW which is therefore not applicable for this type of building.	<b>For information purposes</b>
Part J4	<b>Building fabric</b>	A Section J report will be submitted to the appointed building certifier with the application of a construction certificate.	<b>Complies subject to certification</b>
Part J5	<b>Building sealing</b>	A Section J report will be submitted to the appointed building certifier with the application of a construction certificate.	<b>Complies subject to certification</b>
Part J6	<b>Air-conditioning and ventilation</b>	A Section J report will be submitted to the appointed building certifier with the application of a construction certificate.	<b>Complies subject to certification</b>
Part J7	<b>Artificial lighting and power</b>	A Section J report will be submitted to the appointed building certifier with the application of a construction certificate.	<b>Complies subject to certification</b>
Part J8	<b>Heated water supply</b>	A Section J report will be submitted to the appointed building certifier with the application of a construction certificate.	<b>Complies subject to certification</b>
Part J9	<b>Energy monitoring and on-site distributed energy resources</b>	A Section J report will be submitted to the appointed building certifier with the application of a construction certificate.	<b>Complies subject to certification</b>

## PART 4

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### **Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021**

The provisions of the Environmental Planning and Assessment Act, 1979 and the Regulation 2021 with respect to fire safety should be considered by the local authority.

The following provisions of the Regulation are highlighted for consideration.

#### **Section 22 Fire safety systems in class 2–9 buildings—the Act, s 6.33(1)**

(1) It is a condition of a construction certificate for building work involving the installation, extension or modification of a relevant fire safety system in a class 2, 3, 4, 5, 6, 7, 8 or 9 building that the building work must not commence unless—

- (a) plans have been submitted to the principal certifier that show—
  - (i) for building work involving the installation of the relevant fire safety system—the layout, extent and location of key components of the relevant fire safety system, or
  - (ii) for building work involving the extension or modification of the relevant fire safety system—the layout, extent and location of the new or modified components of the relevant fire safety system, and
- (b) specifications have been submitted to the principal certifier that—
  - (i) describe the basis for the design, installation and construction of the relevant fire safety system, and
  - (ii) identify the provisions of the Building Code of Australia on which the design of the system is based, and
- (c) the plans and specifications—
  - (i) are certified by a compliance certificate as complying with the relevant provisions of the Building Code of Australia, or
  - (ii) are endorsed by an accredited practitioner (fire safety) as complying with the relevant provisions of the Building Code of Australia, and
- (d) if the plans and specifications were submitted before the construction certificate was issued—they are endorsed by a certifier with a statement that the certifier is satisfied they correctly identify the relevant performance requirements and deemed-to-satisfy provisions, and
- (e) if the plans and specifications were not submitted before the construction certificate was issued—they are endorsed by the principal certifier with a statement that the principal certifier is satisfied they correctly identify the relevant performance requirements and deemed-to-satisfy provisions.

(2) Subsection (1)(c)(ii) does not apply to the extent of an exemption under section 74(4).

#### **Section 78 - Fire safety schedules**

(1) This section applies to a person who—

- (a) grants a development consent for a change of building use, other than by a complying development certificate, if building work is not—
  - (i) proposed by the applicant for the consent, or
  - (ii) required by the consent authority, or

- (b) issues a complying development certificate for the erection of a building or a change of building use, or
  - (c) issues a construction certificate for building work, or
  - (d) gives a fire safety order in relation to premises.
- (2) A person must—
- (a) issue a schedule (a fire safety schedule) containing the matters specified in section 79, and
  - (b) ensure the requirements of this section relating to the fire safety schedule are complied with.
- Maximum penalty (subsection (2))—
- (a) for a corporation—300 penalty units, or
  - (b) for an individual—150 penalty units.
- (3) For a fire safety order in relation to which a further order is made under the Act, Schedule 5, clause 1, the fire safety schedule must be issued when the further order is made.
- (4) A fire safety schedule is not required to be issued if—
- (a) the work for which a complying development certificate or construction certificate will be issued relates only to—
    - (i) an alteration to a hydraulic fire safety system, or
    - (ii) the installation of a fixed on-site pumpset and the construction of a new external pumphouse to accommodate the pumpset, and
  - (b) the carrying out of the work will not result in a permanent reduction of the fire protection provided by the existing hydraulic fire safety system that will be the subject of the work, and
  - (c) there is notice of past, current or proposed action by or on behalf of a water utility to—
    - (i) install mains pressure reduction capability, or
    - (ii) implement mains pressure reduction.
- (5) A copy of the fire safety schedule must be attached to the relevant development consent, construction certificate or fire safety order.
- (6) The attached fire safety schedule is taken to form part of the development consent, construction certificate or fire safety order.
- (7) An earlier fire safety schedule is superseded by a later fire safety schedule and ceases to have effect when the later fire safety schedule is issued.

## **Section 79 – Content of fire safety schedules**

- (1) A fire safety schedule must specify the current and proposed fire safety measures that must be implemented for the building, including statutory fire safety measures and other fire measures.
- (2) A fire safety schedule must deal with the whole of the building and not only the part of the building to which the development consent, construction certificate or fire safety order relates.
- (3) A fire safety schedule must—
  - (a) specify and distinguish between the statutory fire safety measures that are—
    - (i) currently implemented for the building, and
    - (ii) proposed or required to be implemented for the building, and
  - (b) specify each critical fire safety measure and the intervals, of less than 12 months, at which a supplementary fire safety statement must be given to the council for each measure, and
  - (c) specify the minimum standard of performance for each fire safety measure in the schedule.
- (4) In this section— statutory fire safety measures means the measures specified in the following Table—

### **Table**

Access panels, doors and hoppers to fire-resisting shafts  
 Automatic fail-safe devices  
 Automatic fire detection and alarm systems  
 Automatic fire suppression systems  
 Emergency lifts  
 Emergency lighting

Emergency warning and intercommunication systems  
Exit signs  
Fire control centres and rooms  
Fire dampers  
Fire doors  
Fire hose reel systems  
Fire hydrant systems  
Fire seals protecting openings in fire-resisting components of the building  
Fire shutters  
Fire windows  
Lightweight construction  
Mechanical air handling systems  
Perimeter vehicle access for emergency vehicles  
Portable fire extinguishers  
Safety curtains in proscenium openings  
Smoke alarms and heat alarms  
Smoke and heat vents  
Smoke dampers  
Smoke detectors and heat detectors  
Smoke doors  
Solid core doors  
Standby power systems  
Wall-wetting sprinkler and drencher systems  
Warning and operational signs

### **Section 81 – Essential fire safety measures to be maintained**

- (1) The owner of a building must maintain each essential fire safety measure for the building—
- (a) for an essential fire safety measure specified in a fire safety schedule—to a standard no less than that specified in the schedule, or
  - (b) for an essential fire safety measure applicable to the building but not specified in the fire safety schedule (an original measure)—to a standard no less than that to which the measure was originally designed and implemented.

Note—Some pre-1997 buildings may not have a fire safety schedule but essential fire safety measures still apply.

Maximum penalty (subsection (1))—

- (a) for a corporation—600 penalty units, or
- (b) for an individual—300 penalty units.

- (2) The owner of a building to which an original measure applies may request from the council a schedule of the original measures for the building.
- (3) The council must provide the schedule to the owner as soon as practicable after receiving the request.

### **Section 84 – Issue of fire safety certificates**

- (1) A person must not issue a fire safety certificate unless the assessment by a properly qualified person required for the certificate has been carried out within the previous 3 months.
- (2) The owner of the building may choose a person to carry out the assessment.

- (3) The person who carries out the assessment must—
    - (a) inspect and verify the performance of each essential fire safety measure being assessed, and
    - (b) test the operation of equipment that—
      - (i) is specified in the current fire safety schedule for the building, and
      - (ii) has not previously been tested in an assessment because it is newly installed.
  - (4) A fire safety certificate is not required to address an essential fire safety measure if—
    - (a) the certificate is issued in relation to work that has been authorised or required by a development consent, construction certificate or fire safety order, and
    - (b) the measure is addressed in another fire safety certificate or fire safety statement issued within the previous 6 months.
  - (5) Subsection (4) does not apply if the person who issued the development consent, construction certificate or fire safety order determines it should not apply.
  - (6) A person may make a determination under subsection (5) only if the person—
    - (a) considers that the essential fire safety measure will be affected by the work, and
    - (b) has specified in the fire safety schedule attached to the development consent, construction certificate or fire safety order that the fire safety certificate issued in relation to the work must address the essential fire safety measure.
- Maximum penalty (subsections (1) and (3))—
- (a) for a corporation—300 penalty units, or
  - (b) for an individual—150 penalty units.

## **Section 86 – Information to be included in fire safety certificates**

- (1) A person must not issue a fire safety certificate for a building or part of a building unless the certificate—
  - (a) is in the approved form, and
  - (b) contains the following information—
    - (i) the name and address of the owner of the building,
    - (ii) a description of the building, including the address,
    - (iii) a list of each essential fire safety measure in the building and the minimum standard of performance specified in the relevant fire safety schedule for each measure,
    - (iv) the date on which the essential fire safety measures were assessed,
    - (v) whether the certificate is a final or interim fire safety certificate,
    - (vi) a statement to the effect referred to in section 83(1)(b) for a final fire safety certificate or section 83(2)(b) for an interim fire safety certificate,
    - (vii) the date on which the certificate is issued.
- (2) Subsection (1)(b)(iii) and (iv) applies only to the essential fire safety measures required to be addressed in the fire safety certificate.
- (3) A person must not issue a fire safety certificate for a building or part of a building unless the certificate is accompanied by a fire safety schedule for the building or part of the building.

- Maximum penalty (subsections (1) and (3))—
- (a) for a corporation—300 penalty units, or
  - (b) for an individual—150 penalty units.

## **Part 17 Modification of Building Code of Australia standards—the Act, s 6.33(1)**

### **Section 115 Application of Part**

- (1) This Part applies to a person who makes one of the following applications—
  - (a) a development application or an application for a complying development certificate for a change of building use for an existing building that does not involve an alteration of the building,

- (b) a development application or an application for a complying development certificate for the use of a building as an entertainment venue,
  - (c) an application for a construction certificate for building work, other than building work associated with a change of building use referred to in paragraph (a).
- (2) In this Part— applicant means a person who makes an application specified in subsection (1).  
relevant provision means the Environmental Planning and Assessment Regulation 2021, section 69 or 146.

### **Section 116 Objections to Building Code of Australia standards**

- (1) An applicant may lodge an objection with the consent authority or certifier that—
  - (a) the Building Code of Australia, as applied by a relevant provision, does not make appropriate provision for—
    - (i) the building in relation to which the change of building use is sought, or
    - (ii) the building to be used as an entertainment venue, or
    - (iii) the building work, or
  - (b) compliance with a specified provision of the Building Code of Australia, as applied by a relevant provision, is unreasonable or unnecessary in the circumstances.
- (2) The objection must—
  - (a) specify the grounds of the objection, and
  - (b) for proposed building work—include a copy of the building work plans and specifications.
- (3) An objection relating to a Category 3 fire safety provision, as applied by a relevant provision, must—
  - (a) indicate if a similar objection has been made to the Fire Commissioner under section 111, and
  - (b) be accompanied by a copy of the Fire Commissioner’s determination of the objection.
- (4) An applicant for an application referred to in section 115(1)(a) or (b) cannot lodge an objection to a Category 1 fire safety provision, as applied by a relevant provision, if the application has already been determined by the granting of development consent.

### **Section 117 Determination of objections**

- (1) If the consent authority or certifier is satisfied an objection lodged under section 116 is well-founded, it may—
    - (a) exempt the development, either conditionally or unconditionally, from a specified provision of the Building Code of Australia, as applied by a relevant provision, and
    - (b) direct that specified requirements apply to the building work.
  - (2) If a consent authority or certifier grants an exemption subject to a condition, the consent authority or certifier must ensure the condition is included in the building work plans and specifications by—
    - (a) redrawing the plans and specifications, or
    - (b) annotating the relevant part of the plans and specifications, including by inserting, deleting or altering matter.
  - (3) Subsection (2) applies only if the condition can be given effect to by being included in the building work plans and specifications.
  - (4) If the condition cannot be included in the building work plans and specifications—
    - (a) the consent authority or certifier must, if granting development consent for development referred to in section 115(1)(a) or (b), grant development consent subject to the condition, or
    - (b) the certifier must, if issuing a construction certificate for development referred to in section 115(1)(c), issue the construction certificate subject to the condition.
- Maximum penalty (subsection (4)(b))—
- (a) for a corporation—150 penalty units, or
  - (b) for an individual—75 penalty units.
- (5) A consent authority or certifier may take action under this section only with the concurrence of the Planning Secretary.

- (6) Concurrence is to be assumed if at least 40 days have passed since concurrence was sought and the Planning Secretary has not, within that period, expressly refused concurrence.
- (7) The Planning Secretary may—
  - (a) give notice to the consent authority or certifier that concurrence may be assumed, in relation to a class of objections, subject to the conditions specified in the notice, and
  - (b) amend the notice by a further notice given to the consent authority or certifier.
- (8) Action taken in accordance with a notice under subsection (7) is as valid as it would be if the consent authority or certifier had obtained the concurrence of the Planning Secretary.
- (9) An exemption or direction given by the consent authority or certifier under this section must be given subject to, and must not be inconsistent with, a condition to which the concurrence of the Planning Secretary is subject.

## PART 5

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### CONCLUSION AND VERIFICATION

This assessment identified areas of potential non-compliance with the deemed-to-satisfy provisions of the National Construction Code - Building Code of Australia 2022–Volume One Class 2 to 9 Buildings.

It is the opinion of the author that subject to compliance with the recommendations of this report, the new school building addition is capable of complying with the provisions of the BCA.

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**APPENDIX A**

**SPECIFICATION 5**

**Type B Construction**

## Specification 5 – Type B Construction

Table S5C21a: Type B construction: FRL of loadbearing parts of external walls				
Distance from a fire-source feature	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Less than 1.5 m	90/90/90	120/120/120	180/180/180	240/240/240
1.5 to less than 3 m	90/60/30	120/90/60	180/120/90	240/180/120
3 m to less than 9 m	90/30/30	120/30/30	180/90/60	240/90/60
9 m to less than 18 m	90/30/–	120/30/–	180/60/–	240/60/–
18 m or more	–/–/–	–/–/–	–/–/–	–/–/–
Table S5C21b: Type B construction: FRL of non-loadbearing parts of external walls				
Distance from a fire-source feature	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Less than 1.5 m	–/90/90	–/120/120	–/180/180	–/240/240
1.5 m to less than 3 m	–/60/30	–/90/60	–/120/90	–/180/120
3 m or more	–/–/–	–/–/–	–/–/–	–/–/–
Table S5C21c: Type B construction: FRL of external columns not incorporated in an external wall				
Distance from a fire-source feature	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Loadbearing column — less than 18 m	90/–/–	120/–/–	180/–/–	240/–/–
NCC 2022 Volume One - Building Code of Australia				
Page 142				
S5C21				
Fire resistance				
Distance from a fire-source feature	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Loadbearing column — 18 m or more	–/–/–	–/–/–	–/–/–	–/–/–
Non-loadbearing column	–/–/–	–/–/–	–/–/–	–/–/–
Table S5C21d: Type B construction: FRL of common walls and fire walls				
Wall type	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Loadbearing or non-loadbearing	90/90/90	120/120/120	180/180/180	240/240/240
Table S5C21e: Type B construction: FRL of loadbearing internal walls				
Location	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Fire-resisting lift and stair shafts	90/90/90	120/120/120	180/120/120	240/120/120
Bounding public corridors, public lobbies and the like	60/60/60	120/–/–	180/–/–	240/–/–
Between or bounding sole-occupancy units	60/60/60	120/–/–	180/–/–	240/–/–
Table S5C21f: Type B construction: FRL of non-loadbearing internal walls				
Location	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Fire-resisting lift and stair shafts	–/90/90	–/120/120	–/120/120	–/120/120
Bounding public corridor, public lobbies and the like	–/60/60	–/–/–	–/–/–	–/–/–
Between or bounding sole-occupancy units	–/60/60	–/–/–	–/–/–	–/–/–
Table S5C21g: Type B construction: FRL of other building elements not covered by Tables S5C21a to S5C21f				
Building element	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Other loadbearing internal walls and columns	60/–/–	120/–/–	180/–/–	240/–/–
Roofs	–/–/–	–/–/–	–/–/–	–/–/–

*Note: This table should be read in conjunction with all other clauses of Specification 5.*

# **APPENDIX B**

## Proposed Fire Safety Schedule

# Proposed Fire Safety Schedule

*Issued pursuant to the Environmental Planning and Assessment Act 1979*

<b>Date of Issue:</b>	TBA
<b>Construction Certificate No.:</b>	TBA
<b>Description of work:</b>	New school building
<b>Name of building (If applicable)</b>	Covenant Christian School Block 'D' Building
<b>Address of subject land:</b>	212 Forest Way, Belrose

<b>PROPOSED ESSENTIAL FIRE SAFETY MEASURE</b>	
<b>FIRE SAFETY MEASURE</b>	<b>MINIMUM STANDARD OF PERFORMANCE DESIGN &amp; INSTALLATION</b>
<b>Emergency lighting</b>	NCC BCA (2022) Clause E4.2 & E4.4 & AS/NZS2293.1-2018
<b>Exit and directional signage</b>	NCC BCA (2022) Clause E4.5, NSW E4.6 & E4.8 & AS/NZS2293.1-2018.
<b>Portable fire extinguishers and portable fire blanket</b>	NCC BCA (2022) Clause E1.6, AS2444-2001
<b>Smoke detectors for the Automatic shutdown of the mechanical air handling system.</b>  <i>To Be Confirmed</i>	NCC BCA (2022) NSW Variation E2D16 and S20C6
<b>Fire hydrant system</b>	NCC BCA (2022) Clause E1D2 & AS2419.1-2021
<b>Fire reel system</b>	NCC BCA (2022) Clause E1D3 & AS2441.1-2005

The 'Essential Fire Safety Measures' identified in the above-mentioned table are to be the subject of an 'Annual Fire Safety Statement' to be submitted to the Council and The Commissioner of NSW Fire and Rescue.

A copy of the 'Final Fire Safety Certificate, together with the 'Fire Safety Schedule' must be prominently displayed in the building.