BCA Compliance Assessment Report

35-43 Hay Street, Collaroy

Residential Development

Date: 23rd June 2023

Report no. J1115-BCA-2

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J1115-BCA-1	11/05/2023	Draft BCA report for DA Stage
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CONTENTS

1 Executive Summary

This report provides an assessment of the proposed residential development at 35-43 Hay Street, Collaroy, against the relevant *Deemed-to-Satisfy Provisions* of the Building Code of Australia (BCA) 2022, excluding accessibility provisions, which will be addressed by a separate Access Consultant.

The architectural design documentation, has been assessed against the applicable Deemed-to-Satisfy Provisions of the Building Code of Australia 2022, as detailed in the clause-by-clause assessment contained within in Part 4 of this report and is considered to be consistent with the relevant BCA provisions.

To demonstrate full BCA compliance, the matters identified in Part 4 of this report as 'Compliance Readily Achievable' (CRA) will need to be detailed in the plans, certified by the relevant party or included in the project specifications. Compliance with these matters must be demonstrated prior to the issue of the Construction Certificate.

2 Introduction

2.1 Location and Description

The development is located at 35-43 Hay Street, Collaroy, NSW. The works involve the construction of a two-storey residential building, containing eleven residential units above a basement carpark containing twenty-four vehicle spaces.

2.2 Purpose of the Report

The purpose of this report is to provide an assessment of the proposed design against the deemed-to-satisfy provisions of the Building Code of Australia (BCA) (excluding accessibility provisions which will be addressed by a separate Access consultant), outline any non-compliances identified in the design and provide recommendations as to how BCA compliance may be achieved, either by amending the design to comply with the deemed-to-satisfy provisions or by identifying opportunities for performance solutions, where appropriate.

2.3 Basis of the Report

This report is based on:

- the architectural plans provided, as listed in Annexure C; and
- the National Construction Code 2022 Building Code of Australia.

2.4 Building Code of Australia Structure

The Building Code of Australia is divided into two volumes.

BCA Volume One contains the requirements for-

(a) all Class 2 to 9 buildings

(b) access requirements for people with a disability in Class 1b and 10a buildings; and

(c) certain Class 10b structures including access requirements for people with a disability in Class 10b swimming pools.

BCA Volume Two contains the requirements for—

(a) Class 1 and 10a buildings (other than access requirements for people with a disability in Class 1b and 10a buildings); and

(b) certain Class 10b structures (other than access requirements for people with a disability in Class 10b swimming pools); and

(c) Class 10c private bushfire shelters.

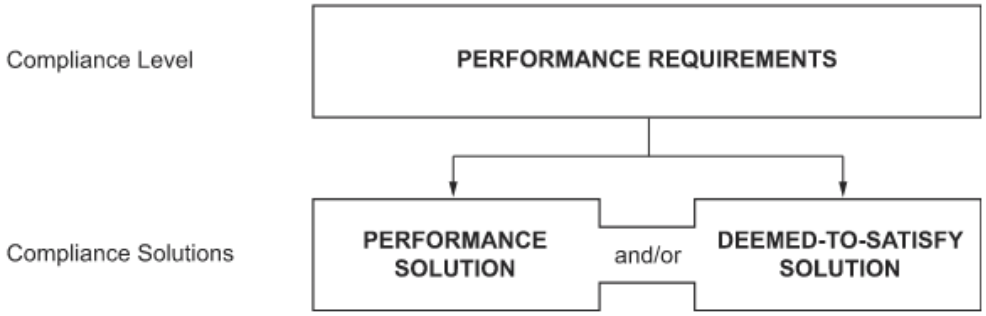
2.5 Compliance with the BCA

Compliance with the BCA is achieved through complying with the BCA Performance Requirements. The performance requirements are detailed at the start of each section of the BCA and may be satisfied by:

- a performance solution,
- a deemed-to-satisfy solution or
- a combination of the two,

as demonstrated in BCA Figure A2G1 below.

Figure A2G1: NCC compliance structure



This report provides an assessment of the design against the *Deemed-to-Satisfy Provisions* of the BCA.

2.6 Limitations of the Report

This report does not include nor imply any detailed assessment for design, compliance or upgrading for:

a) the structural adequacy or design of the building;
b) the inherent or derived fire-resistance ratings of any proposed structural elements of the building (unless specifically referred to);
c) requirements of Australian Standards unless specifically referred to;
d) the design of any proposed electrical, mechanical, hydraulic, passenger lift or fire protection services;
e) weatherproofing or waterproofing design details.

This report does not include, nor imply compliance with:

a) the National Construction Code Volume Three – Plumbing Code of Australia;
b) the Disability Discrimination Act 1992;
c) Work Health and Safety Act 2011;
d) requirements of Australian Standards unless specifically referred to;
e) requirements of other Regulatory Authorities including, but not limited to, Telstra, Telecommunications Supply Authority, Water Supply Authority, Electricity Supply Authority, Work Cover, Roads and Maritime Services (RMS), Local Council, Department of Planning and the like; or
f) conditions of the Development Consent issued by the Local Consent Authority.

3 BCA Assessment Data

For the purposes of the Building Code of Australia, the development may be described as follows.

(Note: the terms identified by italics are defined terms in Schedule 1 of the BCA, some of which are included Annexure D of this report.)

3.1 Building Classification

The building has been classified according to its use, in accordance with BCA Part A6.

Class	Level	Description
2	Level 01, Level 02 and part Basement Level	Residential *sole-occupancy units* and common areas
7a	Part Basement Level	Carpark

3.2 Building Rise in Storeys

The building has a *rise in storeys* of two, determined in accordance with BCA Clause C2D3.

3.3 Type of Construction

The building is required to be of Type B fire-resisting construction, in accordance with BCA Clause C2D2.

3.4 Effective Height

The building has an *effective height* of less than 12m.

3.5 Exits

The *exits* of the building are as follows:

Basement level

- The two non-fire-isolated stairways discharging into the residential lobby at Level 01; and

Level 01

- The point at which open space is reached at each of the two residential lobbies, serving Apartments 1 to 4.
- Apartments 5, 6 & 7 have their own direct egress to open space fronting Anzac Avenue.

3.6 Location of Fire-source Features

The *fire-source features* to which the building is exposed and their approximate distances from the building's external walls are as follows:

North:	The far boundary of Anzac Avenue (> 6 m)
South:	The southern side allotment boundary (3.8 m)
East:	The rear allotment boundary (4.3 m)
West:	The far boundary of Hay Street (> 6 m)

3.7 Climate Zone

For the purposes of Section J of the BCA, the building is located within Climate Zone 5.

4 BCA Clause-by-Clause Assessment

The table on the following page provides a clause-by-clause assessment of the design against the applicable *Deemed-to-Satisfy Provisions* of the BCA.

The following abbreviations have been used to indicate the compliance status:

NA	Not applicable – The deemed-to-satisfy clause is not applicable to the design
Complies	The design complies with the relevant parts of the deemed-to-satisfy clause
CRA	Compliance readily achievable – The design is consistent with the relevant deemed-to-satisfy clause, however strict compliance with the clause will need to be demonstrated by either certification by the appropriate party or by inclusion in the BCA specifications for the project at Construction Certificate stage.
DNC	Does Not Comply
PS	Performance Solution – BCA compliance is proposed or recommended to be achieved via a Performance Solution, in lieu of compliance with the subject deemed-to-satisfy clause.
Noted	The clause has been considered in the assessment, however, does not require any further design input.

BCA Clause-by-Clause Assessment Table

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
Part B1 – Structural provisions			
B1D1: Deemed-to-Satisfy Provisions	Informational	-	Noted
B1D2: Resistance to actions	The resistance of the building must be greater than the most critical action effect resulting from different combinations of actions, where– (a) the most critical action effect is determined in accordance with B1D3 and the general design procedures contained in AS/NZS 1170.0-2002; and (b) the resistance of a building or structure is determined in accordance with B1D4.	Structural Engineer to certify at CC stage.	CRA
B1D3: Determination of individual actions	The magnitude of individual actions must be determined in accordance with clause B1D3 of the BCA.	Structural Engineer to certify at CC stage.	CRA
B1D4: Determination of structural resistance of materials and forms of construction	The structural resistance of materials and forms of construction must be determined in accordance with BCA Clause B1D4, including the following, as appropriate: > Masonry – AS 3700-2018 as varied by BCA Clause B1D4 (a) > Concrete – AS 3600-2018, AS 5146.1 & AS 5216 > Steel structures – AS 4100-2020, AS/NZS 4600-2018 & NASH Standard > Composite steel and concrete: AS/NZS 2327-2017 > Aluminium construction – AS/NZS 1664.1 or AS/NZS 1664.2	Structural Engineer / suitably qualified person to certify at CC stage.	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	> Timber construction – AS 1684.2-2021, AS 1720.1-2010 & AS 1720.5-2015 > Piling – AS 2159-2009 > Glazed assemblies – AS 2047-2014 & AS 1288-2021 > Roof tiling – AS 2050-2018 > Metal roofing – AS 1562.1-2018 > Termite Risk Management: Where a *primary building element* is subject to attack by subterranean termites: AS 3660.1-2014, and— (i) for the purposes of this provision, a *primary building element* consisting entirely of, or a combination of, any of the following materials is considered not subject to termite attack: (A) Steel, aluminium or other metals. (B) Concrete. (C) Masonry. (D) Fibre-reinforced cement. (E) Timber — naturally termite resistant in accordance with Appendix C of AS 3660.1. (F) Timber — preservative treated in accordance with Appendix D of AS 3660.1; and (ii) a durable notice must be permanently fixed to the building in a prominent location, such as a meter box or the like, indicating— (A) the termite management system used; and (B) the date of installation of the system; and		

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(C) where a chemical is used, its life expectancy as listed on the appropriate authority's pesticides register label; and (D) the installer's or manufacturer's recommendations for the scope and frequency of future inspections for termite activity. > Particleboard structural flooring: AS 1860.2-2006. > Lift shafts must be completely enclosed with non-perforated material between the bottom of the pit and the ceiling of the lift shaft, other than– o at landing doors; and o *low-rise, low-speed constant pressure lifts*; and o *small-sized, low-speed automatic lifts.*		
B1D5: Structural software	Not applicable	-	NA
B1D6: Construction of buildings in flood hazard areas	Not applicable	-	NA
Part C2 – Fire resistance and stability			
C2D1: Deemed-to-Satisfy Provisions	Informational	-	Noted
C2D2: Type of construction required	(1) The minimum Type of *fire-resisting* construction of a building **must** be determined in accordance with Table C2D2, except as allowed for— (a) certain Class 2, 3 or 9c buildings in C2D6; and (b) a Class 4 part of a building located on the top *storey* in C2D4(2); and	The building is required to comply with Type B *fire-resisting* construction. Refer to Type B *fire-resisting construction* requirements detailed in Specification 5 section below.	-

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(c) open spectator stands and indoor sports stadiums in C2D8. (2) Each building element must comply with Specification 5 as applicable.		
C2D3: Calculation of rise in *storey*s	(1) The rise in *storey*s is the sum of the greatest number of *storey*s at any part of the external walls of the building and any *storey*s within the roof space— (a) above the finished ground next to that part; or (b) if part of the external wall is on the boundary of the allotment, above the natural ground level at the relevant part of the boundary. (2) A *storey* is not counted if— (a) it is situated at the top of the building and contains only heating, ventilating or lift equipment, water tanks, or similar service units or equipment; or (b) it is situated partly below the finished ground and the underside of the ceiling is not more than 1 m above the average finished level of the ground at the external wall, or if the external wall is more than 12 m long, the average for the 12 m part where the ground is lowest.	The building has a rise in *storey*s of two.	Noted
C2D4: Buildings of multiple classification	Informational 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 *storey*s.	-	Noted
C2D5: Mixed Types of construction	Not applicable	-	NA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
C2D6: Two *Storey* Class 2, 3 or 9c buildings	Not applicable	-	NA
C2D7: Class 4 Parts of building	Not applicable	-	NA
C2D8: Open spectator stands and indoor sports stadium	Not applicable	-	NA
C2D9: Lightweight construction	*Lightweight construction* must comply with Specification 6 if it is used in a fire rated wall or shaft system or the covering of a steel column of the like.	-	CRA
C2D10: Non-combustible building elements	(1) The following building elements and their components must be *non-combustible*: (a) External walls and common walls, including all components incorporated in them including the facade covering, framing and insulation. (b) The flooring and floor framing of the lift pits. (c) Non-*loadbearing* internal walls required to be *fire-resisting*. (2) A *shaft*, being a lift, ventilating, pipe, garbage, or similar *shaft* that is non-*loadbearing*, must be of *non-combustible* construction. (3) A *loadbearing* internal wall, including those that are part of a *loadbearing* shaft, must comply with Specification 5. (4) The requirements of (1) and (2) do not apply to the following: (a) Gaskets.	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(b) Caulking. (c) Sealants. (d) Termite management systems. (e) Glass, including laminated glass, and associated adhesives, including tapes. (f) Thermal breaks associated with– (i) glazing systems; or (ii) external walls systems, where the thermal breaks– (A) are no larger than necessary to achieve thermal objectives; and (B) do not extend beyond one *storey*; and (C) do not extend beyond one *fire compartment*s. (g) Damp-proof courses. (h) Compressible fillers and backing materials, including those associated with articulation joints, closing gaps not wider than 50 mm. (i) Isolated— (i) construction packers and shims; or (ii) blocking for fixing fixtures; or (iii) fixings, including fixing accessories; or (iv) acoustic mounts. (j) Waterproofing materials applied to the external face, used below ground level and up to 250 mm above ground level.		

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(k) Joint trims and joint reinforcing tape of a width no greater than 50 mm. (l) Weather sealing materials, applied to gaps no wider than 50 mm, used within and between concrete elements. (m) Wall ties and other masonry components complying with AS 2699 Part 1 and Part 3 as appropriate and associated with masonry wall construction. (n) Reinforcing bars and associated minor elements that are wholly or predominately encased in concrete or grout. (o) A paint, lacquer or a similar finish or coating. (p) Adhesives, including tapes, associated with stiffeners for cladding systems. (q) Fire-protective materials and components required for the protection of penetrations (5) The following materials, when entirely composed of itself, are *non*-combustible and may be used wherever a *non-combustible* material is required: (a) Concrete. (b) Steel, including metallic coated steel. (c) Masonry, including mortar. (d) Aluminium, including aluminium alloy. (e) Autoclaved aerated concrete, including mortar. (f) Iron. (g) Terracotta.		

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(h) Porcelain. (i) Ceramic. (j) Natural stone. (k) Copper. (l) Zinc. (m) Lead. (n) Bronze. (o) Brass. (6) The following materials may be used wherever a non-combustible material is required: (a) Plasterboard. (b) Perforated gypsum lath with a normal paper finish. (c) Fibrous-plaster sheet. (d) Fibre-reinforced cement sheeting. (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. (f) *Sarking-type materials* that do not exceed 1 mm in thickness and have a *Flammability Index* not greater than 5. (g) Bonded laminated materials where— (i) each lamina, including any core, is *non-combustible*; and		

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(ii) each adhesive layer does not exceed 1 mm in thickness and the total thickness of the adhesive layers does not exceed 2 mm; and (iii) the Spread-of-Flame Index and the Smoke-Developed Index of the bonded laminated material as a whole do not exceed 0 and 3 respectively; and (iv) when located externally, are fixed in accordance with C2D15.		
C2D11: Fire hazard properties	(1) The *fire hazard properties* of the following internal linings, materials and assemblies must comply with Specification 7: (a) Floor linings and floor coverings. (b) Wall linings and ceiling linings. (c) Air-handling ductwork. (d) Lift cars. (e) (not applicable) (f) (not applicable) (g) Sarking-type materials. (h) Attachments to floors, ceilings, internal walls, common walls, *fire walls* and to internal linings of external walls. (i) Other materials including insulation materials other than sarking-type materials. (2) Paint or fire-retardant coatings must not be used in order to make a material comply with a required fire hazard property.	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(3) The requirements of (1) do not apply to a material or assembly if it is— (a) plaster, cement render, concrete, terrazzo, ceramic tile or the like; or (b) a *fire-protective covering*; or (c) a timber-framed window; or (d) a solid timber handrail or skirting; or (e) a timber-faced door; or (f) an electrical switch, socket-outlet, cover plate or the like; or (g) a material used for— (i) a roof insulating material applied in continuous contact with a substrate; or (ii) an adhesive; or (iii) a *damp-proof course*, *flashing*, caulking, sealing, ground moisture barrier, or the like; or (h) a paint, varnish, lacquer or similar finish, other than nitro-cellulose lacquer; or (i) a clear or translucent roof light of glass fibre-reinforced polyester if— (i) the roof in which it is installed forms part of a single *storey* building required to be Type C construction; and (ii) the material is used as part of the roof covering; and (iii) it is not closer than 1.5 m from another roof light of the same type; and		

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(iv) each roof light is not more than 14 m^2 in area; and (v) the area of the roof lights per 70 m^2 of roof surface is not more than 14 m^2; or (j) a face plate or neck adaptor of supply and return air outlets of an air handling system; or (k) a face plate or diffuser plate of light fitting and emergency exit signs and associated electrical wiring and electrical components; or (l) a joinery unit, cupboard, shelving, or the like; or (m) an attached non-building fixture and fitting such as— (i) a curtain, blind, or similar decor, other than— (A) a proscenium curtain required by Specification 32; or (B) in a Class 9b building used as an entertainment venue, a material regulated under NSW Table S7C4; and (ii) a whiteboard, window treatment or the like; or (n) timber treads, risers, landings and associated supporting framework installed in accordance with D3D30 where the Spread-of-Flame Index and the Smoke-Developed Index of the timber does not exceed 9 and 8 respectively; or (o) any other material that does not significantly increase the hazards of fire.		
C2D12: Performance of external walls in fire	Concrete external walls that could collapse as complete panels (e.g. tilt-up and pre-cast concrete), in a building	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	having a rise in *storey*s of not more than 2, must comply with Specification 8.		
C2D13: Fire-protected timber: Concession	Not applicable	-	NA
C2D14: Ancillary elements	An *ancillary element* must not be fixed, installed, attached to or supported by the internal parts or external face of an external wall that is required to be *non-combustible* unless it is one of the following: (a) An *ancillary element* that is *non-combustible*. (b) A gutter, downpipe or other plumbing fixture or fitting. (c) A flashing. (d) A grate or grille not more than 2 m² in area associated with a building service. (e) An electrical switch, socket-outlet, cover plate or the like. (f) A light fitting. (g) A required sign. (h) A sign other than one provided under (a) or (g) that— (i) achieves a group number of 1 or 2; and (ii) does not extend beyond one *storey*; and (iii) does not extend beyond one *fire compartment*; and (iv) is separated vertically from other signs permitted under (h) by at least 2 *storey*s.	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(i) An awning, sunshade, canopy, blind or shading hood other than one provided under (a) that— (i) meets the relevant requirements of Table S7C7 as for an internal element; and (ii) serves a *storey*— (A) at ground level; or (B) immediately above a *storey* at ground level; and (iii) does not serve an *exit*, where it would render the *exit* unusable in a fire. (j) A part of a security, intercom or announcement system. (k) Wiring. (l) Waterproofing material installed in accordance with AS 4654.2 and applied to an adjacent floor surface, including vertical upturn, or a roof surface. (m) Collars, sleeves and insulation associated with service installations. (n) Screens applied to vents, weepholes and gaps complying with AS 3959. (o) Wiper and brush seals associated with doors, *windows* or other openings. (p) A gasket, caulking, sealant or adhesive directly associated with (a) to (o). C2D14 does not apply to ancillary elements fixed, installed or attached to the internal face or lining of an external wall.		

<table>
<tr><th>BCA Clause</th><th>Relevant Deemed-To-Satisfy Requirements</th><th>Comment</th><th>Status</th></tr>
<tr><td></td><td>C2D14 does not prevent the mounting of domestic air-conditioning condenser units on external walls.

Ancillary elements fixed, installed or attached to the internal face or lining of an external wall may be subject to other provisions such as C2D11.</td><td></td><td></td></tr>
<tr><td>C2D15: Fixing of bonded laminated cladding panels</td><td>(1) Externally located bonded laminated cladding panels must have all layers of cladding mechanically supported or restrained to the supporting frame.

(2) An externally located bonded laminated cladding panel need not comply with (1) if it is one of the following:

(a) A laminated glass system.

(b) Layered plasterboard product.

(c) Perforated gypsum lath with a normal paper finish.

(d) Fibrous-plaster sheet.

(e) Fibre-reinforced cement sheeting.

(f) A component of a garage door.</td><td>-</td><td>CRA</td></tr>
<tr><td colspan="4">Part C3 – Compartmentation and separation</td></tr>
<tr><td>C3D1: Deemed-to-Satisfy Provisions</td><td>Informational</td><td>-</td><td>Noted</td></tr>
<tr><td>C3D2: Application of Part</td><td>Informational</td><td>-</td><td>Noted</td></tr>
<tr><td>C3D3: General floor area and volume limitations</td><td>The size of fire compartments in a Class 5, 6, 7, 8 or 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.

<table><tr><th>Classification</th><th>Type B construction</th></tr><tr><td>7</td><td>Max floor area – 3,500 m^2</td></tr></table></td><td>As the building has a total floor area of approximately 4,300 m^2, which exceeds the maximum of 3,500 m^2, fire compartmentation will be required at basement level so that no Class 7a fire compartment exceeds 3,500 m^2 in floor area.</td><td>CRA</td></tr>
</table>

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	Max volume – 21,000 m^3		
C3D4: Large isolated buildings	Not applicable	-	NA
C3D5: Requirements for open spaces and vehicular access	Not applicable	-	NA
C3D6: Class 9 buildings	Not applicable	-	NA
C3D7: Vertical separation of openings in external walls	Not applicable	-	NA
C3D8: Separation by fire walls	(1) Construction — A *fire wall* must be constructed in accordance with the following: (a) The *fire wall* has the relevant FRL prescribed by Specification 5 for each of the adjoining parts, and if these are different, the greater FRL. (b) Any openings in a *fire wall* must not reduce the FRL required by Specification 5 for the *fire wall*, except where permitted by the *Deemed-to-Satisfy Provisions* of Part C4. (c) Building elements must not pass through or cross the *fire wall* unless the required *fire-resisting* performance of the *fire wall* is maintained. (2) (not applicable) (3) Separation of *fire compartments* — A part of a building separated from the remainder of the building by a *fire wall* may be treated as a separate *fire compartment* if it is constructed in accordance with (a) and the *fire wall* extends to the underside of—	*Fire wall* separation is required to limit the Class 7a fire compartment size and must comply with this clause. The FRL required under Specification 5 for the fire wall separation is not less than FRL 120/120/120.	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(a) a floor having an FRL required for a *fire wall*; or (b) the roof covering.		
C3D9: Separation of classifications in the same storey	(1) If a building has parts of different classifications located alongside one another in the same *storey*— (a) each building element in that *storey* must have the higher FRL prescribed in Specification 5 for that element for the classifications concerned; or (b) the parts must be separated in that *storey* by a *fire wall*. (2) A *fire wall* required by (1)(b) must have the FRL prescribed in accordance with Specification 5 as applicable for that element for the Type of construction and the classifications concerned. (3) For the purposes of (2), the FRL in Specification 5 must be the higher FRL prescribed in Table S5C21d. (4) (not applicable)	-	CRA
C3D10: Separation of classifications in different storeys	If parts of different classification are situated one above the other in adjoining *storey*s they must be separated as follows: (a) (not applicable) (b) Type B construction — If one of the adjoining parts is of Class 2, the floor separating the part from the *storey* below must— (i) be a floor/ceiling system incorporating a ceiling which has a *resistance to the incipient spread of fire* to the space above itself of not less than 60 minutes; or (ii) have an FRL of at least 30/30/30.	Note: As the floor slab separating the Class 7a carpark from the Class 2 parts above forms part of the Class 7a fire compartmentation, it is required to achieve an FRL of not less than FRL 120/120/120, as per C3D8(3)(a).	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
C3D11: Separation of lift shafts	(1) Any lift connecting more than 2 *storey*s must be separated from the remainder of the building by enclosure in a shaft in which— (a) (not applicable) (b) in a building required to be of Type B construction — the walls— (i) if *loadbearing*, have the relevant FRL prescribed by Tables S5C21a to S5C21f of Specification 5; or (ii) if *non-loadbearing*, be of *non-combustible* construction. (2) (not applicable) (3) (not applicable) (4) Openings for lift landing doors and services must be protected in accordance with the *Deemed-to-Satisfy Provisions* of Part C4.	-	CRA
C3D12: Stairways and lifts in one shaft	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.	-	CRA
C3D13: Separation of equipment	(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— (a) lift motors and lift control panels; or (b) emergency generators used to sustain emergency equipment operating in the emergency mode; or (c) central smoke control plant; or (d) *boilers;* or	There is currently no equipment indicated on the plans that would require separation in accordance with this clause.	NA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(e) a *battery system* installed in the building that has a total voltage of 12 volts or more and a storage capacity of 200 kWh or more. (2) Equipment need not be separated in accordance with (1) if the equipment comprises— (a) (not applicable) (b) (not applicable) (c) a lift installation without a machine-room; or (d) equipment otherwise adequately separated from the remainder of the building. (3) Separation of on-site fire pumps must comply with the requirements of AS 2419.1-2021. (4) Separating construction must have— (a) except as provided by (b)— (i) an FRL as required by Specification 5, but not less than 120/120/120; and (ii) any doorway protected with a *self-closing* fire door having an FRL of not less than –/120/30; or (b) when separating a lift shaft and lift motor room, an FRL not less than 120/–/–.		
C3D14: Electricity supply system	(1) (not applicable) (2) A main switchboard located within the building which sustains emergency equipment operating in the emergency mode must—	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(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. (3) Subject to (4), electrical conductors must— (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 (b) be enclosed or otherwise protected by construction having an FRL of not less than 120/120/120. (4) The requirements of (3) only apply to electrical conductors located within a building that supply— (a) a substation located within the building which supplies a main switchboard covered by (2); or (b) a main switchboard covered by (2). (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. (6) For the purposes of (5), emergency equipment includes but is not limited to the following:		

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(a) Fire hydrant booster pumps. (b) (not applicable) (c) (not applicable). (d) (not applicable) (e) (not applicable) (f) Control and indicating equipment. (g) (not applicable)		
C3D15: Public corridors in Class 2 and 3 Buildings	Not applicable	-	NA
Part C4 – Protection of openings			
C4D1: Deemed-to-Satisfy Provisions	Informational	-	Noted
C4D2: Application of Part	Informational– (1) The *Deemed-to-Satisfy Provisions* of this Part do not apply to the following– (a) Control joints, weep holes and the like in external walls of masonry construction and joints between panels in external walls of pre-cast concrete panel construction if, in all cases they are not larger than necessary for the purpose. (b) *Non-combustible* ventilators for subfloor or cavity ventilation, if each does not exceed 45 000 mm^2 in face area and is spaced not less than 2 m from any other ventilator in the same wall. (c) Openings in the vertical plane formed between building elements at the construction edge or	-	Noted

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	perimeter of a balcony or verandah, colonnade, terrace, or the like. (d) In a *carpark* floor other than a floor that separates a part not used as a *carpark*, and subject to (e), the following openings in a *carpark* floor: (i) Service penetrations. (ii) Openings formed by a vehicle ramp. (e) The requirements of (d) only apply where the connected *carpark* levels comply as a single *fire compartment* for the purposes of all other requirements of the *Deemed-to-Satisfy Provisions* of Sections C, D and E. (2) For the purposes of the *Deemed-to-Satisfy Provisions* of this Part, openings in building elements required to be *fire-resisting* include doorways, *windows* (including any associated fanlight), infill panels and fixed or openable glazed areas that do not have the required FRL. (3) For the purposes of the *Deemed-to-Satisfy Provisions* of this Part, openings, other than those covered under (1)(c), between building elements such as columns, beams and the like, in the plane formed at the construction edge or perimeter of the building, are deemed to be openings in an external wall.		
C4D3: Protection of openings in external walls	Not applicable	There are no openings in external walls located less than 3 m of and exposed to, a side or rear boundary.	NA
C4D4: Separation of external walls and associated openings	Not applicable	-	NA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
in different fire compartments			
C4D5: Acceptable methods of protection	Fire doors, fire *windows* and fire shutters must comply with Specification 12.	-	CRA
C4D6: Doorways in fire walls	Doors in a *fire wall* must be *self-closing* and achieve an FRL of not less than that required by Specification 5 for the *fire wall* except that each door must have an insulation level of at least 30.	The doorways in the *fire walls* forming the Class 7a fire compartment at basement level must achieve an FRL of not less than -/120/30.	CRA
C4D7: Sliding fire doors	Not applicable	-	NA
C4D8: Protection of doorways in horizontal exits	Not applicable	-	NA
C4D9: Openings in fire-isolated exits	Not applicable	-	NA
C4D10: Service penetrations in fire-isolated exits	Not applicable	-	NA
C4D11: Openings in fire-isolated lift shafts	(1) Doorways — If a lift *shaft* is required to be *fire-isolated*, an entrance doorway to that shaft must be protected by –/60/– fire doors that— (a) comply with AS 1735.11-1986; and (b) are set to remain closed except when discharging or receiving passengers, goods or vehicles. (2) Lift indicator panels — A lift call panel, indicator panel or other panel in the wall of a fire-isolated lift shaft must be backed by construction having an FRL of not less than –/60/60 if it exceeds 35 000 mm^2 in area.	This clause will apply to any *loadbearing* lift shafts, which are required to be fire-isolated under Clause C3D11.	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
C4D12: Bounding Construction: Class 2, 3 and 4 Buildings		-	CRA
C4D12: Bounding Construction: Class 2, 3 and 4 Buildings	(1) A doorway in a Class 2 or 3 building must be protected if it provides access from a *sole-occupancy unit* to— (a) a *public corridor*, public lobby, or the like; or (b) a room not within a *sole-occupancy unit*; or (c) the landing of an internal non *fire-isolated stairway* that serves as a required exit; or (d) another *sole-occupancy unit*. (2) (not applicable) (3) (not applicable) NSW C4D12(4): (4) Except as provided for in NSW C4D12(5), protection for a doorway required under (1), (2) or (3) must be at least— (a) (not applicable) (b) in a building of Type B construction — a self-closing, tight fitting, solid core door, not less than 35 mm thick. NSW C4D12(5): (5) (not applicable) (6) Other openings in internal walls which are required to have an FRL with respect to integrity and insulation must not reduce the *fire-resisting* performance of the wall.	The doorways between sole occupancy units and the public lobbies at Level 01 and level 02 must be protected by self-closing, tight fitting, solid core doors not less than 35 mm thick.	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
C4D13: Openings in floors and ceilings for services	(1) Where a service passes through— (a) a floor that is required to have an FRL with respect to *integrity* and *insulation*; or (b) a ceiling required to have a *resistance to the incipient spread of fire*, the service must be installed in accordance with (2). (2) A service must be protected— (a) (not applicable) (b) in a building of Type B or C construction, by a shaft that will not reduce the fire performance of the building elements it penetrates; or (c) in accordance with C4D15.	-	CRA
C4D14: Openings in shafts	Not applicable	Relates to Type A construction only.	NA
C4D15: Openings for service installations	(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. (2) An installation mentioned in (1) must comply with any one of the following: (a) Tested systems — the following applies: (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	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	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. (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; and (C) 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. (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. (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. (c) Compliance with Specification 13 — the following applies: (i) The service is a pipe system comprised entirely of metal (excluding pipe seals or the like) and is		

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	installed in accordance with Specification 13 and it— (A) penetrates a wall, floor or ceiling, but not a ceiling required to have a resistance to the incipient spread of fire; and (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. (iii) The service is a wire or cable, or a cluster of wires or cables installed in accordance with Specification 13 and it— (A) penetrates a wall, floor or ceiling, but not a ceiling required to have a resistance to the incipient spread of fire; and (B) connects not more than 2 *fire compartments* in addition to any *fire-resisting* service shafts.		

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(iv) The service is an electrical switch, outlet, or the like, and it is installed in accordance with Specification 13.		
C4D16: Construction joints	(1) Construction joints, spaces and the like in and between building elements required to be *fire-resisting* with respect to integrity and insulation must be protected in a manner– (a) identical with a prototype tested in accordance with AS 4072.1 and AS 1530.4 to achieve the required FRL; or (b) that differs from a prototype in accordance with Section 4 of AS 4072.1 and achieves the required FRL. (2) The determination of the required FRL must be confirmed in a report from an *Accredited Testing Laboratory* in accordance with Specifications 1 and 2. (3) The requirements of (1) do not apply where joints, spaces and the like between *fire-protected timber* elements are provided with cavity barriers in accordance with Specification 9.	-	CRA
C4D17: Columns protected with lightweight construction to achieve an FRL	Not applicable	-	NA
Specification 5 – Fire-resisting construction			
S5C1: Scope	This Specification contains requirements for the *fire-resisting* construction of building elements.	-	Noted

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
S5C2: Exposure to fire-source features	Informational– (1) A part of a building element is exposed to a *fire-source feature* if any of the horizontal straight lines between that part and the *fire-source feature*, or vertical projection of the feature, is not obstructed by another part of the building that— (a) has an FRL of not less than 30/–/–; and (b) is neither transparent nor translucent. (2) A part of a building element is not exposed to a *fire-source feature* if the *fire-source feature* is— (a) an external wall of another building that stands on the allotment and the part concerned is more than 15 m above the highest part of that external wall; or (b) a side or rear boundary of the allotment and the part concerned is below the level of the finished ground at every relevant part of the boundary concerned. (3) If various distances apply for different parts of a building element— (a) the entire element must have the FRL applicable to that part having the least distance between itself and the relevant *fire-source feature*; or (b) each part of the element must have the FRL applicable according to its individual distance from the relevant fire-(b)source feature. (4) The requirements of (3) do not override or permit any exemption from S5C3.	-	Noted

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
S5C3: Fire protection for a support of another part	(1) Where a part of a building required to have an FRL depends upon direct vertical or lateral support from another part to maintain its FRL, that supporting part, subject to (2), must— (a) have an FRL not less than that required by other provisions of this Specification; and (b) if located within the same *fire compartment* as the part it supports have an FRL in respect of structural adequacy the greater of that required— (i) for the supporting part itself; and (ii) for the part it supports; and (c) be *non-combustible*— (i) if required by other provisions of this Specification; or (ii) if the part it supports is required to be *non-combustible*. (2) The following building elements need not comply with (1)(b) and (1)(c)(ii): (a) (not applicable) (b) (not applicable) (c) A roof providing lateral support in a building of Type B construction. (d) (not applicable) (e) An element providing lateral support to a *fire wall* or *fire-resisting* wall, provided the wall is supported on both sides and failure of the element on one side does not affect the fire performance of the wall.	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
S5C4: Lintels	(1) A lintel must have the FRL required for the part of the building in which it is situated. (2) A lintel need not comply with (1) if it does not contribute to the support of a fire door, fire window or fire shutter, and— (a) it spans an opening in a non-*loadbearing* wall of a Class 2 building; or (b) it spans an opening in masonry which is not more than 150 mm thick and— (i) not more than 3 m wide if the masonry is non-*loadbearing*; or (ii) not more than 1.8 m wide if the masonry is *loadbearing* and part of a solid wall or one of the leaves of a cavity wall.	-	CRA
S5C5: Method of attachment not to reduce the fire-resistance of building elements	The method of attaching or installing a finish, lining, *ancillary element* or service installation to a building element must not reduce the fire-resistance of that element to below that required.	-	CRA
S5C6: General concessions	Not applicable	-	NA
S5C7: Mezzanine floors: Concession	Not applicable	-	NA
S5C8: Enclosure of shafts	(1) Shafts required to have an FRL must be enclosed at the top and bottom by construction having an FRL not less than that required for the walls of a non-loadbearing shaft in the same building. (2) The provisions of (1) need not apply to—	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(a) the top of a shaft extending beyond the roof covering; or (b) the bottom of a shaft if it is non-combustible and laid directly on the ground.		
S5C9: Carparks in Class 2 and 3 Buildings	(1) If a Class 2 building contains not more than 4 *storey*s of which— (a) one *storey* is Class 7 used solely for the purpose of parking motor vehicles or for some other purpose that is ancillary to a Class 2; and (b) the remaining *storey*s are of Class 2, the *carpark storey* is regarded as Class 2 only for the purpose of determining the relevant *fire-resisting* requirements of this Specification.	Confirmed by the Australian Building Codes Board (ABCB) by phone 7/10/21, that this clause does not apply when there is also a Class 2 part at basement level.	NA
S5C10: Residential care building: Concession	Not applicable	-	NA
Type B Fire-resting Construction			
S5C21: Fire-resistance of building elements	(1) In a building required to be of Type B construction— (a) each building element listed in Tables S5C21a, S5C21b, S5C21c, S5C21d, S5C21e, S5C21f and S5C21g, and any beam or column incorporated in it, must have an FRL not less than that listed in the Table for the particular class of building concerned; and (b) if a stair *shaft* supports any floor or a structural part of it— (i) the floor or part must have an FRL of 60/–/– or more; or	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(ii) the junction of the stair *shaft* must be constructed so that the floor or part will be free to sag or fall in a fire without causing structural damage to the *shaft*; and (c) any *internal wall* which is required to have an FRL with respect to *integrity* and *insulation* must extend to— (i) the underside of the floor next above if that floor has an FRL of at least 30/30/30; or (ii) the underside of a ceiling having a *resistance to the incipient spread of fire* to the space above itself of not less than 60 minutes; or (iii) the underside of the roof covering if it is *non-combustible* and, except for roof battens with dimensions of 75 mm x 50 mm or less or *sarking-type material*, must not be crossed by timber or other *combustible* building elements; or (iv) 450 mm above the roof covering if it is *combustible*; and (d) a *loadbearing internal wall* and a *loadbearing fire wall* (including those that are part of a *loadbearing shaft*) must be constructed from— (i) concrete; or (ii) masonry; or (iii) (not applicable) (iv) any combination of (i) to (iii); and (e) (not applicable)		

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(f) in a Class 2 building, a floor separating *storeys* or above a space for the accommodation of motor vehicles or used for storage or any other ancillary purpose, must— (i) be constructed so that it is at least of the standard achieved by a floor/ceiling system incorporating a ceiling which has a *resistance to the incipient spread of fire* to the space above itself of not less than 60 minutes; or (ii) have an FRL of at least 30/30/30; or (iii) have a *fire-protective covering* on the underside of the floor, including beams incorporated in it, if the floor is *combustible* or of metal; and (g) (not applicable) (2) (not applicable) (3) For the purposes of Table S5C21a and Table S5C21b, external wall includes any column and other building element incorporated within it or other external building element.		
S5C22: Carparks	Not applicable	-	NA
S5C23: Class 2 and 3 buildings: Concession	This clause provides concessions for the use of timber framing in the Class 2 parts. (Refer to full clause in BCA)	The application of this clause will be further assessed at the construction certificate design stage once the proposed wall types are known.	CRA
Part D2 – Provision for escape			
D2D1: Deemed-to-Satisfy Provisions	Informational	-	Noted

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
D2D2: Application of Part	The *Deemed-to-Satisfy Provisions* of this Part do not apply to the internal parts of a sole-occupancy unit in a Class 2 building.	-	Noted
D2D3: Number of exits required	> Class 2 - Every *storey* must have at least one exit. > Basements — In addition to any *horizontal exit*, not less than 2 *exits* must be provided from any storey if egress from that storey involves a vertical rise within the building of more than 1.5 m, unless— o the *floor area* of the *storey* is not more than 50 m²; and o the distance of travel from any point on the floor to a single *exit* is not more than 20 m. > Without passing through another *sole-occupancy unit*, every occupant of a storey or part of a storey must have access to— o an *exit*; or o at least 2 *exits* if 2 or more *exits* are *required*.	Every occupant of the Class 2 parts has access to an exit and two exits are provided from the basement, as required by this clause.	Complies
D2D4: When fire-isolated stairways and ramps are required	(1) Class 2 buildings — (a) Subject to (b), every stairway or ramp serving as a *required exit* must be fire-isolated unless it connects, passes through or passes by not more than 3 consecutive *storeys* in a Class 2 building. (b) (not applicable) (2) Class 7 buildings — Every stairway or ramp serving as a *required exit* must be fire-isolated unless it connects, passes through or passes by not more than 2 consecutive *storeys* and one extra storey of any classification may be included if—	The exit stairs are located within the Class 2 part of the building and do not connect more than 3 consecutive storeys.	Complies

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(i) the building has a sprinkler system (other than a FPAA101D system) complying with Specification 17 installed throughout; or (ii) the *required exit* does not provide access to or egress for, and is separated from, the extra storey by construction having— (A) an FRL of –/60/60, if non-*loadbearing*; and (B) an FRL of 90/90/90 for Type A construction or 60/60/60 for Type B or C construction, if *loadbearing*; and (C) no opening that could permit the passage of fire or smoke.		
D2D5: Exit travel distances	Class 2 residential — > The entrance doorway of each *sole-occupancy unit* must be not more than – o 6 m from an *exit* or from a point from which travel in different directions to 2 *exits* is available; or o 20 m from a single *exit* serving the *storey* at the level of egress to a road or open space; and > No point on the floor of a room which is not in a *sole-occupancy unit* must be more than 20 m from an *exit* or from a point at which travel in different directions to 2 *exits* is available. Class 7a *carpark*— No point on the 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.	-	Complies

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
D2D6: Distance between alternative exits	*Exits* that are required as alternative means of egress must be— (a) distributed as uniformly as practicable within or around the storey served and in positions where unobstructed access to at least 2 *exits* is readily available from all points on the floor including lift lobby areas; and (b) not less than 9 m apart; and (c) not more than— (i) in a Class 2 or 3 building — 45 m apart; or (ii) (not applicable) (iii) in all other cases — 60 m apart; and (d) located so that alternative paths of travel do not converge such that they become less than 6 m apart.	-	Complies
D2D7: Height of doorways in exits and paths of travel to exits	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.	-	CRA
D2D8: Width of exits and paths of travel to exits	The unobstructed width of each required exit or path of travel to an exit, except for doorways, must be not less than 1 m.	-	CRA
D2D9: Width of doorways in exits of paths of travel to exits	In a required exit or path of travel to an exit, the unobstructed width of a doorway must be not less than 750 mm.	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
D2D10: Exit width not to diminish in direction of travel	The unobstructed width of a required exit must not diminish in the direction of travel to a road or *open space.*	-	Complies
D2D11: Determination and measurement of exits and paths of travel to exits	For the purposes of D2D7 to D2D10 the following apply: (a) The required width of a stairway or ramp in a required exit or path of travel to an exit must— (i) be measured clear of all obstructions such as handrails, projecting parts of barriers and the like; and (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.	-	Noted
D2D12: Travel via fire-isolated exits	Not applicable	-	NA
D2D13: External stairways or ramps in lieu of fire-isolated exits	Not applicable	-	NA
D2D14: Travel by non-fire-isolated stairways or ramps	(1) A non-*fire-isolated stairway* 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. (2) In a Class 2 building, the distance between the doorway of a room or *sole-occupancy unit* and the point of egress to a road or *open space* by way of a stairway that is not fire-isolated and is required to serve that room or *sole-occupancy unit* must not exceed— (a) 30 m in a building of Type C construction; or	-	Complies

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(b) 60 m in all other cases. (3) 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* must not exceed 80 m. (4) In a Class 2 building, a required non-*fire-isolated stairway* must discharge at a point not more than— (a) 15 m from a doorway providing egress to a road or open space or from a fire-isolated passageway leading to a road or open space; or (b) 30 m from one of 2 such doorways or passageways if travel to each of them from the non-*fire-isolated stairway* or non-fire-isolated ramp is in opposite or approximately opposite directions.		
D2D15: Discharge from exits	(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. (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 1m. (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— (a) a ramp or other incline having a gradient not steeper than 1:8 at any part, or not steeper than 1:14 if required by the *Deemed-to-Satisfy Provisions* of Part D4; or	-	Complies

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(b) except if the exit is from a Class 9a building, a stairway complying with the *Deemed-to-Satisfy Provisions* of the BCA.		
D2D16: Horizontal exits	Not applicable	-	NA
D2D17: Non-required stairways, ramps or escalators	Not applicable	-	NA
D2D18: Number of persons accommodated	Not applicable	-	NA
D2D19: Measurement of distances	The nearest part of an exit means in the case of— > a non-*fire-isolated stairway*, the nearest part of the nearest riser; and > a doorway opening to a road or open space, the nearest part of the doorway.		Noted
D2D20: Method of measurement	The following rules apply: (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. (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	-	Noted

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	point from which travel in different directions to 2 required exits is available. (c) Subject to (d), the distance between exits is measured in a straight line between the nearest parts of those exits. (d) Only the shortest distance is taken along a corridor, hallway, external balcony or other path of travel that curves or changes direction. (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. (f) If a wall (including a demountable internal wall) that does not bound a room, 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. (g) If permanent fixed seating is provided, the distance is measured along the path of travel between the rows of seats. (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.		
D2D21: Plant rooms, lift machine rooms and electricity network	Not applicable	-	NA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
substations: Concession			
D2D22: Access to Lift pits	Access to lift pits must be through the lowest landing doors.	-	CRA
D2D23: Egress from primary schools	Not applicable	-	NA
Part D3 – Construction of exits			
D3D1: Deemed-to-Satisfy Provisions	Informational	-	Noted
D3D2: Application of Part	Except for— D3D14, D3D15(a), D3D17, D3D18, D3D19, D3D20, D3D22(5), D3D22(6), D3D23 and D3D29, the *Deemed-to-Satisfy Provisions* of this Part do not apply to the internal parts of a sole-occupancy unit in a Class 2 building.	-	Noted
D3D3: Fire-isolated stairways and ramps	Not applicable	-	NA
D3D4: Non-fire-isolated stairways and ramps	In a building having a rise in *storey*s 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— (a) reinforced or prestressed concrete; or (b) steel in no part less than 6 mm thick; or (c) timber that— (i) has a finished thickness of not less than 44 mm; and (ii) has an average density of not less than 800 kg/m^3 at a moisture content of 12%; and	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(iii) has not been joined by means of glue unless it has been laminated and glued with resorcinol formaldehyde or resorcinol phenol formaldehyde glue.		
D3D5: Separation of rising and descending flights	Not applicable	-	NA
D3D6: Open access ramps and balconies	Not applicable	-	NA
D3D7: Smoke lobbies	Not applicable	-	NA
D3D8: Installations in exits and paths of travel	(1) (not applicable) (2) (not applicable) (3) Gas or other fuel services must not be installed in a *required exit*. (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— (a) electricity meters, distribution boards or ducts; or (b) central telecommunications distribution boards or equipment; or (c) electrical motors or other motors serving equipment in the building. (5) An enclosure for the purposes of (4) must be suitably sealed against smoke spreading from the enclosure and be—	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(a) *non-combustible* construction; or (b) a *fire-protective covering*.		
D3D9: Enclosure of space understairs and ramps	(1) (not applicable) (2) The space below a required non *fire-isolated stairway* must not be enclosed to form a cupboard or other enclosed space unless— (a) the enclosing walls and ceilings have an FRL of not less than 60/60/60; and (b) any access doorway to the enclosed space is fitted with a *self-closing* –/60/30 fire door.	No enclosures are indicated below the exit stairs.	Complies
D3D10: Width of required stairways and ramps	Not applicable	-	NA
D3D11: Pedestrian ramps	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.	-	CRA
D3D12: Fire-isolated passageways	Not applicable	-	NA
D3D13: Roof as open space	If an exit discharges to a roof of a building, the roof must— (a) have an FRL of not less than 120/120/120; and (b) not have any roof lights or other openings within 3 m of the path of travel of persons using the exit to reach a road or open space.	The roof of the basement must have an FRL of not less than 120/120/120 in accordance with this clause.	CRA
D3D14: Goings and risers	(1) A stairway must have— (a) not more than 18 and not less than 2 risers in each flight; and	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(b) going (G), riser (R) and quantity (2R + G) in accordance with Table D3D14, except as permitted by (2) and (3); and (c) constant goings and risers throughout each flight, except as permitted by (2) and (3), and the dimensions of goings (G) and risers (R) in accordance with (1)(b) are considered constant if the variation between— (i) adjacent risers, or between adjacent goings, is no greater than 5 mm; and (ii) (the largest and smallest riser within a flight, or the largest and smallest going within a flight, does not exceed 10 mm; and (d) risers which do not have any openings that would allow a 125 mm sphere to pass through between the treads; and (e) treads which have— (i) a surface with a slip-resistance classification not less than that listed in Table D3D15 when tested in accordance with AS 4586; or (ii) a nosing strip with a slip-resistance classification not less than that listed in Table D3D15 when tested in accordance with AS 4586; and (f) (not applicable) (g) (not applicable) (h) in the case of a required stairway, no winders in lieu of a landing.		

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
D3D15: Landings	In a stairway— (a) landings having a maximum gradient of 1:50 may be used in any building to limit the number of risers in each flight and each landing must— (i) be not less than 750 mm long, and where this involves a change in direction, the length is measured 500 mm from the inside edge of the landing; and (ii) have— (A) a surface with a slip-resistance classification not less than that listed in Table D3D15 when tested in accordance with AS 4586; or (B) a strip at the edge of the landing with a slip-resistance classification not less than that listed in Table D3D15 when tested in accordance with AS 4586, where the edge leads to a flight below.	-	CRA
D3D16: Thresholds	The threshold of a doorway must not incorporate a step or ramp at any point closer to the doorway than the width of the door leaf unless— > in a building required to be accessible by Part D4, the doorway— (i) opens to a road or *open space*; and (ii) is provided with a threshold ramp or step ramp in accordance with AS 1428.1.	-	CRA
D3D17: Barriers to prevent falls	(1) A continuous barrier must be provided along the side of—	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(a) a roof to which general access is provided; and (b) a stairway or ramp; and (c) a floor, corridor, hallway, balcony, deck, verandah, mezzanine, access bridge or the like; and (d) any delineated path of access to a building, if the trafficable surface is 1 m or more above the surface beneath. (2) The requirements of (1) do not apply to— (a) the perimeter of a stage, rigging loft, loading dock or the like; or (b) areas referred to in D3D23; or (c) a retaining wall unless the retaining wall forms part of, or is directly associated with a delineated path of access to a building from the road, or a delineated path of access between buildings; or (d) a barrier provided to an openable window covered by D3D29. (3) A barrier required by (1) must be constructed in accordance with D3D18, D3D19, D3D20 and, if a wire barrier is used, D3D21.		
D3D18: Height of barriers	(1) The height of a barrier required by D3D17 must be not less than the following: (a) For stairways or ramps with a gradient of 1:20 or steeper — 865 mm. (b) For landings to a stair or ramp where the barrier is provided along the inside edge of the landing and does not exceed 500 mm in length — 865 mm.	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(c) (not applicable) (d) (not applicable) (e) (not applicable) (f) For all other locations — 1 m. (2) For a barrier provided under (1) — (a) barrier heights are measured vertically from the surface beneath, except that for stairways the height must be measured above the nosing line of the stair treads; and (b) a transition zone may be incorporated where the barrier height changes from 865 mm on a stair flight or ramp to 1 m at a landing or floor.		
D3D19: Openings in barriers	(1) Openings in a required barrier must not allow a 125 mm sphere to pass through. (2) (not applicable) (3) (not applicable). (4) (not applicable) (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. (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. (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	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
D3D20: Barrier climbability	A barrier required by D3D17, located on a floor more than 4 m above the surface beneath, must not incorporate horizontal or near horizontal elements that could facilitate climbing between 150 mm and 760 mm above the floor.	-	CRA
D3D21: Wire barriers	Not applicable	-	NA
D3D22: Handrails	(1) Handrails must— (a) be located along at least one side of the ramp or flight; and (b) (not applicable) (c) (not applicable) (d) in any other case, be fixed at a height of not less than 865 mm; and (e) be continuous between stair flight landings and have no obstruction on or above them that will tend to break a hand-hold; and (f) in a required exit serving an area required to be accessible, be designed and constructed to comply with clause 12 of AS 1428.1, except that clause 12(d) does not apply to a handrail required by (1)(c)(ii). (2) The height required by (1) (d) is measured above the nosings of stair treads and the floor surface of the ramp, landing or the like. (3) (not applicable) (4) Handrails required to assist people with a disability must be provided in accordance with D4D4. (5) Handrails to a stairway or ramp within a sole-occupancy unit in a Class 2 building must—	Note: Refer to project Access consultant for information regarding compliance with D4D4. This report does not include assessment of accessibility compliance matters.	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(a) be located along at least one side of the flight or ramp; and (b) be located along the full length of the flight or ramp, except in the case where a handrail is associated with a barrier, the handrail may terminate where the barrier terminates; and (c) have the top surface of the handrail not less than 865 mm vertically above the nosings of the stair treads or the floor surface of the ramp; and (d) have no obstruction on or above them that will tend to break a handhold, except for newel posts, ball type stanchions, or the like. (6) The requirements of (5) do not apply to— (a) (not applicable) (b) a stairway or ramp providing a change in elevation of less than 1 m; or (c) a landing; or (d) a winder where a newel post is installed to provide a handhold.		
D3D23: Fixed platforms, walkways, stairways and ladders	Not applicable	-	NA
D3D24: Doorways and doors	(1) (not applicable) (2) A doorway serving as a required exit or forming part of a required exit— (a) must not be fitted with a revolving door; and	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(b) must not be fitted with a roller shutter or tilt-up door. (c) must not be fitted with a sliding door unless— (i) it leads directly to a road or open space; and (ii) the door is able to be opened manually under a force of not more than 110 N; and (d) if fitted with a door which is power-operated— (i) it must be able to be opened manually under a force of not more than 110 N if there is a malfunction or failure of the power source; and (ii) if it leads directly to a road or open space it must open *automatic*ally if there is a power failure to the door or on the activation of a fire or smoke alarm anywhere in the *fire compartment* served by the door; and (3) A power-operated door in a path of travel to a required exit, must be able to be opened manually under a force of not more than 110 N if there is a malfunction or failure of the power source.		
D3D25: Swinging doors	(1) A swinging door in a required exit or forming part of a required exit— (a) must not encroach— (i) at any part of its swing by more than 500 mm on the required width (including any landings) of a required stairway, ramp or passageway if it is likely to impede the path of travel of the people already using the exit;	-	Complies

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(ii) and when fully open, by more than 100 mm on the required width of the required exit; and (b) must swing in the direction of egress unless— (i) it serves a building or part with a floor area not more than 200 m^2, it is the only required exit from the building or part and it is fitted with a device for holding it in the open position; or (ii) it serves a sanitary compartment or airlock (in which case it may swing in either direction); and (c) must not otherwise impede the path or direction of egress. (2) 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.		
NSW D3D26: Operation of latch	(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— (a) a single hand downward action on a single device which is located between 900 mm and 1.1 m from the floor and if serving an area required to be accessible by Part D4— (i) be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch; and (ii) have a clearance between the handle and the back plate or door face at the centre grip	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	section of the handle of not less than 35 mm and not more than 45 mm; or (b) a single hand pushing action on a single device which is located between 900 mm and 1.2 m from the floor. (2) Where the latch operation device referred to in (1)(b) is not located on the door leaf itself— (a) manual controls to power-operated doors must be at least 25 mm wide, proud of the surrounding surface and located— (i) not less than 500 mm from an internal corner; and (ii) for a hinged door, between 1 m and 2 m from the door leaf in any position; and (iii) for a sliding door, within 2 m of the doorway and clear of a surface mounted door in the open position; and (b) braille and tactile signage complying with S15C3 and S15C6 must identify the latch operation device. (3) The requirements of (1) and (2) do not apply to a door that serves only, or is within a sole-occupancy unit in a Class 2 building.		
D3D27: Re-entry from fire-isolated exits	Not applicable	-	NA
D3D28: Signs on doors	Not applicable	-	NA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
D3D29: Protection of openable windows	(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 building; or (b) (not applicable) (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: (a) The openable portion of the window must be protected with— (i) a device capable of restricting the window opening; or (ii) a screen with secure fittings. (b) A device or screen required by (a) must— (i) not permit a 125 mm sphere to pass through the window opening or screen; and (ii) resist an outward horizontal action of 250 N against the— (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. (3) A barrier with a height not less than 865 mm above the floor is required to an openable window—	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(a) in addition to window protection, when a child resistant release mechanism is required by (2)(b)(iii); and (b) where the floor below the window is 4 m or more above the surface beneath if the window is not covered by (1). (4) A barrier covered by (3) must not— (a) permit a 125 mm sphere to pass through it; and (b) have any horizontal or near horizontal elements between 150 mm and 760 mm above the floor that facilitate climbing.		
D3D30: Timber stairways: Concession	Not applicable	-	NA
NSW D3D31: Doors in paths of travel to an entertainment venue	Not applicable	-	NA
Part D4 – Access for people with a disability – Refer to report by separate Access consultant			
Part E1 Fire-fighting equipment			
E1D1: Deemed-to-Satisfy Provisions	Informational	-	Noted
E1D2: Fire hydrants	(1) A fire hydrant system must be provided to serve the building. (2) The fire hydrant system must be installed in accordance with AS 2419.1-2021. (3) (not applicable)	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(4) Where internal fire hydrants are provided, they must serve only the *storey* on which they are located except that a sole-occupancy unit in a Class 2 building may be served by a single fire hydrant located at the level of egress from that sole-occupancy unit.		
E1D3: Fire hose reels	(1) E1D3 does not apply to a Class 2 building. (2) A fire hose reel system must be provided— (a) to serve the whole building where one or more internal fire hydrants are installed; or (b) where internal fire hydrants are not installed, to serve any *fire compartment* with a floor area greater than 500 m^2. (3) The fire hose reel system must— (a) have fire hose reels installed in accordance with AS 2441; and (b) provide fire hose reels to serve only the *storey* at which they are located. (4) Fire hose reels must be located internally, externally or in combination, to achieve the system coverage specified in AS 2441. (5) In achieving system coverage, one or a combination of the following criteria for individual internally located fire hose reels must be met in determining the layout of any fire hose reel system: (a) Fire hose reels must be located adjacent to an internal fire hydrant (other than one within a fire-isolated exit), except that a fire hose reel need not be located adjacent to every fire hydrant, provided system coverage can be achieved.	Fire hose reels are required to the basement in accordance with this clause.	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(b) Fire hose reels must be located within 4 m of an exit, except that a fire hose reel need not be located adjacent to every exit, provided system coverage can be achieved. (c) Where system coverage is not achieved by compliance with (a) and (b), additional fire hose reels may be located in paths of travel to an exit to achieve the required coverage. (6) Fire hose reels must be located so that the fire hose will not need to pass through doorways fitted with fire or smoke doors, except— (a) (not applicable) (b) doorways in walls referred to in C3D13 or C3D14 separating equipment or electrical supply systems; and (c) doorway openings to shafts referred to in C4D14. (7) Where the normal water supply cannot achieve the flow and pressures required by AS 2441, or is unreliable— (a) a pump; or (b) water storage facility; or (c) both a pump and water storage facility, must be installed to provide the minimum flow and pressures required by clause 6.1 of AS 2441.		
NSW E1D4: Sprinklers	Not applicable	-	NA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
E1D5: Where sprinklers are required: all classifications	Not applicable	-	NA
E1D6: Where sprinklers are required: Class 2 and 3 buildings other than residential care buildings	Not applicable	-	NA
E1D7: Where sprinklers are required: Class 3 building used as a residential care building	Not applicable	-	NA
E1D8: Where sprinklers are required: Class 6 building	Not applicable	-	NA
E1D9: Where sprinklers are required: Class 7a building, other than an open-deck *carpark*	Not applicable	-	NA
E1D10: Where sprinklers are required: Class 9a health-care building used as a residential care building, Class 9c building	Not applicable	-	NA

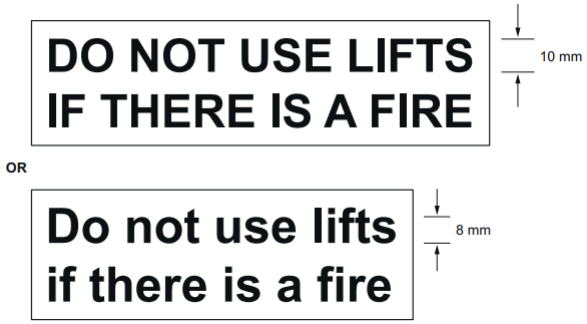
BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
E1D11: Where sprinklers are required: Class 9b buildings	Not applicable	-	NA
E1D12: Where sprinklers are required: additional requirements	Not applicable	-	NA
E1D13: Where sprinklers are required: occupancies of excessive hazard	Not applicable	-	NA
E1D14: Portable fire extinguishers	(1) Portable fire extinguishers must be provided to the Class 2 parts and selected, located and distributed in accordance with Sections 1, 2, 3 and 4 of AS 2444. (2) Portable fire extinguishers provided in a Class 2 or 3 building or Class 4 part of a building must be— (a) an ABE type fire extinguisher; and (b) a minimum size of 2.5 kg; and (c) distributed outside a sole-occupancy unit— (i) to serve only the *storey* at which they are located; and (ii) so that the travel distance from the entrance doorway of any sole-occupancy unit to the nearest fire extinguisher is not more than 10 m.	-	CRA
E1D15: Fire control centres	Not applicable	-	NA
E1D16: Fire precautions during construction	In a building under construction— (a) not less than one fire extinguisher to suit Class A, B and C fires and electrical fires must be provided at	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	all times on each *storey* adjacent to each required exit or temporary stairway or exit.		
E1D17: Provision for special hazards	Not applicable	-	NA
Part E2 Smoke hazard management			
E2D1: Deemed-to-Satisfy Provisions	Informational	-	Noted
E2D2: Application of requirements	Informational	-	Noted
E2D3: Air handling systems other than as part of a smoke hazard management system	Not applicable	-	NA
E2D4: Fire-isolated exits	Not applicable	-	NA
E2D5: Buildings more than 25 m in effective height: Class 2 and 3 buildings and Class 4 part of a building	Not applicable	-	NA
E2D6: Buildings more than 25 m in effective height: Class 5, 6, 7b, 8 or 9b buildings	Not applicable	-	NA
E2D7: Buildings more than 25 m in effective	Not applicable	-	NA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
height: Class 9a buildings			
E2D8: Buildings not more than 25 m in effective height: Class 2 and 3 buildings and Class 4 part of a building	If a Class 2 building is not more than 25 m in effective height, it must be provided with an *automatic* smoke detection and alarm system complying with Specification 20.	-	CRA
E2D9: Buildings not more than 25 m in effective height: Class 5, 6, 7b, 8 and 9b buildings	Not applicable	-	NA
E2D10: Buildings not more than 25 m in effective height: large isolated buildings subject to C3D4	Not applicable	-	NA
E2D11: Buildings not more than 25 m in effective height: Class 9a and 9c buildings	Not applicable	-	NA
E2D12: Class 7a buildings	A Class 7a building, including a basement, provided with a mechanical ventilation system in accordance with AS 1668.2-2012, must comply with clause 5.5 of AS 1668.1-2015.	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
E2D13: Basements (other than Class 7a buildings)	Not applicable	-	NA
E2D14: Class 6 buildings – in fire compartments more than 2000 m^2 Class 6 building (not containing an enclosed common walkway or mall serving more than one Class 6 sole-occupancy unit)	Not applicable	-	NA
E2D15: Class 6 buildings – in fire compartments more than 2000 m^2: Class 6 building (containing an enclosed common walkway or mall	Not applicable	-	NA
NSWE2D16: Class 9b – assembly buildings: all	Not applicable	-	NA
NSWE2D17: Class 9b – assembly buildings: night clubs, discotheques and the like	Not applicable	-	NA
NSWE2D18:	Not applicable	-	NA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
Class 9b – assembly buildings: exhibition halls, museums and art galleries			
NSWE2D19: Class 9b – assembly buildings: other assembly buildings	Not applicable	-	NA
E2D20: Class 9b assembly buildings: other assembly buildings (not listed in E2D16 to E2D19)	Not applicable	-	NA
E2D21: Provision for special hazards	Not applicable	-	NA
Part E3 Lift installations			
E3D1: Deemed-to-Satisfy Provisions	Informational	-	Noted
E3D2: Lift installations	An electric passenger lift installation and an electrohydraulic passenger lift installation must comply with Specification 24	-	CRA
E3D3: Stretcher facility in lifts	Not applicable	-	NA
E3D4: Warning against use of lifts in fire	(1) A warning sign must be displayed where it can be readily seen near every call button for a passenger lift or group of lifts throughout a building.	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(2) The requirements of (1) do not apply to a small lift such as a dumb-waiter or the like that is for the transport of goods only. (3) Each warning sign required by (1) must comply with the details and dimensions of Figure E3D4 and consist of— (a) incised, inlaid or embossed letters on a metal, wood, plastic or similar plate securely and permanently attached to the wall; or (b) letters incised or inlaid directly into the surface of the material forming the wall. Figure E3D4: Warning sign for passenger lifts 		
E3D5: Emergency lifts	Not applicable	-	NA
E3D6: Landings	Access and egress to and from lift well landings must comply with the *Deemed-to-Satisfy Provisions* of Parts D2, D3 and D4.	Refer to report by separate Access consultant.	-
E3D7: Passenger lift types and their limitations	(1) In an *accessible* building, every passenger lift must be one of the following lift types, subject to the limitations (if any) of each lift type:	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(a) There are no limitations on the use of electric passenger lifts, electrohydraulic passenger lifts or inclined lifts. (b) Stairway platform lifts must not— (i) be used to serve a space in a building accommodating more than 100 persons calculated according to D2D18; or (ii) be used in a high traffic public use area such as a theatre, cinema, auditorium, transport interchange, shopping centre or the like; or (iii) be used where it is possible to install another type of passenger lift; or (iv) connect more than 2 *storey*s; or (v) where more than 1 stairway lift is installed, serve more than 2 consecutive *storey*s; or (vi) when in the folded position, encroach on the minimum width of a stairway required by D2D8 to D2D11. (c) A low-rise platform lift must not travel more than 1000 mm. (d) A low-rise, low-speed constant pressure lift must not— (i) for an enclosed type, travel more than 4 m; or (ii) for an unenclosed type, travel more than 2 m; or (iii) be used in a high traffic public use areas in buildings such as a theatre, cinema,		

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	auditorium, transport interchange, shopping complex or the like. (e) A small-sized, low-speed *automatic* lift must not travel more than 12 m. (2) A passenger lift referred to in (1) must not rely on a constant pressure device for its operation if the lift car is fully enclosed.		
E3D8: Accessible features required for passenger lifts	-	Refer to report by separate Access consultant.	-
E3D9: Fire service controls	Not applicable	-	NA
E3D10: Residential care buildings	Not applicable	-	NA
E3D11: Fire service recall control switch	Not applicable	-	NA
E3D12: Lift car fire service drive control switch	Not applicable	-	NA
Part E4 Visibility in an emergency, exit signs and warning systems			
E4D1: Deemed-to-Satisfy Provisions	Informational	-	Noted
E4D2: Emergency lighting requirements	An emergency lighting system must be installed throughout the building in accordance with Clause E4D2.	-	CRA
E4D3: Measurement of distance	Informational	-	Noted

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
E4D4: Design and operation of emergency lighting	The emergency lighting system must comply with AS/NZS 2293.1-2018.	-	CRA
E4D5: Exit signs	An exit sign must be installed above or adjacent to the exit doors and doors to the stairways at basement level.	-	CRA
E4D6: Direction signs	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.	-	CRA
E4D7: Class 2 and 3 buildings and Class 4 Parts: Exemptions	E4D5 does not apply to— (a) a Class 2 building in which every door referred to is clearly and legibly labelled on the side remote from the exit or balcony— (i) with the word "EXIT" in capital letters 25 mm high in a colour contrasting with that of the background; or (ii) by some other suitable method; and (b) an entrance door of a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building.	-	Noted
E4D8: Design and operation of exit signs	Every required exit sign must— (a) comply with— (i) AS/NZS 2293.1; or (ii) for a photoluminescent exit sign, Specification 25; and (b) be clearly visible at all times when the building is occupied by any person having the right of legal entry to the building.	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
E4D9: Emergency warning and intercom systems	Not applicable	-	NA
Part F1 – Surface water management, rising damp and external waterproofing			
F1D1: Deemed-to-Satisfy Provisions	Informational	-	Noted
F1D2: Application of Part	(1) F1D4 and F1D5 do not apply to a roof with a covering complying with F3D2(a) to (d). (2) F1D3 to F1D5 do not apply to a balcony, podium or similar horizontal surface part of a building— (a) where the flooring is of timber decking or other perforated flooring; or (b) which is located directly above ground.	-	Noted
F1D3: Stormwater drainage	Stormwater drainage must be designed and constructed in accordance with AS/NZS 3500.3-2021.	-	CRA
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 4654.2-2012; and (b) not be located beneath or run through a planter box, water feature or similar part of the building.	-	CRA
F1D5: External waterproofing membranes	A roof, balcony, podium or similar horizontal surface part of a building must be provided with a waterproofing membrane—	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(a) consisting of materials complying with AS 4654.1-2012; and (b) designed and installed in accordance with AS 4654.2-2012.		
F1D6: Damp-proofing	(1) Except for a building covered by (3), moisture from the ground must be prevented from reaching— (a) the lowest floor timbers and the walls above the lowest floor joists; and (b) the walls above the *damp-proof course*; and (c) the underside of a suspended floor constructed of a material other than timber, and the supporting beams or girders. (2) Where a *damp-proof course* is provided, it must consist of— (a) a material that complies with AS/NZS 2904; or (b) impervious sheet material in accordance with AS 3660.1. (3) The following buildings need not comply with (1): (a) A Class 7 building where in the particular case there is no necessity for compliance.	-	CRA
F1D7: Damp-proofing of floors on the ground	(1) If a floor of a room is laid on the ground or on fill, moisture from the ground must be prevented from reaching the upper surface of the floor and adjacent walls by the insertion of a vapour barrier in accordance with AS 2870. (2) The requirements of (1) do not apply where— (a) weatherproofing is not required; or	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(b) the floor is the base of a stair, lift or similar shaft which is adequately drained by gravitation or mechanical means.		
F1D8: Subfloor ventilation	Not applicable	-	NA
Part F2 Wet areas and overflow protection			
F2D1: Deemed-to-Satisfy Provisions	Informational	-	Noted
F2D2: Wet area construction	*Wet areas* must be *water resistant* or *waterproof* in accordance with Specification 26 and comply with AS 3740-2021.	-	CRA
F2D3: Rooms containing urinals	Not applicable	-	NA
F2D4: Floor wastes	(1) In a Class 2 building, a bathroom or laundry located at any level above a *sole-occupancy unit* or public space must have a *floor waste*. (2) Where a *floor waste* is installed— (a) the minimum continuous fall of a floor plane to the waste must be 1:80; and (b) the maximum continuous fall of a floor plane to the waste must be 1:50.	-	CRA
Part F3 Roof and wall cladding			
F3D1 Deemed-to-Satisfy Provisions	Informational	Noted	Noted
F3D2 Roof coverings	A roof must be covered with—	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(a) roof tiles complying with AS 2049, fixed in accordance with AS 2050; or (b) metal sheet roofing complying with AS 1562.1; or (c) plastic sheet roofing designed and installed in accordance with AS 1562.3; or (d) terracotta, fibre-cement and timber slates and shingles designed and installed in accordance with AS 4597, except in cyclonic areas; or (e) an external waterproofing *membrane* complying with F1D5.		
F3D3 Sarking	*Sarking-type material* used for weatherproofing of roofs and walls must comply with AS 4200.1-2017 and AS 4200.2-2017.	-	CRA
F3D4 Glazed assemblies	Glazed assemblies in an external wall must comply with AS 2047-2014 requirements for resistance to water penetration.	-	CRA
F3D5 Wall cladding	External wall cladding must comply with one or a combination of the following: (a) Masonry, including masonry veneer, unreinforced and reinforced masonry: AS 3700. (b) Autoclaved aerated concrete: AS 5146.3. (c) Metal wall cladding: AS 1562.1.	-	CRA
Part F4 Sanitary and other facilities			
F4D1 Deemed-to-Satisfy Provisions	Informational	-	Noted

BCA Clause		Relevant Deemed-To-Satisfy Requirements	Comment	Status
F4D2	Facilities in residential buildings	Sanitary facilities, laundry facilities and kitchen must be provided in accordance with this clause.	-	Complies
F4D3	Calculation of number of occupants and facilities	Not applicable	-	NA
F4D4	Facilities in Class 3 to 9 buildings	Not applicable	-	NA
F4D5	Accessible sanitary facilities	Not applicable	-	NA
F4D6	Accessible unisex sanitary compartments	Not applicable	-	NA
F4D7	Accessible unisex showers	Not applicable	-	NA
F4D8	Construction of sanitary compartments	The door to a fully enclosed *sanitary compartment* must— > open outwards; or > slide; or > 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 BCA Figure F4D8, between the closet pan within the *sanitary compartment* and the doorway.	-	CRA
F4D9	Interpretation: urinals and washbasins	Not applicable	-	NA
F4D11	Waste management	Not applicable	-	NA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
F4D12 Accessible adult change facilities	Not applicable	-	NA
Part F5 Room heights			
F5D1 Deemed-to-Satisfy Provisions	Informational	-	Noted
F5D2 Height of rooms and other spaces	(1) The height of rooms and other spaces in a Class 2 building must be not less than— (a) for a kitchen, laundry, or the like — 2.1 m; and (b) for a corridor, passageway or the like — 2.1 m; and (c) for a habitable room excluding a kitchen — 2.4 m; and (d) in a habitable room, or space within a habitable room, with a sloping ceiling or projections below the ceiling line— (i) in an attic — a height of not less than 2.2 m for not less than two-thirds of the floor area of the room or space; and (ii) in other rooms — a height of not less than 2.4 m for not less than two-thirds of the floor area of the room or space; and (e) in a habitable room, or space within a habitable room, with a sloping ceiling or projections below the ceiling line — a height of not less than 2.1 m for not less than two-thirds of the floor area of the room or space. (2) For the purposes of (1), when calculating the floor area of a room or space, any part that has a ceiling height of less than 1.5 m is not included.	-	CRA

BCA Clause		Relevant Deemed-To-Satisfy Requirements	Comment	Status
		(3) The height of rooms and other spaces in a Class 7 building must be not less than— (a) except as allowed in (b) and (8) — 2.4 m; and (b) a corridor, passageway, or the like — 2.1 m. (4) (not applicable) (5) (not applicable) (6) (not applicable) (7) (not applicable) (8) The height of rooms and other spaces in any building must not be less than— (a) for a bathroom, shower room, *sanitary compartment*, other than an accessible adult change facility, airlock, tea preparation room, pantry, store room, garage, car parking area, or the like — 2.1 m; and (b) (not applicable) (c) above a stairway, ramp, landing or the like — 2 m measured vertically above the nosing line of stairway treads or the floor surface of the ramp, landing or the like.		
Part F6 Light and ventilation				
F6D1	Deemed-to-Satisfy Provisions	Informational	-	Noted
F6D2	Provision of natural light	Natural light must be provided to all *habitable rooms*.	-	Complies

BCA Clause		Relevant Deemed-To-Satisfy Requirements	Comment	Status
F6D3	Methods and extent of natural light	(1) Natural light must be provided by: (a) Windows, excluding rooflights, that–: (i) have an aggregate light transmitting area of not less than 10% the *floor area* of the room; and (ii) are open to the sky or face a court or other space open to the sky or an open verandah, carport or the like; or (b) Roof lights, that have an aggregate light transmitting area of not less than 3% the *floor area* of the room; or (c) a proportional combination of windows and roof lights required by (a) and (b). (2) A required window that faces a boundary of an adjoining allotment or a wall of the same building or another building on the allotment must be not less than a horizontal distance from that boundary or wall that is the greater of – (a) 1m; and (b) 50% of the square root of the exterior height of the wall in which the window is located, measured from its sill.	-	Complies
F6D4	Natural light borrowed from adjoining room	Not applicable	-	NA
F6D5	Artificial lighting	Artificial lighting to all areas is to comply with AS/NZS 1680.0-2009.	Note: in addition to the internal parts of the building, BCA Clause G6D9 requires artificial lighting compliant	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
		with this clause to be provided to the *occupiable outdoor area*.	
NSW F6D6 Ventilation of rooms	All rooms occupied by a person for any purpose must have— (a) natural ventilation complying with F6D7; or (b) a mechanical ventilation or air-conditioning system complying with AS 1668.2-2012.	-	CRA
F6D7 Natural ventilation	(1) Natural ventilation provided in accordance with F6D6(a) must consist of openings, windows, doors or other devices which can be opened— (a) with a ventilating area not less than 5% of the floor area of the room required to be ventilated; and (b) open to— (i) a suitably sized court, or space open to the sky; or (ii) an open verandah, carport, or the like; or (iii) an adjoining room in accordance with F6D8.	-	CRA
F6D8 Ventilation borrowed from adjoining room	Not applicable	-	NA
F6D9 Restriction on location of sanitary compartments	*Sanitary compartments* must not open directly into a kitchen or pantry.	-	Complies
F6D10 Airlocks	If a sanitary compartment is prohibited under F6D9 from opening directly to another room— (a) in a sole-occupancy unit in a Class 2 building—	-	Complies

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(i) access must be by an airlock, hallway or other room; or (ii) the sanitary compartment must be provided with mechanical exhaust ventilation.		
F6D11 Carparks	The carpark must have a system of mechanical ventilation complying with AS 1668.2-2012.	-	CRA
F6D12 Kitchen local exhaust ventilation	Not applicable	-	NA
Part F7 Sound transmission and insulation			
F7D1 Deemed-to-Satisfy Provisions	Informational	-	Noted
F7D2 Application of Part	Informational	-	Noted
F7D3 Determination of airborne sound insulation ratings	A form of construction required to have an airborne sound insulation rating must— (a) have the required value for weighted sound reduction index (Rw) or weighted sound reduction index with spectrum adaptation term (Rw + Ctr) determined in accordance with AS/NZS ISO 717.1 using results from laboratory measurements; or (b) comply with BCA Specification 28.	-	CRA
F7D4 Determination of impact sound insulation ratings	(1) A floor in a building required to have an impact sound insulation rating must— (a) have the required value for weighted normalised impact sound pressure level ($L_{n,w}$) determined in accordance with AS/ISO 717.2 using results from laboratory measurements; or	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(b) comply with BCA Specification 28. (2) A wall in a building required to have an impact sound insulation rating must be of discontinuous construction; and (3) For the purposes of this Part, discontinuous construction means a wall having a minimum 20 mm cavity between 2 separate leaves, and (a) for masonry, where wall ties are required to connect leaves, the ties are of the resilient type; and (b) for other than masonry, there is no mechanical linkage between leaves except at the periphery.		
F7D5 Sound insulation rating of floors	(1) A floor in a Class 2 building must achieve an $R_w + C_{tr}$ (airborne) not less than 50, and an $L_{n,w}$ (impact) not more than 62, if separating- (a) *sole-occupancy units;* or (b) a *sole-occupancy unit* from a plant room, lift *shaft*, stairway, *public corridor*, public lobby or the like, or parts of a different classification.	-	CRA
F7D6 Sound insulation rating of walls	(1) A wall in a Class 2 building must: (a) have an Rw + Ctr (airborne) not less than 50 if it separates *sole-occupancy units*; and (b) have an Rw (airborne) not less than 50, if it separates a *sole-occupancy unit* from a plant room, lift shaft, stairway, *public corridor,* public lobby or the like, or parts of a different classification; and (c) be of discontinuous construction in accordance with F7D4(2) if it separates–	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(i) a bathroom, *sanitary compartment*, laundry or kitchen in one *sole-occupancy unit* from a *habitable room* (other than a kitchen) in an adjoining unit; or (ii) a *sole-occupancy unit* from a plant room or lift shaft. (2) A door may be incorporated in a wall in a Class 2 building that separates a *sole-occupancy unit* from a stairway, public corridor, public lobby or the like, provided the door assembly has an Rw not less than 30. (3) (not applicable) (4) (not applicable) (5) Where a wall required to have sound insulation has a floor above, the wall must continue to: (a) the underside of the floor above; or (b) a ceiling that provides the sound insulation required for the wall. (6) Where a wall required to have sound insulation has a roof above, the wall must continue to: (a) the underside of the roof above; or (b) a ceiling that provides the sound insulation required for the wall.		
F7D7 Sound insulation rating of internal services	(1) If a duct, soil, waste or water supply pipe, including a duct or pipe that is located in a wall or floor cavity, serves or passes through more than one *sole-occupancy unit*, the duct or pipe must be separated from the rooms of any *sole-occupancy unit* by construction with an Rw + Ctr (airborne) not less than—	-	CRA

BCA Clause		Relevant Deemed-To-Satisfy Requirements	Comment	Status
		(a) 40 if the adjacent room is a *habitable room* (other than a kitchen); or (b) 25 if the adjacent room is a kitchen or non-*habitable room*. (2) If a storm water pipe passes through a *sole-occupancy unit* it must be separated in accordance with (1)(a) and (b).		
F7D8	Sound isolation of pumps	A flexible coupling must be used at the point of connection between the service pipes in a building and any circulating or other pump.	-	CRA
Part F8 Condensation Management				
Note: From1 May 2023 to 30 September 2023 Part F6 of NCC 2019 Volume One Amendment 1 may apply instead of Part F8 of NCC 2022 Volume One. From 1 October 2023 Part F8 of NCC 2022 Volume One applies.				
F8D1	Deemed-to-Satisfy Provisions	Informational	-	Noted
F8D2	Application of Part	The provisions of this Part apply only to the Class 2 part.	-	Noted
F8D3	External wall construction	(1) Where a *pliable building membrane* is installed in an *external wall*, it must— (a) comply with AS 4200.1; and (b) be installed in accordance with AS 4200.2; and (c) be located on the exterior side of the primary insulation layer of wall assemblies that form the external envelope of a building. (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	Refer to clause in BCA for additional explanatory information.	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	must have a *vapour permeance* of not less than 0.143 µg/N.s; and (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.		
F8D4 Exhaust systems	(1) An exhaust system installed in a kitchen, bathroom, *sanitary compartment* or laundry must have a minimum flow rate of— (a) 25 L/s for a bathroom or *sanitary compartment*; and (b) 40 L/s for a kitchen or laundry. (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.* (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.* (4) (3) does not apply if a condensing-type clothes drying appliance is installed. (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— (a) be interlocked with the room's light switch; and (b) include a run-on timer so that the exhaust system continues to operate for 10 minutes after the light switch is turned off.	-	CRA

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
	(6) Except for rooms that are ventilated in accordance with F6D7 (natural ventilation), 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		
F8D5 Ventilation of roof spaces	Not applicable	-	NA
Part G1 Minor structures and components – not applicable			
Part G2 Boilers, pressure vessels, heating appliances, fireplaces, chimneys and flues – not applicable			
Part G3 Atrium construction – not applicable to atriums that connect only 2 storeys			
Part G4 Construction in alpine areas – not applicable			
Part G5 Construction in bushfire prone areas – not applicable			
Part G6 Occupiable outdoor areas – not applicable. The provisions of this part do not apply to *occupiable outdoor areas* of Class 2 SOUs.			
Part G7 Livable housing design – not applicable in NSW			
Section I Special use buildings – not applicable			
Section J Energy Efficiency			
NSW Part J1 Energy Efficiency			
This Part sets the thermal performance properties of building fabric, the energy efficiency of key energy using equipment and the features a building must have to facilitate the future installation of distributed energy resources. **Notes** (1) For a Class 2 building, where a relevant development consent requires compliance with a BASIX Single Dwelling or Multi Dwelling Certificate issued under **Version 3.0** or earlier, NSW Section J of NCC 2019 Amendment 1 applies.			

BCA Clause	Relevant Deemed-To-Satisfy Requirements	Comment	Status
(2) For a Class 2 building, where a relevant development consent requires compliance with a BASIX Single Dwelling or Multi Dwelling Certificate issued under Version 4.0 or later, Section J of NCC 2022 applies. (3) (not applicable) (4) For a Class 7 building: (a) From 1 May 2023 to 30 September 2023 NSW Section J of NCC 2019 Amendment 1 may apply instead of Section J of NCC 2022 Volume One. (b) From 1 October 2023 Section J of NCC 2022 Volume One applies. **As the BASIX Certificate is proposed to be issued under Version 3.0 or earlier, the Class 2 building will be assessed under the requirements of NSW Section J of NCC 2019 Amendment 1.** **The Class 7a part will be assessed under the requirements of Section J of NCC 2022, though it is noted that alternatively, Section J of NCC 2019 Amendment 1 may be applied until 30 September 2023.**			

Class 2 - Assessment to NSW Section J of NCC 2019 Amendment 1			
BCA Clause	**Relevant Deemed-To-Satisfy Requirements**	**Comment**	**Status**
NSW Part J(A)1 Building fabric			
NSW J(A)1.0: Deemed-to-satisfy Provisions	Informational	-	Noted
NSW J(A)1.1: Application of Part	> The deemed-to-satisfy provisions of this Part only apply to thermal insulation in a Class 2 building where a development consent specifies that the insulation is to be provided as part of the development. > The Deemed-to-Satisfy Provisions of this Part for thermal breaks apply to all Class 2 buildings.	-	Noted
NSW J(A)1.2:	The *sole-occupancy units* of a Class 2 building must comply with the national BCA provisions of J0.2(b) to (d) - except that the reference to "Where required" in J1.2 is deemed to	Refer to these clauses below.	Noted

Class 2 - Assessment to NSW Section J of NCC 2019 Amendment 1			
BCA Clause	**Relevant Deemed-To-Satisfy Requirements**	**Comment**	**Status**
Compliance with BCA provisions	refer to "Where a development consent or a complying development certificate specifies that insulation is to be provided as part of the development."		
NSW Part J(A)2 Building sealing			
NSW J(A)2.0: Deemed-to-satisfy provisions	Informational	-	Noted
NSW (A)2.1: Application of Part	The deemed-to-satisfy provisions of this Part apply to elements forming the *envelope* of a Class 2 building.	-	Noted
NSW J(A)2.2: Compliance with BCA provisions	Class 2 buildings must comply with the following national BCA provisions: > J3.2 Chimneys and flues > J3.3 Roof lights > J3.4 (a) to (d) Windows and doors > J3.5 Exhaust fans > J3.6 Construction of ceilings, walls and floors. > J3.7 Evaporative cloolers	Refer to these clauses below.	Noted
NSW Part J(A)3 Air-conditioning and ventilation systems			
NSW J(A)3.0: Deemed-to-satisfy provisions	Informational	-	Noted
NSW J(A)3.1: Application of Part	The deemed-to-satisfy provisions of this Part apply to a Class 2 building.	-	Noted

Class 2 - Assessment to NSW Section J of NCC 2019 Amendment 1			
BCA Clause	**Relevant Deemed-To-Satisfy Requirements**	**Comment**	**Status**
NSW J(A)3.2: Compliance with BCA provisions	Class 2 buildings must comply with the following national BCA provisions, as applicable– (a) for air-conditioning system control: J5.2; and (b) for mechanical ventilation system control: J5.3; and (c) for fan systems: J5.4; and (d) for ductwork insulation: J5.5; and (e) for ductwork sealing: J5.6; and (f) for pump systems: J5.7; and (g) for pipework insulation: J5.8; and (h) for refrigerant chillers: J5.10; and (i) for unitary air-conditioning equipment: J5.11; and (j) for heat rejection equipment: J5.12.	Refer to these clauses below.	Noted
NSW Part J(A)4 Heated water supply			
NSW J(A)4.0: Deemed-to-satisfy provisions	Informational	-	Noted
NSW J(A)4.1: Application of Part	Informational	-	Noted
NSW J(A)4.2: Compliance with BCA provisions	Class 2 buildings must comply with the national BCA provisions of J7.2 Heated water supply.	Refer to clause below.	Noted
NSW Part J(A)5 Facilities for energy monitoring			
NSW J(A)5.0:	Informational	-	Noted

Class 2 - Assessment to NSW Section J of NCC 2019 Amendment 1			
BCA Clause	**Relevant Deemed-To-Satisfy Requirements**	**Comment**	**Status**
Deemed-to-satisfy provisions			
NSW J(A)5.1: Application of Part	The deemed-to-satisfy provisions of this Part apply to a Class 2 building except within a *sole-occupancy unit.*	-	Noted
NSW J(A)5.3: Compliance with BCA provisions	Class 2 buildings must comply with the national BCA provisions of J8.3.	Refer to clause below.	Noted
Part J0 Energy Efficiency			
J0.2: Heating & cooling loads of Sole Occupancy Units to Class 2 & 4 parts	J0.2 (b) to (d) require compliance with the following national provisions: > J1.2 for general thermal construction; and > J0.4 and J0.5 for thermal breaks; and > J1.6(b) and J1.6(c) for floor edge insulation	Refer to clauses below.	Noted
J0.4: Roof thermal breaks	A roof that has metal sheet roofing fixed to metal purlins, metal rafters or metal battens and has a ceiling fixed directly to those metal purlins, metal rafters or metal battens, must have a thermal break, consisting of a material with an *R-Value* of not less than R0.2, installed at all points of contact between the metal sheet roofing and its supporting metal purlins, metal rafters or metal battens.	-	CRA
J0.5: Wall thermal breaks	Where a wall lining is fixed directly to the metal wall frame and lightweight external cladding is used, a thermal break consisting of a material with an *R-Value* of not less than R0.2 must be installed at all points of contact between the external cladding and the metal frame.	-	CRA
Part J1 Building Fabric			

Class 2 - Assessment to NSW Section J of NCC 2019 Amendment 1			
BCA Clause	**Relevant Deemed-To-Satisfy Requirements**	**Comment**	**Status**
J1.0: Deemed-to-Satisfy Provisions	Informational	-	Noted
J1.1: Application of Part	The provisions of Part J1 apply to building elements forming part of the *envelope* of the building.	-	Noted
J1.2: Thermal construction general	(a) Where required, insulation must comply with AS/NZS 4859.1 and be installed so that it— (i) abuts or overlaps adjoining insulation other than at supporting members such as studs, noggings, joists, furring channels and the like where the insulation must be against the member; and (ii) forms a continuous barrier with ceilings, walls, bulkheads, floors or the like that inherently contribute to the thermal barrier; and (iii) does not affect the safe or effective operation of a service or fitting. (b) Where required, *reflective insulation* must be installed with— (i) the necessary airspace to achieve the required R-Value between a reflective side of the reflective insulation and a building lining or cladding; and (ii) the *reflective insulation* closely fitted against any penetration, door or window opening; and (iii) the *reflective insulation* adequately supported by framing members; and (iv) each adjoining sheet of roll membrane being— (A) overlapped not less than 50 mm; or	-	CRA

Class 2 - Assessment to NSW Section J of NCC 2019 Amendment 1			
BCA Clause	**Relevant Deemed-To-Satisfy Requirements**	**Comment**	**Status**
	(B) taped together. (c) Where required, bulk insulation must be installed so that— (i) it maintains its position and thickness, other than where it is compressed between cladding and supporting members, water pipes, electrical cabling or the like; and (ii) in a ceiling, where there is no bulk insulation or reflective insulation in the wall beneath, it overlaps the wall by not less than 50 mm. (d) Roof, ceiling, wall and floor materials, and associated surfaces are deemed to have the thermal properties listed in Specification J1.2. (e) The required Total R-Value and Total System U-Value, including allowance for thermal bridging, must be— (i) calculated in accordance with AS/NZS 4859.2 for a roof or floor; or (ii) determined in accordance with Specification J1.5a for wall-glazing construction; or (iii) determined in accordance with Specification J1.6 or Section 3.5 of CIBSE Guide A for soil or sub-floor spaces.		
J1.6: Floors	Not applicable	For climate zone 5 in NSW, this clause is only applicable if an in-slab or in-screed heating or cooling system is proposed.	NA
Part J2 Glazing Part J2 has deliberately been left blank from the BCA2019			
Part J3 – Building sealing			

Class 2 - Assessment to NSW Section J of NCC 2019 Amendment 1			
BCA Clause	**Relevant Deemed-To-Satisfy Requirements**	**Comment**	**Status**
J3.0: Deemed-to-Satisfy Provisions	Informational	-	Noted
J3.1: Application of Part	The requirements of this Part apply to elements forming the *envelope* of the building other than: > a permanent building opening necessary for the safe operation of a gas appliance; and > parts of building that cannot be fully enclosed.	-	Noted
J3.2: Chimneys and flues	Not applicable	-	NA
J3.3: Roof lights	(a) A roof light must be sealed, or capable of being sealed. (b) A roof light must be constructed with— (i) an imperforate ceiling diffuser or the like installed at the ceiling or internal lining level; or (ii) a weatherproof seal; or (iii) a shutter system readily operated either manually, mechanically or electronically by the occupant.	-	CRA
J3.4: Windows and doors	(a) A door, openable window or the like must be sealed. (b) The above does not apply to a window complying with AS 2047 or a fire door. (c) A seal to restrict air infiltration— (i) for the bottom edge of a door, must be a draft protection device; and (ii) for the other edges of a door or the edges of an openable window or other such opening, may be a foam or rubber compression strip, fibrous seal or the like.	-	CRA

Class 2 - Assessment to NSW Section J of NCC 2019 Amendment 1			
BCA Clause	**Relevant Deemed-To-Satisfy Requirements**	**Comment**	**Status**
	(d) An entrance to a building, if leading to a *conditioned space* must have a self-closing door.		
J3.5: Exhaust fans	Any exhaust fan serving a *conditioned space* or *habitable room* must be fitted with a sealing device, such as a self-closing damper of the like.	-	CRA
J3.6: Construction of ceilings, walls and floors	Ceilings, walls, floors and any openings, such as a window frame, doors frame or the like, are to be constructed to minimise air leakage by being enclosed by internal lining systems that are close fitting at junctions.	-	CRA
J3.7: Evaporative Coolers	Not applicable	-	NA
Part J5 – Air-conditioning and ventilation systems			
J5.2: Air-conditioning system control	Air-conditioning system control must comply with clause J5.2 of BCA 2019.	Design certification to be provided by air-conditioning systems supplier/installer.	CRA
J5.3: Mechanical ventilation system control	A mechanical ventilation system control must comply with clause J5.3 of BCA 2019.	Design certification to be provided by air-conditioning systems supplier/installer.	CRA
J5.4: Fan systems	Fan systems must comply with Clause J5.4 of BCA 2019.	Design certification to be provided by air-conditioning systems supplier/installer.	CRA
J5.5: Ductwork Insulation	Ductwork insulation must comply with Clause J5.5 of BCA 2019.	Design certification to be provided by air-conditioning systems supplier/installer.	CRA
J5.6: Ductwork Sealing	Ductwork must be sealed in accordance with Clause J5.4 of BCA 2019, where applicable.	Design certification to be provided by air-conditioning systems supplier/installer.	CRA
J5.7: Pump Systems	Pump systems must comply with Clause J5.7 of BCA 2019, where applicable.	Design certification to be provided by air-conditioning systems supplier/installer.	CRA

Class 2 - Assessment to NSW Section J of NCC 2019 Amendment 1			
BCA Clause	**Relevant Deemed-To-Satisfy Requirements**	**Comment**	**Status**
J5.8: Pipework Insulation	Pipework insulation must comply with Clause J5.7 of BCA 2019, where applicable.	Design certification to be provided by air-conditioning systems supplier/installer.	CRA
J5.10: Refrigerant Chillers	Refrigerant chillers used as part of an air-conditioning system must comply with Clause J5.10 of BCA 2019.	Design certification to be provided by air-conditioning systems supplier/installer.	CRA
J5.11: Unitary Air-Conditioning Equipment	Unitary air-conditioning equipment must comply with Clause J5.11 of BCA 2019.	Design certification to be provided by air-conditioning systems supplier/installer.	CRA
J5.12: Heat Rejection Equipment	Heat rejection equipment must comply with Clause J5.12 of BCA 2019.	Design certification to be provided by air-conditioning systems supplier/installer.	CRA
Part J7 Heated water supply and swimming pool and spa pool plant			
J7.0: Deemed-to-Satisfy Provisions	Informational	-	Noted
J7.2: Heated water supply system	A heated water supply system for food preparation and sanitary purposes must be designed and installed in accordance with Part B2 of NCC Volume Three — Plumbing Code of Australia.	-	CRA
Part J8 Facilities for energy monitoring			
J8.1: Application of Part	The *deemed-to-satisfy provisions* of this Part do not apply within the Class 2 *sole-occupancy units.*	-	Noted
J8.3: Facilities for energy monitoring	The building must have an energy meter configured to record the time-of-use consumption of gas and electricity.	-	CRA

Class 7a - Assessment to NSW Section J of NCC 2022			
BCA Clause	**Relevant Deemed-To-Satisfy Requirements**	**Comment**	**Status**
Part J2 Energy Efficiency			
NSW J2D1 Deemed-to-satisfy Provisions	Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements NSW J1P1 to NSW J1P7 are satisfied by complying with— (a) NSW J2D2; and (b) NSW J3D2 to J3D10; and (c) NSW J4D2 to J4D7; and (d) NSW J5D2 to J5D8; and (e) NSW J6D2 to J6D13; and (f) NSW J7D2 to J7D9; and (g) J8D2 to NSW J8D4; and (h) J9D2 to J9D5.	Refer to clauses below.	Noted
NSW J2D2 Application of Section J	(1) For a Class 3 and 5 to 9 building, Performance Requirement NSW J1P1 is satisfied by complying with— (a) Part J4, for the building fabric; and (b) Part J5, for building sealing; and (c) Part J6, for *air-conditioning* and ventilation; and (d) Part J7, for artificial lighting and power; and (e) Part J8, for heated water supply and *swimming pool* and spa pool plant; and (f) J9D3, for facilities for energy monitoring. (2) (not applicable) (3) (not applicable)	Refer to Parts below.	CRA

Class 7a - Assessment to NSW Section J of NCC 2022			
BCA Clause	**Relevant Deemed-To-Satisfy Requirements**	**Comment**	**Status**
	(4) (not applicable) (5) For a Class 2 to 9 building, *Performance Requirement* NSW J1P4 is satisfied by complying with J9D4 and J9D5.		
Part J3 Elemental provisions for a sole-occupancy unit of a Class 2 building or a Class 4 part of a building – not applicable			
Part J4 Building Fabric			
NSW J4D1 Deemed-to-satisfy Provisions	Informational	-	Noted
NSW J4D2 Application of Part	The Deemed-to-Satisfy Provisions of this Part apply to building elements forming the *envelope* of a Class 3 and Class 5 to 9 building.	There is no *envelope* in the Class 7a part.	NA
Part J5 Building Sealing			
NSW J5D1 Deemed-to-Satisfy Provisions	Informational	-	Noted
NSW J5D2 Application of Part	The Deemed-to-Satisfy Provisions of this Part apply to building elements forming the *envelope* of a Class 3 and Class 5 to 9 building.	There is no *envelope* in the Class 7a part.	NA
Part J6 Air-conditioning and ventilation			
NSW J6D2 Deemed-to-Satisfy Provisions	Informational	-	Noted
NSW J6D2 Application of Part	Informational	-	Noted

Class 7a - Assessment to NSW Section J of NCC 2022			
BCA Clause	**Relevant Deemed-To-Satisfy Requirements**	**Comment**	**Status**
J6D3 Air-conditioning system control	Not applicable	-	NA
J6D4 Mechanical ventilation system control	(1) General — A mechanical ventilation system, including one that is part of an *air-conditioning* system, except where the mechanical system serves only one sole-occupancy unit in a Class 2 building or serves only a Class 4 part of a building, must— (a) be capable of being deactivated when the building or part of the building served by that system is not occupied; and (b) (not applicable) (c) for an airflow of more than 1000 L/s, have a variable speed fan unless the downstream airflow is required by Part F6 to be constant. (2) Exhaust systems — An exhaust system with an air flow rate of more than 1000 L/s must be capable of stopping the motor when the system is not needed.. (3) *Carpark* exhaust systems — *Carpark* exhaust systems must have a control system in accordance with— (a) clause 4.11.2 of AS 1668.2; or (b) clause 4.11.3 of AS 1668.2. (4) Time switches — The following applies: (a) A time switch must be provided to a mechanical ventilation system with an air flow rate of more than 1000 L/s.	-	CRA

Class 7a - Assessment to NSW Section J of NCC 2022			
BCA Clause	**Relevant Deemed-To-Satisfy Requirements**	**Comment**	**Status**
	(b) The time switch must be capable of switching electric power on and off at variable pre-programmed times and on variable pre-programmed days. (c) (not applicable)		
J6D5 Fans and duct systems	Fans and duct systems must comply with Clause J6D5. Refer to full clause in BCA.	-	CRA
J6D6 Ductwork insulation	Not applicable	-	NA
J6D7 Ductwork sealing	Not applicable	-	NA
J6D8 Pump systems	Not applicable	-	NA
J6D9 Pipework insulation	Not applicable	-	NA
J6D10 Space heating	Not applicable	-	NA
J6D11 Refrigerant chillers	Not applicable	-	NA
J6D12 Unitary air-conditioning equipment	Not applicable	-	NA
J6D10 Space heating	Not applicable	-	NA
J6D12 Unitary air-conditioning equipment	Not applicable	-	NA
J6D13 Heat rejection equipment	Not applicable	-	NA
Part J7 Artificial lighting and power			

Class 7a - Assessment to NSW Section J of NCC 2022			
BCA Clause	**Relevant Deemed-To-Satisfy Requirements**	**Comment**	**Status**
J7D1 Deemed-to-Satisfy Provisions	Informational	-	Noted
NSW J7D2 Application of Part	Informational	-	Noted
J7D3 Artificial lighting	(1) In a Class 3 or Class 5 to 9 building— (a) for artificial lighting, the aggregate design illumination power load must not exceed the sum of the allowances obtained by multiplying the area of each space by the maximum illumination power density in Table J7D3a; and (b) the aggregate design illumination power load in (a) is the sum of the design illumination power loads in each of the spaces served; and (c) where there are multiple lighting systems serving the same space, the design illumination power load for (b) is— (i) the total illumination power load of all systems; or (ii) where a control system permits only one system to operate at a time based on the highest illumination (iii) power load; or determined by the formula— $[H \times T/2 + P \times (100 - T/2]/100$ (d) In the formula at (c)(ii)— (i) *H* = the highest illumination power load; and	-	CRA

Class 7a - Assessment to NSW Section J of NCC 2022			
BCA Clause	**Relevant Deemed-To-Satisfy Requirements**	**Comment**	**Status**
	(ii) *T* = the time for which the maximum illumination power load will occur, expressed as a percentage; and (iii) *P* = the predominant illumination power load. (2) The requirements of (1) and (2) do not apply to emergency lighting provided in accordance with Part E4. (3) For the purposes of Table J7D3b, the following control devices must comply with Specification 40: (a) Lighting timers. (b) Motion detectors. (c) Daylight sensors and dynamic lighting control devices.		
J7D4 Interior artificial lighting and power control	(1) All artificial lighting of a room or space must be individually operated by– (a) a switch; or (b) other control device; or (c) a combination of (a) and (b). (2) (not applicable) (3) An artificial lighting switch or other control device in (1) must— (a) if an artificial lighting switch, be located in a visible and easily accessed position— (i) in the room or space being switched; or (ii) in an adjacent room or space from where 90% of the lighting being switched is visible; and	-	CRA

Class 7a - Assessment to NSW Section J of NCC 2022			
BCA Clause	**Relevant Deemed-To-Satisfy Requirements**	**Comment**	**Status**
	(b) for other than a single functional space such as an auditorium, theatre, swimming pool, sporting stadium or warehouse— (i) if in a Class 5 building or a Class 8 laboratory, not operate lighting for an area of more than 250 m^2; or (ii) if in a Class 3, 6, 7, 8 (other than a laboratory) or 9 building, not operate lighting for an area of more than— (A) 250 m^2 for a space of not more than 2000 m^2; or (B) 1000 m^2 for a space of more than 2000 m^2. (4) (NSW) 95% of the light fittings in a building or storey of a building, other than a Class 3 building of more than 250 m^2 must be controlled by— (a) a time switch in accordance with Specification 40; or (b) an occupant sensing device such as— (i) a security key card reader that registers a person entering and leaving the building; or (ii) a motion detector in accordance with Specification 40. (5) (not applicable) (6) (not applicable) (7) Artificial lighting in a foyer, corridor and other circulation spaces— (a) of more than 250 W within a single zone; and		

Class 7a - Assessment to NSW Section J of NCC 2022				
BCA Clause		**Relevant Deemed-To-Satisfy Requirements**	**Comment**	**Status**
		(b) adjacent to windows, must be controlled by a daylight sensor and dynamic lighting control device in accordance with Specification 40. (8) Artificial lighting for daytime travel in the first 19 m of travel in a carpark entry zone must be controlled by a daylight sensor in accordance with Specification 40. (9) The requirements of (1), (2), (3), (4), (5), (6), (7) and (8) do not apply to the following: (a) Emergency lighting in accordance with Part E4. (b) (not applicable). (10) The requirements of (4) do not apply to the following: (a) Artificial lighting in a space where the sudden loss of artificial lighting would cause an unsafe situation such as a plant room. (b) (not applicable)		
J7D5	Interior decorative and display lighting	Not applicable	-	NA
J7D6	Exterior artificial lighting	(1) Exterior artificial lighting attached to or directed at the facade of a building, must— (a) be controlled by— (i) a daylight sensor; or (ii) a time switch that is capable of switching on and off electric power to the system at variable pre-programmed times and on variable pre-programmed days; and	-	CRA

Class 7a - Assessment to NSW Section J of NCC 2022				
BCA Clause		**Relevant Deemed-To-Satisfy Requirements**	**Comment**	**Status**
		(b) when the total lighting load exceeds 100 W— (i) use LED luminaires for 90% of the total lighting load; or (ii) be controlled by a motion detector in accordance with Specification 40; or (iii) when used for decorative purposes, such as façade lighting or signage lighting, have a separate time switch in accordance with Specification 40.		
J7D7	Boiling water and chilled water storage units	Not applicable	-	NA
J7D8	Lifts	Lifts must— (a) be configured to ensure artificial lighting and ventilation in the car are turned off when it is unused for 15 minutes; and (b) achieve the idle and standby energy performance level in Table J7D8a; and (c) achieve— (i) the energy efficiency class in Table J7D8b; or (ii) if a dedicated goods lift, energy efficiency class D in accordance with ISO 25745-2.	-	CRA
J7D9	Escalators and moving walkways	Not applicable	-	NA
Part J8 Heated water supply and swimming pool and spa pool plant – not applicable				

Class 7a - Assessment to NSW Section J of NCC 2022			
BCA Clause	**Relevant Deemed-To-Satisfy Requirements**	**Comment**	**Status**
Part J9 Energy monitoring and on-site distributed energy resources			
J9D2 Application of Part	Informational	-	Noted
J9D3 Facilities for energy monitoring	The building must have energy meters configured to record the time-of-use consumption of gas and electricity.	-	CRA
J9D4 Facilities for electric vehicle charging equipment	(1) Subject to (2), a *carpark* associated with a Class 2, 3, 5, 6, 7b, 8 or 9 building must be provided with electrical distribution boards dedicated to electric vehicle charging— (a) in accordance with Table J9D4 in each *storey* of the *carpark*; and (b) labelled to indicate use for electric vehicle charging equipment. (2) Electrical distribution boards dedicated to serving electric vehicle charging in a *carpark* must— (a) be fitted with a charging control system with the ability to manage and schedule charging of electric vehicles in response to total building demand; and (b) when associated with a Class 2 building, have capacity for each circuit to support an electric vehicle charger able to deliver a minimum of 12 kWh from 11:00 pm to 7:00 am daily; and (c) (not applicable) (d) (not applicable) (e) be sized to support the future installation of a 7 kW (32 A) type 2 electric vehicle charger in—	-	CRA

Class 7a - Assessment to NSW Section J of NCC 2022			
BCA Clause	**Relevant Deemed-To-Satisfy Requirements**	**Comment**	**Status**
	(i) 100% of the car parking spaces associated with a Class 2 building; (ii) (not applicable) (iii) (not applicable) (f) contain space of at least 36 mm width of DIN rail per outgoing circuit for individual sub-circuit electricity metering to record electricity use of electric vehicle charging equipment; and (g) be labelled to indicate the use of the space required by (f) is for the future installation of metering equipment.		
J9D5 Facilities for solar photovoltaic and battery systems	(1) The main electrical switchboard of a building must— (a) contain at least two empty three-phase circuit breaker slots and four DIN rail spaces labelled to indicate the use of each space for— (i) a solar photovoltaic system; and (ii) a *battery system*; and (b) be sized to accommodate the installation of solar photovoltaic panels producing their maximum electrical output on at least 20% of the building roof area. (2) At least 20% of the roof area of a building must be left clear for the installation of solar photovoltaic panels, except for buildings— (a) with installed solar photovoltaic panels on— (i) at least 20% of the roof area; or	-	CRA

Class 7a - Assessment to NSW Section J of NCC 2022			
BCA Clause	**Relevant Deemed-To-Satisfy Requirements**	**Comment**	**Status**
	(ii) an equivalent generation capacity elsewhere on-site; or (b) where 100% of the roof area is shaded for more than 70% of daylight hours; or (c) with a roof area of not more than 55 m^2; or (d) where more than 50% of the roof area is used as a terrace, *carpark*, roof garden, *roof light* or the like. **Limitations** (1) The requirements of J9D5(1)(a)(i) and (b) do not apply to a building with solar photovoltaic panels installed on at least 20% of the roof area. (2) The requirements of J9D5(1)(a)(ii) and (b) do not apply to a building with *battery systems* installed.		

5 BCA Assessment Summary

As identified by the clause-by-clause assessment in Part 4 of this report, the architectural design for 35-43 Hay Street, Collaroy, is consistent with the relevant BCA provisions. To demonstrate full BCA compliance, the matters identified in Part 4 of this report as 'Compliance Readily Achievable' (CRA) will need to be detailed in the plans, certified by the relevant party or included in the project specifications, prior to the issue of the Construction Certificate.

Annexure A – Fire Resistance Levels

The following fire resistance levels (FRL's) are required for the various building elements, with a *fire source feature* being the far boundary of a road adjoining the allotment, a side or rear boundary.

Type B Fire-resistance Levels

Item	Class 2	Class 7a
Loadbearing parts of External Walls (including columns and other building elements incorporated therein)		
> 3 to less than 9m to a fire- source feature	90/30/30	120/30/30
> 9 – less than 18m from a fire-source feature	90/30/-	120/30/-
> 18m or more from a fire source feature	-/-/-	-/-/-
External Columns		
> Loadbearing	90/-/-	120/-/-
Fire walls	90/90/90	120/120/120
Lift shafts required to be fire-resisting		
> Loadbearing	90/90/90	120/120/120
> Non-loadbearing	-/90/90	-/120/120
Internal walls bounding public corridors, public lobbies and the like:		
> Loadbearing	60/60/60	120/-/-
> Non-loadbearing	-/60/60	-/-/-
Internal walls between or bounding sole-occupancy units:		
> Loadbearing	60/60/60	120/-/-
> Non-loadbearing	-/60/60	-/-/-
Other loadbearing internal walls and columns	60/-/-	120/-/-
Roofs See notes	-/-/-	-/-/-

Notes regarding fire-resistance:

1. The roof of Basement 1 must achieve an FRL of not less than 120/120/120 as exits discharge onto it, as per Clause D3D13.

Annexure B – Proposed Fire Safety Schedule

The following fire safety measures are required to be installed in the building. The following table may be required to be updated as the design develops and options for compliance are confirmed.

Item	Fire Safety Measure	Standard of Performance
1.	Automatic fire detection and alarm system	BCA2022 Clause E2D8, Specification 20 & AS 1670.1-2018
2.	Building occupant warning system	BCA2022 Clause S20C7 & Clause 3.22 of AS 1670.1-2018
3.	Emergency lighting	BCA2022 Clause E4D2 & AS/NZS 2293.1-2018
4.	Exit signs	BCA2022 Clauses E4D5, E4D6, E4D7, E4D8 & AS/NZS 2293.1-2018
5.	Fire dampers	BCA2022 Clauses C4D15 & AS 1668.1:2015 (Amdt 1) AS 1682.1:2015 & AS 1682.2:2015
6.	Fire doors	BCA2022 Clauses: C3D14 (Electricity supply system) C4D6 (Doorways in fire walls) S12C2 (Fire doors) AS 1905.1-2015 & AS 1735.11-1986
7.	Fire hydrant system	BCA2022 Clause E1D2 & AS 2419.1-2021
8.	Fire hose reel system	BCA2022 Clause E1D3 & AS 2441-2005
9.	Fire seals protecting openings in fire-resisting components of the building	BCA2022 Clauses: C4D13 (Openings in floors) C4D15 (Openings for service installations) C4D16 (Construction joints) Specification 13 AS1530.4-2014 & AS4072.1-2005
10.	Mechanical air-handling systems • Carpark ventilation system	BCA2022 E2D12, clause 5.5 of AS 1668.1-2015 (Amdt 1), AS 1668.2-2012
11.	Portable fire extinguishers	BCA2022 Clause E1D14 & AS 2444-2001
12.	Solid core doors	BCA2022 Clause C4D12

Item	Fire Safety Measure	Standard of Performance
13.	Warning and operational signs	BCA2022 D4D7 (Braille exit signs) BCA2022 E3D4 (Lift Signs) Clause 5.5.3 of AS 1668.1-2015 (Amdt 1) (Signage at *carpark* entry to indicate location of ventilation control switches)

Annexure C – Design Documentation

This report has been prepared based on the following design documentation.

Architectural plans prepared by PopovBass			
Drawing no.	**Revision**	**Date**	**Title**
0638-DA-104	E	22/06/23	SITE PLAN
0638-DA105	F	22/06/23	Basement Plan
0638-DA106	E	22/06/23	Level 01 Plan
0638-DA107	E	22/06/23	Level 02 Plan
0638-DA108	E	22/06/23	Roof Plan
0638-DA112	E	22/06/23	Elevations 1
0638-DA113	E	22/06/23	Elevations 2
0638-DA114	E	22/06/23	Section AA & BB
0638-DA115	E	22/06/23	Section CC & DD
0638-DA124	A	22/06/23	Schedule of colours and materials

Annexure D – Definitions

Terms in italics used throughout this report have the BCA definitions, as listed below.

Air-conditioning: A service that actively cools or heats the air within a space, but does not include a service that directly:

(a) cools or heats cold or hot rooms; or

(b) maintains specialised conditions for equipment or processes, where this is the main purpose of the service.

Aluminium Composite Panel (ACP): Flat or profiled aluminium sheet material in composite with any type of materials.

Ancillary element: An element that is secondary to and not an integral part of another element to which it is attached.

***Automatic*:** Designed to operate when activated by a heat, smoke or fire sensing device.

Average specific extinction area means the average specific extinction area for smoke as determined by AS 5637.1:2015.

Battery system: One or more chemical cells connected in series, parallel or a combination of the two for the purpose of electrical energy storage.

Climate zone means an area defined in Figure 2 and in Tables 3a to 3h for specific locations, having energy efficiency provisions based on a range of similar climatic characteristics.

Combustible: Applied to—

(a) a material — means combustible as determined by AS 1530.1-1994; and

(b) construction or part of a building — means constructed wholly or in part of combustible materials.

Conditioned space: A space within a building, including a ceiling or under-floor supply air plenum or return air plenum, where the environment is likely, by the intended use of the space, to have its temperature controlled by *air-conditioning.*

Critical radiant flux (CRF): The critical heat flux at extinguishment (CHF in kW/m^2) as determined by AS ISO 9239.1:2003.

***Deemed-to-Satisfy Provisions*:** Provisions which are deemed to satisfy the Performance Requirements.

Deemed-to-Satisfy Solution: A method of satisfying the *Deemed-to-Satisfy Provisions*.

Designated bushfire prone area

Land that:

(a) has been designated under legislation; or

(b) has been identified under an environmental planning instrument, development control plan or in the course of processing and determining a development application,

as land that can support a bushfire or is likely to be subject to bushfire attack.

Display glazing *Glazing* used to display retail goods in a shop or showroom directly adjacent to a walkway or footpath, but not including that used in a café or restaurant.

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

Envelope: For the purposes of Section J in Volume One, means the parts of a building's fabric that separate a *conditioned space* or *habitable room* from—

(a) the exterior of the building; or

(b) a non-*conditioned space* including—

(A) the floor of a rooftop plant room, lift-machine room or the like; and

(B) the floor above a *carpark* or warehouse; and

(C) the *common wall* with a *carpark*, warehouse or the like

Exit means –

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

(i) An internal or external stairway.

(ii) A ramp.

(iii) A fire-isolated passageway.

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

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

External wall means an outer wall of a building which is not a *common wall*.

Fire compartment: Either—

(a) the total space of a building; or

(b) when referred to in—

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

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

Fire hazard properties: The following properties of a material or assembly that indicate how they behave under specific fire test conditions:

(a) *Average specific extinction area*, *critical radiant flux* and *Flammability Index*, determined as defined in Schedule 3 of the BCA.

(b) *Smoke-Developed Index, smoke development rate* and *Spread-of-Flame Index*, determined in accordance with Schedule 6 of the BCA.

(c) *Group number* and *smoke growth rate index* (SMOGRARC), determined in accordance with Specification C1.10 of BCA Volume One.

Fire-isolated passageway means a corridor, hallway or the like, of *fire-resisting* construction, which provides egress to or from a *fire-isolated stairway* or fire-isolated ramp or to a road or open space.

***Fire-isolated stairway*:** A stairway within a *fire-resisting* shaft and includes the floor and roof or top enclosing structure.

Fire-resistance level (FRL): The grading periods in minutes determined in accordance with Specification A2.3, for the following criteria—

(a) structural adequacy; and

(b) integrity; and

(c) insulation,

and expressed in that order.

Note: A dash means that there is no requirement for that criterion. For example, 90/–/– means there is no requirement for an FRL for integrity and insulation, and –/–/– means there is no requirement for an FRL.

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.

Fire wall: A wall with an appropriate resistance to the spread of fire that divides a *storey* or building into *fire compartments*.

Flammability index means the index number as determined by AS 1530.2:1993.

Flight: That part of a stair that has a continuous series of risers, including risers of winders, not interrupted by a landing or floor.

Flood hazard area: The site (whether or not mapped) encompassing land lower than the *flood hazard level* which has been determined by the *appropriate authority.*

Going means the horizontal dimension from the front to the back of a tread less any overhang from the next tread or landing above (see Figure 3.9.1.4).

Group number means the number of one of 4 groups of materials used in the regulation of fire hazard properties and applied to materials used as a finish, surface, lining, or attachment to a wall or ceiling.

Habitable room means a room used for normal domestic activities, and—

(a) includes a bedroom, living room, lounge room, music room, television room, kitchen, dining room, sewing room, study, playroom, family room, home theatre and sunroom; but

(b) excludes a bathroom, laundry, water closet, pantry, walk-in wardrobe, corridor, hallway, lobby, photographic darkroom, clothes-drying room, and other spaces of a specialised nature occupied neither frequently nor for extended periods.

Horizontal exit means a required doorway between 2 parts of a building separated from each other by a fire wall.

Insulation in relation to an FRL, means the ability to maintain a temperature on the surface not exposed to the furnace below the limits specified in AS 1530.4.

Integrity in relation to an FRL, means the ability to resist the passage of flames and hot gases specified in AS 1530.4.

Loadbearing means intended to resist vertical forces additional to those due to its own weight.

Non-combustible means—

(a) applied to a material — not deemed combustible as determined by AS 1530.1:1994 — Combustibility Tests for Materials; and

(b) applied to construction or part of a building — constructed wholly of materials that are not deemed combustible.

Occupiable outdoor area: A space on a roof, balcony or similar part of a building—

(a) that is open to the sky; and

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

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

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

Performance Requirement means a requirement which states the level of performance which a Performance Solution or Deemed-to-Satisfy Solution must meet.

Performance Solution means a method of complying with the Performance Requirements other than by a Deemed-to-Satisfy Solution.

Pliable building membrane means a water barrier as classified by AS/NZS 4200.1.

Primary building element, for the purposes of Volume One, means a member of a building designed specifically to take part of the loads specified in B1.2 and includes roof, ceiling, floor, stairway or ramp and wall framing members including bracing members designed for the specific purpose of acting as a brace to those members.

R-Value (m^2.K/W) means the thermal resistance of a component calculated by dividing its thickness by its thermal conductivity.

Rise in *storey*s: The greatest number of *storey*s calculated in accordance with C2D3 of Volume One.

Riser means the height between consecutive treads and between each landing and continuous tread.

Sanitary compartment: A room or space containing a closet pan or urinal (see Figures 6a and 6b).

Sarking-type material means a material such as a reflective insulation or other flexible membrane of a type normally used for a purpose such as waterproofing, vapour management or thermal reflectance.

Smoke-Developed Index means the index number for smoke as determined by AS/NZS 1530.3.

Smoke development rate means the development rate for smoke as determined by testing flooring materials in accordance with AS ISO 9239.1.

Smoke growth rate index (SMOGRA $_{RC}$) means the index number for smoke used in the regulation of fire hazard properties and applied to materials used as a finish, surface, lining or attachment to a wall or ceiling.

Solar admittance means the fraction of incident irradiance on a wall-glazing construction that adds heat to a building's space.

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

(a) a dwelling; or

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

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

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

(e) the exclusive use of a resident.

Spread-of-Flame Index: The index number for spread of flame as determined by AS/NZS 1530.3-1999.

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

(a) a space that contains only—

(i) a lift shaft, stairway or meter room; or

(ii) a bathroom, shower room, laundry, water closet, or other sanitary compartment; or

(iii) accommodation intended for not more than 3 vehicles; or

(iv) a combination of the above; or

(b) a mezzanine.

Structural adequacy: In relation to an FRL, means the ability to maintain stability and adequate loadbearing capacity as determined by AS 1530.4-2014.

Wall-glazing construction, for the purposes of Section J in Volume One, means the combination of wall and glazing components comprising the envelope of a building, excluding—

(a) display glazing; and

(b) opaque non-glazed openings such as doors, vents, penetrations and shutters.

Waterproof: The property of a material that does not allow moisture to penetrate through it.

Water resistant: The property of a system or material that restricts moisture movement and will not degrade under conditions of moisture.

Water control layer means a *pliable building membrane* or the exterior cladding when no *pliable building membrane* is present.

Water sensitive materials: Materials that have an inherent capacity to absorb water vapour and include timber, plasterboard, plywood, oriented strand board and the like.