

BUILDING CODE OF AUSTRALIA COMPLIANCE ASSESSMENT REPORT

MAIN WORKS FOR WATERLOO MIXED USE DEVELOPMENT (HDA) - SSD-80441462

881-885 BOURKE STREET, WATERLOO – PARCEL 2 (BUILDINGS 2A & 2B) AND PARCEL 3
(BUILDINGS 3A & 3B)

DATE ► 06/05/2026

REPORT NO. ► 13143.9-Rev 2

PREPARED FOR ► Waterloo Property Pty. Ltd. as trustee for Waterloo Property Unit Trust

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AEDGROUP

Innovation & expertise in building regulations



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REVISION STATUS				
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1.0 EXECUTIVE SUMMARY AND RECOMMENDATIONS

This report provides a Building Code of Australia (BCA) 2022, Amendment 2 assessment of Main Works for Waterloo Mixed Use Development (HDA) - SSD-80441462, to be located at 881-885 Bourke Street, Waterloo – Parcel 2 (Buildings 2a & 2B) AND Parcel 2 (Buildings 3a & 3b). This report assesses Parcels 2 & 3.

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

The proposed design is capable of complying with the BCA subject to the adoption of the requirements within this report.

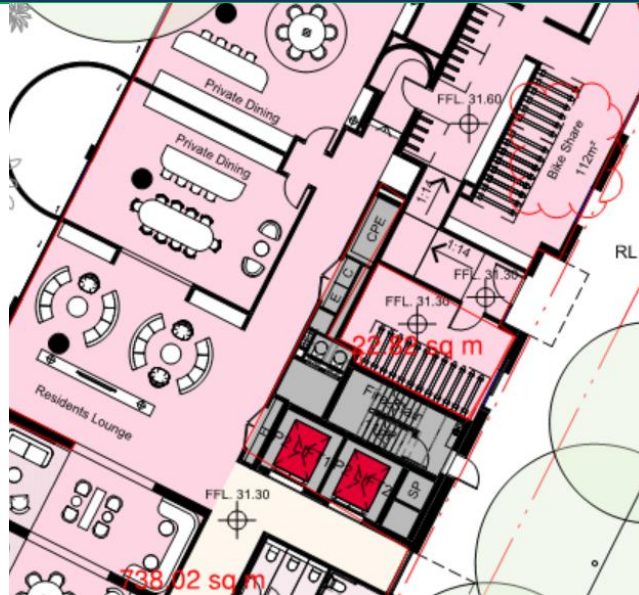
1.1 Recommendations

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

BCA Clause	Deemed-to-Satisfy Provision to be addressed														
C2D10 Non-combustible building elements [2019: C1.9]	▪ The use of waterproof membrane within planter boxes that are located against the external wall and extending more than 250mm above the ground level is to be addressed by way of a Performance Solution by the fire engineer. ▪ The use of timber noggings within non-loadbearing internal walls is to be addressed by way of a Performance Solution by the fire engineer.														
C2D14 Ancillary elements [2019: C1.14]	All components of the planter boxes attached to the external walls of the building are to contain non-combustible materials or to be addressed by way of a Performance Solution by the fire engineer at CC stage.  <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>														
C3D9 Separation of classifications in the same storey [2019: C2.8]	Compliance with this clause is required, noting the different classifications on the ground floor within Buildings 2A, 2B, 3A & 3B and on level 1 to Buildings 3A & 3B and level 2 to Buildings 3A & 3B. Compliance with this clause is required where the storage on ground floor of Building 2A exceeds 10% (approx. 18%) due to bike storage. As such would need 4 hour fire separation. Refer to table S5C11d. Furthermore, the storage/ waste rooms on the basement carpark levels may exceed 10% of the floor area – further assessment required at CC stage once basement plans have been developed showing all parcels. Table S5C11d: Type A construction: FRL of common walls and fire walls <table><tr><th rowspan="2">Wall type</th><th colspan="4">FRL (in minutes): <i>Structural adequacy / Integrity / Insulation</i></th></tr><tr><th>Class 2, 3 or 4 part</th><th>Class 5, 7a or 9</th><th>Class 6</th><th>Class 7b or 8</th></tr><tr><td><i>Loadbearing or non-loadbearing</i></td><td>90/90/90</td><td>120/120/120</td><td>180/180/180</td><td>240/240/240</td></tr></table> Fire separation is to be addressed by way of a Performance Solution by the fire engineer at CC stage	Wall type	FRL (in minutes): <i>Structural adequacy / Integrity / Insulation</i>				Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8	<i>Loadbearing or non-loadbearing</i>	90/90/90	120/120/120	180/180/180	240/240/240
Wall type	FRL (in minutes): <i>Structural adequacy / Integrity / Insulation</i>														
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8											
<i>Loadbearing or non-loadbearing</i>	90/90/90	120/120/120	180/180/180	240/240/240											

BCA Clause

Deemed-to-Satisfy Provision to be addressed



Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification

C3D10

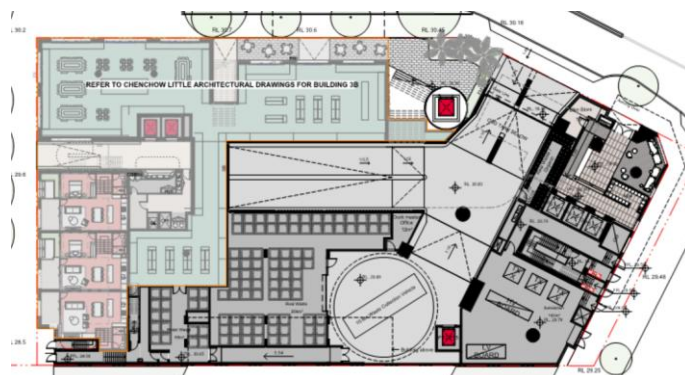
Separation of classifications in different storeys
[2019: C2.9]

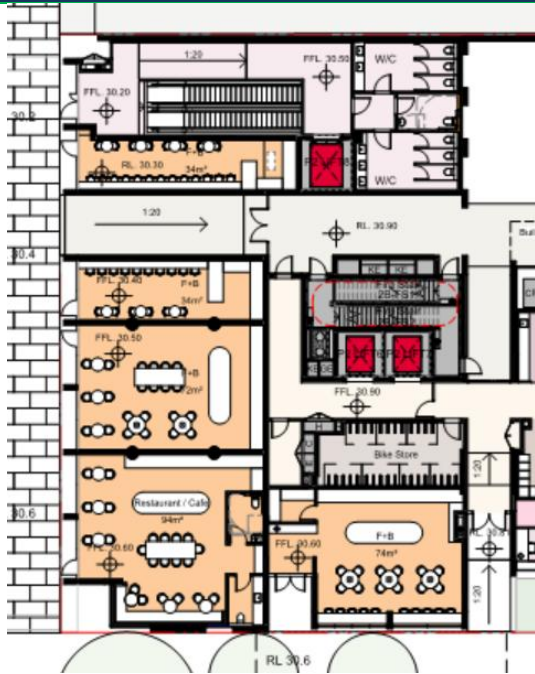
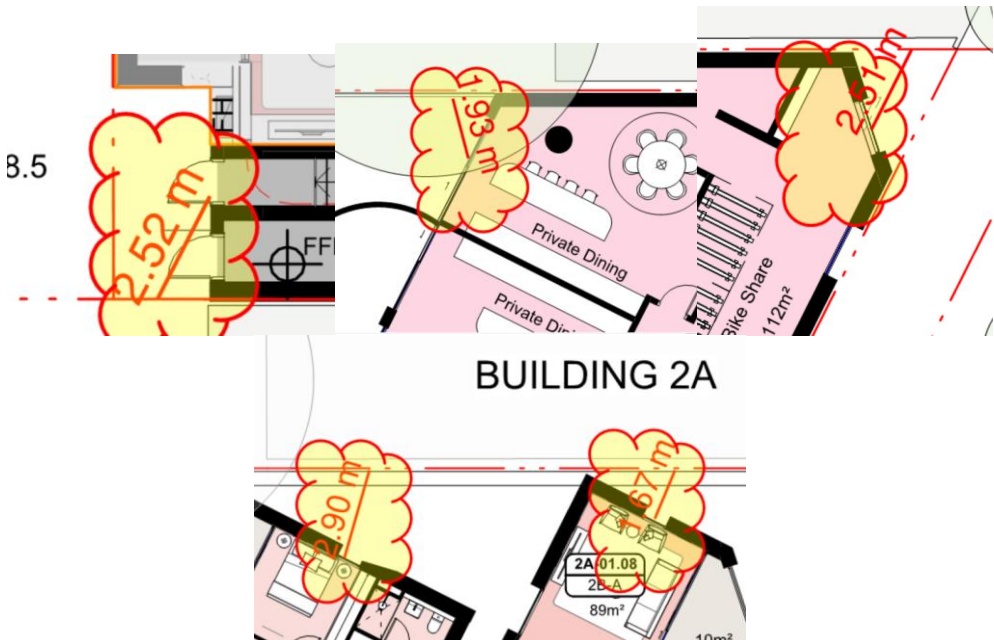
Compliance with the requirements of this clause is required – refer to table S5C11g.

Table S5C11g: Type A construction: FRL of other building elements not covered by Tables S5C11a to S5C11f

Building element	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Other loadbearing internal walls, internal beams, trusses and columns	90/-/-	120/-/-	180/-/-	240/-/-
Floors	90/90/90	120/120/120	180/180/180	240/240/240
Roofs	90/60/30	120/60/30	180/60/30	240/90/60

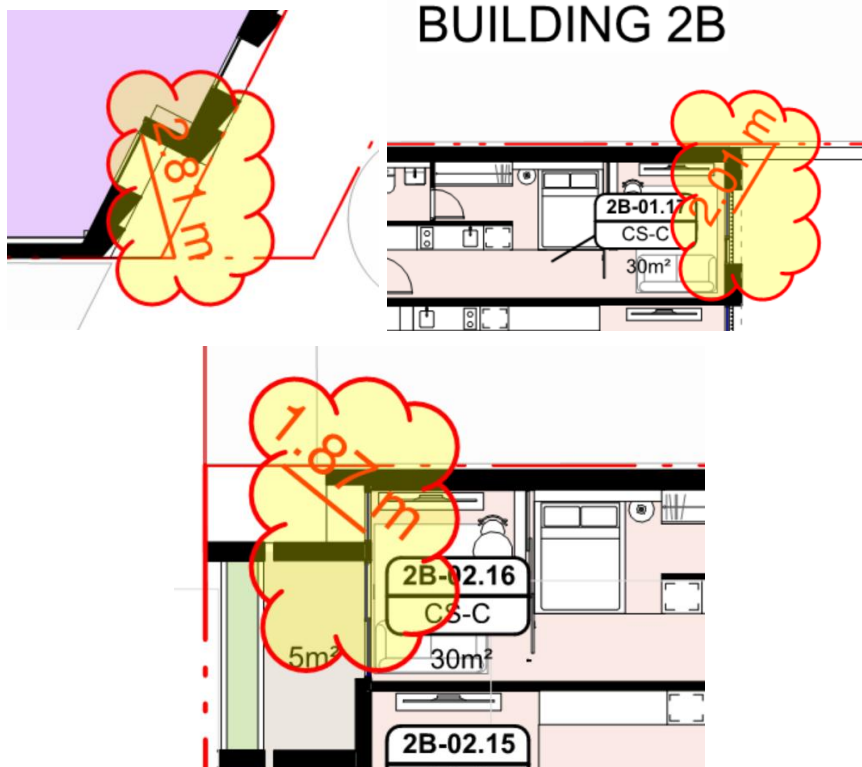
It should be noted fire separation will be required between ground floor and basement level 1 at the driveway due to the loading dock and waste room on the ground floor to Building 3A accounting for more than 10% of the floor area of the storey and Basement level 1 being classified as Class 7a (Carpark). In addition to this, fire separation between Basement 01 carpark and ground floor retail space. Fire separation is to be addressed by way of a Performance Solution by the fire engineer at CC stage.



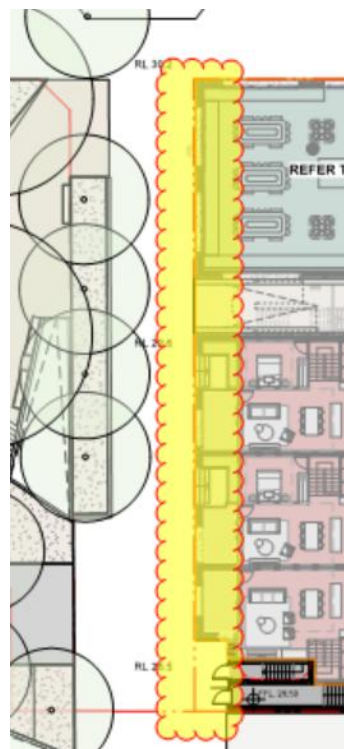
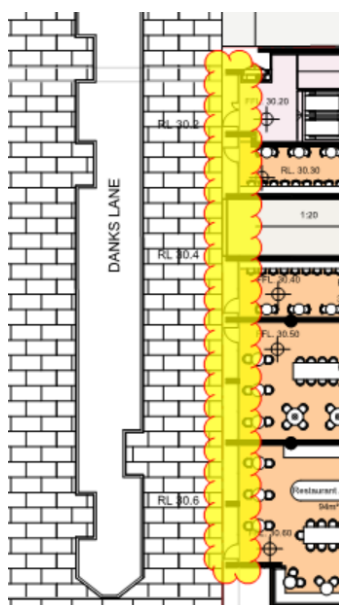
BCA Clause	Deemed-to-Satisfy Provision to be addressed
	 Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
C4D3 Protection of openings in external walls [2019: C3.2]	Openings within 3m from the side and rear boundaries are to be protected in accordance with Clause C4D5 or addressed by way of a Performance Solution by the fire engineer at CC stage. Examples are clouded below in yellow.  BUILDING 2A

BCA Clause

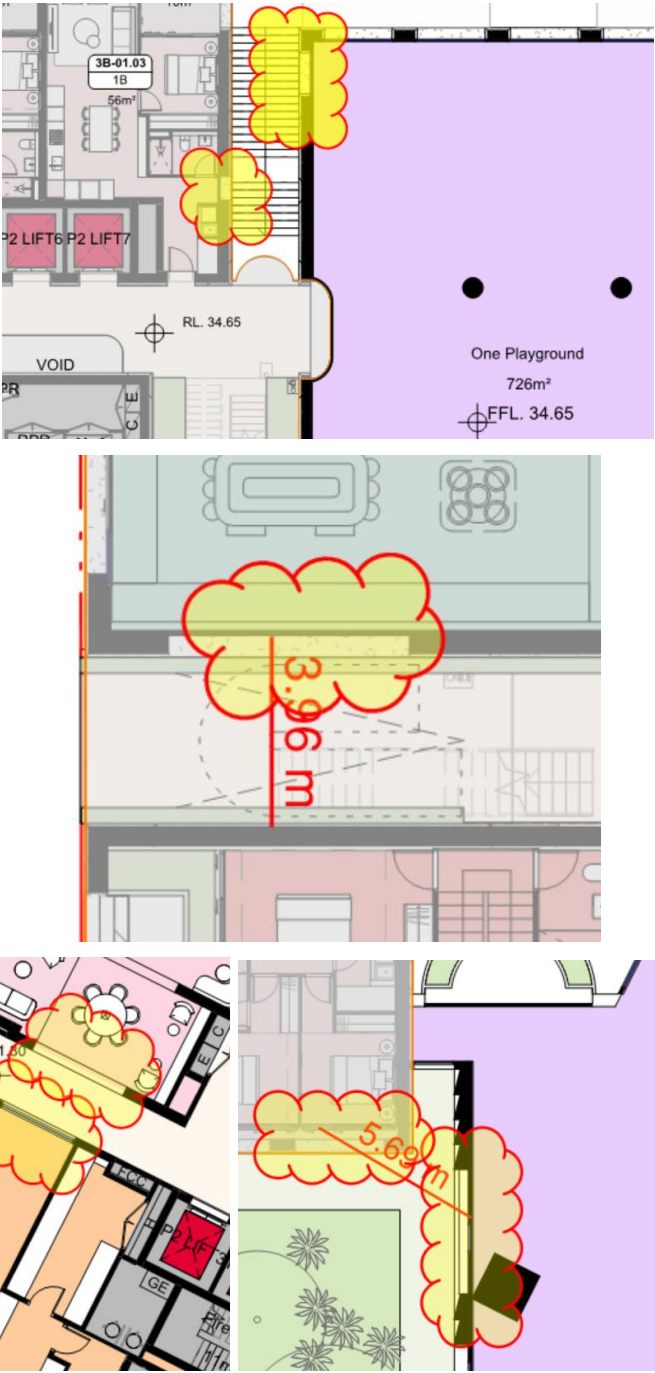
Deemed-to-Satisfy Provision to be addressed



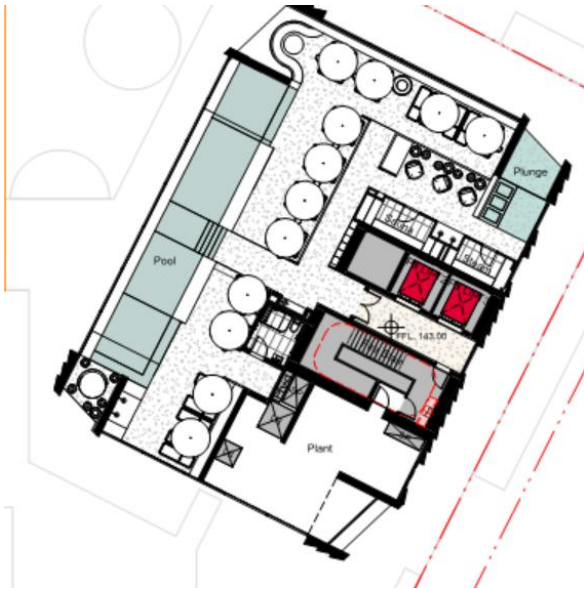
- There are numerous openings within 3m of boundaries that are noted as being dedicated as future roads. These roads will need to be dedicated as public roads or otherwise, the openings within 3m of these boundaries will need to be protected in accordance with Clause C4D5 or addressed by way of a Performance Solution by the fire engineer at CC stage. Examples of the openings within to potentially be protected are clouded in yellow below.



Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification

BCA Clause	Deemed-to-Satisfy Provision to be addressed
C4D4 Separation of external walls and associated openings in different fire compartments [2019: C3.3]	Openings in external walls to different fire compartments separated by a fire wall are to be protected in accordance with this clause or addressed by way of a Performance Solution by the fire engineer at CC stage. Examples of openings to comply with the clause are highlighted in yellow below.  Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S5C8 Enclosure of shafts [2019: Spec C1.1: 2.7]	It is assumed the base of the garbage shafts/chutes will not be fire rated. It is assumed the garbage rooms will be fire separated in lieu of the base of the shaft (examples coloured in green below). This is to be addressed by way of a Performance Solution by the fire engineer at CC stage.

BCA Clause	Deemed-to-Satisfy Provision to be addressed
	Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S5C11 Type A fire-resisting construction — Fire-resistance of building elements [2019: Spec C1.1: 3.1 and Table 3]	- The architect/ structural engineer are to confirm if the brickwork to the external façade of the building will be supported by shelf-angles not providing the structural adequacy, integrity and insulation rating for the external wall. Where the FRL is omitted, this will need to be addressed by way of a Performance Solution by the fire engineer at CC stage. - Any cavities provided within the external wall compromising horizontal and vertical fire separation and not fire stopped with a tested system is to be addressed by way of a Performance Solution by the fire engineer at CC stage. Junction details to be provided at CC stage. - The fire engineer is to address by way of a Performance Solution at CC stage setbacks proposed within internal wet areas reducing the thickness of the slab and FRL achieved by the slab. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
NSW D2D3 Number of exits required [2019: D1.2]	The following areas are not provided with a second exit: Loading dock and waste areas on the ground floor of Building 3A

BCA Clause	Deemed-to-Satisfy Provision to be addressed
	- Building 2A – level 01 to level 6;  - Building 3A – level 33.  This is to be addressed by way of a Performance Solution by the fire engineer at CC stage. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D2D5 Exit travel distances [2019: D1.4]	The following areas provide extended distance of travel to a point of choice to an exit or extended distance to an exit: Basement 02 – Up to 25m to a point of choice and up to 48m to an exit;

BCA Clause	Deemed-to-Satisfy Provision to be addressed
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The diagram shows a complex floor plan for Basement 02 (Parcel 3). It includes several rooms such as Food/Organic Waste, Chute Discharge, Electrical MCB, and various storage areas. Key dimensions and annotations include:

- Distances between alternate exits: 84.3m, 104m.
- Points of choice: Up to 25m to a point of choice, Up to 31m of choice, Up to 48m to an exit.
- Other dimensions: 10.75 sq m, 38.24 sq m, 25 sq m, 24.660.53 mm, 9.853.54 mm, 1.000.55 mm, 21.97 sq m, 16.2 sq m, 24.660.53 mm, 9.853.54 mm, 1.000.55 mm.

- Basement 02 (Parcel 3) – Up to 36.3m to a point of choice and up to 61.1m to an exit from the furthest point within the Resi waste room;

The diagram shows a complex floor plan for Basement 01. It includes several rooms such as CP Supply, CP Ex, CWD, and various storage areas. Key dimensions and annotations include:

- Distances between alternate exits: 31.100.09 mm, 2.784.48 sq m, 75.01 sq m, 24.660.53 mm, 9.853.54 mm, 1.000.55 mm.
- Points of choice: Up to 31m to a point of choice, Up to 36.3m to a point of choice from the furthest point within the resi waste room and 61.1m to an exit.

- Basement 01 – Up to 32.4m to a point of choice in lieu of 20m from the furthest point within the CP Supply room;

The diagram shows a complex floor plan for Basement 01. It includes several rooms such as CS, Parking/Storage, CP Supply, WASTE RISERS, STORAGE, COLD WATER PUMP, and various storage areas. Key dimensions and annotations include:

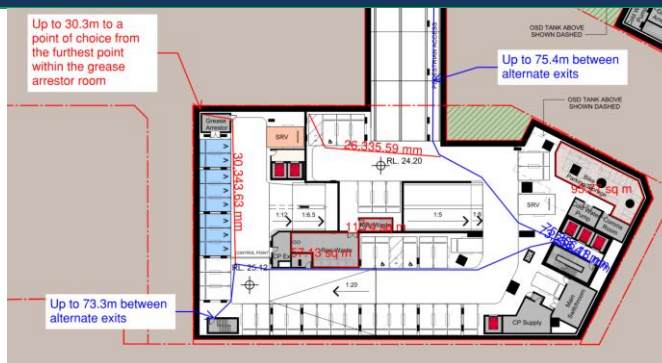
- Distances between alternate exits: 32.390.01 mm, 1.12, 1.65, 1.4, 1.12.
- Points of choice: Up to 32.4m to a point of choice in lieu of 20m from the furthest point within the grease arrestor room.

- Basement 01 – Up to 32.4m to a point of choice in lieu of 20m from the furthest point within the grease arrestor room;

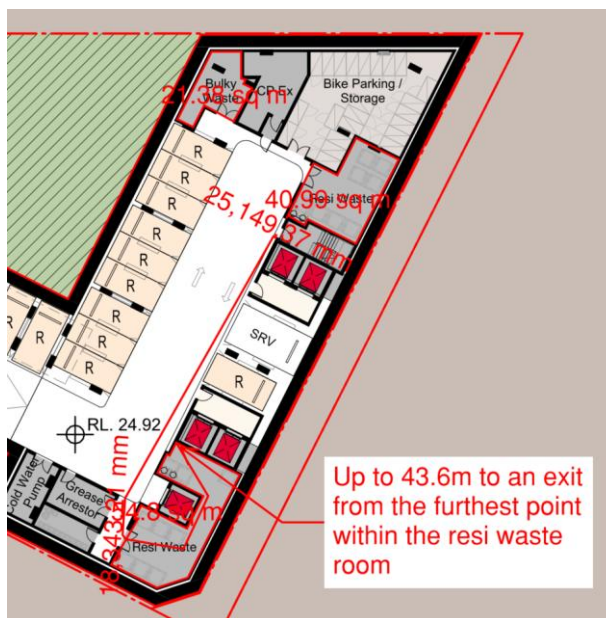


BCA Clause

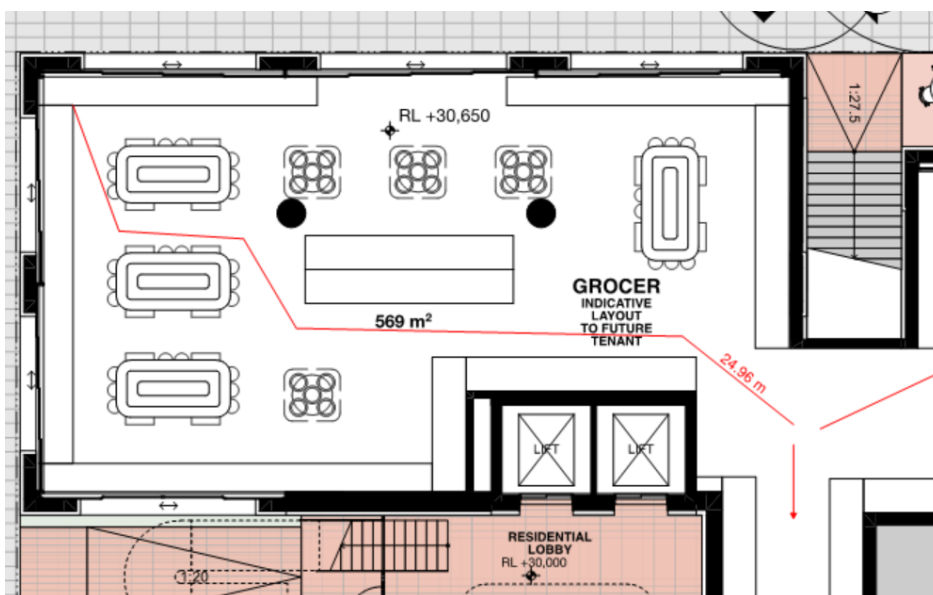
Deemed-to-Satisfy Provision to be addressed



- Basement 01 – Up to 43.6m to an exit in lieu of 40m from the furthest point within the Resi waste room;



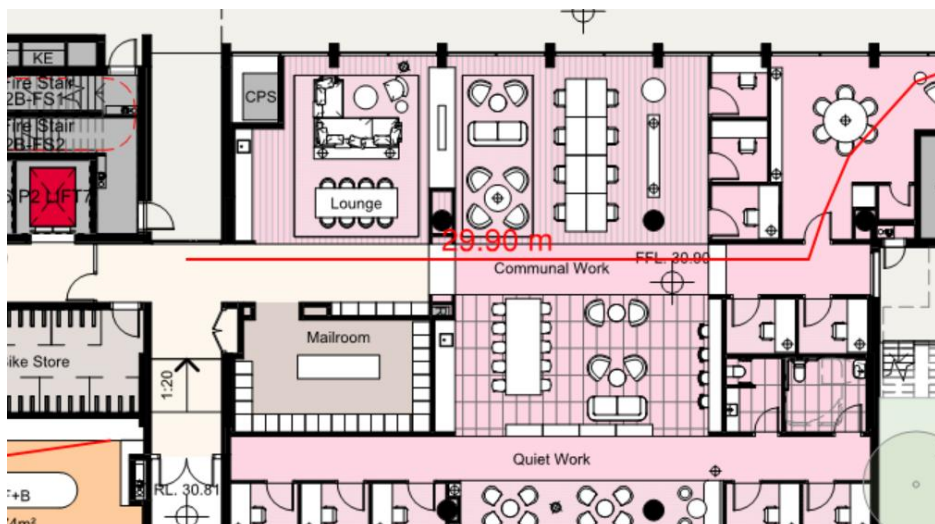
- Ground floor retail tenancy (Building 3B) – 25m to a point of choice to 2 exits in lieu of 20m;



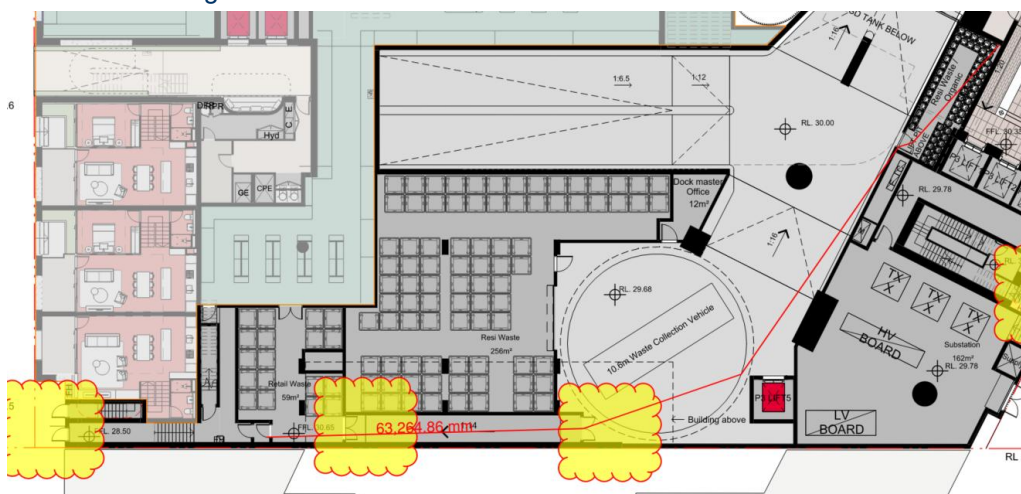
- Ground floor communal work area (Building 2B) – 30m to a point of choice to 2 exits in lieu of 20m;

BCA Clause

Deemed-to-Satisfy Provision to be addressed



- Ground floor (Building 3A) – 63.3m from the furthest point within the resi waste/organic room to exit in lieu of 20m



- Level 01 to level 03 (Building 2B) – Up to 11m to a point of choice to 2 exits in lieu of 6m;

BCA Clause

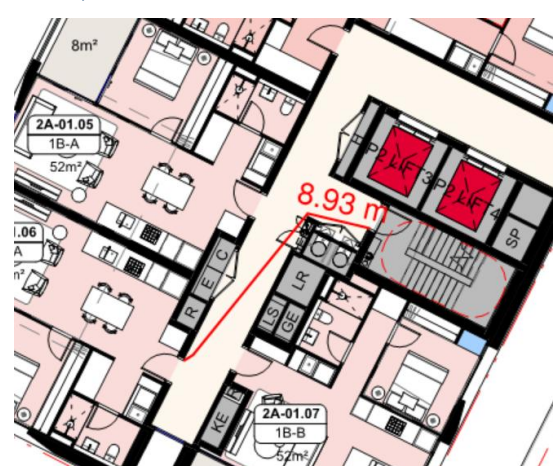
Deemed-to-Satisfy Provision to be addressed

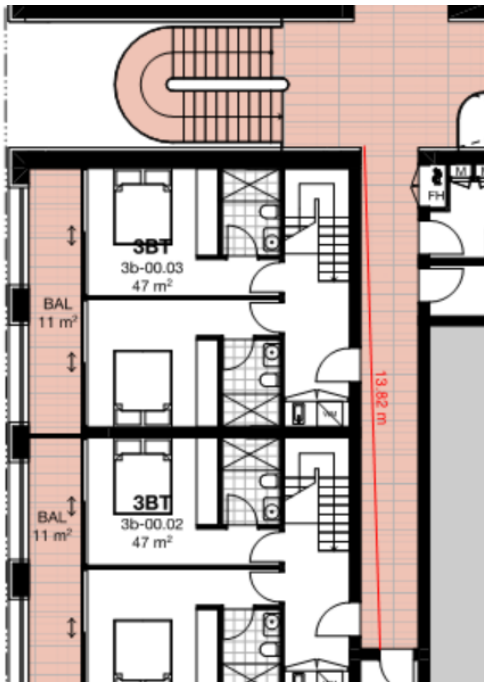
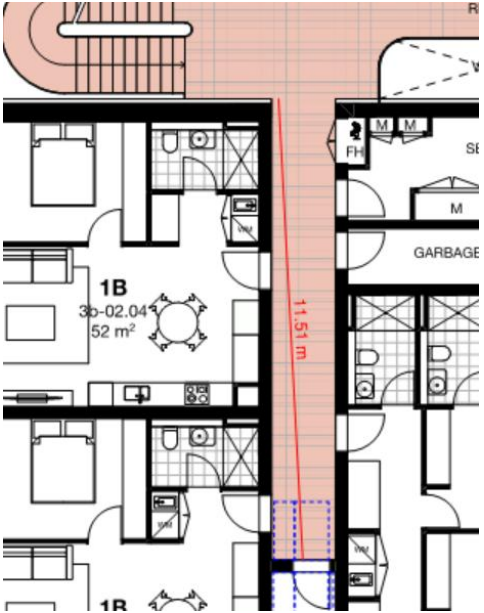


- Level 04 to level 07 and level 08 to level 13 (Building 2B) – Up to 6.7m to a point of choice to 2 exits in lieu of 6m;



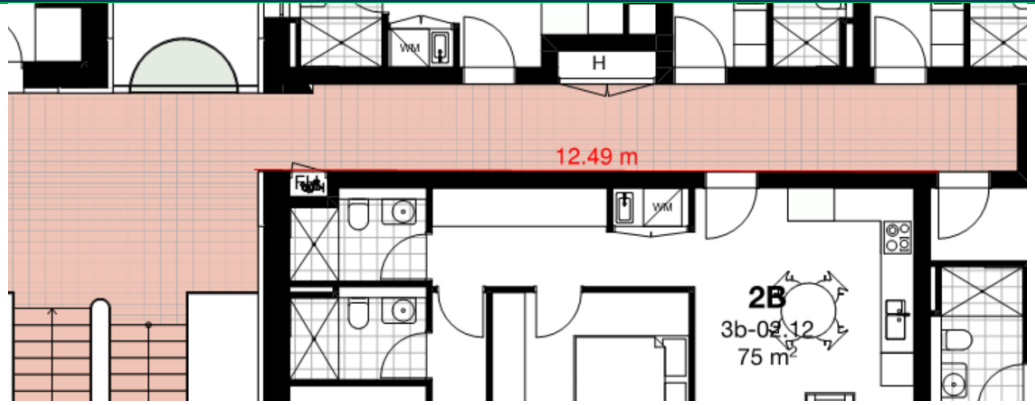
- Level 01 to level 6 (Building 2A) – Up to 9m and 10.5m to an exit in lieu of 6m from the doorway to the furthest unit;



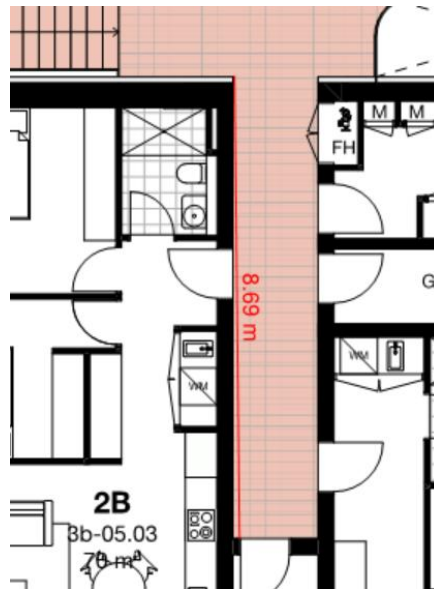
BCA Clause	Deemed-to-Satisfy Provision to be addressed
	- Level 01 (Building 3B) – Up to 13.8m to a point of choice to 2 exits in lieu of 6m;  - Level 02 to level 04 (Building 3B) – Up to 11.5m and 12.5m to a point of choice to 2 exits in lieu of 6m; 

BCA Clause

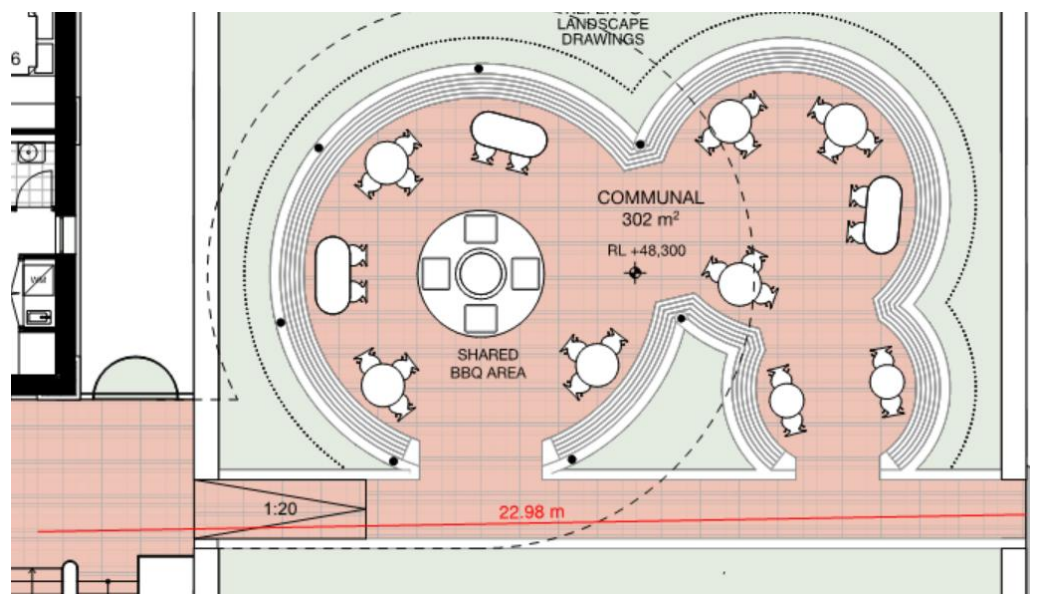
Deemed-to-Satisfy Provision to be addressed



- Level 05 to level 06 (Building 3B) – Up to 8.7m to a point of choice to 2 exits in lieu of 6m;



- Level 05 (Building 3B) – 23m to a point of choice to 2 exits in lieu of 20m from communal area;



BCA Clause

Deemed-to-Satisfy Provision to be addressed

- Level 03 and 04 (Building 3A) – Up to 6.4m to a point of choice to 2 exits in lieu of 6m;

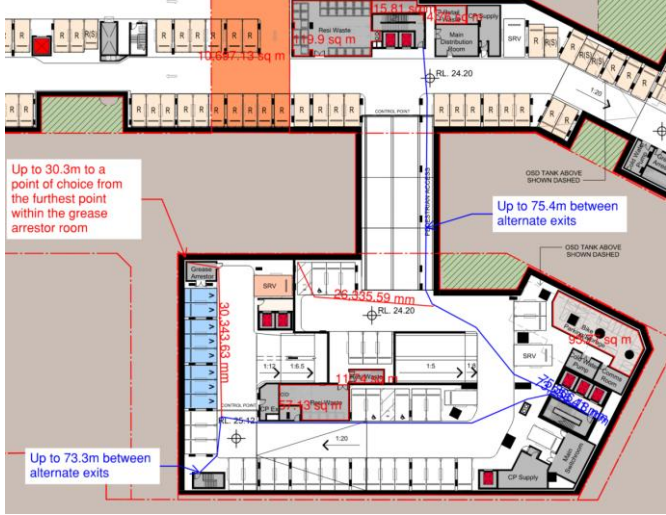
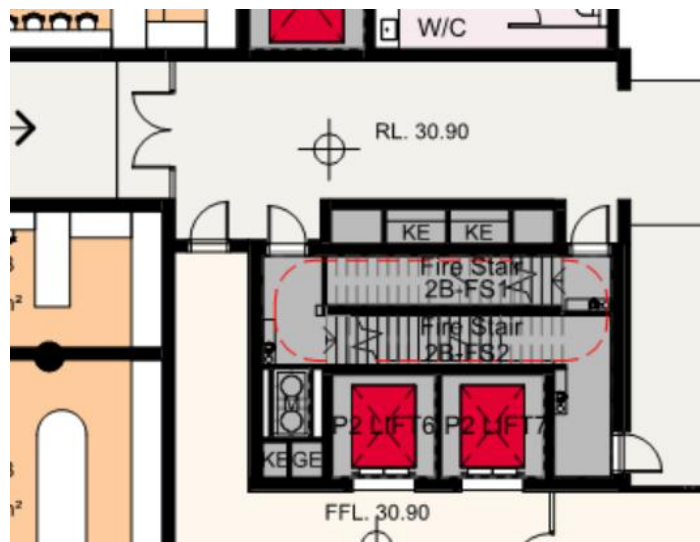


- Level 06 (Building 3A) – Up to 34.3m from the furthest point on the external balcony of the communal area in lieu of 20m;



This is to be addressed by way of a Performance Solution by the fire engineer at CC stage.

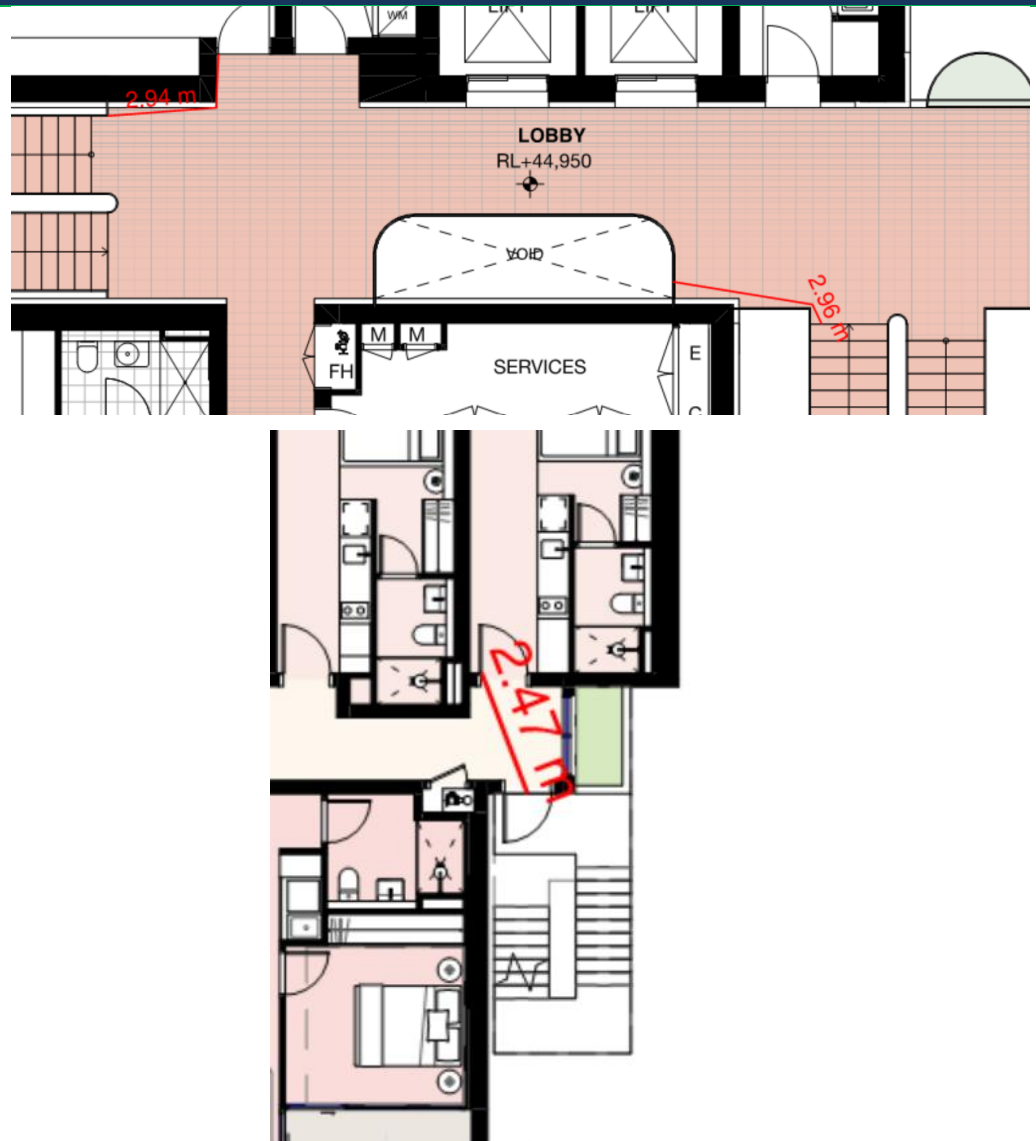
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BCA Clause	Deemed-to-Satisfy Provision to be addressed
	 This is to be addressed by way of a Performance Solution by the fire engineer at CC stage.
D2D12 Travel via fire-isolated exits [2019: D1.7]	The fire-isolated stairways serving the upper levels of Building 2B discharge internally into an area that is not open for at least 2/3rds of its perimeter.  Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D2D13 External stairways or ramps in lieu of fire-isolated exits [2019: D1.8]	- External stairways in lieu of fire-isolated stairways are proposed to Buildings 2B & 3B. Both buildings provide an effective height greater than 25m and as such, external stairways in lieu of fire-isolated stairways are not permitted. Discussions to be held with the fire engineer to determine if this can be addressed by way of a Performance Solution. - The atrium provides an opening within 3m of the external stairway which is not permitted. - Door openings to the units are located within 3m of the external stairways contrary to Clause D2D13(3)(a)(ii).

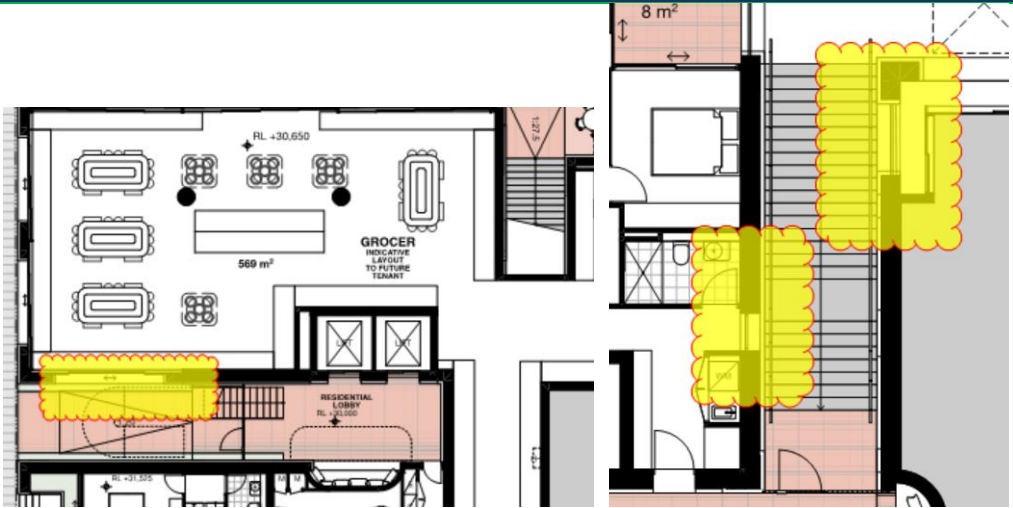
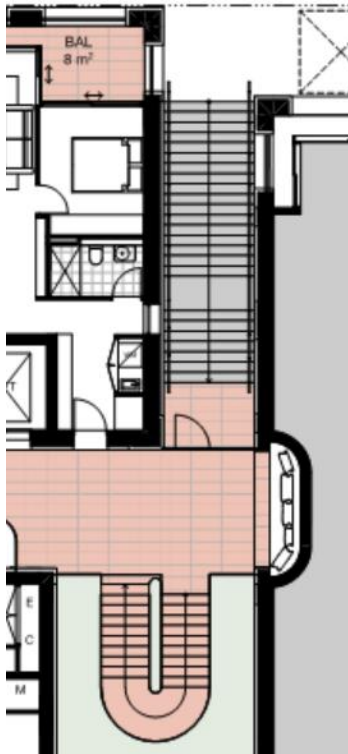


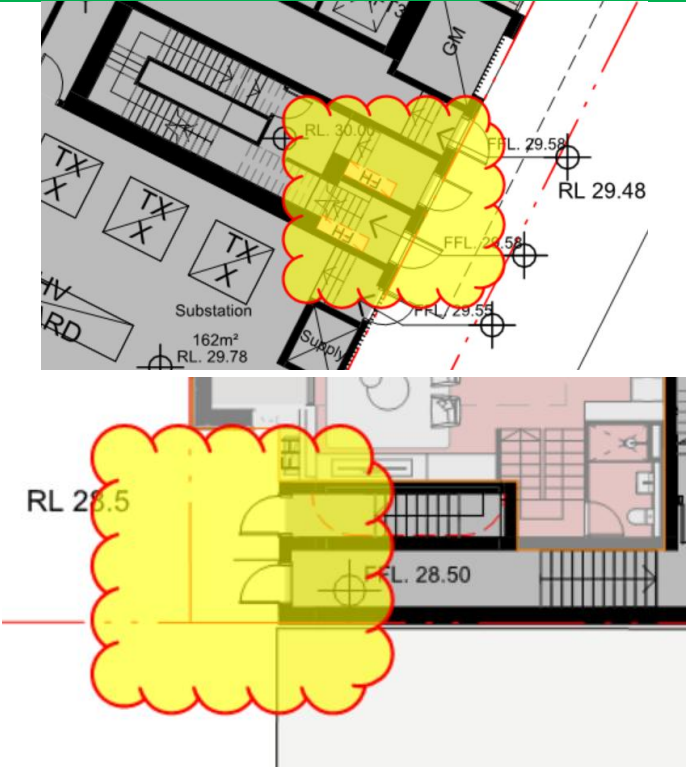
BCA Clause

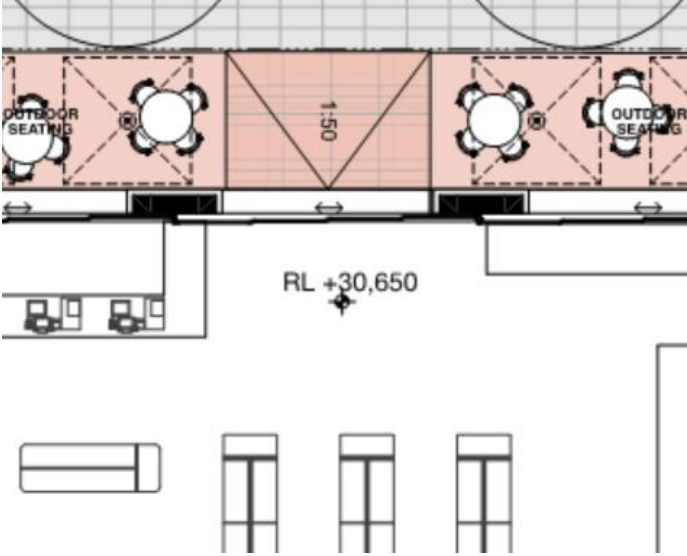
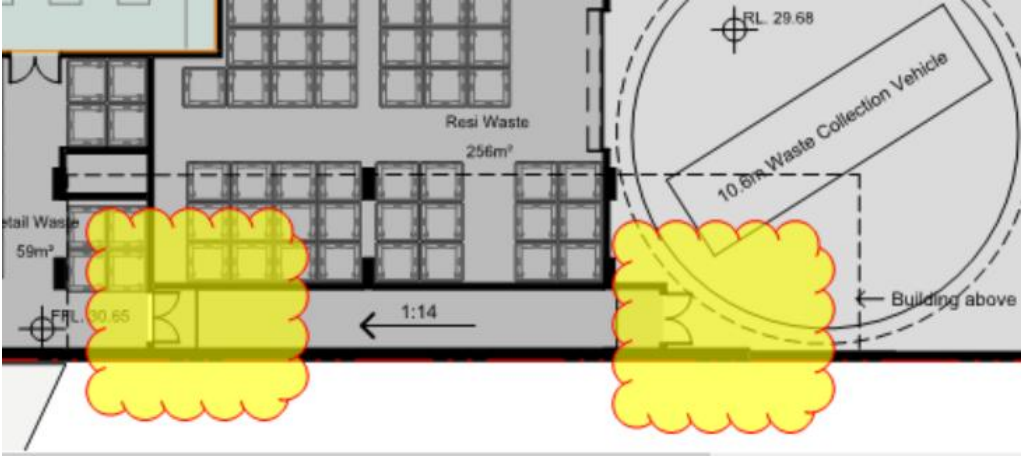
Deemed-to-Satisfy Provision to be addressed



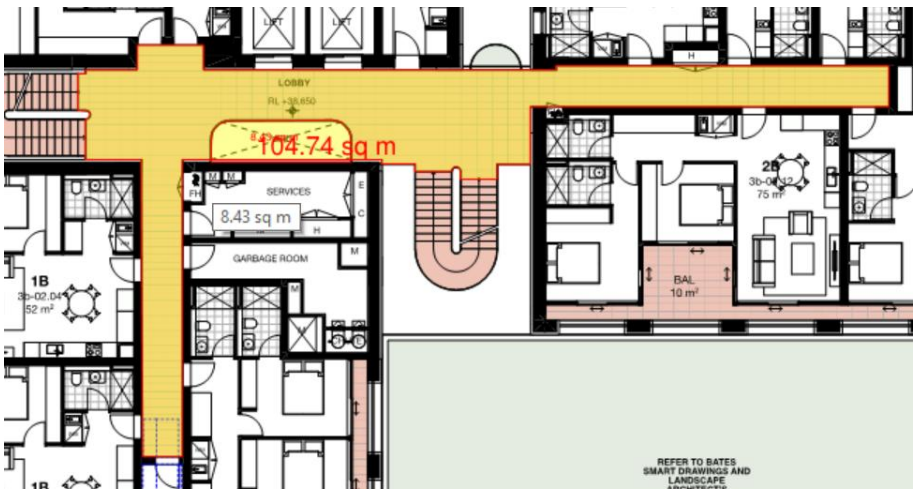
- The external non-fire-isolated stairways serving in lieu of fire-isolated discharge into a covered area on level 1 and then use a separate non-fire-isolated stairway to discharge to the street at ground level and requires occupants to pass by openings in the external wall. Discussions to be held with the fire engineer to determine if this can be addressed by way of a Performance Solution.

BCA Clause	Deemed-to-Satisfy Provision to be addressed
	 Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D2D14 Travel by non-fire-isolated stairways or ramps [2019: D1.9]	Continuous means of travel by its own flights and landings has not been provided to the external stairway serving Building 3B.  This is to be addressed by way of a Performance Solution by the fire engineer at CC stage. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
NSW D2D15 Discharge from exits [2019: D1.10]	- It should be noted, egress from the buildings relies upon the dedication of land for the purpose of public roads. The land identified as future roads and through site link is required to be dedicated as such prior to the issuance of an OC or discussions to be held with the fire engineer at CC stage. - The fire-isolated stairways serving Building 3A and 3B discharge at ground floor level but are not as far apart as practical.

BCA Clause	Deemed-to-Satisfy Provision to be addressed
	 Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D3D13 Roof as open space [2019: D2.12]	Openings within the slab between basement level 01 and ground floor are located within 3m of the path of travel to a road or open space from the fire-isolated stairways is to be addressed by way of a Performance Solution by the fire engineer at CC stage. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
NSW D3D24 Doorways and doors [2019: D2.19]	Automatic sliding door serving entry serving ground floor retail tenancy is 3B must comply with below provisions. - 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 if it leads directly to a road or open space it must open automatically if there is a power failure to the door or on the activation of a fire or smoke alarm anywhere in the fire compartment served by the door; and - 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

BCA Clause	Deemed-to-Satisfy Provision to be addressed
	 <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
D3D25 Swinging doors [2019: D2.20]	The doorways clouded in yellow below do not swing in the direction of egress: <u>Ground floor</u>   <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>

BCA Clause	Deemed-to-Satisfy Provision to be addressed
E1D2 Fire hydrants [2019: E1.3]	- The location of the fire hydrant pumproom is to be detailed on the drawings to determine compliance with Clause 6.11 of AS 2419.1-2021. - The location of the fire hydrant booster assembly is to be detailed on the drawings to determine compliance with Clause 7.3 of AS 2419.1-2021. It should be noted where a single booster assembly is detailed to serve multiple buildings, the fire engineer will be required to address the non-compliance of the booster assembly being more than 20m from the main pedestrian entrance of each building (Clause 7.3.1(c)(ii)). - The buildings are required to be provided with a ring main in accordance with Clause 8.6.1 and 8.6.2 of AS 2419.1-2021. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification. Relevant fire safety systems are required to be designed and endorsed by an accredited practitioner (fire safety) in accordance with Section 22 of the EP&A (DC&FS) Regulation 2021.
E1D3 Fire hose reels [2019: E1.4]	Fire hose reels omitted from fire or smoke separated rooms is to be addressed by way of a Performance Solution by the fire engineer at CC stage. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification. Relevant fire safety systems are required to be designed and endorsed by an accredited practitioner (fire safety) in accordance with Section 22 of the EP&A (DC&FS) Regulation 2021.
E1D15 Fire control centres [2019: E1.8]	The location of the fire control centre is to be detailed on the drawings at CC stage to determine compliance. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
E1D17 Provision for special hazards [2019: E1.10] & E2D21 Provision for special hazards [2019: E2.3]	Electric Vehicle (EV) charging stations are deemed to be a special hazard and will require assessment by a suitably qualified fire engineer against this clause. This is to be included in the Fire Engineering Report prepared by the fire engineer at CC stage.
E2D4 Fire-isolated exits [2019: Table E2.2a]	Each of the fire-isolated stairways serving the above ground levels in each of the buildings are to be provided with stair pressurisation unless addressed by way of a Performance Solution by the fire engineer at CC stage. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F4D4 Facilities in Class 3 to 9 buildings [2019: F2.3]	Sanitary facilities have not been detailed within each of the retail and gym tenancies within the buildings. Either individual sanitary facilities are to be detailed within each of the tenancies or a bank of sanitary facilities are to be detailed within the building at CC stage. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
G3D1 Application of Part [2019: G3.1]	AED have carried out an assessment of the void that connects ground floor to level 8 (the roof). The void in isolation is shown to connect more than 2 storeys and is detailed as not being covered by a roof or floor. However, part (b) of the definition (see below), requires all areas not separated by an appropriate barrier to fire to be included in the area that is considered enclosed under part (d) of the definition.

BCA Clause	Deemed-to-Satisfy Provision to be addressed
	The areas to be included in the total roof area are highlighted in yellow below.  The combined area of the void and adjacent covered areas that are not separated from the remainder of the building by an appropriate fire barrier is approximately 104m². The area of the void that is open to the sky is 8.43m² which accounts for 8% of the total area. As such, the area that is open is less than 50% of the total area. The void is considered an atrium and required to comply with the requirements under Part G3 of the BCA. Atrium: A space within a building that connects 2 or more storeys and— (a) is enclosed at the top by a floor or roof (including a glazed roof structure); and (b) <u>includes any adjacent part of the building not separated by an appropriate barrier to fire; but</u> (c) does not include a stairwell, rampwell or the space within a shaft; and (d) <u>for the purposes of (a) a space is considered enclosed if the area of the enclosing floor or roof is greater than 50% of the area of the space, measured in plan, of any of the storeys connected by the space.</u> Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
G3D2 Dimensions of atrium well [2019: G3.2]	The atrium well does not provide a width of 6m diameter throughout. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
G3D3 Separation of atrium by bounding walls [2019: G3.3]	An atrium must be separated from the remainder of the building at each storey by bounding walls set back not more than 3.5 m from the perimeter of the atrium well except in the case of the walls at not more than 3 consecutive storeys if— (a) one of those storeys is at a level at which direct egress to a road or open space is provided; and (b) the sum of the floor areas of those storeys that are contained within the atrium is not more than the maximum area that is permitted in Table C3D3. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
G3D8 Fire and smoke control systems [2019: G3.8]	Sprinkler systems, smoke control, fire detection and alarm systems, and emergency warning and intercom systems must be installed in compliance with Specification 31. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification

2.0 INTRODUCTION

This Building Code of Australia (BCA 2022, Amendment 2) assessment report has been prepared by AE&D on behalf of Waterloo Property Pty Ltd as trustee for the Waterloo Property Unit Trust (the Applicant) in support of a Housing Delivery Authority (HDA) nominated State Significant Development Application (SSDA) for a proposed mixed-use development at 881-885 Bourke Street, Waterloo, with concurrent rezoning (SSD-80441462). The report is submitted to the NSW Department of Planning, Housing, and Infrastructure (DPHI).

This application is preceded by a separate SSDA for Early Works that prepare the Site for the proposed development (SSD-80911502).

Specifically, consent is sought for the following Main Works for the Waterloo Mixed Use Development:

- Site establishment and enabling works (that were not included in the preceding Early Works SSDA);
- Construction of residential and mixed-use buildings across four development parcels, inclusive of;
 - build to rent apartments and associated amenities;
 - affordable apartments;
 - non residential floor space including commercial premises and creative industry;
- Construction of a consolidated basement with below-ground links between development parcels, comprising car parking, plant and storage area;
- Landscaping and publicly accessible open space;
- Works to site frontages; and
- Extension and augmentation of infrastructure and services (that were not included in the preceding early Works SSDA) as required.

Development on the site was declared State Significant Development (SSD) pursuant to State Significant Declaration Order 2025 (Order) dated 17 February 2025. The Order declares development specified in EOI application 229420 dated 8 January 2025, including development for the purposes of mixed-use development (Build to Rent including affordable housing) with ground floor non-residential uses at 881-885 Bourke Street, as identified in Schedule 3, is SSD.

On 5 March 2025, the Department of Planning, Housing and Infrastructure (the Department) issued SEARs and concurrent rezoning requirements for the project.

The site is subject to an existing Voluntary Planning Agreement (VPA) that sets out dedication of public domain between four development parcels. The public domain includes a new east-west street, a through site link and public open space area (comprising future shared zones and park). The development parcels and public domain as set out in the VPA will be delivered notwithstanding the works proposed in this SSDA.

This report has been prepared to provide a BCA assessment of the proposed works against the current BCA, BCA 2022, Amendment 2. This report assesses Parcels 2 & 3.

This report provides a BCA assessment table in Section 4.0 that summarises the identified non-compliance matters and offers specific recommendations.

2.1 Basis of Report

The key basis of this report is to address compliance with the Building Code of Australia (BCA) 2022, Amendment 2. The scope of services is limited to Sections C – “Fire Resistance”, Section D – “Access & Egress”, Section E – “Services & Equipment”, Section F “Health and Amenity”, Section G “Ancillary Provisions” and Section I “Special use Buildings”

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

- Architectural plans prepared by Bates Smart.
- Architectural plans prepared by Chenchow Little.
- Architectural plans prepared by SJB.

- The Building Code of Australia 2022, Amendment 2, prepared by the Australian Building Codes Board.
- The Guide to the BCA 2019 Amendment 1, prepared by the Australian Building Codes Board.

2.2 Purpose of the Report

The purpose of this report is to assess the following:

- Assessment under the current Building Code of Australia 2022, Amendment 2 and list any departures from the BCA 2022, Amendment 2.
- Provide recommendations to address identified non-compliances, and/or identify potential performance solutions.

2.3 Limitations of the Report

This report does not assess the following:

- Structural Provisions of the BCA (Section B) have not been considered. A suitably qualified Structural Engineer should be engaged to determine compliance.
- Accessibility Provisions of the BCA (BCA Part D4, BCA Clause E3D7-E3D8 (inclusive), F4D5-F4D7 (inclusive) and F4D12) have not been considered. A suitably qualified Access Consultant should be engaged to determine compliance.
- Accessibility Provisions of the BCA have been assessed however compliance with Disability Discrimination Act 1992 (DDA) is outside the scope of this report. It should be noted that BCA compliance does not necessarily meet the requirements of the Disability Discrimination Act (DDA).
- Energy Efficiency Provisions of the BCA (Section J) have not been considered. A suitably qualified Energy Consultant should be engaged to determine compliance.
- Sections H & I of the BCA have not been considered as part of this assessment.
- Reporting on hazardous materials, WHS matters, or site contamination.
- Assessment of any structural elements or geotechnical matters relating to the building, including any structural or other assessment of the existing fire-resistant levels of the building.
- Consideration of any fire services operations (including hydraulic, electrical, or other systems).
- Assessment of plumbing and drainage installations, including stormwater.
- Assessment of mechanical plant operations, electrical systems, or security systems.
- Heritage significance.
- Consideration of energy or water authority requirements.
- Consideration of Council's local planning policies.
- Environmental or planning issues.
- Requirements of statutory authorities.
- Pest inspection or assessment building damage caused by pests (general/visual pest invasion or damage will be reported, however invasive or intrusive inspections have not been carried out).
- Provision of any construction approvals or certification under Part 6 of the Environmental Planning & Assessment Act 1979.
- Glazing, shading, lighting calculations and the like required by Section J of the BCA have not been carried out.
- BCA 2022, Amendment 2 does not directly specify slip-resistance classification(s) for all *accessible paths of travel*; however, we highlight the need under AS 1428.1-2009 for all *accessible paths of travel* to have a slip-resistant surface. We recommend you should seek surface finish advice from an independent specialist slip safety consultant.



3.0 BCA ASSESSMENT DATA

The following data is provided in respect to review of the building under the Building Code of Australia 2022, Amendment 2 in respect to the compliance assessment of the Main Works for Waterloo Mixed Use Development (HDA) - SSD-80441462, to be located at 881-885 Bourke Street, Waterloo – Parcel 2 (Buildings 2a & 2B) AND Parcel 2 (Buildings 3a & 3b). This report assesses Parcels 2 & 3.

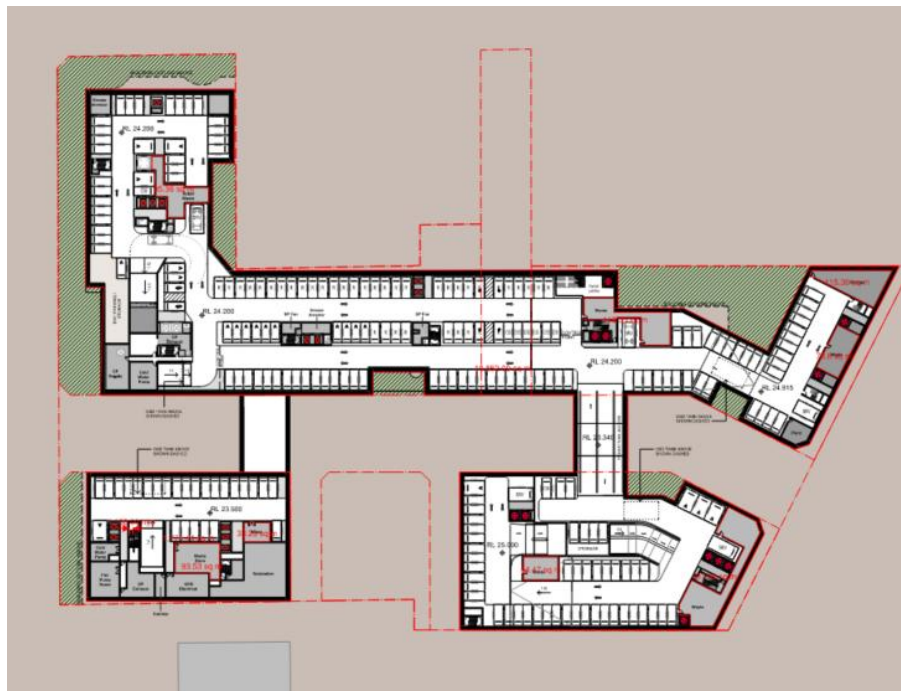
BCA Building Classifications:	Storey	Classification
	Basement 01	Class 7a (Carpark) Class 7b areas (storage) <10% of the floor area of the storey <10% storage is subject to further assessment once overall basement plans provided
	Basement 02	Class 7a (Carpark) Class 7b areas (storage) <10% of the floor area of the storey <10% storage is subject to further assessment once overall basement plans provided
Building 2A	Level 00	Class 9b (residential amenities – residents lounge and private dining rooms), class 6 (Retail) & Class 7b (Bike storage- >10% of the floor area of the storey ~ 18.42%)
	Level 1 to 6	Class 2 (Residential)
Building 2B	Level 00	Class 6 (Retail), Class 7b (Bike storage- <10% & Class 9b (Assembly building) or Class 2 Amenities (classification to be confirmed by the certifier)
	Level 1 to 14	Class 2 (Residential)
Buildings 3A & 3B	Level 00	Class 2 (Residential), Class 6 (Retail) and Class 7b (Waste room and loading dock)
	Level 1 to 2	Class 2 (Residential) & Class 9b (Gym)
	Level 3 to 7	Class 2 (Residential) & Class 9b (Communal areas)
	Level 8 to 30	Class 2 (Residential)
	Level 31 to 32	Class 9b (Pool area and lounge bar) & Entertainment quarter



Building rise in storeys:	Building 2A	7 (level 6) (determined in accordance with C2D3 of the BCA).
	Building 2B	15 (level 14)
	Building 3A	33 (level 00 - level 33)
	Building 3B	8 (level 7)
Type of Construction:	Type A (determined in accordance with C2D2 of the BCA)	
Floor area:	Class 5 & 9b – 8,000m ² / 48,000m ³ Class 6 & 7 – 5,000m ² / 30,000m ³	
Effective Height (m):	Building 2A	20.9m (30.600-51.5)
	Building 2B	47.05m (30.500-77.55)
	Building 3A	106.67m (29.58-136.25)
	Building 3B	24.82m (29.58-54.4)
Climate Zone (Thermal Design)	5 (determined in accordance with ABCB Climate Map, Sept 2019)	

3.1 Assessment of Effective Height

The Precinct Plans prepared for Parcels 1 to 4 illustrate the 4 parcels as being connected at Basement level 1 (see below).



As such, the buildings are considered one united building and each building provides an effective height greater than 25m.

3.2 Location of Fire Source features

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

In this instance the following setbacks are determined in respect to the fire source features applicable to the building:

- North – <3m from the northern boundary
- South – <3m from the southern boundary
- East – > 6m from the far boundary to Bourke Street
- West – > 6m from the far boundary

3.3 Summary of Fire Services Required

Summarised below are the BCA Deemed-to-Satisfy fire services required for the building:

- A fire hydrant system must be provided to serve all parts of the building in accordance with BCA Clause E1D2 and AS 2419.1-2021.
- A fire hose reel system must be provided in accordance with BCA Clause E1D3 and AS 2441-2005.
- A sprinkler system must be provided throughout all parts of the building in accordance with BCA Part E1, BCA Specification 17 and BCA Specification 18, as applicable.
- Portable fire extinguishers must be provided in accordance with BCA Clause E1D14 and must be selected, located, and distributed in accordance with Sections 1, 2, 3 and 4 of AS 2444-2001.
- A fire control centre facility must be provided in accordance with BCA Clause E1D15 and BCA Specification 19.
- An automatic smoke and fire detection must be provided in accordance with BCA Part E2, BCA Specification 20, AS 1670.1-2018 and AS 3786-2014, as applicable.
- Automatic air pressurisation must be provided to fire isolated stairs serving residential & basement levels and the fire control room in accordance with BCA Part E2, BCA Specification 19 and AS 1668.1-2015.
- A zone smoke control system must be provided between vertically separated fire compartments in accordance with BCA Part E2 and 1668.1-2015.
- Mechanical ventilation must be provided to the basement carpark in accordance with BCA Clause E2D2, E2D4, AS 1668.1-2015 and AS 1668.2-2012, incorporating metal fans.
- Emergency lighting must be provided throughout the building in accordance with BCA Clause E4D2, E4D4 and AS 2293.1-2018.
- Exit signage must be provided throughout the building in accordance with BCA Clause E4D5, NSW E4D6, E4D8 and AS 2293.1-2018.
- An emergency warning and intercom system (EWIS) must be provided in accordance with BCA Clause E4D9, and AS 1670.4-2018.
- Signage must be provided to exits in accordance with BCA Clause D3D28 and Section 108 of the Environmental Planning & Assessment (Development Certification and Fire Safety) Regulation 2021.
- Emergency lifts must be provided in accordance with BCA Part E3, BCA Clause E3D5 and C3D11.
- Stretcher facility and fire service controls in the lift must be provided in accordance with BCA Clause E3D3.
- Service penetrations through building elements required to be fire-resisting must be provided with fire sealing in accordance with BCA Clause C4D15, Specification 13 and AS 1540.4-2014.
- 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 accordance with BCA Clause C4D16.
- Re-entry from fire-isolated exits must be provided in accordance with BCA Clause D3D27.
- In accordance with BCA Clause E2D3, an air-handling system which does not form part of a smoke hazard management system in accordance with clause E2D4 to E2D20 and which recycles air from one fire compartment to another fire compartment or operates in a manner that may unduly contribute to the spread of smoke from one fire compartment to another fire compartment, subject to E2D3(2), must be designed and installed—

- to operate as a smoke control system in accordance with AS 1668.1; or
- incorporate smoke dampers where the air-handling ducts penetrate any elements separating the fire compartments served and is arranged such that the air-handling system is shut down and the smoke dampers are activated to close automatically by smoke detectors complying with clause 7.5 of AS 1670.1.
- In accordance with BCA Clause NSW E2D16, a building or part of a building used as a Class 9b assembly building must be provided with automatic shutdown of any air-handling system (other than non-ducted individual room units with a capacity not more than 1000 L/s and miscellaneous exhaust air systems installed in accordance with Sections 5 and 6 of AS 1668.1) which does not form part of the smoke hazard management system, on the activation of—
 - smoke detectors installed complying with S20C6; and
 - any other installed fire detection and alarm system, including a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17.
- Fire walls must be provided in accordance with BCA Clause C3D8 and BCA Specifications 1, 5, and AS 1530.4-2014.
- Fire doors must be provided in accordance with BCA Clause C4D6, C4D9, BCA Specification 12 and AS 1905.1-2015.
- Fire dampers must be provided in accordance with BCA Clause C4D15, AS 1668.1-2015, AS 1682.1-2015 and AS 1682.2-2015.
- Fire shutters must be provided in accordance with BCA Specification 12, AS 1905.2-2005 and a tested prototype, as applicable.
- Fire windows must be provided in accordance with BCA Specification 12 and a tested prototype, as applicable.
- Smoke walls must be provided in accordance with BCA Clause C3D6, C3D15 and BCA Specification 11.
- Smoke doors must be provided in accordance with BCA Specification 11 and Specification 12.
- Fire-rated lift landing doors must be provided in accordance with BCA Clause C4D11 and AS 1735.11-1986.
- Sprinkler systems, smoke control, fire detection and alarm systems, and emergency warning and intercom systems must be installed in compliance with Specification 31, in accordance with G3D8. (Atrium)
- Atrium construction shall comply with the requirements of BCA G3D1. (Atrium)

3.4 Building subject to Design and Building Practitioners Act

The Design and Building Practitioners Act 2020 and Design and Building Practitioners Regulation 2021 (the DBP legislation) were established to raise the standards of building design and building work. This legislation applies to class 2 buildings or buildings with a class 2 part.

Design Practitioners (e.g. architects, engineers) have obligations in relation to preparing and declaring Regulated Designs under the DBP legislation. The obligations under the DBP legislation are in addition to design requirements under other legislation.

For more information, please go to:

[Design-Practitioners-Handbook-July 2023 Edition](#)
[Regulated Design Guidance Material August 2023](#)
[Building industry reforms | NSW Fair Trading](#)



4.0 BCA ASSESSMENT SUMMARY

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

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Section B Structure					
Part B1 Structural provisions					
B1D1 Deemed-to-Satisfy Provisions [2019: B1.0]			X		(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements B1P1 to B1P4 are satisfied by complying with B1D2 to B1D6. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.
B1D2 Resistance to actions [2019: B1.1]				X	The resistance of a building or structure must be greater than the most critical action effect resulting from different combinations of actions, where— (a) the most critical action effect on a building or structure is determined in accordance with B1D3 and the general design procedures contained in AS/NZS 1170.0; and (b) the resistance of a building or structure is determined in accordance with B1D4. <i>Details demonstrating compliance with this clause must be incorporated into the Structural Engineering plans / specification</i>
B1D3 Determination of individual actions [2019: B1.2]				X	The magnitude of individual actions must be determined in accordance with the following: (a) Permanent actions: (i) the design or known dimensions of the building or structure; and (ii) the unit weight of the construction; and (iii) AS/NZS 1170.1; and (iv) for a Class 7b building, a notional additional permanent roof load of not less than 0.15 kPa to support the addition of solar photovoltaic panels. (b) Imposed actions: (i) the known loads that will be imposed during the occupation or use of the building or structure; and (ii) construction activity actions; and (iii) AS/NZS 1170.1. (c) Wind, snow and ice and earthquake actions: (i) the applicable annual probability of design event for safety, determined by— (A) assigning the building or structure an Importance Level in accordance with Table B1D3a; and (B) determining the corresponding annual probability of exceedance in accordance with Table B1D3b; and (ii) AS/NZS 1170.2; and (iii) AS/NZS 1170.3 as appropriate; and (iv) AS 1170.4; and





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(v) in cyclonic areas, metal roof cladding, its connections and immediate supporting members must comply with Specification 4; and (vi) for the purposes of (v), cyclonic areas are those determined as being located in wind regions C and D in accordance with AS/NZS 1170.2. (d) Actions not covered in (a), (b) and (c) above: (i) the nature of the action; and (ii) the nature of the building or structure; and (iii) the Importance Level of the building or structure determined in accordance with Table B1D3a; and (iv) AS/NZS 1170.1. (e) For the purposes of (d) the actions include but are not limited to— (i) liquid pressure action; and (ii) ground water action; and (iii) rainwater action (including ponding action); and (iv) earth pressure action; and (v) differential movement; and (vi) time dependent effects (including creep and shrinkage); and (vii) thermal effects; and (viii) ground movement caused by— (A) swelling, shrinkage or freezing of the subsoil; and (B) landslip or subsidence; and (C) siteworks associated with the building or structure; and (ix) construction activity actions. <i>Details demonstrating compliance with this clause must be incorporated into the Structural Engineering plans / specification</i>
B1D4 Determination of structural resistance of materials and forms of construction [2019: B1.4]				X	The structural resistance of materials and forms of construction must be determined in accordance with the following, as appropriate: (a) Masonry (including masonry-veneer, unreinforced masonry and reinforced masonry): AS 3700, except— (i) (for piers—isolated or engaged) is removed from Clause 8.5.1(d); and (ii) where Clause 8.5.1 requires design as for unreinforced masonry in accordance with Section 7, the member must also be designed as unreinforced masonry in accordance with Tables 10.3 and 4.1(a)(i)(C) of AS 3700. (b) Concrete: (i) Concrete construction (including reinforced and prestressed concrete): AS 3600. (ii) Autoclaved aerated concrete: AS 5146.1. (iii) Post-installed and cast-in fastenings: AS 5216. (c) Steel construction: (i) Steel structures: AS 4100. (ii) Cold-formed steel structures: AS/NZS 4600.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(iii) Residential and low-rise steel framing: NASH Standard – Residential and Low-Rise Steel Framing Part 1 or Part 2. (d) Composite steel and concrete: AS/NZS 2327. (e) Aluminium construction: AS/NZS 1664.1 or AS/NZS 1664.2. (f) Timber construction: (i) Design of timber structures: AS 1720.1. (ii) Timber structures: AS 1684.2, AS 1684.3 or AS 1684.4. (iii) Nailplated timber roof trusses: AS 1720.5. (g) Piling: AS 2159. (h) Glazed assemblies: (i) The following glazed assemblies in an external wall must comply with AS 2047: (A) Windows excluding those listed in (ii). (B) Sliding and swinging glazed doors with a frame, including french and bi-fold doors with a frame. (C) Adjustable louvres. (D) Shopfronts. (E) Window walls with one piece framing. (ii) All glazed assemblies not covered by (i) and the following glazed assemblies must comply with AS 1288: (A) All glazed assemblies not in an external wall. (B) Revolving doors. (C) Fixed louvres. (D) Skylights, roof lights and windows in other than the vertical plane. (E) Sliding and swinging doors without a frame. (F) Windows constructed on site and architectural one-off windows, which are not design tested in accordance with AS 2047. (G) Second-hand windows, re-used windows and recycled windows. (H) Heritage windows. (I) Glazing used in balustrades and sloping overhead glazing. (i) Termite Risk Management: Where a primary building element is subject to attack by subterranean termites: AS 3660.1, 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.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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 (C) where a chemical is used, its life expectancy as listed on the appropriate authority's pesticides register label; and (D) the installers or manufacturer's recommendations for the scope and frequency of future inspections for termite activity. (j) Roof construction (except in cyclonic areas): (i) Roof tiling: AS 2050. (ii) Cellulose cement corrugated sheets: AS/NZS 2908.1 with safety mesh installed in accordance with AS/NZS 1562.3 clause 2.4.3.2 except for sub-clause (g)(c)(vii) or plastic sheeting. (iii) Metal roofing: AS 1562.1. (k) Particleboard structural flooring: AS 1860.2. (l) Garage doors and other large access doors in openings not more than 3 m in height in external walls of buildings determined as being located in wind region C or D in accordance with AS/NZS 1170.2: AS/NZS 4505. (m) Lift shafts which are not required to have an FRL, must— (i) except as required by (ii), be completely enclosed with non-perforated material between the bottom of the pit and the ceiling of the lift shaft, other than— (A) at landing doors, emergency doors and pit access doors; and (B) low-rise, low-speed constant pressure lifts; and (C) small-sized, low-speed automatic lifts; and (ii) in atrium and observation areas, be protected with non-perforated material not less than 2.5 m in height— (A) above any places on which a person can stand, which are within 800 mm horizontal reach of any vertical moving lift component including ropes and counterweights; and (B) at the lowest level of the atrium area that the lift serves, on all sides except the door opening, for not less than 2.5 m in height, by enclosure with non-perforated material; and (iii) be of non-brittle material; and (iv) where glazing is used— (A) comply with Table B1D4; or (B) not fail the deflection criteria required by S6C6(c). Details demonstrating compliance with this clause must be incorporated into the Structural Engineering plans / specification





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
B1D5 Structural software [2019: B1.5]				X	(1) Structural software used in computer aided design of a building or structure, that uses design criteria based on the Deemed-to-Satisfy Provisions of the BCA, including its referenced documents, for the design of steel or timber trussed roof and floor systems and framed building systems, must comply with the ABCB Protocol for Structural Software. (2) Structural software referred to in (1) can only be used for buildings within the following geometric limits: (a) The distance from ground level to the underside of eaves must not exceed 6 m. (b) The distance from ground level to the highest point of the roof, neglecting chimneys, must not exceed 8.5 m. (c) The building width including roofed verandahs, excluding eaves, must not exceed 16 m. (d) The building length must not exceed five times the building width. (e) The roof pitch must not exceed 35 degrees. (3) The requirements of (1) do not apply to design software for individual frame members such as electronic tables similar to those provided in— (a) AS 1684; or (b) NASH Standard Residential and Low-Rise Steel Framing Part 2. Details demonstrating compliance with this clause must be incorporated into the Structural Engineering plans / specification
B1D6 Construction of buildings in flood hazard areas [2019: B1.6]				X	(1) A building in a flood hazard area must comply with the ABCB Standard for Construction of Buildings in Flood Hazard Areas. (2) The requirements of (1) only apply to a Class 2 or 3 building, Class 9a health-care building, Class 9c building or a Class 4 part of a building. Details demonstrating compliance with this clause must be incorporated into the Structural Engineering plans / specification
Specification 4 Design of buildings in cyclonic areas					
S4C1 Scope [2019: Spec B1.2: 1]			X		(1) This specification contains requirements for the design of buildings in cyclonic areas in addition to the requirements of AS/NZS 1170.2. (2) For the purposes of Specification 4, cyclonic areas are those determined as being located in wind regions C and D in accordance with AS/NZS 1170.2. Details demonstrating compliance with this clause must be incorporated into the Structural Engineering plans / specification
S4C2 Roof cladding [2019: Spec B1.2: 2]			X		Test for strength: Metal roof cladding, its connections and immediate supporting members must be capable of remaining in position notwithstanding any permanent distortion, fracture or damage that might occur in the sheet or fastenings under the pressure sequences A to G defined in Table S4C2. Details demonstrating compliance with this clause must be incorporated into the Structural Engineering plans / specification
Section C Fire resistance					
Part C2 Fire resistance and stability					
C2D1			X		Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements C1P1 to C1P9 are satisfied by complying with—





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Deemed-to-Satisfy Provisions [2019: C1.0]					(a) C2D2 to C2D14, C3D2 to C3D15 and C4D2 to C4D17; and (b) in a building containing an atrium, Part G3; and (c) for additional requirements for Class 9b buildings, Part I1; and (d) for farm sheds, Part I3.
C2D2 Type of construction required [2019: C1.1]				X	(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 (c) open spectator stands and indoor sports stadiums in C2D8 (2) Each building element must comply with Specification 5 as applicable. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
	Rise in storeys				Class of building 2, 5, 6, 7 and 9
	4 of more				A
C2D3 Calculation of rise in storeys [2019: C1.2]			X		(1) The rise in storeys is the sum of the greatest number of storeys at any part of the external walls of the building and any storeys within the roof space— (a) above the finished ground next to that part; or (b) if part of the external wall is on the boundary of the allotment, above the natural ground level at the relevant part of the boundary. (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. (3) In a Class 7 or 8 building, a storey that has an average internal height of more than 6 m is counted as— (a) one storey if it is the only storey above the ground; or (b) 2 storeys in any other case. (4) For the purposes of calculating the rise in storeys of a building— (a) a mezzanine is regarded as a storey in that part of the building in which it is situated if its floor area is more than 200 m2 or more than 1/3 of the floor area of the room, whichever is the lesser; and (b) two or more mezzanines are regarded as a storey in that part of the building in which they are situated if they are at or near the same level and have an aggregate floor area more than 200 m2 or more than 1/3 of the floor area of the room, whichever is the lesser.
C2D4 Buildings of multiple classification [2019: C1.3]			X		Not applicable.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
C2D5 Mixed types of construction [2019: C1.4]			X		Not applicable.
C2D6 Two storey Class 2, 3 or 9c buildings [2019: C1.5]			X		Not applicable.
C2D7 Class 4 parts of buildings [2019: C1.6]			X		Not applicable.
C2D8 Open spectator stands and indoor sports stadiums [2019: C1.7]			X		Not applicable.
C2D9 Lightweight construction [2019: C1.8]				X	<u>Design requirements</u> (1) Lightweight construction must comply with Specification 6 if it is used in a wall system— (a) that is required to have an FRL; or (b) for a lift shaft, stair shaft or service shaft or an external wall bounding a public corridor including a non-fire-isolated passageway or non-fire-isolated ramp, in a spectator stand, sports stadium, cinema or theatre, railway station, bus station or airport terminal. (2) If lightweight construction is used for the fire-resisting covering of a steel column or the like, and if— (a) the covering is not in continuous contact with the column, then the void must be filled solid, to a height of not less than 1.2 m above the floor to prevent indenting; and (b) the column is liable to be damaged from the movement of vehicles, materials, or equipment, then the covering must be protected by steel or other suitable material. <i>Lightweight construction:</i> Construction which incorporates or comprises— (a) sheet or board material, plaster, render, sprayed application, or other material similarly susceptible to damage by impact, pressure or abrasion; or (b) concrete and concrete products containing pumice, perlite, vermiculite, or other soft material similarly susceptible to damage by impact, pressure or abrasion; or (c) masonry having a width of less than 70 mm <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
C2D10 Non-combustible building elements [2019: C1.9]				X	(1) In a building required to be of Type A construction, the following building elements and their components must be non-combustible:





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(a) External walls and common walls, including all components incorporated in them including the facade covering, framing and insulation. (b) The flooring and floor framing of lift pits. (c) Non-loadbearing internal walls where they are required to be fire-resisting. (2) A shaft, being a lift, ventilating, pipe, garbage, or similar shaft that is not for the discharge of hot products of combustion, that is non-loadbearing, must be of non-combustible construction in— (a) a building required to be of Type A construction; and (b) a building required to be of Type B construction, subject to C3D11, in— (i) a Class 2, 3 or 9 building; and (ii) a Class 5, 6, 7 or 8 building if the shaft connects more than 2 storeys. (3) A loadbearing internal wall and a loadbearing fire wall, including those that are part of a loadbearing shafts, must comply with Specification 5. (4) The requirements of (1) and (2) do not apply to the following: (a) Gaskets. (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 wall 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. (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. (k) Joint trims and joint reinforcing tape and mesh of a width not greater than 50 mm. (l) Weather sealing materials, applied to gaps not wider than 50mm, 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.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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. (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 (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. <u>Compliance commentary</u>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					- Required for CC - Manufacturers specifications and Test Reports (detailing the AS 1530.1 test) are required for the following components: - External wall sarking (if any); - Insulation within external wall (if any); - Insulation within the internal walls required to be fire resisting; - External wall cladding (if any). - The use of waterproof membrane within planter boxes that are located against the external wall and extending more than 250mm above the ground level is to be addressed by way of a Performance Solution by the fire engineer. - The use of timber noggings within non-loadbearing internal walls is to be addressed by way of a Performance Solution by the fire engineer. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
NSW C2D11 Fire hazard properties [2019: C1.10 and NSW C1.10]				X	(1) The fire hazard properties of the following internal linings, materials and assemblies within a Class 2 to 9 building must comply with Specification 7: (a) Floor linings and floor coverings. (b) Wall linings and ceiling linings. (c) Air-handling ductwork. (d) Lift cars. (e) In Class 9b buildings used as— (i) an entertainment venue, a material used to cover closed back upholstered seats; and (ii) a public hall or the like, a proscenium curtain required by Specification 32. (f) Escalators, moving walkways and non-required non fire-isolated stairways or pedestrian ramps subject to Specification 14. (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 <i>required fire hazard property</i>, except in respect of a material referred to in NSW Specification 7, Table S7C4 and to which Notes 4 and 5 are applicable. (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





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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 (iv) each roof light is not more than 14 m² in area; and (v) the area of the roof lights per 70 m² of roof surface is not more than 14 m²; 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. <u>Compliance commentary</u> Required for CC - Manufacturers specifications and Test Reports (detailing the AS 1530.3 test) are required for all relevant materials. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
C2D12			X		Not applicable.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Performance of external walls in fire [2019: C1.11]					
C2D13 Fire-protected timber: Concession [2019: C1.13]			X		Not applicable.
C2D14 Ancillary elements [2019: C1.14]				X	An ancillary element must not be fixed, installed, attached to or supported by the concealed internal parts or external face of an external wall that is required to be non-combustible unless it is 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. A grate, grille or similar cover not more than 2 m² (d) in area associated with a building service. (e) An electrical switch, socket-outlet, cover plate or the like. (f) A light fitting. (g) A required sign. (h) A sign other than one provided under (a) or (g) that— (i) achieves a group number of 1 or 2; and (ii) does not extend beyond one storey; and (iii) does not extend beyond one fire compartment; and (iv) is separated vertically from other signs permitted under (h) by at least 2 storeys. (i) An awning, sunshade, canopy, blind or shading hood other than one provided under (a) that— (i) meets the relevant requirements of Table S7C7 as for an internal element; and (ii) serves a storey— (A) at ground level; or (B) immediately above a storey at ground level; and (iii) does not serve an exit, where it would render the exit unusable in a fire. (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).



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					<u>Compliance commentary</u> All components of the planter boxes attached to the external walls of the building are to contain non-combustible materials or to be addressed by way of a Performance Solution by the fire engineer at CC stage.  <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
C2D15 Fixing of bonded laminated cladding panels [New for 2022]				X	(1) In a building required to be of Type A or B construction, externally located bonded laminated cladding panels must have all layers of cladding mechanically supported or restrained to the supporting frame. (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. A component of a garage door. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
Part C3 Compartmentation and separation					
C3D1 Deemed-to-Satisfy Provisions [2019: C2.0]			X		(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements C1P1 to C1P9 are satisfied by complying with— (a) C2D2 to C2D14, C3D2 to C3D15 and C4D2 to C4D17; and (b) in a building containing an atrium, Part G3; and (c) or additional requirements for Class 9b buildings, Part I1; and (d) for farm sheds, Part I3. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.
C3D2 Application of Part			X		(1) C3D3, C3D4 and C3D5 do not apply to a carpark provided with a sprinkler system (other than a FPAA101D or FPAA101H system)



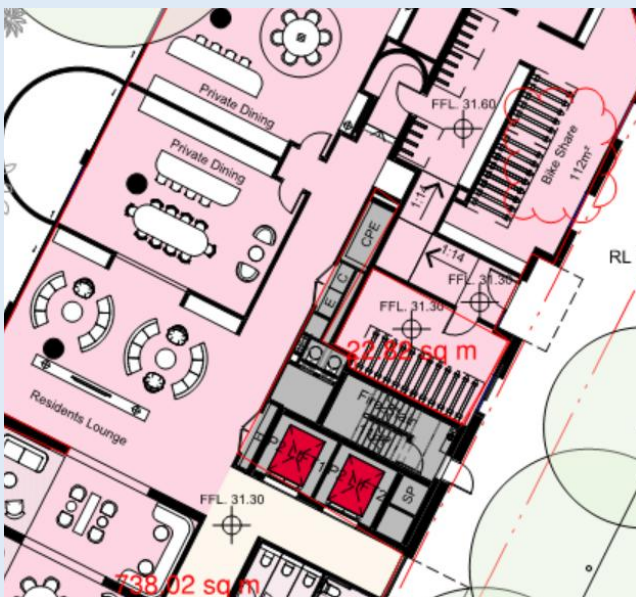
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS								
[2019: C2.1]					complying with Specification 17, an open-deck carpark or an open spectator stand. (2) C3D13(1)(e) does not apply to a Class 8 electricity network substation.								
C3D3 General floor area and volume limitations [2019: C2.2]	X				Complies.								
					<table><tr><th>Classification</th><th>Type A construction</th></tr><tr><td rowspan="2">5 and 9b</td><td>Max floor area—8 000m²</td></tr><tr><td>Max volume—48 000m³</td></tr><tr><td rowspan="2">6 or 7</td><td>Max floor area—5 000m²</td></tr><tr><td>Max volume—30 000m³</td></tr></table>	Classification	Type A construction	5 and 9b	Max floor area—8 000m ²	Max volume—48 000m ³	6 or 7	Max floor area—5 000m ²	Max volume—30 000m ³
Classification	Type A construction												
5 and 9b	Max floor area—8 000m ²												
	Max volume—48 000m ³												
6 or 7	Max floor area—5 000m ²												
	Max volume—30 000m ³												
C3D4 Large isolated buildings [2019 C2.3]			X		Not applicable.								
C3D5 Requirements for open spaces and vehicular access [2019: C2.4]			X		Not applicable.								
C3D6 Class 9 buildings [2019: C2.5]			X		Not applicable.								
C3D7 Vertical separation of openings in external walls [2019: C2.6]			X		Not applicable. The building is required to be protected with an AS 2118 sprinkler system throughout the building.								
C3D8 Separation by fire walls [2019: C2.7]				X	<u>Design requirements</u> (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, except where S5C19(3)(c)(i), S5C22(3)(c)(i) and S5C25(3)(c)(i) permit a lower FRL on the carpark side. (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, other than roof battens with dimensions of 75 mm x 50 mm or less or sarking- type material, must not pass through or cross the fire wall unless the required fire-resisting performance of the fire wall is maintained. (2) Separation of buildings — A part of a building separated from the remainder of the building by a fire wall may be treated as a separate								

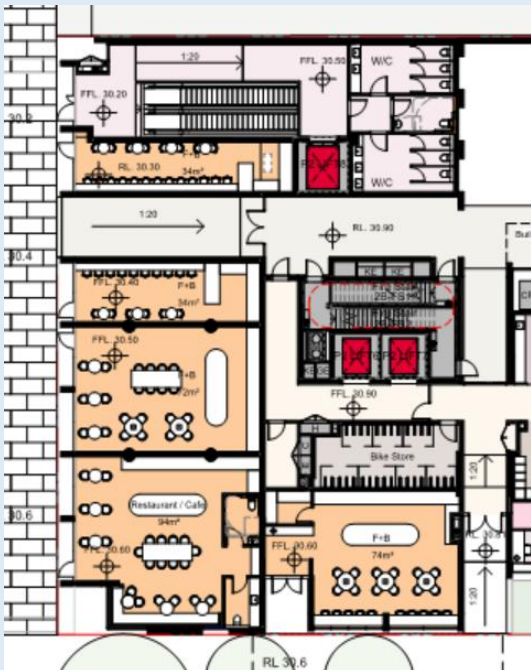
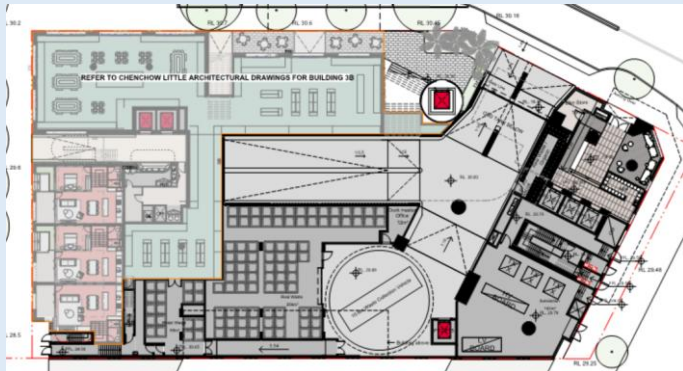




BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					building for the purposes of the Deemed-to-Satisfy Provisions of Sections C, D and E if it is constructed in accordance with (1) and the following: (a) The fire wall extends through all storeys and spaces in the nature of storeys that are common to that part and any adjoining part of the building. (b) The fire wall is carried through to the underside of the roof covering. (c) Where the roof of one of the adjoining parts is lower than the roof of the other part, the fire wall extends to the underside of— (i) the covering of the higher roof, or not less than 6 m above the covering of the lower roof; or (ii) the lower roof if it has an FRL not less than that of the fire wall and no openings closer than 3m to any wall above the lower roof; or (iii) the lower roof if its covering is non-combustible and the lower part has a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17. (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— (a) a floor having an FRL required for a fire wall; or (b) the roof covering. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
C3D9 Separation of classifications in the same storey [2019: C2.8]				X	<u>Design requirements</u> (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 either— (a) the higher FRL prescribed in Tables S5C11a to S5C11g or S5C21a to S5C21f; or (b) the FRL prescribed in Tables S5C24a to S5C24e. (4) For the purposes of (1), where one part is a carpark complying with S5C19, S5C22 and S5C25, the parts may be separated by a fire wall complying with the appropriate Clause. <u>Compliance commentary</u> Compliance with this clause is required, noting the different classifications on the ground floor within Buildings 2A, 2B, 3A & 3B and on level 1 to Buildings 3A & 3B and level 2 to Buildings 3A & 3B.



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS																			
					Compliance with this clause is required where the storage on ground floor of Building 2A exceeds 10% (approx. 18%) due to bike storage. As such would need 4 hour fire separation. Refer to table S5C11d. Furthermore, the storage/ waste rooms on the basement carpark levels may exceed 10% of the floor area – further assessment required at CC stage once basement plans have been developed showing all parcels. <table><tr><td colspan="5">Table S5C11d: Type A construction: FRL of common walls and fire walls</td></tr><tr><td rowspan="2">Wall type</td><td colspan="4">FRL (in minutes): Structural adequacy / Integrity / Insulation</td></tr><tr><td>Class 2, 3 or 4 part</td><td>Class 5, 7a or 9</td><td>Class 6</td><td>Class 7b or 8</td></tr><tr><td>Loadbearing or non-loadbearing</td><td>90/90/90</td><td>120/120/120</td><td>180/180/180</td><td>240/240/240</td></tr></table> Fire separation is to be addressed by way of a Performance Solution by the fire engineer at CC stage.  Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification	Table S5C11d: Type A construction: FRL of common walls and fire walls					Wall type	FRL (in minutes): Structural adequacy / Integrity / Insulation				Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8	Loadbearing or non-loadbearing	90/90/90	120/120/120	180/180/180	240/240/240
Table S5C11d: Type A construction: FRL of common walls and fire walls																								
Wall type	FRL (in minutes): Structural adequacy / Integrity / Insulation																							
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8																				
Loadbearing or non-loadbearing	90/90/90	120/120/120	180/180/180	240/240/240																				
C3D10 Separation of classifications in different storeys [2019: C2.9]				X	If parts of different classification are situated one above the other in adjoining storeys, they must be separated as follows: (a) Type A construction — The floor between the adjoining parts must have an FRL of not less than that prescribed in Specification 5 for the classification of the lower storey. (b) Type B or C construction — If one of the adjoining parts is of Class 2, 3 or 4, the floor separating the part from the storey below must— (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; 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.																			

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS																													
					Compliance commentary Compliance with the requirements of this clause is required – refer to table S5C11g. <table><tr><td colspan="5">Table S5C11g: Type A construction: FRL of other building elements not covered by Tables S5C11a to S5C11f</td></tr><tr><th rowspan="2">Building element</th><th colspan="4">FRL (in minutes): Structural adequacy / Integrity / Insulation</th></tr><tr><th>Class 2, 3 or 4 part</th><th>Class 5, 7a or 9</th><th>Class 6</th><th>Class 7b or 8</th></tr><tr><td>Other loadbearing internal walls, internal beams, trusses and columns</td><td>90/-/-</td><td>120/-/-</td><td>180/-/-</td><td>240/-/-</td></tr><tr><td>Floors</td><td>90/90/90</td><td>120/120/120</td><td>180/180/180</td><td>240/240/240</td></tr><tr><td>Roofs</td><td>90/60/30</td><td>120/60/30</td><td>180/60/30</td><td>240/90/60</td></tr></table> It should be noted fire separation will be required between ground floor and basement level 1 at the driveway due to the loading dock and waste room on the ground floor to Building 3A accounting for more than 10% of the floor area of the storey and Basement level 1 being classified as Class 7a (Carpark). In addition to this, fire separation between Basement 01 carpark and ground floor retail space. Fire separation is to be addressed by way of a Performance Solution by the fire engineer at CC stage.  Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification	Table S5C11g: Type A construction: FRL of other building elements not covered by Tables S5C11a to S5C11f					Building element	FRL (in minutes): Structural adequacy / Integrity / Insulation				Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8	Other loadbearing internal walls, internal beams, trusses and columns	90/-/-	120/-/-	180/-/-	240/-/-	Floors	90/90/90	120/120/120	180/180/180	240/240/240	Roofs	90/60/30	120/60/30	180/60/30	240/90/60
Table S5C11g: Type A construction: FRL of other building elements not covered by Tables S5C11a to S5C11f																																		
Building element	FRL (in minutes): Structural adequacy / Integrity / Insulation																																	
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8																														
Other loadbearing internal walls, internal beams, trusses and columns	90/-/-	120/-/-	180/-/-	240/-/-																														
Floors	90/90/90	120/120/120	180/180/180	240/240/240																														
Roofs	90/60/30	120/60/30	180/60/30	240/90/60																														



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
C3D11 Separation of lift shafts [2019: C2.10]				X	(1) Any lift connecting more than 2 storeys, or more than 3 storeys if the building is sprinklered, (other than lifts which are wholly within an atrium) must be separated from the remainder of the building by enclosure in a shaft in which— (a) in a building required to be of Type A construction — the walls have the relevant FRL prescribed by Specification 5; and (3) An emergency lift must be contained within a fire-resisting shaft having an FRL of not less than 120/120/120. (4) Openings for lift landing doors and services must be protected in accordance with the Deemed-to-Satisfy Provisions of Part C4. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
C3D12 Stairways and lifts in one shaft [2019: C2.11]	X				Complies.
C3D13 Separation of equipment [2019: C2.12]				X	(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 (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) smoke control exhaust fans located in the air stream which are constructed for high temperature operation in accordance with Specification 21; or (b) stair pressurising equipment installed in compliance with the relevant provisions of AS 1668.1; or (c) a lift installation without a machine-room; or (d) equipment otherwise adequately separated from the remainder of the building. (3) Separation of on-site fire pumps must comply with the requirements of AS 2419.1. (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/–/–. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification





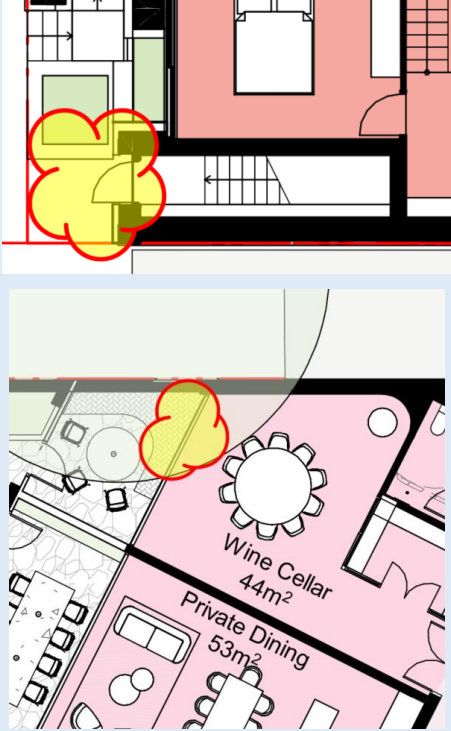
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
C3D14 Electricity supply system [2019: C2.13]				X	(1) An electricity substation located within a building must— (a) be separated from any other part of the building by construction having an FRL 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. (2) A main switchboard located within the building which sustains emergency equipment operating in the emergency mode must— (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: (a) Fire hydrant booster pumps. (b) Pumps for automatic sprinkler systems, water spray, chemical fluid suppression systems or the like. (c) Pumps for fire hose reels where such pumps and fire hose reels form the sole means of fire protection in the building. (d) Air handling systems designed to exhaust and control the spread of fire and smoke. (e) Emergency lifts. (f) Control and indicating equipment. (g) Emergency warning and intercom systems. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
C3D15 Public corridors in Class 2 and 3 buildings [2019: C2.14]			X		In a Class 2 or 3 building, a public corridor, if more than 40 m in length, must be divided at intervals of not more than 40 m with smoke-proof walls complying with S11C2.

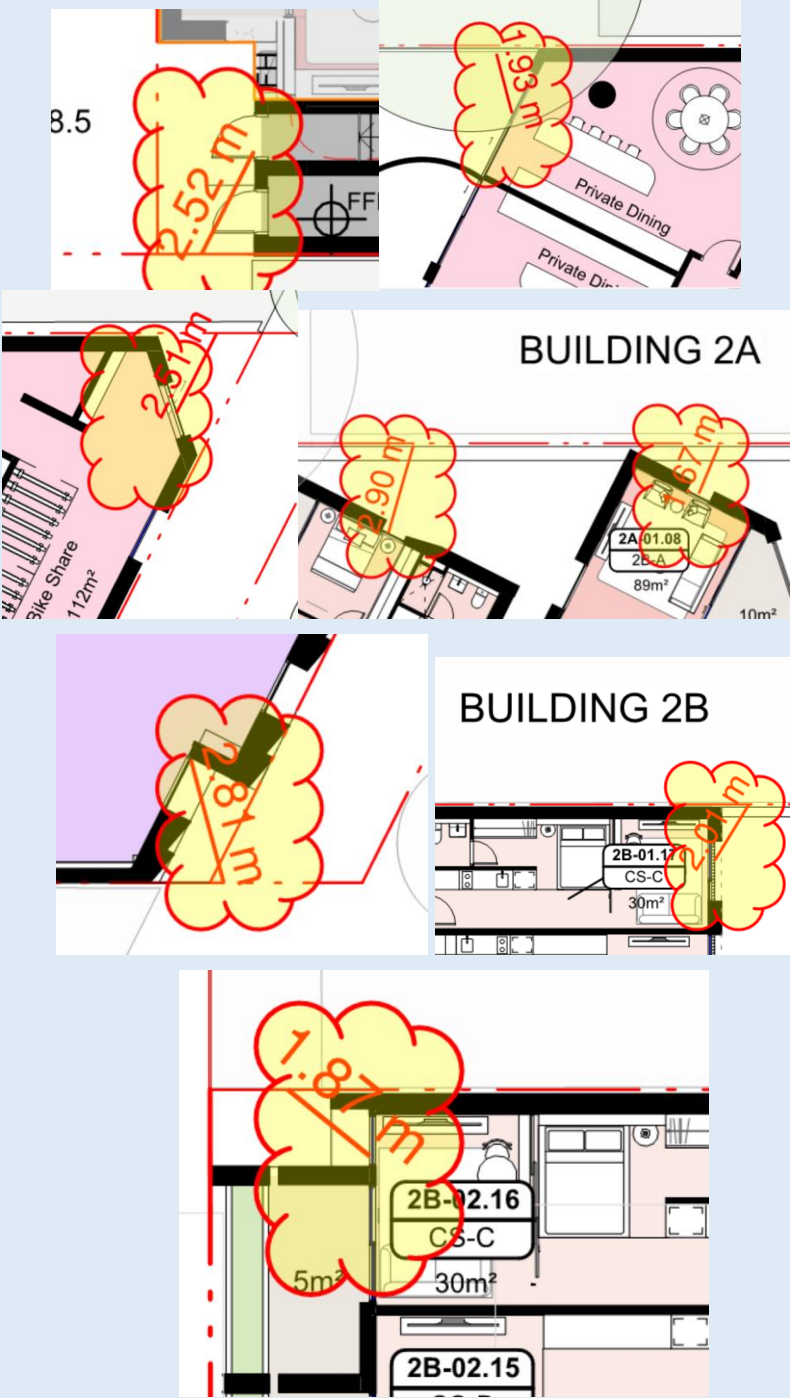


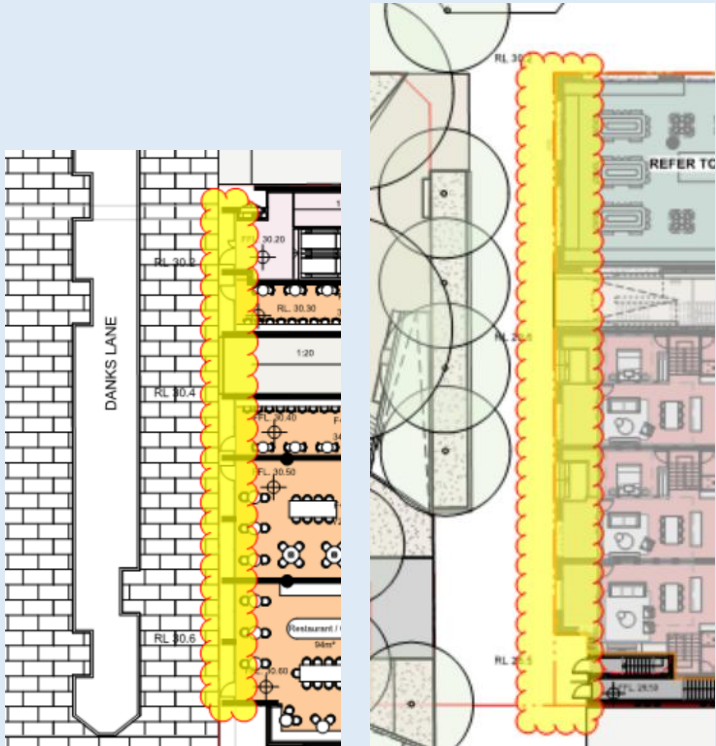


BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					Buildings 2B & 3B are noted as not having public corridors due to the corridors being open at various ends of the corridor (not enclosed throughout the entire corridor). <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
Part C4 Protection of openings					
C4D1 Deemed-to-Satisfy Provisions [2019: C3.0]			X		(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements C1P1 to C1P9 are satisfied by complying with— (a) C2D2 to C2D14, C3D2 to C3D15 and C4D2 to C4D17; and (b) in a building containing an atrium, Part G3; and (c) for additional requirements for Class 9b buildings, Part I1; and (d) for farm sheds, Part I3. (2) Where a Performance Solution is proposed the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.
C4D2 Application of Part [2019: C3.1]			X		(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 mm² 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 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 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 [2019: C3.2]				X	(1) Subject to (2), openings in an external wall that is required to have an FRL must be protected in accordance with C4D5, and if wall-wetting sprinklers are used they must be located externally. (2) The requirements of (1) only apply if the distance between the opening and the fire-source feature to which it is exposed is less than—



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(a) 3 m from a side or rear boundary of the allotment; or (b) 6 m from the far boundary of a road, river, lake or the like adjoining the allotment, if not located in a storey at or near ground level; or (c) 6 m from another building on the allotment that is not Class 10. (3) Openings in an external wall that is required to have an FRL, if required to be protected under (1), must not occupy more than 1/3 of the area of the external wall of the storey in which it is located unless they are in a Class 9b building used as an open spectator stand. Compliance commentary - Openings within 3m from the side and rear boundaries are to be protected in accordance with Clause C4D5 or addressed by way of a Performance Solution by the fire engineer at CC stage. Examples are clouded below in yellow.  - There are numerous openings within 3m of boundaries that are noted as being dedicated as future roads. These roads will need to be dedicated as public roads or otherwise, the openings within 3m of these boundaries will need to be protected in accordance with Clause C4D5 or addressed by way of a Performance Solution by the fire engineer at CC stage. Examples of the openings within to potentially be protected are clouded in yellow below.
C4D4 Separation of external walls and associated				X	The distance between parts of external walls and any openings within them in different fire compartments separated by a fire wall must not be less than that set out in Table C4D4, unless—

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
openings in different fire compartments [2019: C3.3]					(a) those parts of each wall have an FRL not less than 60/60/60; and (b) any openings protected in accordance with C4D5. Compliance commentary Openings within 3m from the side and rear boundaries are to be protected in accordance with Clause C4D5 or addressed by way of a Performance Solution by the fire engineer at CC stage. Examples are clouded below in yellow. 

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					There are numerous openings within 3m of boundaries that are noted as being dedicated as future roads. These roads will need to be dedicated as public roads or otherwise, the openings within 3m of these boundaries will need to be protected in accordance with Clause C4D5 or addressed by way of a Performance Solution by the fire engineer at CC stage. Examples of the openings within to potentially be protected are clouded in yellow below.  <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
C4D5 Acceptable methods of protection [2019: C3.4]			X		(1) Where protection is required, doorways, windows and other openings must be protected as follows: (a) Doorways— (i) internal or external wall-wetting sprinklers as appropriate used with doors that are self-closing or automatic closing; or (ii) –/60/30 fire doors that are self-closing or automatic closing. (b) Windows— (i) internal or external wall-wetting sprinklers as appropriate used with windows that are automatic closing or permanently fixed in the closed position; or (ii) –/60/– fire windows that are automatic closing or permanently fixed in the closed position; or (iii) –/60/– automatic closing fire shutters. (c) Other openings— (i) excluding voids — internal or external wall-wetting sprinklers, as appropriate; or (ii) construction having an FRL not less than –/60/–.



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(2) Fire doors, fire windows and fire shutters must comply with Specification 12.
C4D6 Doorways in fire walls [2019: C3.5]				X	<u>Design requirements</u> (1) The aggregate width of openings for doorways in a fire wall, which are not part of a horizontal exit, must not exceed $\frac{1}{2}$ of the length of the fire wall, and each doorway must be protected by— (a) 2 fire doors or fire shutters, one on each side of the doorway, each of which has an FRL of not less than $\frac{1}{2}$ that required by Specification 5 for the fire wall except that each door or shutter must have an insulation level of at least 30; or (b) a fire door on one side and a fire shutter on the other side of the doorway, each of which complies with (a); or (c) a single fire door or fire shutter which has an FRL of not less than that required by Specification 5 for the fire wall except that each door or shutter must have an insulation level of at least 30. (2) A fire door or fire shutter required by (1)(a), (b) or (c) must be self-closing, or automatic closing in accordance with (3) and (4). (3) The automatic closing operation required by (2) must be initiated by the activation of a smoke detector, or any other detector deemed suitable in accordance with AS 1670.1 if smoke detectors are unsuitable in the atmosphere, installed in accordance with the relevant provisions of AS 1670.1 and located on each side of the fire wall not more than 1.5 m horizontal distance from the opening. (4) Where any other required suitable fire alarm system, including a sprinkler system (other than a FPAA101D system) complying with Specification 17, is installed in the building, activation of the system in either fire compartment separated by the fire wall must also initiate the automatic closing operation. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
C4D7 Sliding fire doors [2019: C3.6]			X		Not applicable.
C4D8 Protection of doorways in horizontal exits [2019: C3.7]			X		Not applicable.
C4D9 Openings in fire-isolated exits [2019: C3.8]				X	<u>Design requirements</u> (1) Doorways that open to fire-isolated stairways, fire-isolated passageways or fire-isolated ramps, and are not doorways opening to a road or open space, must be protected by –/60/30 fire doors that are self-closing, or automatic closing in accordance with (2) and (3). (2) The automatic-closing operation required by (1) must be initiated by the activation of a smoke detector, or any other detector deemed suitable in accordance with AS 1670.1 if smoke detectors are unsuitable in the atmosphere, installed in accordance with the relevant provisions of AS 1670.1 and located not more than 1.5 m horizontal distance from the approach side of the doorway. (3) Where any other required suitable fire alarm system, including a sprinkler system (other than a FPAA101D system) complying with





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
					Specification 17, is installed in the building, activation of the system must also initiate the automatic-closing operation. (4) A window in an external wall of a fire-isolated stairway, fire-isolated passageway or fire-isolated ramp must be protected in accordance with C4D5 if it is within 6 m of, and exposed to, a window or other opening in a wall of the same building, other than in the same fire-isolated enclosure. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
C4D10 Service penetrations in fire-isolated exits [2019: C3.9]				X	<u>Design requirements</u> Fire-isolated exits must not be penetrated by any services other than— (a) electrical wiring permitted by D3D8(6) to be installed within the exit; or (b) ducting associated with a pressurisation system if it— (i) is constructed of material having an FRL of not less than –/120/60 where it passes through any other part of the building; and (ii) does not open into any other part of the building; or (c) for fire services, water supply and test drain pipes. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
C4D11 Openings in fire-isolated lift shafts [2019: C3.10]				X	<u>Design requirements</u> (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; 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 mm² in area. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
NSW C4D12 Bounding construction: Class 2 and 3 buildings and Class 4 parts [2019: C3.11]				X	(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) A doorway in a Class 2 or 3 building must be protected if it provides access from a room not within a sole-occupancy unit to— (a) a public corridor, public lobby, or the like; or (b) the landing of an internal non fire-isolated stairway that serves as a required exit. (4) Except as provided for in NSW C4D12(5), protection for a doorway required under (1), (2) or (3) must be at least— (a) in a building of Type A construction — a self-closing –/60/30 fire door;





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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. (7) A door required by (4) or (5) may be automatic-closing in accordance with the following: (a) The automatic-closing operation must be initiated by the activation of a smoke detector, or any other detector deemed suitable in accordance with AS 1670.1 if smoke detectors are unsuitable in the atmosphere, installed in accordance with the relevant provisions of AS 1670.1 and located not more than 1.5 m horizontal distance from the approach side of the doorway. (b) Where any other required suitable fire alarm system, including a sprinkler system (other than a FPAA101D system) complying with Specification 17, is installed in the building, activation of the system must also initiate the automatic- closing operation. (8) The requirements of (9) apply in a Class 2 or 3 building where a path of travel to an exit— (a) does not provide a person seeking egress with a choice of travel in different directions to alternative exits; and (b) is along an open balcony, landing or the like; and (c) passes an external wall of— (i) another sole-occupancy unit; or (ii) a room not within a sole-occupancy unit. (9) The external wall mentioned in (8)(c) must— (a) be constructed of concrete or masonry, or be lined internally with a fire-protective covering; and (b) have any doorway fitted with a self-closing, tight-fitting solid core door not less than 35 mm thick; and (c) have any windows or other openings— (i) protected internally in accordance with C4D5; or (ii) located at least 1.5 m above the floor of the balcony, landing or the like. <u>Compliance commentary</u> The walls to the units bounding the unenclosed corridor to Buildings 2B and 3B are to be constructed of concrete or masonry, or lined internally with a fire-protective covering and the doorways fitted with a self-closing, tight-fitting solid core doors not less than 35mm thick. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
C4D13 Openings in floors and ceilings for services [2019: C3.12]				X	(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) in a building of Type A construction, by a shaft complying with Specification 5; or (b) in a building of Type B or C construction, by a shaft that will not reduce the fire performance of the building elements it penetrates; or (c) in accordance with C4D15.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(3) Where a service passes through a floor which is required to be protected by a fire-protective covering, the penetration must not reduce the fire performance of the covering. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
C4D14 Openings in shafts [2019: C3.13]				X	In a building of Type A construction, an opening in a wall providing access to a ventilating, pipe, garbage or other service shaft must be protected by— (a) if it is in a sanitary compartment — a door or panel which, together with its frame, is non-combustible or has an FRL of not less than –/30/30; or (b) a self-closing –/60/30 fire door or hopper; or (c) an access panel having an FRL of not less than –/60/30; or (d) if the shaft is a garbage shaft — a door or hopper of non-combustible construction. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
C4D15 Openings for service installations [2019: C3.15]				X	(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 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 100mm 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 2m 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.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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 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. (iv) The service is an electrical switch, outlet, or the like, and it is installed in accordance with Specification 13. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
C4D16 Construction joints [2019: C3.16]				X	<u>Design requirements</u> (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. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
C4D17 Columns protected with lightweight construction to achieve an FRL [2019: C3.17]				X	A column protected by lightweight construction to achieve an FRL which passes through a building element that is required to have an FRL or a resistance to the incipient spread of fire, must be installed using a method and materials identical with a prototype assembly of the construction which has achieved the required FRL or resistance to the incipient spread of fire. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
Specification 5 Fire-resisting construction					
S5C1 Scope [2019: Spec C1.1: 1]			X		This Specification contains requirements for the fire-resisting construction of building elements.
S5C2 Exposure to fire-source features [2019: Spec C1.1: 2.1]				X	(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 source feature. (4) The requirements of (3) do not override or permit any exemption from S5C3.
S5C3 Fire protection for a support of another part [2019: Spec C1.1: 2.2]				X	(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.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(2) The following building elements need not comply with (1)(b) and (1)(c)(ii): (a) An element providing lateral support to an external wall complying with S5C24(1)(b) or C2D12. (b) An element providing support within a carpark and complying with S5C19, S5C22 or S5C25. (c) A roof providing lateral support in a building— (i) of Type A construction if it complies with S5C15(a), (b) or (d); and (ii) of Type B and C construction. (d) A column providing lateral support to a wall where the column complies with S5C6(1) and (2). (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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S5C4 Lintels [2019: Spec C1.1: 2.3]				X	(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— (i) a wall of a building containing only one storey; or (ii) a non-loadbearing wall of a Class 2 or 3 building; or (b) it spans an opening in masonry which is not more than 150 mm thick and— (i) not more than 3m 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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S5C5 Method of attachment not to reduce the fire-resistance of building elements [2019: Spec C1.1: 2.4]				X	The method of attaching or installing a finish, lining, ancillary element or service installation to the building element must not reduce the fire-resistance of that element to below that required. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S5C6 General concessions [2019: Spec C1.1: 2.5]			X		(1) Steel columns — A steel column, other than one in a fire wall or common wall, need not have an FRL in a building that contains— (a) only 1 storey; or (b) 2 storeys in some of its parts and 1 storey only in its remaining parts if the sum of the floor areas of the upper storeys of its 2 storey parts does not exceed the lesser of— (i) 1/8 of the sum of the floor areas of the 1 storey parts; or





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					(ii) in the case of a building to which one of the maximum floor areas specified in Table C3D3 is applicable — 1/10 of that area; or (iii) in the case of a building to which two or more of the maximum floor area specified in Table C3D3 is applicable — 1/10 of the lesser of those areas. (2) Timber columns — A timber column may be used in a single storey building if— (a) in a fire wall or common wall the column has an FRL not less than that listed in the appropriate Tables S5C11a to S5C11g, S5C21a to S5C21f or S5C24a to S5C24e; and (b) in any other case where the column is required to have an FRL in accordance with Tables S5C11a to S5C11g, S5C21a to S5C21f or S5C24a to S5C24e, it has an FRL of not less than 30/–/–. (3) Structures on roofs — A non-combustible structure situated on a roof need not comply with the other provisions of this Specification if it only contains— (a) lift motor equipment; or (b) one or more of the following: (i) Hot water or other water tanks. (ii) Ventilating ductwork, ventilating fans and their motors. (iii) Air-conditioning chillers. (iv) Window cleaning equipment. (v) Other service units that are non-combustible and do not contain flammable or combustible liquids or gases. (4) Curtain walls and panel walls — A requirement for an external wall to have an FRL does not apply to a curtain wall or panel wall which is of non-combustible construction and fully protected by automatic external wall-wetting sprinklers. (5) Balconies and verandahs — A balcony, verandah or the like and any incorporated supporting part, which is attached to or forms part of a building, need not comply with Tables S5C11a to S5C11g, S5C21a to S5C21f and S5C24a to S5C24e if— (a) it does not form part of the only path of travel to a required exit from the building; and (b) in Type A construction— (i) it is situated not more than 2 storeys above the lowest storey providing direct egress to a road or open space; and (ii) any supporting columns are of non-combustible construction.
S5C7 Mezzanine floors: Concession [2019: Spec C1.1: 2.6]			X		Not applicable.
S5C8 Enclosure of shafts [2019: Spec C1.1: 2.7]				X	(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—



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					(a) the top of a shaft extending beyond the roof covering, other than one enclosing a fire-isolated stairway or ramp; or (b) the bottom of a shaft if it is non-combustible and laid directly on the ground. Compliance commentary It is assumed the base of the garbage shafts/chutes will not be fire rated. It is assumed the garbage rooms will be fire separated in lieu of the base of the shaft (examples coloured in green below). This is to be addressed by way of a Performance Solution by the fire engineer at CC stage.  <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
S5C9 Carparks in Class 2 and 3 buildings [2019: Spec C1.1: 2.8]			X		Not applicable.
S5C10 Residential care building: Concession [2019: Spec C1.1: 2.9]			X		Not applicable.
S5C11 Type A fire-resisting construction —				X	(1) In a building required to be of Type A construction— (a) each building element listed in Tables S5C11a to S5C11g and any beam or column incorporated in it, must have an FRL not less than that listed in those Tables for the particular Class of building concerned; and



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Fire-resistance of building elements [2019: Spec C1.1: 3.1 and Table 3]					(b) any internal wall required to have an FRL with respect to integrity and insulation must extend to— (i) the underside of the floor next above; or (ii) the underside of a roof complying with Tables S5C11a to S5C11g; or (iii) if under S5C15 the roof is not required to comply with Tables S5C11a to S5C11g, the underside of the non-combustible roof covering and, except for roof battens with dimensions of 75 mm x 50 mm or less or sarking-type material, must not be crossed by timber or other combustible building elements; or (iv) a ceiling that is immediately below the roof and has a resistance to the incipient spread of fire to the roof space between the ceiling and the roof of not less than 60 minutes; and (c) a loadbearing internal wall and a loadbearing fire wall (including those that are part of a loadbearing shaft) must be constructed from— (i) concrete; or (ii) masonry; or (iii) subject to (2), fire-protected timber; or (iv) any combination of (i) to (iii); and (d) the FRLs specified in Tables S5C11a to S5C11g for an external column apply also to those parts of an internal column that face and are within 1.5 m of a window and are exposed through that window to a fire-source feature. (2) For the purposes of (1)(c)(iii), fire-protected timber may be used, provided that— (a) the building is— (i) a separate building; or (ii) a part of a building— (A) which only occupies part of a storey, and is separated from the remaining part by a fire wall; or (B) which is located above or below a part not containing fire-protected timber and the floor between the adjoining parts is provided with an FRL not less than that prescribed for a fire wall for the lower storey; and (b) the building has an effective height of not more than 25 m; and (c) the building has a sprinkler system (other than a FPAA101D or FPAA101H system) throughout complying with Specification 17; and (d) any insulation installed in the cavity of the timber building element required to have an FRL is non-combustible; and (e) cavity barriers are provided in accordance with Specification 9. (3) For the purposes of Table S5C11a and Table S5C11b, external wall includes any column and other building element incorporated within it or other external building element. <u>Compliance commentary</u>



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					- The architect/ structural engineer are to confirm if the brickwork to the external façade of the building will be supported by shelf-angles not providing the structural adequacy, integrity and insulation rating for the external wall. Where the FRL is omitted, this will need to be addressed by way of a Performance Solution by the fire engineer at CC stage. - Any cavities provided within the external wall compromising horizontal and vertical fire separation and not fire stopped with a tested system is to be addressed by way of a Performance Solution by the fire engineer at CC stage. Junction details to be provided at CC stage. - The fire engineer is to address by way of a Performance Solution at CC stage setbacks proposed within internal wet areas reducing the thickness of the slab and FRL achieved by the slab. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S5C12 Type A fire-resisting construction — Concessions for floors [2019: Spec C1.1: 3.2]			X		A floor need not comply with Tables S5C11a to S5C11g if— (a) it is laid directly on the ground; or (b) in a Class 2, 3, 5 or 9 building, the space below is not a storey, does not accommodate motor vehicles, is not a storage or work area, and is not used for any other ancillary purpose; or (c) it is a timber stage floor in a Class 9b building laid over a floor having the required FRL and the space below the stage is not used as a dressing room, store room, or the like; or (d) it is within a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building; or (e) it is an open-access floor (for the accommodation of electrical and electronic services and the like) above a floor with the required FRL.
S5C13 Type A fire-resisting construction — Floor loading of Class 5 and 9b buildings: Concession [2019: Spec C1.1: 3.3]			X		If a floor in a Class 5 or 9b building is designed for a live load not exceeding 3 kPa— (a) the floor next above (including floor beams) may have an FRL of 90/90/90; or (b) the roof, if that is next above (including roof beams), may have an FRL of 90/60/30.
S5C14 Type A fire-resisting construction — Roof superimposed on concrete slab: Concession [2019: Spec C1.1: 3.4]			X		A roof superimposed on a concrete slab roof need not comply with S5C11 as to fire-resisting construction if— (a) the superimposed roof and any construction between it and the concrete slab roof are non-combustible throughout; and (b) the concrete slab roof complies with Tables S5C11a to S5C11g.



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
S5C15 Type A fire-resisting construction — Roof: Concession [2019: Spec C1.1: 3.5]			X		A roof need not comply with Tables S5C11a to S5C11g if its covering is non-combustible and the building— (a) has a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17 installed throughout; or (b) has a rise in storeys of 3 or less; or (c) is of Class 2 or 3; or (d) has an effective height of not more than 25 m and the ceiling immediately below the roof has a resistance to the incipient spread of fire to the roof space of not less than 60 minutes.
S5C16 Type A fire-resisting construction — Roof lights [2019: Spec C1.1: 3.6]			X		Not applicable.
S5C17 Type A fire-resisting construction — Internal columns and walls: Concession [2019: Spec C1.1:3.7]			X		For a building with an effective height of not more than 25 m and having a roof without an FRL in accordance with S5C15, in the storey immediately below that roof, internal columns other than those referred to in S5C11(1)(d) and internal walls other than fire walls and shaft walls may have— (a) in a Class 2 or 3 building: FRL 60/60/60; or (b) in a Class 5, 6, 7, 8 or 9 building— (i) with rise in storeys exceeding 3: FRL 60/60/60; or (ii) with rise in storeys not exceeding 3: no FRL.
S5C18 Type A fire-resisting construction — open spectator stands and indoor sports stadiums: Concession [2019: Spec C1.1: 3.8]			X		Not applicable.
S5C19 Type A fire-resisting construction — carparks [2019: Spec C1.1: 3.9 and Table 3.9]			X		(1) Notwithstanding S5C11, a carpark may comply with this clause if it is an open-deck carpark or is protected with a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17 and is— (a) a separate building; or (b) a part of a building— (i) which only occupies part of a storey, and is separated from the remaining part by a fire wall; or (ii) which is located above or below another classification, and the floor separating the classifications complies with C3D10; or (iii) which is located above another Class 7 part of the building not used for carparking, and the floor separating the parts complies with Tables S5C11a to S5C11g for a Class 7 part other than a carpark; or





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					(iv) which is located below another Class 7 part of the building not used for carparking, and the floor separating the parts complies with this clause. (2) For the purposes of this clause, a carpark— (a) includes— (i) an administration area associated with the functioning of the carpark; and (ii) where the carpark is sprinklered, is associated with a Class 2 or 3 building and provides carparking for separate sole-occupancy units, each carparking area with an area not greater than 10% of its floor area for purposes ancillary to the sole-occupancy units; but (b) excludes— (i) except for (a), any area of another classification, or other part of a Class 7 building not used for carparking; and (ii) a building or part of a building specifically intended for the parking of trucks, buses, vans and the like. (3) For building elements in a carpark as described in (1) and (2), the following minimum FRLs are applicable: (a) External wall: (i) Less than 3 m from a fire-source feature to which it is exposed: (A) Loadbearing: 60/60/60. (B) Non-loadbearing: –/60/60. (ii) 3 m or more from a fire-source feature to which it is exposed: –/–/–. (b) Internal wall: (i) Loadbearing, other than one supporting only the roof (not used for carparking): 60/–/–. (ii) Supporting only the roof (not used for carparking): –/–/–. (iii) Non-loadbearing: –/–/–. (c) Fire wall: (i) From the direction used as a carpark: 60/60/60. (ii) From the direction not used as a carpark: as required by Tables S5C11a to S5C11g. (d) Columns: (i) Supporting only the roof (not used for carparking) and 3 m or more from a fire-source feature to which it is exposed: –/–/–. (ii) Steel column, other than one covered by (i) and one that does not support a part of a building that is not used as a carpark— (A) 60/–/–; or (B) an ESA/M of not greater than 26m² / tonne. (iii) Any other column not covered by (i) or (ii): 60/–/–. (e) Beams: (i) Steel floor beam in continuous contact with a concrete floor slab—





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					(A) 60/–/–; or (B) an ESA/M of not greater than 30m²/tonne. (ii) Any other beam: 60/–/–. (f) Fire-resisting lift and stair shaft (within the carpark only): 60/60/60. (g) Floor slab and vehicle ramp: 60/60/60. (h) Roof (not used for carparking): –/–/–. (4) For the purposes of subclause (3): (a) ESA/M means the ratio of exposed surface area to mass per unit length. (b) Refer to Specification 17 for special requirements for a sprinkler system in a carpark complying with (3) and located within a multi-classified building.
S5C20 Type A fire-resisting construction — Class 2 and 3 buildings: Concession [2019: Spec C1.1: 3.10]			X		Not applicable.
S5C21 Type B fire-resisting construction — fire-resistance of building elements [2019: Spec C1.1: 4.1 and Table 4]			X		Not applicable.
S5C22 Type B fire-resisting construction — carparks [2019: Spec C1.1: 4.2 and Table 4.2]			X		Not applicable.
S5C23 Type B fire-resisting construction — Class 2 and 3 buildings: Concession [2019: Spec C1.1: 4.3]			X		Not applicable.
S5C24 Type C fire-resisting construction —			X		Not applicable.





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fire-resistance of building elements [2019: Spec C1.1: 5.1 and Table 5]					
S5C25 Type C fire-resisting construction — car parks [2019: Spec C1.1: 5.2 and Table 5.2]			X		Not applicable.
Specification 6 Structural tests for lightweight construction					
S6C1 Scope [2019: Spec C1.8: 1]			X		This Specification describes tests to be applied to and criteria to be satisfied by a wall system of lightweight construction.
S6C2 Application [2019: Spec C1.8: 2]			X		A wall system need not be tested in accordance with this Specification for static pressure or impact if it is designed and constructed in accordance with the Deemed-to-Satisfy Provisions of Part B1 to resist the appropriate pressures and impacts defined in this Specification.
S6C3 Walls of certain Class 9b buildings [2019: Spec C1.8: 3.1]			X		Not applicable.
S6C4 Walls of shafts and fire-isolated exits generally [2019: Spec C1.8: 3.2]			X		Not applicable.
S6C5 Additional requirements for lift shafts [2019: Spec C1.8: 3.3]			X		Not applicable.
S6C6 Walls generally [2019: Spec C1.8: 3.4]			X		An external and internal wall of lightweight construction that is required to be fire-resisting, other than one covered by S6C3, S6C4 or S6C5, must be subjected to the following tests and must fulfil the following criteria: (a) The materials tests of S6C10(a) and the criteria of S6C11(a). (b) A static test by the imposition of a uniformly distributed load of 0.25 kPa (or its equivalent) in accordance with S6C10(b) and the damage and deflection criteria of S6C11(b) and (c) respectively. (c) A dynamic test by fall of the impact bag through a height of 100 mm in accordance with S6C10(c) and the damage and deflection criteria of S6C11(b) and (d) respectively.





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					(d) The surface indentation test of S6C10(d) and the surface indentation criterion of S6C11(e).
S6C7 General requirements for testing [2019: Spec C1.8: 4.1]			X		Testing must be carried out on either— (a) construction in-situ; or (b) a laboratory specimen of the construction.
S6C8 Testing in-situ [2019: Spec C1.8: 4.2]			X		If testing is carried out in-situ, it must be done on that part of the construction least likely, because of the particular combination of the height of the walls, the support conditions, and other aspects of the construction, to resist the loads.
S6C9 Testing of specimens [2019: Spec C1.8: 4.3]			X		If a laboratory specimen is tested, the specimen must span only in the direction corresponding to the height of the wall and testing must be done in accordance with either (a) or (b) below: (a) The test specimen— (i) height (or length, if the specimen is tested horizontally) must be identical with the height between supports in the actual construction; and (ii) must be supported at the top and bottom (or at each end if tested horizontally) by components identical with, and in a manner identical with, the actual construction. (b) If the distance between supports of the actual construction is more than 3 m, then a smaller specimen may be tested but— (i) the distance between supports must be not less than 3 m; and (ii) forces, reactions and support conditions must be modelled so as to reproduce the behaviour of the actual construction if it were tested in-situ.
S6C10 Test methods [2019: Spec C1.8: 5]			X		Tests must be carried out in accordance with the following: (a) Material tests — The methods specified for the constituent materials of the construction of the standards adopted by reference in the NCC. (b) For resistance to static pressure — The provisions for testing walls under transverse load in ASTM E72-15, except that— (i) support conditions must be as specified in S6C9; and (ii) equivalent load shall mean the quarter-point load that produces the same deflection or central moment as appropriate; and (iii) the timber species nominated in that standard may be substituted with a different species. (c) For resistance to impact — The provisions for testing wall systems in ASTM E695-03, except that— (i) the point of impact must be set 1.5 m above finished floor level or 1.5 m above the part of the specimen that corresponds to finished floor level; and (ii) the impact bag must be not less than 225 mm in diameter and not more than 260 mm in diameter and have a mass of not less than 27.2 kg or more than 27.3 kg; and





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					(iii) the mass must be achieved by putting loose, dry sand into the bag and must be adjusted before each series of impact tests; and (iv) where the impact bag and suspension cannot be vertical at the instant of impact on a curved surface or an inclined surface, the height of drop is the net height at the point of impact. (d) For resistance to surface indentation — The test for resistance to surface indentation must be carried out at three points on the surface of an undamaged sample sheet as follows: (i) A steel ball of 10 mm diameter with a load of 150 N must be placed gently on the surface of the sheet and allowed to remain in position for 5 minutes. (ii) The ball and load must then be removed and the diameter of each impression of the ball on the surface measured. (e) For resistance of lift shaft construction to repetitive load — As for (b) except that— (i) it is sufficient to test one specimen with the pressure applied from the side of the construction on which the lift will operate; and (ii) the load must be applied dynamically at a frequency not less than 1 Hz and not more than 3 Hz; and (iii) equivalent load shall mean the quarter-point load that produces the same central moment as the distributed load.
S6C11 Criteria for compliance [2019: Spec C1.8: 6]			X		The wall system or the specimen of it must fulfil the following criteria: (a) Materials — Materials must comply with the applicable standard adopted by reference in the NCC. (b) Damage — There must be no crack, penetration or permanent surface-deformation to a depth of more than 0.5 mm or any other non-elastic deformation or fastener failure. (c) Deflection — Static pressure — Under static pressure the deflection must not be more than— (i) 1/240th of the height between supports; or (ii) for construction other than a lift shaft — 30 mm; or (iii) for a lift shaft — 20 mm. (d) Deflection — Impact — Under impact the instantaneous deflection must not be more than— (i) 1/120th of the height of the wall between supports; or (ii) for construction other than a lift shaft — 30 mm; or (iii) for a lift shaft— 20 mm. (e) Surface indentation — No impression must be more than 5 mm in diameter.
Specification 7 Fire Hazard Properties					
S7C1 Scope [2019: Spec C1.10: 1]			X		This Specification sets out requirements in relation to the fire hazard properties of linings, materials and assemblies in Class 2 to 9 buildings as set out in Table S7C2.





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S7C2 Application [2019: Spec C1.10: 2]			X		Linings, materials and assemblies must comply with the appropriate requirement described in Table S7C2.
S7C3 Floor linings and floor coverings [2019: Spec C1.10: 3]				X	A floor lining or floor covering must have— (a) a critical radiant flux not less than that listed in Table S7C3; and (b) in a building not protected by a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17, a maximum smoke development rate of 750 percent-minutes; and (c) a group number complying with S7C6(b), for any portion of the floor covering that is continued more than 150 mm up a wall. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S7C4 Wall and ceiling linings [2019: Spec C1.10: 4]				X	(1) A wall or ceiling lining system must comply with the group number specified in Table S7C4 and for buildings not fitted with a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17 have— (a) a smoke growth rate index not more than 100; or (b) an average specific extinction area less than 250 m² /kg. (2) A group number of a wall or ceiling lining and the smoke growth rate index or average specific extinction area must be determined in accordance with AS 5637.1. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S7C5 Air-handling ductwork [2019: Spec C1.10: 5]				X	Rigid and flexible ductwork in a Class 2 to 9 building must comply with the fire hazard properties set out in AS 4254.1 and AS 4254.2. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S7C6 Lift cars [2019: Spec C1.10: 6]				X	Materials used as— (a) floor linings and floor coverings must have a critical radiant flux not less than 2.2; and (b) wall and ceiling linings must be a Group 1 material or a Group 2 material in accordance with AS5637.1. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
NSW S7C7 Other materials [2019: Spec C1.10: 7]				X	Materials and assemblies not included in S7C3, S7C4, S7C5 or S7C6 must not exceed the indices set out in NSW Table S7C7. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
Specification 8 Performance of external walls in fire					
S8C1 Scope [2019: Spec C1.11: 1]			X		This Specification contains measures to minimise, in the event of fire, the likelihood of external walls covered by S8C2 collapsing outwards as complete panels and the likelihood of panels separating from supporting members.





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S8C2 Application [2019: Spec C1.11: 2]			X		Not applicable.
S8C3 General requirements for external wall panels [2019: Spec C1.11: 3]			X		Not applicable.
S8C4 Additional requirements for vertically spanning external wall panels adjacent to column [2019: Spec C1.11: 4]			X		Not applicable.
Specification 9 Cavity barriers for fire-protected timber					
S9C1 Scope [2019: Spec C1.13: 1]			X		This Specification sets out requirements for cavity barriers in fire-protected timber construction.
S9C2 Requirements [2019: Spec C1.13: 2]			X		Not applicable.
Specification 10 Fire-protected timber					
S10C1 Scope [2019: Spec C1.13a: 1]			X		This Specification contains requirements for fire-protected timber and procedures for determining the time at which the temperature at the interface between the protection system and the timber is exceeded.
S10C2 General requirements [2019: Spec C1.13a: 2.1]			X		Not applicable.
S10C3 Massive timber [2019: Spec C1.13a: 2.2]			X		Not applicable.
S10C4 Form of test			X		Not applicable.





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[2019: Spec C1.13a: 3.1]					
S10C5 Smaller specimen permitted [2019: Spec C1.13a: 3.2]			X		Not applicable.
S10C6 Acceptance criteria [2019: Spec C1.13a: 3.3]			X		Not applicable.
Specification 11 Smoke-proof walls in healthcare and residential care buildings					
S11C1 Scope [2019: Spec C2.5: 1]			X		(1) This Specification sets out requirements for the construction of smoke-proof walls in Class 9a health-care buildings and Class 9c buildings. (2) Smoke proof walls required to have an FRL are to be in accordance with A5G5.
S11C2 Class 9a health-care buildings [2019: Spec C2.5: 2]			X		Not applicable.
S11C3 Class 9c buildings [2019: Spec C2.5: 3]			X		Not applicable.
S11C4 Doorways in smoke-proof walls [2019: Spec C2.5: 4]			X		Not applicable.
Specification 12 Fire doors, smoke doors, fire windows and shutters					
S12C1 Scope [2019: Spec C3.4: 1]			X		This Specification sets out requirements for the construction of fire doors, smoke doors, fire windows and fire shutters.
S12C2 Fire Doors [2019: Spec C3.4: 2]				X	A required fire door must— (a) comply with AS 1905.1; and (b) not fail by radiation through any glazed part during the period specified for integrity in the required FRL. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
S12C3 General requirements for smoke doors				X	Smoke doors must be constructed so that smoke will not pass from one side of the doorway to the other and, if they are glazed, there is minimal danger of a person being injured by accidentally walking into them.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
[2019: Spec C3.4: 3.1]					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S12C4 Construction Deemed-to-Satisfy [2019: Spec C3.4: 3.2]				X	A smoke door of one or two leaves satisfies S12C3 if it is constructed as follows: (a) The leaves are side-hung to swing— (i) in the direction of egress; or (ii) in both directions. (b) The leaves are solid-core and at least 35 mm thick, or are capable of resisting smoke at 200°C for 30 minutes. (c) The leaves are fitted with smoke seals. (d) The leaves— (i) are normally in the closed position; or (ii) operate such that— (A) they are closed automatically with the automatic closing operation initiated by smoke detectors, installed in accordance with the relevant provisions of AS 1670.1, located on each side of the doorway not more than 1.5 m horizontal distance from the doorway; and (B) in the event of power failure to the door, they will fail-safe in the closed position. (e) The leaves return to the fully closed position after each manual opening. (f) Any glazing incorporated in the door complies with AS 1288. (g) If a glazed panel is capable of being mistaken for an unobstructed exit, the presence of the glass must be identified by an opaque mid-height band, mid-rail, crash-bar or other opaque construction. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S12C5 Fire shutters [2019: Spec C3.4: 4]				X	A required fire shutter must— (a) be a shutter that— (i) is identical with a tested prototype that has achieved the required FRL; and (ii) is installed in the same manner and in an opening that is not larger than the tested prototype; and (iii) did not have a rise in average temperature on the side remote from the furnace of more than 140 K during the first 30 minutes of the test; or (b) be a steel shutter complying with AS 1905.2 if a metallic fire shutter is not prohibited by C4D6. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S12C6 Fire windows [2019: Spec C3.4: 6]				X	A required fire window must be— (a) identical in construction with a prototype that has achieved the required FRL; and (b) installed in the same manner and in an opening that is not larger than the tested prototype.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
Specification 13 Penetration of walls, floors and ceilings by services					
S13C1 Scope [2019: Spec C3.15: 1]			X		This Specification prescribes materials and methods of installation for services that penetrate walls, floors and ceilings required to have an FRL.
S13C2 Application [2019: Spec C3.15: 2]			X		(1) This Specification applies to installations permitted under the Deemed-to-Satisfy Provisions of the BCA as alternatives to systems that have been demonstrated by test to fulfil the requirements of C4D15(2)(a). (2) This Specification does not apply to installations in ceilings required to have a resistance to the incipient spread of fire nor to the installation of piping that contains or is intended to contain a flammable liquid or gas.
S13C3 Metal pipe systems [2019: Spec C3.15: 3]				X	(1) A pipe system comprised entirely of metal (excluding pipe seals or the like) that is not normally filled with liquid must not be located within 100 mm, for a distance of 2 m from the penetration, of any combustible building element or a position where combustible material may be located, and must be constructed of— (a) copper alloy or stainless steel with a wall thickness of at least 1 mm; or (b) cast iron or steel (other than stainless steel) with a wall thickness of at least 2 mm. (2) An opening for a pipe system comprised entirely of metal (excluding pipe seals or the like) must— (a) be neatly formed, cut or drilled; and (b) be no closer than 200 mm to any other service penetration; and (c) accommodate only one pipe. (3) A pipe system comprised entirely of metal (excluding pipe seals or the like) must be wrapped but must not be lagged or enclosed in thermal insulation over the length of its penetration of a wall, floor or ceiling unless the lagging or thermal insulation fulfils the requirements of S13C7. (4) The gap between a metal pipe and the wall, floor or ceiling it penetrates must be fire-stopped in accordance with S13C7. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S13C4 Pipes penetrating sanitary compartments [2019: Spec C3.15: 4]				X	If a pipe of metal or UPVC penetrates the floor of a sanitary compartment in accordance with C4D15(2)(c)(ii)— (a) the opening must be neatly formed and no larger than is necessary to accommodate the pipe or fitting; and (b) the gap between pipe and floor must be fire-stopped in accordance with S13C7. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S13C5 Wires and cables [2019: Spec C3.15: 5]				X	If a wire or cable or cluster of wires or cables penetrates a floor, wall or ceiling— (a) the opening must be neatly formed, cut or drilled and no closer than 50 mm to any other service; and (b) the opening must be no larger in cross-sectional area than—





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(i) 2000 mm² if only a single cable is accommodated and the gap between cable and wall, floor or ceiling is no wider than 15 mm; or 500 mm² (ii) in any other case; and (c) the gap between the service and the wall, floor or ceiling must be fire-stopped in accordance with S13C7. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S13C6 Electrical switches and outlets [2019: Spec C3.15: 6]				X	If an electrical switch, outlet, socket or the like is accommodated in an opening or recess in a wall, floor or ceiling— (a) the opening or recess must not— (i) be located opposite any point within 300 mm horizontally or 600 mm vertically of any opening or recess on the opposite side of the wall; or (ii) extend beyond half the thickness of the wall; and (b) the gap between the service and the wall, floor or ceiling must be fire-stopped in accordance with S13C7. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S13C7 Fire-stopping [2019: Spec C3.15: 7]				X	(1) Material: The material used for the fire-stopping of service penetrations must be concrete, high-temperature mineral fibre, high-temperature ceramic fibre or other material that does not flow at a temperature below 1120°C when tested in accordance with ISO 540, and must have— (a) demonstrated in a system tested in accordance with C4D15(2)(a) that it does not impair the fire-resisting performance of the building element in which it is installed; or (b) demonstrated in a test in accordance with (5) that it does not impair the fire-resisting performance of the test slab. (2) Installation: Fire-stopping material must be packed into the gap between the service and wall, floor or ceiling in a manner, and compressed to the same degree, as adopted for testing under (1)(a) or (b). (3) Hollow construction: If a pipe penetrates a hollow wall (such as a stud wall, a cavity wall or a wall of hollow blockwork) or a hollow floor/ceiling system, the cavity must be so framed and packed with fire-stopping material that is— (a) installed in accordance with (2) to a thickness of 25 mm all round the service for the full length of the penetration; and (b) restrained, independently of the service, from moving or parting from the surfaces of the service and of the wall, floor or ceiling. (4) Recesses: If an electrical switch, socket, outlet or the like is accommodated in a recess in a hollow wall or hollow floor/ceiling system— (a) the cavity immediately behind the service must be framed and packed with fire-stopping material in accordance with (3); or (b) the back and sides of the service must be protected with refractory lining board identical with and to the same thickness as that in which the service is installed. (5) Test: The test to demonstrate compliance of a fire-stopping material with this Specification must be conducted as follows: (a) The test specimen must comprise a concrete slab not less than 1 m square and not more than 100 mm thick, and appropriately





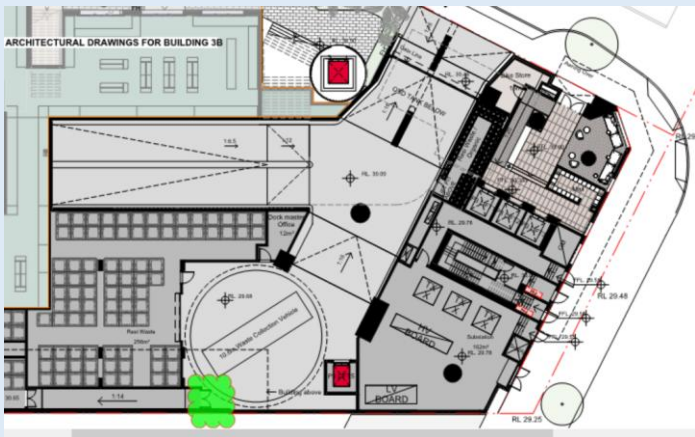
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					reinforced if necessary for structural adequacy during manufacture, transport and testing. (b) The slab must have a hole 50 mm in diameter through the centre and the hole must be packed with the fire-stopping material. (c) The slab must be conditioned in accordance with AS 1530.4. (d) Two thermocouples complying with AS 1530.4 must be attached to the upper surface of the packing each about 5 mm from its centre. (e) The slab must be tested on flat generally in accordance with Section 10 of AS 1530.4 and must achieve an FRL of 60/60/60 or as otherwise <i>required</i>. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>

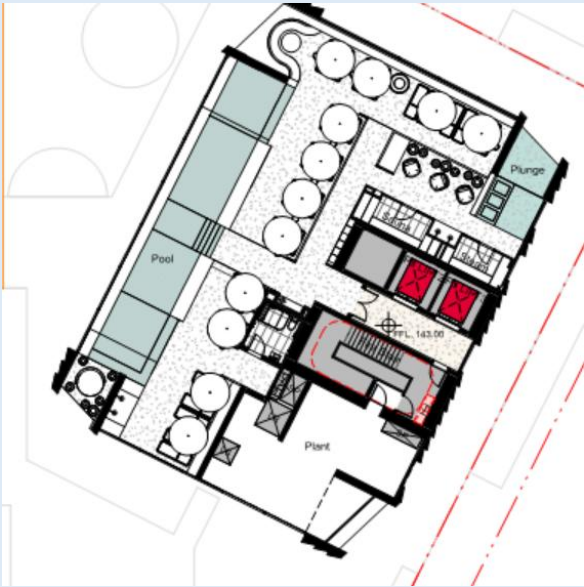
Section D Access and Egress

Part D2 Provision for escape

D2D1 Deemed-to-Satisfy Provisions [2019: D1.0]			X		(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements D1P1 to D1P6, D1P8 and D1P9 are satisfied by complying with— (a) D2D2 to D2D23, D3D2 to D3D30 and D4D2 to D4D13; and (b) in a building containing an atrium, Part G3; and (c) in a building in an alpine area, Part G4; and (d) for a building containing an occupiable outdoor area, Part G6; and (e) for additional requirements for Class 9b buildings, Part I1; and (f) for public transport buildings, Part I2; and (g) for farm sheds, Part I3. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable. (3) Performance Requirement D1P7 must be complied with if lifts are to be used to assist occupants to evacuate a building.
D2D2 Application of Part [2019: D1.1]			X		The Deemed-to-Satisfy Provisions of this Part do not apply to the internal parts of a sole-occupancy unit in a Class 2 or 3 building or a Class 4 part of a building.
NSW D2D3 Number of exits required [2019: D1.2]		X			(1) All buildings — Every building must have at least one exit from each storey. (2) Class 2 to 8 buildings — (a) In addition to any horizontal exit, not less than 2 exits must be provided from the following: (i) Each storey if the building has an effective height of more than 25 m. (ii) A Class 2 or 3 building subject to C2D6. (b) The requirements of (a)(i) do not apply to a part of a storey that— (i) is provided with direct egress to a road or open space; and (ii) satisfies D2D5 by the provision of 1 exit.



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(3) 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— (a) the floor area of the storey is not more than 50 m²; and (b) the distance of travel from any point on the floor to a single exit is not more than 20 m. (4) Class 9 buildings — (a) In addition to any horizontal exit, not less than 2 exits must be provided from the following: (i) Each storey if the building has a rise in storeys of more than 6 or an effective height of more than 25 m. (vi) Any storey or mezzanine that accommodates more than 50 persons, calculated under D2D18. (b) The requirements of (a) do not apply to a part of a storey that— (i) is a plant room, machinery room, storeroom, lift-machine room or the like; and (ii) is provided with direct egress to a road, open space or a fire-isolated exit complying with D2D12(2); and (iii) satisfies D2D5 by the provision of 1 exit. (7) Access to exits — Without passing through another sole-occupancy unit every occupant of a storey or part of a storey must have access to— (a) an exit; or (b) at least 2 exits if 2 or more exits are required. Compliance commentary The following areas are not provided with a second exit: ○ Loading dock and waste areas on the ground floor of Building 3A  ○ Building 2A – level 01 to level 6;

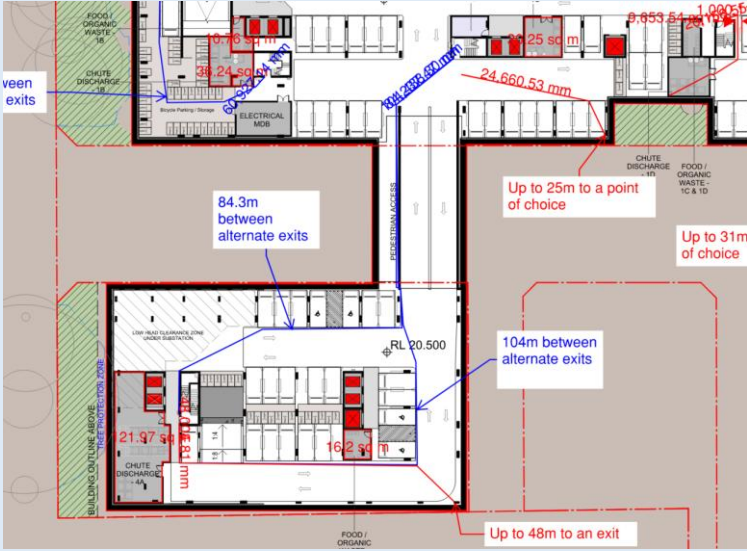
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					 ○ Building 3A – level 33.  This is to be addressed by way of a Performance Solution by the fire engineer at CC stage. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
D2D4 When fire-isolated stairways and ramps are required [2019: D1.3]				X	(1) Class 2 and 3 buildings — The following applies: (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— (i) 3 consecutive storeys in a Class 2 building; or (ii) 2 consecutive storeys in a Class 3 building.



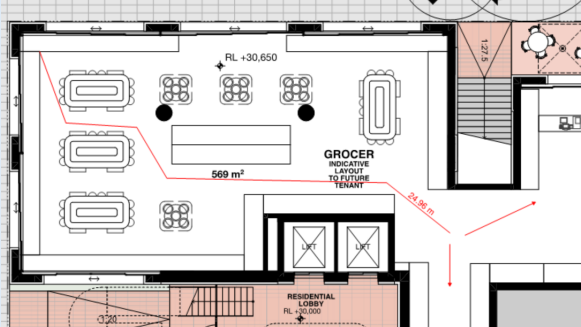
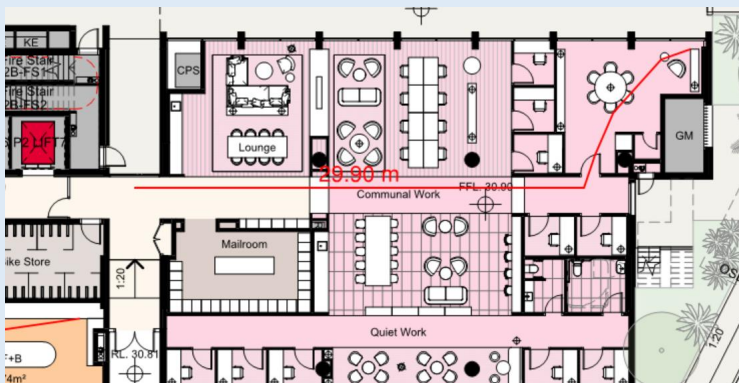
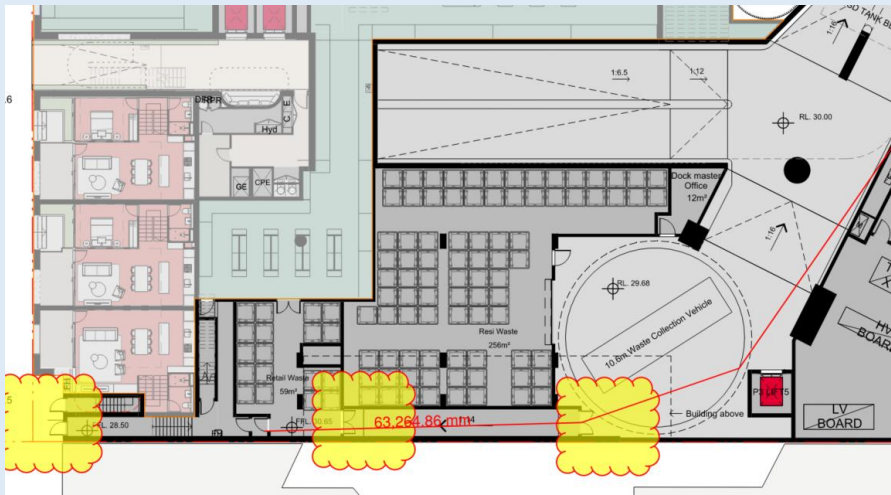
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(b) Notwithstanding (a), one extra storey of any classification may be included if— (i) it is only for the accommodation of motor vehicles or for other ancillary purposes; or (ii) the building has a sprinkler system (other than a FPAA101D system) complying with Specification 17 installed throughout; or (iii) 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, if loadbearing; and (C) no opening that could permit the passage of fire or smoke. (2) Class 5, 6, 7, 8 or 9 buildings — Every stairway or ramp serving as a required exit must be fire-isolated unless— (b) it is part of an open spectator stand; or (c) in any other case, except in a Class 9b early childhood centre or a Class 9c building, it connects, passes through or passes by not more than 2 consecutive storeys and one extra storey of any classification may be included if— (i) the building has a sprinkler system (other than a FPAA101D system) complying with Specification 17 installed throughout; or (ii) the required exit does not provide access to or egress for, and is separated from, the extra storey by construction having— (A) an FRL of –/60/60, if non-loadbearing; and (B) an FRL of 90/90/90 for Type A construction or 60/60/60 for Type B or C construction, if loadbearing; and (C) no opening that could permit the passage of fire or smoke. <u>Compliance commentary</u> The two non-fire isolated stairways serving Building 3B and the single non-fire isolated stairway serving Building 2B connect more than 4 consecutive storeys and are noted as being external stairways in lieu of a fire-isolated stairway.

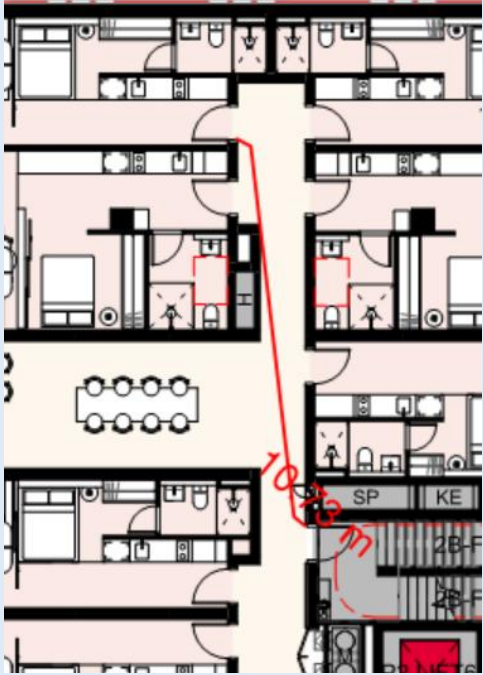
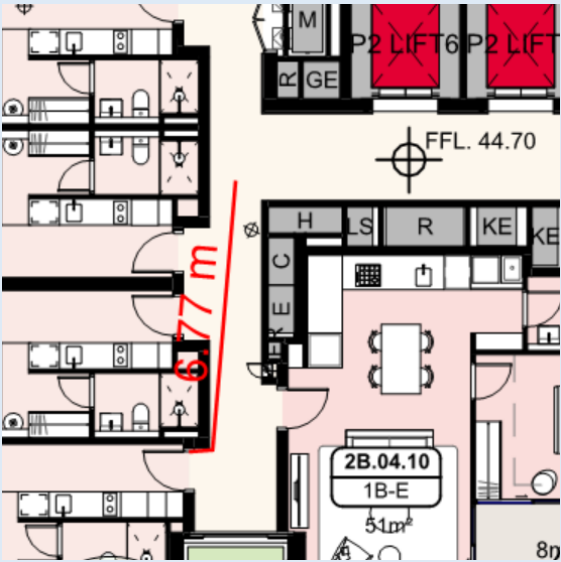


BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					 Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D2D5 Exit travel distances [2019: D1.4]		X			(1) Class 2 and 3 buildings — (a) The entrance doorway of any sole-occupancy unit must be not more than— (i) 6 m from an exit or from a point from which travel in different directions to 2 exits is available; or (ii) 20 m from a single exit serving the storey at the level of egress to a road or open space; and (b) 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. (3) Class 5, 6, 7, 8 or 9 buildings — Subject to (4), (5) and (6)— (a) no point on a floor must be more than 20 m from an exit, or a point from which travel in different directions to 2 exits is available, in which case the maximum distance to one of those exits must not exceed 40 m; and (b) in a Class 5 or 6 building, the distance to a single exit serving a storey at the level of access to a road or open space may be increased to 30 m.

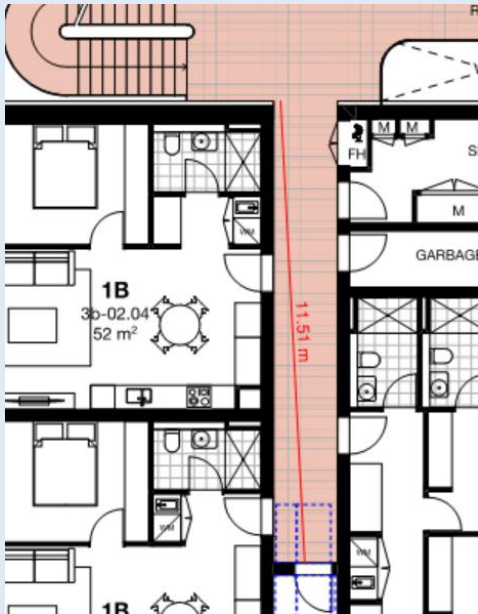
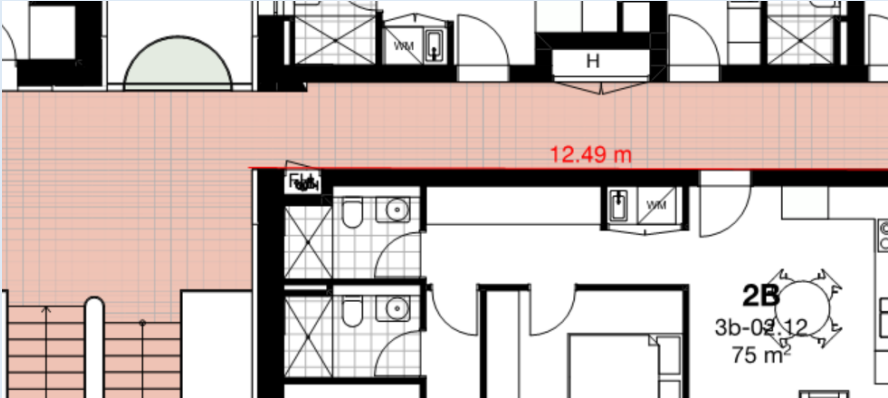
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
					(6) Assembly buildings — In a Class 9b building other than a school or early childhood centre, the distance to one of the exits may be 60 m if— (a) the path of travel from the room concerned to that exit is through another area which is a corridor, hallway, lobby, ramp or other circulation space; and (b) the room is smoke-separated from the circulation space by construction having an FRL of not less than 60/60/60 with every doorway in that construction protected by a tight fitting, self-closing, solid-core door not less than 35 mm thick; and (c) the maximum distance of travel does not exceed 40 m within the room and 20 m from the doorway to the room through the circulation space to the exit. Compliance commentary The following areas provide extended distance of travel to a point of choice to an exit or extended distance to an exit: - Basement 02 – Up to 25m to a point of choice and up to 48m to an exit;  - Basement 02 (Parcel 3) – Up to 36.3m to a point of choice and up to 61.1m to an exit from the furthest point within the Resi waste room;  - Basement 01 – Up to 32.4m to a point of choice in lieu of 20m from the furthest point within the CP Supply room;

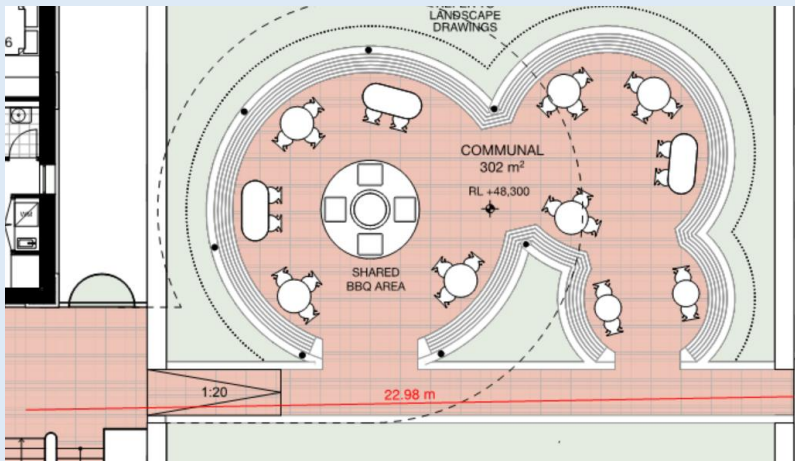
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					- Basement 01 – Up to 32.4m to a point of choice in lieu of 20m from the furthest point within the grease arrestor room; - Basement 01 – Up to 43.6m to an exit in lieu of 40m from the furthest point within the Resi waste room; - Ground floor retail tenancy (Building 3B) – 25m to a point of choice to 2 exits in lieu of 20m;

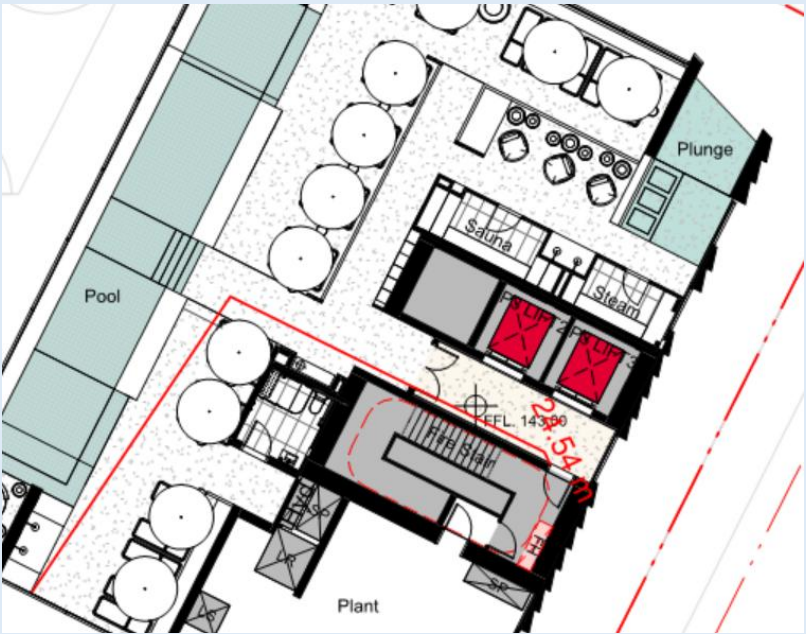
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					 - Ground floor communal work area (Building 2B) – 30m to a point of choice to 2 exits in lieu of 20m;  - Ground floor (Building 3A) – 63.3m from the furthest point within the resi waste/organic room to exit in lieu of 20m  - Level 01 to level 03 (Building 2B) – Up to 11m to a point of choice to 2 exits in lieu of 6m;

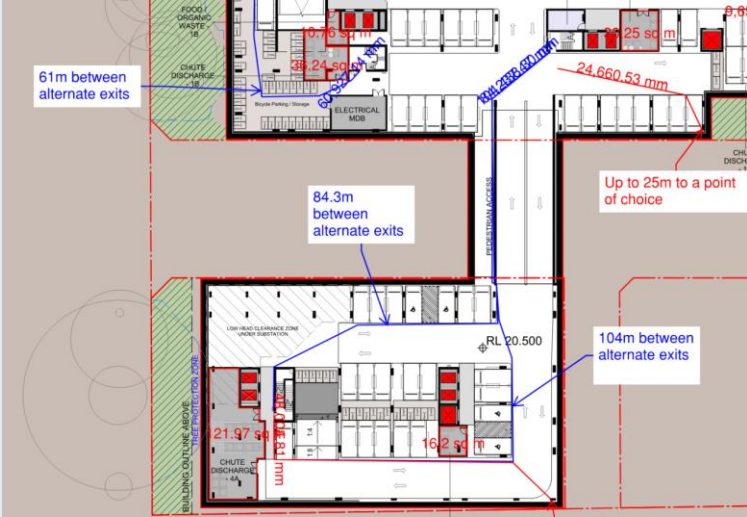
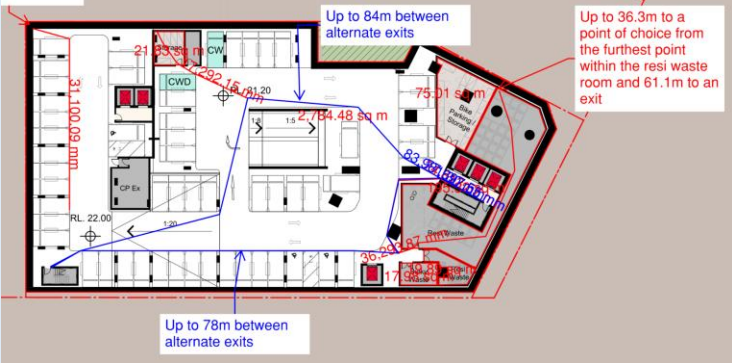
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					 - Level 04 to level 07 and level 08 to level 13 (Building 2B) – Up to 6.7m to a point of choice to 2 exits in lieu of 6m;  - Level 01 to level 6 (Building 2A) – Up to 9m and 10.5m to an exit in lieu of 6m from the doorway to the furthest unit;

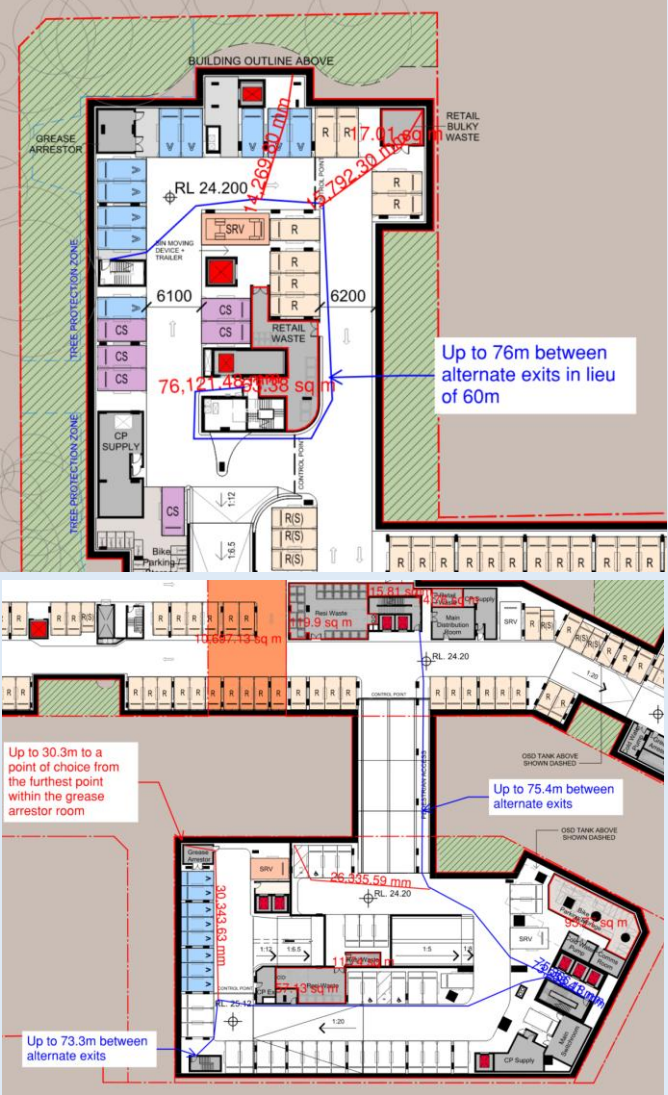
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					Level 01 (Building 3B) – Up to 13.8m to a point of choice to 2 exits in lieu of 6m;

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					- Level 02 to level 04 (Building 3B) – Up to 11.5m and 12.5m to a point of choice to 2 exits in lieu of 6m;   - Level 05 to level 06 (Building 3B) – Up to 8.7m to a point of choice to 2 exits in lieu of 6m;

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					 - Level 05 (Building 3B) – 23m to a point of choice to 2 exits in lieu of 20m from communal area;  - Level 03 and 04 (Building 3A) – Up to 6.4m to a point of choice to 2 exits in lieu of 6m;

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					 Level 06 (Building 3A) – Up to 34.3m from the furthest point on the external balcony of the communal area in lieu of 20m;  This is to be addressed by way of a Performance Solution by the fire engineer at CC stage. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
D2D6 Distance between alternative exits [2019: D1.5]		X			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

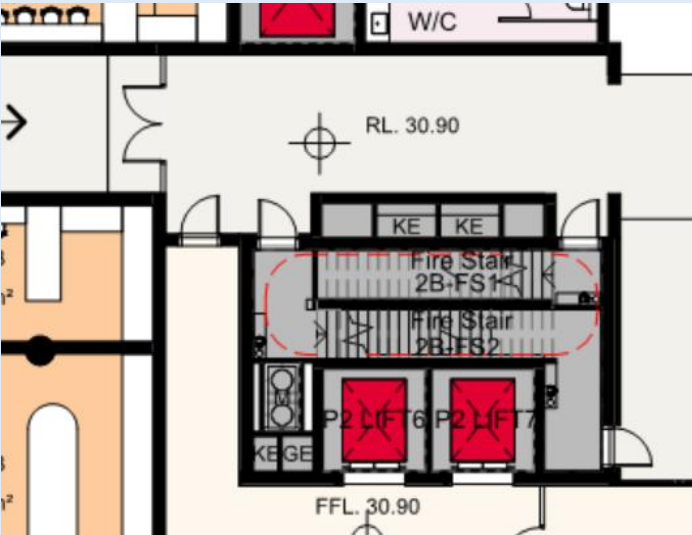
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					least 2 exits is readily available from all points on the floor including lift lobby areas; and (b) not less than 9 m apart; and (c) not more than— (i) in a Class 2 or 3 building — 45 m apart; or (ii) in a Class 9a health-care building, if such required exit serves a patient care area — 45 m apart; or (iii) in all other cases — 60 m apart; and (d) located so that alternative paths of travel do not converge such that they become less than 6m apart. Compliance commentary Basement 02 – Up to 104m between alternate exits through the point of choice in lieu of 60m;  Basement 02 (Parcel 3) – Up to 84m between alternate exits through the point of choice in lieu of 60m;  Basement level 1 – Up to 76m between alternate exits through the point of choice in lieu of 60m;

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
					 This is to be addressed by way of a Performance Solution by the fire engineer at CC stage. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D2D7 Height of doorways in exits and paths of travel to exits [2019: D1.6(a)]				X	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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
NSW D2D8 Width of exits and paths of travel to exits [2019: D1.6(b), (c), (d) and (e)]				X	(1) The unobstructed width of each required exit or path of travel to an exit, except for ladders provided in accordance with D2D21, D3D23 or I3D5, and doorways, must be not less than— (a) 1 m; or (2) If the storey, mezzanine or open spectator stand accommodates more than 100 persons but not more than 200 persons, the aggregate



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
					unobstructed width of each required exit or path of travel to an exit, except for doorways, must be not less than— (a) 1 m plus 250 mm for each 25 persons (or part) in excess of 100; (3) If the storey, mezzanine or open spectator stand accommodates more than 200 persons, the aggregate unobstructed width of each required exit or path of travel to an exit, except for doorways, must be not less than— (a) 2 m plus 500 mm for every 60 persons (or part) in excess of 200 persons if egress involves a change in floor level by a stairway or ramp with a gradient steeper than 1 in 12; or (b) in any other case, 2 m plus 500 mm for every 75 persons (or part) in excess of 200. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
NSW D2D9 Width of doorways in exits or paths of travel to exits [2019: D1.6, NSW D1.6(f)(vi)]				X	In a required exit or path of travel to an exit, the unobstructed width of a doorway must be not less than— (c) the unobstructed width of each exit provided to comply with D2D8(1), (2), (3) or (4), minus 250 mm; or (f) in any other case except where it opens to a sanitary compartment or bathroom — 750 mm wide. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D2D10 Exit width not to diminish in direction of travel [2019: D1.6(g)]				X	The unobstructed width of a required exit must not diminish in the direction of travel to a road or open space, except where the width is increased in accordance with D2D8(1)(b) or D2D9(a)(i). Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D2D11 Determination and measurement of exits and paths of travel to exits [2019: D1.6(h) and (i)]				X	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 2m vertically above a line along the nosings of the treads or the floor surface of the ramp or landing. (b) To determine the aggregate unobstructed width, the number of persons accommodated must be calculated according to D2D18. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D2D12 Travel via fire-isolated exits [2019: D1.7]		X			(1) A doorway from a room must not open directly into a stairway, passageway or ramp that is required to be fire-isolated unless it is from— (a) a public corridor, public lobby or the like; or (b) a sole-occupancy unit occupying all of a storey; or (c) a sanitary compartment, airlock or the like. (2) Each fire-isolated stairway or fire-isolated ramp must provide independent egress from each storey served and discharge directly, or by way of its own fire-isolated passageway— (a) to a road or open space; or (b) to a point—

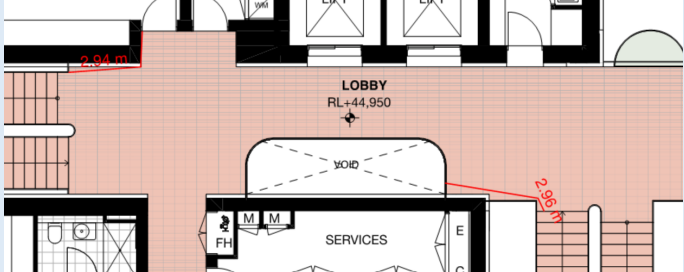
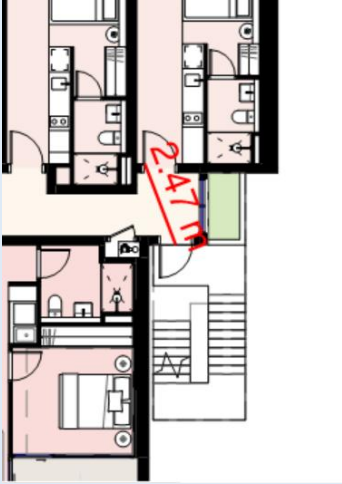
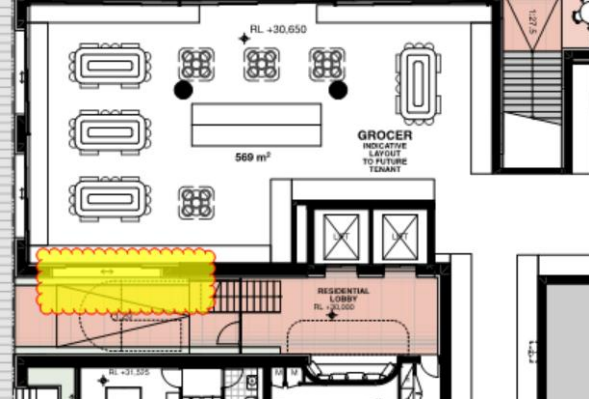


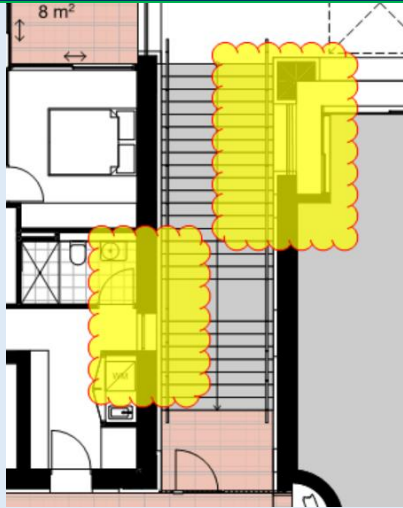
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
					(i) in a storey or space, within the confines of the building, that is used only for pedestrian movement, car parking or the like and is open for at least $\frac{2}{3}$ of its perimeter; and (ii) from which an unimpeded path of travel, not further than 20 m, is available to a road or open space; or (c) into a covered area that— (i) adjoins a road or open space; and (ii) is open for at least $\frac{1}{3}$ of its perimeter; and (iii) has an unobstructed clear height throughout, including the perimeter openings, of not less than 3 m; and (iv) provides an unimpeded path of travel from the point of discharge to the road or open space of not more than 6 m. (3) Where a path of travel from the point of discharge of a fire-isolated exit necessitates passing within 6 m of any part of an external wall of the same building, measured horizontally at right angles to the path of travel, the following applies: (a) That part of the wall must have— (i) an FRL of not less than 60/60/60; and (ii) any openings protected internally in accordance with C4D5; and (b) The protection required by (a) must extend for a distance of 3 m above or below, as appropriate, the level of the path of travel, or for the height of the wall, whichever is the lesser. (4) If more than 2 access doorways, not from a sanitary compartment or the like, open to a required fire-isolated exit in the same storey— (a) a smoke lobby in accordance with D3D7 must be provided; or (b) the <i>exit</i> must be pressurised in accordance with AS 1668.1. (5) A ramp must be provided at any change in level less than 600 mm in a <i>fire-isolated passageway</i> in a Class 9 building. Compliance commentary The fire-isolated stairways serving the upper levels of Building 2B discharge internally into an area that is not open for at least $\frac{2}{3}$ of its perimeter. 

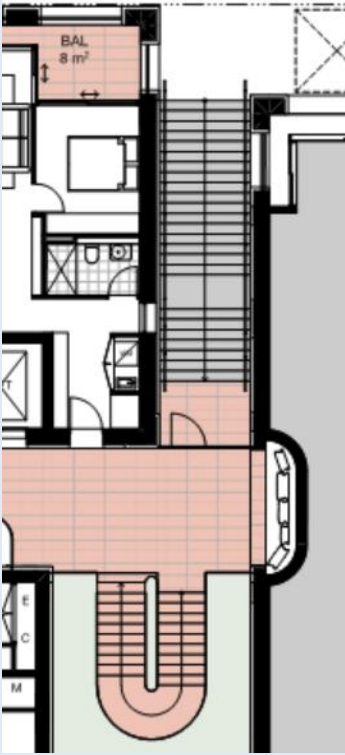


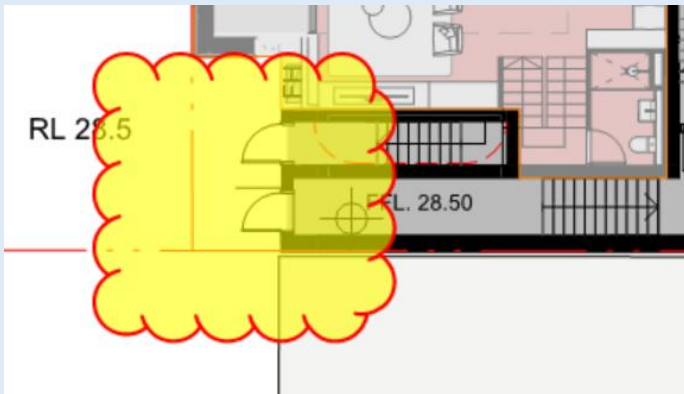
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D2D13 External stairways or ramps in lieu of fire-isolated exits [2019: D1.8]		X			(1) An external stairway or ramp may serve as a required exit in lieu of a fire-isolated exit serving a storey below an effective height of 25 m, if the stairway or ramp is— (a) non-combustible throughout; and (b) protected in accordance with (3) if it is within 6 m of, and exposed to, any part of the external wall of the building it serves. (2) For the purposes of this clause— (a) exposure under (1)(b), is measured in accordance with S5C2, as if the exit was a building element and the external wall of the building was a fire-source feature to the exit, except that the FRL required in S5C2(1)(a) must not be less than 60/60/60; and (b) the plane formed at the construction edge or perimeter of an unenclosed building or part such as an open-deck carpark, open spectator stand or the like, is deemed to be an external wall; and (c) openings in an external wall and openings under (3) and (4), are determined in accordance with C4D2. (3) The protection referred to in (1)(b), must adequately protect occupants using the exit from exposure to a fire within the building, in accordance with one of the following methods: (a) The part of the external wall of the building to which the exit is exposed must have— (i) an FRL of not less than 60/60/60; and (ii) no openings less than 3 m from the exit (except a doorway serving the exit protected by a –/60/30 fire door in accordance with C4D9(1)); and (iii) any opening 3 m or more but less than 6 m from the exit, protected in accordance with C4D5 and if wall wetting sprinklers are used, they are located internally. (b) The exit must be protected by construction of a wall, roof, floor or other shielding element as appropriate in accordance with (4) from— (i) any part of the external wall of the building having an FRL of less than 60/60/60; and (ii) any openings in the external wall. (4) The wall, roof, floor or other shielding element required by (3)(b) must— (a) have an FRL of not less than 60/60/60; and (b) have no openings less than 3 m from the external wall of the building (except a doorway serving the exit protected by a –/60/30 fire door in accordance with C4D9(1)); and (c) have any opening 3 m or more but less than 6 m from any part of the external wall of the building protected in accordance with C4D5 and if wall wetting sprinklers are used, they are located on the side exposed to the external wall. <u>Compliance commentary</u> ▪ External stairways in lieu of fire-isolated stairways are proposed to Buildings 2B & 3B. Both buildings provide an effective height greater than 25m and as such, external stairways in lieu of fire-isolated stairways are not permitted.



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					Discussions to be held with the fire engineer to determine if this can be addressed by way of a Performance Solution. - The atrium provides an opening within 3m of the external stairway which is not permitted. - Door openings to the units are located within 3m of the external stairways contrary to Clause D2D13(3)(a)(ii).   - The external non-fire-isolated stairways serving in lieu of fire-isolated discharge into a covered area on level 1 and then use a separate non-fire-isolated stairway to discharge to the street at ground level and requires occupants to pass by openings in the external wall. Discussions to be held with the fire engineer to determine if this can be addressed by way of a Performance Solution. 

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					 <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
D2D14 Travel by non-fire-isolated stairways or ramps [2019: D1.9]				X	(1) A non-fire-isolated stairway or non-fire-isolated ramp serving as a required exit must provide a continuous means of travel by its own flights and landings from every storey served to the level at which egress to a road or open space is provided. (2) In a Class 2, 3 or 4 building, the distance between the doorway of a room or sole-occupancy unit and the point of egress to a road or open space by way of a stairway or ramp that is not fire-isolated and is required to serve that room or sole-occupancy unit must not exceed— (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 or non-fire-isolated ramp must not exceed 80 m. (4) In a Class 2, 3 or 9a building, a required non-fire-isolated stairway or non-fire-isolated ramp must discharge at a point not more than— (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. (5) In a Class 5 to 8 or 9b building, a required non-fire-isolated stairway or non-fire-isolated ramp must discharge at a point not more than— (a) 20 m from a doorway providing egress to a road or open space or from a fire-isolated passageway leading to a road or open space; or (b) 40 m from one of 2 such doorways or passageways if travel to each of them from the non-fire-isolated stairway or non-fire-isolated ramp is in opposite or approximately opposite directions. (6) In a Class 2 or 3 building, if 2 or more exits are required and are provided by means of internal non-fire-isolated stairways or non-fire-isolated ramps each exit must— (a) provide separate egress to a road or open space; and (b) be suitably smoke-separated from each other at the level of discharge. <u>Compliance commentary</u>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					- Continuous means of travel by its own flights and landings has not been provided to the external stairway serving Building 3B. - This is to be addressed by way of a Performance Solution by the fire engineer at CC stage.  <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
NSW D2D15 Discharge from exits [2019: D1.10]		X			(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— (a) the minimum width of the required exit; or (b) 1 m, whichever is the greater. (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 (b) except if the exit is from a Class 9a building, a stairway complying with the Deemed-to-Satisfy Provisions of the BCA. (4) The discharge point of alternative exits must be located as far apart as practical. (7) The number of persons accommodated must be calculated according to D2D18.

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					Compliance commentary - It should be noted, egress from the buildings relies upon the dedication of land for the purpose of public roads. The land identified as future roads and through site link is required to be dedicated as such prior to the issuance of an OC or discussions to be held with the fire engineer at CC stage. - The fire-isolated stairways serving Building 3A and 3B discharge at ground floor level but are not as far apart as practical.   <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
D2D16 Horizontal exits [2019: D1.11]			X		Not applicable.
D2D17 Non-required stairways, ramps or escalators [2019: D1.12]				X	An escalator, moving walkway or non-required non fire-isolated stairway or pedestrian ramp— (a) must not be used between storeys in— (i) a patient care area in a Class 9a health-care building; or (ii) a resident use area in a Class 9c building; and (b) may connect any number of storeys if it is— (i) in an open spectator stand or indoor sports stadium; or (ii) in a carpark or an atrium; or (iii) outside a building; or



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(iv) in a Class 5 or 6 building that is sprinklered throughout, where the escalator, walkway, stairway or ramp complies with Specification 14; and (c) except where permitted in (b) must not connect more than— (i) 3 storeys if each of those storeys is provided with a sprinkler system (other than a FPAA101D system) complying with Specification 17 throughout; or (ii) 2 storeys, provided that in each case, those storeys must be consecutive, and one of those storeys is situated at a level at which there is direct egress to a road or open space; and (d) except where permitted in (b) or (c), must not connect, directly or indirectly, more than 2 storeys at any level in a Class 5, 6, 7, 8 or 9 building and those storeys must be consecutive. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
NSW D2D18 Number of persons accommodated [2019: D1.13]			X		For the purposes of the Deemed-to-Satisfy Provisions, the number of persons accommodated in a storey, room or mezzanine must be determined with consideration to the purpose for which it is used and the layout of the floor area by— (a) calculating the sum of the numbers obtained by dividing the floor area of each part of the storey by the number of square metres per person listed in Table D2D18 according to the use of that part, excluding spaces set aside for— (i) lifts, stairways, ramps and escalators, corridors, hallways, lobbies and the like; and (ii) service ducts and the like, sanitary compartments or other ancillary uses; or (b) reference to the seating capacity in an assembly building or room; or (c) any other suitable means of assessing its capacity.
D2D19 Measurement of distances [2019: D1.14]			X		The nearest part of an exit means in the case of— (a) a fire-isolated stairway, fire-isolated passageway, or fire-isolated ramp, the nearest part of the doorway providing access to them; and (b) a non-fire-isolated stairway, the nearest part of the nearest riser; and (c) a non-fire-isolated ramp, the nearest part of the junction of the floor of the ramp and the floor of the storey; and (d) a doorway opening to a road or open space, the nearest part of the doorway; and (e) a horizontal exit, the nearest part of the doorway
D2D20 Method of measurement [2019: D1.15]			X		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





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					building is measured in a straight line to the nearest part of the required single exit or point from which travel in different directions to 2 required exits is available. (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 substations: Concession [2019: D1.16]				X	(1) A ladder may be used in lieu of a stairway to provide egress from— (a) a plant room with a floor area of not more than 100 m²; or (b) all but one point of egress from a plant room, a lift machine room or a Class 8 electricity network substation with a floor area of not more than 200 m². (2) A ladder permitted under (1)— (a) may— (i) form part of an exit provided that in the case of a fire-isolated stairway it is contained within the shaft; or (ii) discharge within a storey in which case it must be considered as forming part of the path of travel; and (b) for a plant room or a Class 8 electricity network substation, must comply with AS 1657; and (c) for a lift machine room, where access is provided from within a machine room to a secondary floor, a fixed rung type ladder complying with AS 1657 may be used, provided that— (i) the height between the floors is not more than 2800 mm; and (ii) the ladder is inclined at an angle to the horizontal not less than 65 degrees nor more than 75 degrees; and (iii) the distance between the front face of the ladder and any adjacent obstruction is not less than— (A) 960 mm, where the ladder is inclined 65 degrees to the horizontal; or (B) 760 mm, where the ladder is inclined 75 degrees to the horizontal; or (C) a distance that is determined by interpolating the values in (A) and (B), where the ladder is





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					inclined at any angle between 65 degrees and 75 degrees to the horizontal; and (iv) a clear space not less than 600 mm exists between the foot of the ladder and any equipment.
D2D22 Access to lift pits [2019: D1.17]			X		Not applicable.
D2D23 Egress from primary schools [2019: D1.18]			X		Not applicable.
Part D3 Construction of exits					
D3D1 Deemed-to-Satisfy Provisions [2019: D2.0]			X		(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements D1P1 to D1P6, D1P8 and D1P9 are satisfied by complying with— (a) D2D2 to D2D23, D3D2 to D3D30 and D4D2 to D4D13; and (b) in a building containing an atrium, Part G3; and (c) in a building in an alpine area, Part G4; and (d) for a building containing an occupiable outdoor area, Part G6; and (e) for additional requirements for Class 9b buildings, Part I1; and (f) for public transport buildings, Part I2; and (g) for farm buildings and farm sheds, Part I3. (2) Where a Performance Solution is proposed the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable. (3) Performance Requirement D1P7 must be complied with if lifts are to be used to assist occupants to evacuate a building.
NSW D3D2 Application of Part [2019: NSW D2.1(c)]			X		(1) Except for— (a) D3D14, D3D15(a), D3D17, D3D18, D3D19, D3D20, D3D22(5), D3D22(6), D3D26 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 3 building; and (b) 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 or Class 4 part of a building. (1) In a Class 9b building used as an entertainment venue— (a) Clauses NSW D3D14(1)(i), (j), and (k), NSW D3D16(d), NSW D3D18(1)(d), and NSW D3D24(2)(e) apply to only those parts of the building used by the public; and (b) the general requirements of Part D3 apply to all other parts of the building.
D3D3 Fire-isolated stairways and ramps [2019: D2.2]				X	A stairway or ramp (including any landings) that is required to be within a fire-resisting shaft must be constructed— (a) of non-combustible materials; and (b) so that if there is local failure it will not cause structural damage to, or impair the fire-resistance of, the shaft.





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					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans, Structural Engineering Plans & specification
D3D4 Non-fire-isolated stairways and ramps [2019: D2.3]				X	In a building having a rise in storeys of more than 2, required stairs and ramps (including landings and any supporting building elements) which are not required to be within a fire-resisting shaft, must be constructed according to D3D3, or only of— (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/m³ at a moisture content of 12%; and (iii) has not been joined by means of glue unless it has been laminated and glued with resorcinol formaldehyde or resorcinol phenol formaldehyde glue. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D3D5 Separation of rising and descending stair flights [2019: D2.4]				X	If a stairway serving as an exit is required to be fire-isolated— (a) there must be no direct connection between— (i) a flight rising from a storey below the lowest level of access to a road or open space; and (ii) a flight descending from a storey above that level; and (b) any construction that separates or is common to the rising and descending flights must be— (i) non-combustible; and (ii) smoke proof in accordance with S11C2 Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D3D6 Open access ramps and balconies [2019: D2.5]			X		Not applicable.
D3D7 Smoke lobbies [2019: D2.6]			X		Not applicable.
D3D8 Installations in exits and paths of travel [2019: D2.7]				X	(1) Access to service shafts and services other than to fire-fighting or detection equipment as permitted in the Deemed-to-Satisfy Provisions of Section E, must not be provided from a fire-isolated stairway, fire-isolated passageway or fire-isolated ramp. (2) An opening to any chute or duct intended to convey hot products of combustion from a boiler, incinerator, fireplace or the like, must not be located in any part of a required exit or any corridor, hallway, lobby or the like leading to a required exit. (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





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					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— (a) non-combustible construction; or (b) a fire-protective covering. (6) Electrical wiring may be installed in a fire-isolated exit if the wiring is associated with— (a) a lighting, detection, or pressurisation system serving the exit; or (b) a security, surveillance or management system serving the exit; or (c) an intercommunication system or an audible or visual alarm system in accordance with D3D27; or (d) the monitoring of hydrant or sprinkler isolating valves. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D3D9 Enclosure of space under stairs and ramps [2019: D2.8]				X	(1) Fire-isolated stairways and ramps — If the space below a required fire-isolated stairway or fire-isolated ramp is within the fire-isolated shaft, it must not be enclosed to form a cupboard or similar enclosed space. (2) Non fire-isolated stairways and ramps — The space below a required non fire-isolated stairway (including an external stairway) or non fire-isolated ramp must not be enclosed to form a cupboard or other enclosed space unless— (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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D3D10 Width of required stairways and ramps [2019: D2.9]				X	A required stairway or ramp that exceeds 2 m in width is counted as having a width of only 2 m unless it is divided by a handrail or barrier continuous between landings and each division has a width of not more than 2 m. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D3D11 Pedestrian ramps [2019: D2.10]				X	(1) A fire-isolated ramp may be substituted for a fire-isolated stairway if the construction enclosing the ramp and the width and ceiling height comply with the requirements for a fire-isolated stairway. (2) A ramp serving as a required exit must— (a) where the ramp is also serving as an accessible ramp under Part D4, be in accordance with AS 1428.1; or (b) in any other case, have a gradient not steeper than 1:8.





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					(3) The floor surface of a ramp must have a slip-resistance classification not less than that listed in Table D3D15 when tested in accordance with AS 4586. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D3D12 Fire-isolated passageways [2019: D2.11]				X	(1) The enclosing construction of a fire-isolated passageway must have an FRL when tested for a fire outside the passageway in another part of the building of— (a) if the passageway discharges from a fire-isolated stairway or ramp — not less than that required for the stairway or ramp shaft; or (b) in any other case — not less than 60/60/60. (2) Notwithstanding (1)(b), the top construction of a fire-isolated passageway need not have an FRL if the walls of the fire-isolated passageway extend to the underside of— (a) a non-combustible roof covering; or (b) a ceiling having a resistance to the incipient spread of fire of not less than 60 minutes separating the roof space or ceiling space in all areas surrounding the passageway within the fire compartment. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D3D13 Roof as open space [2019: D2.12]				X	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. Compliance commentary Openings within the slab between basement level 01 and ground floor and located within 3m of the path of travel to a road or open space from the fire-isolated stairways is to be addressed by way of a Performance Solution by the fire engineer at CC stage. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
NSW D3D14 Goings and risers [2019: D2.13]				X	(1) A stairway must have— (a) not more than 18 and not less than 2 risers in each flight; and (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





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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) treads of solid construction (not mesh or other perforated material) if the stairway is more than 10 m high or connects more than 3 storeys; and (g) in a Class 9b building, not more than 36 risers in consecutive flights without a change in direction of at least 30°; and (h) in the case of a required stairway, no winders in lieu of a landing; and (2) In the case of a non-required stairway— (a) the stairway must have— (i) not more than 3 winders in lieu of a quarter landing; and (ii) not more than 6 winders in lieu of a half landing; and (b) the going of all straight treads must be constant throughout the same flight and the dimensions of goings (G) is considered constant if the variation between— (i) adjacent goings, is no greater than 5 mm; and (ii) the largest and smallest going within a flight, does not exceed 10 mm; and (c) the going of all winders in lieu of a quarter or half landing may vary from the going of the straight treads within the same flight provided that the going of all such winders is constant. (3) Where a stairway discharges to a sloping public walkway or public road— (a) the riser (R) may be reduced to account for the slope of the walkway or road; and (b) the quantity (2R+G) may vary at that location. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D3D15 Landings [2019: D2.14]				X	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; and





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
NSW D3D16 Thresholds [2019: D2.15, NSW D2.15(d), (e)]				X	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— (b) in resident use areas in a Class 9c building, a ramp is provided with a maximum gradient of 1:8 for a maximum height of 25 mm over the threshold; or (c) in a building required to be accessible by Part D4, the doorway— (i) opens to a road or open space; and (ii) is provided with a threshold ramp or step ramp in accordance with AS 1428.1; or (e) In other cases— (i) the doorway opens to a road or open space, external stair landing or external balcony; and (ii) the door sill is not more than 190 mm above the finished surface of the ground, balcony, or the like, to which the doorway opens. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D3D17 Barriers to prevent falls [2019: D2.16(a), (b) and (c)]				X	<u>Design requirements</u> (1) A continuous barrier must be provided along the side of— (a) a roof to which general access is provided; and (b) a stairway or ramp; and (c) a floor, corridor, hallway, balcony, deck, verandah, mezzanine, access bridge or the like; and (d) any delineated path of access to a building, if the trafficable surface is 1 m or more above the surface beneath. (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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
NSW D3D18 Height of barriers [2019: Table D2.16a]				X	<u>Design requirements</u> (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.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(e) For all other locations – 1m. (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. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
D3D19 Openings in barriers [2019: Table D2.16a]				X	<u>Design requirements</u> (1) Except where allowed by (2), openings in a required barrier must not allow a 125 mm sphere to pass through. (2) In a fire-isolated stairway, fire-isolated ramp or other area used primarily for emergency purposes, openings in a required barrier— (a) must not allow a 300 mm sphere to pass through; or (b) where rails are used— (i) a 150 mm sphere must not be able to pass through the opening between the nosing line of the stair treads and the rail or between the rail and the floor of the landing, balcony or the like; and (ii) the opening between rails must not be more than 460 mm. (3) In Class 7 (other than car parks) and Class 8 buildings, openings in a required barrier— (a) must not allow a 300 mm sphere to pass through; or (b) where rails are used— (i) a 150 mm sphere must not be able to pass through the opening between the nosing line of the stair treads and the rail or between the rail and the floor of the landing, balcony or the like; and (ii) the opening between the rails must not be more than 460mm. (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. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
D3D20 Barrier climbability [2019: Table D2.16a]				X	<u>Design requirements</u> (1) A barrier required by D3D17, located on a floor more than 4 m above the surface beneath, must not incorporate horizontal or near horizontal elements that could facilitate climbing between 150 mm and 760 mm above the floor. (2) The requirements of (1) do not apply to—





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(a) fire-isolated stairways, fire-isolated ramps and other areas used primarily for emergency purposes, other than— (i) external stairways; and (ii) external ramps; and (b) Class 7 (other than carparks) and Class 8 buildings. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D3D21 Wire barriers [2019: D2.16(d)]				X	Where a required barrier is constructed of wire, it is deemed to meet the requirements of D3D19(1) if it is constructed in accordance with the following: (a) For horizontal wire systems— (i) when measured with a strain indicator, it must be in accordance with the tension values in Table D3D21a; or (ii) must not exceed the maximum deflections in Table D3D21c. (b) For non-continuous vertical wire systems, when measured with a strain indicator, must be in accordance with the tension values in Table D3D21a (see Note 4). (c) For continuous vertical or continuous near vertical sloped wire systems— (i) must have wires of no more than 2.5 mm diameter with a lay of 7×7 or 7×19 construction; and (ii) changes in direction at support rails must pass around a pulley block without causing permanent deformation to the wire; and (iii) must have supporting rails, constructed with a spacing of not more than 900 mm, of a material that does not allow deflection that would decrease the tension of the wire under load; and (iv) when the wire tension is measured with a strain indicator, it must be in accordance with the tension values in Table D3D21b and measured in the furthestmost span from the tensioning device. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D3D22 Handrails [2019: D2.17]				X	<u>Design requirements</u> (1) Except for handrails referred to in D3D23, and subject to (2), handrails must— (a) be located along at least one side of the ramp or flight; and (b) be located along each side if the total width of the stairway or ramp is 2 m or more; and (c) in a Class 9b building used as a primary school or a building that contains an early childhood centre— (i) have one handrail fixed at a height of not less than 865 mm; and (ii) in addition to (i), have a handrail— (A) fixed at a height between 665 mm and 750 mm in a primary school; and (B) with a cross-sectional dimension not less than 16 mm and not greater than 45 mm as measured





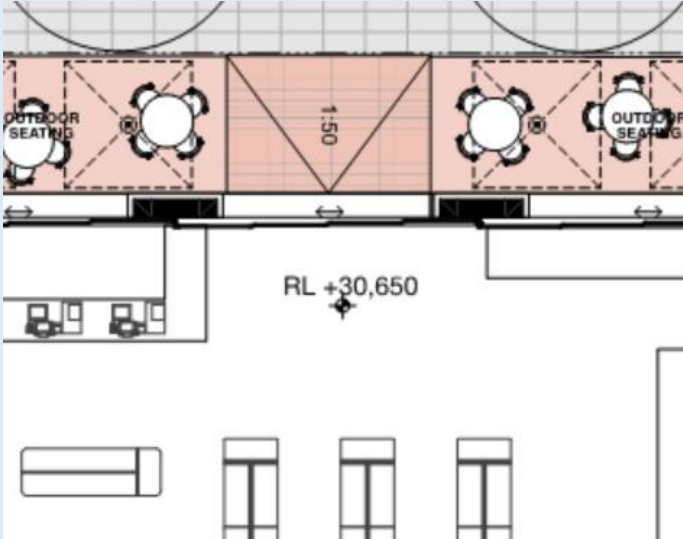
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					in any direction across its centre, fixed at a height between 450 mm and 700 mm in a Class 9b early childhood centre; and (d) in any other case, be fixed at a height of not less than 865 mm; and (e) be continuous between stair flight landings and have no obstruction on or above them that will tend to break a hand- hold; and (f) in a required exit serving an area required to be accessible, be designed and constructed to comply with clause 12 of AS 1428.1, except that clause 12(d) does not apply to a handrail required by (1)(c)(ii). (2) The height required by (1)(c) and (d) is measured above the nosings of stair treads and the floor surface of the ramp, landing or the like. (3) Handrails— (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 or 3 building or Class 4 part of a building must— (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) handrails referred to in D3D23; or (b) a stairway or ramp providing a change in elevation of less than 1m; or (c) a landing; or (d) a winder where a newel post is installed to provide a handhold. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D3D23 Fixed platforms, walkways, stairways and ladders [2019: D2.18]				X	A fixed platform, walkway, stairway, ladder and any going and riser, landing, handrail or barrier attached thereto may comply with AS 1657 in lieu of D3D14, D3D16, D3D17, D3D18, D3D19, D3D20, D3D21 and D3D22 if it only serves— (a) machinery rooms, boiler houses, lift-machine rooms, plant-rooms, and the like; or (b) non-habitable rooms, such as attics, storerooms and the like that are not used on a frequent or daily basis in the internal parts of a sole-occupancy unit in a Class 2 building or Class 4 part of a building. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
NSW D3D24		X			(2) A doorway serving as a required exit or forming part of a required exit, or a doorway in a patient care area of a Class 9a health-care building—

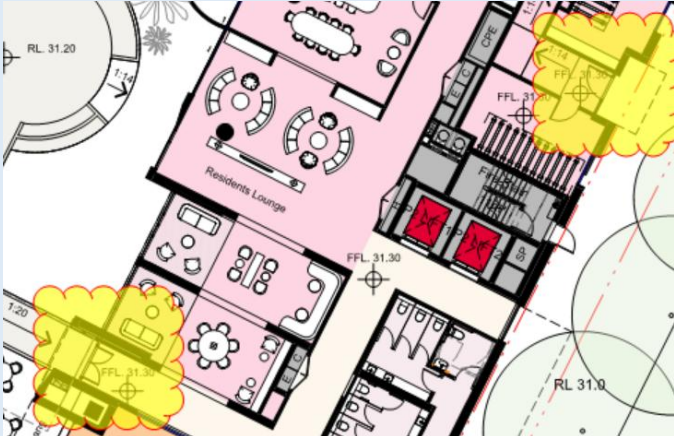
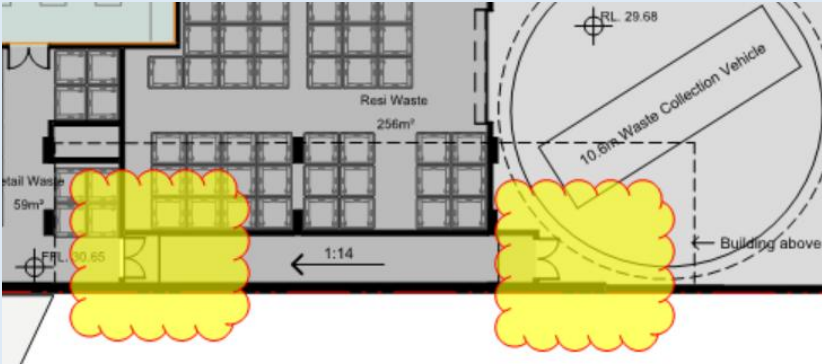




BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Doorways and doors [2019: D2.19]					(a) must not be fitted with a revolving door; and (b) must not be fitted with a roller shutter or tilt-up door unless— (i) it serves a Class 6, 7 or 8 building or part with a floor area not more than 200 m²; and (ii) the doorway is the only required exit from the building or part; and (iii) it is held in the open position while the building or part is lawfully occupied; and (c) must not be fitted with a sliding door unless— (i) it leads directly to a road or open space; and (ii) the door is able to be opened manually under a force of not more than 110 N; and (d) if fitted with a door which is power-operated— (i) it must be able to be opened manually under a force of not more than 110 N if there is a malfunction or failure of the power source; and (ii) if it leads directly to a road or open space it must open automatically if there is a power failure to the door or on the activation of a fire or smoke alarm anywhere in the fire compartment served by the door; and (d) in a Class 9b building used as an entertainment venue— (i) must not be fitted with a collapsible gate, accordion door, turnstile or rigid barrier; and (ii) if fitted with a door, must be— (A) a swing door which opens in the direction of egress; and (B) doors hung in two folds where the unobstructed width of the doorway is more than 1 m; and (iii) a doorway or opening within sight of the audience but not intended for egress must have a notice displayed clearly indicating its purpose and such a notice must not be internally illuminated; and (iv) notwithstanding (2)(c), a sliding door may be fitted where— (A) it leads directly to a road or open space and forms a main entrance; and (B) it is capable of swinging in the direction of egress when pressure is applied to the inside face of the door; and (C) the door is provided with signage that clearly indicates to persons seeking egress, the potential for swinging the door open in an emergency. (3) A power-operated door in a path of travel to a required exit, except for a door in a patient care area of a Class 9a health-care building as provided in (2), 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. <u>Compliance commentary</u> Automatic sliding door serving entry serving ground floor retail tenancy is 3B must comply with below provisions.



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					- 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 if it leads directly to a road or open space it must open automatically if there is a power failure to the door or on the activation of a fire or smoke alarm anywhere in the fire compartment served by the door; and - 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  <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
D3D25 Swinging doors [2019: D2.20]		X			(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; and (ii) when fully open, by more than 100 mm on the required width of the required exit; and (b) must swing in the direction of egress unless— (i) it serves a building or part with a floor area not more than 200m², 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. <u>Compliance commentary</u>

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					The doorways clouded in yellow below do not swing in the direction of egress: Ground floor   Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
NSW D3D26 Operation of latch [2019: D2.21]				X	(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 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



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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— (a) serves a vault, strong-room, sanitary compartment, or the like; or (b) serves only, or is within— (i) a sole-occupancy unit in a Class 2 building or a Class 4 part of a building; or (ii) a sole-occupancy unit in a Class 3 building (other than an entry door to a sole-occupancy unit of a boarding house, guest house, hostel, lodging house or backpacker accommodation); or (iii) a sole-occupancy unit with a floor area not more than 200 m² in a Class 5, 6, 7 or 8 building; or (iv) a space which is otherwise inaccessible to persons at all times when the door is locked; or (c) complies with (4) and serves— (i) Australian Government Security Zones 4 or 5; or (ii) the secure parts of a bank, detention centre, mental health facility, early childhood centre or the like; or (d) is fitted with a fail-safe device which automatically unlocks the door upon the activation of any sprinkler system (other than a FPAA101D system) complying with Specification 17 or smoke, or any other detector system deemed suitable in accordance with AS 1670.1 installed throughout the building, and is readily openable when unlocked; or (4) A door referred to in (3)(c) must be able to be immediately unlocked— (a) by operating a fail-safe control switch, not contained within a protective enclosure, to actuate a device to unlock the door; or (b) by hand by a person or persons, specifically nominated by the owner, properly instructed as to the duties and responsibilities involved and available at all times when the building is lawfully occupied so that persons in the building or part may immediately escape if there is a fire. (5) The requirements of (1) and (2) do not apply in a Class 9b building (other than a school, an early childhood centre or a building used for religious purposes) to a door in a required exit, forming part of a required exit or in the path of travel to a required exit serving a storey or room accommodating more than 100 persons, determined in accordance with D2D18, in which case it must be readily openable— (a) without a key from the side that faces a person seeking egress; and (b) by a single hand pushing action on a single device such as a panic bar located between 900 mm and 1.2 m from the floor; and (c) where a two-leaf door is fitted, the provisions of (a) and (b) need only apply to one door leaf if the appropriate requirements of D2D9 are satisfied by the opening of that one leaf; and





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(d) where the door is a door in a path of travel providing re-entry to the building from a balcony, terrace or the like, it may be fitted with key-operated fastenings only, the tongues of which must be locked in the retracted position whenever the building is occupied by the public, so the door can yield to pressure. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D3D27 Re-entry from fire-isolated exits [2019: D2.22]				X	(1) Doors of a fire-isolated exit must not be locked from the inside as follows: (d) In a fire-isolated exit serving any storey above an effective height of 25 m, throughout the exit. (2) The requirements of (1)(a), (c) and (d) do not apply to a door fitted with a fail-safe device that automatically unlocks the door upon the activation of a fire alarm and— (a) on at least every fourth storey, the doors are not able to be locked and a sign is fixed on such doors stating that re-entry is available; or (b) an intercommunication system, or an audible or visual alarm system, operated from within the enclosure is provided near the doors and a sign is fixed adjacent to such doors explaining its purpose and method of operation. (3) The requirements of (1)(b) do not apply to a door fitted with a fail-safe device that automatically unlocks the door serving the Class 9b early childhood centre upon the activation of a fire alarm. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D3D28 Signs on doors [2019: D2.23]				X	(1) A sign, to alert persons that the operation of certain doors must not be impaired, must be installed where it can readily be seen on, or adjacent to, in accordance with (2)— (a) a required— (i) fire door providing direct access to a fire-isolated exit, except a door providing direct egress from a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building; and (ii) smoke door; and (b) any door which is a— (i) fire door forming part of a horizontal exit; and (ii) smoke door that swings in both directions; and (iii) door leading from a fire isolated exit to a road or open space. (2) A sign required by (1)(a) must be fixed on the side of the door that faces a person seeking egress and, if the door is fitted with a device for holding it in the open position, either a sign must be fixed on the wall adjacent to the doorway, or signs must be fixed to both sides of the door. (3) A sign required by (1)(b) must be fixed on each side of the door. (4) A sign referred to in (1) must be in capital letters not less than 20 mm high in a colour contrasting with the background and state the following: (a) For an automatic door held open by an automatic hold-open device— FIRE SAFETY DOOR — DO NOT OBSTRUCT (a) For a self-closing door—





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					FIRE SAFETY DOOR DO NOT OBSTRUCT DO NOT KEEP OPEN (a) For a door discharging from a fire-isolated exit— FIRE SAFETY DOOR — DO NOT OBSTRUCT <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
D3D29 Protection of openable windows [2019: D2.24]				X	<u>Design requirements</u> (1) A window opening must be provided with protection, if the floor below the window is 2 m or more above the surface beneath in— (a) a bedroom in a Class 2 or 3 building or Class 4 part of a building; or (b) a Class 9b early childhood centre. (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— (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) except for (5) 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. (5) A barrier required by (3) to an openable window in— (a) fire-isolated stairways, fire-isolated ramps and other areas used primarily for emergency purposes, excluding external stairways and external ramps; and (b) Class 7 (other than carparks) and Class 8 buildings and parts of buildings containing those classes, must not permit a 300 mm sphere to pass through it. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
D3D30			X		Not applicable.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Timber stairways: Concession [2019: D2.25]					
NSW D3D31 Doors in paths of travel to an entertainment venue [2019: NSW D2.101]			X		Not applicable.
Part D4 Access for people with a disability – Excluded from this report					
Specification 14 Non-required stairways, ramps and escalators					
S14C1 Scope [2019: Spec D1.12: 1]			X		(1) This Specification contains the requirements to allow non-required stairways, ramps or escalators to connect any number of storeys in a Class 5 or 6 building. (2) The requirements do not apply in an atrium or outside a building.
S14C2 Requirements [2019: Spec D1.12: 2]				X	An escalator, moving walkway or non-required non-fire-isolated stairway or pedestrian ramp must comply with the following: (a) The escalator, walkway, stairway or ramp must be bounded by a shaft of— (i) construction with an FRL of not less than 120/120/120 if loadbearing or –/120/120 if non-loadbearing and if of lightweight construction must comply with Specification 6; or (ii) glazed construction with an FRL of not less than –/60/30 protected by a wall wetting system in accordance with S31C2 to S31C6. (b) The void of each non-required stairway, ramp or escalator must not connect more than 2 storeys. (c) Rising and descending escalators, walkways, stairways and ramps within one shaft must be separated by construction with an FRL of not less than –/60/30. (d) Openings into the shaft must be protected by fire doors with an FRL not less than –/60/30. (e) When the fire door is in the closed position, the floor or any covering over the floor beneath the fire door must not be combustible. (f) Fire doors must be fitted with smoke seals and the assembly must be tested in accordance with AS 1530.4. (g) Fire doors must be— (i) closed and locked for security reasons; or (ii) held open and be automatic closing. (h) Smoke detectors must be installed on both sides of the opening, not more than 1.5m horizontal distance from the opening. (i) In the closed position, fire doors must be openable on a single hand downward action or horizontal pushing action on a single device within the shaft and by key only from outside the shaft. (j) A warning sign must be displayed where it can readily be seen outside the shaft near all fire doors opening to the shaft, and must comply with the details and dimensions of Figure S14C2.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(k) All doors opening into the shaft must be within 20 m of a required exit. (l) Signs showing the direction of the nearest required exit must be installed where they can be readily seen. (m) Materials attached to any wall, ceiling or floor within the shaft must comply with Specification 7. (n) Emergency lighting must be installed in the shaft in accordance with E4D4. (o) No step or ramp may be closer to the threshold of the doorway than the width of the door leaf. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
Specification 15 Braille and tactile signs – Excluded from this report					
Specification 16 Accessible water entry/exit from swimming pools – Excluded from this report					
Section E Services and equipment					
Part E1 Fire fighting equipment					
E1D1 Deemed-to-Satisfy Provisions [2019: E1.0]			X		(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements E1P1 to E1P6 are satisfied by complying with— (a) E1D2 to E1D16; and (b) in a building containing an atrium, Part G3; and (c) in a building in an alpine area, Part G4; and (d) for a building containing an occupiable outdoor area, Part G6; and (e) for additional requirements for Class 9b buildings, Part I1; and (f) for farm buildings and farm sheds, Part I3. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.
E1D2 Fire hydrants [2019: E1.3]		X			(1) A fire hydrant system must be provided to serve a building— (a) having a total floor area greater than 500 m²; and (b) where a fire brigade station is— (i) no more than 50 km from the building as measured along roads; and (ii) equipped with equipment capable of utilising a fire hydrant. (2) The fire hydrant system must be installed in accordance with AS 2419.1. (3) Notwithstanding (2), a Class 8 electricity network substation need not comply with clause 4.2 of AS 2419.1 if— (a) it cannot be connected to a town main supply; and (b) one hour water storage is provided for fire-fighting. (4) Where internal fire hydrants are provided, they must serve only the storey on which they are located except that a sole-occupancy unit— (a) in a Class 2 or 3 building or Class 4 part of a building may be served by a single fire hydrant located at the level of egress from that sole-occupancy unit; or (b) of not more than 2 storeys in a Class 5, 6, 7, 8 or 9 building may be served by a single fire hydrant located at the level of egress





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					from that sole-occupancy unit provided the fire hydrant can provide coverage to the whole of the sole-occupancy unit. <u>Compliance commentary</u> ▪ The location of the fire hydrant pumproom is to be detailed on the drawings to determine compliance with Clause 6.11 of AS 2419.1-2021. ▪ The location of the fire hydrant booster assembly is to be detailed on the drawings to determine compliance with Clause 7.3 of AS 2419.1-2021. It should be noted where a single booster assembly is detailed to serve multiple buildings, the fire engineer will be required to address the non-compliance of the booster assembly being more than 20m from the main pedestrian entrance of each building (Clause 7.3.1(c)(ii). ▪ The buildings are required to be provided with a ring main in accordance with Clause 8.6.1 and 8.6.2 of AS 2419.1-2021. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification. Relevant fire safety systems are required to be designed and endorsed by an accredited practitioner (fire safety) in accordance with Section 22 of the EP&A (DC&FS) Regulation 2021.</i>
E1D3 Fire hose reels [2019: E1.4]				X	(1) E1D3 does not apply to— (a) a Class 2, 3 or 5 building or Class 4 part of a building; or (b) a Class 8 electricity network substation; or (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 m². (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, except a sole-occupancy unit of not more than 2 storeys in a Class 6, 7, 8 or 9 building may be served by a single fire hose reel located at the level of egress from that sole-occupancy unit provided the fire hose reel can provide coverage to the whole of the sole-occupancy unit. (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. (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.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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) doorways in walls referred to in C3D6(1)(e) in a Class 9a building and C3D6(5)(d) in a Class 9c building, separating ancillary use areas of high potential fire hazard; and (b) doorways in walls referred to in C3D13 or C3D14 separating equipment or electrical supply systems; and (c) doorway openings to shafts referred to in C4D14. (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. <u>Compliance commentary</u> Fire hose reels omitted from fire or smoke separated rooms is to be addressed by way of a Performance Solution by the fire engineer at CC stage. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification. Relevant fire safety systems are required to be designed and endorsed by an accredited practitioner (fire safety) in accordance with Section 22 of the EP&A (DC&FS) Regulation 2021.</i>
E1D4 Sprinklers [2019: E1.5]				X	A sprinkler system must— (a) be installed in a building or part of a building when required by E1D5 to E1D13 as applicable; and (b) comply with Specification 17 and Specification 18 as applicable. <u>Notes</u> NSW has requirements for fire sprinkler systems in certain residential aged care facilities. See the Department of Planning and Environment website www.planning.nsw.gov.au. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification. Relevant fire safety systems are required to be designed and endorsed by an accredited practitioner (fire safety) in accordance with Section 22 of the EP&A (DC&FS) Regulation 2021.</i>
E1D5 Where sprinklers are required: all classifications [2019: Table E1.5]				X	Sprinklers are required throughout all buildings if any part of the building has an effective height of more than 25 m— (a) including an open-deck carpark within a multi-classified building; but (b) excluding— (i) an open-deck carpark being a separate building; and





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(ii) a Class 8 electricity network substation, with a floor area not more than 200 m ² located within a multi- classified building. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
E1D6 Where sprinklers are required: Class 2 and 3 buildings other than residential care buildings [2019: Table E1.5]				X	(1) In a Class 2 or 3 building and any other class of building containing a Class 2 or 3 part, sprinklers are required throughout the building if any part of the building has— (a) a rise in storeys of 4 or more; and (b) an effective height of not more than 25 m. (2) The requirements of (1) do not apply to a residential care building. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
E1D7 Where sprinklers are required: Class 3 building used as a residential care building [2019: Table E1.5]			X		Not applicable.
E1D8 Where sprinklers are required: Class 6 building [2019: Table E1.5]			X		Not applicable.
E1D9 Where sprinklers are required: Class 7a building, other than an open-deck carpark [2019: Table E1.5]				X	In a Class 7a building, other than an open-deck carpark, sprinklers are required in fire compartments where more than 40 vehicles are accommodated. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
E1D10 Where sprinklers are required: Class 9a health-care building used as a residential care building, Class 9c buildings [2019: Table E1.5]			X		Not applicable.
E1D11			X		Not applicable.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Where sprinklers are required: Class 9b buildings [2019: Table E1.5]					
E1D12 Where sprinklers are required: additional requirements [2019: Table E1.5]				X	(1) For sprinkler requirements for atriums, see Part G3. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
E1D13 Where sprinklers are required: occupancies of excessive hazard [2019: Table E1.5 (Note 4)]			X		Not applicable.
E1D14 Portable fire extinguishers [2019: E1.6 and Table E1.6]				X	(1) Portable fire extinguishers must be— (a) provided as listed in (3) and (4); and (b) for a Class 2, 3 or 5 building or Class 4 part of a building, provided— (i) to serve the whole Class 2, 3 or 5 building or Class 4 part of a building where one or more internal fire hydrants are installed; or (ii) where internal fire hydrants are not installed, to serve any fire compartment with a floor area greater than 500 m ² , and for the purposes of this clause, a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building is considered to be a fire compartment; and (c) subject to (2), 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. (3) In Class 2 to 9 buildings (except within sole-occupancy units of a Class 9c building), portable fire extinguishers must be provided as follows: (a) To cover Class AE or E fire risks associated with emergency services switchboards. (b) To cover Class F fire risks involving cooking oils and fats in kitchens. (c) To cover Class B fire risks in locations where flammable liquids in excess of 50 litres are stored or used (not including that held in fuel tanks of vehicles).





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(d) To cover Class A fire risks in normally occupied fire compartments less than 500 m² not provided with fire hose reels (excluding open-deck carparks). (e) To cover Class A fire risks in classrooms and associated corridors in primary and secondary schools not provided with fire hose reels. (f) To cover Class A fire risks associated with a Class 2, 3 or 5 building or Class 4 part of a building. (4) In addition to the requirements of (3), portable fire extinguishers must be provided to cover Class A and E fire risks in the following occupancies in buildings, or parts of a building: (a) A Class 9a health-care building, including a Class 9a building used as a residential care building. (b) Class 3 parts of detention and correctional occupancies. (c) Class 3 accommodation for children, aged persons and people with disabilities, including a Class 3 building used as a residential care building. (d) A Class 9c building. (5) For the purposes of (3) and (4): (a) Fire risks are defined in accordance with AS 2444. (b) An emergency services switchboard is one which sustains emergency equipment operating in the emergency mode. (c) A Class E fire extinguisher need only be located at each nurses' station, supervisors' station or the like. (d) Additional extinguishers may be required to cover fire risks in relation to special hazards provided for in E1D17. (e) The fire risks in a Class 2 or 3 building or Class 4 part of a building must include risks within any sole-occupancy units, however portable fire extinguishers are not required to be located within a sole-occupancy unit unless the sole-occupancy unit has a floor area greater than 500 m². (6) For the purposes of (4), where applicable, a Class E fire extinguisher need only be located at each nurses' station, supervisors' station or the like. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
E1D15 Fire control centres [2019: E1.8]				X	A fire control centre facility in accordance with Specification 19 must be provided for— (a) a building with an effective height of more than 25 m; and (b) a Class 6, 7, 8 or 9 building with a total floor area of more than 18 000 m² <u>Compliance commentary</u> The location of the fire control centre is to be detailed on the drawings at CC stage to determine compliance. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
E1D16				X	In a building under construction—





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Fire precautions during construction [2019: E1.9]					(a) not less than one fire extinguisher to suit Class A, B and C fires and electrical fires must be provided at all times on each storey adjacent to each required exit or temporary stairway or exit; and (b) after the building has reached an effective height of 12 m— (i) the required fire hydrants and fire hose reels must be operational in at least every storey that is covered by the roof or the floor structure above, except the 2 uppermost storeys; and (ii) any required booster connections must be installed.
E1D17 Provision for special hazards [2019: E1.10]			X		Suitable additional provision must be made if special problems of fighting fire could arise because of— (a) the nature or quantity of materials stored, displayed or used in a building or on the allotment; or (b) the location of the building in relation to a water supply for fire-fighting purposes. <u>Note: Electric Vehicle (EV) charging stations are deemed to be a special hazard and will require assessment by a suitably qualified fire engineer against this clause. This is to be included in the Fire Engineering Report prepared by the fire engineer at CC stage.</u>
Part E2 Smoke hazard management					
E2D1 Deemed-to-Satisfy Provisions [2019: E2.0]			X		(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements E2P1 to E2P2 are satisfied by complying with— (a) E2D2 to E2D21; and (b) in a building containing an atrium, Part G3; and (c) in a building in an alpine area, Part G4; and (d) for additional requirements for Class 9b buildings, Part I1. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.
E2D2 Application of Part [2019: E2.1]			X		(1) The Deemed-to-Satisfy Provisions of this Part do not apply to— (a) an open-deck carpark; or (b) an open spectator stand; or (c) a Class 8 electricity network substation with a floor area not more than 200 m², located within a multi-classified building. (2) In addition to the Deemed-to-Satisfy Provisions of E2D3 to E2D13, the following specific Deemed-to-Satisfy Provisions apply to the following Class 6 and Class 9b buildings: (a) For Class 6 buildings, in fire compartments more than 2000 m²— (i) not containing an enclosed common walkway or mall serving more than one Class 6 sole- occupancy unit — must comply with E2D14; or (ii) containing an enclosed common walkway or mall serving more than one Class 6 sole-occupancy unit — must comply with E2D15. (b) For Class 9b assembly buildings— (i) nightclubs, discotheques and the like — must comply with E2D16; and





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(ii) exhibition halls — must comply with E2D17; and (iii) theatres and public halls — must comply with E2D18; and (iv) theatres and public halls (not covered by E2D18) including lecture theatres and cinema/auditorium complexes — must comply with E2D19; and (v) other assembly buildings (not listed in (i) to (iv)) excluding schools — must comply with E2D20. (3) The smoke exhaust and smoke-and-heat vent provisions of this Part do not apply to any area not used by occupants for an extended period of time such as a storeroom with a floor area less than 30 m², sanitary compartment, plant room or the like.
E2D3 General Requirements [2019: E2.2]				X	(1) An air-handling system which does not form part of a smoke hazard management system in accordance with E2D4 to E2D20 and which recycles air from one fire compartment to another fire compartment or operates in a manner that may unduly contribute to the spread of smoke from one fire compartment to another fire compartment must, subject to (2), be designed and installed— (a) to operate as a smoke control system in accordance with AS 1668.1; or (b) such that it— (i) incorporates smoke dampers where the air-handling ducts penetrate any elements separating the fire compartments served; and (ii) is arranged such that the air-handling system is shut down and the smoke dampers are activated to close automatically by smoke detectors complying with clause 7.5 of AS 1670.1. (2) For the purposes of (1), each sole-occupancy unit in a Class 2 or 3 building is treated as a separate fire compartment. (3) Miscellaneous air-handling systems covered by Sections 5 and 6 of AS 1668.1 serving more than one fire compartment (other than a carpark ventilation system) and not forming part of a smoke hazard management system must comply with these Sections of the Standard. (4) A smoke detection system must be installed in accordance with S20C6 to operate AS 1668.1 systems that are provided for zone pressurisation and automatic air pressurisation for fire-isolated exits. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
E2D4 Fire-isolated exits [2019: Table E2.2a]		X			(1) A part of a building listed in (2) must be provided with— (a) an automatic air pressurisation system for fire-isolated exits in accordance with AS 1668.1; or (b) open access ramps or balconies in accordance with D3D6. (2) The requirements of (1) apply to— (a) a required fire-isolated stairway, including any associated fire-isolated passageway or fire-isolated ramp serving— (i) any storey above an effective height of 25 m; or (iii) an atrium to which Part G3 applies; or (b) a required fire-isolated passageway or fire-isolated ramp with a length of travel more than 60m to a road or open space.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
					(3) An automatic air pressurisation system for a fire-isolated exit must serve the entire exit. <u>Compliance commentary</u> Each of the fire-isolated stairways serving the above ground levels are to be provided with stair pressurisation unless addressed by way of a Performance Solution by the fire engineer at CC stage. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
E2D5 Buildings more than 25 m in effective height: Class 2 and 3 buildings and Class 4 part of a building [2019: Table E2.2a]				X	An automatic smoke detection and alarm system complying with Specification 20 must be provided to the following: (a) A Class 2 or 3 building which is more than 25 m in effective height. (b) A Class 2 or 3 part of a building, or a Class 4 part of a building, in a building which is more than 25 m in effective height. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
E2D6 Buildings more than 25 m in effective height: Class 5, 6, 7b, 8 or 9b buildings [2019: Table E2.2a]				X	(1) A Class 5, 6, 7b, 8 or 9b building or part of a building must be provided with a zone pressurisation system between vertically separated fire compartments in accordance with AS 1668.1, if the building is more than 25 m in effective height. (2) The requirements of (1) do not apply to a building that has a fire compartment containing a Class 5, 6, 7b, 8 or 9b part (or a combination of these classes in the same fire compartment) where there is only one fire compartment containing these classifications in an otherwise Class 2, 3, 9a or 9c building. (3) For the purposes of (1), 'vertically separated fire compartments' are fire compartments above and below each other, and not fire compartments within the same storey. <u>Compliance commentary</u> A zone pressurisation system is required within buildings 3A & 3B. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
E2D7 Buildings more than 25 m in effective height: Class 9a buildings [2019: Table E2.2a]			X		Not applicable.
E2D8 Buildings not more than 25 m in effective height: Class 2 and 3 buildings and			X		Not applicable.





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Class 4 part of a building [2019: Table E2.2a]					
E2D9 Buildings not more than 25 m in effective height: Class 5, 6, 7b, 8 and 9b buildings [2019: Table E2.2a]			X		Not applicable.
NSW E2D10 Buildings not more than 25 m in effective height: large isolated buildings subject to C3D4 [2019: NSW Table E2.2a]			X		Not applicable.
E2D11 Buildings not more than 25 m in effective height: Class 9a and 9c buildings [2019: Table E2.2a]			X		Not applicable.
E2D12 Class 7a buildings [2019: Table E2.2a]				X	A Class 7a building, including a basement, provided with a mechanical ventilation system in accordance with AS 1668.2, must comply with clause 5.5 of AS 1668.1. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
E2D13 Basements (other than Class 7a buildings) [2019: Table E2.2a]			X		Not applicable.
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			X		Not applicable.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
one Class 6 sole-occupancy unit) [2019: Table E2.2b]					
E2D15 Class 6 buildings – in fire compartments more than 2000 m ² : Class 6 building (containing an enclosed common walkway or mall serving more than one Class 6 sole-occupancy unit) [2019: Table E2.2b]			X		Not applicable.
NSW E2D16 Class 9b – assembly buildings: all [2019: NSW Table E2.2b]			X		Not applicable.
NSW E2D17 Class 9b – assembly buildings: night clubs, discotheques and the like [2019: NSW Table E2.2b]			X		Not applicable.
NSW E2D18 Class 9b – assembly buildings: exhibition halls, museums and art galleries [2019: NSW Table E2.2b]			X		Not applicable.
NSW E2D19 Class 9b – assembly buildings: other				X	(1) Unless otherwise described in (2), in a building or part of a building used as an assembly building (not being a night club, discotheque or the like; or an exhibition hall, museum or art gallery) where the floor area of a





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
assembly buildings (not listed in NSW E2D16 to E2D18) [2019: NSW Table E2.2b]					fire compartment is more than 2000 m², the fire compartment must be provided with— (a) an automatic smoke exhaust system complying with Specification 21; or (b) roof mounted automatic smoke-and-heat vents complying with Specification 22, in a single storey building or the top storey of a multi storey building; or (c) if the floor area of the fire compartment is not more than 5000 m² and the building has a rise in storeys of not more than 2— (i) an automatic smoke detection and alarm system complying with Specification 20; or (ii) a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17. (2) The following buildings are exempt from the provisions of (1): (a) Sporting complexes, (including sports halls, gymnasiums, swimming pools, ice and roller rinks, and the like) other than indoor sports stadiums with total spectator seating for more than 1000 persons. (b) Churches and other places used solely for religious worship. (c) School classrooms. (3) A building containing a Class 9b early childhood centre must be provided with an automatic smoke detection and alarm system complying with Specification 20 throughout the whole building, including any part of another Class. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
NSW E2D20 Class 9b assembly buildings: other assembly buildings (not listed in E2D16 to E2D19)				X	This clause has deliberately been left blank. E2D20 does not apply in NSW. This clause is deleted from the BCA in NSW, as requirements for Class 9b – Assembly buildings in NSW are covered under NSW E2D16 to NSW E2D19.
E2D21 Provision for special hazards [2019: E2.3]			X		Additional smoke hazard management measures may be necessary due to the— (a) special characteristics of the building; or (b) special function or use of the building; or (c) special type or quantity of materials stored, displayed or used in a building; or (d) special mix of classifications within a building or fire compartment, which are not addressed in E2D4 to E2D20. <u>Note: Electric Vehicle (EV) charging stations are deemed to be a special hazard and will require assessment by a suitably qualified fire engineer against this clause.</u>
Part E3 Lift Installations					
E3D1			X		(1) Where a <i>Deemed-to-Satisfy Solution</i> is proposed, <i>Performance Requirements</i> E3P1 to E3P4 are satisfied by complying with—





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Deemed-to-Satisfy Provisions [2019: E3.0]					(a) E3D2 to E3D12; and (b) for a building containing an occupiable outdoor area, Part G6; and (c) for public transport buildings, Part I2. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.
E3D2 Lift installations [2019: E3.1]				X	An electric passenger lift installation and an electrohydraulic passenger lift installation must comply with Specification 24. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
E3D3 Stretcher facility in lifts [2019: E3.2]					(1) A stretcher facility in accordance with (2) must be provided— (a) in at least one emergency lift required by E3D5; or (b) where an emergency lift is not required, if passenger lifts are installed to serve any storey above an effective height of 12 m, in at least one of those lifts to serve each floor served by the lifts. (2) A stretcher facility must accommodate a raised stretcher with a patient lying on it horizontally by providing a clear space not less than 600 mm wide x 2000 mm long x 1400 mm high above the floor level. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
E3D4 Warning against use of lifts in fire [2019: E3.3]				X	(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. (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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
E3D5 Emergency lifts [2019: E3.4]				X	(1) At least one emergency lift complying with (4) must be installed in— (a) a building which has an effective height of more than 25 m. (2) An emergency lift may be combined with a passenger lift and must serve those storeys served by the passenger lift so that all storeys of the building served by passenger lifts are served by at least one emergency lift. (3) Where two or more passenger lifts are installed and serve the same storeys, excluding a lift that is within an atrium and not contained wholly within a shaft— (a) at least two emergency lifts must be provided to serve those storeys; and (b) if located within different shafts, at least one emergency lift must be provided in each shaft. (4) An emergency lift must— (a) be contained within a fire-resisting shaft in accordance with C3D11; and





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(c) if the building has an effective height of more than 75 m, have a rating of at least— (i) 600 kg if not provided with a stretcher facility; or (ii) 900 kg if provided with a stretcher facility. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
E3D6 Landings [2019: E3.5]				X	Access and egress to and from lift well landings must comply with the Deemed-to-Satisfy Provisions of Parts D2, D3 and D4. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
E3D7 Passenger lift types and their limitations [2019: E3.6, Table E3.6a, Table E3.6b]				X	(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: (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 storeys; or (v) where more than 1 stairway lift is installed, serve more than 2 consecutive storeys; 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, 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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
E3D8 Accessible features required by passenger lifts [2019: Table E3.6a, Table E3.6b]					Excluded from this assessment.
E3D9				X	Where lifts serve any storey above an effective height of 12 m, the following must be provided:





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Fire service controls [2019: E3.7]					(a) A fire service recall control switch complying with E3D11 for— (i) a group of lifts; or (ii) a single lift not in a group that serves the storey. (b) A lift car fire service drive control switch complying with E3D12 for every lift. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
E3D10 Residential care buildings [2019: E3.8]			X		Not applicable.
E3D11 Fire service recall control switch [2019: E3.9]				X	(1) Each group of lifts must be provided with one fire service recall control switch required by E3D9 that activates the fire service recall operation at (6). (2) The switch required by (1) must— (a) be located at the landing nominated by the appropriate authority; and (b) be labelled “FIRE SERVICE” in indelible white lettering on a red background; and (c) have two positions with an “OFF” and an “ON” position identified; and (d) be operable only by the use of a key that is removable in either the “OFF” position or the “ON” position. (3) Adhesive labels must not be used for compliance with (2)(b) and (c). (4) The key in (2)(d) must be able to turn all fire service recall control switches in the building and must have a different key combination to other keys used for lifts in the building. (5) The fire service recall operation must be activated by— (a) switching the fire service recall control switch in (1) to “ON”; or (b) a signal from a fire management system approved by the appropriate authority. (6) The activation of the fire service recall operation at (5) must— (a) cancel all registered car and landing calls; and (b) inactivate all door reopening devices that may be affected by smoke; and (c) ensure lift cars travelling toward the nominated floor continue to the nominated floor without stopping; and (d) ensure lift cars travelling away from the nominated floor stop at or before the next available floor without opening the doors (either automatically or by the door open button), reverse direction and travel without stopping to the nominated floor; and (e) for lifts stopped at a floor other than the nominated floor, close the doors and travel without stopping to the nominated floor; and (f) ensure that lifts stay at the nominated floor with doors open; and (g) permit all lifts to return to normal service if the fire service recall control switch at (1) is switched to the “OFF” position during or after the fire service recall operation. (7) The requirements of (6) do not apply to lifts on inspection service or when the lift car fire service control switch required by E3D12 is in the “ON” position.





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					(8) Lifts having manual controls must signal an alert to the lift for the lift to return to the nominated floor containing the recall switch that activated the signal. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
E3D12 Lift car fire service drive control switch [2019: E3.10]				X	(1) The lift car fire service drive control switch required by E3D9 must be activated from within the lift car. (2) The switch must— (a) be located between 600 mm and 1500 mm above the lift car floor; and (b) be labelled “FIRE SERVICE” by indelible white lettering on a red background; and (c) have two positions with an “OFF” and an “ON” position identified; and (d) operate only by the use of a key that is removable in either the “OFF” position or the “ON” position. (3) Adhesive labels must not be used for compliance with (2)(b) or (c). (4) When the lift car fire service drive control switch at (1) is turned to the “ON” position, the lift must— (a) not respond to the fire service recall control switch; and (b) cancel all registered lift car and landing calls; and (c) override all lift car call access control systems; and (d) inactivate all door reopening devices that may be affected by smoke; and (e) allow the registration of lift car call by lift car call buttons, however the lift doors must not close in response to the registration of lift car calls; and (f) activate door closing by constant pressure being applied on the “door close” button unless the button is released before the doors are fully closed, in which case the doors must reopen and any registered lift car calls must be cancelled; and (g) when the doors are closed, move the lift in response to registered lift car calls while allowing additional lift car calls to also be registered; and (h) travel to the first possible floor in response to registered lift car calls and cancel all registered lift car calls after the lift stops; and (i) ensure doors do not open automatically, rather by constant pressure being applied on the “door open” button unless the button is released before the doors are fully open, in which case the doors must re-close. (5) The requirements of (4)(a) to (i) do not apply to a lift operating on inspection service. (6) A multi-deck lift installation must have systems in place that— (a) are able to communicate to the fire officer that the fire service drive control switch will not operate until all decks have been cleared of passengers; and (b) ensure there is an appropriate method of clearing all deck landings of passengers; and (c) maintain all doors to deck landings not containing the fire service control switch closed and inoperative while the lift is on fire service drive control.





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					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
Part E4 Visibility in an emergency, exit signs and warning systems					
E4D1 Deemed-to-Satisfy Provisions [2019: E4.0]			X		(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements E4P1 to E4P3 are satisfied by complying with— (a) E4D2 to E4D9; and (b) in a building containing an atrium, Part G3; and (c) in a building in an alpine area, Part G4; and (d) for a building containing an occupiable outdoor area, Part G6; and (e) for additional requirements for Class 9b buildings, Part I1; and (f) for farm buildings and farm sheds, Part I3. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.
E4D2 Emergency lighting requirements [2019: E4.2]				X	An emergency lighting system must be installed— (a) in every fire-isolated stairway, fire-isolated passageway or fire-isolated ramp; and (b) in every storey of a Class 5, 6, 7, 8 or 9 building where the storey has an area more than 300 m²— (i) in every passageway, corridor, hallway, or the like, that is part of the path of travel to an exit; and (ii) in any room having a floor area more than 100 m² that does not open to a corridor or space that has emergency lighting or to a road or open space; and (iii) in any room having a floor area more than 300 m²; and (c) in every passageway, corridor, hallway, or the like, having a length of more than 6 m from the entrance doorway of any sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building to the nearest doorway opening directly to— (i) a fire-isolated stairway, fire-isolated passageway or fire-isolated ramp; or (ii) an external stairway serving instead of a fire-isolated stairway under D2D13; or (iii) an external balcony leading to a fire-isolated stairway, fire-isolated passageway or fire-isolated ramp; or (iv) a road or open space; and (d) in every required non-fire-isolated stairway; and (e) in a sole-occupancy unit in a Class 5, 6 or 9 building if— (i) the floor area of the unit is more than 300 m²; and (ii) an exit from the unit does not open to a road or open space or to an external stairway, passageway, balcony or ramp, leading directly to a road or open space; and (f) in every room or space to which there is public access in every storey in a Class 6 or 9b building if— (i) the floor area in that storey is more than 300 m²; or (ii) any point on the floor of that storey is more than 20 m from the nearest doorway leading directly to a stairway, ramp, passageway, road or open space; or





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					(iii) egress from that storey involves a vertical rise within the building of more than 1.5 m, or any vertical rise if the storey concerned does not admit sufficient light; or (iv) the storey provides a path of travel from any other storey required by (i), (ii) or (iii) to have emergency lighting; and (i) in every required fire control centre. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
E4D3 Measurement of distance [2019: E4.3]			X		Distances, other than vertical rise, must be measured along the shortest path of travel whether by straight lines, curves or a combination of both.
E4D4 Design and operation of emergency lighting [2019: E4.4]				X	Every required emergency lighting system must comply with AS/NZS 2293.1. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
E4D5 Exit signs [2019: E4.5]				X	An exit sign must be clearly visible to persons approaching the exit, and must be installed on, above or adjacent to each— (a) door providing direct egress from a storey to— (i) an enclosed stairway, passageway or ramp serving as a required exit; and (ii) an external stairway, passageway or ramp serving as a required exit; and (iii) an external access balcony leading to a required exit; and (b) door from an enclosed stairway, passageway or ramp at every level of discharge to a road or open space; and (c) horizontal exit; and (d) door serving as, or forming part of, a required exit in a storey required to be provided with emergency lighting in accordance with E4D2. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
NSW E4D6 Direction signs [2019: NSW E4.6]				X	If an exit is not readily apparent to persons occupying or visiting the building, then exit signs must be installed— (a) in appropriate positions in corridors, hallways, lobbies, foyers, auditoria, and the like, indicating the direction to a required exit; and (b) in a Class 9b building used as an entertainment venue — in any external egress path to a road where the exit does not open directly onto a road. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
E4D7 Class 2 and 3 buildings and			X		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—





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Class 4 parts: exemptions [2019: E4.7]					(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.
E4D8 Design and operation of exit signs [2019: E4.8]				X	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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
E4D9 Emergency warning and intercom systems [2019: E4.9]				X	An emergency warning and intercom system complying, where applicable, with AS 1670.4 must be installed— (a) in a building with an effective height of more than 25 m. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
Specification 17 Fire Sprinkler systems					
S17C1 Scope [2019: Spec E1.5: 1]			X		This Specification sets out requirements for the design and installation of fire sprinkler systems.
S17C2 Application of automatic fire sprinkler standards [2019: Spec E1.5: 2]				X	Subject to this Specification, an automatic fire sprinkler system must comply with— (a) for all building classifications: AS 2118.1; or (b) for a Class 2 or 3 building with an effective height of not more than 25 m and a rise in storeys of 4 or more: Specification 18 and the relevant provisions of this Specification as applicable; or (c) for Class 5, 6, 7, 8, 9a (other than a residential care building) or 9b (other than a Class 9b early childhood centre) parts of a building with an effective height not more than 25 m, which also contains Class 2 or 3 parts: a sprinkler system in accordance with Specification 18 as for a Class 2 or 3 building and the relevant provisions of this Specification except— (i) a FPAA101D sprinkler system cannot be used where the Class 5, 6, 7, 8, 9a (other than a residential care building) or 9b parts— (A) contain more than 2 storeys; or (B) are more than 25% of the total floor area of the building; or (C) are located above the fourth storey; and (ii) a FPAA101D or FPAA101H sprinkler system cannot be used where the Class 7a part (other than an open-deck carpark) accommodates more than 40 vehicles; or (d) for a combined sprinkler and fire hydrant system: AS 2118.6. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
S17C3 Separation of sprinklered and non-sprinklered areas [2019: Spec E1.5: 3]				X	Where a part of a building is not protected with sprinklers, the sprinklered and non-sprinklered parts must be fire-separated with a wall or floor which must— (a) comply with any specific requirement of the Deemed-to-Satisfy Provisions of the BCA; or (b) where there is no specific requirement, comply with the relevant part of AS 2118, FPAA101D or FPAA101H. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S17C4 Protection of openings [2019: Spec E1.5: 4]				X	Any openings, including those for service penetrations, in construction separating sprinklered and non-sprinklered parts of a building, including the construction separating the areas nominated for omitted protection in AS 2118.1, must be protected in accordance with the Deemed-to-Satisfy Provisions of Part C4. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S17C5 Quick response sprinklers [2019: Spec E1.5: 5]				X	Quick response sprinklers may be installed only if they are suitable for the type of application proposed and it is demonstrated that the sprinkler system is designed to accommodate their use. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S17C6 Sprinkler valve enclosures [2019: Spec E1.5: 6]				X	(1) Sprinkler alarm valves must be located in a secure room or enclosure which has direct egress to a road or open space. (2) All sprinkler valve rooms and enclosures must be secured with a system suitable for use by the fire brigade. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S17C7 Water supply [2019: Spec E1.5: 7]				X	(1) A required sprinkler system must be provided with at least one water supply. (2) A required sprinkler system in a building greater than 25 m in effective height must be provided with dual water supply except that a secondary water supply storage capacity of 25,000 litres may be used if— (a) the storage tank is located at the topmost storey of the building; and (b) the building occupancy is classified as no more hazardous than Ordinary Hazard 2 (OH2) under AS 2118.1; and (c) an operational fire brigade service is available to attend a building fire. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S17C8 Building occupant warning system [2019: Spec E1.5: 8]				X	A required sprinkler system, except a FPAA101D sprinkler system, must be connected to and activate a building occupant warning system complying with S20C7. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S17C9 Connection to other systems				X	Where a smoke hazard management system is installed and is actuated by smoke detectors, the sprinkler system must, wherever practicable, be arranged to also activate the smoke hazard management system.





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[2019: Spec E1.5: 9]					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S17C10 Anti-tamper devices [2019: Spec E1.5: 10]				X	(1) Where a sprinkler system is installed— (a) over any stage area in a theatre, public hall or the like, visual and audible status indication of sprinkler valves must be provided at the location normally used by the stage manager; or (b) in a space housing lift electrical and control equipment (including machine rooms, secondary floors and sheave rooms), any valves provided to control sprinklers in these spaces must be located adjacent to the space. (2) Any valves provided to control sprinklers required by (1) must be fitted with anti-tamper monitoring devices connected to a monitoring panel. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S17C11 Sprinkler systems in carparks [2019: Spec E1.5: 11]				X	A sprinkler system protecting a carpark complying with S5C19(3) in a multi-classified building must— (a) be independent of the sprinkler system protecting any part of the building not used as a carpark; or (b) if forming part of a sprinkler system protecting a part of the building not used as a carpark, be designed such that the section protecting the non-carpark part can be isolated without interrupting the water supply or otherwise affecting the effective operation of the section protecting the carpark. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S17C12 Residential care buildings [2019: Spec E1.5: 12]			X		Not applicable.
S17C13 Sprinkler systems in lift installations [2019: Spec E1.5: 13]				X	(1) Where sprinklers are installed in a space housing lift electrical and control equipment, including machine rooms, secondary floors and sheave rooms, sprinklers in these spaces must— (a) have heads protected from accidental damage by way of a guard that will not impair the performance of the head; and (b) be capable of being isolated and drained, either separately or collectively, without isolating any other sprinklers within the building. (2) Valves provided to control sprinklers referred to in (1) must be installed in accordance with S17C10(2). Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S17C14 Early childhood centres [New for 2022]			X		Not applicable.

Specification 18 Class 2 and 3 buildings not more than 25m in effective height





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S18C1 Scope [2019: Spec E1.5a: 1]			X		This Specification sets out requirements for the design and installation of fire sprinkler systems, and concessions for Class 2 and 3 buildings not more than 25 m in effective height with a rise in storeys of 4 or more.
S18C2 Application [2019: Spec E1.5a: 1]			X		Not applicable.
S18C3 System requirements [2019: Spec E1.5a: 2]			X		Not applicable.
S18C4 Permitted concessions [2019: Spec E1.5a: 3]			X		Not applicable.
Specification 19 Fire control centres					
S19C1 Scope [2019: Spec E1.8: 1]			X		(1) This Specification describes the construction and content of required fire control centres and rooms. (2) A fire control room is a fire control centre in a dedicated room with additional specific requirements.
S19C2 Application [2019: Spec E1.8: 1]			X		(1) S19C3 to S19C6 apply to fire control centres (including fire control rooms). (2) S19C7 to S19C13 apply additional requirements to fire control rooms.
S19C3 Purpose and content of fire control centre [2019: Spec E1.8: 2]				X	A fire control centre must— (a) provide an area from which fire-fighting operations or other emergency procedures can be directed or controlled; and (b) contain controls, panels, telephones, furniture, equipment and the like associated with the required fire services in the building; and (c) not be used for any purpose other than the control of— (i) fire-fighting activities; and (ii) other measures concerning the occupant safety or security. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
S19C4 Location of fire control centre [2019: Spec E1.8: 3]				X	A fire control centre must be so located in a building that egress from any part of its floor, to a road or open space, does not involve changes in level which in aggregate exceed 300 mm. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
S19C5				X	An internal combustion engine, pumps, sprinkler control valves, pipes and pipe fittings must not be located in a fire control centre, but may be located in rooms accessed through the fire control centre.





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Equipment not permitted within a fire control centre [2019: Spec E1.8: 4]					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S19C6 Ambient sound level for a fire control centre [2019: Spec E1.8: 5]				X	(1) The ambient sound level within the fire control centre measured when all fire safety equipment is operating in the manner in which it operates in an emergency must not exceed 65 dB(A). (2) The measurement must be taken for a sufficient time to characterise the effects of all sound sources. (3) Where there is not a great variation in noise level, a measurement time of 60 seconds may be used. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S19C7 Construction of a fire control room [2019: Spec E1.8: 6]				X	A fire control centre in a building more than 50 m in effective height must be in a separate room where— (a) the enclosing construction is of concrete, masonry or the like, sufficiently impact resistant to withstand the impact of any likely falling debris, and with an FRL of not less than 120/120/120; and (b) any material used as a finish, surface, lining or the like within the room complies with the requirements of Specification 7; and (c) services, pipes, ducts and the like that are not directly required for the proper functioning of the fire control room do not pass through it; and (d) openings in the walls, floors or ceiling which separate the room from the interior of the building are confined to doorways, ventilation and other openings for services necessary for the proper functioning of the facility. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S19C8 Protection of openings in a fire control room [2019: Spec E1.8: 7]				X	Openings permitted by S19C7 must be protected as follows: (a) Openings for windows, doorways, ventilation, service pipes, conduits and the like, in an external wall of the building that faces a road or open space, must be protected in accordance with the Deemed-to-Satisfy Provisions of Part C4. (b) Openings in the floors, ceilings and internal walls enclosing a fire control room must, except for doorways, be protected in accordance with the Deemed-to-Satisfy Provisions of Part C4. (c) A door opening in the internal walls enclosing a fire-control room, must be fitted with a self-closing –/120/30 smoke sealed fire door. (d) Openings associated with natural or mechanical ventilation must— (i) not be made in any ceiling or floor immediately above or below the fire control room; and (ii) be protected by a –/120/– fire damper if the opening is for a duct through a wall required to have an FRL, other than an external wall. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
S19C9 Doors to a fire control room [2019: Spec E1.8: 8]				X	(1) Required doors to a fire control room must open into the room, be lockable and located so that persons using escape routes from the building will not obstruct or hinder access to the room. (2) The fire control room must be accessible via two paths of travel— (a) one from the front entrance of the building; and (b) one direct from a public place or fire-isolated passageway which leads to a public place and has a door with an FRL of not less than –/120/30 Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S19C10 Size and contents of a fire control room [2019: Spec E1.8: 9]				X	(1) A fire control room must contain— (a) a Fire Indicator Panel and necessary control switches and visual status indication for all required fire pumps, smoke control fans and other required fire safety equipment installed in the building; and (b) a telephone directly connected to an external telephone exchange; and (c) a blackboard or whiteboard not less than 1200 mm wide x 1000 mm high; and (d) a pin-up board not less than 1200 mm wide x 1000 mm high; and (e) a raked plan layout table of a size suitable for laying out the plans provided under (f); and (f) colour-coded, durable, tactical fire plans. (2) In addition, a fire control room may contain— (a) master emergency control panels, lift annunciator panels, remote switching controls for gas or electrical supplies and emergency generator backup; and (b) building security, surveillance and management systems if they are completely segregated from all other systems. (3) A fire control room must— (a) have a floor area of not less than 10 m² and the length of any internal side must be not less than 2.5 m; and (b) if only the minimum prescribed equipment is installed — have a net floor area of not less than 8 m² with a clear space of not less than 1.5 m² in front of the Fire Indicator Panel; and (c) if additional equipment is installed — have an additional area of not less than 2 m² net floor area for each additional facility and a clear space of not less than 1.5 m² in front of each additional control or indicator panel; and (d) be constructed such that the area required for any path of travel through the room to other areas is provided in addition to the requirements (b) and (c). Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S19C11 Ventilation and power supply for a fire control room				X	(1) A fire control room must be ventilated by— (a) natural ventilation from a window or doorway in an external wall of the building which opens directly into the fire control room from a road or open space; or





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[2019: Spec E1.8: 10]					(b) a pressurisation system that only serves the fire control room, and— (i) is installed in accordance with AS 1668.1 as though the room is a fire-isolated stairway; and (ii) is activated automatically by operation of the fire alarm, or sprinkler system complying with Specification 17, installed in the building and manually by an over-riding control in the room; and (iii) provides a flow of fresh air through the room of not less than 30 air changes per hour when the system is operating and any door to the room is open; and (iv) has fans, motors and ductwork that form part of the system but not contained within the fire control room protected by enclosing construction with an FRL of not less than 120/120/120; and (v) has any electrical supply to the fire control room or equipment necessary for its operation connected to the supply side of the main disconnection switch for the building. (2) No openable devices other than necessary doorways, pressure controlled relief louvres and windows that are openable by a key, must be constructed in the fire control room. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S19C12 Sign for a fire control room [2019: Spec E1.8: 11]				X	The external face of the door to the fire control room must have a sign with the words— FIRE CONTROL ROOM in letters not less than 50 mm high and of a colour which contrasts with that of the background. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S19C13 Lighting for a fire control room [2019: Spec E1.8: 12]				X	Emergency lighting in accordance with the Deemed-to-Satisfy Provisions of Part E4. must be provided in a fire control room, except that an illumination level of not less than 400 lux must be maintained at the surface of the plan table. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
Specification 20 Smoke detection and alarm systems					
S20C1 Scope [2019: Spec E2.2a: 1]			X		This Specification describes the installation and operation of automatic smoke detection and alarm systems.
S20C2 Type of system [2019: Spec E2.2a: 2]				X	A required automatic smoke detection and alarm system must be provided in accordance with the following: (a) Class 2 buildings and Class 4 parts of a building— (i) a smoke alarm system complying with S20C3; or (ii) a smoke detection system complying with S20C4; or (iii) a combination of a smoke alarm system and a smoke detection system complying with S20C5.





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					(b) Class 3 buildings— (i) with a Class 3 part located more than 2 storeys above ground level — a smoke detection system complying with S20C4; or (ii) which accommodate more than 20 residents and are the residential part of a school, accommodation for the aged, children or people with a disability — a smoke detection system complying with S20C4; or (iii) all other Class 3 buildings— (A) a smoke alarm system complying with S20C3; or (B) a smoke detection system complying with S20C4; or (C) a combination of a smoke alarm system and a smoke detection system complying with S20C5. (c) Class 5, 6, 7, 8, 9b and 9c buildings — a smoke detection system complying with S20C4 (d) Class 9a health-care buildings— (i) where more than 6 bed patients are accommodated — a smoke detection system complying with S20C4; or (ii) where 6 or less bed patients are accommodated— (A) a smoke alarm system complying with S20C3; or (B) a smoke detection system complying with S20C4. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
S20C3 Smoke alarm system [2019: Spec E2.2a: 3]				X	(1) In all Class 2 - 9 buildings provided with a smoke alarm system, the following applies: (a) A smoke alarm system must— (i) consist of smoke alarms complying with AS 3786; and (ii) be powered from the consumer mains source. (b) In kitchens and other areas where the use of the area is likely to result in smoke alarms causing spurious signals, subject to (c)— (i) any other alarm deemed suitable in accordance with AS 1670.1 may be installed provided that smoke alarms are installed elsewhere in the sole-occupancy unit in accordance with (2)(a) and (2)(b); or (ii) an alarm acknowledgement facility may be installed. (c) Where a kitchen or other area referred to in (b) is in a building protected with a sprinkler system complying with Specification 17 (other than a FPAA101D system), alarms need not be installed in the kitchen or other area likely to result in spurious signals. (2) In a Class 2 or 3 building or Class 4 part of a building provided with a smoke alarm system, the following applies: (a) Alarms must be installed within each sole-occupancy unit, and located on or near the ceiling in any storey— (i) containing bedrooms—





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					(A) between each part of the sole-occupancy unit containing bedrooms and the remainder of the sole occupancy unit; and (B) where bedrooms are served by a hallway, in that hallway; and (ii) not containing any bedrooms, in egress paths. (b) Where there is more than one alarm installed within a sole-occupancy unit, alarms must be interconnected within that sole-occupancy unit. (c) Subject to (d), alarms must be— (i) installed in public corridors and other internal public spaces, located in accordance with the requirements for smoke detectors in AS 1670.1; and (ii) connected to activate a building occupant warning system in accordance with S20C7. (d) In a Class 2 or 3 building or Class 4 part of a building protected with a sprinkler system complying with Specification 17 (other than a FPAA101D system), alarms are not required in public corridors and other internal public spaces. (3) In a Class 9a building provided with a smoke alarm system, smoke alarms must be— (a) installed in every room, public corridor and other internal public space; and (b) located in accordance with the requirements for smoke detectors in AS 1670.1; and (c) interconnected to provide a common alarm; and (d) have manual call points installed in evacuation routes so that no point on a floor is more than 30 m from a manual call point. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S20C4 Smoke detection system [2019: Spec E2.2a: 4]				X	(1) In all Class 2 - 9 buildings provided with a smoke detection system, the following applies: (a) A smoke detection system must— (i) subject to (2) and (3), comply with AS 1670.1; and (ii) activate a building occupant warning system in accordance with S20C7. (b) In kitchens and other areas where the use of the area is likely to result in smoke detectors causing spurious signals, subject to (c)— (i) any other detector deemed suitable in accordance with AS 1670.1 may be installed provided that smoke detectors are installed elsewhere in the sole-occupancy unit in accordance with the requirements for alarms in S20C3(2)(a) and (2)(b); or (ii) an alarm acknowledgement facility may be installed. (c) Where a kitchen or other area referred to in (b) is in a building protected with a sprinkler system complying with Specification 17 (other than a FPAA101D or FPAA101H system), detectors need not be installed in the kitchen or other areas likely to result in spurious signals.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(2) In a Class 2 or 3 building or Class 4 part of a building provided with a smoke detection system, the following applies: (a) Smoke detectors must be installed— (i) within each sole-occupancy unit, in accordance with the requirements for alarms in S20C3(2)(a) and (2)(b); and (ii) subject to (b), in public corridors and other internal public spaces. (b) In a Class 2 or 3 building or Class 4 part of a building protected with a sprinkler system complying with Specification 17 (other than a FPAA101D or FPAA101H system), smoke detectors are not required in public corridors and other internal public spaces. (3) In a Class 9a health-care building provided with a smoke detection system, the following applies: (a) Except as provided in (b)— (i) photoelectric type smoke detectors must be installed in patient care areas and in paths of travel to exits from patient care areas; and (ii) in areas other than patient care areas and paths of travel to exits from patient care areas, where the use of the area is likely to result in smoke detectors causing spurious signals, any other detector deemed suitable in accordance with AS 1670.1 may be installed in lieu of smoke detectors. (b) The requirements of (a) do not apply where an area is protected with a sprinkler system complying with Specification 17, smoke detectors need not be installed where the use of the area is likely to result in spurious signals. (c) Manual call points must be installed in evacuation routes so that no point on a floor is more than 30 m from a manual call point. (4) In a Class 9c building provided with a smoke detection system, the following applies: (a) remote automatic indication of each zone must be given in each smoke compartment by means of— (i) mimic panels with an illuminated display; or (ii) annunciator panels with alpha numeric display; and (b) if the building accommodates more than 20 residents, manual call points must be installed in paths of travel so that no point on a floor is more than 30 m from a manual call point. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S20C5 Combined smoke alarm and smoke detection system [2019: Spec E2.2a: 5]				X	(1) A Class 2 or 3 building or Class 4 part of a building provided with a combination of a smoke alarm system and smoke detection system in accordance with S20C2 must— (a) be provided with a smoke alarm system complying with S20C3 within sole-occupancy units; and (b) subject to (2), be provided with a smoke detection system complying with S20C4 in areas not within sole-occupancy units. (2) In a Class 2 or 3 building or Class 4 part of a building protected with a sprinkler system complying with Specification 17 (other than a FPAA101D or FPAA101H system), smoke detectors are not required in public corridors and other internal public spaces.





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					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S20C6 Smoke detection for smoke control systems [2019: Spec E2.2a: 6]				X	(1) Smoke detectors required to activate air pressurisation systems for fire-isolated exits and zone pressurisation systems must— (a) be installed in accordance with AS 1670.1; and (b) have additional smoke detectors installed adjacent to each bank of lift landing doors set back horizontally from the door openings by a distance of not more than 3 m. (2) Smoke detectors required to activate— (a) automatic shutdown of air-handling systems in accordance with E2D14 to E2D20; or (b) a smoke exhaust system in accordance with Specification 21, must comply with the requirements of (3). (3) Smoke detectors referred to in (2) must— (a) be spaced— (i) not more than 20 m apart and not more than 10 m from any wall, bulkhead or smoke curtain; and (ii) in enclosed malls and walkways in a Class 6 building not more than 15 m apart and not more than 7.5 m from any wall, bulkhead or curtain; and (b) have a sensitivity— (i) in accordance with AS 1670.1 in areas other than a multi-storey walkway and mall in a Class 6 building; and (ii) not exceeding 0.5% smoke obscuration per metre with compensation for external airborne contamination as necessary, in a multi-storey walkway and mall in a Class 6 building. (4) Smoke detectors provided to activate a smoke control system must— (a) either— (i) form part of a building fire or smoke detection system complying with AS 1670.1; or (ii) be a separate dedicated system incorporating control and indicating equipment complying with AS 1670.1; and (b) activate a building occupant warning system complying with S20C7, except that smoke detectors provided solely to initiate automatic shutdown of air-handling systems in accordance with (2)(a) need not activate a building occupant warning system. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S20C7 Building occupant warning system [2019: Spec E2.2a: 7]				X	Subject to E4D9, a building occupant warning system provided as part of a smoke hazard management system must comply with clause 3.22 of AS 1670.1 to sound through all occupied areas except— (a) in a Class 2 and 3 building or Class 4 part of a building provided with a smoke alarm system in accordance with S20C3(2)(c)— (i) the sound pressure level need not be measured within a sole-occupancy unit if a level of not less than 85 dB(A) is provided at the door providing access to the sole-occupancy unit; and (ii) the inbuilt sounders of the smoke alarms may be used to wholly or partially meet the requirements; and





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					(b) in a Class 2 and 3 building or Class 4 part of a building provided with a smoke detection system in accordance with S20C4(2), the sound pressure level from a building occupant warning system need not be measured within a sole-occupancy unit if a level of not less than 100 dB(A) is provided at the door providing access to the sole-occupancy unit; and (c) in a Class 3 building used as a residential care building, the system— (i) must be arranged to provide a warning for occupants; and (ii) in areas used by residents, may have its alarm adjusted in volume and content to minimise trauma consistent with the type and condition of residents; and (d) in a Class 9a health-care building, in a patient care area, the system— (i) must be arranged to provide a warning for occupants; and (ii) in a ward area, may have its alarm adjusted in volume and content to minimise trauma consistent with the type and condition of the patients; and (e) in a Class 9c building, the system— (i) must be arranged to provide a warning for occupants; and (ii) must notify staff caring for the residents of the building; and (iii) in areas used by residents, may have its alarm adjusted in volume and content to minimise trauma consistent with the type and condition of residents. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
NSW S20C8 System monitoring [2019: NSW Spec E2.2a: 8]				X	The following installations must be connected to a fire alarm monitoring system connected to a fire station or fire station dispatch centre in accordance with AS 1670.3: (a) A smoke detection system in a Class 3 building provided in accordance with S20C2(b)(i) or S20C2(b)(ii). (b) A smoke detection system in a Class 9a health-care building, if the building accommodates more than 20 patients. (c) A smoke detection system in a Class 9c building. (d) Smoke detection in accordance with S20C6 provided to activate— (i) a smoke exhaust system in accordance with Specification 21; or (ii) smoke-and-heat vents in accordance with Specification 22. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
Specification 21 Smoke exhaust systems					
S21C1 Scope			X		This Specification describes the requirements for mechanical smoke exhaust systems.





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[2019: Spec E2.2b: 1]					
S21C2 Smoke exhaust capacity [2019: Spec E2.2b: 2]			X		(1) Smoke exhaust fans must have a sufficient capacity to contain the smoke layer— (a) within a smoke reservoir formed in accordance with S21C4 and not less than 2 m above the highest floor level; and (b) above the top of any openings interconnecting different smoke reservoirs. (2) Exhaust rates must be determined in accordance with Figure S21C2, with the height measurement taken from the lowest floor level to the underside of the smoke layer and the fire load determined in accordance with Table S21C2. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S21C3 Smoke exhaust fans [2019: Spec E2.2b: 3]			X		Each smoke exhaust fan, complete with its drive, flexible connections, control gear and wiring must— (a) be constructed and installed so that it is capable of continuous operation (exhausting the required volumetric flow rate at the installed system resistance) at a temperature of 200°C for a period of not less than 1 hour; and (b) in a building not fitted with a sprinkler system, be capable of continuous operation at a temperature of 300°C for a period of not less than 30 minutes; and (c) be rated to handle the required volumetric flow rate at ambient temperature to be capable of exhausting cool smoke during the early stages of a fire and to allow routine testing; and (d) have any high temperature overload devices installed, automatically overridden during the smoke exhaust Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S21C4 Smoke reservoirs [2019: Spec E2.2b: 4]			X		(1) A fire compartment must be divided at ceiling level into smoke reservoirs formed by smoke baffles/curtains of non-combustible and non-shatterable construction. (2) The horizontal area of a smoke reservoir must not exceed 2000 m² and in enclosed walkways and malls of a Class 6 building must not exceed 60 m in length. (3) Smoke reservoirs must be of sufficient depth to contain the smoke layer and must not be less than 500 mm below an imperforate ceiling or roof. (4) Within a multi-storey fire compartment— (a) a non-combustible bulkhead or smoke baffle/curtain must be provided around the underside of each opening into a building void to minimise the spread of smoke to other storeys; and (b) the depth of the bulkhead or smoke baffle must be not less than the depth of the smoke reservoir provided under (3) plus an additional 400 mm. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S21C5			X		Smoke exhaust fans and vents must be located—





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Smoke exhaust fan and vent location [2019: Spec E2.2b: 5]					(a) such that each smoke reservoir is served by one or more fans with the maximum exhaust rate at any one point limited to avoid extracting air from below the smoke layer; and (b) to prevent the formation of stagnant regions resulting in excessive cooling and downward mixing of smoke; and (c) at natural collection points for the hot smoky gases within each smoke reservoir having due regard to the ceiling geometry and its effect on the migratory path of the smoke; and (d) away from the intersection of walkways or malls; and (e) to ensure that any voids containing escalators and/or stairs commonly used by the public are not used as a smoke exhaust path; and (f) to discharge directly to outdoor with a velocity of not less than 5 m/s, at a suitable point not less than 6 m from any air intake point or exit. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S21C6 Make-up air [2019: Spec E2.2b: 6]			X		(1) Low level make-up air must be provided either automatically or via permanent ventilation openings to replace the air exhausted so as to minimise— (a) any disturbance of the smoke layer due to turbulence created by the incoming air; and (b) the risk of smoke migration to areas remote from the fire due to the effect of make-up air on the air balance of the total system. (2) The velocity of make-up air through doorways must not exceed 2.5 m/s. (3) Within a multi-storey fire compartment, make-up air must be provided across each vertical opening from a building void to the fire-affected storey at an average velocity of 1 m/s so as to minimise the spread of smoke from the fire affected storey to other storeys. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S21C7 Smoke exhaust system control [2019: Spec E2.2b: 7]			X		(1) Each smoke exhaust fan must be activated sequentially by smoke detectors complying with Specification 20 and arranged in zones to match the smoke reservoir served by the fan(s). (2) Subject to (3) and (4), an air handling system (other than individual room units less than 1000 L/s and miscellaneous exhaust air systems installed in accordance with Sections 5 and 6 of AS 1668.1) which does not form part of the smoke hazard management system must be automatically shut down on the activation of the smoke exhaust system. (3) In a single storey fire compartment, air handling systems in all non-fire-affected zones may operate on 100% outdoor air to provide make-up air to the fire-affected zone. (4) Within a multi-storey fire compartment air handling systems in all non-fire-affected zones and storeys must operate at 100% outdoor air to provide make-up air to the fire-affected storey via building voids connecting storeys. (5) Manual override control and indication together with operating instructions for use by emergency personnel must be provided adjacent to the fire indicator panel in accordance with the requirements of clauses 4.11 and 4.13 of AS 1668.1. (6) Manual control for the smoke exhaust system must also be provided at a location normally used by the stage manager in a theatre.





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					(7) Power supply wiring to exhaust fans together with detection, control, and indication circuits (and where necessary to automatic make-up air supply arrangements) must comply with AS 1668.1. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S21C8 Smoke detection [2019: Spec E2.2b: 8]			X		A smoke detection system must be installed in accordance with Specification 20 to activate the smoke exhaust system. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
Specification 22 Smoke-and-heat vents					
S22C1 Scope [New for 2022]			X		This Specification contains requirements for automatic smoke-and-heat vents.
S22C2 Adoption of AS 2665 [2019: Spec E2.2c: 1]			X		Automatic smoke-and-heat vents must be installed as a system complying with AS 2665 except that permanently open vents may form part of the smoke/heat venting system provided they comply with the relevant criteria for automatic smoke and-heat vents in AS 2665. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S22C3 Controls [2019: Spec E2.2c: 2]			X		Where a smoke-and-heat vent system is installed to comply with E2D14 to E2D20, then, in addition to thermally released link operation, smoke-and-heat vents must also be initiated by smoke detection complying with S20C6 and S20C8 and arranged in zones to match the smoke reservoirs. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
Specification 23 Residential fire safety					
S23C1 Scope [2019: Spec E2.2d: 1]			X		This Specification describes the requirements for residential fire safety systems referenced in Specification 18.
S23C2 Application [2019: Spec 2.2d: 1]			X		Not applicable.
S23C3 General requirements [2019: Spec 2.2d: 2(a)]			X		Not applicable.
S23C4 Local fire indicator panel [2019: Spec 2.2d: 2(b)]			X		Not applicable.
S23C5 Smoke alarms			X		Not applicable.





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[2019: Spec E2.2d: 2(c)]					
S23C6 Signal isolation interface units [2019: Spec E2.2d: 2(d)]			X		Not applicable.
S23C7 Wiring [2019: Spec E2.2d: 2(e)]			X		Not applicable.
S23C8 Connection to monitoring service [2019: Spec E2.2d: 3(a)]			X		Not applicable.
S23C9 Indication at the fire indicator panel [2019: Spec E2.2d: 3(b)]			X		Not applicable.
Specification 24 Lift installations					
S24C1 Scope [2019: Spec E3.1: 1]			X		This Specification contains requirements for electric passenger lift installations and electrohydraulic passenger lift installations.
S24C2 Lift cars exposed to solar radiation [2019: Spec E3.1: 2]				X	(1) A lift car exposed to solar radiation directly, or indirectly by re-radiation, must have — (a) mechanical ventilation at a rate of one air change per minute; or (b) mechanical cooling. (2) A 2 hour alternative power source for ventilation or mechanical cooling at (1) must be provided in the event of normal power loss. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S24C3 Lift car emergency lighting [2019: Spec E3.1: 3]				X	A lift car must have an emergency lighting system designed— (a) to come on automatically upon failure of the normal lighting supply; and (b) to provide at least 20 lux of lighting for 2 hours on the alarm initiation button. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S24C4 Cooling of lift shaft				X	While a lift in a lift shaft is in service, the cooling of the lift shaft must— (a) ensure that the dry bulb air temperature in the lift shaft does not exceed 40°C; and





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[2019: Spec E3.1: 4]					(b) if the cooling is by a ventilation system, be provided with an air change rate determined using a temperature rise of no more than 5 K. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S24C5 Lift foyer access [2019: Spec E3.1: 5]				X	Where there is a security foyer in a building, access may be via locked security doors provided— (a) security doors revert to the unlocked state in the event of— (i) power failure; or (ii) fire alarm; and (b) locked foyer areas are monitored by closed circuit television and intercom system to a 24 hour staffed location. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S24C6 Emergency access doors in a single enclosed lift shaft [2019: Spec E3.1: 6]				X	(1) Where a lift is installed in a single enclosed lift shaft having a distance between normal landing entrances greater than 12.2 m, emergency access doors must be provided and constructed as follows: (a) The clear opening size of emergency doors must be not less than 600 mm wide x 980 mm high. (b) Hinged doors must not open towards the interior of the lift shaft. (c) Doors must be self-closing and self-locking. (d) Doors must be marked on the landing side with the letters not less than 35 mm high: DANGER LIFTWELL ACCESS KEEP FURNITURE AND FIXTURES CLEAR (e) Doors from the landing side must only be openable by a tool. (f) Each emergency door must be provided with a positive breaking electrical contact, wired into the control circuit to prevent movement of the lift until the emergency door is both closed and locked. (2) Emergency egress from the lift car must be provided in single enclosed lift shafts where— (a) ropes are installed; and (b) the vertical distance between the lift car sill and the landing door head is less than 600 mm; and (c) the counterweight is resting on its fully compressed buffer. (3) Emergency egress required by (2) must be in the form of an interlocked door with clear opening dimensions not less than 600 mm x 600 mm, accessible from the lift car entrance or the lift car roof (where the door is located in the wall of the lift shaft). Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
Specification 25 Photoluminescent exit signs					
S25C1 Scope [2019: Spec E4.8: 1]			X		This Specification contains requirements for photoluminescent exit signs.





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S25C2 Application [2019: Spec E4.8: 2]				X	A photoluminescent exit sign must comply with Section 5 and Appendix D of AS/NZS 2293.1, except where varied by this Specification. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
S25C3 Illumination [2019: Spec E4.8: 3]				X	A photoluminescent exit sign must— (a) be maintained in a continuously charged state by a minimum illumination of 100 lux at the face of the sign by a dedicated light source with a colour temperature not less than 4000 K; and (b) in the event of a power failure, continue to provide a minimum luminance of 30 mcd/m ² for not less than 90 minutes; and (c) have its performance verified by testing in accordance with ASTM E2073-10, except the activation illumination in clause 8.3 is replaced with 54 lux. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
S25C4 Pictorial elements [2019: Spec E4.8: 4]				X	Pictorial elements on a photoluminescent exit sign must— (a) where the colour white is used, be replaced with a photoluminescent material; and (b) be not less than 1.3 times larger than that specified in Table 5.1 of AS/NZS 2293.1; and (c) have a border of photoluminescent material that extends not less than 15 mm beyond the pictorial elements. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
S25C5 Viewing distance [2019: Spec E4.8: 5]				X	The maximum viewing distance in clause 5.6 of AS/NZS 2293.1 must not be more than 24 m. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
S25C6 Smoke control systems [2019: Spec E4.8: 6]				X	Smoke control systems required by clause 5.3 of AS/NZS 2293.1 do not apply to a photoluminescent exit sign. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>

Section F Health and Amenity

Part F1 External waterproofing, rainwater management and rising damp

F1D1 Deemed-to-Satisfy Provisions [2019: F1.0]			X		(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements F1P1 to F1P4 are satisfied by complying with F1D2 to F1D8. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.
F1D2 Application of Part [New for 2022]			X		(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.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
F1D3 Stormwater Drainage [2019: F1.1]				X	Stormwater drainage must be designed and constructed in accordance with AS/NZS 3500.3. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
F1D4 Exposed Joints [New for 2022]				X	Exposed joints in the drainage surface on a roof, balcony, podium, or similar horizontal surface part of a building must— (a) be protected in accordance with Section 2.9 of AS 4654.2; and (b) not be located beneath or run through a planter box, water feature or similar part of the building. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
F1D5 External waterproofing membranes [2019: F1.4]				X	A roof, balcony, podium, or similar horizontal surface part of a building must be provided with a waterproofing membrane— (a) consisting of materials complying with AS 4654.1; and (b) designed and installed in accordance with AS 4654.2. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
F1D6 Damp-proofing [2019: F1.9]				X	(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 or 8 building where in the particular case there is no necessity for compliance. (b) A garage, tool shed, sanitary compartment, or the like, forming part of a building used for other purposes. (c) An open spectator stand or open-deck carpark. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
F1D7 Damp-proofing of floors on the ground [2019: F1.10]				X	(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 (b) the floor is the base of a stair, lift or similar shaft which is adequately drained by gravitation or mechanical means. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
F1D8 Subfloor ventilation			X		(1) Subfloor spaces must—





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
[2019: F1.12]					(a) be provided with openings in external walls and internal subfloor walls in accordance with Table F1D8 for the climatic zones given in Figure F1D8; and (b) have clearance between the ground surface and the underside of the lowest horizontal member in the subfloor in accordance with Table F1D8. (2) In addition to (1), a subfloor space must— (a) be cleared of all building debris and vegetation; and (b) have the ground beneath the suspended floor graded to prevent surface water ponding under the building; and (c) contain no dead air spaces; and (d) have openings evenly spaced as far as practicable; and (e) have openings placed not more than 600 mm in from corners. (3) In double leaf masonry walls, openings specified in (1) must be provided in both leaves of the masonry, with openings being aligned to allow an unobstructed flow of air. (4) Openings in internal subfloor walls specified in (1) must have an unobstructed area equivalent to that required for the adjacent external openings. (5) Where the ground or subfloor space is excessively damp or subject to frequent flooding, in addition to the requirements of (1) to (4)— (a) the subfloor ventilation required in (1) must be increased by 50%; or (b) the ground within the subfloor space must be sealed with an impervious membrane; or (c) subfloor framing must be— (i) where above ground, above-ground durability Class 1 or 2 timbers or H3 preservative treated timbers in accordance with AS 1684.2, AS 1684.3 or AS 1684.4; or (ii) where in ground, in-ground durability Class 1 or 2 timbers or H5 preservative treated timbers in accordance with AS 1684.2, AS 1684.3 or AS 1684.4; or (iii) steel in accordance with NASH Standard 'Residential and Low-Rise Steel Framing' Part 2. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification

Part F2 Wet areas and overflow protection

F2D1 Deemed-to-Satisfy Provisions [New for 2022]			X		(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements F2P1 and F2P2 are satisfied by complying with F2D2 to F2D4. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.
F2D2 Wet area construction [2019: F1.7(a) and (b)]				X	(1) In a Class 2 and 3 building and a Class 4 part of a building, building elements in wet areas must— (a) be water resistant or waterproof in accordance with Specification 26; and (b) comply with AS 3740.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(2) In a Class 5, 6, 7, 8 or 9 building, building elements in a bathroom or shower room, a slop hopper or sink compartment, a laundry or sanitary compartment must— (a) be water resistant or waterproof in accordance with Specification 26; and (b) comply with AS 3740, as if they were in a Class 2 or 3 building or a Class 4 part of a building. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F2D3 Rooms containing urinals [2019: F1.7(c), (d) and (e)]				X	(1) Where a slab or stall type urinal is installed— (a) the floor surface of the room containing the urinal must be an impervious material; and (i) where no step is installed, must— (A) be graded to the urinal channel for a distance of 1.5 m from the urinal channel; and (B) have the remainder of the floor graded to a floor waste; and (ii) where a step is installed— (A) the step must have an impervious surface and be graded to the urinal channel; and (B) the floor behind the step must be graded to a floor waste; and (b) the junction between the floor surface and the urinal channel must be impervious. (2) Where a wall hung urinal is installed— (a) the wall must be surfaced with impervious material extending from the floor to the top of the urinal and not less than 225 mm on each side of the urinal; and (b) the floor must be surfaced with an impervious material and be graded to a floor waste. (3) In a room with timber or steel-framed walls and containing a urinal— (a) the wall must be surfaced with an impervious material extending from the floor to not less than 100 mm above the floor surface; and (b) the junction of the floor surface and the wall surface must be impervious. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F2D4 Floor wastes [2019: F1.11]				X	(1) In a Class 2 or 3 building or Class 4 part of a building, a bathroom or laundry located at any level above a sole occupancy unit or public space must have a floor waste. (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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification

Part F3 Roof and wall cladding





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
F3D1 Deemed-to-Satisfy Provisions [New for 2022]			X		(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirement F3P1 is satisfied by complying with F3D2 to F3D5. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.
F3D2 Roof coverings [2019: F1.5]				X	A roof must be covered with— (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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F3D3 Sarking [2019: F1.6]				X	Sarking-type material used for weatherproofing of roofs and walls must comply with AS 4200.1 and AS 4200.2. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F3D4 Glazed assemblies [2019: F1.13]				X	(1) Subject to (2) and (3), the following glazed assemblies in an external wall, must comply with AS 2047 requirements for resistance to water penetration: (a) Windows. (b) Sliding and swinging glazed doors with a frame, including French and bi-fold doors with a frame. (c) Adjustable louvres. (d) Shopfronts. (e) Window walls with one piece framing. (2) The following buildings need not comply with (1): (a) A Class 7 or 8 building where in the particular case there is no necessity for compliance. (b) A garage, tool shed, sanitary compartment, or the like, forming part of a building used for other purposes, except where the construction of the garage, tool shed, sanitary compartment or the like contributes to the weatherproofing of the other part of the building. (c) An open spectator stand or open-deck carpark. (3) The following glazed assemblies need not comply with (1): (a) All glazed assemblies not in an external wall. (b) Revolving doors. (c) Fixed louvres. (d) Skylights, roof lights and windows in other than the vertical plane. (e) Sliding and swinging glazed doors without a frame. (f) Windows constructed on site and architectural one-off windows, which are not design tested in accordance with AS 2047.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(g) Second-hand windows, re-used windows and recycled windows. (h) Heritage windows. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F3D5 Wall cladding [New for 2022]				X	(1) External wall cladding must comply with one or a combination of the following: (a) Masonry, including masonry veneer, unreinforced and reinforced masonry: AS 3700. (b) Autoclaved aerated concrete: AS 5146.3. (c) Metal wall cladding: AS 1562.1. (2) The following buildings need not comply with (1): (a) A Class 7 or 8 building where in the particular case there is no necessity for compliance. (b) A garage, tool shed, sanitary compartment, or the like, forming part of a building used for other purposes, except where the construction of the garage, tool shed, sanitary compartment or the like contributed to the weatherproofing of another part of the building that is required to be weatherproofed. (c) An open spectator stand or open deck carpark. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
Part F4 Sanitary and other facilities					
F4D1 Deemed-to-Satisfy Provisions [2019: F2.0]			X		(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements F4P1 to F4P6 are satisfied by complying with— (a) F4D2 to F4D12; and (b) for public transport buildings, Part I2; and (c) for farm sheds, Part I3. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.
F4D2 Facilities in residential buildings [2019: F2.1]				X	(1) For facilities in Class 2 buildings, the following applies: (a) Within each sole-occupancy unit, provide— (i) a kitchen sink and facilities for the preparation and cooking of food; and (ii) a bath or shower; and (iii) a closet pan; and (iv) a washbasin. (b) For laundry facilities, provide either— (i) in each sole-occupancy unit— (A) clothes washing facilities, comprising at least one washtub and a space for a washing machine; and (B) clothes drying facilities comprising clothes line or a hoist with not less than 7.5 m of line, or space for one heat operated drying cabinet or appliance in the same room as the clothes washing facilities; or





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(ii) a separate laundry for each 4 sole-occupancy units, or part thereof, that must comprise— (A) clothes washing facilities, comprising at least one washtub and a space for a washing machine; and (B) clothes drying facilities comprising clothes line or a hoist with not less than 7.5 m of line per sole occupancy unit, or space for one heat operated drying cabinet or appliance. (c) For the purposes of (a) and (b), a kitchen sink or washbasin must not be counted as a laundry washtub. (2) For facilities in Class 3 buildings other than residential care buildings, the following applies: (a) For residents in each building or group of buildings, for each 10 residents for whom private facilities are not provided, provide— (i) a bath or shower; and (ii) a closet pan; and (iii) a washbasin. (b) Notwithstanding (a), if one urinal is provided for each 25 males up to 50 and one additional urinal for each additional 50 males or part thereof, one closet pan for each 12 males may be provided. (c) Facilities for employees must be provided in accordance with F4D4. (d) Facilities required by (a), (b) or (c) need not be situated in the same building. (3) For facilities in Class 3 residential care buildings, the following applies: (a) For residents in each building or group of buildings, provide— (i) a shower, closet pan and wash basin for each 8 residents or part thereof where private facilities are not provided; and (ii) a suitable bath for each 30 residents or part thereof. (b) For the purposes of (a), urinals must not be taken into consideration in calculating the number of facilities. (4) For facilities in a Class 4 part of a building, the following applies: (a) For the sole-occupancy unit, provide— (i) a kitchen sink and facilities for the preparation and cooking of food; and (ii) a bath or shower; and (iii) a closet pan; and (iv) a washbasin; and (v) clothes washing facilities, comprising a washtub and space in the same room for a washing machine; and (vi) a clothes line or hoist, or space for a heat-operated drying cabinet or similar appliance for the exclusive use of the occupants. (b) For the purposes of (a), a kitchen sink or washbasin must not be counted as a laundry washtub. (5) For facilities in Class 9c buildings, the following applies: (a) For residents in each building or group of buildings, provide—





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(i) a closet pan and wash basin for each 6 residents or part thereof where private facilities are not provided; and (ii) a shower for each 7 residents or part thereof for where private facilities are not provided; and (iii) a suitable bath, fixed or mobile. (b) In addition to the facilities required by (a), provide— (i) one kitchen or other adequate facility for the preparation and cooking or reheating of food including a kitchen sink and washbasin; and (ii) laundry facilities for the cleansing and drying of linen and clothing or adequate facilities for holding and dispatch or treatment of soiled linen and clothing and the like and the receipt and storage of clean linen; and (iii) one clinical hand washing basin for each 16 residents or part thereof. (c) For the purposes of (a), urinals must not be taken into consideration in calculating the number of facilities. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F4D3 Calculation of number of occupants and facilities [2019: F2.2]			X		(1) The number of persons accommodated must be calculated according to D2D18 if it cannot be more accurately determined by other means. (2) Unless the premises are used predominantly by one sex, sanitary facilities must be provided on the basis of equal numbers of males and females. (3) In calculating the number of sanitary facilities to be provided under F4D2 and F4D4, a unisex facility required for people with a disability (other than a facility provided under F4D12) may be counted once for each sex. (4) For the purposes of this Part, a unisex facility comprises one closet pan, one washbasin and means for the disposal of sanitary products.
F4D4 Facilities in Class 3 to 9 buildings [2019: F2.3]				X	(1) Except where permitted by (3), (4), (7), F4D5(a) and F4D5(b), separate sanitary facilities for males and females must be provided for Class 3, 5, 6, 7, 8 or 9 buildings in accordance with Tables F4D4a to F4D4I, as appropriate. (2) In Tables F4D4a to F4D4I— (a) 'Number' means the number of facilities required; and (b) '>' means greater than; and (c) a hyphen means no data (refer to the row above for the highest value applicable); and (d) 'N/A' means not applicable; and (e) a reference to— (i) employees includes owners and managers using the building; and (ii) add 1 per 100 or 150, 250, 500" etc. includes any part of that number. (3) If not more than 10 people are employed, a unisex facility may be provided instead of separate facilities for each sex. (4) If the majority of employees are of one sex, not more than 2 employees of the other sex may share toilet facilities if the facilities are separated by means of walls, partitions and doors to afford privacy. (5) Employees and the public may share the same facilities in a Class 6 and 9b building (other than a school or early childhood centre) provided the





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
					number of facilities provided is not less than the total number of facilities required for employees plus those required for the public. (6) Adequate means of disposal of sanitary products must be provided in sanitary facilities for use by females. (11) Not less than one washbasin must be provided where closet pans or urinals are provided. <u>Compliance commentary</u> Sanitary facilities have not been detailed within each of the retail and gym tenancies within the buildings. Either individual sanitary facilities are to be detailed within each of the tenancies or a bank of sanitary facilities are to be detailed within the building at CC stage. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
F4D5 Accessible sanitary facilities [2019: F2.4]					Not part of this assessment.
F4D6 Accessible unisex sanitary compartments [2019: Table F2.4a]					Not part of this assessment.
F4D7 Accessible unisex showers [2019: Table F2.4b]					Not part of this assessment.
F4D8 Construction of sanitary compartments [2019: F2.5]				X	(1) Other than in an early childhood centre, sanitary compartments must have doors and partitions that separate adjacent compartments and extend— (a) from floor level to the ceiling in the case of a unisex facility; or (b) to a height of not less than 1.5 m above the floor if primary school children are the principal users; or (c) 1.8 m above the floor in all other cases. (2) The door to a fully enclosed sanitary compartment must— (a) open outwards; or (b) slide; or (c) be readily removable from the outside of the sanitary compartment, unless there is a clear space of at least 1.2 m, measured in accordance with Figure F4D8, between the closet pan within the sanitary compartment and the doorway. (3) In an early childhood centre, facilities for use by children must have each sanitary compartment screened by a partition which, except for the doorway, is opaque for a height of at least 900 mm but not more than 1200 mm above the floor level.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F4D9 Interpretation: urinals and washbasins [2019: F2.6]			X		(1) A urinal may be— (a) an individual stall or wall-hung urinal; or (b) each 600 mm length of a continuous urinal trough; or (c) a closet pan used in place of a urinal. (2) A washbasin may be— (a) an individual basin; or (b) a part of a hand washing trough served by a single water tap.
F4D11 Waste management [2019: F2.8]			X		Not applicable.
F4D12 Accessible adult change facilities [2019: F2.9]					Not part of this assessment.
Part F5 Room heights					
F5D1 Deemed-to-satisfy Provisions [2019: F3.0]			X		(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirement F5P1 is satisfied by complying with— (a) F5D2; and (b) for farm sheds, Part I3. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.
F5D2 Height of rooms and other spaces [2019: F3.1]				X	(1) The height of rooms and other spaces in a Class 2 or 3 building or Class 4 part of a 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 non-habitable room, or space within a non-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. (3) The height of rooms and other spaces in a Class 5, 6, 7 or 8 building must be not less than— (a) except as allowed in (b) and (8) — 2.4 m; and (b) a corridor, passageway, or the like — 2.1 m.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(4) The height of rooms and other spaces in a Class 9a health-care building must be not less than— (a) for a patient care area — 2.4 m; and (b) for an operating theatre or delivery room — 3 m; and (c) for a treatment room, clinic, waiting room, passageway, corridor, or the like — 2.4 m. (5) The height of rooms and other spaces in a Class 9b building must be not less than— (a) for a school classroom or other assembly building or part that accommodates not more than 100 persons — 2.4 m; and (b) for a theatre, public hall or other assembly building or part that accommodates more than 100 persons — 2.7 m; and (c) for a corridor— (i) that serves an assembly building or part that accommodates not more than 100 persons — 2.4 m; or (ii) that serves an assembly building or part that accommodates more than 100 persons — 2.7 m. (6) For the purposes of (5) the number of persons accommodated must be calculated according to D2D18. (7) The height of rooms and other spaces in a Class 9c 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 — 2.4 m; and (c) for a habitable room excluding a kitchen — 2.4 m. (8) The height of rooms and other spaces in any building must be not less than— (a) for a bathroom, shower room, sanitary compartment, other than an accessible adult change facility, airlock, tea preparation room, pantry, store room, garage, car parking area, or the like — 2.1 m; and (b) for a commercial kitchen — 2.4 m; and (c) above a stairway, ramp, landing or the like — 2 m measured vertically above the nosing line of stairway treads or the floor surface of the ramp, landing or the like; and (d) for a required accessible adult change facility — 2.4 m. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
Part F6 Light and Ventilation					
F6D1 Deemed-to-Satisfy Provisions [2019: F4.0]			X		(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements F6P1 to F6P5 are satisfied by complying with— (a) F6D2 to F6D12; and (b) for a building containing an occupiable outdoor area, Part G6; and (c) for farm buildings and farm sheds, Part I3. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.
F6D2				X	Natural light must be provided in:





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Provision of natural light [2019: F4.1]					(a) A Class 2 building and a Class 4 parts of a building — to all habitable rooms. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
F6D3 Methods and extent of natural light [2019: F4.2]				X	(1) Required natural light must be provided by— (a) windows, excluding roof lights, that— (i) have an aggregate light transmitting area measured exclusive of framing members, glazing bars or other obstructions of not less than 10% of the floor area of the room; and (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— (i) have an aggregate light transmitting area measured exclusive of framing members, glazing bars or other obstructions of not less than 3% of the floor area of the room; and (ii) are open to the sky; or (c) a proportional combination of windows and roof lights required by (a) and (b) (2) Except in a Class 9c aged care building, in a Class 2, 3 or 9 building or Class 4 part of a building, a required window that faces a boundary of an adjoining allotment or a wall of the same building or another building on the allotment must not be less than a horizontal distance from that boundary or wall that is the greater of— (a) generally — 1 m; and (b) in a patient care area or other room used for sleeping purposes in a Class 9a building — 3 m; and (c) 50% of the square root of the exterior height of the wall in which the window is located, measured in metres from its sill. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
F6D4 Natural light borrowed from adjoining room [2019: F4.3]				X	(1) Natural light to a room in a Class 2 building or Class 4 part of a building or in a sole-occupancy unit of a Class 3 building, may come through one or more glazed panels or openings from an adjoining room (including an enclosed verandah) if— (a) both rooms are within the same sole-occupancy unit or the enclosed verandah is on common property; and (b) the glazed panels or openings have an aggregate light transmitting area of not less than 10% of the floor area of the room to which it provides light; and (c) the adjoining room has— (i) windows, excluding roof lights, that— (A) have an aggregate light transmitting area of not less than 10% of the combined floor areas of both rooms; and (B) are open to the sky or face a court or other space open to the sky or an open verandah, carport or the like; or (ii) roof lights, that—





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(A) have an aggregate light transmitting area of not less than 3% of the combined floor areas of both rooms; and (B) are open to the sky; or (iii) a proportional combination of windows and roof lights required by (i) and (ii). (2) The areas specified in (1)(b) and (c) may be reduced as appropriate if direct natural light is provided from another source. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F6D5 Artificial lighting [2019: F4.4]				X	(1) Artificial lighting must be provided— (a) in required stairways, passageways, and ramps; and (b) if natural light of a standard equivalent to that required by F6D3 is not available, and the periods of occupation or use of the room or space will create undue hazard to occupants seeking egress in an emergency, in— (i) a Class 4 part of a building — to sanitary compartments, bathrooms, shower rooms, airlocks and laundries; and (ii) a Class 2 building — to sanitary compartments, bathrooms, shower rooms, airlocks, laundries, common stairways and other spaces used in common by the occupants of the building; and (iii) Class 3, 5, 6, 7, 8 and 9 buildings — to all rooms that are frequently occupied, all spaces required to be accessible, all corridors, lobbies, internal stairways, other circulation spaces and paths of egress. (2) The artificial lighting system must comply with AS/NZS 1680.0. (3) The system may provide a lesser level of illumination to the following spaces during times when the level of lighting would be inappropriate for the use: (a) A theatre, cinema or the like, when performances are in progress, with the exception of aisle lighting required by Part I1. (b) A museum, gallery or the like, where sensitive displays require low lighting levels. (c) A discotheque, nightclub or the like, where to create an ambience and character for the space, low lighting levels are used. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
NSW F6D6 Ventilation of rooms [2019: F4.5]				X	A habitable room, office, shop, factory, workroom, sanitary compartment, bathroom, shower room, laundry and any other room occupied by a person for any purpose must have— (a) natural ventilation complying with F6D7; or (b) a mechanical ventilation or air-conditioning system complying with AS 1668.2. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F6D7 Natural ventilation [2019: F4.6]				X	(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—





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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. (2) The requirements of (1)(a) do not apply to a Class 8 electricity network substation. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F6D8 Ventilation borrowed from adjoining room [2019: F4.7]				X	Natural ventilation to a room may come through a window, opening, door or other device from an adjoining room (including an enclosed verandah) if both rooms are within the same sole-occupancy unit or the enclosed verandah is common property, and— (a) in a Class 2 building, a sole-occupancy unit of a Class 3 building or Class 4 part of a building— (i) the room to be ventilated is not a sanitary compartment; and (ii) the window, opening, door or other device has a ventilating area of not less than 5% of the floor area of the room to be ventilated; and (iii) the adjoining room has a window, opening, door or other device with a ventilating area of not less than 5% of the combined floor areas of both rooms; and (b) in a Class 5, 6, 7, 8 (except a Class 8 electricity network substation) or 9 building— (i) the window, opening, door or other device has a ventilating area of not less than 10% of the floor area of the room to be ventilated, measured not more than 3.6 m above the floor; and (ii) the adjoining room has a window, opening, door or other device with a ventilating area of not less than 10% of the combined floor areas of both rooms; and (c) the ventilating areas specified in (a) and (b) may be reduced as appropriate if direct natural ventilation is provided from another source. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F6D9 Restriction on location of sanitary compartments [2019: F4.8]				X	A sanitary compartment must not open directly into— (a) a kitchen or pantry; or (b) a public dining room or restaurant; or (c) a dormitory in a Class 3 building; or (d) a room used for public assembly (which is not an early childhood centre, primary school or open spectator stand); or (e) a workplace normally occupied by more than one person. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F6D10 Airlocks [2019: F4.9]				X	If a sanitary compartment is prohibited under F6D9 from opening directly to another room— (a) in a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building—





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(i) access must be by an airlock, hallway or other room; or (ii) the sanitary compartment must be provided with mechanical exhaust ventilation; and (b) in a Class 5, 6, 7, 8 or 9 building (which is not an early childhood centre, primary school or open spectator stand)— (i) access must be by an airlock, hallway or other room with a floor area of not less than 1.1 m² and fitted with self-closing doors at all access doorways; or (ii) the sanitary compartment must be provided with mechanical exhaust ventilation and the doorway to the room adequately screened from view. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F6D11 Carparks [2019: F4.11]				X	Every storey of a carpark, except an open-deck carpark, must have— (a) a system of mechanical ventilation complying with AS 1668.2; or (b) a system of natural ventilation complying with Section 4 of AS 1668.4 Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F6D12 Kitchen local exhaust ventilation [2019: F4.12]				X	A commercial kitchen must be provided with a kitchen exhaust hood complying with AS 1668.1 and AS 1668.2 where— (a) any cooking apparatus has— (i) a total maximum electrical power input exceeding 8 kW; or (ii) a total gas power input exceeding 29 MJ/hour; or (b) the total maximum power input to more than one apparatus exceeds, per m² of floor area of the room or enclosure— (i) 0.5 kW electrical power; or (ii) 1.8 MJ/hour gas. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification

Part F7 Sound transmission and insulation

F7D1 Deemed-to-Satisfy Provisions [2019: F5.0]			X		(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements F7P1 to F7P4 are satisfied by complying with F7D2 to F7D8. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.
F7D2 Application of Part [2019: F5.1]			X		The Deemed-to-Satisfy Provisions of this Part apply to Class 2 and 3 buildings and Class 9c buildings.
F7D3 Determination of airborne sound insulation ratings [2019: F5.2]				X	A form of construction required to have an airborne sound insulation rating must— (a) have the required value for weighted sound reduction index (R_w) or weighted sound reduction index with spectrum adaptation term ($R_w + C_{tr}$) determined in accordance with AS/NZS ISO 717.1 using results from laboratory measurements; or (b) comply with Specification 28.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F7D4 Determination of impact sound insulation ratings [2019: F5.3]				X	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 (b) comply with Specification 28. (2) A wall in a building required to have an impact sound insulation rating must— (a) for a Class 2 or 3 building be of discontinuous construction and (b) for a Class 9c building, must— (i) for other than masonry, be two or more separate leaves without rigid mechanical connection except at the periphery; or (ii) be identical with a prototype that is no less resistant to the transmission of impact sound when tested in accordance with Specification 29 than a wall listed in S28C4 to S28C7. (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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F7D5 Sound insulation rating of floors [2019: F5.4]				X	(1) A floor in a Class 2 or 3 building must have an $R_w + C_{tr}$ (airborne) not less than 50 and an $L_{n,w}$ (impact) not more than 62 if it separates— (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. (2) A floor in a Class 9c building separating sole-occupancy units must have an R_w not less than 45. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F7D6 Sound insulation rating of walls [2019: F5.5]				X	(1) A wall in a Class 2 or 3 building must— (a) have an $R_w + C_{tr}$ (airborne) not less than 50, if it separates sole-occupancy units; and (b) have an R_w (airborne) not less than 50, if it separates a sole-occupancy unit from a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification; and (c) comply with F7D4(2) if it separates— (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.





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					(2) A door may be incorporated in a wall in a Class 2 or 3 building that separates a sole-occupancy unit from a stairway, public corridor, public lobby or the like, provided the door assembly has an R_w not less than 30. (3) A wall in a Class 9c building must have an R_w not less than 45 if it separates— (a) sole-occupancy units; or (b) a sole-occupancy unit from a kitchen, bathroom, sanitary compartment (not being an associated ensuite), laundry, plant room or utilities room. (4) In addition to (3), a wall separating a sole-occupancy unit in a Class 9c building from a kitchen or laundry must comply with F7D4(2). (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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F7D7 Sound insulation rating of internal services [2019: F5.6]				X	(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 $R_w + C_{tr}$ (airborne) not less than— (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 stormwater pipe passes through a sole-occupancy unit, it must be separated in accordance with (1)(a) and (b). Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F7D8 Sound isolation of pumps [2019: F5.7]				X	A flexible coupling must be used at the point of connection between the service pipes in a building and any circulating or other pump. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
Part F8 Condensation management					
F8D1 Deemed-to-Satisfy Provisions [2019: F6.0]			X		(1) Compliance with Performance Requirement F8P1 is satisfied by complying with Deemed-to-Satisfy Provisions F8D2 to F8D5. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.
F8D2 Application of Part [2019: F6.1]			X		The Deemed-to-Satisfy Provisions of this Part only apply to a sole-occupancy unit of a Class 2 building and a Class 4 part of a building.
F8D3 External wall construction				X	(1) Where a pliable building membrane is installed in an external wall, it must— (a) comply with AS 4200.1; and





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[2019: F6.2]					(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 must have a vapour permeance of not less than— (a) in climate zones 4 and 5, 0.143 µg/N.s; and (b) in climate zones 6, 7 and 8, 1.14 µg/N.s. (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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F8D4 Exhaust systems [2019: F6.3]				X	(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. (6) Except for rooms that are ventilated in accordance with F6D7, a room with space for ducting a clothes drying appliance to outdoor air in accordance with (3) must be provided with make-up air in accordance with AS 1668.2 Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F8D5 Ventilation of roof spaces [2019: F6.4]				X	(1) In climate zones 6, 7 and 8, a roof must have a roof space that— (a) is located— (i) immediately above the primary insulation layer; or (ii) immediately above sarking with a vapour permeance of not less than 1.14 µg/N.s, which is immediately above the primary insulation layer; or (iii) immediately above ceiling insulation which meets the requirements of J3D7(3) and J3D7(4); and (b) has a height of not less than 20 mm; and (c) is either— (i) ventilated to outdoor air through evenly distributed openings in accordance with Table F8D5; or





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					(ii) located immediately underneath roof tiles of an unsarked tiled roof. (2) The requirements of (1) do not apply to a— (a) concrete roof; or (b) roof that is made of structural insulated panels; or (c) roof that is subject to Bushfire Attack Level FZ requirements in accordance with AS 3959. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
Specification 26 Waterproofing and water-resistance requirements for building elements in wet areas					
S26C1 Scope [2019: Table F1.7]			X		This Specification sets out requirements for building elements in wet areas that are required to be— (a) water resistant; or (b) waterproof.
S26C2 Application [2019: Table F1.7]			X		(1) The requirements of this Specification apply to— (a) shower areas (enclosed and unenclosed); and (b) areas outside a shower area; and (c) areas adjacent to baths and spas; and (d) other areas as set out in clause S26C7. (2) Where a shower is above a bath or spa, use requirements for a shower.
S26C3 Shower area (enclosed and unenclosed) [2019: Table F1.7]				X	(1) For a shower area with a hob, step-down or level threshold, the following applies: (a) The floor of the shower area must be waterproof, including any hob or step-down; and (b) The walls of the shower area must be waterproof not less than 1800 mm above the floor substrate. (c) Wall junctions and joints within the shower area must be waterproof. (d) Wall/floor junctions within the shower area must be waterproof. (e) Penetrations within the shower area must be waterproof. (2) A shower with a preformed shower base must also comply with the requirements of (1), except for (a) which is not applicable. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S26C4 Area outside shower area [2019: Table F1.7]				X	(1) For concrete, compressed fibre-cement and fibre-cement sheet flooring, the floor of the room must be water resistant. (2) For timber floors including particleboard, plywood and other timber based flooring materials, the floor of the room must be waterproof. (3) Wall/floor junctions must be waterproof Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S26C5 Areas adjacent to baths and spas without showers [2019: Table F1.7]				X	(1) For areas adjacent to a bath and spa, the following applies: (a) For concrete, compressed fibre-cement and fibre-cement sheet flooring, the floor of the room must be water resistant. (b) For timber floors including particleboard, plywood and other timber based flooring materials, the floor of the room must be waterproof.





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					(c) Tap and spout penetrations must be waterproof where they occur in horizontal surfaces. (2) For areas adjacent to a non-freestanding bath and spa, the following applies: (a) Walls must be water resistant— (i) to a height of not less than 150 mm above the vessel, for the extent of the vessel, where the vessel is within 75 mm of a wall; and (ii) to all exposed surfaces below vessel lip. (b) Wall junctions and joints must be water resistant within 150 mm above a vessel for the extent of the vessel. (c) Wall/floor junctions must be waterproof for the extent of the vessel. (3) For inserted baths and spas, the following applies: (a) For floors and horizontal surfaces: (i) Any shelf area adjoining the bath or spa must be waterproof and include a waterstop under the vessel lip. (ii) There are no requirements for the floor under a bath or spa. (b) For walls: (i) Waterproof to not less than 150 mm above the lip of a bath or spa. (ii) There are no requirements for walls beneath the lip of a bath or spa. (c) For wall junctions and joints: (i) Waterproof junctions within 150 mm of a bath or spa. (ii) There are no requirements for junctions and joints in walls beneath the lip of a bath or spa. (d) Tap and spout penetrations must be waterproof where they occur in horizontal surfaces. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S26C6 Other areas [2019: Table F1.7]				X	(1) For walls adjoining other types of vessels (e.g. sink, basin or laundry tub), the following applies: (a) Walls must be water resistant to a height of not less than 150 mm above the vessel, for the extent of the vessel, where the vessel is within 75 mm of a wall. (b) Waterproof wall junctions where a vessel is fixed to a wall. (c) Waterproof tap and spout penetrations where they occur in surfaces required to be waterproof or water resistant. (2) For laundries and WCs, other than WCs as described in (3), the following applies: (a) Water resistant floor of the room. (b) Water resistant wall/floor junctions. (c) Waterproof penetrations where they occur in surfaces required to be waterproof. (3) For WCs with a handheld bidet spray installation, the following applies: (a) Waterproof floor of the room. (b) Walls must be—





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					(i) waterproof within a 1500 mm radius from the wall connection of the handheld bidet spray device to a height of not less than 150 mm above the floor substrate; and (ii) water resistant within a 1500 mm radius from the wall connection of the handheld bidet spray device to a height of not less than 1200 mm above the finished floor level of the WC. (c) Waterproof wall junctions within the WC area within 1500 mm radius from the wall connection of the handheld bidet spray device. (d) Waterproof wall/floor junctions within the WC area within 1500 mm radius from the wall connection of the handheld bidet spray device. (e) Waterproof penetrations in WC area. (4) For bathrooms and laundries required to be provided with a floor waste by F2D4, the following applies: (a) Waterproof floor of the room. (b) Waterproof wall/floor junctions. (c) Waterproof penetrations where they occur through the floor. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
Specification 27 Accessible adult change facilities – Excluded from this assessment					
Specification 28 Sound insulation for building elements					
S28C1 Scope [2019: Spec F5.2: 1(a)]			X		This Specification lists the weighted sound reduction index RW for some common forms of construction.
S28C2 Discontinuous construction [2019: Spec F5.2: 1(b)]				X	Wall systems listed in S28C4 to S28C7 having a minimum 20 mm cavity between 2 separate leaves are deemed to be discontinuous construction if— (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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S28C3 Construction Deemed-to-Satisfy [2019: Spec F5.2: 2]				X	(1) The forms of wall construction described in S28C4 to S28C7 and floor construction described in S28C8 to S28C10, are considered to have the R_w, $R_w + C_{tr}$ and $L_{n,w}$ stated in those clauses. (2) The forms of construction referred to in (1) must be installed as follows: (a) Masonry units must be laid with all joints filled solid, including those between the masonry and any adjoining construction. (b) Joints between concrete slabs or panels and any adjoining construction must be filled solid. (c) For sheeting materials— (i) if one layer is required on both sides of a wall, it must be fastened to the studs with joints staggered on opposite sides; and





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					(ii) if two layers are required, the second layer must be fastened over the first layer so that the joints do not coincide with those of the first layer; and (iii) joints between sheets or between sheets and any adjoining construction must be taped and filled solid. (d) Timber or steel-framed construction — perimeter framing members must be securely fixed to the adjoining structure and— (i) bedded in resilient compound; or (ii) the joints must be caulked so that there are no voids between the framing members and the adjoining structure. (e) Services must not be chased into concrete or masonry elements. (f) A door or panel required to have a certain $R_w + C_{tr}$ that provides access to a duct, pipe or other service must— (i) not open into any habitable room (other than a kitchen); and (ii) be firmly fixed so as to overlap the frame or rebate of the frame by not less than 10 mm, be fitted with a sealing gasket along all edges and be constructed of— (A) wood, particleboard or blockboard not less than 33 mm thick; or (B) compressed fibre-reinforced cement sheeting not less than 9 mm thick; (C) or other suitable material with a mass per unit area not less than 24.4 kg/m² (g) A water supply pipe must— (i) only be installed in the cavity of discontinuous construction; and (ii) in the case of a pipe that serves only one sole-occupancy unit, not be fixed to the wall leaf on the side adjoining any other sole-occupancy unit and have a clearance not less than 10 mm to the other wall leaf. (h) Electrical outlets must be offset from each other— (i) in masonry walling, not less than 100 mm; and (ii) in timber or steel-framed walling, not less than 300 mm. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S28C4 Acceptable forms of construction for walls — masonry [2019: Spec F5.2: Table 2]				X	(1) Acceptable forms of construction for masonry walls are set out in (2) to (9). (2) Two leaves of 110 mm clay brick masonry with— (a) a cavity of not less than 50 mm between leaves; and (b) 50 mm thick glass wool insulation with a density of 11 kg/m³ or 50 mm thick polyester insulation with a density of 20 kg/m³ in the cavity, has an $R_w + C_{tr}$ of not less than 50 and an R_w of not less than 50, if constructed as shown in Figure S28C4a. (3) Two leaves of 110 mm clay brick masonry with— (a) a cavity of not less than 50 mm between leaves; and (b) 13 mm cement render on each outside face,





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					has an $R_w + C_{tr}$ of not less than 50 and an R_w of not less than 50, when constructed as shown in Figure S28C4b. (4) A single leaf of 110 mm clay brick masonry with— (a) a row of 70 mm x 35 mm timber studs or 64 mm steel studs at 600 mm centres, spaced 20 mm from the masonry wall; and (b) 50 mm thick glass or mineral wool insulation with a density of 11 kg/m³ c positioned between studs; and (c) one layer of 13 mm plasterboard fixed to outside face of studs and outside face of masonry, has an $R_w + C_{tr}$ of not less than 50 and an R_w of not less than 50, if constructed as shown in Figure S28C4c. (5) A single leaf of 90 mm clay brick masonry with— (a) a row of 70 mm x 35 mm timber studs or 64 mm steel studs at 600 mm centres, spaced 20 mm from each face of the masonry wall; and (b) 50 mm thick mineral insulation or glass wool insulation with a density of 11 kg/m³ positioned between studs in each row; and (c) one layer of 13 mm plasterboard fixed to studs on each outside face, has an $R_w + C_{tr}$ of not less than 50 and an R_w of not less than 50, if constructed as shown in Figure S28C4d. (6) A single leaf of 150 mm brick masonry with 13 mm cement render on each face has an R_w of not less than 50 if constructed as shown in Figure S28C4e. (7) A single leaf of 220 mm brick masonry with 13 mm cement render on each face has an $R_w + C_{tr}$ of not less than 50 and an R_w of not less than 50, if constructed as shown in Figure S28C4f. (8) 110 mm thick brick masonry with 13 mm cement render on each face has an R_w of not less than 45 if constructed as shown in Figure S28C4g. (9) 110 mm thick concrete brickwork has an R_w of not less than 45 if constructed as shown in Figure S28C4h. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
S28C5 Acceptable forms of construction for walls — concrete [2019: Spec F5.2: Table 2]				X	(1) Acceptable forms of construction for concrete walls are set out in (3) to (12). (2) For the purposes of this clause, the term 'concrete panel' is a reference to a solid in-situ concrete panel or solid pre-cast concrete panel. (3) A 150 mm thick concrete panel has an $R_w + C_{tr}$ of not less than 50 and an R_w of not less than 50, if constructed as shown in Figure S28C5a. (4) A 150 mm thick concrete panel with one layer of 10 mm plasterboard fixed to 28 mm metal furring channels on each face, has an R_w of not less than 50, if constructed as shown in Figure S28C5b. (5) A 200 mm thick concrete panel with one layer of 13 mm plasterboard or 13 mm cement render on each face has an $R_w + C_{tr}$ of not less than 50 and an R_w of not less than 50, if constructed as shown in Figure S28C5c. (6) A 100 mm thick concrete panel with— (a) a row of 64 mm steel studs at 600 mm centres, spaced 25 mm from the concrete panel; and (b) 80 mm thick polyester insulation or 50 mm thick glass wool insulation with a density of 11kg/m³ , positioned between studs; and





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(c) two layers of 13 mm plasterboard fixed to outside face of studs and one layer of 13 mm plasterboard fixed to outside face of concrete panel, has an with an $R_w + C_{tr}$ of not less than 50 and an R_w of not less than 50, if constructed in accordance with Figure S28C5d. (7) A 125 mm thick concrete panel with— (a) a row of 64 mm steel studs at 600 mm centres, spaced 20 mm from the concrete panel; and (b) 70 mm polyester insulation with a density of 9 kg/m³, positioned between studs; and (c) one layer of 13 mm plasterboard fixed to the outside face of the studs, has an with an $R_w + C_{tr}$ of not less than 50 and an R_w of not less than 50, if constructed in accordance with Figure S28C5e. (8) A 125 mm thick concrete panel has an R_w of not less than 50, if constructed as shown in Figure S28C5f. (9) A 100 mm concrete panel with 13 mm cement render or one layer of 13 mm plasterboard on each face has an R_w of not less than 50, if constructed as shown in Figure S28C5g. (10) A 190 mm thick concrete blockwork has an R_w of not less than 45, if constructed as shown in Figure S28C5h. (11) A 140 mm thick concrete blockwork, the face shell thickness of the blocks being not less than 44 mm and with— (a) 50 mm x 50 mm timber battens spaced at not more than 610 mm centres screw-fixed on one face of the blocks into resilient plugs with rubber inserts between battens and the wall; and (b) the face of the battens clad with 13 mm plasterboard, has an R_w of not less than 45, if constructed as shown in Figure S28C5i. (12) A concrete panel, 100 mm thick, has an R_w of not less than 45, if constructed as shown in Figure S28C5j. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S28C6 Acceptable forms of construction for walls — autoclaved aerated concrete [2019: Spec F5.2: Table 2]				X	(1) Acceptable forms of construction for autoclaved aerated concrete walls are set out in (2) to (5). (2) A 75 mm thick autoclaved aerated concrete wall panel with— (a) a row of 64 mm steel studs at 600 mm centres, spaced 20 mm from the autoclaved aerated concrete wall panel; and (b) 75 mm thick glass wool insulation with a density of 11 kg/m³ positioned between studs; and (c) one layer of 10 mm moisture resistant plasterboard or 13 mm fire protective grade plasterboard fixed to outside face of studs and outside face of autoclaved aerated concrete wall panel, has an $R_w + C_{tr}$ of not less than 50 and an R_w of not less than 50, if constructed as shown in Figure S28C6a. (3) A 75 mm thick autoclaved aerated concrete wall panel with— (a) a row of 64 mm steel studs at 600 mm centres, spaced 35 mm from the autoclaved aerated concrete panel wall; and (b) 28 mm metal furring channels fixed to the outside face of the autoclaved aerated concrete wall panel, with 50 mm thick polyester insulation with a density of 9 kg/m³ positioned between





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					furring channels and one layer of 13 mm fire protective grade plasterboard fixed to furring channels; and (c) 105 mm thick glass wool insulation with a density of 7 kg/m³ positioned between studs; and (d) one layer of 13 mm fire protective grade plasterboard fixed to the outside face of the studs, has an $R_w + C_{tr}$ of not less than 50 and an R_w of not less than 50, if constructed as shown in Figure S28C6b. 4) Two leaves of 75 mm autoclaved aerated concrete wall panel with— (a) a cavity not less than 30 mm between panels containing 50 mm glass wool insulation with a density of 11 kg/m³; and (b) one layer of 10 mm plasterboard fixed to outside face of each panel, has an $R_w + C_{tr}$ of not less than 50 and an R_w of not less than 50, if constructed as shown in Figure S28C6c. (5) A 75 mm thick autoclaved aerated concrete wall panel with— (a) one layer of 10 mm moisture resistant plasterboard on one face; (b) 28 mm metal furring channels and resilient mounts, 75 mm polyester insulation with a density of 9 kg/m³ and 13 mm fire-protective grade plasterboard fixed to the other face, has an R_w of not less than 50, if constructed as shown in Figure S28C6d. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S28C7 Acceptable forms of construction for walls — timber and steel framing [2019: Spec F5.2: Table 2]				X	(1) Acceptable forms of construction for timber and steel framing wall are set out in (2) to (11). (2) Two rows of 70 x 35 mm timber studs at 450 mm centres with— (a) an air gap not less than 20 mm between the rows of studs; and (b) 75 mm thick glass or mineral wool insulation with a density of 8 kg/m³ or 60 mm thick polyester insulation with a density of 11 kg/m³ positioned between one row of studs; and (c) two layers of 13 mm fire protective grade plasterboard or one layer of 6 mm fibre-cement sheet and one layer of 13 mm fire protective grade plasterboard, fixed to outside face of studs, has an $R_w + C_{tr}$ of not less than 50 and an R_w of not less than 50, if constructed as shown in Figure S28C7a. (3) One row of 70 mm x 35 mm staggered timber studs, without noggings between adjacent studs, at not less than 450 mm centres, fixed to 90 mm x 35 mm wall plates with— (a) 75 mm thick glass or mineral wool insulation with a minimum density of 8 kg/m³ positioned between studs; and (b) two layers of 13 mm fire-protective grade plasterboard fixed to outside face of studs, has an R_w of not less than 50, if constructed as shown in Figure S28C7b. (4) One row of 70 mm x 35 mm timber studs at not less than 600 mm centres with— (a) 75 mm thick glass or mineral wool insulation with a minimum density of 8 kg/m³ positioned between studs; and





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(b) two layers of 13 mm fire-protective grade plasterboard fixed to outside face of studs, has an R_w of not less than 45, if constructed as shown in Figure S28C7c. (5) One row of 70 mm x 35 mm timber studs at not less than 450 mm centres with— (a) 28 mm furring channels installed horizontally on one side; and (b) two layers of 13 mm fire-protective plasterboard fixed on each face, has an R_w of not less than 45, if constructed as shown in Figure S28C7d. (6) Two rows of 64 mm steel studs at 600 mm centres with— (a) an air gap not less than 20 mm between the rows of studs; and (b) 50 mm thick glass wool insulation or 60 mm thick polyester insulation with a density of 11kg/m³ positioned between one row of studs; and (c) two layers of 13 mm fire-protective grade plasterboard or one layer of 6 mm fibre-cement sheet and one layer of 13 mm fire-protective grade plasterboard, fixed to outside face of studs, has an $R_w + C_{tr}$ of not less than 50 and an R_w of not less than 50, if constructed as shown in Figure S28C7e. (7) Two rows of 64 mm steel studs at 600 mm centres with— (a) an air gap not less than 80 mm between the rows of studs; and (b) 200 mm thick polyester insulation with a density of 14 kg/m³ positioned between studs; and (c) one layer of 13 mm fire-protective grade plasterboard and one layer 13 mm plasterboard on one outside face and one layer of 13 mm fire-protective grade plasterboard on the other outside face, has an $R_w + C_{tr}$ of not less than 50 and an R_w of not less than 50, if constructed as shown in Figure S28C7f. (8) One row of 92 mm steel studs at 600 mm centres with— (a) 50 mm thick glass wool insulation with a density of 11 kg/m³ or 60 mm thick polyester insulation with a density of 8 kg/m³, positioned between studs; and (b) two layers of 13 mm fire-protective grade plasterboard or one layer of 6 mm fibre-cement sheet and one layer of 13 mm fire-protective grade plasterboard, fixed to each face, has an R_w of not less than 50, if constructed as shown in Figure S28C7g. (9) One row of 64 mm steel studs with 2 layers of 16 mm fire-protective grade plasterboard fixed to each face has an R_w of not less than 45, if constructed as shown in Figure S28C7h. (10) One row of 64 mm steel studs with— (a) one layer of 16 mm fire-protective grade plasterboard fixed to one face; and (b) 50 mm thick glass or mineral wool insulation with a density of 11 kg/m³ positioned between the studs; and (c) two layers of fire-protective grade plasterboard fixed to the other face, the inner layer being 16mm thick and the outer layer being 13 mm,





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					has an R_w of not less than 45, if constructed as shown in Figure S28C7i. (11) One row of 64 mm steel studs with two layers of 13 mm plasterboard on each face has an R_w of not less than 45, if constructed as shown in Figure S28C7j. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S28C8 Acceptable forms of construction for floors — concrete [2019: Spec F5.2: Table 3]				X	(1) Acceptable forms of construction for concrete floors are set out in (2) to (4). (2) 150 mm thick concrete slab with— (a) 28 mm metal furring channels and isolation mounts fixed to underside of slab, at 600 mm centres; and (b) 65 mm thick polyester insulation with a density of 8 kg/m³, positioned between furring channels; and (c) one layer of 13 mm plasterboard fixed to furring channels, has an $R_w + C_{tr}$ of not less than 50, an $L_{n,w}$ of not more than 62 and an R_w of not less than 50, if constructed as shown in Figure S28C8a. (3) 200 mm thick concrete slab with carpet on underlay has an $R_w + C_{tr}$ of not less than 50, an $L_{n,w}$ of not more than 62 and an R_w of not less than 50, if constructed as shown in Figure S28C8b. (4) 100 mm thick concrete slab has an $R_w + C_{tr}$ of not less than 45 and an R_w of not less than 45, if constructed as shown in Figure S28C8c. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S28C9 Acceptable forms of construction for floors — autoclaved aerated concrete [2019: Spec F5.2: Table 3]				X	(1) An acceptable form of construction for autoclaved aerated concrete floors is set out in (2). (2) 75 mm thick autoclaved aerated concrete floor panel with— (a) 8 mm ceramic tiles with flexible adhesive and waterproof membrane, located above the slab; and (b) timber joists at 600 mm centres; and (c) R1.5 glass wool insulation positioned between timber joists; and (d) 28 mm metal furring channels and resilient mounts fixed to underside of joists; and (e) two layers of 13 mm plasterboard fixed to furring channels, has an $R_w + C_{tr}$ of not less than 50, an $L_{n,w}$ of not more than 62 and an R_w of not less than 50, if constructed as shown in Figure S28C9. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S28C10 Acceptable forms of construction for floors — timber [2019: Spec F5.2: Table 3]				X	(1) Acceptable forms of construction for timber floors are set out in (2) and (3). (2) 19 mm thick particleboard floor sheeting with— (a) 190 mm x 45 mm timber joists at 450 mm centres; and (b) R2.5 glass or mineral wool insulation positioned between timber joists; and (c) 28 mm metal furring channels and isolation mounts fixed to underside of joists, isolation mounts to be of natural rubber with a dynamic factor of not more than 1.1 and static deflection of not less than 3 mm at actual operating load; and





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(d) two layers of 16 mm fire-protective grade plasterboard fixed to furring channels, has an $R_w + C_{tr}$ of not less than 50, an $L_{n,w}$ of not more than 62 and an R_w of not less than 50, if constructed as shown in Figure S28C10a. (3) Timber flooring with minimum 8.5 kg/m² mass, over 19 mm thick particleboard floor sheeting with— (a) 190 mm x 45 mm timber joists at not less than 450 mm centres; and (b) R2.5 glass or mineral wool insulation positioned between timber joists; and (c) 28 mm metal furring channels fixed to underside of joists at 600 mm centres by clip or mount; and (d) one layer of 13 mm acoustic grade plasterboard fixed to furring channels, has an $R_w + C$ of not less than 45 and an R_w of not less than 45, if constructed as shown in Figure S28C10b. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification

Specification 29 Impact sound- test of equivalence

S29C1 Scope [2019: Spec F5.5: 1]			X		This Specification describes a method of test to determine the comparative resistance of walls to the transmission of impact sound.
S29C2 Construction to be tested [2019: Spec F5.5: 2]			X		(1) The test is conducted on a specimen of prototype wall construction and on a specimen of one or other of the constructions specified in S28C4 to S28C7. (2) The testing of a construction specified in S28C4 to S28C7 need not be repeated for subsequent comparisons provided complete records of the results, the test equipment and the technique of testing are kept so that identical equipment can be employed and an identical technique can be adopted in the testing of specimens of prototype wall construction.
S29C3 Method [2019: Spec F5.5: 3]			X		(1) The wall constructions to be compared must be tested in accordance with AS 1191. (2) A horizontal steel platform 510 mm x 460 mm x 10 mm thick must be placed with one long edge in continuous and direct contact with the wall to be tested on the side of the wall on which the impact sound is to be generated. (3) A tapping machine complying with ISO 140/6 — 1998 (E) must be mounted centrally on the steel platform. (4) The sound transmission through the wall must be determined in accordance with AS 1191 except that the tapping machine as mounted on the steel platform must be used as the source of sound. (5) The impact sound pressure levels measured in the receiving room must be converted into normalised levels using a reference equivalent absorption area of 10 m². Specification 29 Impact sound – test of equivalence Preview D.

Section G Ancillary Provisions

Part G1 Minor structures and components

G1D1			X		(1) Performance Requirement G1P1 must be complied with.
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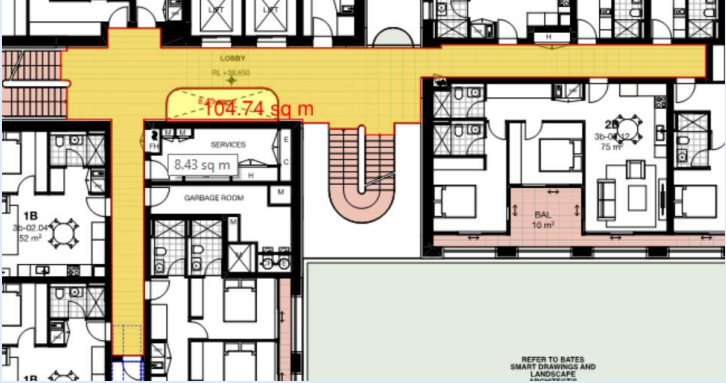
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
Deemed-to-Satisfy Provisions [2019: G1.0]					(2) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements G1P2 to G1P5 are satisfied by complying with G1D2 to G1D4. (3) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.
NSW G1D2 Swimming pools [2019: G1.1]				X	(1) A swimming pool with a depth of water more than 300 mm and which is associated with a Class 2 or 3 building or Class 4 part of a building, must have suitable barriers to restrict access by young children to the immediate pool surrounds in accordance with AS 1926.1 and AS 1926.2. (2) A water recirculation system in a swimming pool with a depth of water more than 300 mm must comply with AS 1926.3. <u>Compliance commentary</u> Details including the location of the swimming pool barrier is required to determine compliance. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
G1D3 Refrigerated chambers, strong-rooms and vaults [2019: G1.2]				X	(1) A refrigerated or cooling chamber, strongroom or vault which is of sufficient size for a person to enter must have— (a) a door which is capable of being opened by hand from inside without a key; and (b) internal lighting controlled only by a switch which is located adjacent to the entrance doorway inside the chamber, strongroom or vault; and (c) an indicator lamp positioned outside the chamber, strongroom or vault which is illuminated when the interior lights required by (b) are switched on; and (d) an alarm that is— (i) located outside but controllable only from within the chamber, strongroom or vault; and (ii) able to achieve a sound pressure level outside the chamber, strongroom or vault of 90 dB(A) when measured 3 m from the sounding device. (2) A door required by (1)(a) in a refrigerated or cooling chamber must have a doorway with a clear width of not less than 600 mm and a clear height not less than 1.5 m. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
G1D4 Outdoor play spaces [2019: G1.3]			X		Not applicable.
NSW G1D5 Provision for cleaning windows [2016: NSW G1.101]				X	(1) A building must provide for a safe manner of cleaning any windows located 3 or more storeys above ground level. (2) A building satisfies (1) where— (a) the windows can be cleaned wholly from within the building; or (b) provision is made for the cleaning of the windows by a method complying with the Work Health and Safety Act 2011 and regulations made under that Act.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
Part G2 Boilers, pressure vessels, heating appliances, fireplaces, chimneys and flues					
G2D1 Deemed-to-Satisfy Provisions [2019: G2.0]			X		(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements G2P1 and G2P2 are satisfied by complying with G2D2 to G2D4. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.
G2D2 Installation of appliances [2019: G2.2]			X		Not applicable.
G2D3 Open fireplaces [2019: G2.3]			X		Not applicable.
G2D4 Incinerator rooms [2019: G2.4]			X		Not applicable.
Part G3 Atrium Construction					
G3D1 Application of Part [2019: G3.1]			X		This Part does not apply to an atrium which— (a) connects only 2 storeys; or (b) connects only 3 storeys if— (i) each storey is provided with a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17 throughout; and (ii) one of those storeys is situated at a level at which there is direct egress to a road or open space. <u>Compliance commentary</u> AED have carried out an assessment of the void that connects ground floor to level 8 (the roof). The void in isolation is shown to connect more than 2 storeys and is detailed as not being covered by a roof or floor. However, part (b) of the definition (see below), requires all areas not separated by an appropriate barrier to fire to be included in the area that is considered enclosed under part (d) of the definition. The areas to be included in the total roof area are highlighted in yellow below.



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
					 The combined area of the void and adjacent covered areas that are not separated from the remainder of the building by an appropriate fire barrier is approximately 104m². The area of the void that is open to the sky is 8.43m² which accounts for 8% of the total area. As such, the area that is open is less than 50% of the total area. The void is considered an atrium and required to comply with the requirements under Part G3 of the BCA. Atrium: A space within a building that connects 2 or more storeys and— (e) is enclosed at the top by a floor or roof (including a glazed roof structure); and (f) <u>includes any adjacent part of the building not separated by an appropriate barrier to fire; but</u> (g) does not include a stairwell, rampwell or the space within a shaft; and (h) <u>for the purposes of (a) a space is considered enclosed if the area of the enclosing floor or roof is greater than 50% of the area of the space, measured in plan, of any of the storeys connected by the space.</u>
G3D2 Dimensions of atrium well [2019: G3.2]				X	An atrium well must have a width throughout the well that is able to contain a cylinder having a horizontal diameter of not less than 6 m. <u>Compliance commentary</u> The atrium well does not provide a width of 6m diameter throughout. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
G3D3 Separation of atrium by bounding walls [2019: G3.3]				X	An atrium must be separated from the remainder of the building at each storey by bounding walls set back not more than 3.5 m from the perimeter of the atrium well except in the case of the walls at not more than 3 consecutive storeys if— (a) one of those storeys is at a level at which direct egress to a road or open space is provided; and (b) the sum of the floor areas of those storeys that are contained within the atrium is not more than the maximum area that is permitted in Table C3D3. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	Informational NA or	Compliance Required	COMMENTS
G3D4 Construction of bounding walls [2019: G3.4]				X	Bounding walls must— (a) have an FRL of not less than 60/60/60, and— (i) extend from the floor of the storey to the underside of the floor next above or to the underside of the roof; and (ii) have any door openings protected with self-closing or automatic –/60/30 fire doors; or (b) be constructed of fixed toughened safety glass, or wired safety glass in non-combustible frames, with— (i) any door openings fitted with a self-closing smoke door complying with Specification 12; and (ii) the walls and doors protected with wall-wetting systems in accordance with Specification 31; and (iii) a fire barrier with an FRL of not less than –/60/30 installed in any ceiling spaces above the wall. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
G3D5 Construction at balconies [2019: G3.5]				X	If a bounding wall separating an atrium from the remainder of the building is set back from the perimeter of the atrium well, a barrier that is imperforate and non-combustible, and not less than 1 m high must be provided. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
G3D6 Separation at roof [2019: G3.6]				X	In an atrium— (a) the roof must have the FRL prescribed in Tables S5C11a to S5C11g of Specification 5; or (b) the roof structure and membrane must be protected by a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
G3D7 Means of egress [2019: G3.7]				X	All areas within an atrium must have access to at least 2 exits. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
G3D8 Fire and smoke control systems [2019: G3.8]				X	Sprinkler systems, smoke control, fire detection and alarm systems, and emergency warning and intercom systems must be installed in compliance with Specification 31. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
Part G4 Construction in alpine areas					
G4D1 Deemed-to-Satisfy Provisions [2019: G4.0]			X		(1) Where a Deemed-to-Satisfy Provisions is proposed, Performance Requirements G4P1 to G4P4 are satisfied by complying with— (a) G4D2 to G4D8; and (b) for a building containing an occupiable outdoor area, Part G6. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.
G4D2 Application of Part			X		Not applicable.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
[2019: G4.1]					
G4D3 External doors [2019: G4.3]			X		Not applicable.
G4D4 Emergency lighting [2019: G4.4]			X		Not applicable.
G4D5 External trafficable structures [2019: G4.5]			X		Not applicable.
G4D6 Clear space around buildings [2019: G4.6]			X		Not applicable.
G4D7 Fire-fighting services and equipment [2019: G4.8]			X		Not applicable.
G4D8 Fire orders [2019: G4.9]			X		Not applicable.
Part G5 Construction in bushfire prone areas					
G5D1 Deemed-to-Satisfy Provisions [2019: G5.0]			X		(1) Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements G5P1 and subject to G5D2, G5P2, are satisfied by complying with G5D3 and G5D4. (2) Where a Performance Solution is proposed, the relevant Performance Requirements must be determined in accordance with A2G2(3) and A2G4(3) as applicable.
NSW G5D2 Application of Part [2019: NSW G5.1]			X		Not applicable.
NSW G5D3 Protection [2019: NSW G5.2]			X		Not applicable.
NSW G5D4 Protection – Class 9 buildings used as a special fire protection purpose [New for 2022]			X		Not applicable.
Part G6 Occupiable outdoor areas					





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
G6D1 Application of Part [2019: G6.1]			X		(1) The Deemed-to-Satisfy Provisions of this Part apply to buildings containing an occupiable outdoor area in addition to the other Deemed-to-Satisfy Provisions of NCC Volume One. (2) The Deemed-to-Satisfy Provisions of this Part take precedence where there is a difference to the Deemed-to-Satisfy Provisions of Sections C, D, E, F and G. (3) Except for G6D2, the Deemed-to-Satisfy Provisions of this Part do not apply to— (a) an occupiable outdoor area of a sole-occupancy unit in a Class 2 or 3 building, Class 9c building or Class 4 part of a building; or (b) an occupiable outdoor area with an area less than 10m².
G6D2 Fire hazard properties [2019: G6.2]				X	(1) Subject to (2), a lining, material or assembly in an occupiable outdoor area must comply with C2D11 as for an internal element. (2) The following fire hazard properties of a lining, material or assembly in an occupiable outdoor area are not required to comply with C2D11: (a) Average specific extinction area. (b) Smoke-Developed Index. (c) Smoke development rate. (d) Smoke growth rate index (SMOGRARC). Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
G6D3 Fire separation [2019: G6.3]				X	For the purposes of the Deemed-to-Satisfy Provisions of C3D8, C3D9 and C3D10, a reference to a storey includes an occupiable outdoor area, however a fire wall cannot be used to separate an occupiable outdoor area into different fire compartments. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
G6D4 Provision for escape [2019: G6.4]				X	For the purposes of the Deemed-to-Satisfy Provisions of Part D2, a reference to a storey or room includes an occupiable outdoor area. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
G6D5 Construction of exits [2019: G6.5]				X	For the purposes of the Deemed-to-Satisfy Provisions of Part D3, a reference to a storey or room includes an occupiable outdoor area. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
G6D6 Firefighting equipment [2019: G6.6]				X	Except for S17C7(2)(a), for the purposes of the Deemed-to-Satisfy Provisions of Part E1, a reference to a storey includes an occupiable outdoor area. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
G6D7 Lift installations [2019: G6.7]				X	For the purposes of the Deemed-to-Satisfy Provisions of Part E3, a reference to a storey includes an occupiable outdoor area. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
G6D8 Visibility in an emergency, exit				X	For the purposes of the Deemed-to-Satisfy Provisions of Part E4, a reference to a storey includes an occupiable outdoor area.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
signs and warning systems [2019: G6.8]					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
G6D9 Light and ventilation [2019: G6.9]				X	For the purposes of the Deemed-to-Satisfy Provisions of F6D5, F6D9 and F6D10, a reference to a room includes an occupiable outdoor area. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
G6D10 Fire Orders [2019: G6.10]				X	For the purposes of the Deemed-to-Satisfy Provisions of G4D8, a reference to a storey includes an occupiable outdoor area. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
Part G7 Liveable housing design – Excluded from this assessment					
Specification 30 Installation of boilers and pressure vessels					
S30C1 Scope [2019: Spec G2.2: 1]			X		This Specification sets out the requirements for the installation of boilers and pressure vessels in buildings.
S30C2 Explosion relief [2019: Spec G2.2: 2.1]			X		Not applicable.
S30C3 Floors and drainage [2019: Spec G2.2: 2.2]			X		Not applicable.
S30C4 Protection from heat [2019: Spec G2.2: 2.3]			X		Not applicable.
Specification 31 Fire and smoke control systems in buildings containing atriums					
S31C1 Scope [2019: Spec G3.8: 1]			X		This Specification sets out the requirements for the design and operation of systems of fire and smoke control in buildings containing an atrium.
S31C2 General requirement – automatic fire sprinkler system [2019: Spec G3.8: 2.1]				X	A sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17 must be installed in every building containing an atrium, except where varied or superseded by this Specification. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S31C3				X	A roof of an atrium which does not have the FRL prescribed in Specification 5 or the Deemed-to-Satisfy Provisions of Part C3 must be protected by





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Roof protection [2019: Spec G3.8: 2.2]					automatic sprinklers arranged to wet both the covering membrane and supporting structure if the roof is— (a) less than 12 m above the floor of the atrium or the floor of the highest storey where the bounding construction is set back more than 3.5 m from the atrium well if a Class 2, 3, 5 or 9 part of a building is open to the atrium; or (b) less than 20 m above the floor of the atrium or the floor of the highest storey where the bounding construction is set back more than 3.5 m from the atrium well if a Class 6, 7 or 8 part of a building is open to the atrium, and the temperature rating of sprinkler heads providing roof protection must be within the range 79°C – 100°C. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S31C4 Atrium floor protection [2019: Spec G3.8: 2.3]				X	The floor of the atrium must be protected by sprinklers with— (a) the use of sidewall pattern sprinkler heads together with overhead sprinklers where dictated by the dimensions of the atrium; and (b) sprinkler heads of the quick response type. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S31C5 Sprinkler systems to glazed walls [2019: Spec G3.8: 2.4.1 – 2.4.5]				X	(1) Where an atrium is separated from the remainder of the building by walls or doors incorporating glazing, a wall wetting system must be provided to protect the glazing as follows: (a) On the atrium side of the glazing — to all glazed walls which are set back more than 3.5 m from the atrium well. (b) On the atrium side of the glazing — to all glazed walls which are not set back, or are set back 3.5 m or less, from the atrium well, for all levels which are less than— (i) 12 m above the floor of an atrium or the floor of the highest storey where the bounding wall is set back more than 3.5 m from the atrium well if a Class 2, 3, 5 or 9 part of the building is open to the atrium; or (ii) 20 m above the floor of an atrium or the floor of the highest storey where the bounding wall is set back more than 3.5 m from the atrium well if a Class 6, 7 or 8 part of the building is open to the atrium. (c) On the side of the glazing away from the atrium well — to all glazing forming part of the bounding wall at each storey. (2) Sprinklers must be located in positions allowing full wetting of the glazing surfaces without wetting adjacent sprinkler heads. (3) Sprinkler heads must be of the quick response type and have a maximum temperature rating of 74°C. (4) The rate of water discharge to protect glazing must be not less than— (a) on the atrium side of the glazing— (i) 0.25 L/s.m² where glazing is not set back from the atrium well; or (ii) 0.167 L/s.m² where glazing is set back from the atrium well; and (b) on the side away from the atrium well — 0.167 L/s.m².





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(5) In addition to that of the basic sprinkler protection for the building, the water supply to required wall wetting systems must be of adequate capacity to accommodate the following on the atrium side of the glazing: (a) Where the bounding walls are set back less than 3.5 m from the atrium well — wall wetting of a part not less than 6 m long for a height of not less than— (i) 12 m above the floor of an atrium or the floor of the highest storey where the bounding wall is set back more than 3.5 m from the atrium well if a Class 2, 3, 5 or 9 part of the building is open to the atrium; or (ii) 20 m above the floor of an atrium or the floor of the highest storey where the bounding wall is set back more than 3.5 m from the atrium well if a Class 6, 7 or 8 part of the building is open to the atrium. (b) Where the walls are set back 3.5 m or more from the atrium well — wetting of a part not less than 12 m long on one storey. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S31C6 Stop valves [2019: Spec G3.8: 2.5]				X	(1) Basic sprinkler and wall wetting systems protecting a building containing an atrium must be provided with easily accessible and identified stop valves. (2) Sprinkler and wall wetting systems must be provided with independent stop valves. (3) Sprinkler heads protecting the roof of the atrium must be provided with a stop valve. (4) Stop valve to wall wetting and roof sprinklers may be of the gate type. (5) All sprinkler and wall wetting stop valves must be monitored to detect unauthorised closure. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S31C7 General requirements — smoke control system [2019: Spec G3.8: 3.1]				X	Except where varied or superseded by this Specification, mechanical air-handling systems in a building containing an atrium must comply with AS 1668.1. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S31C8 Operation of atrium mechanical air-handling systems [2019: Spec G3.8: 3.2]				X	Mechanical air-handling systems serving an atrium must be designed to operate so that during a fire— (a) a tenable atmosphere is maintained in all paths of travel along balconies to required exits during the period of evacuation; and (b) smoke exhaust fans serving the atrium are only activated when smoke enters the atrium; and (c) central plant systems do not use the atrium as a return air path; and (d) central plant systems which use return air paths remote from the atrium— (i) cycle to the full outside air mode; and (ii) stop supply air to the fire affected storey or fire compartment; and





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(iii) continue to fully exhaust the fire affected storey or fire compartment and reduce the exhaust from other storeys or fire compartments by at least 75%; and (iv) continue to supply air to fire compartments or storeys other than the fire affected storey or fire compartment; and (e) fans performing relief or exhaust duty from the atrium stop normal operation; and (f) floor by floor, or unitary, air-handling plant serving a single fire compartment or storey— (i) ceases normal operation in the fire affected storey or fire compartment; and (ii) commences full relief or exhaust from that fire affected storey or fire compartment; and (iii) continue to supply air to fire compartments or storeys other than the fire affected storey or fire compartment. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S31C9 Activation of smoke control system [2019: Spec G3.8: 3.3]				X	(1) The smoke control system must be activated by— (a) operation of an automatic fire alarm; or (b) operation of the sprinkler system; or (c) a manual start switch. (2) All controls for the smoke control system must be located— (a) in the fire control room; or (b) in the emergency control centre (if any); or (c) adjacent to the sprinkler control valves; or (d) incorporated in the Fire Indicator Panel. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S31C10 Smoke exhaust system [2019: Spec G3.8: 3.4]				X	A smoke exhaust system serving an atrium must be designed on the basis of— (a) the sprinkler system limiting the size of a fire to— (i) a heat output of 1.5 MW and perimeter of 7.5 m if a Class 2, 3, 5 or 9 part of the building is open to the atrium; or (ii) a heat output of 5 MW and perimeter of 12 m if a Class 6, 7 or 8 part of the building is open to the atrium; and (b) a smoke plume reaching a level 3 m above the highest storey having a path of travel to a required exit along a balcony bounding the atrium well, and not less than— (i) 12 m above the floor of an atrium or the floor of the highest storey where the bounding wall is set back more than 3.5 m from the atrium well if a Class 2, 3, 5 or 9 part of the building is open to the atrium; or (ii) 20 m above the floor of an atrium or the floor of the highest storey where the bounding construction is set back more than 3.5 m from the atrium well if a Class 6, 7 or 8 part of the building is open to the atrium; and (c) the smoke exhaust system discharging smoke at a rate of not less than that shown in Figure S31C10 for the appropriate height of smoke plume and fire size—





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(i) from the top of the atrium; or (ii) horizontally where calculations of wind velocity induced pressure profiles for the building verify that the exhaust system will operate effectively for all wind directions. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S31C11 Upward air velocity [2019: Spec G3.8: 3.5]				X	Notwithstanding S31C10(c), the average upward air velocity in the atrium, due to the required smoke exhaust quantity must— (a) be not less than 0.2 m/s at any level over an 18 m height above the floor of the atrium; and (b) not exceed the following maximum velocities in atriums of constant cross sectional plan area: (i) For occupancy classification qualifying for 1.5 MW fire size — 3.5 m/s. (ii) For occupancy classifications qualifying for 5 MW fire size — 5 m/s. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S31C12 Exhaust fans [2019: Spec G3.8: 3.6]				X	(1) Smoke exhaust must be provided by fans capable of continuous and required operation for a period of not less than 1 hour when handling exhaust gases at 200°C. (2) Where a Class 2, 3 or 9 part of a building adjoins an atrium, the atrium must be provided with a minimum of 3 fans each capable of 50% of the total required smoke exhaust capacity. (3) Atriums other than those referred to in (2) must be provided with a minimum of 2 fans each capable of 50% of the total required smoke exhaust capacity. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S31C13 Smoke and heat vents [2019: Spec G3.8: 3.7]				X	Notwithstanding S31C12, automatic vents complying with AS 2665 may be used, except where a Class 6 part of a building adjoins the atrium, in lieu of exhaust fans provided that— (a) the height from the atrium floor to the bottom of the highest vent is not more than 12 m; and (b) the vents are fitted with a remote manual operation switch located adjacent to the sprinkler control valves or incorporated in the Fire Indicator Panel. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S31C14 Make-up air supply [2019: Spec G3.8: 3.8]				X	(1) Uniformly distributed make-up air must be provided to the atrium exhaust system from— (a) outside the atrium at or near the lowest storey level; and (b) relief air from non-fire storeys. (2) A discharge volume sufficient to maintain a velocity of not less than 0.1 m/s towards the atrium well must be provided on all storeys where the bounding wall is set back from the atrium well. (3) The requirements of (1)(a) are satisfied if make-up air is provided to the atrium exhaust system in such a manner as to prevent, as far as possible, disturbance of the smoke layer due to turbulence created by the incoming air, through—





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(a) openings directly from the outside air to the atrium and located as close as practicable to the lowest level of the atrium; or (b) ducts from the outside air to the atrium which deliver air as close as practicable to the lowest level of the atrium and, where passing through any other fire compartment having an FRL of at least 60/60/60; or (c) a combination of (a) or (b). Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S31C15 General requirements—fire detection and alarm system [2019: Spec G3.8: 4.1]				X	Except where superseded by this Specification, automatic fire detection and alarm systems in a building containing an atrium must comply with AS 1670.1. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S31C16 Smoke detection system [2019: Spec G3.8: 4.2]				X	Smoke detection within an atrium— (a) must be provided within all outside air intakes and at individual floor return air intakes of all air-handling systems to initiate automatic fire mode operation, and where applicable, comply with the restart facilities in AS 1668.1; and (b) must operate at an obscuration level not greater than 0.5% per metre with compensation for external airborne contamination as necessary; and (c) must sample air within the atrium and in storeys where the bounding wall is set back more than 3.5 m from the atrium well; and (d) must be calibrated to compensate for smoke dilution where sampling occurs within return air path common to more than one room; and (e) may incorporate beam type detectors to sense smoke in an atrium in a Class 5, 6, 7 or 8 building with an effective height of not more than 25 m if the beam detectors are— (i) located at intervals of not more than 3 storeys; and (ii) arranged to scan at 90 degrees orientation to adjacent beam units. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S31C17 Smoke detection in spaces separated from the atrium by bounding walls [2019: Spec G3.8: 4.3]				X	Smoke detection systems must be located at all return and relief air openings associated with the building air-handling systems and be— (a) of the sampling type system as required in S31C16; or (b) of the point type photoelectric smoke detector. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S31C18 Alarm systems [2019: Spec G3.8: 4.4]				X	(1) A break-glass fire alarm point must be provided at each door to a fire-isolated stairway, fire-isolated ramp or fire-isolated passageway. (2) A staged alarm must be provided where an air sampling type smoke detection system is provided for the atrium, and must operate as follows:





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					(a) Alert building management when abnormal smoke levels of 0.03% obscuration per metre are detected. (b) Initiate a second alarm to management and start all smoke control systems including pressurisation of escape routes when smoke levels of 0.07% obscuration per metre are detected. (c) Automatically call the fire brigade, activate the emergency warning and intercom system, and de-activate all plant not necessary for fire safety within the building when smoke levels of 0.09% obscuration per metre are detected. (3) Beam and point type smoke detectors required must simultaneously operate all functions referred to above and activate at the level set out in AS 1670.1. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S31C19 Emergency warning and intercom systems [2019: Spec G3.8: 5]				X	A building containing an atrium must be provided with an emergency warning and intercom system which— (a) complies with AS 1670.4; and (b) incorporates visual warning devices that— (i) operate upon the evacuation signal; and (ii) display the word “EVACUATE” in red with letters conforming with the requirements of the Deemed-to-Satisfy Provisions of Part E4 for exit signs. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S31C20 Standby power system [2019: Spec G3.8: 6]				X	(1) If a required path of travel to an exit is within an atrium, a suitable alternative power supply must be provided to operate required safety systems, including sprinkler systems and fire hydrant pumps, air handling systems, alarms, warning and communication systems and emergency lighting circuits. (2) The alternative power supply must— (a) be connected automatically if the normal power supply fails; and (b) if located within the building, be separated from the remainder of the building by an enclosure with an FRL of at least 120/120/120; and (c) be connected to the safety systems by means of cabling complying with C3D14(3). (3) The requirements of (1) are satisfied by— (a) a single medium voltage supply taken from an electricity substation situated within, or adjacent to, the building concerned where the power supply to the substation consists of two or more high voltage cables each taking electricity from separate transformers; or (b) two or more medium voltage supplies each taking electricity from separate electricity substations situated— (i) outside the building concerned; and (ii) at a suitable distance from each other; or (c) a single medium voltage supply taken from an electricity substation together with an electricity generating plant capable of— (i) generating a medium voltage supply; and





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(ii) starting and taking the required electrical load within a period of not more than 30 seconds from the time of normal supply failure. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
S31C21 System for excluding smoke from fire-isolated exits [2019: Spec G3.8: 7]				X	Required fire-isolated exits in a building containing an atrium must be protected from the entry of smoke in accordance with E2D3. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
Specification 43 Bushfire protection for certain Class 9 buildings					
S43C1 Scope [New for 2022]			X		Not applicable.
S43C2 Separation from classified vegetation [New for 2022]			X		Not applicable.
S43C3 Separation between buildings [New for 2022]			X		Not applicable.
S43C4 Separation from allotment boundaries and carparking areas [New for 2022]			X		Not applicable.
S43C5 Separation from hazards [New for 2022]			X		Not applicable.
S43C6 Non-combustible path around building [New for 2022]			X		Not applicable.
S43C7 Access pathways [New for 2022]			X		Not applicable.
S43C8 Exposed external areas [New for 2022]			X		Not applicable.





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S43C9 Internal tenability [New for 2022]			X		Not applicable.
S43C10 Building envelope [New for 2022]			X		Not applicable.
S43C11 Supply of water for fire-fighting purposes [New for 2022]			X		Not applicable.
S43C12 Emergency power supply [New for 2022]			X		Not applicable.
S43C13 Signage [New for 2022]			X		Not applicable.
S43C14 Vehicular access [New for 2022]			X		Not applicable.
Section I Special use buildings					
Part I1 Class 9b Buildings					
Introduction to this Part					
This Part provides additional Deemed-to-Satisfy Provisions for certain types of Class 9b buildings where large numbers of people assemble and which contain a stage and backstage area.					
NSW I1D1 Application of Part [2019: H1.1]			X		Not applicable.
I1D2 Separation [2019: H1.2]			X		Not applicable.
I1D3 Proscenium wall construction [2019: H1.3]			X		Not applicable.
I1D4 Seating area [2019: H1.4]			X		Not applicable.
I1D5 Exits from stages [2019: H1.5]			X		Not applicable.
I1D6			X		Not applicable.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Access to platforms and lofts [2019: H1.6]					
I1D7 Aisle lights [2019: H1.7]			X		Not applicable.
Part I2 Public transport buildings					
I2D1 Application of Part [2019: H2.1]			X		Not applicable.
I2D2 Accessways [2019: H2.2]			X		Not applicable.
I2D3 Ramps [2019: H2.3]			X		Not applicable.
I2D4 Handrails and grabrails [2019: H2.4]			X		Not applicable.
I2D5 Doorways and doors [2019: H2.5]			X		Not applicable.
I2D6 Lifts [2019: H2.6]			X		Not applicable.
I2D7 Stairways [2019: H2.7]			X		Not applicable.
I2D8 Unisex accessible toilet [2019: H2.8]			X		Not applicable.
I2D9 Location of accessible toilet [2019: H2.9]			X		Not applicable.
I2D10 Symbols and signs [2019: H2.10]			X		Not applicable.
I2D11			X		Not applicable.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Tactile ground surface indicators [2019: H2.11]					
I2D12 Lighting [2019: H2.12]			X		Not applicable.
I2D13 Hearing augmentation [2019: H2.13]			X		Not applicable.
I2D14 Emergency warning systems [2019: H2.14]			X		Not applicable.
I2D15 Controls [2019: H2.15]			X		Not applicable.
Part I3 Farm buildings and farm sheds					
I3D1 Application of part [2019: H3.1]			X		Not applicable.
I3D2 Fire resistance and separation [2019: H3.2]			X		Not applicable.
I3D3 Provision for escape [2019: H3.3]			X		Not applicable.
I3D4 Construction of exits [2019: H3.4]			X		Not applicable.
I3D5 Fixed platforms, walkways, stairways and ladders [2019: H3.5]			X		Not applicable.
I3D6 Thresholds [2019: H3.6]			X		Not applicable.
I3D7 Swinging doors [2019: H3.7]			X		Not applicable.





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I3D8 Fire fighting equipment [2019: H3.8]			X		Not applicable.
I3D9 Fire hydrants and water supplies [2019: H3.9]			X		Not applicable.
I3D10 Fire hose reels [2019: H3.10]			X		Not applicable.
I3D11 Portable fire extinguishers [2019: H3.11]			X		Not applicable.
I3D12 Emergency lighting requirements [2019: H3.12]			X		Not applicable.
I3D13 Exit signs [2019: H3.13]			X		Not applicable.
I3D14 Direction signs [2019: H3.14]			X		Not applicable.
I3D15 Design and operation of exit signs [2019: H3.15]			X		Not applicable.
I3D16 Sanitary facilities [2019: H3.16]			X		Not applicable.
I3D17 Height of rooms and other spaces [2019: H3.17]			X		Not applicable.
I3D18 Artificial lighting [2019: H3.18]			X		Not applicable.
Specification 32 Construction of proscenium walls					
S32C1 Scope			X		This Specification contains the requirements for the construction of proscenium walls for theatres, public halls, or the like.





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[2019: Spec H1.3: 1]					
S32C2 Separation of stage areas, etc [2019: Spec H1.3: 2]			X		Not applicable.
S32C3 Proscenium wall construction [2019: Spec H1.3: 3]			X		Not applicable.
S32C4 Combustible materials not to cross proscenium wall [2019: Spec H1.3: 4]			X		Not applicable.
S32C5 Protection of openings in proscenium wall [2019: Spec H1.3: 5]			X		Not applicable.
S32C6 Proscenium curtains [2019: Spec H1.3: 6]			X		Not applicable.
NSW Part I4 Class 9b Buildings					
NSW I4D1 Application of Part [2019: NSW H101.1]			X		This Part applies to every entertainment venue as described in the Environmental Planning and Assessment Regulation 2021.
NSW I4D2 Fire separation [2019: NSW H101.2]			X		Not applicable.
NSW I4D3 Foyer space [2019: NSW H101.3]			X		Not applicable.
NSW I4D4 Sprinkler systems for common foyers			X		Not applicable.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
[2019: NSW H101.4]					
NSW I4D5 Conventional stages: application [2019: NSW H101.5]			X		Not applicable.
NSW I4D6 Convention stages: extent of stage area [2019: NSW H101.5.1]			X		Not applicable.
NSW I4D7 Conventional stages: small stages [2019: NSW H101.5.2]			X		Not applicable.
NSW I4D8 Conventional stages: large stages [2019: NSW H101.5.3]			X		Not applicable.
NSW I4D9 Conventional stages: fire separation of stages [2019: NSW H101.5.4]			X		Not applicable.
NSW I4D10 Non-conventional stages: application [2019: NSW H101.6]			X		Not applicable.
NSW I4D11 Non-conventional stages: application [2019: NSW H101.6.1]			X		Not applicable.
NSW I4D12			X		Not applicable.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Non-conventional stages” large stages [2019: NSW H101.6.2]					
NSW I4D13 Flying scenery [2019: NSW H101.7]			X		Not applicable.
NSW I4D14 Load notice [2019: NSW H101.8]			X		Not applicable.
NSW I4D15 Safety curtains [2019: NSW H101.10]			X		Not applicable.
NSW I4D16 Safety curtains – additional requirements [2019: NSW H101.10.1]			X		Not applicable.
NSW I4D17 Seating in rows: application [2019: NSW H101.11]			X		Not applicable.
NSW I4D18 Seating in rows: number of seats [2019: NSW H101.11.1]			X		Not applicable.
NSW I4D19 Seating in rows: chairs used for seating [2019: NSW H101.11.2]			X		Not applicable.
NSW I4D20 Seating in rows: chairs in auditoriums – level floors [2019: NSW H101.11.3]			X		Not applicable.
NSW I4D21			X		Not applicable.





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Seating in rows: chairs in auditoriums – sloping floors [2019: NSW H101.11.4]					
NSW I4D22 Seating in rows: radiating aisles in seating areas [2019: NSW H101.11.5]			X		Not applicable.
NSW I4D23 Seating in rows: aisles and cross-overs [2019: NSW H101.11.6]			X		Not applicable.
NSW I4D24 Seating in rows: platforms and steps [2019: NSW H101.11.7]			X		Not applicable.
NSW I4D25 Seating in rows: stepped platforms [2019: H101.11.8]			X		Not applicable.
NSW I4D26 Continental seating: application [2019: NSW H101.12]			X		Not applicable.
NSW I4D27 Continental seating: seating to be fastened [2019: NSW H101.12.1]			X		Not applicable.
NSW I4D28 Continental seating: maximum seats per row [2019: NSW H101.12.2]			X		Not applicable.
NSW I4D29			X		Not applicable.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Continental seating: depth of seating [2019: NSW H101.12.3]					
NSW I4D30 Continental seating: clearance between rows [2019: NSW H101.12.4]			X		Not applicable.
NSW I4D31 Continental seating: chairs used for seating [2019: NSW H101.12.5]			X		Not applicable.
NSW I4D32 Continental seating: egress doorways [2019: NSW H101.12.6]			X		Not applicable.
NSW I4D33 Continental seating: clear areas [2019: NSW H101.12.7]			X		Not applicable.
NSW I4D34 Continental seating: minimum clear space [2019: NSW H101.12.8]			X		Not applicable.
NSW I4D35 Continental seating: doors [2019: NSW H101.12.9]			X		Not applicable.
NSW I4D36 Provision of guardrails: location [2019: NSW H101.13.1]			X		Not applicable.
NSW I4D37			X		Not applicable.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Provision of guardrails: fixed back seats [2019: NSW H101.13.2]					
NSW I4D38 Provision of guardrails: steps between platforms [2019: NSW H101.13.3]			X		Not applicable.
NSW I4D39 Guardrails for seating areas: application [2019: NSW H101.14]			X		Not applicable.
NSW I4D40 Guardrails for seating areas: continental seating [2019: NSW H101.14.1]			X		Not applicable.
NSW I4D41 Guardrails for seating areas: balconies and boxes [2019: NSW H101.14.2]			X		Not applicable.
NSW I4D42 Guardrails for seating areas: cross-overs [2019: NSW H101.14.3]			X		Not applicable.
NSW I4D43 Dressing rooms [2019: NSW H101.15]			X		Not applicable.
NSW I4D44 Storerooms [2019: NSW H101.16]			X		Not applicable.
NSW I4D45 Projection suites: Application			X		Not applicable.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
[2019: NSW H101.17]					
NSW I4D46 Projection suites: rooms to be provided [2019: NSW H101.17.1]			X		Not applicable.
NSW I4D47 Projection suites: fire separation [2019: NSW H101.17.2]			X		Not applicable.
NSW I4D48 Projection suites: concession for protection of some openings [2019: NSW H101.17.3]			X		Not applicable.
NSW I4D49 Basement storeys [2019: NSW H101.18]			X		Not applicable.
NSW I4D50 Basement storeys: more than two [2019: NSW H101.18.1]			X		Not applicable.
NSW I4D51 Electric mains installation: main switchboard [2019: NSW H101.19.1]			X		Not applicable.
NSW I4D52 Electric mains installation: circuit protection [2019: NSW H101.19.2]			X		Not applicable.
NSW I4D53			X		Not applicable.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Electric mains installation: separate sub-mains [2019: NSW H101.19.3]					
NSW I4D54 Lighting: lighting switches [2019: NSW H101.20.1]			X		Not applicable.
NSW I4D55 Lighting: lighting levels [2019: NSW H101.20.2]			X		Not applicable.
NSW I4D56 Lighting: provision of aisle lighting [2019: NSW H101.20.3]			X		Not applicable.
NSW I4D57 Lighting: aisle lighting power supply [2019: NSW H101.20.4]			X		Not applicable.
NSW I4D58 Lighting: aisle lighting alternative lighting supply [2019: NSW H101.20.5]			X		Not applicable.
NSW I4D59 Automatic smoke-and-heat vents for stages [2019: NSW H101.22]			X		Not applicable.
NSW I4D60			X		Not applicable.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Solid fuel burning stoves and open fire places [2019: NSW H101.23]					
NSW I4D61 Fuel Gas Cylinders: general [2019: NSW H101.24.1]			X		Not applicable.
NSW I4D62 Fuel gas cylinders: enclosures [2019: NSW H101.24.2]			X		Not applicable.
NSW Part I5 Temporary Structures					
NSW I5D1 Application of Part [2019: NSW H102.1]			X		This Part applies to temporary structures used as entertainment venues.
NSW I5D2 Exits — exclusions [2019: NSW H102.2]			X		Not applicable.
NSW I5D3 Location of exits [2019: NSW H102.3]			X		Not applicable.
NSW I5D4 Exits to be provided [2019: NSW H102.4]			X		Not applicable.
NSW I5D5 Vertical clearance for exits [2019: NSW H102.5]			X		Not applicable.
NSW I5D6 Curtains across exits [2019: NSW H102.6]			X		Not applicable.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
NSW I5D7 Curtains and blinds [2019: NSW H102.7]			X		Not applicable.
NSW I5D8 Fabrics [2019: NSW H102.8]			X		Not applicable.
NSW I5D9 Guardrails [2019: NSW H102.9]			X		Not applicable.
NSW I5D10 Seating [2019: NSW H102.10]			X		Not applicable.
NSW I5D11 Sanitary accommodation [2019: NSW H102.11]			X		Not applicable.
NSW I5D12 Projection suites [2019: NSW H102.12]			X		Not applicable.
NSW I5D13 Fireplaces and heating [2019: NSW H102.13]			X		Not applicable.
NSW I5D14 Electrical services [2019: NSW H102.14]			X		Not applicable.
NSW I5D15 Artificial lighting: general [2019: NSW H102.15]			X		Not applicable.
NSW I5D16 Emergency lighting [2019: NSW H102.15.1]			X		Not applicable.
NSW I5D17 Emergency lighting power supply			X		Not applicable.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
[2019: NSW H102.15.2]					
NSW I5D18 Exit signs [2019: NSW H102.16]			X		Not applicable.
NSW I5D19 Fire-fighting services [2019: NSW H102.17]			X		Not applicable.
NSW Part I6 Drive-in theatres					
NSW I6D1 Application of Part [2019: NSW H103.1]			X		This Part applies to drive-in theatres.
NSW I6D2 Speaker standards [2019: NSW H103.2]			X		Not applicable.
NSW I6D3 Lines of speaker standards [2019: NSW H103.2.1]			X		Not applicable.
NSW I6D4 Electrical services [2019: NSW H103.3]			X		Not applicable.
NSW I6D5 Vehicular entrances [2019: NSW H103.4]			X		Not applicable.
NSW I6D6 Lighting [2019: NSW H103.5]			X		Not applicable.
Section J Energy Efficiency – Not part of this assessment					



5.0 CONCLUSION

This report provides a Building Code of Australia 2022, Amendment 2 (BCA) assessment of the proposed Main Works for Waterloo Mixed Use Development (HDA) - SSD-80441462. This report assesses Parcels 2 & 3.

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

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

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

The proposal is capable of complying with the BCA subject to the adoption of the requirements within this report.

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6.0 ATTACHMENT A - INSPECTION & MAINTENANCE

6.1 Fire Safety Measures

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

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

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

6.2 Good Housekeeping

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

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

