

BUILDING CODE OF AUSTRALIA COMPLIANCE ASSESSMENT REPORT

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

881-885 BOURKE STREET, WATERLOO

DATE ► 05/09/2025

REPORT NO. ► 13143.9 – Parcel 4 – Rev.00

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

PREPARED BY ► AE&D



AEDGROUP

Innovation & expertise in building regulations



CONTENTS

1.0	EXECUTIVE SUMMARY AND RECOMMENDATIONS	3
1.1	RECOMMENDATIONS	3
2.0	INTRODUCTION	20
2.1	BASIS OF REPORT	20
2.2	PURPOSE OF THE REPORT	21
2.3	LIMITATIONS OF THE REPORT	21
3.0	BCA ASSESSMENT DATA	23
3.1	ASSESSMENT OF EFFECTIVE HEIGHT	23
3.2	LOCATION OF FIRE SOURCE FEATURES	23
3.3	SUMMARY OF FIRE SERVICES REQUIRED	24
3.4	BUILDING SUBJECT TO DESIGN AND BUILDING PRACTITIONERS ACT	25
4.0	BCA ASSESSMENT SUMMARY	26
5.0	CONCLUSION	139
6.0	ATTACHMENT A - INSPECTION & MAINTENANCE	140
6.1	FIRE SAFETY MEASURES	140
6.2	GOOD HOUSEKEEPING	140

REVISION STATUS				
REPORT NO/REV	DATE	STATUS	WRITTEN	CHECKED
13143.9 – Parvel 4 - Rev.00	05/09/2025	Report Issued	MN	TJ

COMMERCIAL IN CONFIDENCE

This document contains confidential material that is intended solely for the client commissioning AE&D to prepare this report. The client, project team and all regulatory authorities shall exercise precautionary measures to ensure that the information contained herein is not to be accessed by any third party. AE&D will take no responsibility for the use of any information contained within this report by any third party, unless AE&D's permission is requested and provided in writing.



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.

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.

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
General Note	General Notes - Plans are referencing in the key that the development is for lot 1 and 4. Please amend the plans on application for a Construction Certificate. - Vital information on the plan sets is missing. For example, there are multiple locations where doorways are missing from the plan set. As such, any assessment of egress and travel distances is subject to change. - Provide the basement plans in this plan set applicable to this building. - The building is a united building between all lots. It is understood that multiple fire related services may be shared throughout the entire four parcel building. If this is the case, then the assessment is to be revisited. - Given the building is a united building sharing a basement carpark, no separation has been shown between buildings. If sharing exits and travel distances without separation through fire walls between buildings, an entire re-assessment is to be carried out. It will need to include the building as a whole (all 4 parcels), as the building will then be considered only a single building instead of multiple under the BCA. Alternatively, fire walls can be installed with protected openings to ensure separation of the buildings (in the basement level connections). - The locations of exits are taken to future roads. Currently, these have not been registered and cannot be privately owned if being used as exits (they should be dedicated to Transport for NSW or Council). If these are not registered as roads, then a further assessment is to take place to re-establish egress from the building and the fire source features of the building. This may result in additional changes to the plans and/or additional fire engineering to be carried out.
B1D3 Determination of individual actions	Compliance Required – Seismic Restraints for Services Installation The Structural Engineer is required to provide certification on application for a Construction Certificate for all seismic restraints and connections for plant and services in accordance with AS1170.4. Compliance Required – Planting and Other Ancillary Landscaping The Structural Engineer is required to provide certification on application for a Construction Certificate for all trees, planting and landscaping loads being applied to the building.
B1D6 Construction of buildings in flood hazard areas [2019: B1.6]	Further Information Required – Flood Hazard Management Confirmation is required to be provided to AED as to whether the proposed development is located within a flood hazard area. Any reports and report requirements are required to be provided on application for a Construction Certificate.
C2D2	Further Information Required – External Wall FRL's to be Maintained (Both Parcels 1 and 4)

BCA Clause

Deemed-to-Satisfy Provision to be addressed

Types of Construction Required

External walls are required to maintain an FRL by construction complying with that in Tables SC11a-SC11g of Specification 5. The external wall considers load bearing elements (any loads at all other than itself that the material is supporting), along with and elements or materials incorporated into it (shelf angles included). All walls and columns within the following setbacks to a fire source feature are included:

Table S5C11a: Type A construction: FRL of loadbearing parts of external walls

Distance from a fire-source feature	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
Less than 1.5 m	90/90/90	120/120/120	180/180/180	240/240/240
1.5 to less than 3 m	90/60/60	120/90/90	180/180/120	240/240/180
3 m or more	90/60/30	120/60/30	180/120/90	240/180/90

Table S5C11b: Type A construction: FRL of non-loadbearing parts of external walls

Distance from a fire-source feature	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
Less than 1.5 m	–/90/90	–/120/120	–/180/180	–/240/240
1.5 to less than 3 m	–/60/60	–/90/90	–/180/120	–/240/180
3 m or more	–/–/–	–/–/–	–/–/–	–/–/–

If shelf angles are being used, they do not maintain an FRL for a loadbearing element in the external wall and therefore do not comply with Specification 5. As a result, the use of shelf angles with the external masonry results in a performance-based fire engineered solution being required.

Further Information Required – Enclosure of Shafts (Both Parcels 1 and 4)

Enclosure of garbage chutes by fire-rated construction will be omitted at the roof slab of the garbage rooms. the garbage room itself will be fire rated and forming part of the vertical shaft. As a result of there being no fire separation, this is required to be addressed through performance-based fire engineered solution.

DTS Departure – External Wall Construction (Both Parcels 1 and 4)

External walls are required to maintain an FRL in accordance with Specification 5. The Eastern Boundary Walkway is considered a side boundary and as such, the fire source feature. This wall requires the following FRL's:

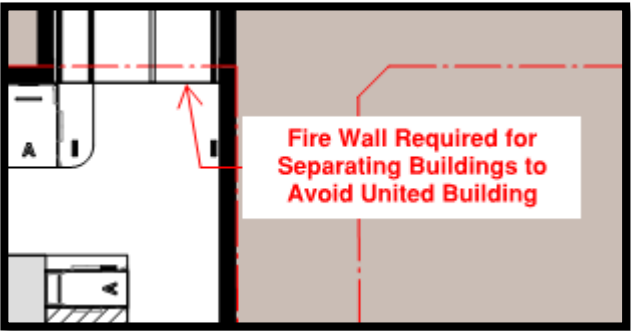
Table S5C11a: Type A construction: FRL of loadbearing parts of external walls

Distance from a fire-source feature	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
Less than 1.5 m	90/90/90	120/120/120	180/180/180	240/240/240
1.5 to less than 3 m	90/60/60	120/90/90	180/180/120	240/240/180
3 m or more	90/60/30	120/60/30	180/120/90	240/180/90

Table S5C11b: Type A construction: FRL of non-loadbearing parts of external walls

Distance from a fire-source feature	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
Less than 1.5 m	–/90/90	–/120/120	–/180/180	–/240/240
1.5 to less than 3 m	–/60/60	–/90/90	–/180/120	–/240/180
3 m or more	–/–/–	–/–/–	–/–/–	–/–/–

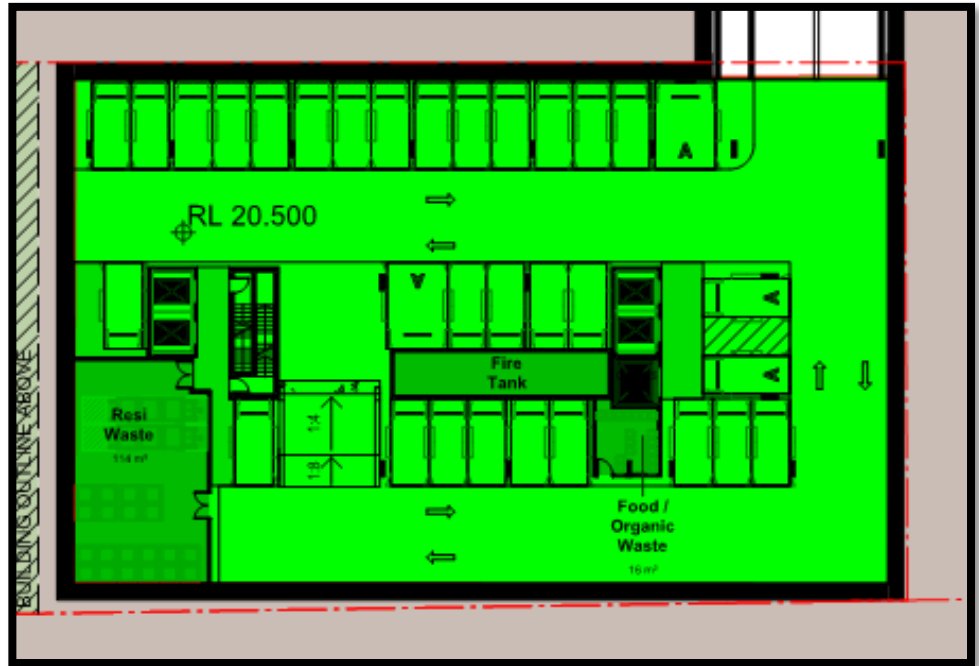
As a result of the above, these walls on both Parcels 1 and 4 have likely not been considered as requiring an FRL, however, technically these do under DTS due to a side

BCA Clause	Deemed-to-Satisfy Provision to be addressed										
	boundary passing through the lot. It is recommended this be considered in the Fire Engineering Strategy and easements or a right of way be applied to these boundaries to ensure there is no future buildings placed on these portions of the land. Further Information Required – Slab Set-downs and Cavities - 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 set-downs proposed within internal wet areas reducing the thickness of the slab and FRL achieved by the slab.										
C2D10 Non-Combustible Elements	Further Information Required – External Wall Test Reports External Walls on a structure of Type A Construction (applicable to this building) are required to be non-combustible when tested in accordance with AS1530.1. No specifications or testing reports have been provided for the external walls of this building at this stage, and as such further information is required to determine compliance. It is recommended that this documentation be supplied to AED and the Principal Certifier to determine compliance with C2D10 at the Construction Certificate stage.										
C3D8 Fire Walls	DTS Departure – Separation by Fire Walls Different buildings are required to be separated by fire walls in accordance with this part. Currently, all buildings are connected as a United Building. This means it should be assessed as a single building as opposed to multiple buildings.  AED recommend separation by fire walls and fire doors to ensure the buildings can be considered separate. Alternatively, new plans are to be assessed with the combined as fire source features and travel distances will drastically change.										
C3D9 Separation of Classifications in the Same Storey	Compliance Required – Separation of Classifications Each classification is required to be separated within each storey by construction comply with that in Tables SC11a-SC11g of Specification 5. Should compliance not be achieved through a DTS compliant amendment to the plans, then a Performance-Based Fire Engineered Solution is required to be obtained. The following assessment of each main area is established based on the overall areas of each classification. <table border="1" data-bbox="550 1787 1425 2022"> <thead> <tr> <th>Classification</th><th>FRL</th></tr> </thead> <tbody> <tr> <td>Class 2</td><td>90/90/90</td></tr> <tr> <td>Class 7a</td><td>120/120/120</td></tr> <tr> <td>Class 7b</td><td>240/240/240</td></tr> <tr> <td>Class 9b</td><td>120/120/120</td></tr> </tbody> </table>	Classification	FRL	Class 2	90/90/90	Class 7a	120/120/120	Class 7b	240/240/240	Class 9b	120/120/120
Classification	FRL										
Class 2	90/90/90										
Class 7a	120/120/120										
Class 7b	240/240/240										
Class 9b	120/120/120										

BCA Clause

Deemed-to-Satisfy Provision to be addressed

Basement 2

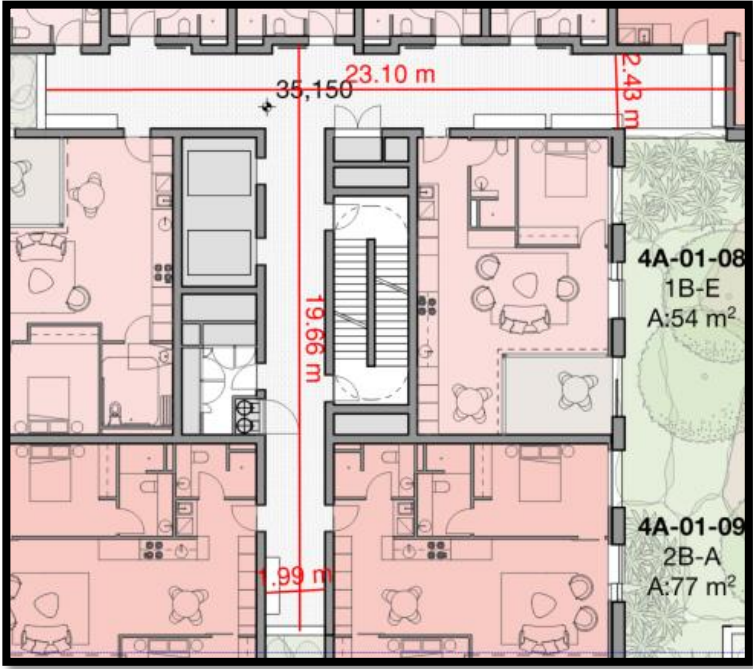
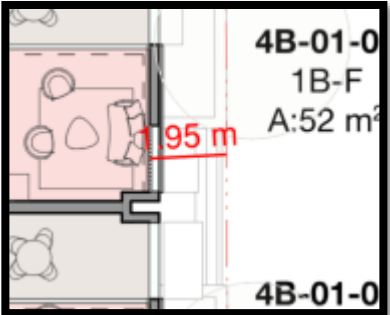


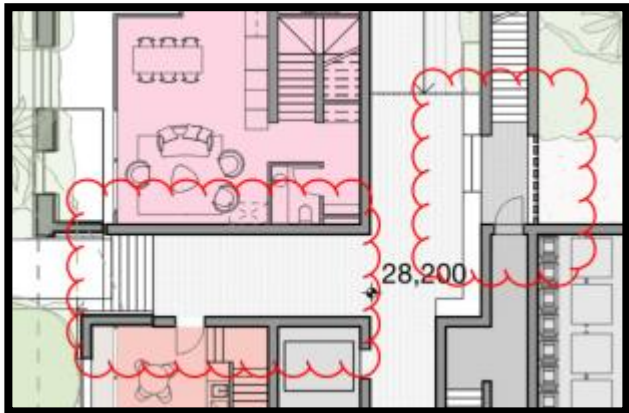
Basement 1

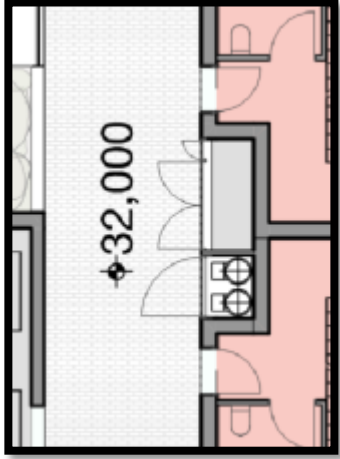
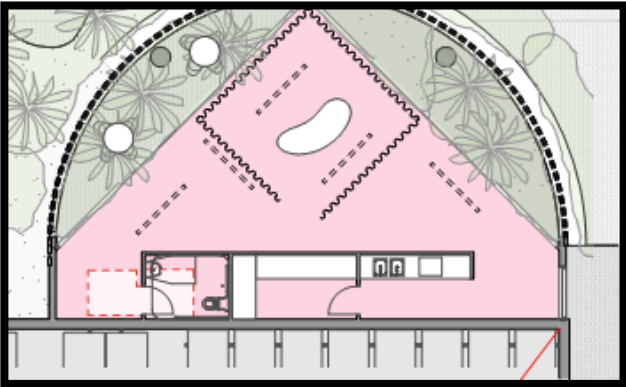


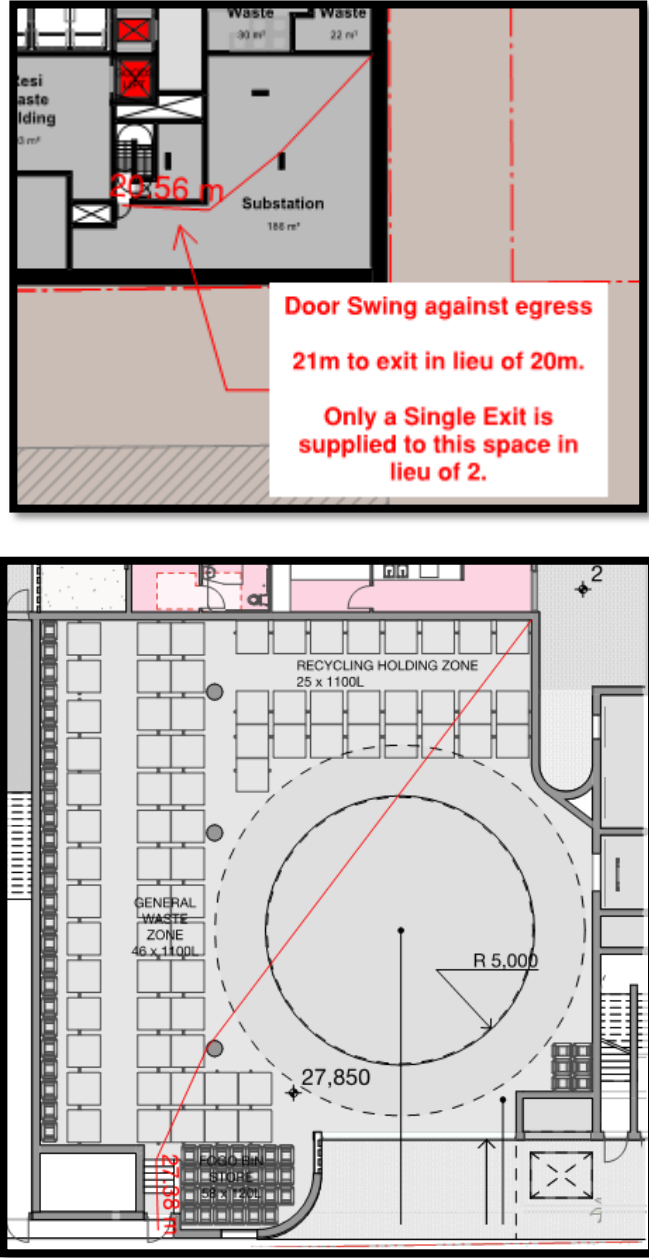
Ground Floor

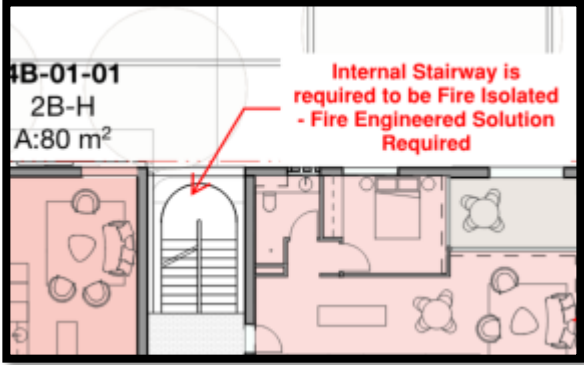
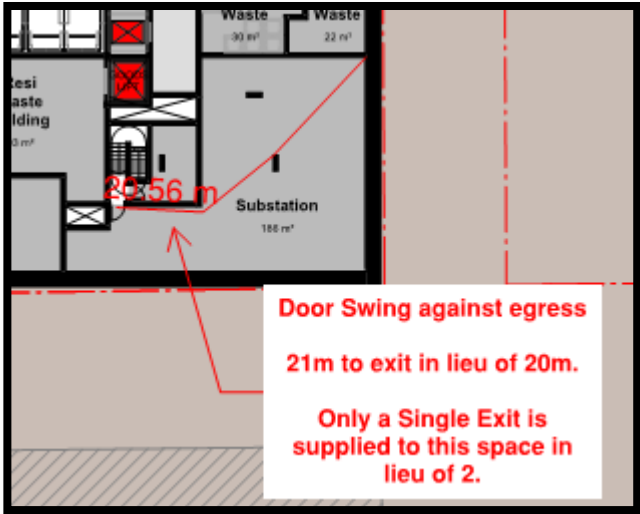
Page 7 of 140

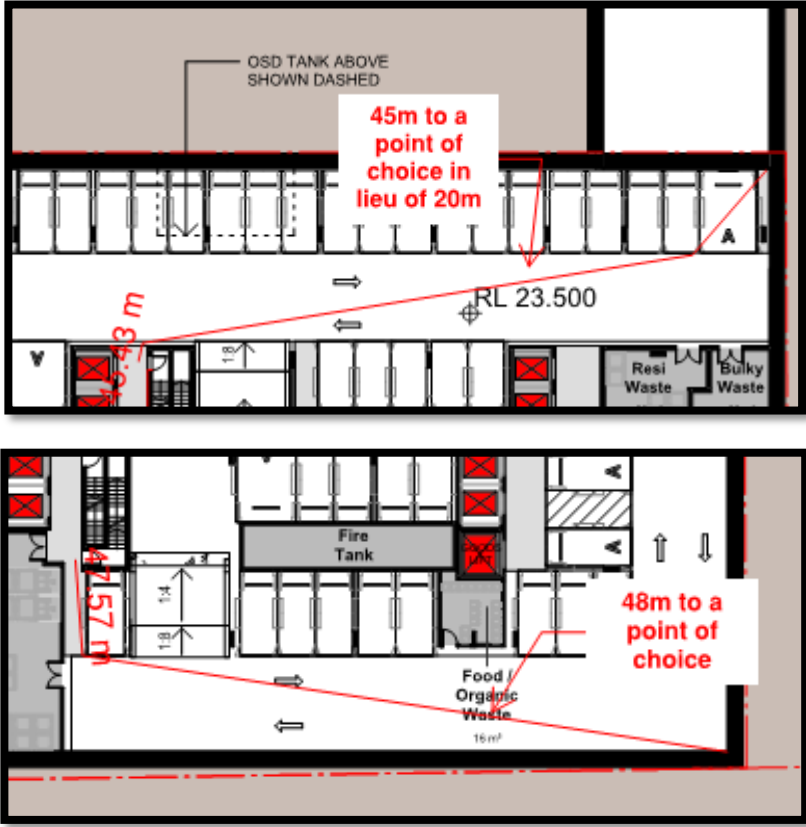
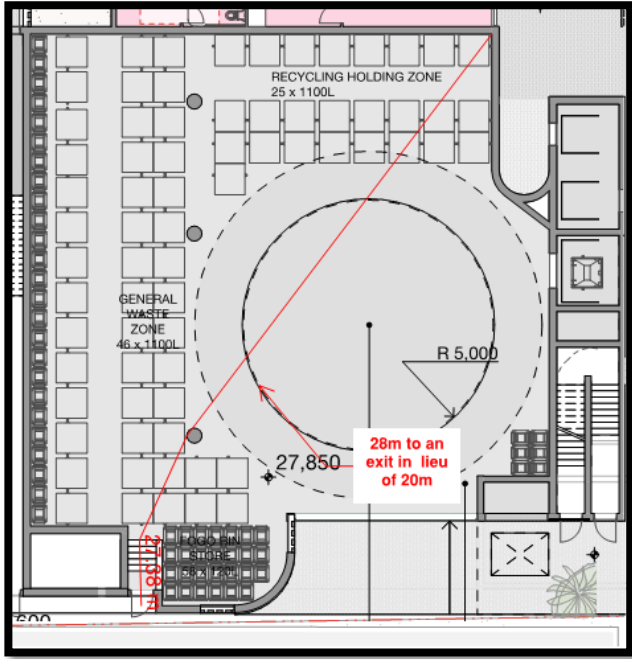
BCA Clause	Deemed-to-Satisfy Provision to be addressed
	obtained. This is also a DTS departure for the external wall FRL being required to be maintained. AED recommend that a performance solution is obtained from a suitable qualified fire engineer to rationalise the FRL's of the storage and retail areas. It is noted that there are limited fire stopping products available for services penetrating floors that require a 180/180/180 and 240/240/240 FRL.
C3D15 Public Corridors in Class 2 and 3 Buildings	DTS Departure – Corridor Length Corridors in Class 2/3 portion of the building are not permitted to exceed 40m, unless they are smoke separated to not exceed 40m. Currently, the corridors in the worst case are 48m in total length (typical issue through all residential corridors shown).  As such, this is required to be addressed through a fire engineered solution, or alternatively, have it smoke separated to not exceed 40m.
C4D3 Protection of Openings in External Walls	DTS Departure / Further Information Required – Boundary Setbacks Openings within 3m of a boundary are required to be separated in accordance with C4D5. <u>The north, east and south boundaries may become fire source features depending on if these are registered roads.</u> An example is the following:  As a result, many openings along these boundaries may require protection. Confirmation is required to be supplied to detail the locations of lot boundaries through the provision of a Deposited Plan to be supplied on application for a Construction Certificate. Alternatively, the DA will stipulate any lot subdivision or consolidation. Once this has been confirmed, the extent of the FER will be required to be addressed.
C4D4	Further Information Required – Openings in Different Fire Compartments

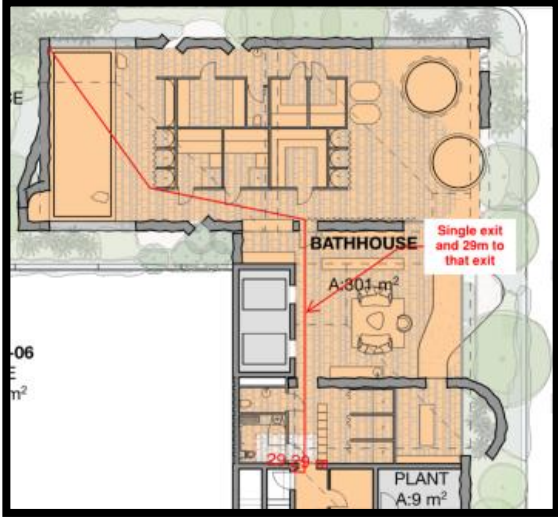
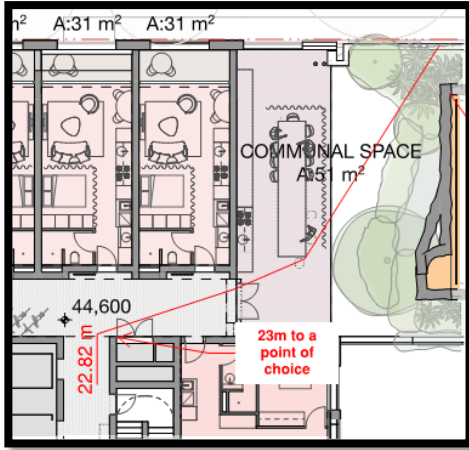
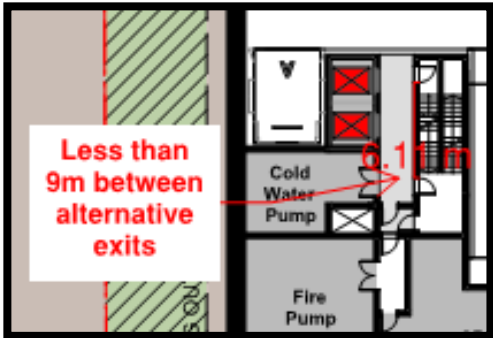
BCA Clause	Deemed-to-Satisfy Provision to be addressed																													
Separation of external walls and associated openings in different fire compartments [2019: C3.3]	Openings in external walls to different fire compartments separated by a fire wall are to be protected in accordance with 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 clouded below: 																													
C4D12 Bounding Construction	Further Information Required – Bounding Construction Between Units Compliance has been shown through the Fire Wall Plans provided, however, testing reports of the proposed wall systems are required to be supplied. Walls between sole-occupancy units of the Class 2 portions of the building, along with walls bounding public corridors are required to be separated by a fire separating wall as detailed in Tables SC11a-SC11g of Specification 5. The required separation between these portions is as follows: Class 2 areas – FRL 90/90/90 loadbearing and FRL -/60/60 for non-loadbearing walls. <table border="1"><caption>Table S5C11f: Type A construction: FRL of non-loadbearing internal walls</caption><thead><tr><th rowspan="2">Location</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></thead><tbody><tr><td>Fire-resisting lift and stair shafts</td><td>-/90/90</td><td>-/120/120</td><td>-120/120</td><td>-/120/120</td></tr><tr><td>Bounding public corridors, public lobbies and the like</td><td>-/60/60</td><td>-/-/-</td><td>-/-/-</td><td>-/-/-</td></tr><tr><td>Between or bounding sole-occupancy units</td><td>-/60/60</td><td>-/-/-</td><td>-/-/-</td><td>-/-/-</td></tr><tr><td>Ventilating, pipe, garbage, and like shafts not used for the discharge of hot products of combustion</td><td>-/90/90</td><td>-/90/90</td><td>-/120/120</td><td>-/120/120</td></tr></tbody></table> Further specifications are required to be supplied to confirm compliance.	Location	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	Fire-resisting lift and stair shafts	-/90/90	-/120/120	-120/120	-/120/120	Bounding public corridors, public lobbies and the like	-/60/60	-/-/-	-/-/-	-/-/-	Between or bounding sole-occupancy units	-/60/60	-/-/-	-/-/-	-/-/-	Ventilating, pipe, garbage, and like shafts not used for the discharge of hot products of combustion	-/90/90	-/90/90	-/120/120	-/120/120
Location	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																										
Fire-resisting lift and stair shafts	-/90/90	-/120/120	-120/120	-/120/120																										
Bounding public corridors, public lobbies and the like	-/60/60	-/-/-	-/-/-	-/-/-																										
Between or bounding sole-occupancy units	-/60/60	-/-/-	-/-/-	-/-/-																										
Ventilating, pipe, garbage, and like shafts not used for the discharge of hot products of combustion	-/90/90	-/90/90	-/120/120	-/120/120																										
C4D14 Openings for Shafts	Further Information Required – Shaft Construction or Penetrations Sealed in accordance with AS1530.4 Confirmation is required to be supplied to confirm the construction methods for what appears to be shafts and the openings applicable at doorways for those shafts:																													

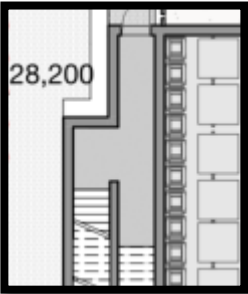
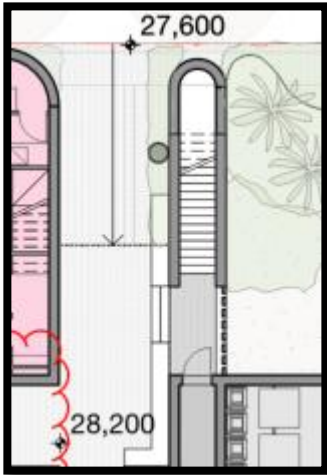
BCA Clause	Deemed-to-Satisfy Provision to be addressed
	 Full specifications and testing reports are required to be supplied to detail the shaft construction for the garbage chutes, hydraulic shafts, mechanical shafts, and electrical shafts as applicable. In addition, this is required to be supplied for the construction of any doorways for service cupboards, or confirmation if they are being sealed at the floors and walls in accordance with a tested system to AS1530.4.
D2D3 Number of Exits Required	DTS Departure – Number of Exits Multiple portions of the building are not showing doors. For example, the ground floor (see the following):  DTS Departure – Less than 2 Exits to Parts of the Building Under D2D3 (7), all parts of the building require access to at least 2 exits. Currently, there are parts of the building that provide access to only one exit:

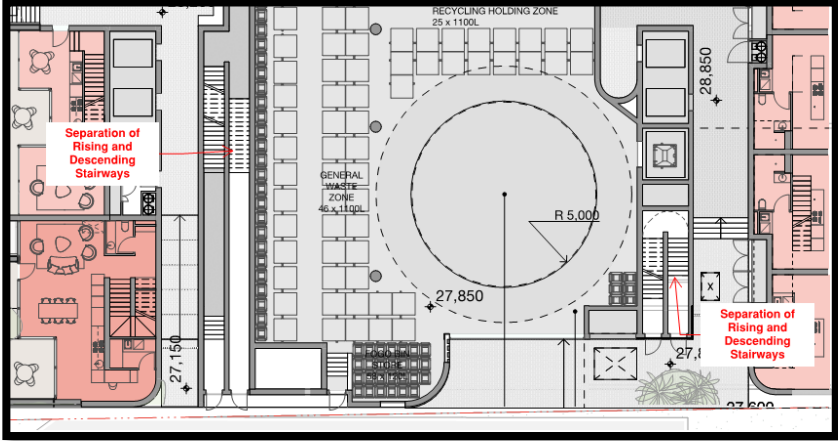
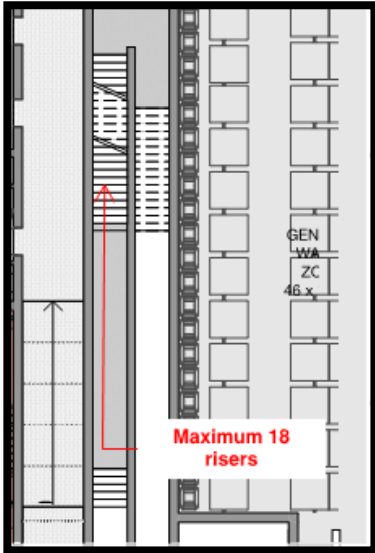
BCA Clause	Deemed-to-Satisfy Provision to be addressed
	 As such, this should either be addressed through a re-design, or a fire engineered solution.
D2D4 When fire-isolated stairways and ramps are required	DTS Departure – Non-fire Isolated Stairway Stairways connecting more than 2 storeys are required to be fire isolated. The internal stairway connecting the Class 2 portions of the building is proposed not to be fire isolated – as such not complying with this clause:

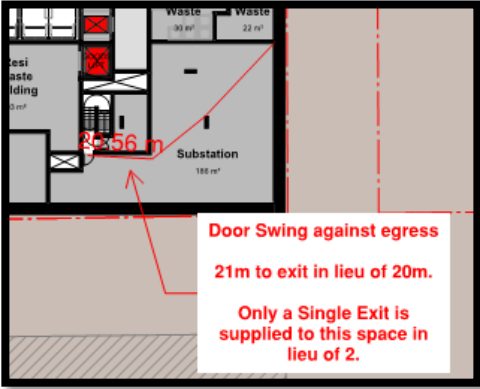
BCA Clause	Deemed-to-Satisfy Provision to be addressed
	 As such, this is required to be addressed through a fire engineered solution.
D2D5 Exit Travel Distances	DTS Departure – Travel Distances (Residential Corridors) The travel distances in common area corridors exceed 6m (12m with the concession). The common corridors in residential areas are 16m to a point of choice between the two exits.  As a result of the above, this is required to be addressed through a performance-based fire engineered solution. DTS Departure – Basement Distance to an Exit or Point of Choice (Basement 1 and Basement 2) The basement travel distance when scaled exceeds 20m to a single exit (21m). See the following example:  In addition, basement 1 and 2 also exceeds 20m to a point of choice. Basement 1 is 45m, with basement 2 with 48m.

BCA Clause	Deemed-to-Satisfy Provision to be addressed
	
	DTS Departure – Loading Dock Travel Distance The Class 7b loading dock requires a maximum travel distance of 20m. Currently, this is greater than 20m (28m).  As such, this is required to be addressed through a fire engineered solution. DTS Departure – Level 4 Bathhouse Area The bathhouse area exceeds 20m to an exit (currently 29m).

BCA Clause	Deemed-to-Satisfy Provision to be addressed
	 As such, this is required to be addressed through a fire engineered solution. DTS Departure – Level 4 Communal Space The communal space is 23m to a point of choice in lieu of 20m.  This is required to be addressed through a fire engineered solution.
D2D6 Distance Between Alternative Exits	DTS Departure – Alternative Exits less than 9m Alternative exits are required to be no less than 9m apart. Multiple storeys contain exits too close together. See the following example from basement 1 and 2:  As such, this is required to be addressed through a fire engineered solution.
D2D12	DTS Departure – Travel through Fire Exit not Independent

BCA Clause	Deemed-to-Satisfy Provision to be addressed
Travel Via Fire-Isolated Exits	A fire isolated passageway is required to provide its own independent egress to a road or open space by way of its own fire isolated passageway. Currently, the ground floor does not provide its own independent egress and is shared.  As a result of the departure, a performance-based fire engineered solution is required to be obtained. DTS Departure – Fire Isolated Exit Opens within the confines of the building The Northern Fire Isolated Exit discharges into the internals of the building as opposed to the road or open space:  In addition, any external walls or external wall openings are required to maintain an FRL of 60/60/60 and be protected if within 6m of the path of travel to the road. As such, this is required to be addressed in a fire engineered solution.
D2D15 Discharge from Exits	DTS Departure – Discharge to an Exit The walkway portion on the neighbouring side of the building on the Eastern Side cannot be used as an exit as it is not a road or open space by definition and simply passes onto a neighbouring lot. This also applies to the northern and southern roads if it is not a registered dedicated road. For the purposes of this assessment, these have been considered exits. As such, confirmation is to be sought from the fire engineer as to if they can address this through a fire engineered solution.
D3D5 Separation of Rising and Descending Stairs	DTS Departure – Rising and Descending Stairway Stairways are required to be separated if they are rising from a lower level and descending from an upper level. They cannot be in the same shaft. Multiple Ground Floor stairways appear to be unseparated rising and descending stairways. For example:

BCA Clause	Deemed-to-Satisfy Provision to be addressed
	 As a result, this is required to be addressed through a performance-based fire engineered solution.
D3D13 Roof as open space	Potential DTS Departure – Roof Openings 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. Any openings are not permitted within 3m of the path of travel to the exit. Confirmation is required to be supplied through services plans to demonstrate the location of any openings in the slab to confirm compliance. Should compliance not be achieved, this is required to be addressed through a performance-based fire engineered solution. <i>Please note – this includes services penetrations such as fire, plumbing, and mechanical services.</i>
D3D14 Goings and Risers	DTS Departure – Goings and Risers The ground floor fire exit contains more than 18 risers in a flight which does not comply with this clause.  As such, this is required to be addressed through a fire engineered solution.
D3D25 Swinging Doors	Potential DTS Departure – Swinging Doors Retail Areas Doors are required to swing in the direction of egress and not impede on egress. Currently, there are doorways that do not swing in egress, and as such, they are required to be fitted with hold open devices which are permitted due to the sizes of the tenancies.

BCA Clause	Deemed-to-Satisfy Provision to be addressed
	 Provide details of compliance on application for a Construction Certificate.
E1D2 Fire Hydrants	DTS Departure – Fire Hydrants A building that exceeds 500m² requires a hydrant system installed throughout. Further information is required to be provided to display compliance. The information is to be within hydraulic plans that include the location of all outlets, the tank, the pump system being installed in the pump room. If not independent to this building, then this is required to be addressed in a fire engineered solution. The details are required to demonstrate compliance with AS2419.1-2021. The CC plans are to be developed to demonstrate that the hydrant booster is located not less than 10 m from high voltage electrical equipment, EV charging stations, dangerous good, external combustible storage in accordance with Clause 7.3.3(d) of AS 2419.1-2021. The CC plans are to be developed to demonstrate that the hydrant booster is located not less than 3 m from the vent terminal of any gas assembly or gas measurement system or discharge outlet of any building exhaust system operating in fire mode in accordance with Clause 7.3.3(e) & (f) of AS 2419.1-2021. Buildings that are 50m plus require a minimum of two independent fire hydrant riser systems in separate stairwells. In addition, the Booster Assembly is not shown and therefore not within eyesight of the main pedestrian entrance. As a result, this is required to be addressed through a Fire Engineered Solution. Fire safety practitioner to fully develop designs in accordance with AS 2419.1-2021 and the Fire Engineer address any DTS departures at CC stage.
E1D3 Fire Hose Reels	Further Information Required – Hose Reel Locations Hose reels are required to be supplied any non-class 2 portion of this development (namely, the carpark basement level, storage areas, office and retail areas). Locations of the Hose Reels are required to be shown displaying adequate coverage throughout the area and not being permitted to pass through any doorways to maintain coverage to the required areas. Further information is required to confirm compliance with the DTS provisions and AS2441-2005. Fire service / hydraulic plans are required to demonstrate compliance.
E1D4 Sprinklers	Compliance Required - Sprinkler System The building is required to be fitted with a sprinkler system in accordance with AS2118.1-2017 (as advised by the designer) due to the building being 4 storeys or more. The design of the sprinkler system will be required to be supplied at the Construction Certificate stage. Provide the location of the sprinkler valve room to confirm compliance with Specification 17.
S17C6 Sprinkler valve enclosures	DTS Departure – Clear Identification of Sprinkler Valve Room Required

BCA Clause	Deemed-to-Satisfy Provision to be addressed
[2019: Spec E1.5: 6]	The sprinkler valve room is required to be accessed directly from a road or open space in accordance with S17C6. Currently, it is not clear as to the location of the sprinkler valve room. Should it be confirmed the location of the sprinkler valve room is not directly accessible from the road or open space, then a performance-based Fire Engineered solution will be required to be obtained.
S19C4 Location of fire control centre [2019: Spec E1.8: 3]	Further Information Required – Fire Control Centre No fire control centre has been detailed on the plans. Full details of the FIP and fire control centre are to be supplied on application for a Construction Certificate.
E1D17 Provision for Special Hazards	Compliance Required – Ion Battery and Charging Stations Special hazards are required to be considered in the construction and design of the building to ensure Special Hazards are considered to meet the performance requirements of the BCA. With new technology such as Ion battery charging stations in carparks, this is to be considered by the Fire Engineer, and if necessary, adopted into the FER should these charging stations be installed within the development.
E2D4 Fire-isolated exits [2019: Table E2.2a]	Compliance Required – Stair Pressurisation 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.
E2D5 Class 2 and 3 Buildings more than 25m in effective height (Smoke Detection)	Further Information Required – Smoke Alarms and Smoke Detection Class 2 buildings are required to be fitted with a smoke detection system to common areas (including all other parts of the building) to AS1670.1-2018. Internals to sole-occupancy units require a smoke alarm system installed to AS3786-2014. Full details are required to be supplied on application for a Construction Certificate.
NSW E2D18 Class 9b – assembly buildings: exhibition halls, museums and art galleries [2019: NSW Table E2.2b]	Further Information Required – Class 9b Portions Auto Shut-down (Artist Community Space and Bath house) Class 9b portions of the building are required to have their mechanical ventilation systems installed to shut-down on an automatic fire trip associated with the sprinkler or smoke detection system. Full details are required to be supplied on application for a Construction Certificate.
E3D5 Emergency lifts [2019: E3.4]	Further Information Required – Emergency Lifts Emergency Lifts are required to be installed in accordance with this clause. Full details are required to be supplied by a vertical transport consultant on application for a Construction Certificate.
F1D5 External waterproofing membranes [2019: F1.4]	Further Information Required – External Waterproofing The roof, balconies, podiums, planter boxes, are required to be provided with a waterproofing membrane in accordance with AS 4654.1 & .2. AED recommend that a waterproofing specialist is engaged to provide specifications for compliance to be achieved, subsequently, the architect must develop the CC plans to demonstrate how compliance will be achieved. Set-downs to external wet areas are to be coordinated with the architect, structural engineer and façade engineer in accordance with Appendix A of AS 4654.2-2012. The wind class of the building will determine the minimum set-downs required to external wet areas for a compliant waterproofing membrane to be installed.
F2D2 Wet area construction [2019: F1.7(a) and (b)]	Further Information Required – Wet Areas Membrane The internal wet areas are required to be provided with a waterproofing membrane in accordance with this clause and AS 3740-2021. AED recommend that a waterproofing specialist is engaged to provide specifications for compliance to be achieved,

BCA Clause	Deemed-to-Satisfy Provision to be addressed
	subsequently, the architect must develop the CC plans to demonstrate how compliance will be achieved.
F4D4 Facilities in Class 3 to 9 Buildings	DTS Departure – Number of Sanitary Facilities The communal and class 3 areas are required to have facility numbers in accordance with F4D4. The final use of each area is required to determine facility numbers. Currently, there is inadequate numbers of facilities the occupants based on the floor area being of the Class 9b portions of the building. Provide details of facilities numbers on application for a Construction Certificate.
F6D3 Methods and Extent of Natural Light	Further Information Required – Natural Light from Potential Road/pedestrian Boundaries Natural Light is required to all habitable rooms. 50% of the square root of the height of the highest sill to boundaries is required to be achieved from boundaries. If registered roads or pathways are proposed, this will be achieved, however, it's vital to confirm if these roads or pedestrian links will be registered to ensure that the natural light can come from this source without being obstructed into the future. Confirmation is required on application for a Construction Certificate.
NSW G1D2 Swimming pools [2019: G1.1]	Further Information Required – Swimming Pool Barrier Details including the location of the swimming pool barrier is required to determine compliance (in the bathhouse).

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 Parcel 4.

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 Curious Practice, Project No. TBC Drawing Numbers:

PARCEL 4 DRAWING SCHEDULE						
Project	Discipline	Stage	Layout ID	Layout Name	Scale	Revision
DRAWING LIST						
WL	AR	SSDA	0000	COVER SHEET & DRAWING LIST	NTS	1
COMMUNICATION						
WL	AR	SSDA	0100	RENDER 1	NTS	1
WL	AR	SSDA	0101	RENDER 2	NTS	1
PLANS						
WL	AR	SSDA	1000	FLOOR PLAN - PARCEL 4 - LEVEL 00	1:200	1
WL	AR	SSDA	1001	FLOOR PLAN - PARCEL 4 - LEVEL MEZZ	1:200	1
WL	AR	SSDA	1002	FLOOR PLAN - PARCEL 4 - LEVEL 01	1:200	1
WL	AR	SSDA	1003	FLOOR PLAN - PARCEL 4 - LEVEL 02	1:200	1
WL	AR	SSDA	1004	FLOOR PLAN - PARCEL 4 - LEVEL 03	1:200	1
WL	AR	SSDA	1005	FLOOR PLAN - PARCEL 4 - LEVEL 04	1:200	1
WL	AR	SSDA	1006	FLOOR PLAN - PARCEL 4 - LEVEL 05	1:200	1
WL	AR	SSDA	1007	FLOOR PLAN - PARCEL 4 - LEVEL 06	1:200	1
WL	AR	SSDA	1008	FLOOR PLAN - PARCEL 4 - LEVEL 07	1:200	1
WL	AR	SSDA	1009	FLOOR PLAN - PARCEL 4 - LEVEL 08	1:200	1
WL	AR	SSDA	1010	FLOOR PLAN - PARCEL 4 - LEVEL 09	1:200	1
WL	AR	SSDA	1011	FLOOR PLAN - PARCEL 4 - LEVEL 10	1:200	1
WL	AR	SSDA	1012	FLOOR PLAN - PARCEL 4 - LEVEL 11	1:200	1
WL	AR	SSDA	1013	FLOOR PLAN - PARCEL 4 - ROOF	1:200	1
ELEVATIONS						
WL	AR	SSDA	1400	ELEVATIONS - PARCEL 4 - NORTH	1:200	1
WL	AR	SSDA	1401	ELEVATIONS - PARCEL 4 - SOUTH	1:200	1
WL	AR	SSDA	1402	ELEVATIONS - PARCEL 4 - EAST	1:200	1
WL	AR	SSDA	1403	ELEVATIONS - PARCEL 4 - WEST	1:200	1
SECTIONS						
WL	AR	SSDA	1500	SECTIONS - PARCEL 4 - SECTION 1	1:200	1
WL	AR	SSDA	1501	SECTIONS - PARCEL 4 - SECTION 2	1:200	1
WL	AR	SSDA	1502	SECTIONS - PARCEL 4 - SECTION 3	1:200	1
WL	AR	SSDA	1503	SECTIONS - PARCEL 4 - SECTION 4	1:200	1
APARTMENTS						
WL	AR	SSDA	4000	APARTMENT TYPES - PARCEL 4	1:100	1
WL	AR	SSDA	4001	APARTMENT TYPES - PARCEL 4	1:100	1
WL	AR	SSDA	4002	APARTMENT TYPES - PARCEL 4	1:100	1
COMPLIANCE						
WL	AR	SSDA	8000	SOLAR ACCESS - PARCEL 4	1:500	1
WL	AR	SSDA	8001	CROSS VENTILATION - PARCEL 4	1:500	1
AREA PLANS						
WL	AR	SSDA	9000	AREA PLANS - PARCEL 4	1:500	1

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

BCA Building Classifications:	Class 2 (Residential) Class 3 (Boarding Rooms) Class 7a (Basement Carpark) Class 7b (Storage Areas) Class 9b (Communal Spaces) Class 10b (Swimming Pool)
Building rise in storeys:	14 (determined in accordance with C2D3 of the BCA).
Type of Construction:	Type A (determined in accordance with C2D2 of the BCA)
Effective Height (m):	43.2m (+25m)
Climate Zone (Thermal Design)	5 (determined in accordance with ABCB Climate Map, Sept 2019)

3.1 Assessment of Effective Height

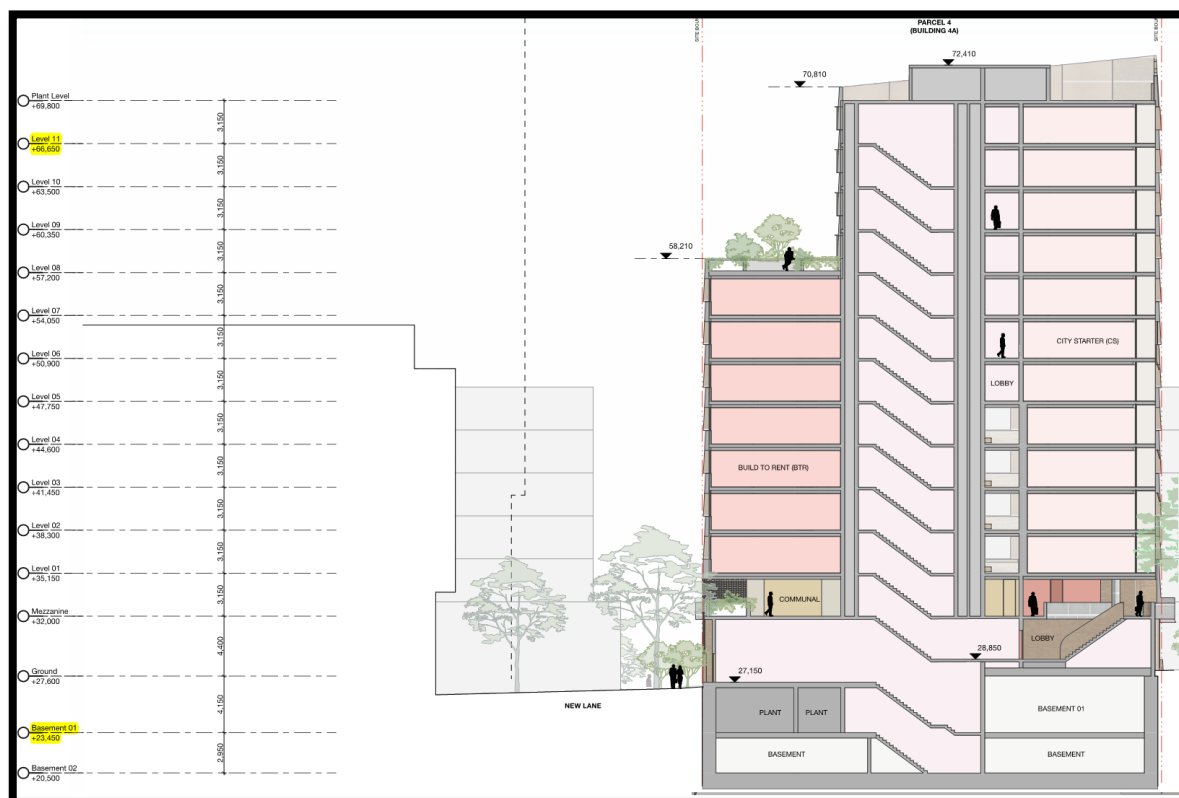


Figure 1: Effective Height Storey Measurement (see highlighted)

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 – Opposite side of road boundary (New Street)
- South – Opposite side of road boundary (New Street)
- East – Side boundary
- West – Opposite of the road boundary (Young Street)

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.
- Smoke exhaust systems must be provided in accordance with BCA Part E2 and Specification 21.
- Smoke-and-heat vents must be provided in accordance with BCA Part E2 and Specification 22.
- 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.
- Fire-rated lift landing doors must be provided in accordance with BCA Clause C4D11 and AS 1735.11-1986.

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					
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 (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:





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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. Compliance Required – Seismic Restraints for Services Installation The Structural Engineer is required to provide certification on application for a Construction Certificate for all seismic restraints and connections for plant and services in accordance with AS1170.4. Compliance Required – Planting and Other Ancillary Landscaping The Structural Engineer is required to provide certification on application for a Construction Certificate for all trees, planting and landscaping loads being applied to the building. Details demonstrating compliance with this clause must be incorporated into the Structural Engineering plans / specification
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.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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. (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.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(D) Fibre-reinforced cement. (E) Timber — naturally termite resistant in accordance with Appendix C of AS 3660.1. (F) Timber — preservative treated in accordance with Appendix D of AS 3660.1; and (ii) a durable notice must be permanently fixed to the building in a prominent location, such as a meter box or the like, indicating— (A) the termite management system used; and (B) the date of installation of the system; and (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





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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
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. Further Information Required – Flood Hazard Management Confirmation is required to be provided to AED as to whether the proposed development is located within a flood hazard area. Any reports and report requirements are required to be provided on application for a Construction Certificate. 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					
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 or 3 building. (2) Each building element must comply with Specification 5 as applicable. Further Information Required – External Wall FRL's to be Maintained (Both Parcels 1 and 4)



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS																																																																								
					External walls are required to maintain an FRL by construction complying with that in Tables SC11a-SC11g of Specification 5. The external wall considers load bearing elements (any loads at all other than itself that the material is supporting), along with and elements or materials incorporated into it (shelf angles included). All walls and columns within the following setbacks to a fire source feature are included: <table><caption>Table S5C11a: Type A construction: FRL of loadbearing parts of external walls</caption><thead><tr><th rowspan="2">Distance from a fire-source feature</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></thead><tbody><tr><td>Less than 1.5 m</td><td>90/90/90</td><td>120/120/120</td><td>180/180/180</td><td>240/240/240</td></tr><tr><td>1.5 to less than 3 m</td><td>90/60/60</td><td>120/90/90</td><td>180/180/120</td><td>240/240/180</td></tr><tr><td>3 m or more</td><td>90/60/30</td><td>120/60/30</td><td>180/120/90</td><td>240/180/90</td></tr></tbody></table> <table><caption>Table S5C11b: Type A construction: FRL of non-loadbearing parts of external walls</caption><thead><tr><th rowspan="2">Distance from a fire-source feature</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></thead><tbody><tr><td>Less than 1.5 m</td><td>~90/90</td><td>~120/120</td><td>~180/180</td><td>~240/240</td></tr><tr><td>1.5 to less than 3 m</td><td>~60/60</td><td>~90/90</td><td>~180/120</td><td>~240/180</td></tr><tr><td>3 m or more</td><td>~--</td><td>~--</td><td>~--</td><td>~--</td></tr></tbody></table> If shelf angles are being used, they do not maintain an FRL for a loadbearing element in the external wall and therefore do not comply with Specification 5. As a result, the use of shelf angles with the external masonry results in a performance-based fire engineered solution being required. Further Information Required – Enclosure of Shafts (Both Parcels 1 and 4) Enclosure of garbage chutes by fire-rated construction will be omitted at the roof slab of the garbage rooms. the garbage room itself will be fire rated and forming part of the vertical shaft. As a result of there being no fire separation, this is required to be addressed through performance-based fire engineered solution. DTS Departure – External Wall Construction (Both Parcels 1 and 4) External walls are required to maintain an FRL in accordance with Specification 5. The Eastern Boundary Walkway is considered a side boundary and as such, the fire source feature. This wall requires the following FRL's: <table><caption>Table S5C11a: Type A construction: FRL of loadbearing parts of external walls</caption><thead><tr><th rowspan="2">Distance from a fire-source feature</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></thead><tbody><tr><td>Less than 1.5 m</td><td>90/90/90</td><td>120/120/120</td><td>180/180/180</td><td>240/240/240</td></tr><tr><td>1.5 to less than 3 m</td><td>90/60/60</td><td>120/90/90</td><td>180/180/120</td><td>240/240/180</td></tr><tr><td>3 m or more</td><td>90/60/30</td><td>120/60/30</td><td>180/120/90</td><td>240/180/90</td></tr></tbody></table>	Distance from a fire-source feature	FRL (in minutes): Structural adequacy/ Integrity / Insulation				Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8	Less than 1.5 m	90/90/90	120/120/120	180/180/180	240/240/240	1.5 to less than 3 m	90/60/60	120/90/90	180/180/120	240/240/180	3 m or more	90/60/30	120/60/30	180/120/90	240/180/90	Distance from a fire-source feature	FRL (in minutes): Structural adequacy/ Integrity / Insulation				Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8	Less than 1.5 m	~90/90	~120/120	~180/180	~240/240	1.5 to less than 3 m	~60/60	~90/90	~180/120	~240/180	3 m or more	~--	~--	~--	~--	Distance from a fire-source feature	FRL (in minutes): Structural adequacy/ Integrity / Insulation				Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8	Less than 1.5 m	90/90/90	120/120/120	180/180/180	240/240/240	1.5 to less than 3 m	90/60/60	120/90/90	180/180/120	240/240/180	3 m or more	90/60/30	120/60/30	180/120/90	240/180/90
Distance from a fire-source feature	FRL (in minutes): Structural adequacy/ Integrity / Insulation																																																																												
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8																																																																									
Less than 1.5 m	90/90/90	120/120/120	180/180/180	240/240/240																																																																									
1.5 to less than 3 m	90/60/60	120/90/90	180/180/120	240/240/180																																																																									
3 m or more	90/60/30	120/60/30	180/120/90	240/180/90																																																																									
Distance from a fire-source feature	FRL (in minutes): Structural adequacy/ Integrity / Insulation																																																																												
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8																																																																									
Less than 1.5 m	~90/90	~120/120	~180/180	~240/240																																																																									
1.5 to less than 3 m	~60/60	~90/90	~180/120	~240/180																																																																									
3 m or more	~--	~--	~--	~--																																																																									
Distance from a fire-source feature	FRL (in minutes): Structural adequacy/ Integrity / Insulation																																																																												
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8																																																																									
Less than 1.5 m	90/90/90	120/120/120	180/180/180	240/240/240																																																																									
1.5 to less than 3 m	90/60/60	120/90/90	180/180/120	240/240/180																																																																									
3 m or more	90/60/30	120/60/30	180/120/90	240/180/90																																																																									

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS																								
					Table S5C11b: Type A construction: FRL of non-loadbearing parts of external walls <table><tr><th rowspan="2">Distance from a fire-source feature</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>Less than 1.5 m</td><td>–/90/90</td><td>–/120/120</td><td>–/180/180</td><td>–/240/240</td></tr><tr><td>1.5 to less than 3 m</td><td>–/60/60</td><td>–/90/90</td><td>–/180/120</td><td>–/240/180</td></tr><tr><td>3 m or more</td><td>–/–/–</td><td>–/–/–</td><td>–/–/–</td><td>–/–/–</td></tr></table> As a result of the above, these walls on both Parcels 1 and 4 have likely not been considered as requiring an FRL, however, technically these do under DTS due to a side boundary passing through the lot. It is recommended this be considered in the Fire Engineering Strategy and easements or a right of way be applied to these boundaries to ensure there is no future buildings placed on these portions of the land. Further Information Required – Slab Set-downs and Cavities - 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 set-downs 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	Distance from a fire-source feature	FRL (in minutes): Structural adequacy / Integrity / Insulation				Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8	Less than 1.5 m	–/90/90	–/120/120	–/180/180	–/240/240	1.5 to less than 3 m	–/60/60	–/90/90	–/180/120	–/240/180	3 m or more	–/–/–	–/–/–	–/–/–	–/–/–
Distance from a fire-source feature	FRL (in minutes): Structural adequacy / Integrity / Insulation																												
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8																									
Less than 1.5 m	–/90/90	–/120/120	–/180/180	–/240/240																									
1.5 to less than 3 m	–/60/60	–/90/90	–/180/120	–/240/180																									
3 m or more	–/–/–	–/–/–	–/–/–	–/–/–																									
					<table><tr><th>Rise in storeys</th><th>Class of building 2, 3, 9</th><th>Class of building 5, 6, 7, 8</th></tr><tr><td>4 of more</td><td>A</td><td>A</td></tr><tr><td>3</td><td>A</td><td>B</td></tr><tr><td>2</td><td>B</td><td>C</td></tr><tr><td>1</td><td>C</td><td>C</td></tr></table>	Rise in storeys	Class of building 2, 3, 9	Class of building 5, 6, 7, 8	4 of more	A	A	3	A	B	2	B	C	1	C	C									
Rise in storeys	Class of building 2, 3, 9	Class of building 5, 6, 7, 8																											
4 of more	A	A																											
3	A	B																											
2	B	C																											
1	C	C																											
C2D9 Lightweight construction [2019: C1.8]				X	(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. Lightweight construction: Construction which incorporates or comprises—																								



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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 Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
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: (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 (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.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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. (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





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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. Further Information Required – External Wall Test Reports External Walls on a structure of Type A Construction (applicable to this building) are required to be non-combustible when tested in accordance with AS1530.1. No specifications or testing reports have been provided for the external walls of this building at this stage, and as such further information is required to determine compliance. It is recommended that this documentation be supplied to AED and the Principal Certifier to determine compliance with C2D10 at the Construction Certificate stage. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
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. (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 (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





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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— (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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
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—

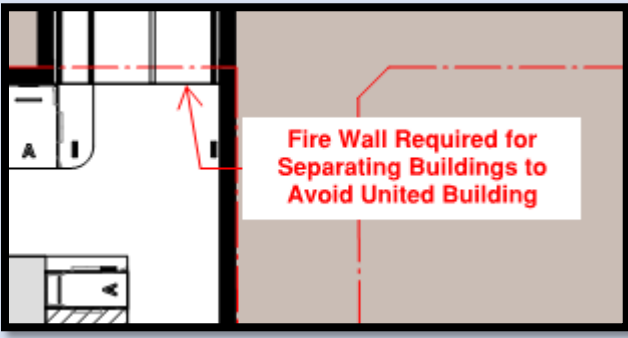


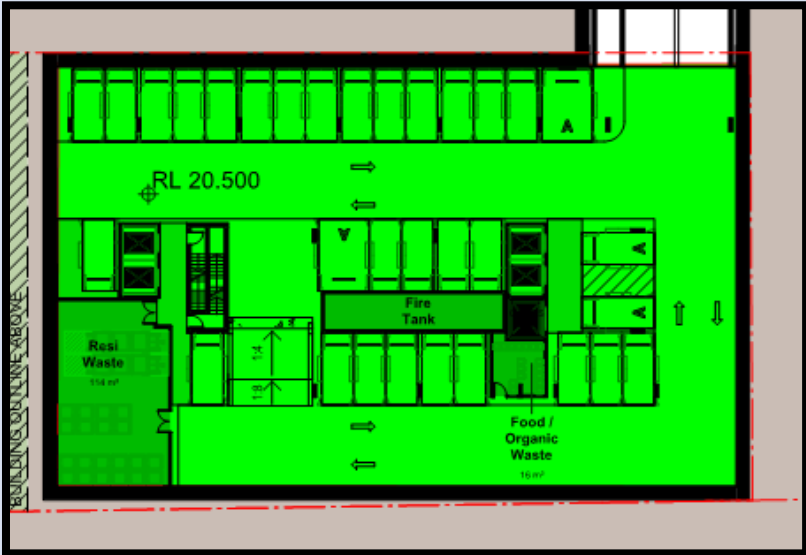
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(A) at ground level; or (B) immediately above a storey at ground level; and (iii) does not serve an exit, where it would render the exit unusable in a fire. (j) A part of a security, intercom 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). Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
Part C3 Compartmentation and separation					
C3D3 General floor area and volume limitations [2019: C2.2]				X	(1) The size of any fire compartment or atrium in a Class 5, 6, 7, or 9 building must not exceed the relevant maximum floor area nor the relevant maximum volume set out in Table C3D3 and C3D6 except as permitted in C3D4. (2) A part of a building which contains only heating, ventilating, or lift equipment, water tanks, or similar service units is not counted in the floor area or volume of a fire compartment or atrium if it is situated at the top of the building. (3) In a building containing an atrium, the part of the atrium well bounded by the perimeter of the openings in the floors and extending from the level of the first floor above the atrium floor to the roof covering is not counted in the volume of the atrium for the purposes of this clause. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification

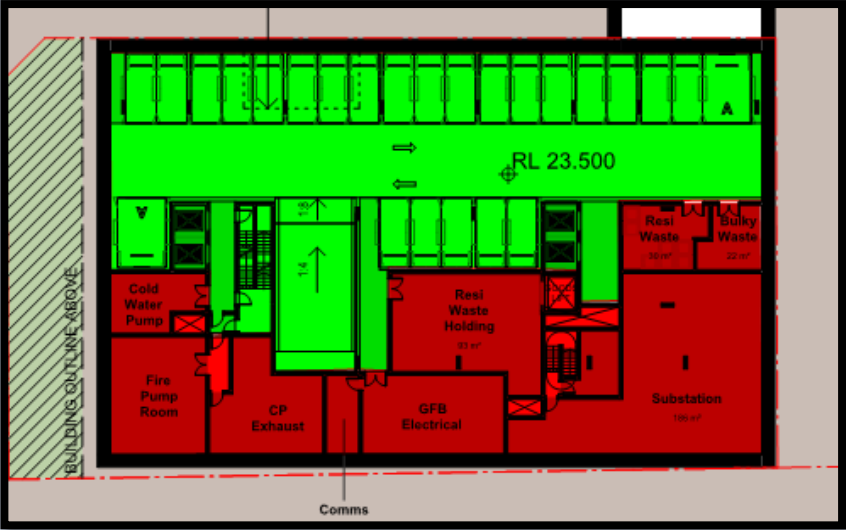
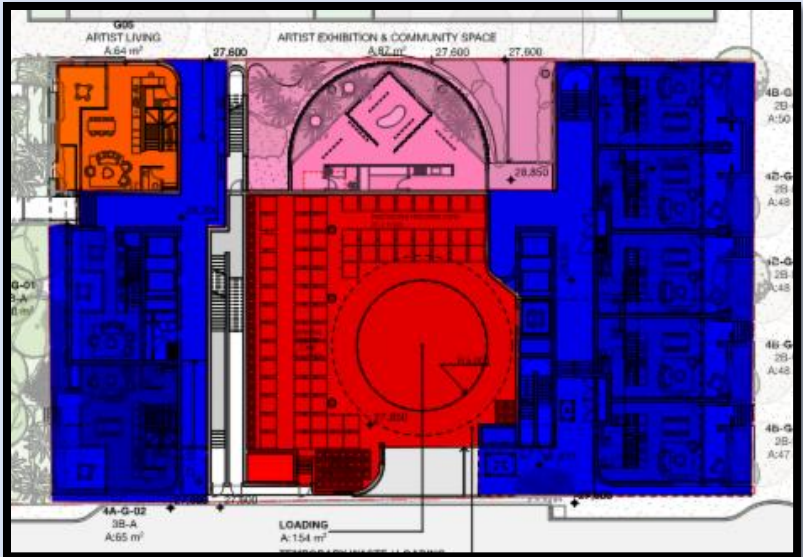


BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Classification	Type A construction		Type B construction		Type C construction
5, 9b or 9c	Max floor area—8 000m ²		Max floor area—5 500m ²		Max floor area—3 000m ²
	Max volume—48 000m ³		Max volume—33 000m ³		max volume—18 000m ³
6, 7, 8 or 9a (except for patient care areas)	Max floor area—5 000m ²		Max floor area—3 500m ²		Max floor area—2 000m ²
	Max volume—30 000m ³		Max volume—21 000m ³		Max volume—12 000m ³
C3D6 Class 9 buildings [2019: C2.5]				X	(2) In a building containing a Class 9b early childhood centre— (a) unless the Class 9b early childhood centre is the only use in the building, it must be separated from the remainder of the building by walls and/or floors with an FRL not less than that required for a fire wall; and (b) each storey must contain not less than 2 fire compartments. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
C3D7 Vertical separation of openings in external walls [2019: C2.6]			X		<i>It is recommended an AS2118.1 system be installed to the building which will negate the requirement for spandrel construction. Should this not be installed, this clause will need to be re-assessed.</i>
C3D8 Separation by fire walls [2019: C2.7]		X			(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 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



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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. DTS Departure – Separation by Fire Walls Different buildings are required to be separated by fire walls in accordance with this part. Currently, all buildings are connected as a United Building. This means it should be assessed as a single building as opposed to multiple buildings.  AED recommend separation by fire walls and fire doors to ensure the buildings can be considered separate. Alternatively, new plans are to be assessed with the combined as fire source features and travel distances will drastically change. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
C3D9 Separation of classifications in the same storey [2019: C2.8]				X	(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. Compliance Required – Separation of Classifications

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS										
					Each classification is required to be separated within each storey by construction comply with that in Tables SC11a-SC11g of Specification 5. Should compliance not be achieved through a DTS compliant amendment to the plans, then a Performance-Based Fire Engineered Solution is required to be obtained. The following assessment of each main area is established based on the overall areas of each classification. <table><tr><th>Classification</th><th>FRL</th></tr><tr><td>Class 2</td><td>90/90/90</td></tr><tr><td>Class 7a</td><td>120/120/120</td></tr><tr><td>Class 7b</td><td>240/240/240</td></tr><tr><td>Class 9b</td><td>120/120/120</td></tr></table> Basement 2  Basement 1	Classification	FRL	Class 2	90/90/90	Class 7a	120/120/120	Class 7b	240/240/240	Class 9b	120/120/120
Classification	FRL														
Class 2	90/90/90														
Class 7a	120/120/120														
Class 7b	240/240/240														
Class 9b	120/120/120														

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					 <u>Ground Floor</u>  All additional storeys to those listed above are considered residential, apart from the areas containing 9b portions (artist area, communal space, and bath house) Class 2: Blue Class 3: Orange Class 7a: Green Class 7b: Red Class 9b: Pink AED recommend that a performance solution is obtained from a suitably qualified fire engineer to rationalise the FRL's of the storage, carpark, and retail areas. It is noted that there are limited fire stopping products available for services penetrating floors that require a 180/180/180 and 240/240/240 FRL.



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS										
					Please note, this is subject to revision by the Architect and Structural Engineer depending on if any walls are considered loadbearing or non-loadbearing, especially if the higher FRL is being adopted instead of a Fire Wall for these parts. The wall locations may change based on this advice. 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]		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. Further Information Required – Separation of Classifications All floors between the storage areas to carparks, to retail/commercial, to the residential levels are required to comply with the requirements of floors within Tables SC11a-SC11g of Specification 5. <table><tr><th>Classification</th><th>FRL</th></tr><tr><td>Class 2</td><td>90/90/90</td></tr><tr><td>Class 7a</td><td>120/120/120</td></tr><tr><td>Class 7b</td><td>240/240/240</td></tr><tr><td>Class 9b</td><td>120/120/120</td></tr></table> Please note, all floors are required to extend the entirety of the floor and not contain gaps in the separation of the flooring and the external wall. If shelf angles are being installed however, they will not maintain the correct FRL for the specific floor levels as they leave a void without an FRL between the floor and external wall. The use of Shelf Angles will result in a performance-based fire engineered solution being required to be obtained. This is also a DTS departure for the external wall FRL being required to be maintained. AED recommend that a performance solution is obtained from a suitable qualified fire engineer to rationalise the FRL's of the storage and retail areas. It is noted that there are limited fire stopping products available for services penetrating floors that require a 180/180/180 and 240/240/240 FRL. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification	Classification	FRL	Class 2	90/90/90	Class 7a	120/120/120	Class 7b	240/240/240	Class 9b	120/120/120
Classification	FRL														
Class 2	90/90/90														
Class 7a	120/120/120														
Class 7b	240/240/240														
Class 9b	120/120/120														
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 (b) in a building required to be of Type B construction — the walls— (i) if loadbearing, have the relevant FRL prescribed by Tables S5C21a to S5C21f of Specification 5; or (ii) if non-loadbearing, be of non-combustible construction										





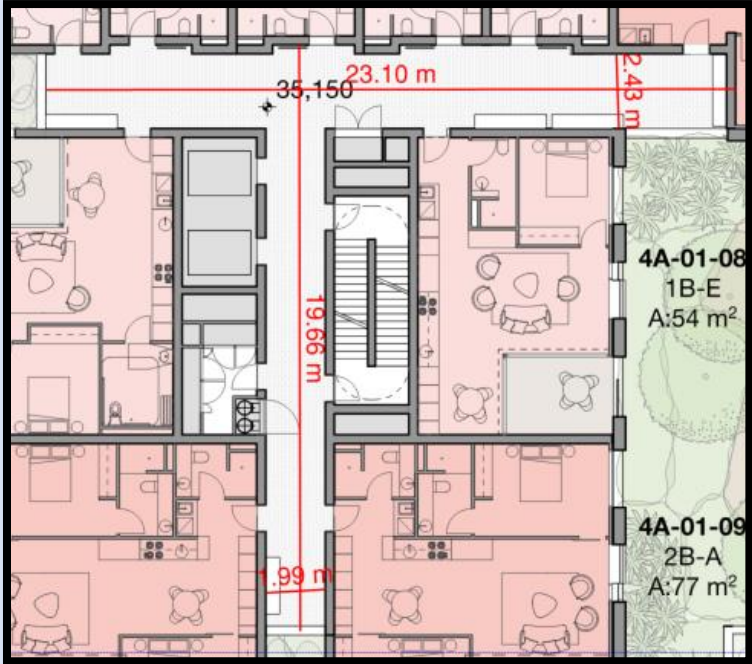
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(3) An emergency lift must be contained within a fire-resisting shaft having an FRL of not less than 120/120/120. (4) Openings for lift landing doors and services must be protected in accordance 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	A stairway and lift must not be in the same shaft if either the stairway or the lift is required to be in a fire-resisting shaft. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
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
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.

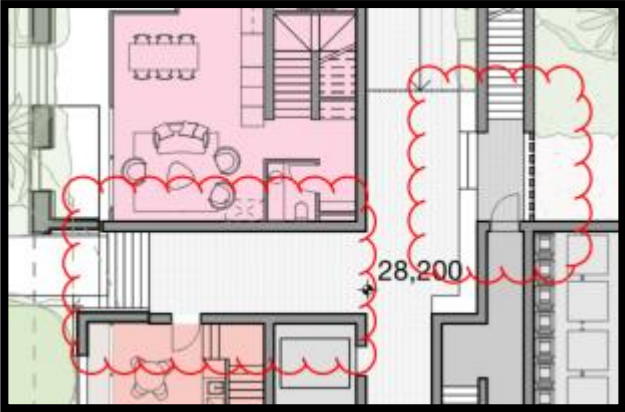




BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(2) A main switchboard located within the building which sustains emergency equipment operating in the emergency mode must— (a) be separated from any other part of the building by construction 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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
C3D15 Public corridors in Class 2 and 3 buildings [2019: C2.14]		X			In a Class 2 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. DTS Departure – Corridor Length Corridors in Class 2/3 portion of the building are not permitted to exceed 40m, unless they are smoke separated to not exceed 40m. Currently, the corridors in the worst case are 48m in total length (typical issue through all residential corridors shown).



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					 As such, this is required to be addressed through a fire engineered solution, or alternatively, have it smoke separated to not exceed 40m. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
Part C4 Protection of openings					
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— (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. DTS Departure / Further Information Required – Boundary Setbacks Openings within 3m of a boundary are required to be separated in accordance with C4D5. <u>The north, east and south boundaries may become fire source features depending on if these are registered roads.</u> An example is the following:

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					 As a result, many openings along these boundaries may require protection. Confirmation is required to be supplied to detail the locations of lot boundaries through the provision of a Deposited Plan to be supplied on application for a Construction Certificate. Alternatively, the DA will stipulate any lot subdivision or consolidation. Once this has been confirmed, the extent of the FER will be required to be addressed. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
C4D4 Separation of external walls and associated openings in different fire compartments [2019: C3.3]		X			Further Information Required – Openings in Different Fire Compartments 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 clouded below: 
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



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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/–. (2) Fire doors, fire windows and fire shutters must comply with Specification 12.
C4D6 Doorways in fire walls [2019: C3.5]				X	(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	(1) If a doorway in a fire wall is fitted with a sliding fire door which is open when the building is in use— (a) it must be held open with an electromagnetic device, which when de-activated in accordance with (2) and (3), allows the door to be fully closed in not less than 20 seconds and not more than 30 seconds after release; and (b) in the event of power failure to the door — the door must fail safe in the closed position in accordance with (a); and (c) an audible warning device must be located near the doorway and a red flashing warning light of adequate intensity on each side of the doorway must be activated in accordance with (2) and (3); and (d) signs must be installed on each side of the doorway located directly over the opening stating, in capital letters not less than 50 mm high in a colour contrasting with the background:





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					WARNING — SLIDING FIRE DOOR (2) The electromagnetic device required by (1)(a) must be de-activated and the warning system activated by heat or smoke detectors, as appropriate, installed in accordance with AS 1905.1 and the relevant provisions of AS 1670.1. (3) 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 in either fire compartment separated by the fire wall must also de-activate the electromagnetic device and activate the warning system. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
C4D8 Protection of doorways in horizontal exits [2019: C3.7]				X	(1) A doorway that is part of a horizontal exit must be protected by either— (a) a single fire door that has an FRL of not less than that required by Specification 5 for the fire wall except that the door must have an insulation level of at least 30; or (b) in a Class 7 building — 2 fire doors, one on each side of the doorway, each with an FRL of not less than ½ that required by Specification 5 for the fire wall except that each door must have an insulation level of at least 30. (2) Each door required by (1) must be self-closing, or 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 on each side of the fire wall not more than 1.5 m horizontal distance from the opening. (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 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>
C4D9 Openings in fire-isolated exits [2019: C3.8]				X	(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 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





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					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	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	(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 mm ² 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 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 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; (5) In a Class 3 building used as a residential care building protected with a sprinkler system complying with Specification 17, protection for a doorway must be at least a tight fitting solid core door not less than 35 mm thick that is— (a) self-closing; or (b) fitted with a free-arm closing device which closes the door or causes the door to remain closed (without preventing manual re-

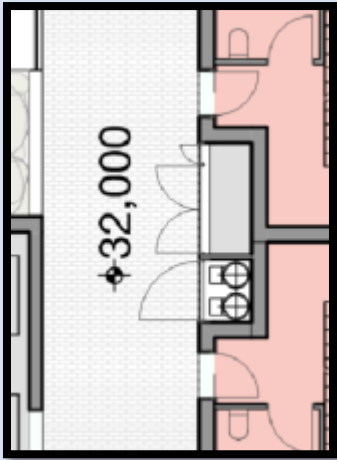




BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					opening), upon the detection of smoke caused by a smoke detector located within the room. (6) Other openings in internal walls which are required to have an FRL with respect to integrity and 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. Further Information Required – Bounding Construction Between Units Compliance has been shown through the Fire Wall Plans provided, however, testing reports of the proposed wall systems are required to be supplied. Walls between sole-occupancy units of the Class 2 portions of the building, along with walls bounding public corridors are required to be separated by a fire separating wall as detailed in Tables SC11a-SC11g of Specification 5. The required separation between these portions is as follows: Class 2 areas – FRL 90/90/90 loadbearing and FRL -/60/60 for non-loadbearing walls.



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS																													
					Table S5C11f: Type A construction: FRL of non-loadbearing internal walls <table><tr><th rowspan="2">Location</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>Fire-resisting lift and stair shafts</td><td>–/90/90</td><td>–/120/120</td><td>–120/120</td><td>–/120/120</td></tr><tr><td>Bounding public corridors, public lobbies and the like</td><td>–/60/60</td><td>–/–/–</td><td>–/–/–</td><td>–/–/–</td></tr><tr><td>Between or bounding sole-occupancy units</td><td>–/60/60</td><td>–/–/–</td><td>–/–/–</td><td>–/–/–</td></tr><tr><td>Ventilating, pipe, garbage, and like shafts not used for the discharge of hot products of combustion</td><td>–/90/90</td><td>–/90/90</td><td>–/120/120</td><td>–/120/120</td></tr></table> Further specifications are required to be supplied to confirm compliance. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification	Location	FRL (in minutes): Structural adequacy / Integrity / Insulation				Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8	Fire-resisting lift and stair shafts	–/90/90	–/120/120	–120/120	–/120/120	Bounding public corridors, public lobbies and the like	–/60/60	–/–/–	–/–/–	–/–/–	Between or bounding sole-occupancy units	–/60/60	–/–/–	–/–/–	–/–/–	Ventilating, pipe, garbage, and like shafts not used for the discharge of hot products of combustion	–/90/90	–/90/90	–/120/120	–/120/120
Location	FRL (in minutes): Structural adequacy / Integrity / Insulation																																	
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8																														
Fire-resisting lift and stair shafts	–/90/90	–/120/120	–120/120	–/120/120																														
Bounding public corridors, public lobbies and the like	–/60/60	–/–/–	–/–/–	–/–/–																														
Between or bounding sole-occupancy units	–/60/60	–/–/–	–/–/–	–/–/–																														
Ventilating, pipe, garbage, and like shafts not used for the discharge of hot products of combustion	–/90/90	–/90/90	–/120/120	–/120/120																														
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 (c) in accordance with C4D15. (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. Further Information Required – Shaft Construction or Penetrations Sealed in accordance with AS1530.4 Confirmation is required to be supplied to confirm the construction methods for what appears to be shafts and the openings applicable at doorways for those shafts:																													

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					 Full specifications and testing reports are required to be supplied to detail the shaft construction for the garbage chutes, hydraulic shafts, mechanical shafts, and electrical shafts as applicable. In addition, this is required to be supplied for the construction of any doorways for service cupboards, or confirmation if they are being sealed at the floors and walls in accordance with a tested system to AS1530.4. 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.



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(iii) The determination of the required FRL must be confirmed in a report from an Accredited Testing Laboratory in accordance with Specifications 1 and 2. (b) Ventilation and air-conditioning — in the case of ventilating or air-conditioning ducts or equipment, the installation is in accordance with AS 1668.1. (c) Compliance with Specification 13 — the following applies: (i) The service is a pipe system comprised entirely of metal (excluding pipe seals or the like) and is 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	(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.



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
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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
Specification 5 Fire-resisting construction					
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. (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.

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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); (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
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— (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 Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
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



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Fire-resistance of building elements [2019: Spec C1.1: 3.1 and Table 3]					than that listed in those Tables for the particular Class of building concerned; and (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.





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
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.
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				X	If a roof is required to have an FRL or its covering is required to be non-combustible, roof lights or the like installed in that roof must— (a) have an aggregate area of not more than 20% of the roof surface; and (b) be not less than 3 m from—





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
[2019: Spec C1.1: 3.6]					(i) any boundary of the allotment other than the boundary with a road or public place; and (ii) any part of the building which projects above the roof unless that part has the FRL required of a fire wall and any openings in that part of the wall for 6 m vertically above the roof light or the like are protected in accordance with C4D5; and (iii) any roof light or the like in an adjoining sole-occupancy unit if the walls bounding the unit are required to have an FRL; and (iv) any roof light or the like in an adjoining fire-separated section of the building; and (c) if a ceiling with a resistance to the incipient spread of fire is required, be installed in a way that will maintain the level of protection provided by the ceiling to the roof space. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
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, 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.
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 (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





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					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— (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):





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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		(1) In a Class 2 or 3 building with a rise in storeys of not more than 3— (a) notwithstanding C2D10(1) and (2) and C3D7, timber framing may be used for— (i) external walls; and (ii) common walls; and (iii) the floor framing of lifts pits; and (iv) non-loadbearing internal walls which are required to be fire-resisting; and (v) non-loadbearing shafts, except shafts used for the discharge of hot products of combustion; and (vi) spandrels or horizontal construction provided for the purposes of C3D7; and (b) notwithstanding S5C11(1)(c), for loadbearing internal walls and loadbearing fire walls— (i) timber framing may be used; and (ii) non-combustible materials may be used; and (c) notwithstanding S5C3(1)(c), timber framing may be used for a part of a building that provides support to a part of a building constructed of timber framing or non-combustible material in accordance with S5C20(1)(a) and (b). (2) A Class 2 or 3 building having a rise in storeys of not more than 4 may have the top three storeys constructed in accordance with (1) provided— (a) the lowest storey is used solely for the purpose of parking motor vehicles or for some other ancillary purpose; and (b) the lowest storey is constructed of concrete or masonry including the floor between it and the Class 2 or 3 part of the building above; and (c) the lowest storey and the storey above are separated by construction having an FRL of not less than 90/90/90 with no openings or penetrations that would reduce the fire-resisting performance of that construction except that a doorway in that construction may be protected by a –/60/30 self-closing fire door. (3) In a Class 2 or 3 building complying with (1) or (2) and fitted with a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17, any FRL criterion prescribed in Tables S5C11a to S5C11g— (a) for any floor and any loadbearing wall, may be reduced to 60, except any FRL criterion of 90 for an external wall must be maintained when tested from the outside; and (b) for any non-loadbearing internal wall, need not apply if— (i) it is lined on each side with 13 mm standard grade plasterboard or similar non-combustible material; and (ii) it extends— (A) to the underside of the floor next above; or (B) to the underside of a ceiling with a resistance to the incipient spread of fire of 60 minutes; or



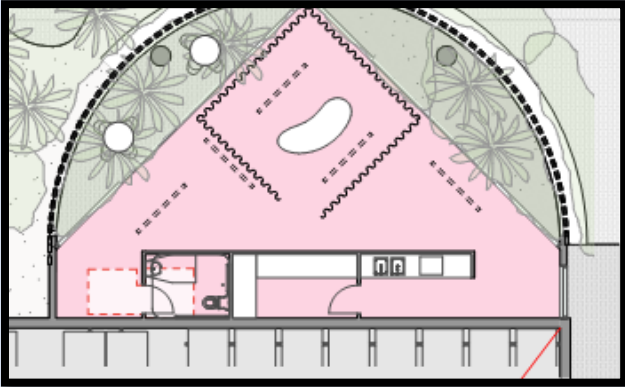
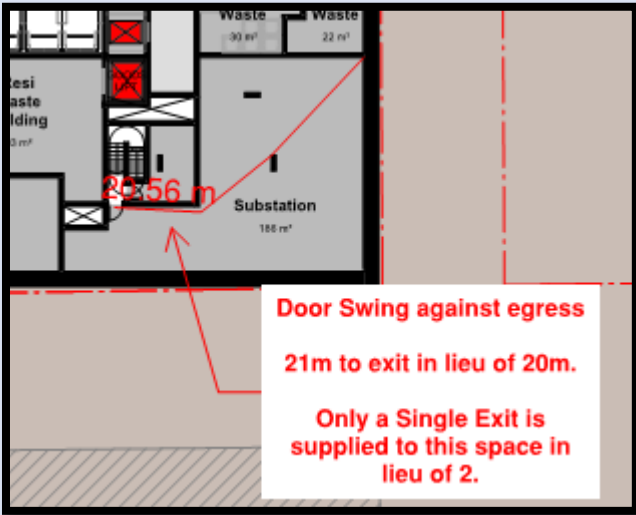


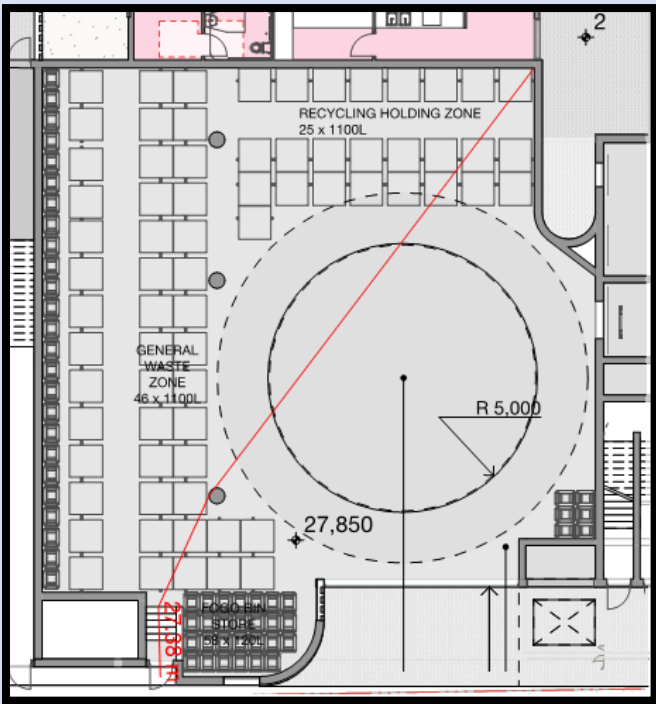
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(C) to the underside of a non-combustible roof covering; and (iii) any insulation installed in the cavity of the wall is non-combustible; and (iv) any construction joint, space or the like between the top of the wall and the floor, ceiling or roof is smoke sealed with intumescent putty or other suitable material; and (v) any doorway in the wall is protected by a self-closing, tight fitting, solid core door not less than 35 mm thick.

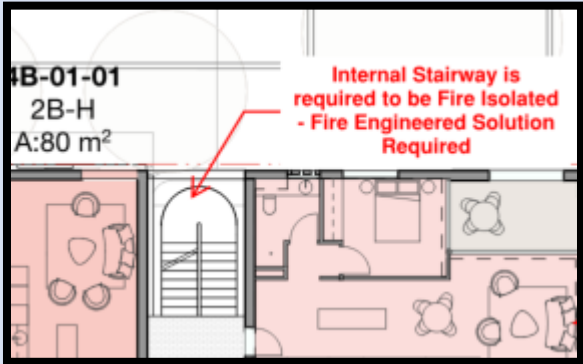
Part D2 Provision for escape

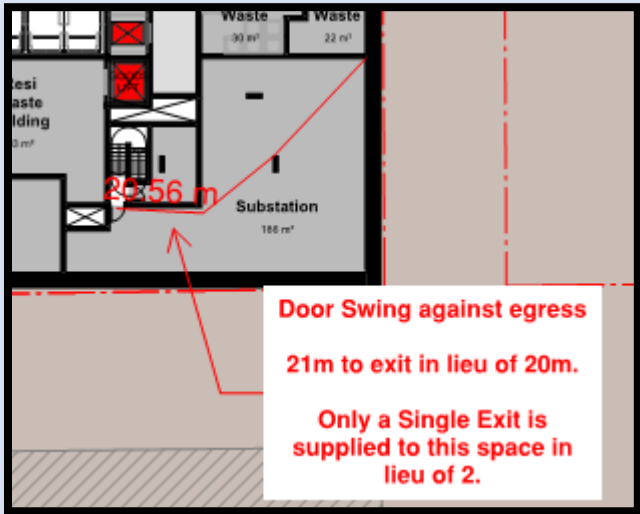
D2D2 Application of Part [2019: D1.1]			X		The Deemed-to-Satisfy Provisions of this Part do not apply to the internal parts of a sole-occupancy unit in a Class 2 or 3 building or a Class 4 part of a building.
NSW D2D3 Number of exits required [2019: D1.2]		X			(1) All buildings — Every building must 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. (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. (ii) Any storey which includes a patient care area in a Class 9a health-care building. (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—

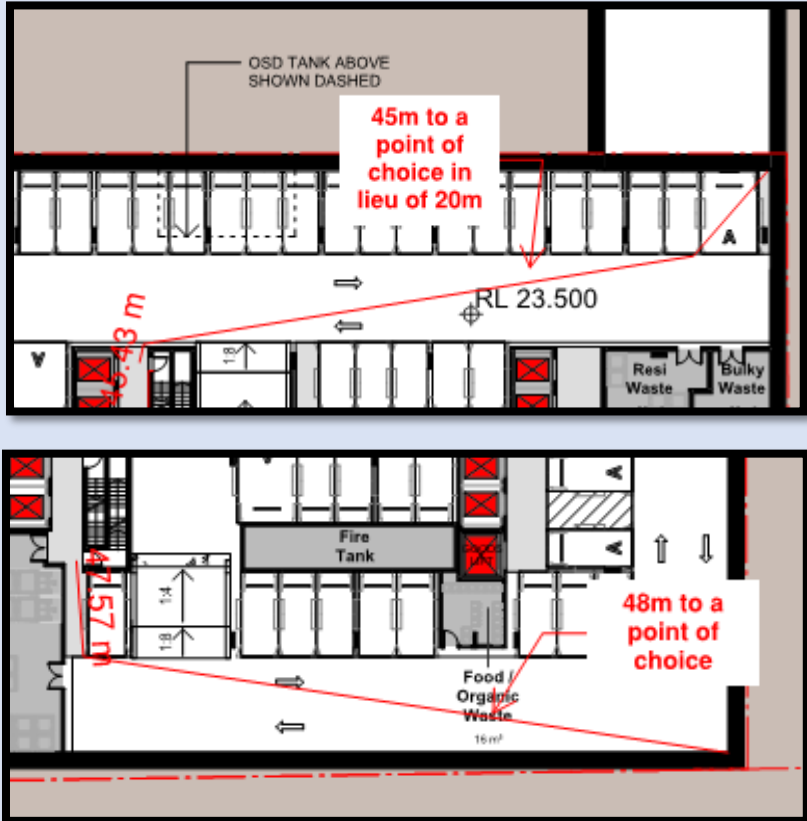
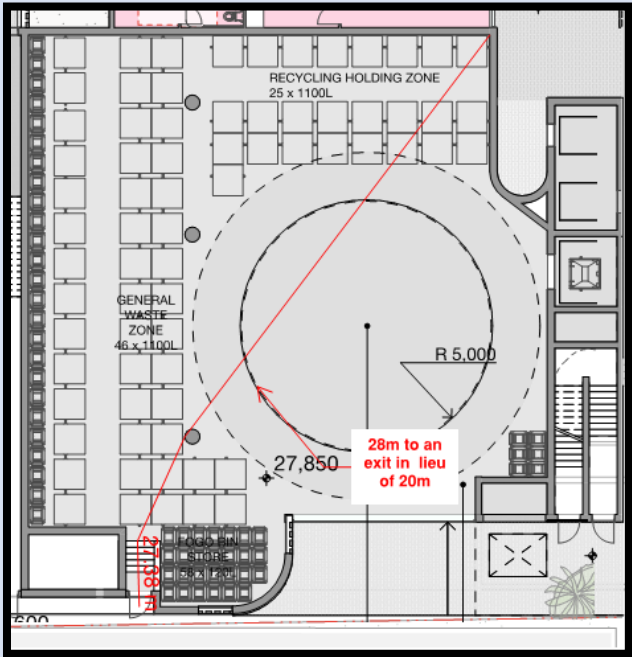


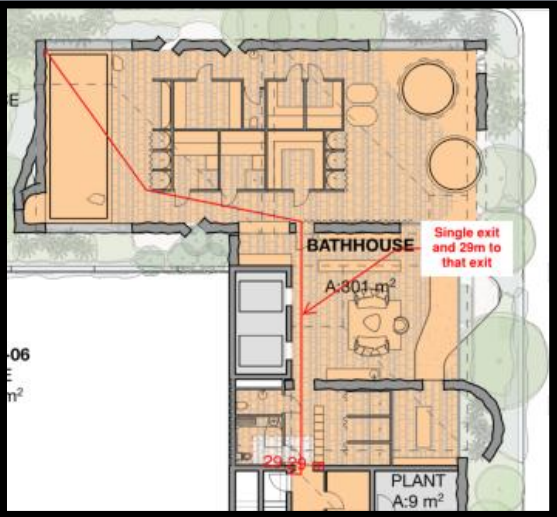
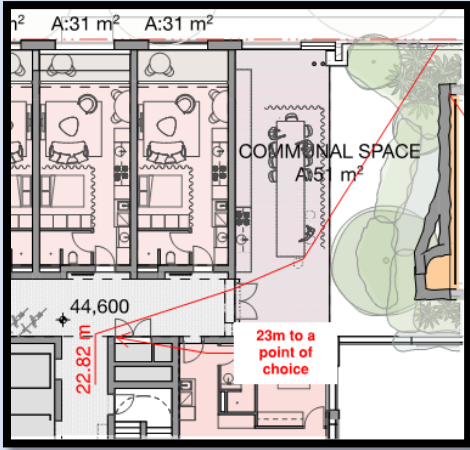
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(a) an exit; or (b) at least 2 exits if 2 or more exits are required. DTS Departure – Number of Exits Multiple portions of the building are not showing doors. For example, the ground floor (see the following):  DTS Departure – Less than 2 Exits to Parts of the Building Under D2D3 (7), all parts of the building require access to at least 2 exits. Currently, there are parts of the building that provide access to only one exit: 

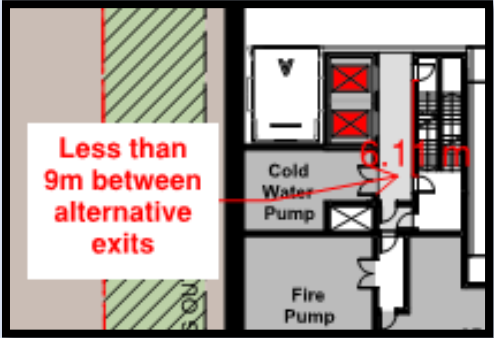
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	NA or DOES NOT COMPLY	Informational	Compliance Required	COMMENTS
					 As such, this should either be addressed through a re-design, or a fire engineered solution. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
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. (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 7, or 9 buildings — Every stairway or ramp serving as a required exit must be fire-isolated unless— (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

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					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, (C) no opening that could permit the passage of fire or smoke. DTS Departure – Non-fire Isolated Stairway Stairways connecting more than 2 storeys are required to be fire isolated. The internal stairway connecting the Class 2 portions of the building is proposed not to be fire isolated – as such not complying with this clause:  As such, this is required to be addressed through a fire engineered solution. 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 7, 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 . (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—

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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. DTS Departure – Travel Distances (Residential Corridors) The travel distances in common area corridors exceed 6m (12m with the concession). The common corridors in residential areas are 16m to a point of choice between the two exits.  As a result of the above, this is required to be addressed through a performance-based fire engineered solution. DTS Departure – Basement Distance to an Exit or Point of Choice (Basement 1 and Basement 2) The basement travel distance when scaled exceeds 20m to a single exit (21m). See the following example: 

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					In addition, basement 1 and 2 also exceeds 20m to a point of choice. Basement 1 is 45m, with basement 2 with 48m.  DTS Departure – Loading Dock Travel Distance The Class 7b loading dock requires a maximum travel distance of 20m. Currently, this is greater than 20m (28m). 

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					As such, this is required to be addressed through a fire engineered solution. DTS Departure – Level 4 Bathhouse Area The bathhouse area exceeds 20m to an exit (currently 29m).  As such, this is required to be addressed through a fire engineered solution. DTS Departure – Level 4 Communal Space The communal space is 23m to a point of choice in lieu of 20m.  This is required to be addressed through a fire engineered solution. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
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 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—

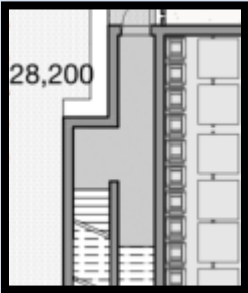
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(i) in a Class 2 or 3 building — 45 m apart; or (iii) in all other cases — 60 m apart; and (d) located so that alternative paths of travel do not converge such that they become less than 6m apart. DTS Departure – Alternative Exits less than 9m Alternative exits are required to be no less than 9m apart. Multiple storeys contain exits too close together. See the following example from basement 1 and 2:  As such, this is required to be addressed through a fire engineered solution. 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 (b) 1.8 m in a passageway, corridor or ramp normally used for the transportation of patients in beds within a treatment area or ward area; and (c) in a public corridor in a Class 9c aged care building, notwithstanding (2) and (3)— (i) 1.5 m; and (ii) 1.8 m for the full width of the doorway, providing access into a sole-occupancy unit or communal bathroom. (2) If the storey, mezzanine or open spectator stand accommodates more than 100 persons but not more than 200 persons, the aggregate unobstructed width of each required exit or path of travel to an exit, except for doorways, must be not less than— (a) 1 m plus 250 mm for each 25 persons (or part) in excess of 100; or

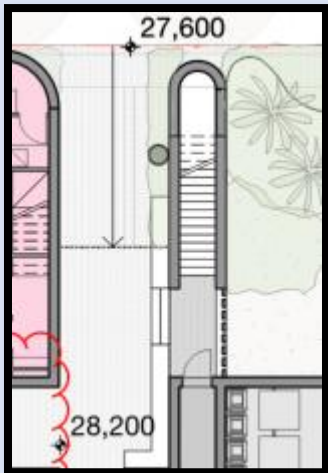


BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(b) 1.8 m in a passageway, corridor or ramp normally used for the transportation of patients in beds within a treatment area or ward area. (3) If the storey, mezzanine or open spectator stand 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. (4) In an open spectator stand which accommodates more than 2000 persons, the aggregate unobstructed width of each required exit or path of travel to an exit, except for doorways, must be not less than 17 m plus a width (in metres) equal to the number in excess of 2000 divided by 600. (5) In a Class 9b building used as an entertainment venue— (a) the aggregate width must be not less than 2 m plus 500 mm for every 50 persons or part in excess of 200; and (b) D2D8(1), (2) and (3) do not apply; and (c) where or more paths of travel merge, the width of the combined path of travel must be not less than the sum of the required widths of those paths of travel; and (d) the required widths of those paths of travel connecting the exits from the building to a public road or open space must comply with (c). <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
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— (a) in patient care areas through which patients would normally be transported in beds— (i) if the doorway provides access to, or from, a corridor of width— (A) less than 2.2 m — 1200 mm; or (B) 2.2 m or greater — 1070 mm; and (ii) where the doorway referred to in (i) is fitted with two leaves and one leaf is secured in the closed position in accordance with D3D26(3)(e), the other leaf must permit an unobstructed opening not less than 800 mm wide; or (b) in patient care areas in a horizontal exit — 1250 mm; or (c) the unobstructed width of each exit provided to comply with D2D8(1), (2), (3) or (4), minus 250 mm; or (d) in a Class 9c building, 800 mm, except— (i) in resident use areas the minimum unobstructed width must be 870 mm; and (ii) for doorways leading from a public corridor to a sole-occupancy unit the minimum unobstructed width must be 1070 mm; and (iii) where the doorway is fitted with two leaves and one leaf is secured in the closed position in accordance with D3D26(3)(e), the other leaf must permit an unobstructed



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					opening not less than 870 mm wide in resident use areas and 800 mm wide in non-resident use area; or (e) in a Class 9b building used as an entertainment venue— (i) in parts of the building used by the public, the width of the required exit or path of travel, and the unobstructed width of each doorway must not be less than 1 m and not more than 3 m; and (ii) in other parts of the building, doorways must comply with NSW D2D9; 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— (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

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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. DTS Departure – Travel through Fire Exit not Independent A fire isolated passageway is required to provide its own independent egress to a road or open space by way of its own fire isolated passageway. Currently, the ground floor does not provide its own independent egress and is shared.  As a result of the departure, a performance-based fire engineered solution is required to be obtained. DTS Departure – Fire Isolated Exit Opens within the confines of the building The Northern Fire Isolated Exit discharges into the internals of the building as opposed to the road or open space:

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					 In addition, any external walls or external wall openings are required to maintain an FRL of 60/60/60 and be protected if within 6m of the path of travel to the road. As such, this is required to be addressed in a fire engineered solution. 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.



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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. <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, or 3 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 7, 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 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.





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 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 (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. DTS Departure – Discharge to an Exit The walkway portion on the neighbouring side of the building on the Eastern Side cannot be used as an exit as it is not a road or open space by definition and simply passes onto a neighbouring lot. This also applies to the northern and southern roads if it is not a registered dedicated road. For the purposes of this assessment, these have been considered exits. As such, confirmation is to be sought from the fire engineer as to if they can address this through a fire engineered solution. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D2D16 Horizontal exits [2019: D1.11]				X	(1) Horizontal exits must not be counted as required exits— (a) between sole-occupancy units; or (b) in a Class 9b building used as an early childhood centre, primary or secondary school. (3) In cases other than in (2), horizontal exits must not comprise more than half of the required exits from any part of a storey divided by a fire wall. (4) Horizontal exits must have a clear area on the side of the wall to which occupants are evacuating, to accommodate the total number of persons (calculated under D2D18) served by the horizontal exit of not less than— (a) 2.5 m² per patient/resident in a Class 9a health-care building or Class 9c aged care building; and (b) 0.5 m² per person in any other case. (5) Where a fire compartment is provided with only two exits, and one of those exits is a horizontal exit, the clear area required by (4) is to be of a size that accommodates all the occupants from the fire compartment being evacuated. (6) In a Class 9b early childhood centre, the clear area required by (4) must accommodate all occupants of the early childhood centre.





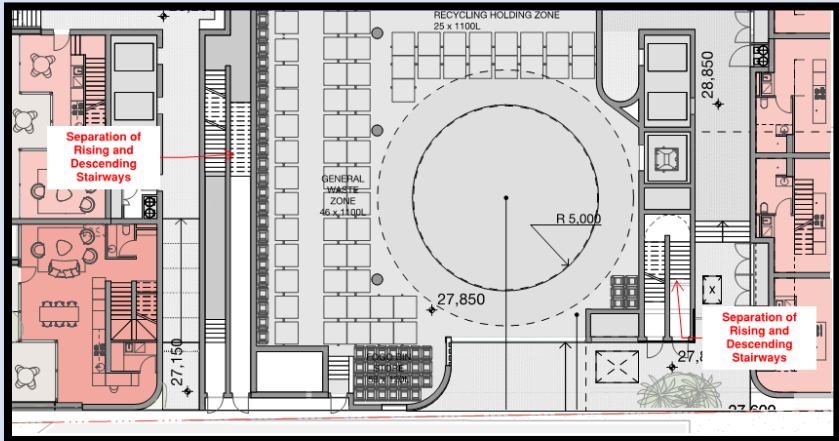
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(7) The clear area required by (4) must be connected to the horizontal exit by an unobstructed path that has at least the dimensions required for the horizontal exit and may include the area of the unobstructed path. (8) Each fire compartment required by C3D6(2) must be served by not less than 2 horizontal exits, each located not less than 9m from— (a) at least one other horizontal exit; and (b) an exit other than a horizontal exit. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
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— (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 (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
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





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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 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	Access to lift pits must— (a) where the pit depth is not more than 3 m, be through the lowest landing doors; or (b) where the pit depth is more than 3 m, be provided through an access doorway complying with the following: (i) In lieu of D2D7 to D2D11, the doorway must be level with the pit floor and not be less than 600 mm wide by 1980 mm high clear opening, which may be reduced to 1500 mm where it is necessary to comply with (ii). (ii) No part of the lift car or platform must encroach on the pit doorway entrance when the car is on a fully compressed buffer. (iii) Access to the doorway must be by a stairway complying with AS 1657. (iv) In lieu of D3D26, doors fitted to the doorway must be— (A) of the horizontal sliding or outwards opening hinged type; and (B) self-closing and self-locking from the outside; and (C) marked on the landing side with the letters not less than 35 mm high: DANGER LIFTWELL – ENTRY OF UNAUTHORIZED PERSONS PROHIBITED – KEEP CLEAR AT ALL TIMES <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
Part D3 Construction of exits					
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. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans, Structural Engineering Plans & specification</i>
D3D4				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



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Non-fire-isolated stairways and ramps [2019: D2.3]					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 DTS Departure – Rising and Descending Stairway Stairways are required to be separated if they are rising from a lower level and descending from an upper level. They cannot be in the same shaft. Multiple Ground Floor stairways appear to be unseparated rising and descending stairways. For example:  As a result, this is required to be addressed through a performance-based fire engineered solution. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D3D6				X	Where an open access ramp or balcony is provided to meet the smoke hazard management requirements of E2D4 to E2D13, it must— (a) have ventilation openings to the outside air which—



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Open access ramps and balconies [2019: D2.5]					(i) have a total unobstructed area not less than the floor area of the ramp or balcony; and (ii) are evenly distributed along the open sides of the ramp or balcony; and (b) not be enclosed on its open sides above a height of 1 m except by an open grille or the like having a free air space of not less than 75% of its area. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D3D7 Smoke lobbies [2019: D2.6]				X	A smoke lobby required by D2D12 must— (a) have a floor area not less than 6 m²; and (b) be separated from the occupied areas in the storey by walls which are impervious to smoke, and— (i) have an FRL of not less than 60/60/– (which may be fire-protective grade plasterboard, gypsum block with set plaster, face brickwork, glass blocks or glazing); and (ii) extend from slab to slab, or to the underside of a ceiling with a resistance to the incipient spread of fire of 60 minutes which covers the lobby; and (iii) any construction joints between the top of the walls and the floor slab, roof or ceiling must be smoke sealed with intumescent putty or other suitable material; and (c) at any opening from the occupied areas, have smoke doors complying with S12C3 and S12C4 except that the smoke sensing device need only be located on the approach side of the opening; and (d) be pressurised as part of the exit if the exit is required to be pressurised under E2D3. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
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 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





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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. (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.





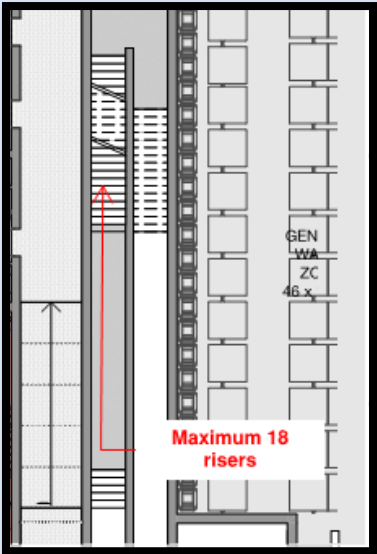
BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(2) Notwithstanding (1)(b), the top construction of a fire-isolated passageway need not have an FRL if the walls of the fire-isolated passageway extend to the underside of— (a) a non-combustible 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. Potential DTS Departure – Roof Openings 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. Any openings are not permitted within 3m of the path of travel to the exit. Confirmation is required to be supplied through services plans to demonstrate the location of any openings in the slab to confirm compliance. Should compliance not be achieved, this is required to be addressed through a performance-based fire engineered solution. <i>Please note – this includes services penetrations such as fire, plumbing, and mechanical services.</i> 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 (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





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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 (i) conspicuous edges to the treads of steps in a Class 9b building used as an entertainment venue; 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. DTS Departure – Goings and Risers The ground floor fire exit contains more than 18 risers in a flight which does not comply with this clause.



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					 As such, this is required to be addressed through a fire engineered solution. 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 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— (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



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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	(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	(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. (c) In front of fixed seating on a mezzanine or balcony within an auditorium in a Class 9b building— (i) 1 m; or (ii) 700 mm where the horizontal projection extends not less than 1 m outwards from the top of the barrier; or (iii) in a Class 9b building used as an entertainment venue, the height prescribed for guardrails in NSW I4D41 or NSW I5D9. (d) In a Class 9b building used as an entertainment venue, for stairways and ramps and the floor of any access path, balcony, landing or the like— (i) 1 m when provided inside the building; and (ii) 1200 mm when provided externally to the building. (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





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D3D19 Openings in barriers [2019: Table D2.16a]				X	(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 carparks) 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. (4) The requirements of (2) do not apply to external stairways, external ramps, or fire-isolated stairways or fire-isolated ramps serving Class 9b early childhood centres. (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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D3D20 Barrier climbability [2019: Table D2.16a]				X	(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— (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) buildings.





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
D3D22 Handrails [2019: D2.17]				X	(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 (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. (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.





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 D3D24 Doorways and doors [2019: D2.19]				X	(1) A doorway in a resident use area of a Class 9c building must not be fitted with— (a) a sliding fire door; or (b) a sliding smoke door; or (c) a revolving door; or (d) a roller shutter door; or (e) a tilt-up door. (2) A doorway serving as a required exit or forming part of a required exit— (a) must not be fitted with a revolving door; and (b) must not be fitted with a roller shutter or tilt-up door unless— (i) it serves a Class 6, 7 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 (i) 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 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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
D3D25 Swinging doors		X			(1) A swinging door in a required exit or forming part of a required exit— (a) must not encroach—



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
[2019: D2.20]					(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. Potential DTS Departure – Swinging Doors Retail Areas Doors are required to swing in the direction of egress and not impede on egress. Currently, there are doorways that do not swing in egress, and as such, they are required to be fitted with hold open devices which are permitted due to the sizes of the tenancies. Provide details of compliance on application for a Construction Certificate. 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



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(b) a single hand pushing action on a single device which is located between 900 mm and 1.2 m from the floor. (2) Where the latch operation device referred to in (1)(b) is not located on the door leaf itself— (a) manual controls to power-operated doors must be at least 25 mm wide, proud of the surrounding surface and located— (i) not less than 500 mm from an internal corner; and (ii) for a hinged door, between 1 m and 2 m from the door leaf in any position; and (iii) for a sliding door, within 2 m of the doorway and clear of a surface mounted door in the open position; and (b) braille and tactile signage complying with S15C3 and S15C6 must identify the latch operation device. (3) The requirements of (1) and (2) do not apply to a door that— (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 (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 building; or (iv) a space which is otherwise inaccessible to persons at all times when the door is locked; 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





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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 (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. 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	(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; (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>
Part D4 Access for people with a disability – refer to separate Access Report (N/A)					
Section E Services and equipment					
Part E1 Fire fighting equipment					





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
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. (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 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 7, or 9 building may be served by a single fire hydrant located at the level of egress from that sole-occupancy unit provided the fire hydrant can provide coverage to the whole of the sole-occupancy unit. DTS Departure – Fire Hydrants A building that exceeds 500m² requires a hydrant system installed throughout. Further information is required to be provided to display compliance. The information is to be within hydraulic plans that include the location of all outlets, the tank, the pump system being installed in the pump room. If not independent to this building, then this is required to be addressed in a fire engineered solution. The details are required to demonstrate compliance with AS2419.1-2021. The CC plans are to be developed to demonstrate that the hydrant booster is located not less than 10 m from high voltage electrical equipment, EV charging stations, dangerous good, external combustible storage in accordance with Clause 7.3.3(d) of AS 2419.1-2021. The CC plans are to be developed to demonstrate that the hydrant booster is located not less than 3 m from the vent terminal of any gas assembly or gas measurement system or discharge outlet of any building exhaust system operating in fire mode in accordance with Clause 7.3.3(e) & (f) of AS 2419.1-2021. Buildings that are 50m plus require a minimum of two independent fire hydrant riser systems in separate stairwells. In addition, the Booster Assembly is not shown and therefore not within eyesight of the main pedestrian entrance. As a result, this is required to be addressed through a Fire Engineered Solution. Fire safety practitioner to fully develop designs in accordance with AS 2419.1-2021 and the Fire Engineer address any DTS departures 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.
E1D3 Fire hose reels				X	(1) E1D3 does not apply to— (a) a Class 2, 3 building.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
[2019: E1.4]					(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 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. (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. Further Information Required – Hose Reel Locations Hose reels are required to be supplied any non-class 2 portion of this development (namely, the carpark basement level, storage areas, office and retail areas). Locations of the Hose Reels are required to be shown displaying adequate coverage throughout the area and not being permitted to pass through any doorways to maintain coverage to the required areas. Further information is required to confirm compliance with the DTS



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					provisions and AS2441-2005. Fire service / hydraulic plans are required to demonstrate compliance. 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.
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. Compliance Required - Sprinkler System The building is required to be fitted with a sprinkler system in accordance with AS2118.1-2017 (as advised by the designer) due to the building being 4 storeys or more. The design of the sprinkler system will be required to be supplied at the Construction Certificate stage. Provide the location of the sprinkler valve room to confirm compliance with Specification 17. 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.
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; Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
E1D8 Where sprinklers are required: Class 6 building				X	In a Class 6 building, sprinklers are required in fire compartments where either of the following apply: (a) A floor area of more than 3 500 m². (b) A volume of more than 21 000 m³.



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
[2019: Table E1.5]					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
E1D11 Where sprinklers are required: Class 9b buildings [2019: Table E1.5]				X	(1) In a Class 9b building, other than an early childhood centre, see Part I1. must be incorporated into the construction certificate plans / specification
E1D12 Where sprinklers are required: additional requirements [2019: Table E1.5]				X	(1) For sprinkler requirements for atriums, see Part G3. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
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, provided— (i) to serve the whole Class 2, 3 or 5 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 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 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.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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). (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. (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 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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
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, or 9 building with a total floor area of more than 18 000 m² Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
E1D16 Fire precautions during construction [2019: E1.9]				X	In a building under construction— (a) not less than one fire extinguisher to suit Class A, B and C fires and electrical fires must be provided at 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





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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.</u> Compliance Required – Ion Battery and Charging Stations Special hazards are required to be considered in the construction and design of the building to ensure Special Hazards are considered to meet the performance requirements of the BCA. With new technology such as Ion battery charging stations in carparks, this is to be considered by the Fire Engineer, and if necessary, adopted into the FER should these charging stations be installed within the development.
Part E2 Smoke hazard management					
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— (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





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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 (ii) more than 2 below ground storeys, not counted in the rise in storeys in accordance with C2D3; 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. (3) An automatic air pressurisation system for a fire-isolated exit must serve the entire exit. Compliance Required – Stair Pressurisation 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. <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				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, in a building which is more than 25 m in effective height. Further Information Required – Smoke Alarms and Smoke Detection



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
[2019: Table E2.2a]					Class 2 buildings are required to be fitted with a smoke detection system to common areas (including all other parts of the building) to AS1670.1-2018. Internals to sole-occupancy units require a smoke alarm system installed to AS3786-2014. Full details are required to be supplied on application for a Construction Certificate. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
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, 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, 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, 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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
E2D13 Basements (other than Class 7a buildings) [2019: Table E2.2a]				X	(1) A basement, other than a Class 7a basement, not counted in the rise in storeys in accordance with C2D3, must— (a) comply with measures in accordance with this Part applicable to the building generally; and (b) where the basement has a total floor area of more than 2000 m² be provided with— (i) if not more than 2 below ground storeys— (A) a zone pressurisation system between vertically separated fire compartments in accordance with AS 1668.1, if the basement has more than one fire compartment; or (B) an automatic smoke detection and alarm system complying with Specification 20; or (C) a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17; or (ii) if more than 2 below ground storeys, a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17. (2) 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.



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 E2D16 Class 9b – assembly buildings: all [2019: NSW Table E2.2b]				X	The following provisions apply to all Class 9b assembly buildings: (a) A building or part of a building used as an assembly building must be provided with automatic shutdown of any air-handling system (other than non-ducted individual room units with a capacity not more than 1000 L/s and miscellaneous exhaust air systems installed in accordance with Sections 5 and 6 of AS 1668.1) which does not form part of the smoke hazard management system, on the activation of— (i) smoke detectors installed complying with S20C6; and (ii) any other installed fire detection and alarm system, including a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17. (b) A basement not counted in the rise in storeys in accordance with C2D3, less than 2000 m² used as an assembly building or part of an assembly building containing an auditorium or other public area, must be equipped with— (i) an automatic smoke detection system in accordance with Specification 20; or (ii) an automatic zone pressurisation system in accordance with AS 1668.1 if the basement has more than one fire compartment; or if the basement forms part of a multi fire compartmented building served by the zone pressurisation system; or (ii) 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
NSW E2D17 Class 9b – assembly buildings: night clubs, discotheques and the like [2019: NSW Table E2.2b]				X	A building or part of a building being a night club, discotheque or the like, must be provided with— (a) in an auditorium— (i) an automatic smoke exhaust system complying with Specification 21; or (ii) 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 (iii) a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17 with fast response sprinkler heads; and (b) in all other areas— (i) where a building or part of a building has a floor area not more than 2000 m²— (A) one of the smoke hazard management measures listed under (a) above; or (B) an automatic smoke detection and alarm system complying with Specification 20; or (ii) where a building or part of a building has a floor area of more than 2000 m², smoke hazard management measures as provided for under NSW E2D19.





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 E2D18 Class 9b – assembly buildings: exhibition halls, museums and art galleries [2019: NSW Table E2.2b]		X			A building or part of a building used as an exhibition hall, museum, art gallery or the like, must be provided with— (a) where the floor area is more than 2000 m² and not more than 3500 m²— (i) an automatic smoke exhaust system complying with Specification 21; or (ii) 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 (iii) a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17; and (b) where the floor area is more than 3500 m², a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17 and— (i) an automatic smoke exhaust system complying with Specification 21; or (ii) 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. Further Information Required – Class 9b Portions Auto Shut-down (Artist Community Space and Bath house) Class 9b portions of the building are required to have their mechanical ventilation systems installed to shut-down on an automatic fire trip associated with the sprinkler or smoke detection system. Full details are required to be supplied on application for a Construction Certificate. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
NSW E2D19 Class 9b – assembly buildings: other assembly buildings (not listed in NSW E2D16 to E2D18) [2019: NSW Table E2.2b]				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 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.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
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 Deemed-to-Satisfy Provisions [2019: E3.0]			X		(1) Where a <i>Deemed-to-Satisfy Solution</i> is proposed, <i>Performance Requirements</i> E3P1 to E3P4 are satisfied by complying with— (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				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.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
[2019: E3.3]					(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. Further Information Required – Emergency Lifts Emergency Lifts are required to be installed in accordance with this clause. Full details are required to be supplied by a vertical transport consultant on application for a Construction Certificate. 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





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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
E3D9 Fire service controls [2019: E3.7]				X	Where lifts serve any storey above an effective height of 12 m, the following must be provided: (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
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





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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. (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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
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





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>

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

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, 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 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—
---	--	--	--	---	---





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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 (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
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—





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
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.
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					
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; or (e) for a Class 9a health-care building used as a residential care building: AS 2118.4 as applicable; or (f) for a Class 2, 3 or 9c building: AS 2118.4 as applicable. 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
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. DTS Departure – Clear Identification of Sprinkler Valve Room Required The sprinkler valve room is required to be accessed directly from a road or open space in accordance with S17C6. Currently, it is not clear as to the location of the sprinkler valve room. Should it be confirmed the location of the sprinkler valve room is not directly accessible from the road or open space, then a performance-based Fire Engineered solution will be required to be obtained. 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



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
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 [2019: Spec E1.5: 9]				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. 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 car parks [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
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
Specification 19 Fire control centres					
S19C3				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



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
Purpose and content of fire control centre [2019: Spec E1.8: 2]					(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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
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. Further Information Required – Fire Control Centre No fire control centre has been detailed on the plans. Full details of the FIP and fire control centre are to be supplied on application for a Construction Certificate. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S19C5 Equipment not permitted within a fire control centre [2019: Spec E1.8: 4]				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. 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.





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
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
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—





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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 [2019: Spec E1.8: 10]				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 (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				X	The external face of the door to the fire control room must have a sign with the words— FIRE CONTROL ROOM





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
[2019: Spec E1.8: 11]					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					
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— (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. (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 (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, 9b buildings — a smoke detection system complying with S20C4 Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
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.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(2) In a Class 2 or 3 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— (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 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. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
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. (2) In a Class 2 or 3 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





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(ii) subject to (b), in public corridors and other internal public spaces. (b) In a Class 2 or 3 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. 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 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 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. 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





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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 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 (b) in a Class 2 and 3 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. 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					
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.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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 Smoke exhaust fan and vent location [2019: Spec E2.2b: 5]				X	Smoke exhaust fans and vents must be located— (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





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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. (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				X	A smoke detection system must be installed in accordance with Specification 20 to activate the smoke exhaust system.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
[2019: Spec E2.2b: 8]					Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
Specification 23 Residential fire safety					
S23C3 General requirements [2019: Spec 2.2d: 2(a)]				X	(1) The installation of a residential local fire alarm system must consist of a system of smoke alarms powered either— (a) directly from the low voltage supply mains; or (b) from an extra-low voltage power source originating at a local fire indicator panel with a battery back-up facility. (2) A smoke detector complying with AS 1670.1 Clause 2.1.2(a)(ii), (xi) or (xv) may be substituted for a smoke alarm, provided an audible alarm device is associated with each detector. (3) The sound pressure level provided by a warning device must be equivalent to that required in Clause 3.22 of AS 1670.1, except that the sound pressure level need not be measured inside a sole-occupancy unit, provided that a level of not less than 85 dB(A) is attained at the access door to the unit. (4) The alarm system must be wired for low voltage or extra-low voltage wiring. (5) The system must be designed so— (a) an audible alarm is given in the area in which the smoke alarm activates; and (b) visible and audible indication of an alarm is provided at the local fire indicator panel; and (c) an audible alarm is given in any area (including sleeping quarters and staff outbuildings) set aside for staff use. (6) The maximum number of smoke alarms on any one alarm zone must— (a) be determined by the maximum current output rating of the system source; and (b) not exceed 10. (7) Each alarm zone must be located around a single central access passageway, corridor or similar thoroughfare, to enable staff to readily identify the source of the alarm. (8) Where the smoke alarm is functionally dependent on an external power source— (a) an audible fault signal must sound at the local fire indicator panel if that power source fails; and (b) the local fire indicator panel must be permanently connected to a reliable 240 V separate low voltage final subcircuit; and (c) source power must be protected by a separate circuit breaker, or fuse, supplied from the live side of the main switch. (9) The smoke alarm system is not required to be connected to a fire alarm monitoring system (refer to S18C3(2)(c)). Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S23C4 Local fire indicator panel [2019: Spec 2.2d: 2(b)]				X	(1) The local fire indicator panel must be located in a central area, such as a reception area, so that it is readily accessible by staff at all times. (2) The local fire indicator panel must be fixed wired. (3) The local fire indicator panel must incorporate the following:





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(a) A suitable mains power supply with battery back-up (capable of operating the system for 12hours) for the local fire indicator panel and extra-low voltage smoke alarms supplied directly from the local fire indicator panel. (b) Terminals for input signal conductors from the smoke alarm and residential sprinkler system and, if the signal source is from a low voltage smoke alarm, external isolation must be provided. (c) Visible indication of the alarm zone in which the actuating device is located. (d) Automatic audible and visible indication of the following faults: (i) A break in the wiring of any circuit between smoke alarms or sprinkler alarm switch and the local fire indicator panel. (ii) Low battery condition. (e) Automatic visible indication of mains power failure. (f) Initiation of any ancillary control facilities such as smoke door release or air-conditioning shut- down. (g) Local operation of individual smoke alarms, in the event of alarm zone isolation at the local fire indicator panel. (4) If the local fire indicator panel is also used for other non-fire related purposes such as security, then these functions— (a) must be on separate and distinct circuits; and (b) when disabled or isolated, must not interfere with the operation of fire alarm circuitry. (5) The local fire indicator panel must comply with AS 1670.1. (6) The local fire indicator panel must have the capacity to incorporate heat detectors deemed suitable in accordance with AS 1670.1 on either the same or separate alarm zones as the smoke alarms. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
S23C5 Smoke alarms [2019: Spec E2.2d: 2(c)]				X	(1) Extra-low voltage smoke alarms must be compatible with the local fire indicator panel. (2) Low voltage smoke alarms must be configured to send an output alarm signal to the local fire indicator panel. (3) Unless there is internal isolation of the signal output conductors, they must at all times be treated as low voltage conductors. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
S23C6 Signal isolation interface units [2019: Spec E2.2d: 2(d)]				X	(1) Signal isolation interface units must isolate any low voltage connected to the smoke alarms from the local fire indicator panel. (2) Signal isolation interface units must be certified by an Accredited Testing Laboratory as compatible with the specific types of smoke alarms used in the system. (3) Signal isolation interface units must be accepted by the electricity supply authority. (4) Units must be marked in a clearly visible location, with letters greater than or equal to 35 mm containing the following information: SMOKE ALARM SIGNAL ISOLATION UNIT WARNING – 240 V Isolate power supply before removing cover



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
S23C7 Wiring [2019: Spec E2.2d: 2(e)]				X	(1) Smoke alarms and associated equipment must be fixed wired for low voltage or extra-low voltage wiring systems, as applicable. (2) All extra-low voltage wiring must be red sheathed 0.6/1 kV stranded, with conductors having a cross sectional area of not less than 0.75 mm². (3) Clear and concise “as-installed” single line drawings to a suitable scale, showing rooms, external and internal walls, fixed partitions, doorways etc., are to be provided for each installation at the local fire indicator panel. (4) Drawings must also include the actual location of fire alarms, smoke alarms, sprinkler flow switches (where installed), alarm connection points and local fire indicator panel, to enable easy identification of alarm system elements and their relationship to the building layout. (5) Symbols used in the drawings referred to in (4) must be as shown in Figures S23C7a to S23C7f. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S23C8 Connection to monitoring service [2019: Spec E2.2d: 3(a)]				X	(1) Connection of a residential sprinkler system to a fire station or other approved monitoring service must be via a sprinkler alarm switch, connected to alarm signalling equipment. (2) The connection from the alarm signalling equipment must be in accordance with AS 1670.3. (3) The alarm signalling equipment must be installed— (a) in a secure, accessible position; and (b) in a weatherproof housing, if located externally; and (c) not more than 500 mm from the system flow switch. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
S23C9 Indication at the fire indicator panel [2019: Spec E2.2d: 3(b)]				X	The fire signal from the alarm signalling equipment must be mimicked by an audible and visible signal at the fire indicator panel. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
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



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(b) which is located directly above ground.
F1D3 Stormwater Drainage [2019: F1.1]				X	Stormwater drainage must be designed and constructed in accordance with AS/NZS 3500.3. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
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. Further Information Required – External Waterproofing The roof, balconies, podiums, planter boxes, are required to be provided with a waterproofing membrane in accordance with AS 4654.1 & .2. AED recommend that a waterproofing specialist is engaged to provide specifications for compliance to be achieved, subsequently, the architect must develop the CC plans to demonstrate how compliance will be achieved. Set-downs to external wet areas are to be coordinated with the architect, structural engineer and façade engineer in accordance with Appendix A of AS 4654.2-2012. The wind class of the building will determine the minimum set-downs required to external wet areas for a compliant waterproofing membrane to be installed. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
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. 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
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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
Part F2 Wet areas and overflow protection					
F2D2 Wet area construction [2019: F1.7(a) and (b)]		X			(1) In a Class 2 and 3 building, building elements in wet areas must— (a) be water resistant or waterproof in accordance with Specification 26; and (b) comply with AS 3740. (2) In a Class 7, 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. Further Information Required – Wet Areas Membrane The internal wet areas are required to be provided with a waterproofing membrane in accordance with this clause and AS 3740-2021. AED recommend that a waterproofing specialist is engaged to provide specifications for compliance to be achieved, subsequently, the architect must develop the CC plans to demonstrate how compliance will be achieved. 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—





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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, 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					
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.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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. (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 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					
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.





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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 (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. 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]		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 F4D4l, as appropriate. (2) In Tables F4D4a to F4D4l— (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



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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 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. DTS Departure – Number of Sanitary Facilities The communal and class 3 areas are required to have facility numbers in accordance with F4D4. The final use of each area is required to determine facility numbers. Currently, there is inadequate numbers of facilities the occupants based on the floor area being of the Class 9b portions of the building. Provide details of facilities numbers on application for a Construction Certificate. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F4D8 Construction of sanitary compartments [2019: F2.5]				X	(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. 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.
Part F5 Room heights					
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—



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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 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. (5) The height of rooms and other spaces in a Class 9b building must be not less than— (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. (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. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
Part F6 Light and Ventilation					
F6D2 Provision of natural light [2019: F4.1]				X	Natural light must be provided in: (a) A Class 2 building — to all habitable rooms. (b) A Class 3 building — to all bedrooms and dormitories. <i>Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification</i>
F6D3 Methods and extent of natural light		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





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
[2019: F4.2]					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) in a Class 2, 3 or 9 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 (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. Further Information Required – Natural Light from Potential Road/pedestrian Boundaries Natural Light is required to all habitable rooms. 50% of the square root of the height of the highest sill to boundaries is required to be achieved from boundaries. If registered roads or pathways are proposed, this will be achieved, however, it's vital to confirm if these roads or pedestrian links will be registered to ensure that the natural light can come from this source without being obstructed into the future. Confirmation is required on application for a Construction Certificate. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
F6D4 Natural light borrowed from adjoining room [2019: F4.3]				X	(1) Natural light to a room in a Class 2 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— (A) have an aggregate light transmitting area of not less than 3% of the combined floor areas of both rooms; and





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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— (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, 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— (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.





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
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— (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, 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— (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, 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





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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 – if applicable.
Part F7 Sound transmission and insulation					
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. 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 (3) For the purposes of this Part, discontinuous construction means a wall having a minimum 20 mm cavity between 2 separate leaves, and—



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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. (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. (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

BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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.
F8D3 External wall construction [2019: F6.2]				X	(1) Where a pliable building membrane is installed in an external wall, it must— (a) comply with AS 4200.1; and (b) be installed in accordance with AS 4200.2; and (c) be located on the exterior side of the primary insulation layer of wall assemblies that form the external envelope of a building. (2) Where a pliable building membrane, sarking-type material or insulation layer is installed on the exterior side of the primary insulation layer of an external wall it 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.



BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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 (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
Section G Ancillary Provisions					
Part G1 Minor structures and components					
NSW G1D2 Swimming pools [2019: G1.1]		X			Further Information Required – Swimming Pool Barrier Details including the location of the swimming pool barrier is required to determine compliance (in the bathhouse).
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—





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
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. 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	The installation of a stove, heater or similar appliance in a building must comply with: (a) Domestic solid-fuel burning appliances — installation: AS/NZS 2918. (b) For boilers and pressure vessels: Specification 30. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
G2D3 Open fireplaces [2019: G2.3]				X	An open fireplace, or solid-fuel burning appliance in which the fuel-burning compartment is not enclosed must have— (a) a hearth constructed of stone, concrete, masonry or similar non-combustible material so that— (i) it extends not less than 300 mm beyond the front of the fireplace opening and not less than 150 mm beyond each side of that opening; and (ii) it extends beyond the limits of the fireplace or appliance not less than 300 mm if the fireplace or appliance is free-standing from any wall of the room; and (iii) its upper surface does not slope away from the grate or appliance; and (iv) combustible material situated below or around the external edge of the hearth but not below that part required to extend beyond the fireplace opening or the limits of the fireplace is not less than 150 mm from the upper surface of the hearth; and





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(b) walls forming the sides and back of the fireplace up to not less than 300 mm above the underside of the arch or lintel which— (i) are constructed in 2 separate leaves of solid masonry with a total combined thickness not less than 180 mm, excluding any cavity; and (ii) do not consist of concrete block masonry in the construction of the inner leaf; and (c) walls of the chimney above the level referred to in (b)— (i) constructed of masonry units with a net volume, excluding cored and similar holes, not less than 75% of their gross volume, measured on the overall rectangular shape of the units, and with an actual thickness of not less than 100 mm; and (ii) lined internally to a thickness of not less than 12 mm with rendering consisting of 1 part cement, 3 parts lime, and 10 parts sand by volume, or other suitable material; and (d) suitable damp-proof courses or flashings to maintain weatherproofing. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
G2D4 Incinerator rooms [2019: G2.4]				X	(1) If an incinerator is installed in a building, any hopper giving access to a charging chute must be— (a) non-combustible; and (b) gas-tight when closed; and (c) designed to return to the closed position after use; and (d) not attached to a chute that connects directly to a flue unless the hopper is located in the open air; and (e) not located in a required exit. (2) A room containing an incinerator must be separated from other parts of the building by construction with an FRL of not less than 60/60/60. Details demonstrating compliance with this clause must be incorporated into the construction certificate plans / specification
Part G6 Occupiable outdoor areas					
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; 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:





BCA DEEMED-TO-SATISFY PROVISION	COMPLIES	DOES NOT COMPLY	NA or Informational	Compliance Required	COMMENTS
					(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 signs and warning systems [2019: G6.8]				X	For the purposes of the Deemed-to-Satisfy Provisions of Part E4, 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
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
Section J Energy Efficiency - Refer to Separate Consultant Report					



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 Parcel 4.

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, Performance 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.



Mark Nicholson
Senior Associate
for AE&D



Trenton Jones
Director
for AE&D



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

