BCA REPORT 310 Terrigal Drive, Terrigal. NSW.

Building Code of Australia 2022. Vol. 1, Class 2-9 Buildings Deemed-to-Satisfy Assessment Pursuant to Section 19 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation, 2021.

Prepared for: Loftus Lane Capital Partners Pty Limited.
Project N° 23124
Prepared by: Rodger Dowsett.
Date: 24th September,2023.
Status: DA-Submission.



DOCUMENT CONTROL

Project No	23127
Project Name	310 Terrigal Drive, Terrigal.
Document Title	BCA Capability Report
Document Reference	V1.0
Issue Type	Draft

Revision	Date	Description	Issued to	Prepared by
*****	20th Sept, 2023.	BCA Capability	Mr P Thakur	Rodger
		Report-Client		Dowsett
		review.		
1.0	24th Sept, 2023	BCA Capability	Mr P Thakur	Rodger
		Report-Final		Dowsett

CONFIDENTIAL INFORMATION

The information in this document has been prepared for the intended recipient and the contents are confidential. The contents of this document are not to be reproduced, copied, and implemented in whole or in part without the prior written consent of National BCA

DISCLAIMER OF LIABILITY

The information contained in this document is provided under direction from the client and all contents have been prepared based on the information provided under this direction. Any third party reviewing the content of this document needs to make their own assessment on the appropriateness of the information contained within. National BCA make no assurance that the information meets the needs of a third party and as such accepts no liability for any loss or damage incurred by third parties whatsoever as a result of using the information.

The information in this document is the property of National BCA and shall be returned on demand. It is issued on the condition that, except with our written permission, it must not be reproduced, copied or communicated to any other party nor be used for any purpose other than that stated in particular enquiry, order or contract with which it is issued.

Table of Contents

1.	Limitations	3
2.	Introduction	4
3.	References	4
4.	Description of Proposed Work	5
5.	Building Characteristics	6
6.	BCA Requirements	7
7.	Fire Safety Measures	10
8	Conclusion	.12
	Appendix A	.13
	Appendix B	.38
	Appendix C	38

1. LIMITATIONS & EXCLUSIONS

The limitations and exclusion of this report are as follows: -

- 1.
- The buildings structural adequacy has not been considered; The design, maintenance or operation of fire safety measures listed in table 3 of the report; 2.
- Occupational Health and Safety Act Regulations; 3.
- 4. Workcover Authority requirements;
- Requirements of other agencies including but not limited to telecommunication providers, Water/Sewerage authority, Energy providers, State Govt. Agencies i.e., RMS or the local authority; The Disability Discrimination Act (DDA) other than the minimum requirements under the Disability (Access to Premises) 5.
- 6. Standards 2010;
- The terms or conditions of the Development Consent; and 7.
- The report although referring to Australian Standards adopted by the BCA, it does not detail the specific requirements of 8. those standards.

2. INTRODUCTION

Location and Description

The assessment comprises an appraisal under National Construction Code Series, Building Code of Australia 2022, Volume 1 (BCA) for development as required under Section 19 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation, 2021.

The report whilst assessing the development against the deemed to satisfy provisions of the code (BCA) also makes reference to a performance based "alternative "solutions where deemed appropriate.

The BCA Capability Report has been prepared by National BCA on behalf of Loftus Lane Capital Partners Pty Limited (the applicant) in support of a development application in concurrence with the planning proposal at 310 Terrigal Drive, Terrigal.

The applicant seeks consent for the construction of a nine-storey mixed-use development, comprising 50 residential apartments together with ground floor cafe and basement car parking for 89 vehicles.

3. REFERENCES

The following documentation was relied upon when preparing this report:

- Building Code of Australia 2022, Volume 1 (BCA).
- Environmental Planning and Assessment Act, 1979.
- Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation, 2021.
- Swimming Pools Regulation, 2018.
- Architects Plans prepared by CKDS Architects listed in the table under Appendix B.

3.1 Assumptions.

- 1. The finished ground level adjacent to the buildings external walls is in the vicinity of +3.20.
- 2. The slab at RL +5.80 is 600mm in thickness.
- 3. Basement levels B1, B2 and B3 although not level throughout their extent have been determined to be storeys but not counted in the building's Rise in Storeys.
- 4. The design and installation of the required sprinkler system is AS 2118.1-2017.
- 5. The cinema and gymnasium located on the "mezzanine" level are ancillary uses to the major Class 2 classification.

4. DESCRIPTION OF PROPOSED WORK.

The proposal is to construct a multi-level residential flat building nine (9) storeys in height over a three (3) level basement carpark on land 331 Terrigal Drive, Terrigal.

The land is registered in Torrens Title as Lot 27 in DP 1223375 otherwise known as the allotment.

The allotment upon which the building is to be erected is irregular in configuration with a secondary road frontage to Charles Kay Drive.

Vehicular access to the allotment is from the secondary road.

The structural elements of the building are deemed non-combustible.

Similarly, facade covering are non-combustible.

5. BUILDING CHARACTERISTICS.

The below table (table 1) is an assessment of the building's primary characteristics in its overall assessment under the relevant provisions of the BCA

Classification of Building or Part:	Basement carpark
	Class 7a
	Ground Floor/Mezzanine level
	Class 2-Residential apartments
	Class 6-Cafe
	Class 7a Vehicle access to basement level
	Mezzanine level
	Place of assembly-Class 9b
	Swimming Pool/Spa pool-Class10b
	Levels 1-7
	Class 2-Residential apartments
Rise in Storeys:	9 storeys
Storeys contained:	12 storeys
No. of basement levels:	Three
Type of Construction required:	Туре А
Floor Area:	Not relevant to Class 2 part
Volume/Floor area limitation:	Calculations indicate the Class 7a, 6 and 9b parts are within the floor area/ volume limitations of Table C3D3 for the building to meet the requirements of Specification 5
Effective Height:	More than 25.0m

Table 1.

5.1 Fire Source Features (FSF)

The fire source features that relate to the development are outlined as follows: -

- North FSF-----far boundary line of the road reserve of Terrigal Drive(FSF-01)
- East FSF----- side boundary line of the allotment (FSF-02);
- West FSF-----far boundary line of the road reserve of Charles Kay Drive(FSF-03); and
- South FSF--- rear boundary line of the allotment(FSF-04).

Fire Source Feature is defined under Schedule 1 of the Building Code of Australia.

The buildings exposure to the Fire Source Features is calculated as follows;

- FSF-01 >9.0m
- FSF-02 >9.0m
- FSF-03 >9.0m
- FSF-04 >9.0m

6. BCA REQUIREMENTS (refer to Appendix A for clause-by-clause comments)

6.1 The below table represents a summary of the development's initial assessment noting that the building's Effective Height is calculated at more than 25m (actual 25.6m).

SECTION AGoverning Requirements		
SECTION B- STRUCTURE		
Part B1	Structural Provisions	The building's structural design together with its structural elements, components and required fire resistance levels are to be undertaken by a professional engineer.
SECTIO	N C – FIRE RESISTANCE	
Part C2 - Fire Hazard Properties and Fire-Resistant Construction		
Clause	Description	Comments
C2D2	Type of construction required	The building is required to be of Type A construction.
		Refer to Appendix C
C2D10	Non-combustible building elements	External walls and facade attachments, ancillary structures are required to be non- combustible.
C2D11- NSW	Fire hazard properties—NSW provisions	Fire hazard properties of floor linings, floor coverings, wall linings, ceiling linings, air handling ductwork, lift cars, sarking

		membranes must comply with Specification 7 and NSW variations.	
Part C3 - Compartmentation and separation			
C3D11	Separation of lift shafts-Emergency lifts	Refer to Appendix A	
C3D13	Separation of equipment-parking level	Rooms of fire-resistant construction are required to separate service equipment from the remainder der of the building. Service equipment includes-	
		a)On-site Pumps-Hydrants/Sprinkler valves;	
		b) The Main Switch Room.	
		c) Substations.	
		The separating construction is required to have an FRL of 120/120/120, access doorways to these rooms are to be protected by a self-closing -/120/30 fire doors that comply with AS 1905.1-2015.	
Part C4	- Protection of openings		
C4D9	Doorways to fire isolated exits	Entry doorways are to be protected by self- closing -60/30 fire doors	
C4D11	Openings in fire isolated lift shafts	Lift landing doors are required to comply with AS 1735.11-1986 and a have an FRL of -/60/-	
C4D12 NSW	Bounding Construction-Entry doorway to SOUs	Entry doorways are to be protected by self- closing -60/30 fire doors	
C4D13	Openings for service installations Floors and ceilings	Opening for service penetrations not protected by fire rated shafts must comply with this clause and Specification 5	
C4D15	Openings for service installations- Electrical, plumbing, telecommunications	1. Penetration through elements that require an FRL are to be protected with assemblies tested in accordance with AS 4072.1-2005 and AS 1530.4-2014.	
		2. Air handing systems-AS1668.1-2015	
SECTION D			
Part D2	Part D2 – Provision for escape		
D2D3	Number of Exits Required	Performance solution required	
D2D5	Exit travel distances	Performance solution required	
D2D6	Distance between alternative exits	Performance solution required	
Part D3- Construction of exits			

D3D8	Installations in exits and paths of travel	Access to service shafts and services other than allowed by this clause are permitted within the fire stair or fire passageway. Openings of chutes and ducts and gas and other services are not permitted to be installed in a required exit or in the passageway to a required exit except as permitted by this clause.
D3D14	Stairway Construction	All stairway geometry to comply with table D3D14 and the slip resistance requirements for treads and or nosings
D3D17	Balustrades/barriers	Balustrades/barriers complying with this clause will be required for stairs/ balconies/stairwell voids and other areas where the level above the surface beneath is more than 1.0m.
D3D26	Operation of latch	Doors in required exits (fire isolated stairways) or doors in the path of travel (basement levels/ lobbies/rooms/cafe in common usage etc.) must be readily openable by a single handed downward or push action on a single device which is located between 900 mm and 1200 mm from the floor.
		As the building is required to be accessible, door furniture/hardware must be suitable for persons who cannot grip
D3D29	Protection of openable windows- Mezzanine level and above	Openable windows to the class 2 (SOU'S) must comply with the provisions of this clause.
		If limiters are proposed, natural ventilation to habitable rooms must also be considered.
Part D4 - Access for people with a disability standard and the BCA		
Refer to Access Report		
SECTIO	NE	
Part E1 -	- Fire-fighting equipment	
E1D2	Fire hydrants	The building requires fire hydrant system designed to AS 2419.1-2021
E1D3	Fire hose reels	Required in the basement level and located within 4m of the exit doorways.
E1D5	Sprinklers	The building requires sprinkler protection
E1D14	Portable Fire Extinguishers	Portable fire extinguishers required.
E1D15	Fire control centre (FCC)	Location of FCC may require a Performance Solution
Part E2 -	- Smoke Hazard Management	
E2D4	Fire isolated exits	Air pressurization is required in accordance with AS 1668.1-2015

E2D8	Smoke hazard management	The whole of the building requires the installation throughout of an automatic fire detection and alarm system complying with Specification 20.as well as;
		 A Building Occupant Warning System (BOWS), The carpark level: the system of mechanical ventilation to comply with AS 1668.2-2012 and also comply with clause 5.5 of AS 1668.1-2015 to the exception of- (a) Fans with metal blades suitable for operation at normal temperatures may be used; and (b) The electrical power and control cabling need not be fire rated.
Part E3	Lift installations	Emergency lifts required
Part E4	Visibility in an Emergency, Exits Signs and Warning Systems	Exit signs and emergency lighting to comply with AS 2293.1-2018.
	Emergency warning and intercommunication system	EWIS required in accordance with AS 1670.4-2018

Table 2

.

7. REQUIRED FIRE SAFETY MEASURES.

The certifying authority on issue of a compliance certificate (construction certificate) is obligated under the provisions of section 78 of the E P&A (Development Certification and Fire safety) Regulation, 2021, to attach to the certificate, a schedule of fire safety measures that are required to be implemented in the building premises.

A fire safety schedule of a kind that can be expected is drafted below.

Item No.	Essential fire and other safety measures	Standard of performance
1	Access panels, doors and hoppers to fire resisting shafts	NCC C4D13
2	Automatic fire detection and alarm system.	NCC E2D5, Specification 20 and AS 1670.1-2018,A1
3	Automatic fire suppressions systems	NCC Clause E1D5, Specification 17 and AS 2118.1-2017
4	Building occupant warning system (BOWS)	NCC S17C8, S20C7 and AS 1670.1- 2018 A1

Fire Safety Schedule V1.0

5	Emergency lifts	NCC E3D5
6	Emergency lighting	NCC E4D2 AS 2293.1-2018
7	Emergency warning and intercommunication system	NCC E4D9 and AS1670.4-2018
8	Exit signs.	NCC E4D5, NSW E4D6 and AS 2293.1-2018
9	Fire control centre	NCC D1D15 and Specification 19
10	Fire alarm communication link	NCC S23C8 and AS 1670.3-2018. A1
11	Fire seals protecting openings in fire resisting components of the building	NCC C4D15 and AS 4072.1-2005 and AS 1530.4-2014
12	Fire doors.	NCC Clauses C3D13 (3), C3D14 (2), C4D9, NSW C4D12 (4) (a) and AS 1905.1-2015.
13	Fire hydrants	NCC E1D2 and AS 2419.1 -2021
14	Fire hose reel systems	NCC E1D3 and AS 2441-2005
15	Lift access doors	NCC C4D11 and AS 1735.11-1986
16	Light weight construction	NCC C2D19 and Specification 6
17	Mechanical air handling systems- Basement/parking levels.	NCC E2D12 and clause 5.5 of AS 1668.1-2015.
18	Mechanical air handling systems-Exits: Automatic air pressurisation systems	NCC E2D4 and AS 1668.1-2015
19	Portable fire extinguishers	NCC E1D14and AS 2444-2001
20	Smoke alarms and heat alarms	NCC S20C3 and AS 3786-2014
21	Smoke detectors and heat detectors	NCC S20C3 and AS 1670.1 -2018. A1
22	Stand by power systems	NCC E1D2 and Specification 17
23	Warning and operational signs.	NCC D3D28,E3D4,D4D7(1)(a)(ii) and section 108 of the EP & A (Development Certification and Fire Safety) Reg, 2021
		Part 3,Section 10 of the Swimming Pools Regulation 2018

Table 3.

8. CONCLUSION

The report is based on the available drawings as listed in Appendix B; drawings endorsed *Development Application-Preliminary*

The design of the development has taken into consideration relevant aspects of the Building Code of Australia to the extent that at the compliance certificate stage the certifier should be in a position to deem the design as detailed in the drawings consistent with the development consent, assuming that the consent does not require significant design modification.

The building solution for the development as determined by the assessment at Appendix A will involve a combination of deemed -to-satisfy provisions and performance-based assessment, neither of which impact on the buildings external design or require consent modification.

Therefore, the report should be revised and updated following the preparation of plans and specifications for construction certificate issue.

Rodger Dowsett

Graduate Dip. Building Surveying & Assessment UTS Masters Deg. Applied Science – Fire Safety Design UWS Masters Deg. Building Surveying UWS.

BCA Consultant

APPENDIX A—Class 2/6/7a Assessment.

Building Code of Australia.

Deemed -to-Satisfy Assessment.

Project Address: 310 Terrigal Drive, Terrrigal. NSW. File Reference: 23127 Date: 24th September, 2023 BCA Edition: Volume 1---2022 Edition.

Building occupancy	Determination
	Residential use.
	Class 2
ClassificationPart A6	Associated uses
	Carpark-Class 7a. Place of assembly- Class 9b.
	Other uses.
	Café-Class 6
Number of levels—Rise in storeys.	Nine (9) storeys
Construction Type	Construction Type A
Allotment details	Lot 27 in DP1223375

BCA Clause by Clause comments of deemed to satisfy provisions.

Note: 1. NA denotes that the clause is not applicable to the development.

- 2. CC denotes Compliance/Construction Certificate.
- 3. FRL Fire resistance level.
- 4. SOU means Sole Occupancy Unit or apartment with the buildings Class 2 part.
- 5. EH means Effective height as defined under Schedule 1.

PART/CLAUS E	REFERENCE	COMMENT
SECTION A – GENERAL PROVISIONS		
Part A4	Reference documents	NA
Part A5	Documentation of design and construction	NA
A6G3	Building classification	
	 Self-contained residential accommodation- (apartments) 	Class 2
NSW A6G7	Building classifications	Class 6
	Cafe	
A6G8	Building classification.	Class 7a
	Parking levels	
A6G8	Building classification	Class 7bRefer to A6G1 below
	Storage –basement level	
A6G10	Building classification	Class 9b.
	Gymnasium and theatre (cinema)	Note 1.
A6G11	Building classifications	Class 10b
	Swimming pool/Spa pool	Note 1.
A6G1	Exemption	Exemption 1 exercised in respect of-
		1. The Class 7b parts (notated on plan a storage) as they occur within the 'split' basement levels B1, B2 and B3 and
		2. The Class 7b part (notated on plan as <i>waste</i>) as the room occurs within the space of the ground floor level.
Note 1. These parts of the building are ancillary in use to the major Class 2 use.		
SECTION B		
PASRT B1 ST	RUCTURAL PROVISIONS	
B1D1	Deemed to Satisfy provisions	Informational.
B1D2	Structural Provisions-Resistance	Structural Engineers design and specification.
		Notes: Structural engineer must be a Professional engineer as defined under Schedule 1Definitions

B1D3	Determination of individual actions	Structural Engineers design and specification and certification including AS 1170 parts 1, 2 and 4
B1D4	Determination of structural resistance of materials and forms of construction.	The following Australian Standards in addition to the above standards are relevant to specified elements of the project: -
		AS 2047-2014: Glazing
		AS1288-2021; Glass used in buildings
		AS 1170 Series-2002
		AS 1170 Part 1-2002
		AS 1170 Part 2-2021
		AS 1170 Part 4-2007
		AS 3700- 2018; Masonry;
		AS 3600-2018; Concrete;
		AS 4100-2020; Steel.
		AS 2159-2009; Piling (if applicable).
		Refer also to D3D3
B1D4(i)	Termite management	NAAS3660.1-2014, the primary elements of the building's construction exclude elements that are susceptible to attack by subterranean termites.
B1D5	Structural software	Noted.
B1D6	Construction of buildings in flood hazard areas	The design of the building is to comply with ABCB Standard for Construction of Buildings in Flood Hazard Areas.
		Revisit following Development Consent
Specification 4	Design of buildings in cyclonic areas	NA
SECTION C - F	IRE RESISTANCE	
Part C2 - Fire re	esistance and stability	
	Application of Part DtS	Noted/informational
C2D2	Type of Construction required	Туре А
C2D3	Calculation of Rise in Storeys (RiS)	9 storeys.
		Note: RIS determination made at the finished ground level (RL+3.20)) and the ground floor level (RL +5.80) together with a slab thickness of 600mm
C2D4	Buildings of Multiple Classification	Type A construction applies throughout the building
C2D5	Mixed Types of Construction	NA
C2D6	Two Storey Class 2, 3 or 9c Buildings	NA
C2D7	Class 4 Parts of Buildings	NA
C2D8	Open Spectator Stands & Indoor Sports Stadiums	NA
C2D9	Lightweight Construction	Lightweight fire-resistant construction must comply with Specification 6.

C2D10	Non-combustible building elements	As the building is determined to be of Type A construction, the following non-combustible
		 External and common walls; Flooring and floor framing of lift pits; Non-loadbearing walls required to have an FRL; Non-loadbearing shaft walls. External attachments to the building i.e., cladding, privacy screening, shade devices, pergola type structures, panelling/cladding or 'feature' panelling.
C2D11-NSW	Fire Hazard Properties	Fire hazard properties of floor linings, floor coverings, wall linings, ceiling linings, air handling ductwork, insulation, sarking type materials, lift cars must comply with Specification 7 and where appropriate NSW Clause S7C7 Notes: The NSW variation relates to- Sarking materials; Insulation materials; Composite materials.
C2D12	Performance of External Walls in fire	NA
C2D13	Fire protected timber: Concession	NA
C2D14	Ancillary elements	Ancillary elements attached to external walls of the building are, unless otherwise exempted to be non-combustible.
C2D15	Fixing of bonded laminated cladding panels	The vertical cladding panels are to be detailed and described together with the method of fixing the cladding to the substrate or supporting frame.
PART C3 - FIRE	RESISTANCE	
C3D1	Deemed-to-Satisfy Provisions.	Noted/information
C3D2	Application of Part	The general limitations do not apply to the Class 7a part if the carpark is protected with a sprinkler system complying with Specification 17.
C3D3	General Floor Area and Volume Limitations	The buildings' Class 7a part and Class 6 part are both within the general floor area/volume limitations of Table C3D3.
C3D4	Large Isolated Buildings	NA
C3D5	Requirements for open space and vehicular access	NA
C3D6	Class 9 Buildings	NA
C3D7(2)(e)	Vertical separation of openings in external Walls	 NA if the building is protected by a sprinkler system complying with Specification 17. Vertical separation. Spandrels of min.900mm in height are to be of non-combustible construction and achieve an FRL of

		60/60/60600mm of the the intervening floor level.	spandrel is to be above
		 Horizontal separa 	tion.
		Horizontal or slab separat combustible construction the building's external wal 1100mm with 450mm late	ion is also to be of non – and project outwards from Ils by a min. distance of ral returns.
C3D8	Separation by fire walls	Fire walls are to be constr	ucted in accordance with-
		1. The FRLs prescribed by	y Specification 5,
		2. Extend from one floor le floor level next above, and	evel to the underside of the d
		3.Constructed from concre	ete or masonry.
C3D9	Separation of classifications in	Basement level	
	the same storey	The basement level conta	ins two classifiable parts
		Class 7a (carparking) and	Class 7b (storage)
		Exemption 1 under A6G1 Class 7a classification app compartment of B1, B2 ar	(1) applied to the extent the plies to the whole of the nd B3.
		Ground floor/mez	zanine level.
		The Class 6 part is to be s remainder of the building FRL criterion of 180minute	separated from the by a fire wall that has an es.
		The Class 7a part is to be remainder of the building FRL criterion of 120minute	separated from the by a fire wall that has an es.
		Note: Separation requiren the building elements in th the higher FRL prescribed	nents may be obviated if ne particular storey all have I by Specification 5.
C3D10	Separation of classifications in different storeys	The FRLs for floor const (lateral and vertical)const	truction and support struction are as follows-
		RL	FRL
		-200	120/-/-
		+5.800	120/120/120
		+9.000	180/180/180
		+9.000 within Class 2 SOUs	Refer to S5C12
		+9.000 remainder	120/120/120
		+12.200 above the Class 6 part	180/180/180
		+12.200 above the Class 2 parts 90/90/90	90/90/90
		+12.200 remainder	120/120/120
		+15.400 to +28.200	90/90/90
		+34.500	90/90/90.

		Refer to S5C8 below
C3D11	Separation of lift shafts	Lift shafts are required to have the following FRLs-
		Up to RL+12.200FRL 120/120/120
		Above RL +12.200FRL 120/120/120
C3D12	Stairways and lifts in One shaft	NA
C3D13	Separation of equipment	The building to incorporates a room onsite for fire pumps and sprinkler control equipment.
		Notes:
		Separation requirements are to comply with AS 2419.1-2021
C3D14	Electricity supply system	Substation. There is no indication of the plans of a substation being incorporated in the building or on the development site. Room—MSB
		The MSB room has not been detailed on the plans. If the room is to sustain emergency equipment required to operate in emergency mode the room is to be separated from the remainder of the building by- a) construction that archives an FRL of 120/120/120; b) the access doorway to the room is to be protected by a self-closing fire door that has an FRL of -/120/30.
		 Emergency equipment includes- Emergency lifts. Fire hydrant pumps. Pumps for the sprinkler system. Pumps for fire hose reels. Control and indicating equipment EWIS.
C3D15	Public corridors in Class 2 & 3 buildings	NA-Public corridors <40m in length
PART C4 – PRC	DTECTION OF OPENINGS	
C4D1	Deemed-to-Satisfy Provisions	Noted/information.
C4D2	Application of Part	information
C4D3	Protection of openings in external walls	The external walls of the buildings are setback >3m from the FSFs identified under Section 5.1
C4D4	Separation of external walls and associated openings in different fire compartments	NA
C4D5	Acceptable methods of protection	NA
C4D6	Doorways in fire walls	NA
C4D7	Sliding fire doors	NA

C4D8	Protection of doorways in horizontal exits	NA
C4D9	Openings in fire isolated exits	Entries to fire isolated stairs are required to be protected by -/60/30 self-closing fire doors.
C4D10	Service penetrations in fire Isolated exits	There was no indication in the plans that building services other than that permitted passed through or penetrated fire isolated exit systems
C4D11	Openings in fire isolated lift shafts	 Lift landing doors require doors that: Have an FRL -/60/- and Comply with AS 1735.11-1986 and are set to remain closed except when discharging or receiving passengers or goods.
C4D12 and NSW C4D12(4)(a)	Bounding construction: Class 2 and 3 buildings and Class 4 parts	The entry doorway to the apartments (SOUs) must be protected by self-closing fire doors of FRL - /60/30
C4D12(5)		NA
C4D12(8)		NA
C4D13	Openings in floors and ceilings for services	Services to be protected by a shaft construction in accordance with Specification 5
C4D14	Openings in shafts	Openings in shafts are to be protected by self-closing -/60/30 fire doors
C4D15	Openings for service installations	Service installations (electrical, electronic, plumbing, ventilation component and the like) that pass- through construction required to have a FRL must be protected at the point of penetration with a system that has been tested in accordance with AS 4072.1- 2005 and AS 1530.4-2014
C4D16	Construction Joints	NA
C4D17	Columns protected with lightweight construction to achieve an FRL	Light weight construction protecting columns must comply with this clause.
SPECIFICATIO N 5	Fire resisting construction	Type A construction required-Refer to Appendix C
S5C4	Lintels	NA
S5C5	Method of attachment not to reduce the fire resistance performance of building elements	This provision has application to attachments to the building's external walls, including finishes, linings, ancillary elements and services
S5C6	General concessions	NA
S5C7	Mezzanine floors-Concession	The floor at RL 9.000 and notated on plan as a 'mezzanine' floor does not qualify to the concession and as such has been counted in the building's Rise in storey calculation

S5C8	Enclosure of shafts	Lift shaft/ stairway roofs to be enclosed by construction that has an FRL of -/90/90 and is non-combustible.
S5C9	Carparks -Class 2 buildings	Concession not available
S5C10	Residential care buildings- concession	NA
S5C11	Type A fire resisting construction	The building is required be Type A construction.
		Note: Internal separating walls required to have a fire resistance are to extend to-
		a) the underside of the floor level next above; and
		b) the underside of the roof.
Table S5C11a	FRL of loadbearing external walls—Class 2 part	Required FRL is 90/60/30
Table S5C11b	FRL of non-loadbearing external walls—Class 2 part	FRL -/-/-
Table S5C11c	FRL of loadbearing external columns—Class 2 part	Required FRL 90/-/-
Table S5C11f	FRL Loadbearing internal walls- Class 2 Part	Required FRL is 90/90/90
S5C12	Concession for floors	The intermediate floors within the Class 2 SOUs are not required to have an FRL
S5C15	Roof: Concession	Roof is not required to comply with Table S5C11g if the sprinkler system complies with Specification 17
S5C16	Rooflights/Skylights	NA
S5C17	Internal walls and columns: Concession	NA
S5C20	Type A construction -Class 2 and 3 buildings-Concession	NA.
S5C21	Type B-fire resisting construction	NA
S5C24	Type C-fire resisting construction	NA
Table S5C24c	FRL for common and fire walls	NA
S5C24(1)(d)	Firewall construction	NA
SPECIFICATI ON 6	Structural Test for Light Weight Construction	NA
SPECIFICATI ON 7	Fire Hazard Properties	Refer to comments under clause C4D15 above
SPECIFICATI ON 8	External Walls	NA
SPECIFICATI ON 9	Cavity Barriers-Timber Const.	NA
SPECIFICATI ON 10	Fire-protected timber	NA
SPECIFICATI ON 11	Smoke proof walls in health care and residential care buildings.	NA

SPECIFICATI ON 12	Fire doors smoke doors and Fire windows and shutters	NA-Fire doors to comply with AS1905.1-2015
SPECIFICATI ON 13	Penetration of walls and floors and ceilings by services	Refer to clause D4D15 above
SECTION D - A	CCESS & EGRESS	
PART D2 - PRO	VISION FOR ESCAPE	
D2D1	Deemed-to-Satisfy Provisions	Noted/informational.
D2D2	Application of Part	NA-The provisions do not apply to the internal parts of SOU's (apartments) of the Class 2 part or Class 3 buildings
D2D3	Number of exits required	Basement levels-B1 , B2 and B3
		Two(2) exits requiredResolve by Performance solution
		Ground Floor Level
		Two (2) exits required.
		Building complies.
		 LevelMezzanine
		Two(2) exits required .Class 6 part does not comply- Resolve by Performance Solution
		 Levels 1 -7
		Two (2) exits required.
		Building complies.
D2D4	When Fire isolated stairways	Basement levels
	and ramps are required	Ascending Exits from the building are required to be fire isolated
D2D5	Exit Travel Distances	Basement levels-B1, B2 and B3
		Travel distance exceed 20ms -Resolve by Performance Solution.
		Ground floor
		Building part complies.
		 Mezzanine level
		Building part complies.
		Levels 1-6
		The distance of travel from the entry doorway of a SOU to a point of choice exceeds 6m- Resolve by Performance Solution.
		 Level 7.
		Building part complies.
D2D6	Distances between alternative exits—	Distance between alternative exits is less than 9m- Resolve by Performance Solution.
D2D7	Height of exits, path of travel to exits and doorways	Building design is capable of compliance

D2D8	Width of exits and paths of travel to exits	The unobstructed width of exits must not less than 1m
D2D9-NSW	Width of doorways in exits or paths of travel to exits	Doorway width maybe reduced by 250mm
D2D10	Exit width not to dimmish in direction of travel	Building design is capable of compliance
D2D11	Determination and measurement of exits and paths of travel to exits	Informational in relation to D2D7 and D2D10
D2D12	Travel via fire isolated exits	Exits discharge direct to open space
D2D13	External stairways or ramps in lieu of fire isolated exits	NA
D2D14	Travel by non-fire isolated stairways or ramps	Building design is capable of compliance
D2D15	Discharge from exits	a) The external accessways (access paths) to the road must have a min. unobstructed width of 1.0m.
		b) The ramped accessway must have a gradient not steeper than 1:14.
		c) The surface of the accessway must have slip resistance classification not less than listed Table D3D15 when tested in accordance with AS 4586- 2013.
		d) Stairs within the length of the accessways are required to comply with the geometrical provisions of D3D14 and the slip resistance requirements under Table D3D15 for 'wet surface conditions' tested in accordance with AS 4586-2013.
		e) Accessway and stairs also need to comply with AS 1428.1-2009.
D2D16	Horizontal exits	NA
D2D17	Non-Required stairways ramps or escalators	Building capable of compliance if the building is protected by a sprinkler system complying with Specification 17.
D2D18	Number of persons accommodated	Noted.
D2D19	Measurement of distances	Noted/informational.
D2D20	Method of measurement	Noted/informational.
D2D21	Plant rooms, lift machine rooms and electricity network substations: Concession	NA
D2D22	Access to lift pits	Lift pit RLs to be detailed on the plans and specifications of the CC
D2D23	Egress from primary schools	NA
PART D3 - CON	ISTRUCTION OF EXITS	
D3D1	Deemed-to-Satisfy Provisions	Noted/informational.
D3D2	Application of Part	Noted/informational. D3D26 does not apply to the internal parts of the
		SOUs of the Class 2 part

D3D3	Fire-Isolated stairways & ramps	Structural engineers' certification re D3D3(b)
D3D4	Non-Fire-Isolated stairways and ramps	Ramps/non-fire isolated stairs to be constructed from reinforced concrete.
D3D5	Separation of rising and descending stair flights	NA
D3D6	Open access ramps and balconies	Noted.
D3D7	Smoke lobbies	NA
D3D8	Installations in exits and paths of travel	No services except those allowed in this clause can be installed within required exits, fire isolated stairs, paths of travel to exits.
D3D9	Enclosure of space under stairs and ramps	NA-Space below the stairway of non-fire isolated stairs may be enclosed with fire resistant construction in accordance with this clause
D3D10	Width of required stairways and ramps	NA
D3D11	Pedestrian ramps	Ramps serving as accessible ramps to comply with AS 1428.1-2009 -The ramp gradient not more than 1:14.
		Slip resistance classification as outlined in table D3D15 when tested in accordance with AS 4586- 2013
D3D12	Fire Isolated passageways	The fire isolated passageway at ground floor level are to comply with Specification 5- and Table S5C11e
D3D13	Roof as open space	NA
D3D14	Goings and risers Internal and private stairs within SOUs	Treads and Risers and nosing strips (geometry/construction/slip resistance) must comply with the provisions of this clause.
		Slip resistance criteria—AS 4586-2013.
		Note: 1. The stair design of the fire isolated stairway to take into account the requirements of AS 1428.1 for handrails not to have vertical sections which requires off set risers to overcome this aspect of handrail configuration.
		Refer to figure(s) 28 of AS 1428.1-2009.
D3D15	Landings	Landings must not be less than 750 mm long.
		Slip resistance criteria in accord with Table D3D15 when tested in accord AS 4586-2013
D3D16	Thresholds	Threshold of a doorway must not incorporate a step except when opens to road or open space and the step is less than 190 mm.
		In addition, thresholds are to be accessible where the doorway opens to a road or open space, the threshold ramp or step ramp is to comply with AS 1428.1-2009
D3D17	Barriers to prevent falls-	Balustrades/barriers complying with this clause are required for stairways and their landings, internal

	External stairways	voids , balconies including and other areas where the level above the surface beneath than 1.0m
		Height of balustrades are to be not less than 1.0m.
		Glazed balustrade assemblies are to comply with AS1288-2021
D3D18	Height of barriers	Not less than 1.0m
D3D19	Openings in barriers	Openings in the barrier construction must not permit a 125mm sphere to pass through.
D3D20	Barrier climbability	The barrier construction to the balconies must not contain climbable elements between 150mm and 760mm above the floor
D3D21	Wire barriers	NA
D3D22	Handrails	Hand rails must be installed in all stairs, according to this clause at a height of 865m above the nosing of stair flights.
		Handrails to also comply with clause 12 of AS 1428.1-2009 both in location and construction and be without vertical sections,
D2D22(5)	Handrails to stairways within	Handrail is-
	SOUs—Class 2 part	1.Required on one side of the flight.
		2. Extend for the full length of the flight and without obstructions.
		3. Located not less than 865mm above the stair nosings.
D3D23	Fixed platforms, walkways stairways and ladders	NA
D3D24(2) NSW	Doorways and doors	Building complies
D3D25	Swinging doors	Doors that form part of the exit system must swing in the direction of egress.
D3D26	Operation of latch	Doors in required exits or doors in the paths of travel must be readily openable without a key from the side that faces a person seeking egress by single handed downward or push action in accordance with this clause,
		Notes: 1. Door latching requirements for the accessible parts of the building are; -
		 Such that a person who cannot grip will not slip from the handle during the operation of the latch, and Have a clearance between the handle and the back plate or door face of not less than 35mm and not more than 45mm, Comprise a single hand pushing action on a single device located between 900mm and 1.2m from the floor surface, and The latching requirements relate to latching hardware that is located on the door leafs themselves and not elsewhere, i.e., not located on a surrounding surface.

D3D27	Re-entry from fire isolated exits	Latching requirements to be determined at the CC
D3D28	Signs on doors	To be complied with. Listed in the buildings Fire Safety Schedule and installed as required below: -
		(i) For a self-closing door-
		"FIRE SAFETY DOOR
		DO NOT OBSTRUCT
		DO NOT KEEP OPEN"
		(ii) For a door discharging from a fire isolated exit
		"FIRE SAFETY DOOR—DO NOT OBSTRUCT".
		Note: The requirements of Section 108 of the EP & A (Development Certification and Fire Safety) Regulation, 2021 also require signage as follows:
		OFFENCE RELATING TO FIRE EXITS
		It is an offence under the Environmental Planning and Assessment Act 1979-
		 (a) To place anything in or near this fire exit that may obstruct persons moving to and from the exit, or (b) To interfere with or obstruct the operation of any fire doors, or (c) To remove, damage or otherwise interfere with this notice
D3D29	Protection of openable windows- Mezzanine Level 1 and above.	Window openings to bedrooms must be provided with 'protection' if the floor below the window is 2.0m or more above the surface beneath.
		Protection may be in the form of secure screens or window opening limiters that restrict window opening such as not to permit a 125mm sphere to pass through.
		Window openings other than bedroom windows that are openable, barrier height of not less than 865mm is required where the floor below the window is 4.0m or more above the surface beneath.
		Notes: 1. Devices or screens must not permit a 125mm sphere to pass through. The device/screen must resist and outward horizontal action of 250N; and
D3D30	Timber stairways-Concession	NA
PART D4 - ACC	ESS FOR PEOPLE WITH DISABIL	ITIES
D4D1	Deemed – to – Satisfy Provisions	Noted/ information

D4D2	General Building Access	Refer to Access Report
	Nequilements	
		Notes
		a) D4D4
		a) 0404
D4D3	Access to building	AS 1428.1-2009.
D4D4	Parts of building to be accessible	2. Non-fire isolated stairways are to comply with clause 11 of AS 1428.1-2009.
D4D5	Exemptions	3. Fire isolated stairways are to comply
D4D6	Accessible Car Parking	with clause 11.1(f) and (g) of AS1428.1-2009
D4D7	Signage	
D4D8	Hearing augmentation	 b) D4D7 Braille and tactile signage required in relation to-
D4D9	Tactile Indicators	"EXIT" &
D4D10	Wheel chair seating spaces in Class 9 (b) assembly buildings	"Level'.
D4D11	Swimming pools	 c) D4D9 Tactile ground surface indicators (TGSIs) required at approaches to ramps and all
D4D12	Ramps	non –fire isolated stairways.
D4D13	Glazing on accessways	
SPECIFICATI ON 14	NON-REQUIRED STAIRWAYS RAMPS AND ESCALATORS	
SPECIFICATI ON 15	BRAILLE AND TACTILE SIGNS	
SPECIFICATI ON 16	ACCESSIBLE WATER ENTRY/EXIT FOR SWIMMING POOLS	
SECTION E - S	ERVICES AND EQUIPMENT	
PART E1 - FIRE	FIGHTING EQUIPMENT	
E1D1	Deemed-to-Satisfy Provisions	Noted/informational.
E1D2	Fire Hydrants	Total floor area of the building calculated to be
		more than 500m ² Compliance standard for fire hydrant installation is
		AS 2419.1-2021
E1D3	Fire Hose Reels	Fire hose reels are required in the parking level located not more than 4m from each exit.
		Compliance standard for hosed reel installation is AS 2441-2005
E1D4	Sprinklers	The design and installation of the sprinkler system is to comply with Specification 17
E1D5	Where sprinklers are required: all classifications	NA
E1D6	Where sprinklers are required: Class 2 and 3 buildings other than residential care buildings	The building requires sprinkler protection throughout

E1D7	Where sprinklers are required: Class 3 building used as a residential care building	NA
E1D8	Where sprinklers are required: Class 6 building	NA
E1D9	Where sprinklers are required: Class 7a building, other than an open-deck carpark	The building requires sprinkler protection throughout
E1D10	Where sprinklers are required: Class 9a health-care building used as a residential care building and Class 9c buildings	NA
E1D11	Where sprinklers are required: Class 9b buildings	NA
E1D12	Where sprinklers are required: additional requirements	NA
E1D13	Where sprinklers are required: occupancies of excessive hazard	NA
E1D14	Portable Extinguishers	Portable fire extinguishers are required to be installed in accordance with AS 2444-2001 and for the class 2 parts.
		Note: Portable fire extinguishers for the class 3 part are required to be-
		 (i) an ABE type fire extinguisher; and (ii) a minimum size of 2.5 kg; and (iii) distributed outside the sole-occupancy units.
		(A) to serve only the storey at which they are located; and
		(B) so that the travel distance from the entrance doorway of any sole-occupancy unit to the nearest fire extinguisher is not more than 10 m.
		The Class 7a part, Class 6 and Class 9b part require portable fire extinguishers to cover class A and class AE risks.
E1D15	Fire Control Centres	Fire control centre required in accordance with Specification 19
E1D16	Fire precautions during construction	Noted.
E1D17	Provision for special hazards	NA
SPECIFICATI	Fire sprinkler system	Design and installation standard is AS 2118.1-2017.
ON 17		The sprinkler system must be connected to activate the building occupant warning system that complies with S20C7 and EWIS.
		Sprinkler valve enclosure to be accessed direct from the road
SPECIFICATI ON 18	Class 2 and Class 3 buildings with a EH less than 25m	NA

SPECIFICATI ON 19	Fire control centres	Location of the fire control centre within the building may require a performance assessment
PART E2 - SMC	DKE HAZARD SYSTEM	
E2D1	Deemed-to-Satisfy Provisions	Information
E2D2	Application of Part	Noted.
E2D3	General requirements	For determination at the CC
E2D4	Fire-isolated exits	The exits from the building are required to be air pressurised in accordance with AS 1668.1-2015
E2D5	Buildings more than 25m in effective height: Class 2 and 3 buildings and Class 4 part of a building	Automatic smoke detection and alarm system required in accordance with Specification 20
E2D6	Buildings more than 25m in effective height: Class 5, 6, 7b, 8 and 9b buildings	NA
E2D7	Buildings more than 25m in effective height: Class 9a buildings	NA
E2D8	Buildings not more than 25m in effective height: Class 2 and 3 buildings and Class 4 part of a building	NA
E2D9	Buildings not more than 25m in effective height: Class 5, 6, 7b, 8 and 9 buildings	NA
E2D10 (NSW)	Buildings not more than 25m in effective height: large isolated buildings subject to C3D4	NA
E2D11	Buildings not more than 25m in effective height: Class 9a and 9c buildings	NA
E2D12	Class 7a buildings	Basement carpark to be provided with a mechanical ventilation system that complies with clause 5.5 of AS 1668.1-2015
E2D13	Basements (other than Class 7a buildings)	NA
E2D14	Class 6 buildings – in fire compartments more than 2000m2. Class 6 building (not containing an enclosed common walkway or mall serving more than one Class 6 sole- occupancy unit)	NA
E2D15	Class 6 buildings – in fire compartments more than 2000m2. Class 6 building (containing an enclosed common walkway or mall serving more than one Class 6 sole-occupancy unit)	NA

E2D16-NSW	Class 9b – assembly buildings: nightclubs, discotheques and the like	Air handling systems for the building's Class 9b parts my require automatic shutdown facility if there design capacity exceeds 1000L/s.
E2D17	Class 9b – assembly buildings: exhibition halls	NA
E2D18	Class 9b – assembly buildings: theatres and public halls	NA
E2D19	Class 9b – assembly buildings: theatres and public halls (not listed in E2D18) including lecture theatres and cinema/auditorium complexes	NA
E2D20	Class 9b assembly buildings: other assembly buildings (not listed in E2D16 to E2D19.	NA
E2D21	Provision for special hazard	N/A
SPECIFICATI ON 20	Smoke detection and alarm systems-internal public spaces	 The smoke detection system must comply with- The provisions of AS 1670.1-2018; Activate a BOWS in accordance with S20C7,
S20C3	Smoke alarm system-SOUs	 Smoke alarms within SOUs a) Consist of smoke alarms that comply with AS3786-2014. b) Be powered from the consumer mains. c) Installed in all levels of the SOU. d) All smoke alarms within the SOU must be interconnected with each other. e) Located in hallways and galleries of the storey that contains bedrooms
SPECIFICATI ON 21	Smoke exhaust systems	NA
SPECIFICATI ON 22	Smoke and heat vents	NA
SPECIFICATI ON 23	Residential fire safety systems	Residential sprinkler system to be connected to a monitoring service in accordance with AS 1670.3- 2018.A1 Fire alarm signal signalling equipment to be audible and visible at the FIP.
PART E3 – LIFT	INSTALLATIONS	
E3D1	Deemed-to-Satisfy Provisions	Noted.
E3D2	Lift installations	NA-Criteria for electric and electrohydraulic lift installation.
E3D3	Stretcher facility in lifts	Stretchers facilities are required in at least one lift that serves each floor of the building. A stretcher facility must accommodate a raised stretcher with a patient lying on it horizontally by providing a clear space of not less than 600mm

		wide by 2000mm long and 1400mm high above floor level
E3D4	Warning against use of lifts in fire	Warning signs for the lift is as follows. DO NOT USE LIFTS IF THERE IS A FIRE or Do not use lifts if there is a fire Listed in the buildings fire safety schedule.
E3D5	Emergency lifts	The building requires emergency lifts. Lift shaft are to comply with C3D11
E3D6	Landings	Access and egress to and from lift well landings must comply with Part D3, D3 and D4
E3D7	Passenger lift types and their limitations	Lift details required at CC
E3D8	Accessible features require for passenger lifts.	Lift car floor dimensions to be not less than 1400mm wide by 1600mm deep
2	2 Volume One - Building Code of Australia (1 May 20	23) Pa
	Services an	d equipment
	Passenger protection system complying with AS 1735.12 for all lifts with power-operated doors. Lift landing doors at the upper landing for all lifts except a <i>stairway platform lift</i> . Lift car and landing control buttons complying with AS 1735.12 for all lifts except— (i) a <i>stairway platform lift</i> ; and (ii) a <i>low-rise platform lift</i> . Lighting in accordance with AS 1735.12 for all enclosed lift cars. For all lifts serving more than 2 levels— (i) automatic audible information within the lift car to identify the level each time the car stops; and (ii) audible and visual indication at each lift landing to indicate the arrival of the lift car; and (iii) audible information and audible indication <i>required</i> by (i) and (ii) is to be provided in a range of betw - 80 dB(A) at a maximum frequency of 1500 Hz. Emergency hands-free communication, including a button that alerts a call centre of a problem and a signal that the call has been received, for all lifts except a <i>stairway platform lift</i> .	

E3D9	Fire Service Controls	All lifts are required to be provided with-
		a) a fire service recall switch complying with E3D11; and
		b) a lift car service drive control switch complying with E3D12
E3D10	Residential care buildings	NA
E3D11	Fire service recall control switch	Required Refer to lift manufacturer at CC
E3D12	Lift car service drive control switch	Required Refer to lift manufacturer at CC
SPECIFICATI ON 24	Lift installations	NA
PART E4 - EME	RGENCY LIGHTING, EXIT SIGNS	AND WARNING SYSTEMS
E4D1	Deemed-to-Satisfy Provisions	Noted.
E4D2	Emergency Lighting	Emergency lighting required in the following areas-
	requirements	a) Fire isolated stairways and passageways,
		b) path of travel to exits,
		c) Carpark levels
		d) Fire control centre
E4D3	Measurement of distance	Noted/information
E4D4	Design and operation of emergency lighting	Design and installation standard is AS 2293.1-2018
E4D5	Exit signs	Exit signs required as follows-
		a) Above doorways to all stairways,
		b) Non-fire isolated stairways.
E4D6 NSW	Direction signs	Required in the carparking levels
E4D7	Class 2 and 3 Buildings and Class 4 parts: exemptions	NA
E4D8	Design and operation of exit signs	Design and installation standard is AS 2293.1-2018
E4D9	Emergency warning and intercom systems	EWIS required to be installed in accordance with AS1670.4-2018
SPECIFICATI ON 25	Photoluminescent exit signs	NA
SECTION F - H	EALTH AND AMENITY	
PART F1 - DAM	P & WEATHER PROOFING	
F1D1	Deemed to Satisfy provisions	Noted/informational
F1D2	Application of Part	Roof/balcony/podium elements of the building
F1D3	Stormwater drainage	Stormwater management design to be prepared by a suitably qualified person in accordance with AS 3500.3-2018 and the requirements of the Council.
F1D4	Exposed joints	Exposed joints in the drainage surface of balconies, podiums must be-
		a) protected in accordance with Section 2.9 of AS 4654.2

		b) not located beneath or run through a planter box, water feature or similar installation.
F1D5	External waterproofing membranes Roof, balconies, podium, café terrace	Waterproof membrane is to comply with AS 4654 parts 1 and 2-2012.
F1D6	Damp proofing	Revisit after development consent
F1D7	Damp proofing of floors on the ground	The slab construction in direct contact the ground surface and the adjoining walls are to have inserted a vapour barrier in accordance with AS 2870-2011
F1D8	Subfloor ventilation	NA
PART F2 – WET	AREA AND OVERFLOW PROTE	CTION
F2D1	Deemed-to-Satisfy Provisions	Noted/information.
F2D2	Wet area construction	Wet areas must be waterproofed in accordance with Specification 26 and comply with AS 3740-2021
F2D3	Rooms containing urinals	NA
F2D4	Floor wastes	Floor waste must be provided according to this clause
		Within bathrooms, sanitary compartments and laundries must have floor waste
		The floor surface of wet areas must be graded and drained to the floor waste i.e.
		Min continuous fall is 1:80,
		Max continuous fall 1:50
SPECIFICATI ON26	Waterproofing and water resistance requirements for	Specification sets out requirements for water resistance or waterproofing in wet areas.
	building elements in wet areas	The building is capable of compliance— Waterproofing details for assessment at the CC.
	Café facility	The accessible sanitary compartment must contain the following: - Closet pan; Washbasin; Shelf or bench top; and Adequate means to dispose of sanitary products
PART F3 RO	OF AND WALL CLADDING	
F3D1	Deemed to Satisfy Provisions	Informational
F3D2	Roof coverings	Refer to F1D5 above
F3D3	Sarking	Sarking membranes are to comply with AS4200.1- 2017 and AS 4200.2-2017
F3D4	Glazed assemblies	Windows, glazed doors, adjustable louvres etc. located in the buildings external walls are to comply with AS 2047 for resistance to water penetration
F3D5	Wall cladding	Masonry wall construction of the buildings external walls is to comply with AS 3700-2018.

		Details required for the CC
PART F4 SANIT	ARY AND OTHER FACILITIES	
F4D1	Deemed to Satisfy Provisions	Noted/informational
F4D2	Facilities in residential buildings	Required facilities within each SOU are-
		a) Kitchen sink and facilities for the cooking and preparation of food.
		b) Bath or shower.
		C Closet pan.
		d) Washbasin.
		e) Laundry and clothes drying
F4D3	Calculation of number of occupants and facilities	Informational
F4D4	Facilities in Class 3 to 9 buildings	Accessible unisex facilities provided for the employees of the café.
		Cafe employees are <10 persons.
F4D5	Accessible sanitary facility	Refer to F4D4 and F4D6
F4D6	Accessible unisex sanitary	Accessible facilities.
	compartments	The facilities are to contain-
		Closet pan.
		Washbasin. Shelf or bonch
		 Means to dispose of sanitary products.
		 Comply with AS 1428.1-2009
F4D7	Accessible unisex showers	NA
F4D8	Construction of sanitary compartments	Doors to sanitary compartments require "lift of hinge" fittings if there is not a clear space of at least 1.2m between the closet pan and the arc of the doorway swing
F4D9	Interpretation: urinal and washbasins	NA
F4D10 NSW	Microbial(legionella) control	NA
F4D11	Waste Management	NA
F4D12	Accessible adult change facilities	NA
SPECIFICATI ON 27	Accessible adult change facilities	NA
PART F5 - ROO	M HEIGHTS	
F5D1	Deemed-to-Satisfy Provisions	Noted/informational
F5D2	Height of rooms and other spaces	Ceiling height of habitable rooms is 2.7m
	Min heights are-	For assessment at CC stage
	Corridors/passageways-2.1m.	
	Laundry/bathroom-2.1m.	

	Carpark- 2.1m with the exception of access to and required accessible car parking spaces	
PART F6 - LIGH	IT AND VENTILATION	
F6D1	Deemed-to-Satisfy Provisions	Informational
F6D2	Provision of Natural light	Required to all habitable rooms
F6D3	Methods and extent of natural light	Residential - window glazing area - to be 10% of floor
		For assessment at CC stage
F6D4	Natural light borrowed from adjoining room	Noted/information.
F6D5	Artificial lighting	Compliance standard AS1680.0-2009
F6D6	Ventilation of rooms	Required to all habitable rooms ,bathrooms, sanitary compartments, laundry either by-
		a) Natural ventilation complying with F6D7, or
		b) Mechanical ventilation complying with AS 1668.2- 2012
F6D7	Natural ventilation	Natural ventilation is achieved by openable windows, doors that have a ventilating area of not less than 5% of floor area of the room.
		For assessment at CC stage
F6D8	Ventilation borrowed from adjoining room	NA.
F6D9	Restriction on location of sanitary compartments	The accessible unisex sanitary compartment within the buildings Class 6 part-
		1. Provided with mechanical exhaust ventilation, and
		2. The doorway adequately screened from view.
F6D10	Airlocks	NA
F6D11	Car parks	Carpark to be ventilated in accordance with AS 1668.2-2012
F6D12	Kitchen local exhaust ventilation	NA
PART F7 - SOU	ND TRANSMISSION AND INSULA	TION
F7D1	Deemed-to-Satisfy Provisions	Noted.
F7D2	Application of Part	Relevant to a Class 2 building
F7D3	Determination of airborne sound insulation ratings	
F7D4	Determination of impact sound insulation ratings	NA
F7D5	Sound Insulation rating of floors	The floors of the SOUs that separate the SOU from the carpark level and other SOUs are required to have an R^w + Ctr of not less than 50 and an Lnw (impact) of not more than 62.

F7D6	Sound Insulation rating of walls	The internal walls that separate one SOU from another SOU are to incorporate sound insulation complying with this clause i.e.
		 R^w + C^{TR}(airborne) not less than 50;
		Internal walls that separate a SOU from a plant room, lift shaft, stairway, public corridor and parts of different classifications are required to an Rw of not less than 50
		Note: a) Discontinuous construction is required where an internal wall separates a bathroom, sanitary compartment, laundry or kitchen from a habitable room in and adjoining SOU.
		b) Door assemblies to the entry doorway of SOUs are to have an Rw not less than 30
F7D7	Sound insulation rating of internal services	Duct, soil, waste or water supply pipes crossing residential units have sound insulation complying with this clause.
F7D8	Sound isolation of pumps	A flexible coupling must be used at the point of connection between the service pipes in a building and any circulating or other pump.
SPECIFICATI ON 29	Sound insulation for building elements	Sound insulation requirements to be documented for the CC.
PERT F8 CON	IDENSATION MANAGEMENT	
PERT F8 CON F8D1	DENSATION MANAGEMENT Deemed to Satisfy Provisions	Information
PERT F8 CON F8D1 F8D2	DENSATION MANAGEMENT Deemed to Satisfy Provisions Application of part	Information Informational
PERT F8 CON F8D1 F8D2 F8D3	DENSATION MANAGEMENT Deemed to Satisfy Provisions Application of part External wall construction	Information Informational Pliable building membranes are to comply with AS4200.1, installed in accordance with AS 4200.2 and located on the exterior of the primary insulation layer.
PERT F8 CON F8D1 F8D2 F8D3	DENSATION MANAGEMENT Deemed to Satisfy Provisions Application of part External wall construction	Information Informational Pliable building membranes are to comply with AS4200.1, installed in accordance with AS 4200.2 and located on the exterior of the primary insulation layer. Details required for the CC
PERT F8 CON F8D1 F8D2 F8D3 F8D4	DENSATION MANAGEMENT Deemed to Satisfy Provisions Application of part External wall construction Exhaust systems	Information Informational Pliable building membranes are to comply with AS4200.1, installed in accordance with AS 4200.2 and located on the exterior of the primary insulation layer. Details required for the CC Flow rates of exhaust systems are required as follows-
PERT F8 CON F8D1 F8D2 F8D3 F8D4	DENSATION MANAGEMENT Deemed to Satisfy Provisions Application of part External wall construction Exhaust systems	Information Informational Pliable building membranes are to comply with AS4200.1, installed in accordance with AS 4200.2 and located on the exterior of the primary insulation layer. Details required for the CC Flow rates of exhaust systems are required as follows- a) Bathroom and sanitary compartment-25L/s.
PERT F8 CON F8D1 F8D2 F8D3 F8D4	DENSATION MANAGEMENT Deemed to Satisfy Provisions Application of part External wall construction Exhaust systems	Information Informational Pliable building membranes are to comply with AS4200.1, installed in accordance with AS 4200.2 and located on the exterior of the primary insulation layer. Details required for the CC Flow rates of exhaust systems are required as follows- a) Bathroom and sanitary compartment-25L/s. b) Kitchen and laundry-40L/s
PERT F8 CON F8D1 F8D2 F8D3 F8D4	DENSATION MANAGEMENT Deemed to Satisfy Provisions Application of part External wall construction Exhaust systems	Information Informational Pliable building membranes are to comply with AS4200.1, installed in accordance with AS 4200.2 and located on the exterior of the primary insulation layer. Details required for the CC Flow rates of exhaust systems are required as follows- a) Bathroom and sanitary compartment-25L/s. b) Kitchen and laundry-40L/s c) Exhaust from the above is direct to outdoor air.
PERT F8 CON F8D1 F8D2 F8D3 F8D4	DENSATION MANAGEMENT Deemed to Satisfy Provisions Application of part External wall construction Exhaust systems	Information Informational Pliable building membranes are to comply with AS4200.1, installed in accordance with AS 4200.2 and located on the exterior of the primary insulation layer. Details required for the CC Flow rates of exhaust systems are required as follows- a) Bathroom and sanitary compartment-25L/s. b) Kitchen and laundry-40L/s c) Exhaust from the above is direct to outdoor air. Note: 1. a) If the laundries of each SOU are to contain a heat operated clothes drying appliance or provision for such, the space must provide for ducting to outdoor air, &
PERT F8 CON F8D1 F8D2 F8D3 F8D4	DENSATION MANAGEMENT Deemed to Satisfy Provisions Application of part External wall construction Exhaust systems	Information Informational Pliable building membranes are to comply with AS4200.1, installed in accordance with AS 4200.2 and located on the exterior of the primary insulation layer. Details required for the CC Flow rates of exhaust systems are required as follows- a) Bathroom and sanitary compartment-25L/s. b) Kitchen and laundry-40L/s c) Exhaust from the above is direct to outdoor air. Note: 1. a) If the laundries of each SOU are to contain a heat operated clothes drying appliance or provision for such, the space must provide for ducting to outdoor air, & b) make up air for laundries is to comply with AS1668.2-2012,
PERT F8 CON F8D1 F8D2 F8D3 F8D4	DENSATION MANAGEMENT Deemed to Satisfy Provisions Application of part External wall construction Exhaust systems	Information Informational Pliable building membranes are to comply with AS4200.1, installed in accordance with AS 4200.2 and located on the exterior of the primary insulation layer. Details required for the CC Flow rates of exhaust systems are required as follows- a) Bathroom and sanitary compartment-25L/s. b) Kitchen and laundry-40L/s c) Exhaust from the above is direct to outdoor air. Note: 1. a) If the laundries of each SOU are to contain a heat operated clothes drying appliance or provision for such, the space must provide for ducting to outdoor air, & b) make up air for laundries is to comply with AS1668.2-2012, 2. Exhaust systems for bathroom and sanitary compartments are required to be-

		 b) Include a run-on timer to allow the exhaust system to operate for 10 minutes after the light switch is turned off.
F8D5	Ventilation of roof spaces	NA
SECTION G1 -	ANCILLARY PROVISIONS	
G1D1	Deemed to Satisfy Provisions	Noted/informational
G1D2NSW	Swimming pools	1.Swimmining pool-Barrier construction required in accordance with AS 1926.1-2012 and AS 1926.2-2007; and
		2. Spa poolBarrier construction required in accordance with (1) above or clause 9 of the Swimming Pools Regulation 2018
G1D3	Refrigerated chambers, strong rooms and vaults	NA
G1D4	Outdoor play spaces	NA
(NSW)	Provision for window cleaning	As the building contains windows located 3 or more storeys above ground level the windows must be either:
		 Capable of being cleaned from within the building; or Provision is made for the cleaning of windows by a method that complies with the
		Work, Health and Safety Act 2011 and its regulations.
PART G2 Boiler	s, pressure vessels, heating applian	ce ,fireplaces ,chimneys and flues
G2D1	Deemed to Satisfy Provisions	NA
G2D2	Installation of appliances	NA
G2D3	Open fireplaces	NA
G2D4	Incinerator rooms	NA
PART G3-ATRIU	JM CONSTRUCTION	
	Atrium construction	NA
PART G4 CONS	TRUCTION IN APLINE AREAS	
	Construction in alpine areas	NA
PART G5 CONS	STRCTION IN BUSHFIRE PRONE	AREAS
	Construction in bushfire prone areas	NA
PART G6 OCCUPIABLE OUTDOOR AREAS		
G6D1	Application of part	InformationalNA
G6D2	Fire hazard properties	NA-
G6D3	Fire separation	NA
G6D4	Provision for escape	NA
G6D5	Construction of exits	NA
G6D6	Firefighting equipment	NA
G6D7	Lift installations	NA

G6D8	Visibility in an emergency, exit signs and warning systems	NA
G6D9	Light and ventilation	NA
G6D10	Fire orders	NA
PART G7 LIVA	BLE HOUSING DESIGN	
SECTION I SPE	CIAL USE BUILDINGS	
I1D1NSW	Application of part	NA
SECTION J ENI		•
	Energy Efficiency.	NA
Other Matters	Part 9.2.4(2) of Volume 2	NA
Clas10a buildings		
Awning/pergo las		

APPENDIX B

Drawing Schedule: Revision 01-WIP

Number	Details
DA-110-001	Basement 3
DA-110-002	Basement 2
DA-110-003	Basement 1
DA-110-004	Ground Level
DA-110-005	Mezzanine Level
DA-110-006	Level 1
DA-110-007	Level 2
DA-110-008	Level 3
DA-110-009	Level 4
DA-110-010	Level 5
DA-110-011	Level 6
DA-110-012	Level 7
DA-201-001	North Elevation
DA-201-002	East Elevation
DA-201-003	South Elevation
DA-201-004	West Elevation
DA-310-001	Section AA
DA-310-002	Section BB

APPENDIX – C

FIRE RESISTANCE LEVELS----Type A Construction Extract

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

Distance from a fire-source feature	FRL (in minutes): Structural adequacy/ Integrity / Insulation			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Less than 1.5 m	90/90/90	120/120/120	180/180/180	240/240/240
1.5 to less than 3 m	90/60/60	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

Fire resistance

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

Distance from a fire-source feature	FRL (in minute Insulation	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 S5C11c: Type A construction: FRL of external columns not incorporated in an external wall

Column type	FRL (in minut Insulation	FRL (in minutes): Structural adequacy / Integrity / Insulation				
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8		
Loadbearing	90/-/-	120/-/-	180/_/_	240//		
Non-loadbearing	-/-/-	_/_/_	-/-/-	_/_/_		

Table S5C11d: Type A construction: FRL of common walls and fire walls

Wall type	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Loadbearing or non-loadbearing	90/90/90	120/120/120	180/180/180	240/240/240

Table S5C11e: Type A construction: FRL of loadbearing internal walls

Location	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Fire-resisting lift and stair shafts	90/90/90	120/120/120	180/120/120	240/120/120
Bounding public corridors, public lobbies and the like	90/90/90	120//	180/_/_	240//
Between or bounding sole-occupancy units	90/90/90	120//	180//	240//-
Ventilating, pipe, garbage, and like <i>shafts</i> not used for the discharge of hot products of combustion	90/90/90	120/90/90	180/120/120	240/120/120

Table S5C11f: Type A construction: FRL of non-loadbearing internal walls

Location	FRL (in minutes): Structural adequacy / Integrity / Insulation			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Fire-resisting lift and stair shafts	-/90/90	-/120/120	-120/120	-/120/120
Bounding public corridors, public lobbies and the like	-/60/60	_/_/_	-/-/-	-/-/-
Between or bounding sole-occupancy units	-/60/60	_/_/_	_/_/_	-/-/-
Ventilating, pipe, garbage, and like <i>shafts</i> not used for the discharge of hot products of combustion	-/90/90	-/90/90	-/120/120	-/120/120

NCC 2022 Volume One - Building Code of Australia

Page 136

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

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