

Building Certifiers Strata Plan Certifiers Building Regulations Fire Safety Access Consultants Energy Assessment

# **Building Code of Australia 2019**

## **Amendment 1**

Volume 1, Class 2-9 Buildings Deemed-To-Satisfy Assessment

**Project Address:** 

351-353 Barrenjoey Rd NEWPORT NSW

**Dix Gardner Job Number:** 

Our REF: 19/0405

Date of Determination:

15/06/2021

**Revision 3** 

Classification of Building or Part:	Class 2, 6 & 7a
Rise in Storeys:	3
No of basement levels:	2
Type of Construction:	Туре А
Effective Height:	<12m

### lcons:

<b>~</b>	The building complies with this clause, or can comply
×	The building does not comply with this clause.
<mark>?</mark>	Further documentation required.
•	Engineering details and/or design certification required This clause is not applicable to this project.
Note	Important.
	•

Note	General information			
Sydney	Newcastle	HEAD OFFICE	Brisbane	Gold Coast
Tel: 02 9279 3657	Tel: 02 4940 0355	Level 4,	Tel: 07 3844 0644	Tel: 07 5504 7984

Sydney NSW 2000

#### Executive Summary:

The following items which may form part of a Performance (Alternative) Solution and Items that require, redesign or a Performance Solution.

They have been identified at this time. Further items may be identified as additional design details become available during the "Detailed Design" phase of project documentation.

NCC/BCA Clause	Description
E1.3	Not shown on plans. Ensure hydrants are installed in accordance with AS 2419.1 requirements

Clause by Clause Assessment NCC-BCA 2019 Volume 1 – Amendment 1

lcon		Clause	Reference	Comment
	Section A		General Provisions	
	A1.1, A1.2, A1.3- Australian Standards		For information	
	A1.4~1.8			
	A2.1~2.5			
		Acceptance of Design		
		Part A3.2	CLASSIFICATION	
	A3.1	Principles of classification		
	A3.2	Classifications		Class 2, 6 & 7a
Note	A3.3	Multiple classifications		
Note	A3.4	Parts with more than one classification		
		Part A4- United buildings		
Note	A4.1	When buildings are united	Building is united	
		Section B	Structure	
	Section B	Part B1	STRUCTURAL PROVISIONS	Note
•		B1.2	Loads	Structural Engineering required
	Section C	Fire Resistance		
	Part C1	FIRE RESITANCE AND STABILITY		
	C1.0	Application of Part		
?	C1.1	Type of Construction	Type "A"	
Note	C1.2	Calculation of Rise in Storeys	3	
Note	C1.3	Buildings of Multiple Classification	Type "A" required	
•	C1.4	Mixed Types of Construction	N/A	
•	C1.5	Two Storey Class 2 or 3 Buildings	N/A	
•	C1.6	Class 4 Parts of Buildings	N/A	
•	C1.7	Open Spectator Stands & Indoor Sports Stadiums	N/A	
•	C1.8	Lightweight Construction	N/A	
Note	C1.9	Non-combustible building Elements	External Walls No part of the external w components with combus	
			Schedule of finishes re	
Note	C1.10	Early Fire Hazard Properties	Provide information on fil	
			Must be in accordance w	ith Specification C1.10
٠	C1.11	Performance of External Walls	N/A	
Note	C1.13	Fire-protected timber concession		
Note	C1.14	Ancillary elements	No ancillary elements of any components with cor Schedule of finishes re	
	Part C2	FIRE RESISTANCE		
	C2.0	Deemed-to-Satisfy Provisions.		
	C2.1	Application		

•	C2.2	General Floor Area Limitations	N/A
•	C2.3	Large Isolated Buildings	N/A
•	C2.4	Requirements for open space	N/A
•	C2.5	Class 9a Buildings	N/A
•	C2.6	Vertical separation of openings in external Walls	N/A
•	C2.7	Separation by fire walls	N/A
•	C2.8	Separation of classifications in the same storey	N/A
Note.	C2.9	Separation of classifications in different storeys	<ul> <li>Type A Construction</li> <li>FRLs <ul> <li>Floor between carpark and retail to achieve an FRL 180/180/180</li> <li>Floors between units to achieve an FRL 90/90/90</li> <li>Walls between units, required FRL is 90/90/90 loadbearing or -/60/60 non-loadbearing. Must extend to the underside of the roof sheeting material.</li> </ul> </li> <li>To note on plans or specification</li> </ul>
Note	C2.10	Separation of lift shafts	Basement lift shaft walls to have a minimum FRL of 120/120/120 loadbearing <b>To note on plans or specification</b>
Note	C2.11	Stairways and lifts not in One shaft	Noted
Note	C2.12	Separation of equipment	Minimum FRL required is 120/120/120 Wall schedule required prior to CC stage
Note	C2.13	Electricity supply system	Electrical / FRL'S to be noted on plans, must comply with this section. Any emergency electrical supply (switch room or distribution board) is required to have a minimum FRL of 120/120/120 separation with self-closing doors FRL -/120/30 and fitted with smoke seals <b>Wall schedule required prior to CC stage</b>
•	C2.14	Public corridors in Class 2 & 3 buildings	N/A
	PART C3	PROTECTION OF OPENINGS	
	C3.0	Deemed-to-Satisfy Provisions	
	C3.1	Application of Part	
•	C3.2	Protection of openings in external walls	Exposed openings protected in accordance with C3.4
•	C3.3	Separation of openings in different fire compartments	N/A
Note	C3.4	Acceptable methods of protection	Note
•	C3.5	Doorways in fire walls	N/A
•	C3.6	Sliding fire doors	N/A
•	C3. 7	Protection of doorways in horizontal exits	N/A
•	C3.8	Openings in fire isolated exits	N/A
•	C3.9	Service penetrations in fire Isolated exits	N/A
Note	C3.10	Openings in fire isolated lift shafts	Must comply with AS1735.11
•	C3.11	Bounding construction Class 2, 3 and 4 buildings	Note

Note	C3.12	Openings in floors for services	Note
Note	C3.13	Openings in shafts	Note
Note	C3.15	Openings for service installations	Note
Note	C3.16	Construction Joints	
•	C3.17	Columns protected with lightweight	N/A
L	00.17	construction to achieve an FRL	
	SPEC C1.1	FIRE RESISTING CONSTRUCTION	
l	3	Type A Construction	
Note	3.1	Fire resistance of building	Required as detailed in Table 3
		elements	Table 3 TYPE A CONSTRUCTION: FRL OF BUILDING ELEMENTS Building element Class of building — FRL: (in minutes)
			Structural adequacyIntegrityIInsulation
			2, 3 or 4 part 5, 7a or 9 6 7b or 8 EXTERNAL WALL (including any column and other building element incorporated within it) or
			other external building element, where the distance from any fire-source feature to which it is exposed is— For <i>loadbearing</i> parts—
			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
			For non- <i>loadbearing</i> parts— 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
			Deemed-to-Satisfy Provisions Table 3 TYPE A CONSTRUCTION: FRL OF BUILDING ELEMENTS — continued
			Building element Class of building — FRL: (in minutes)
			Structural adequacylintegritylinsulation 2, 3 or 4 part 5, 7a or 9 6 7b or 8
			EXTERNAL COLUMN not incorporated in an external wall— For loadbearing columns—
			90/-/- 120/-/- 180/-/- 240/-/- For non- <i>loadbearing</i> columns
			COMMON WALLS and 90/ 90/ 90 120/120/120 180/180/180 240/240/240 FIRE WALLS—
			INTERNAL WALLS— Fire-resisting lift and stair shafts—
			Loadbearing 90/90/90 120/120/120 180/120/120 240/120/120 Non-loadbearing -/ 90/90 -/120/120 -/120/120 -/120/120
			Bounding public corridors, public lobbies and the like-
			Loadbearing 90/ 90/ 90 120/-/- 180/-/- 240/-/- Non-loadbearing -/ 60/ 60 -/-//-//-/-
			Between or bounding sole-occupancy units—           Loadbearing         90/ 90/ 90         120/-/-         180/-/-         240/-/-
			Non-loadbearing -/ 60/ 60 -/-//-/ -/-/ Ventilating, pipe, garbage, and like <i>shafts</i> not used for the discharge of hot products of
			combustion— Loadbearing 90/90/90 120/90/90 180/120/120 240/120/120
			Non-loadbearing -/ 90/ 90 -/ 90/ 90 -/120/120 -/120/120
			OTHER LOADBEARING INTERNAL WALLS, INTERNAL BEAMS, TRUSSES and COLUMNS— 90/-/- 120/-/- 180/-/- 240/-/-
			FLOORS         90/90/90         120/120/120         180/180/180         240/240/240           ROOFS         90/60/30         120/60/30         180/60/30         240/90/60
	SPEC C1.10	FIRE HAZARD PROPERTIES	
Note	1	Scope	
Note	2	Application:	
		Class 2 to 9 buildings General	
		requirements	
Note	3	Floor linings & floor coverings	CRF 2.2
Note	4	Wall & ceiling linings	As per table 3- Class 2 - Unsprinklered
Note	5	Air-handling ductwork	As per AS 4254
Note	6	Lift cars	As per AS5637.1, floor linings - CRF 2.2
	-		As per table 4
Note	7	Other materials	As per lable 4
Note	7	Other materials	
Note	7 SPEC C3.4	Other materials FIRE DOORS, SMOKE DOORS, FIRE WINDOWS AND SHUTTERS	
Note		FIRE DOORS, SMOKE DOORS, FIRE WINDOWS AND	Must comply with AS1905.1

	SPEC C3.15	PENETRATIONS OF WALLS, FLOORS AND CEILINGS BY SERVICES	
	1~7	Protection Required	Must comply with this section

	Section D	Access and Egress	
	PART D1	PROVISION FOR ESCAPE	
way	D1.0	Deemed-to-Satisfy Provisions	
	D1.1	Application	
×	D1.2	Number of exits required	2 for car park and residential floors
•	D1.3	When Fire isolated exits are required	N/A
×	D1.4	Exit Travel Distances	Complies
~	D1.5	Distances between alternative exits	Complies
•	D1.6	Dimensions of exits	Min 1.0m clearance between walls or handrails. Handrails are required both sides in accordance with AS 1428.1, including handrail extensions
•	D1.7	Travel via fire isolated exits	N/A
•	D1.8	External stairways in lieu of fire isolated exits	N/A
Note	D1.9	Travel by non-fire isolated stairways or ramps	Ensure the travel distance from the residential upper floor does not exceed 60m to the doorway providing egress to a road or open space
•	D1.10	Discharge from exits	Noted
•	D1.11	Horizontal exits	N/A
•	D1.12	Non-Required stairways ramps and escalators	Noted
•	D1.13	Number of persons accommodated	N/A
Note	D1.14	Measurement of distances	
Note	D1.15	Method of measurement	
Note	D1.16	Plant rooms & lift motor rooms: Concession	
Note	D1.17	Access to lift pits	
	PART D2	CONSTRUCTION OF EXITS	
Note	D2.0	Deemed-to-Satisfy Provisions	
Note	D2.1	Application of Part	
Note	D2.2	Fire-Isolated stairways & ramps	N/A
Note	D2.3	Non-Fire-Isolated stairways and ramps	Noted
~	D2.4	Separation of rising and descending stair flights	
•	D2.5	Open access ramps and balconies	N/A
•	D2.6	Smoke lobbies	N/A
Note	D2.7	Installations in exits and paths of travel	
Note	D2.8	Enclosure of space under stairs and ramps	Non-fire isolated stairs. Any storage proposed under the stairs. The construction must have an FRL of 60/60/60 with a self-closing fire door with an FRL -/60/30

•	D2.9	Width of stairways	Minimum of 1.0m clear passageway
•	D2.10	Pedestrian ramps	N/A
Note	D2.10 (c)	Slip resistance	Compliance required, as per Table D2.14
	D2.11	Fire Isolated passageways	N/A
•	D2.12	Roof as open space	N/A
•	D2.13	Treads and risers	Must comply with AS 4586
Note	D2.13 (a) (v)	Slip resistance	Treads must comply with AS4586
Note	D2.14	Landings	Must have slip rating in accordance with table D2.14
Note	D2.14 (a) (ii)	Slip resistance	As per table D2.14
Note	D2.15	Thresholds	Any adaptable unit doorway must comply with AS 1428.1
Note	D2.16	Balustrades	<b>All</b> Non-fire isolated stairs will require balustrades- if not signed as fire stairs only then a handrail to both sides will be required.
			All balconies will require balustrades
			Must comply with this section
			Please provide details
?	D2.17	Handrails	Street stairs and the communal BBQ area stairs requires handrail extensions in accordance with AS 1428.1, bottom stairs require 1 x tread width + 300mm extension.
•			Redesign, revise elevations
-	D2.18	Fixed platforms, walkways stairways and ladders	N/A
•	D2.19	Doorways and doors	N/A
~	D2.20	Swinging doors	
Note	D2.21	Operation of latch	All accessible sanitary doors and any accessible or adaptable units, Door handles must comply with this clause and AS1428.1
•	D2.22	Re-entry from fire isolated exits	N/A
Note	D2.23	Signs on doors	Must comply with this clause
Note	D2.24	Protection of openable windows	All bedroom windows must be restricted, max 125mm if above 4.0m from ground level lower edge of the window is lower than 1.7m above the floor. Any window above 4m from ground level must have a barrier not less than 865mm above floor level or restricted as above.
	PART D3	ACCESS FOR PEOPLE WITH DISABILITIES	
Note	D3.0	Deemed-to-Satisfy Provisions	
Note	D3.1	General building access requirements	Access to all accessible public areas used by the occupants
?	D3.2	Access to buildings	Must comply with the requirements of AS1428.1
•	D3.3	Parts of building to be accessible, must comply with AS1428.1, 1428.2 & 4299	Platform lifts have been provided to retail tenancies
Note	D3.4	Exemptions	
•	D3.5	Accessible car-parking	Adaptable car spaces, Basement carpark requires a minimum height of 2.5m.
			The minimum available clearance shall be signposted at all entrances.
			Appropriate warning devices such as flexible striker bars shall be provided in conjunction with

•	SPEC D1.12	NON-REQUIRED STAIRWAYS RAMPS AND ESCALATORS	
Note	D3.12	Glazing on an accessway	
•	D3.11	Ramps	N/A
•	D3.10	Swimming pools	N/A
•	D3.9	Wheelchair seating spaces in Class 9b assembly buildings	N/A
?	D3.8	Tactile Indicators	Required to top and bottom of all public accessible stairs and ramps that are not fire isolated.
•	D3.7	Hearing augmentation	N/A
nciesNot e	D3.6	Signage	Required
			the signs wherever the clearance shown on the signs is <b>less than 2.3m</b>

	Section E	Services and Equipment	
	PART E1	FIRE FIGHTING EQUIPMENT	
Note	E1.0	Deemed-to-Satisfy Provisions	
×	E1.3	Fire Hydrants	Not shown on plans. Ensure hydrants are installed in accordance with AS 2419.1 requirements
•	E1.4	Hose Reels	Required to the retail parts of the building if the tenancies are not fire separated from each other.
•	E1.5	Sprinklers	Not required
•	E1.6	Portable Extinguishers Table E1.6	Required to be installed in accordance with AS 2444.
•	E1.8	Fire Control Centres	N/A
Note	E1.9	Fire precautions during construction	Required
•	E1.10	Provision for special hazards	N/A
	SPEC E1.5	FIRE SPRINKLER SYSTEM	
	PART E2	SMOKE HAZARD MANAGEMENT	
Note	E2.0	Deemed-to-Satisfy Provisions	
Note	E2.1	Application of Part	
Note	E2.2	General requirements (including Tables E2.2a & b)	
*	E2.3	Provision for special hazard	Note
Note	SPEC E2.2a	SMOKE DETECTION AND ALARM SYSTEMS	Required to the class 2 units, in accordance with spec 2.2a and to the retail tenancies.
•	SPEC E2.2b	SMOKE EXHAUST SYSTEMS	N/A
•	SPEC E2.2(c)	SMOKE AND HEAT VENTS	N/A
Note	SPEC E2.2 Clause 4 (c)(i)	FOR INFORMATION	
	PART E3	LIFT INSTALLATIONS	
Note	E3.0	Deemed-to-Satisfy Provisions	
•	E3.2	Stretcher facility in lifts	N/A
Note	E3.3	Warning against use of lifts in fire	Required
•	E3.4	Emergency lifts	N/A
Note	E3.5	Landings	Required to comply
•	E3.6	Passenger lifts	Required to comply
•	E3.7	Fire Service Controls	N/A

•	E3.8	Aged Care buildings	N/A
•	E3.9	Fire Service recall operation switch	N/A
•	E3.10	Lift car fire service drive control switch	N/A
	PART E4	EMERGENCY LIGHTING, EXIT SIGNS AND WARNING SYSTEMS	
Note	E4.0	Deemed-to-Satisfy Provisions	
Note	E4.2	Emergency Lighting System	Required to the basement and basement exits, all stair wells and all required exit passageways
Note	E4.3	Measurement of distances	
Note	E4.4	Design and operation of emergency lighting	Required in accordance with AS2293.1
Note	E4.5	Exit signs	Required to the basement, all required exits, central passageway, passageways
Note	E4.6	Direction signs	As required
•	E4.7	Class 2 and 3 Buildings and Class 4 parts exemptions	N/A
Note	E4.8	Design and operation of exit signs	Must comply with AS2293.1
Note	Spec E4.8	Spec for photoluminescent exit signs	Must comply with AS2293.1
•	E4.9	EWIS System	N/A

	Section F	Health and Amenity	
•	PART F1	DAMP & WEATHER PROOFING	
Note	F1.1	Stormwater drainage.	
Note	F1.4	External above ground membranes	Balcony set downs must comply with AS4654 parts 1&2
			Architect to determine wind category.
			Wind class/ set down required AS4055
			N1 / 40
			N2 / 50
			N3 / 70
			N4 / 100
			Ground floor, unit 5 has external height the same as internal height
Note	F1.5	Roof coverings	
Note	F1.6	Sarking	
Note	F1.7	Waterproofing of wet areas in buildings	Certification required
Note	F1.9	Damp-proofing	
Note	F1.10	Damp-proofing of floors on the ground.	
Note	F1.11	Provision of floor wastes	
•	F1.12	Sub-floor ventilation	N/A
Note	F1.13	Glazed assemblies	Certification required
	PART F2	SANITARY & OTHER FACILITIES	
Note	F2.0	Deemed-to-Satisfy Provisions	
?	F2.1	Facilities in residential buildings	Noted

Note	F2.2	Calculation of number of occupants and fixtures	
?	F2.3	Facilities in Class 3 to 9 Buildings, Table F2.3 or FP2.2	Noted
~	F2.4	Facilities for people with disabilities	Noted. Provided in Basement 1.
Note	F2.5	Construction of sanitary compartments	
•	F2.6	Interpretation: urinals and wash basins	N/A
•	F2.7	Warm water installations	N/A
•	F2.8	Slop-hoppers	N/A
	PART F3	ROOM SIZES	
Note	F3.0	Deemed-to-Satisfy Provisions	
~	F3.1	Height of rooms	

	PART F4	LIGHT AND VENTILATION	
Note	F4.0	Deemed-to-Satisfy Provisions	
Note	F4.1	Provision of Natural light	Please provide a window schedule
Note	F4.2	Methods and extent of natural lighting	
Note	F4.3	Natural light borrowed from adjoining room	
Note	F4.4	Artificial lighting	
Note	F4.5	Ventilation of rooms	Please provide a window schedule
Note	F4.6	Natural ventilation	
Note	F4.7	Ventilation borrowed from adjoining rooms	
•	F4.8	Restriction on position of water closets and urinals	N/A
~	F4.9	Airlocks	
*	F4.11	Carparks	Basements are required to have a mechanical ventilation system in accordance with AS1668.2
•	F4.12	Kitchen local exhaust ventilation	N/A
	PART F5	SOUND TRANSMISSION AND INSULATION	
Note	F5.0	Deemed-to-Satisfy Provisions	
Note	F5.1	Application of Part	Acoustic report required
Note	F5.2	Determination of airborne sound insulation ratings	Details to be provided at Construction Certificate stage and a certificate of compliance prior to the issue of the Final Occupation Certificate.
Note	F5.3	Determination of impact sound insulation ratings	Details to be provided at Construction Certificate stage and a certificate of compliance prior to the issue of the Final Occupation Certificate.
Note Note	F5.4	Sound Insulation ratings of floors	Details to be provided at Construction Certificate stage and a certificate of compliance prior to the issue of the Final Occupation Certificate.

			Certificate stage and a certificate of compliance prior to the issue of the Final Occupation Certificate.
Note	F5.6	Sound insulation rating of services	Details to be provided at Construction Certificate stage and a certificate of compliance prior to the issue of the Final Occupation Certificate.
Note	F5.7	Sound isolation of pumps	Details to be provided at Construction Certificate stage and a certificate of compliance prior to the issue of the Final Occupation Certificate.

	Section G	Ancillary Provisions	
	PART G1	Minor structures and components	
•	G1.1	Swimming pools	N/A
•	G1.2	Refrigerated chambers, strong- rooms and vaults	N/A
	PART G2	Heating Appliances	
•	G2.2	Installation of appliances	N/A
•	G2.3	Open fire places	N/A
•	G2.4	Incinerator rooms	N/A
	PART G3	Atrium Construction	
•	G3.1	Atriums affected by this part	N/A
•	G3.2	Dimensions of atrium wells	N/A
•	G3.3	Separation of atrium by bounding walls	N/A
•	G3.4	Construction of bounding walls	N/A
•	G3.5	Construction of balconies	N/A
•	G3.6	Separation of roof	N/A
•	G3.7	Means of egress	N/A
•	G3.8	Fire & smoke control systems	N/A
•	4.1	General requirements	N/A
•	4.2	Smoke detection system	N/A
•	4.3	Smoke detection in spaces separated from the atrium by bounding walls	N/A
•	4.4	Alarm systems	N/A
•	4.5	Sound systems and intercom systems for emergency purposes	N/A
•	4.6	Stand-by power systems	N/A
•	4.7	Systems for excluding smoke from fire isolated exits	N/A
•	4.8	Fire in alpine areas	N/A
•	PART G4	Construction in alpine areas	N/A
•	PART G5	Construction in bushfire prone areas	N/A
•	G5.2 (NSW)	Protection (Class 2 or 3 buildings)	N/A

	Section H	Special Use Buildings	
	Section I	Maintenance	
Note	11.1 (NSW)	Essential fire safety measures	Must be maintained in accordance with EP&A Regulation 2000
	Section J (NSW)	Energy Efficiency (Including BASIX & Council requirements)	
Note	PART J1	Building Fabric	Basix required

#### Note, Basix will be required for the residential units

#### Plans use in this assessment:

Drawn by- Crawford Architects

A100,A101 Issue 18, A102 Issue23, A103 Issue 27, A104 Issue 25, A105 Issue23

<u>Note</u>: The above assessment has been done under the Deemed-to-Satisfy provisions of the NCC-BCA 2019 - Amendment 1, unless noted otherwise.

Signature:

Edward .

Rod Edwards Senior Building Surveyor BCA Consultant

Date: 15/06/2021