



Mixed Use Development
291-293 Condamine Street
Manly Vale NSW 2093

Regulatory Compliance Report

BCA Assessment

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Date: 6 June 2024

Revision: 4.0

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Date	Rev No	No. of Pages	Issue or Description of Amendment	Assessed By	Approved By	Date Approved
18.06.23	1.0	100	Draft Stakeholder Review	Kurtis Lamaro	Vijay Perumal	18.06.23
20.06.23	2.0	21	Updated Report	Kurtis Lamaro	Vijay Perumal	20.06.23
12.07.23	3.0	22	Updated Report	Kurtis Lamaro	Vijay Perumal	12.07.23
27.05.24	4.0	22	Updated Report	Kurtis Lamaro	Vijay Perumal	6.06.24

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1. EXECUTIVE SUMMARY

The proposed development is a Mixed Use Development, located at 291-293 Condamine Street, Manly Vale NSW 2093.

Summary of Compliance Matter to be Addressed

As Registered Certifiers relevant building surveyor we have reviewed the architectural design documents prepared by Sarm Architects (refer appendix A) for compliance with the building assessment provisions currently outlined in BCA 2022, as current project timeframes indicate that BCA 2022 will be that which applies to the development.

BCA 2022 is scheduled to be adopted by all states and territories on the 1st of May 2023. It is noted that some provisions, such as the liveable housing provisions, have a delayed adoption date of the 'modern homes provisions' i.e. energy efficiency, condensation mitigation and liveable (accessible) housing. Until these adoption dates, NCC 2019 Amendment 1 applies.

It is noted that the full final version of BCA 2022 Volume 1 with state and territory variations has been released, however the Australian Building Codes Board have since advised that editorial corrections will need to be made. These corrections are scheduled to be released in early December 2022. This report has assessed the development against the provisions available at the time of this report.

This report has been prepared to assess the project against the Building Code of Australia to enable issuance of construction approvals. Further assessment of the design will be undertaken as the design develops to ensure compliance is achieved prior to approval being issued

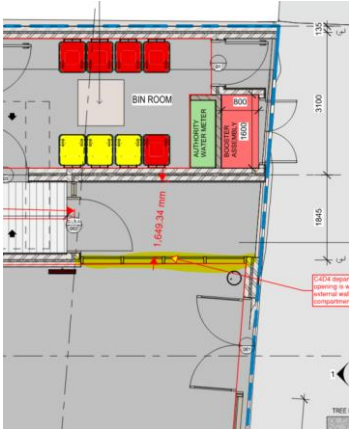
Deviations from the Deemed-to-Satisfy Provisions

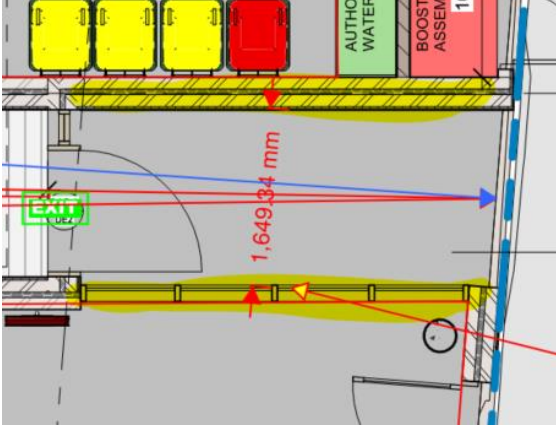
The assessment of the design documentation has revealed that the following areas deviate from the deemed-to-satisfy provisions of the BCA. These items are to be addressed to ensure compliance is achieved, either through design amendment to achieve compliance with the deemed-to-satisfy provisions, or through a performance solution demonstrating compliance with the Performance Requirements of the BCA:

No.	Description	Relevant DTS Clauses'	Performance Requirements
Fire Safety Items			
1	<p>Rationalisation of fire-resistant level's (FRL)</p> <p>As the building is considered to be 'Type A' Construction as nominated within the BCA, all building elements are required to be constructed in accordance with the Tables associated in part S5C11 of Specification 5 of the BCA.</p> <p>Proposed rationalisation to required FRL's (as specified within the tables associated in part S5C11 of Spec 5) are to be addressed as part of a fire engineered solution. The following departures have been noted:</p> <ul style="list-style-type: none"> Where the floor slabs of the wet areas throughout the residential levels incorporate set down in the wet areas resulting in a local reduction of the slab to be less than 200mm, this will be required to be addressed through a fire engineered solution. 	C2D2, Spec C2D2, C3D8, C3D9	C1P1, C1P2

No.	Description	Relevant DTS Clauses'	Performance Requirements
	<ul style="list-style-type: none"> • Lintels supporting brickwork and other openings. • Storage / bin room areas in the basement exceed 10% of the total floor area and are therefore considered class 7b portions requiring 240/240/240 separation. Where it is proposed to be reduced to 120/120/120 a fire engineered performance solution is required. • Roof lights provided to units 7,8 & 9 are located within 3m of each other (please see snapshot of locations below). <p style="color: blue;">Roof light locations have now been made DTS</p>		
2	<p>Fire rating between slab edge, bounding wall and façade junctions</p> <p>Due to the configuration of the slab edge, bounding wall and double brick cavity junctions, DTS compliant fire separation will not be provided as the fire stopping between these elements/junctions will be afforded with a non-tested prototype.</p>	C2D2, Spec C2D2, C3D8, C3D9, C3D10	C1P2, C1P8
3	<p>Utilisation of "Dintel / Redi-wall" external wall/s</p> <p>In a building required to be of Type A construction, the following building elements and their components must be non-combustible:</p> <ul style="list-style-type: none"> (i) External walls and common walls, including all components incorporated in them including the facade covering, (ii) framing and insulation. (iii) The flooring and floor framing of lift pits. (iv) Non-loadbearing internal walls where they are required to be fire-resisting. <p>Where it is proposed to utilise "Dintel / Redi-wall" walls within the building, this must be addressed through a fire engineered solution</p> <p style="color: blue;">It has been confirmed that no Dintel / Redi-Wall type products will be utilised on this project</p>	C2D10, C2D14	C1P2, C1P3
4	<p>Internal combustible elements</p> <p>Where combustible elements are proposed to be installed within the internal fire rated walls or external walls and/or proposed to be penetrated through these walls, which are required to be non-combustible. These elements are technically not considered to be exempt from the provisions of C2D10 and C2D14 of the BCA and must be addressed through fire engineering.</p>	C2D10, C2D14	C1P2

No.	Description	Relevant DTS Clauses'	Performance Requirements
	Elements such as PEX pipes, AC Pair Coils, Electrical Wiring etc are example elements that may contravene the above requirements and are to be confirmed from the design team		
5	<p>Spandrel Separation</p> <p>Where the building has not been sprinkler protected with a AS 2118 Part 1 or Part 4 system throughout the whole building. Spandrel separation is required to be provided in accordance with this Clause.</p> <p>For the purposes of C3D7, window or other opening means that part of the external wall of a building that does not have an FRL of 60/60/60 or greater (two-way fire rating).</p> <p>Spandrels are required in accordance with BCA Clause C3D7, which stipulates a 900mm high spandrel; with 600mm of this spandrel being above the finished floor level. Alternatively, an 1100mm horizontal slab may be utilized. The spandrel material is required to be non-combustible and to achieve an FRL of 60/60/60.</p> <p>Where this has not been provided, will need to be captured as a Fire Engineered Solution</p> <p>To be DTS compliant, will be verified as the design develops into Construction Issued Set</p>	C3D7	C1P1, C1P2, C1P8
6	<p>Smoke separation of public corridors</p> <p>Due to the open stairways serving residential levels, the corridors are technically greater than 40m in length (Up to 64m) and must be divided at intervals of not more than 40m with smoke-proof walls.</p>	C3D15	E2P2, C1P2
7	<p>Protection of Openings</p> <p>The following openings are within proximity to "Fire Source Features" as prescribed within the BCA.</p> <p><i>Ground Floor, Level 1, Level 2, Level Roof</i></p> <ul style="list-style-type: none"> • There are multiple openings exposed to the Northern, Southern and Western allotment "Fire Source Features" • This also includes the discharge of the Carpark Exhaust which is a AS 1668.2 departure <p>Where protection of these openings have not been afforded with C4D5 protection, they must be addressed through fire engineering.</p>	C4D3, C4D5	C1P2, C1P8

No.	Description	Relevant DTS Clauses'	Performance Requirements
8	<p>Separation of external walls and associated openings in different fire compartments</p> <p>The following openings within the external wall of different fire compartments are flagged as a departure in accordance with this Clause:</p> <p><i>Ground Floor</i></p> <ul style="list-style-type: none"> Retail / Bin (Class 6 / 7b) room external walls are within proximity to the external glazed opening of a different fire compartment of the Class 2 portion (see snapshot below). 	C4D4, C4D5	C1P2, C1P8
9	<p>Bounding construction</p> <p>In a Class 2 or 3 building where a path of travel to an exit does not provide a person seeking egress with a choice of travel in different directions to alternative exits and is along an open balcony, landing or the like and passes an external wall of—</p> <ul style="list-style-type: none"> another sole-occupancy unit; or a room not within a sole-occupancy unit, <p>Then that external wall must—</p> <ul style="list-style-type: none"> be constructed of concrete or masonry, or be lined internally with a fire-protective covering; and have any doorway fitted with a self-closing, tight-fitting solid core door not less than 35 mm thick; and have any windows or other openings— <ul style="list-style-type: none"> protected internally in accordance with C3.4; or located at least 1.5 m above the floor of the balcony, landing or the like. <p>The path of travel from class 2 portions to an exit requires passing external walls of a room not within a sole-occupancy unit. The external wall and openings highlighted below must</p>	C4D12	C1P2, C1P8

No.	Description	Relevant DTS Clauses'	Performance Requirements
	<p>comply with C4D12(9), where compliance is not achieved a fire engineered performance solution is required.</p> 		
10	<p>Openings for service penetrations Electrical conduit cables or any other cast in service that are casted into the concrete slabs and pass over fire rated walls / compartments. These slab penetrations are not fire sealed in a compliant arrangement per BCA Clause C4D15 and will need to be addressed through a performance solution.</p>	C4D15	C1P2, C1P8
11	<p>When fire-isolated stairways and ramps are required As the building is not proposed to be completely sprinkler protected with an AS 2118 system. The concession relating to fire stairs not being fire isolated as per D2D4, can not be relied upon as the proposed non-fire isolated stairs connects 4x storeys and protected via a mixture of a AS 2118 and FPA101H system</p> <p>This item has now been confirmed as DTS</p>	D2D4	C1P2, D1P4, D1P5, E2P2
12	<p>Extended travel distances The following travel distances are to be addressed through a performance solution, in the event that they are not reduced through design amendments:</p> <p><i>Ground Floor</i></p> <ul style="list-style-type: none"> Up to 30m to an exit in lieu of 20m (storage) <p>Where design amendments are not afforded, this will need to be addressed as part of a fire engineered solution.</p>	D2D5	D1P4, E2P2
13	<p>Dimensions of exits and paths of travel to exits The following exit paths are to be addressed through a performance solution, in the event that they are not reduced through design amendments:</p>	D2D8	D1P4, D1P6, E2P2

No.	Description	Relevant DTS Clauses'	Performance Requirements
	<p>Ground Floor</p> <ul style="list-style-type: none"> ● Multiple paths of travel less than 1m, please see markups for locations ● The door providing egress from the pump room on ground floor is 730mm wide in lieu of 750mm ● Pump room is assumed to have pathway of less than 1m once pumps installed ● Corridor outside pumproom scaled to be less than 1m <p>Level 01</p> <ul style="list-style-type: none"> ● Multiple paths of travel less than 1m, please see markups for locations <p>Level 02-03</p> <ul style="list-style-type: none"> ● Cupboard doors reduce the path of travel in the corridor to less than 1m <p>Where design amendments are not afforded this must be addressed through fire engineering.</p> <p>To be DTS compliant, will be verified as the design develops into Construction Issued Set</p>		
14	<p>Travel via non-fire isolated stairs</p> <p>The current design of the non-fire isolated stairs does not comply with D2D14(4). The stairway serving the residential portions discharges at a point that is 16m from a doorway leading to a road or open space in lieu of 15m.</p>	D2D14	C1P2, D1P4, D1P5, E2P2
15	<p>Access via a ladder in lieu of a stairway</p> <p>It is prosed to access the roof plant areas via an access hatch. It is assumed that access will be provided via a ladder, as the roof area is greater than 100m² access via a ladder will not comply with D2D21. Please provide details of access/egress from the roof area to confirm the non-compliance.</p>	D2D21	D1P2, D1P4
16	<p>Enclosure of space under stairs and ramps</p> <p>The space under the non-fire isolate stairs is currently provided with an enclosed storage room. Where the below is not complied with, a performance solution is required:</p> <ul style="list-style-type: none"> ● the enclosing walls and ceilings have an FRL of not less than 60/60/60; and any access doorway to the enclosed space is fitted with a self-closing -/60/30 fire door. <p>To be DTS compliant, will be verified as the design develops into Construction Issued Set</p>	D3D9	D1P2

No.	Description	Relevant DTS Clauses'	Performance Requirements
17	<p>Swinging Doors</p> <p><i>Ground Floor</i></p> <ul style="list-style-type: none"> Doors from the retail area do not swing in direction of egress <p>Where design amendments are not afforded will need to be addressed through a fire engineered performance solution.</p>	D3D25	D1P2, D1P4, E2P2
18	<p>Fire Hydrant</p> <p>A fire hydrant has been provided to the building as per E1D2. The current location of the fire hydrant/booster will have the following departures:</p> <ul style="list-style-type: none"> The current location may obstruct occupant egress from the building. It is proposed to have roller door to the enclosure of the cupboard 	E1D2, AS 2419.1 – 2021.	E1P3, E1P4
19	<p>Fire Pump Room</p> <p>The pump room does not open to a road or open space as per AS 2419.1 – 2021</p> <p>No pump room required anymore</p>	E1D2, AS 2419.1 – 2021	D1P6, E1P3, E1P4, E2P2
20	<p>Fire Hose Reels</p> <p>Fire hose reels must be provided to the class 6, 7a and 7b portions. The current fire hose reel locations have the following departures:</p> <ul style="list-style-type: none"> The fire hose reel located in the storage cage / pump room area is located 17m from an exit in lieu of the maximum 4m to an exit. Storage / Bin rooms located on ground floor are not provided with their own hose reels. As per E1D3 of the BCA – Fire hose reels must be located so that the fire hose will not need to pass through doorways fitted with fire or smoke doors. As per E1D3, fire hose reels must be located adjacent to any internal fire hydrant, unless where compliant coverage is achieved. The carpark area located on level 01 is not afforded with a fire hose reel and is required by E1D3. Please confirm proposed location. <p>To be DTS compliant, will be verified as the design develops into Construction Issued Set</p>	E1D3	E1P1
21	<p>Special Hazards</p> <p>The following special hazards are to be discussed within the FEBQ / FER.</p>	Multiple	Multiple

No.	Description	Relevant DTS Clauses'	Performance Requirements
	<ul style="list-style-type: none"> ▪ Car Stacker ▪ EV's / Solar Panels (where proposed) ▪ Carpark Turn Table 		
22	<p>Sprinkler protection to Switch rooms</p> <p>Clause 3.1.3 of AS 2118.1-2017 states that sprinklers can be omitted for reasons of safety or incompatibility to high-voltage, normally unoccupied areas such as rooms used for no purposes other than to contain transformers, electrical switch or control gear (non-oil filled), bounded by walls or other barriers to resist the spread of fire, and fitted with multiple controls for alarm purposes only with the drain discharging to an open tundish, or a detection and alarm system installed in accordance with the requirements of AS 1670.1.</p> <p>Electrical / Fire Services engineer to confirm that the plant within the Switch rooms strictly comply with the above concession. Where this is not achievable, the omission of sprinklers within this area must be addressed through a fire engineered solution.</p>	E1D4	E1P4
23	<p>Sprinklers</p> <p>It is currently proposed to provide an AS 2118.1 system to the ground floor and the carpark portion of level 1. The residential levels are proposed to be provided with a FPAA101H system. This design is to be confirmed by the service consultant. It is noted that the below departures are present with the current design:</p> <ul style="list-style-type: none"> • The AS 2118.1 system provided to the carpark must be independent to any part of the building not used as a carpark; or be designed that the section protecting the non-carpark can be isolated without interrupting the water supply or effective operation of the carpark area. • It is assumed that the sprinkler alarm valves may be located within the pump room instead of complying with specification 17. 	E1D4	E1P4
24	<p>Sprinkler system concessions</p> <p>As the building will not be afforded with a DTS complaint sprinkler protected building, the reliance on the applicable concessions in the BCA for a "Sprinkler Protected Building" is to be addressed with the proposed FER.</p> <p>The departure from the BCA is that the sprinkler system is to comply with Performance Requirement E1P4 of the BCA in lieu of a DTS compliance system.</p>	E1D4	E1P4

No.	Description	Relevant DTS Clauses'	Performance Requirements
25	<p>Jet fans</p> <p>Where it is proposed to incorporate impulse fans in the car park area to address isolated stagnant areas, in an otherwise naturally ventilated car park, instead of traditional ducted mechanical ventilation in accordance with AS1668, this will be required to be addressed through a Fire Engineered Solution</p> <p>No jet fans proposed</p>	E2D3, E1D4	E2P2, E1P4
Miscellaneous Items			
26	<p>Accessibly carparking Space</p> <p>It has been confirmed that ceiling heights within the Accessible carparking space will not achieve a clear 2500mm height and the existing designs indicate a non-compliant location of the bollard within the Shared Space.</p> <p>Where design amendments are not afforded must be addressed via an Access performance solution.</p> <p>To be DTS compliant, will be verified as the design develops into Construction Issued Set</p>	D4D6	D1P8
27	<p>Basement Wet walls</p> <p>Enclosed rooms within the basement are currently abutting 'wet walls.</p> <p>It is recommended that the above discrepancies be amended to comply as this is a simple fix</p> <p>To be DTS compliant, will be verified as the design develops into Construction Issued Set</p>	F1D1	F1P2
28	<p>Sanitary facilities</p> <p>Inadequate sanitary facilities have been provided within the development. Please review "Health and Amenity Assessment" for extent of departure.</p> <p>Ground Floor (Retail)</p> <ul style="list-style-type: none"> No urinal has been provided to the retail portion on ground level. Where this is not proposed, a performance solution is required. 	F4D4	F4P1

No.	Description	Relevant DTS Clauses'	Performance Requirements
	<p>It is recommended that the below discrepancies be amended to comply</p> <p>No urinal required as staff numbers are proposed to be no greater than 10 occupants</p>		
29	<p>Construction of sanitary compartments</p> <p>Sanitary compartments in apartments 9 and 6 currently have WC's are within 1.2m to the doorway, measure in accordance with Figure F4D8. Where design amendments are not proposed, the following must be complied with:</p> <ul style="list-style-type: none"> a) open outwards; or b) slide; or c) be readily removable from the outside d) of the sanitary compartment. <p>To be DTS compliant (lift off hinges), will be verified as the design develops into Construction Issued Set</p>	F4D8	F4P5
30	<p>Weatherproofing of External Walls</p> <p>As the external walls are proposed to be constructed of a material not nominated in F3D5, a performance solution is to be provided by the façade engineer/registered architect demonstrating that the external walls comply with the requirements of Performance Requirement F3P1 (previously FP1.4).</p> <p>To be DTS compliant, will be verified as the design develops into Construction Issued Set</p>	F3D5	F3P1 (previously FP1.4).

The feasibility and any additional requirements that will apply as a result of the performance solution will need to be confirmed by the professional preparing the performance solution. Any performance solution will need to be prepared by a suitably qualified/accredited professional.

Fire Safety Services

The following key fire safety services are required to meet the minimum DTS requirements.

1.	Sprinklers system throughout the building
2.	Fire hydrant system throughout the building
3.	Fire hose reels to the class 6, 7a & 7b portions of the building
4.	Fire precautions during construction

5.	Automatic smoke detection and alarm system throughout the building
6.	Sound System and Intercom System for Emergency Purposes
7.	Carpark ventilation systems must comply with Clause 5.5 of AS/NZS1668.1-2015 except that fans with metal blades suitable for operation at normal temperature may be used and the electrical power and control cabling need not be fire rated

Refer to parts 9 and 10 of this report for further details regarding the required services.

Any fire engineered solution relating to insert relevant category 2 items will need to be approved after consultation with the NSW Fire Brigade as part of the Construction Certificate process.

Further Assessment

The following items will be verified as the design develops into Construction Issued Set and prior to the issue of the Construction Certificate:

No.	Further Information / Review Required	Report Reference
1.	Fire and Smoke Compartmentation Plans prepared by the Registered Architect	Architect
2.	Schedule of materials used in the construction of the external wall and associated test reports demonstrating compliance with non-combustibility requirements. (Please refer to our disclosure statement proforma)	Architect
3.	Please confirm if any Special Hazards are identified and any firefighting problems arising are afforded any additional provisions necessary to address E1D17 of the BCA including: <ul style="list-style-type: none"> a. Nature or quantity of materials stored, displayed or used in a building or on the allotment The location of the building in relation to a water supply for firefighting purposes	Fire Engineer
4.	Please confirm if any Special Hazards are identified and additional smoke hazard management measures necessary in accordance with E2D21 of the BCA including: <ul style="list-style-type: none"> a. Special characteristics of the building, or b. Special function of the building, or c. Special type or quantity of materials stored, displayed or used in the building, or d. Special mix of classifications within a building or fire compartment which are not addressed in E2D4 – E2D13 or Table E2D14 - E2D20	Fire Engineer
5.	Architectural plans highlighting proposed wet areas, locations of floor wastes and details of waterproofing for our review	Architect
6.	Please provide a statement from a structural engineer to certify compliance with Part C and Spec 5 for all Structural Components and Clause D3D3 of the BCA.	Structural Engineer
7.	Please provide the importance level of the building prepared by the structural engineer or seismic consultant. Certification will be required confirming that the design of the seismic restraints comply with AS 1170.4-2002.	Structural Engineer
8.	Please provide detailed structural plans and certificate certifying compliance of the whole of building structure	Structural Engineer
9.	Please provide a list of materials/systems proposed to be used in locations required to achieve an FRL and the supporting test reports/test certificates/assessment reports. The list is to include elements considered exempt	Architect
10.	Please provide a schedule of internal floor, wall and ceiling materials, flexible mechanical ductwork, sarking material and insulation proposed to be used and the	Architect

	supporting test reports/test certificates/assessment reports. The list is to include elements considered exempt	
11.	Please provide a list of ancillary elements materials/systems proposed to be fixed to the internal parts or external face of an external wall and the supporting test reports/test certificates/assessment reports.	Architect
12.	Please confirm what sprinkler system is proposed	Fire Services Engineer
13.	Please provide Location of all services or equipment to confirm compliance with D3D8	Services Consultant
14.	Please provide plans indicating the area under the stairs to confirm compliance with D3D9	Architect
15.	Please provide stair details	Architect
16.	Please provide balustrade & barrier details	Architect
17.	Please provide details of the car lift, including the doorway specifications	Architect
18.	Please provide detail of all latches	Architect
19.	Please provide plans indicating proposed sings on doors	Architect
20.	Please provide a window schedule	Architect
21.	Please confirm if a timber stairway is proposed	Architect
22.	Please provide an Access report from an accredited access consultant and certification confirming compliance	Access Consultant
23.	Please provide plans indicating the location of fire extinguishers	Architect / Fire Services Engineer
24.	Please confirm if jet fans are proposed	Architect
25.	Please confirm if EV chargers or PV systems are proposed	Architect / Fire Engineer
26.	Please confirm if an electric passenger lift or an electrohydraulic passenger lift is proposed	Architect
27.	Please provide plans indicating location of Emergency Lighting and Exit Signs	Architect / Fire Services Engineer
28.	Please provide details confirming compliance with E4D7 for review	Architect
29.	Please confirm if photoluminescent exit signs are proposed	Architect / Fire Services Engineer
30.	Please provide a statement prepared by a registered civil engineer certifying compliance of the stormwater drainage system with AS/NZS 3500.3-2021	Civil Engineer
31.	Please provide a certificate ensuring compliance with AS 4654.1 and AS 4654.2.	Architect / waterproofing consultant
32.	Please provide proposed material and test reports associated with roof coverings	Architect
33.	If a sarking type material is proposed for weatherproofing of roofs and walls please provide a certificate ensuring compliance with AS/NZS 4200.1 and AS 4200.2.	Architect
34.	Please provide a certificate ensuring compliance with AS 3740	Architect / waterproofing consultant

35.	Please provide certificates confirming compliance with AS/NZS 2904 or AS 3660.1.	Architect / waterproofing consultant
36.	Please confirm if a sub-floor is proposed	Architect
37.	Please provide a test certificate demonstrating compliance with AS2047.	Architect
38.	Please ensure all sanitary facilities are indicated on the plans as per F4D2	Architect
39.	Further plans are to be provided to confirm ceiling heights are compliant	Architect
40.	Architect is to provide a schedule demonstrating compliance for each resident room with the 10% requirement for clauses F6D2 & F6D3	Architect
41.	Please confirm is natural light is proposed to be borrowed from an adjoining room	Architect
42.	Design documentation to be provided and certification to ensure compliance with Artificial Lighting clause F6D5	Architect
43.	Statement to be provided confirming natural ventilation is provided to rooms at a rate of 5% of the floor area in openings.	Architect
44.	Please confirm ventilation system proposed and provide certificate indicating compliance with the AS 1668.2 or AS 1668.4	Architect / Services Consultant
45.	Please provide an Acoustic report prepared by an accredited acoustic consultant	Acoustic Consultant
46.	Please provide a report confirming compliance with F8D2 – Condensation Management	Relevant Consultant
47.	ESD Consultant to provide a report demonstrating compliance with the DTS provisions of the BCA or alternatively, a performance solution report in accordance with the Verification Methods available.	ESD Consultant
48.	Please provide fire stair details confirming non-combustibility and smoke proofing to ensure compliance with D3D5.	Architect
49.	Please ensure all matters as per Certatude's and Phillip Chun's markups have been finalised	Multiple Consultants
50.	Further review will be required as the design develops	Certatude

Documentation to enable assessment and demonstrate compliance will be required to address the above items prior to approval.

The application for Construction Certificate shall be assessed under the relevant provisions of the Environmental Planning & Assessment Act 1979 (As Amended) and the Environmental Planning & Assessment (Development Certification and Fire Safety) Regulation 2021.

2. INTRODUCTION

The proposed development is a Mixed Use Development, located at 291-293 Condamine Street, Manly Vale NSW 2093.

This report is based upon the review of the design documentation listed in Appendix A of this Report

The report is intended as an overview of the relevant provisions of the Building Code of Australia for assistance only. Detailed drawings and associated review will still be required as the final design is developed.

The applicable legislation governing the design of buildings is the Environmental Planning and Assessment Act 1979. This Act requires that all new building works must be designed to comply with the BCA.

The version of the BCA applicable to the development, is version that in place at the time of the application to the Registered Certifier for the Construction Certificate. For the purposes of this Report, BCA 2022 has been utilised as it is anticipated that BCA 2022 will apply to the project based on project timeframes.

3. COMPLIANCE WITH THE BCA

The Building Code of Australia is a performance based document, whereby compliance is achieved by complying with the Governing Requirements and the Performance Requirements.

Performance Requirements are satisfied by one of the following:

- 1) A Performance Solution
- 2) A Deemed-to-Satisfy Solution
- 3) A combination of (1) and (2)

4. DOCUMENTATION OF PERFORMANCE SOLUTIONS

A Performance Solution must demonstrate compliance with all relevant Performance Requirements, or the solution must be at least equivalent to the Deemed-to-Satisfy provisions.

Compliance with the Performance Requirements is to be demonstrated through one or a combination of the following:

- a) Evidence of suitability in accordance with Part A5 of the BCA that shows the use of a material, product, plumbing and drainage product, form of construction or design meets the relevant Performance Requirements.
- b) A Verification Method including the following:
 - i. The Verification Methods provided in the NCC.
 - ii. Other Verification Methods, accepted by the appropriate authority that show compliance with the relevant Performance Requirements
- c) Expert Judgement
- d) Comparison with the Deemed-to-Satisfy Provisions

Where a Performance Solution is proposed as the method to achieve compliance, the following steps must be undertaken:

- a) Prepare a performance-based design brief in consultation with relevant stakeholders
- b) Carry out analysis, using one or more of the assessment methods nominated above, as proposed by the performance-based design brief.
- c) Evaluate results from (b) against the acceptance criteria in the performance-based design brief
- d) Prepare a final report that includes:

- i. All Performance Requirements and/or Deemed-to-Satisfy Provisions identified as applicable
- ii. Identification of all assessment methods used
- iii. Details of required steps above
- iv. Confirmation that the Performance Requirement has been met; and
- v. Details of conditions or limitations, if an exist, regarding the Performance Solution.

5. PRELIMINARIES

5.1. BUILDING ASSESSMENT DATA

Summary of Construction Determination:

Part of Project	Building 1
Classification	2, 6, 7a, 7b
Number of Storeys	4
Rise In Storeys	4
Type of Construction	A
Effective Height (m)	10.932

Note: The effective height of the project includes all stories included in the rise in stories of the project.

Summary of the floor areas and relevant populations where applicable: -

Part of Project	BCA Classification	Approx. Floor Area (m ²)	Approximate Volume (m ³)	Assumed Population
Ground Level (Retail)	6	85.11	382.995	29
Ground Level (Storage/Bin Room)	7b	88.48	398.16	3
Ground Level (Carpark)	7a	75.02	337.59	N/A
Level 1 (Carpark)	7a	187.06	561.18	7
Level 1 (Residential)	2	144.15	432.45	4
Level 2 (Residential)	2	293.81	940.192	12
Level 3 (Residential)	2	247.64	841.976	10
Total		1,121.27	3,894.543	65

Notes:

- The above populations have been based on floor areas and calculations in accordance with Table D2D18 (prev. Table D1.13) of the BCA.

5.2. COPY OF CERTIFICATE OF TITLE

A copy of the Certificate of Title and associated plan of subdivision is required. Where it is proposed to construct any part of the building over, under or within an easement, the consent of the relevant authority and Council is required prior to the issue of the Construction Certificate.

6. APPENDIX A – REFERENCE DOCUMENTATION

The following documentation was used in the assessment and preparation of this report:

DRAWING LIST

A000	COVER PAGE	C4	12/04/24
A101	SITE PLAN	C4	12/04/24
A102	AREA SCHEDULE	C4	12/04/24
A103	GRID SETOUT	C4	12/04/24
A200	GROUND FLOOR PLAN	C4	12/04/24
A201	LEVEL 01 PLAN	C4	12/04/24
A202	LEVEL 02 PLAN	C4	12/04/24
A203	LEVEL 03 PLAN	C4	12/04/24
A204	ROOF PLAN	C4	12/04/24
A300	GROUND RCP	C4	12/04/24
A301	LEVEL 01 RCP	C4	12/04/24
A302	LEVEL 02 RCP	C4	12/04/24
A303	LEVEL 03 RCP	C4	12/04/24
A401	ELEVATION - EAST	C4	12/04/24
A402	ELEVATION - SOUTH	C4	12/04/24
A403	ELEVATION - WEST	C4	12/04/24
A501	LONG SECTION - G2	C4	12/04/24
A502	SECTION GA & GC	C4	12/04/24
A503	SECTION GE	C4	12/04/24
A504	LONG SECTION G3	C4	12/04/24
A601	DETAILS SHEET	C4	12/04/24
A605	LOBBY & STAIR DETAILS	C4	12/04/24
A701	WET AREA DETAILS	C4	12/04/24
A801	WALL TYPES & INSULATION NOTES	C4	12/04/24
A802	WATERPROOFING PLANS	C4	12/04/24
A803	PASSIVE FIRE PROTECTION PLANS	C4	12/04/24
A804	NATURAL LIGHT SCHEDULE	C4	12/04/24
A805	VIEW FROM THE SUN STUDY	C4	12/04/24
A903	DOOR SCHEDULE	C4	12/04/24
A904	WINDOW SCHEDULE	C4	12/04/24

7. APPENDIX B – DRAFT FIRE SAFETY SCHEDULE

Below is a Draft Fire Safety Schedule. BCA consultant to provide a Fire Safety Schedule Post Finalisation of the FER

	Essential Fire Safety Measures	Standard of Performance
1.	Access Panels, Doors and Hoppers	BCA 2022 Clause C4D14
2.	Automatic Fail Safe Devices	BCA 2022 Clause D3D24 & D3D26
3.	Automatic Smoke Detection and Alarm System	BCA 2022 Clause E2D3, E2D8, E2D9 , Spec 20 Clause S20C3/S20C4/S20C5, AS 1670.1 – 2018, AS/NZS 1668.1 – 2015, AS 3786-2014
4.	Automatic Fire Suppression System	BCA 2022 Clause E1D5, E1D6, E2D8, Spec 17 & AS 2118.1 – 2017 Amdt 1 & 2,
5.	Building Occupant Warning System activated by the Sprinkler System	BCA 2022 Spec 17 & Spec 20 Clause S20C7 & AS 1670.1 – 2015 – Clause 3.22
6.	Emergency Lighting	BCA 2022 Clause E4D2, E4D4 & AS/NZS 2293.1 – 2018
7.	Exit Signs	BCA 2022 Clauses E4D5, E4D6 & E4D8 and AS/NZS 2293.1 – 2018
8.	Fire Dampers	BCA 2022 Clause C3D13, C4D15, Spec 11, D2D12, E2D3, E2.3, F4.12, Spec E2.2, E2D21, Spec 21, Spec 31 & AS 1668.1 – 2015
9.	Fire Doors	BCA 2022 Clause C4D3, C4D5, C4D6, C4D7, C4D8 & C4D9 and AS 1905.1 – 2015
10.	Fire Hose Reels	BCA 2022 Clause E1D3 & AS 2441 – 2005 Amdt 1
11.	Fire Hydrant System	BCA 2022 Clause C3D13, E1D2, Spec 18, I3D9 & AS 2419.1 – 2021
12.	Fire Seals	BCA 2022 Clause C4D15, C4D16, Spec 13, Spec 14, & AS 1530.4 –2014
13.	Lightweight Construction	BCA 2022 Clause C2D9, Spec 6
14.	Mechanical Air Handling System	BCA 2022 Clause E2D3, AS/NZS 1668.1 – 2015 & AS 1668.2 – 2012
15.	Portable Fire Extinguishers	BCA 2022 Clause E1D14 & I3D11, AS 2444 – 2001
16.	Smoke Alarms	BCA 2022 Spec 20 & AS 3786 - 2014
17.	Warning and Operational Signs	BCA 2022 Clause C4D7, D2.23, E3D4, AS 1905.1 –2015

8. APPENDIX C – FIRE RESISTANCE LEVELS

in accordance with BCA 2022:

Type A Construction

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 1.5m	90/90/90	120/120/120	180/180/180	240/240/240
1.5 to less than 3m	90/60/30	120/90/90	180/180/120	240/240/180
3m 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): Structural Adequacy/ Integrity/ Insulation			
	Class 2,3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Less than 1.5m	-/90/90	-/120/120	-/180/180	-/240/240
1.5 to less than 3m	-/60/60	-/90/90	-/180/120	-/240/180
3m or more	-/-/-	-/-/-	-/-/-	-/-/-

Table S5C11c: Type A Construction: FRL of external columns non incorporated in an external wall

Column 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	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 shafts 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 shafts not used for the discharge of hot products of combustion	-/90/90	-/90/90	-/120/120	-/120/120

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

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
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

(3) Carparks

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):
- 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 (b) located within a multi-classified building.