BUILDING CODE ASSISTANCE BUILDING CODE ASSISTANCE BUILDING CODE ASSISTANCE

BUILDING CODE OF AUSTRALIA - 2013

ASSESSMENT REPORT

Prepared for: **MEISSEN PROPERTIES IB PTY LTD**

Date: **20th November, 2013**

PROJECT ADDRESS:
17-23 MERRIWA STREET, GORDON.

Prepared by: **Peter Dix**
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Revision	Description	Date

1.0 INTRODUCTION

1.1 Background

Building Code Assistance was requested by Brewster Murray Architects on behalf of MEISSEN PROPERTIES IB PTY LTD to inspect the subject premises and assess the architectural plans as provided, in relation to the proposed residential and commercial development and prepare a BCA Assessment Report in relation to compliance with the Building Code of Australia.

A site inspection was carried out on Friday 1st November, 2013 to ascertain if the adjoining sites would contribute to any potential compliance issues.

The proposed building being the subject of this report is a new multi-storey mixed use residential and commercial building located at 17-23 Merriwa Street, Gordon, consisting of the following :-
Basement – 1A, 1B, 2A, 2B – carpark levels.
Building "A" Ground floor and 6 upper residential levels.
Building "B" Ground floor and 6 upper residential levels (1 commercial unit- ground)

Construction is required to comply with the requirements of the Building Code of Australia applicable at the time of lodgment of the Construction Certificate.

1.2 Purpose of the Report

The purpose of this report is to identify any items on the architectural plans provided that may not and/or is required to fully comply with the Current Edition of Building Code of Australia - 2013 Volume One for Class 2 to Class 9 Buildings that may be applicable to the proposed development.

1.3 Basis of Report

This report is based on:
i. The Building Code of Australia 2013 – Volume One
ii. The architectural plans prepared by Brewster Murray Architects.

1.4 Limitations of the Report

This report does not assess the following:
- OH & S requirements
- Determining the full compliance with the BCA, other than the matters identified
- Accessibility requirements under the Disability Discrimination Act.1992
- Disability (Access to Premises - Buildings) Standards 2010
- The requirements of other service providers (Telephone, Electricity or Gas) etc.
- Basix and Section J requirements of the Environmental Planning and Assessment Regulation 2000 and the BCA respectively.

  Note: These requirements are to be assessed by an ABSA Accredited Assessor with all the recommended works to be detailed on the Construction Certificate plans.

1.5 Executive Summary

Initial assessment of documentation provided and information obtained during the site inspection has revealed that the proposed development generally complies and is capable of complying with the requirements of the Building Code of Australia Volume One 2013 known as the National Construction Code.

A number of items were identified that may be required to be rectified to satisfy the Deemed-to-Satisfy provisions of the Building Code of Australia or be considered in the form of an Alternative Solution if prepared to satisfy the Performance Provisions of the BCA will be subject to approval and acceptance by the Certifier, final details on the proposed method of achieving compliance will be provided with the Construction Certificate.

Details of these and other provisions of the Building Code of Australia and appropriate Australian Standards are identified in the following sections.

Where compliance with the Deemed-to-Satisfy provisions of the BCA cannot be achieved further assessment under the Performance Provisions will be required subject to consultation with the Certifying Authority, FRNSW and a Fire Engineer as applicable.

Following the review and assessment of the architectural plans and documentation provided it has been resolved that the proposed development is capable of complying with the Deemed-to-Satisfy and/or Performance Provisions of the Building Code of Australia.

Assessed by:
Peter Dix
Principal Building Surveyor
AIBS Accredited

2.0 SUMMARY OF REVIEW

The Deemed-to-Satisfy requirements of the BCA have been considered in the assessment as requested.

An Energy Efficiency report will be required to determine compliance with J1 to J8 inclusive as applicable

Section 4 (BCA Assessment) below identifies the BCA provisions required to be satisfied to achieve compliance with the BCA. These items will be applicable at Construction Certificate stage.

Should additional information be required, it shall be provided when the Construction Certificate is lodged to ensure compliance with the BCA is achieved.

Where a technical non-compliance with the prescriptive requirements has been identified and full compliance cannot be achieved, an alternative solution prepared by an appropriately qualified person to demonstrate compliance with the performance requirements of the Building Code of Australia may be appropriate.

3.0 BUILDING ASSESSMENT DATA

Summary of Proposed Construction Determination:

Part of Project	Building
Classification	2, 5 and 7a
Number of Storeys Contained	10 Overall (uppermost storey of Bld. "B" to basement level 2A)
Rise in Storeys	Building "A" – 7 x residential plus 2 basement carpark levels, Building "B" - 7 x residential levels Overall (uppermost storey of Bld. "B" to basement level 2A) = 10
Type of Construction	"A"
Effective Height (m)	>25m, however an Alternative Solution is proposed to consider as <25m

Architectural Plans -: 4th November 2013 prepared by: Brewster Murray Architects.

Proposed Building: PRE-DA Submission -
01-Calculation sheet, 02-existing site conditions, 04 basement 2A, 05- basement 2B, 06-basement 1B, 07-ground floor, 08-level1, 09-level 2, 10-level 3, 11-level 4, 12- level 5, 13-level 6, 14-roof, 15-section 1, 16-section 2, 17-south elev., 18-north elev, 19-east elev, 20-west elev, 21-north elev (bldA), 22-south elev (Bld B)

BCA2013 Volume One – Class 2 to 9 Buildings and AS 1428.1 - 2009

4.0 BCA ASSESSMENT – COMPLIANCE & DEFICIENCIES AS NOTED

BCA Clause	Description of Requirement	Status/Action Required
SECTION A – General Provisions		
PART AO - APPLICATION		
AO.1 - AO .10	**Adoption.** The dates of adoption of the Building Code of Australia (Volume One) are shown in the "History of BCA Adoption" division at the end of this Volume.	Noted.
PART A1 - INTERPRETATION		
A1.1 – A1.7	Definitions, Adoption of Standards, Ref. Standards, Differences between ref. Standards and BCA, Compliance with Sections of the BCA, Application of BCA and Language.	Noted, each part must be satisfied as appropriate. Details to be submitted with CC
PART A2 – ACCEPTANCE OF DESIGN AND CONSTRUCTION		
A2.1 – A2.5	Suitability of materials, Evidence of suitability, Fire resistance of building elements, Fire hazard properties, Resistance to the incipient spread of fire.	Compliance will be required as appropriate. Details to be submitted with CC
PART A3 – CLASSIFICATION OF BUILDINGS AND STRUCTURES		
A3.1 Principals of classifications	The classification of a building or part of a building is determined by the purpose for which it is designed, constructed or adapted to be used.	Noted.
A3.2 Classifications	Buildings are classified as follows: Class 2: a building containing 2 or more SOU each being a separate dwelling. Class 5: an office building used for professional or commercial purposes, Class 7: a building which is— (a) Class 7a — a *carpark*;	Noted, the proposed development is Class 2, 5 and 7a.
A3.3 Multiple Class.	Each part of a building must be classified separately for each class.	Noted.
A3.4 Parts with > than one class	(a) Notwithstanding A3.3, a building or part of a building may have more than one classification applying to the whole building or to the whole of that part of the building.	Noted, each part having different classifications must comply with the relevant provisions for each classification.
PART A4 – UNITED BUILDINGS		
A4.1, A4.2	When buildings are united, Alterations in a united building	
PART A - SPECIFICATIONS		
A1.3 Documents adopted by ref.	Schedule of Australian Standards adopted by the BCA.	Compliance with all Australian Standards as applicable is to be maintained. Details to be submitted with CC

BCA Clause	Description of Requirement	Status/Action Required
A2.3 Fire Resistance of building elements	This Specification sets out the procedures for determining the FRL of building elements.	Any building element required to have an FRL, must have it determined in accordance with Specification A2.3. Details to be submitted with CC
A2.4 Fire Hazard Properties	Scope: This Specification sets out the procedures for— (a) determining the *fire hazard properties* of assemblies tested to AS/NZS 1530.3; and (b) predicting a material's *group number* and *smoke growth rate index* ($SMOGRA_{RC}$) for the purposes of Spec. C1.10	Compliance is required as appropriate. Details to be submitted with CC
SECTION B - Structure		
B1.0 Deemed to Satisfy Provisions	This clause specifies (a) that the performance provisions (BP1.1 to BP1.4) are satisfied by complying with B1.1, B1.2, B1.4, B1.5 and B1.6 where a building solution is proposed. (b) The DTS Provisions of B1.1, B1.2, B1.4, B1.5 and B1.6, the relevant Performance Requirements must be determined in accordance with A0.10, where a Building Solution is proposed as an Alternative Solution	Noted
B1.1 Resistance to actions	The resistance of a building or structure must be greater than the most critical action effect resulting from different combinations of actions, where…..	Compliance with AS/NZS 1170.0 will be required as appropriate and the resistance of a building or structure is determined in accordance with B1.4.
B1.2 Determination of Individual Actions	Specifies requirements for the following actions:(a) Permanent actions; (b) Imposed actions; (c) Wind, snow and ice and earthquake actions; (d) Actions not covered in (a), (b) and (c) above; (e) For the purposes of (d) the actions include but are not limited to…….	The magnitude of individual actions must be determined in accordance with the (a) to (e) inclusive as appropriate.
B1.4 Determination of Structural Resist.	The structural resistance of materials and forms of construction must be determined in accordance with the following appropriate Australian Standards	Compliance will be required with the relevant Australian Standards as appropriate.
B1.5 Structural Software	(a) Structural software used in computer aided design of a building or structure….. (b) The requirements of (a) only apply to structural software used to …… (c) The requirements of (a) do not apply to design software for individual frame ……..	This clause specifies the structural software used in the design of buildings and structures, must comply with the ABCB Protocol for Structural Software as applicable.
B1.6	Construction of Buildings in Flood Hazard Areas	A Class 2 building, in a *flood hazard area* must comply with ABCB Standard for Construction of Buildings in FHA's
Specification B1.2		
1. Scope	This specification contains requirements for the design of buildings in cyclonic areas in addition to the requirements of AS/NZS 1170.2.	For the purposes of Specification B1.2, cyclonic areas are those determined as being located in wind regions C and D in accordance with AS/NZS 1170.2. Not applicable to the proposed development.

BCA Clause	Description of Requirement	Status/Action Required
SECTION C – Fire Resistance		
Part C1 - FIRE RESISTANCE AND STABILITY		
C1.1 Type of construction req.	(a) The minimum Type of *fire-resisting construction* of a building must be that specified in Table C1.1 and Specification C1.1, except as allowed for—	Compliance with the requirements of Type A construction is required for the proposed building.
C1.2	Calculation of rise in storeys. Note the following: Building "A" – 7 x residential plus 2 basement carpark levels, Building "B" - 7 x residential levels. Overall (uppermost storey of Bld. "B" to basement level 2A) = 10	The subject development has an overall rise in storey of 10 however the residential portions of Building A has a rise in storey of 7 and Building B has a rise in storey of 7.
C1.3 Buildings of multiple classifications	(a) In a building of multiple classifications, the Type of construction *required* for the building is the most *fire-resisting* Type resulting from the application of Table C1.1 on the basis that the classification applying to the top *storey* applies to all *storeys*.	The top storey is class 2, therefore Type A construction is required throughout.
C1.4 , C1.5, C1.6, C1.7	Mixed types of construction, Two storey Class 2,3 or 9c buildings, Class 4 parts of buildings, Open spectator stands and indoor sports stadiums.	Not applicable to the proposed development.
C1.8 Lightweight Construction	(a) *Lightweight construction* must comply with Spec.C1.8 if it is used in a wall system. i, ii (b) If *lightweight construction* is used for the *fire-resisting* covering of a steel column or the like, and if……(i) and (ii).	Details to be provided at Construction Certificate stage if lightweight construction is to be used within the development.
C1.10	Fire Hazard Properties	Materials as identified in (a), (b) and (c) to be identified for Construction Certificate and certification provided prior to occupation.
C1.11	Performance of External Walls in Fire	Not applicable to the proposed development.
C1.12 Non Combustible Mat.	The following materials, though *combustible* or containing *combustible* fibres, may be used wherever a *non-combustible* material is *required*: (a) to (iv) inclusive.	This clause determines the type of materials to be used where non-combustible materials are required.
Part C2 - COMPARTMENTATION AND SEPARATION		
C2.1 Application of Part	C2.2, C2.3 and C2.4 do not apply to a *carpark* provided with a sprinkler system complying with Specification E1.5, an *open-deck carpark* or an *open spectator stand*.	Compliance achieved as this part is not applicable as the carpark has more than 40 vehicles and will be required to be fully sprinkler protected in accordance with AS2118.1.
C2.2 General floor area/volume limits.	(a) The size of any *fire compartment* or *atrium* in a Class 5 building must not exceed the relevant max. *floor area* nor the relevant max. volume set out in Table C2.2 and C2.5	Compliance achieved as the commercial part fronting Fitzsimons Lane is only 95m2.
C2.3	Large isolated buildings, Requirements for open spaces and vehicular access, Class 9a and 9c buildings	Not applicable to the proposed development.

BCA Clause	Description of Requirement	Status/Action Required
C2.6 Vertical separation of openings in external walls	(a) If in a building of Type A construction, any part of a *window* or other opening in an *external wall* is above another opening in the *storey* next below and its vertical projection falls no further than 450 mm outside the lower opening (measured horizontally), the openings must be separated by- (i) a spandrel which- (A) is not less than 900 mm in height; and (B) extends not less than 600 mm above the upper surface of the intervening floor; and (C) is of *non-combustible* material having an FRL of not less than 60/60/60; or (ii) part of a *curtain wall* or *panel wall* that complies with (i); or (iii) construction that complies with (i) behind a *curtain wall* or *panel wall* and has any gaps packed with a *non-combustible* material that will withstand thermal expansion and structural movement of the walling without the loss of seal against fire and smoke; or (iv) a slab or other horizontal construction that— (A) projects outwards from the external face of the wall not less than 1100 mm; and (B) extends along the wall not less than 450 mm beyond the openings concerned; and (C) is *non-combustible* and has an FRL of not less than 60/60/60.	Openings generally appear to comply with spandrel separation provided in accordance with (a)(i) and (a) (iv) Final design details will be provided with the Construction Certificate demonstrating the proposed method of achieving compliance at balcony edges and glazing to typical floor lobbies, floor plans and elevations are to be reviewed at Construction Certificate stage.
C2.7 Separation by fire walls	(a) Construction — A *fire wall* must be constructed in accordance with the (i), (ii) and (iii). (b) Separation of buildings — A part of a building separated from the remainder of the building by a *fire wall* may be treated as a separate building for the purposes of the *Deemed-to-Satisfy Provisions* of Sections C, D and E if it is constructed in accordance with (a) and the following: (i) , (ii) , (iii). (c) Separation of fire compartments — A part of a building separated from the remainder of the building by a *fire wall* may be treated as a separate *fire compartment* if it is constructed in accordance with (a) and the *fire wall* extends to the underside of— (i) or (ii)	- Fire walls are not proposed except to separate the commercial unit on ground floor of building “B” from the common lobby and residential unit. - An alternative Solution is proposed and will be submitted with the Construction Certificate to provide horizontal separation between the ground floor of Building “B” and the carpark to treat building A and B as separate buildings having an Effective Height of <25m
C2.8 Separation of classifications in the same storey	If a building has parts of different classifications located alongside one another in the same *storey*— (a) each building element in that *storey* must have the higher FRL prescribed in Specification C1.1 for that element for the classifications concerned; or (b) the parts must be separated in that *storey* by a *fire wall* having— (i) or (ii) or. (c) where one part is a carpark complying with Table 3.9, 4.2 or 5.2 of Specification C1.1, the parts may be separated by a *fire wall* complying with the appropriate Table.	Noted, the fire wall separating the commercial part (Class 5) from the residential lobby and the SOU on the ground floor of building “B” is required to have an FRL of 120/120/120. Details will be submitted with Construction Certificate.
C2.9 Separation of classifications in different storeys	If parts of different classification are situated one above the other in adjoining *storeys* they must be separated as follows: (a) Type A construction — The floor between the adjoining parts must have an FRL of not less than that prescribed in Specification C1.1 for the classification of the lower *storey*.	Noted, compliance required as applicable, the floor between the carpark and ground floor levels and over the ground floor commercial area is required to have an FRL of not less than 120/120/120. - Details will be submitted with Construction Certificate.

BCA Clause	Description of Requirement	Status/Action Required
C2.10 Separation of lift shafts	(a) Any lift connecting more than 2 *storeys*, or more than 3 *storeys* if the building is sprinklered, must be separated from the remainder of the building by enclosure in a *shaft* in which— (i) in a building *required* to be of Type A construction—the walls have the relevant FRL prescribed by Specification C1.1; (c) An emergency lift must …	The lift will be contained within a f*ire-resisting shaft* having an FRL of not less than 120/120/120 in the carpark and 90/90/90 in the Class 2 levels. Openings for lift landing doors and services must be protected in accordance with the *Deemed-to-Satisfy Provisions* of Part C3.
C2.11	Stairways and lifts in one shaft	Not applicable to the proposed development.
C2.12 Separation of equipment	(a) Equipment other than that described in (b) and (c) must be separated from the remainder of the building with construction complying with (d), if that equipment comprises…..	- Separation of on-site fire pumps must comply with the requirements of AS 2419.1. - Separating construction of equipment contained in (i) to (v) inclusive must have—(i) except as provided by (ii) an FRL as *req.* by Spec. C1.1, but not less than 120/120/120; and any doorway protected with a *self-closing* fire door having FRL of not less than –/120/30; or when separating a lift *shaft* and lift motor room,an FRL not less than 120/–/–.
C2.13 Electricity supply system	(a) An electricity substation located within a building must be separated from any other part of the building by construction having an FRL of not less than 120/120/120; and have any doorway in that construction protected with a *self-closing* fire door having an FRL of not less than –/120/30. (b) A main switchboard located within the building which sustains emergency equipment operating in the emergency mode must……. (c) Electrical conductors located within a building that supply a substation located within the building which supplies a main switchboard covered by (b); or a main switchboard covered by (b), must have a classification in accordance with AS/NZS 3013 of not less than—(A) if located in a position that could be subject to damage by motor vehicles — WS53W; or (B) otherwise — WS52W; or be enclosed or otherwise protected by construction having an FRL of not less than 120/120/120. (d) Where emergency equipment is *required* in a building, all switchboards in the electrical installation, which sustain the electricity supply to the emergency equipment, must be …… (e) For the purposes of (d), emergency equipment includes but is not limited to the following: Fire hydrant booster pumps, Pumps for *automatic* sprinkler systems…….	- If an electricity substation is proposed to be installed within the building compliance with this clause will be required and details will be submitted with the C.C. - The main switchboard must have an FRL of 120/120/120 in accordance with this clause and have any doorway in that construction protected with a *self-closing* fire door having an FRL of not less than –/120/30. - Electrical conductors if installed will be required to comply with clause (c). - Emergency equipment required by (d) must be constructed so that emergency equipment switchgear is separated from non-emergency equipment switchgear by metal partitions designed to minimise the spread of a fault from the non-emergency equipment switchgear. (e) Noted.
C2.14 Public corridors in Class 2 and 3 buildings	In a Class 2 or 3 building, a *public corridor*, if more than 40 m in length, must be divided at intervals of not more than 40 m with smoke-proof walls complying with Clause 2 of Specification C2.5.	- Compliance achieved, a smoke door is provided in the typical floor lobby of building “A”. - Final details to be submitted with CC.

BCA Clause	Description of Requirement	Status/Action Required
PART C3 – PROTECTION OF OPENINGS		
C3.1 Application of Part	(a) The *Deemed-to-Satisfy Provisions* of this Part do not apply to….. (b) For the purposes of the *Deemed-to-Satisfy Provisions* of this Part, openings in building elements *required* to be *fire-resisting* include ….doorways, *windows* etc.	Noted, compliance generally appears to achieved with this part as no openings appear to be located less than 3.0m from the side or rear boundaries.
C3.2 Protection of openings in external walls	Openings in an *external wall* that is *required* to have an FRL must— (a) if the distance between the opening and the *fire-source feature* to which it is exposed is less than— (i) 3 m from a side or rear boundary of the allotment; or (ii) 6 m from the far boundary of a road, river, lake or the like adjoining the allotment, if not located in a *storey* at or near ground level; or be protected in accordance with C3.4 and if wall wetting sprinklers are used, they are located externally; (iii) 6m from another building on the allotment that is not class 10.	Compliance achieved as doorway and window openings are 3m or more from the boundary.
C3.3	Separation of external walls & associated openings in different fire compartments	Not applicable to the proposed development.
C3.4 Acceptable methods of protection	(a) Where protection is *required*, doorways, *windows* and other openings must be protected as follows: (i) Doorways— (A) internal or external wall-wetting sprinklers as appropriate used with doors that are *self-closing* or *automatic* (B) –/60/30 fire doors that are *self-closing* or *automatic* closing. (ii) *Windows*— (A) internal or external wall-wetting sprinklers as appropriate used with *windows* that are *automatic* closing or permanently fixed in the closed position; or (B) –/60/– fire *windows* that are *automatic* closing or permanently fixed in the closed position; or (C) –/60/– *automatic* closing fire shutters. (iii) Other openings— (A) excluding voids — internal or external wall-wetting sprinklers, as appropriate; or (B) construction having an FRL not less than –/60/–. (b) Fire doors, fire *windows* and fire shutters must comply with Specification C3.4.	Compliance required as applicable, in particular for protection of window and door openings within 6.0m of the path of travel as required by D1.7(c). - Protection is required to the glazing of the ground floor lobby of Building “B” adjacent to the fire stair discharge point and the windows in unit BO.03 and any openings exposed along the path of travel from fire stair A1 to the road. – Details on the proposed method of compliance will be submitted with the C.C
C3.5	Doorways in fire walls	Compliance required to the door between the commercial unit and the ground floor residential lobby of Building “B”.
C3.6, C3.7	Sliding fire doors, Protection of doorways in horizontal exits	Not applicable to the proposed development.
C3.8 Openings in fire isolated exits	Doorways that open to *fire-isolated stairways*, *fire-isolated passageways* or *fire- isolated ramps*, and are not doorways opening to a road or *open space*, must be protected .	Doorways in all fire isolated exits will be protected by a minimum –/60/30 fire doors that are *self-closing*, or automatic-closing in accordance with (ii) and (iii)
C3.9 Service penetrations in fire isolated exits	Fire-isolated *exits* must not be penetrated by any services other than— (a) electrical wiring permitted by D2.7(e) to be installed within the *exit*; or (b) ducting associated with a pressurisation system if it— is constructed of material having an FRL of not less than –/120/60 where it passes through any other part of the	All penetrations will be required to be fire rated except as identified by this clause.

BCA Clause	Description of Requirement	Status/Action Required
	building; and does not open into any other part of the building; or (c) water supply pipes for fire services.	Details will be submitted with CC.
C3.10 Openings in fire isolated lift shafts	(a) Doorways — If a lift *shaft* is *required* to be fire-isolated, an entrance doorway to that *shaft* must be protected by –/60/– fire doors that— comply with AS 1735.11; (b) Lift indicator panels — A lift call panel, indicator panel or other panel in the wall of a fire-isolated lift *shaft* must be backed by construction having an FRL of not less than –/60/60 if it exceeds 35 000 mm2 in area.	- Will be complied with as applicable. - Lift doors will have a minimum FRL of -/60/- - Details will be submitted with CC.
C3.11 Bounding Construction	(a) A doorway in a Class 2 building must be protected if it provides access from a SOU to (i) a *public corridor*, public lobby, or the like; or (ii) a room not within a SOU; or (iii) the landing of an internal non *fire-isolated stairway* that serves as a *required exit*; (b) A doorway in a Class 2 building must be protected if it provides access from a room not within a *sole-occupancy unit* to— (i) a *public corridor*, public lobby, or the like; or (ii) the landing of an internal non *fire-isolated stairway* that serves as a *required exit*.	Protection of doorways will be fire doors having a minimum FRL of -/60/30 and must be provided to the class 2 units, fire isolated stairs, garbage and service rooms.
C3.12 Openings in floors & ceilings for services	(a) Where a service passes through— a floor that is *required* to have an FRL with respect to *integrity* and *insulation*; or a ceiling *required* to have a *resistance to the incipient spread of fire*, the service must be installed in accordance with (b). (b) A service must be protected— in a building of Type A construction, by a *shaft* complying with Specification C1.1; or in accordance with C3.15.	- Protection of all penetrations in fire rated building elements is required to be provided throughout. - Where a service passes through a floor which is *required* to be protected by a *fire-protective covering*, the penetration must not reduce the fire performance of the covering. Details will be submitted with CC.
C3.13 Openings in shafts	In a building of Type A construction, an opening in a wall providing access to a ventilating, pipe, garbage or other service *shaft* must be protected by— (b) a *self-closing* –/60/30 fire door or hopper; or (c) an access panel having an FRL of not less than –/60/30; or (d) if the *shaft* is a garbage *shaft* — a door or hopper of *non-combustible* construction.	Protection is required as applicable. Note: garbage chute door or hopper can be of non-combustible construction. However the door from the public corridor to the room is to have an FRL of minimum -/60/30.
C3.15 Openings for service installations	Where an electrical, electronic, plumbing, mechanical ventilation, air-conditioning or other service penetrates a building element (other than an *external wall* or roof) that is *required* to have an FRL with respect to *integrity* or *insulation* or a *resistance to the incipient spread of fire*, that installation must comply with any one of the following: (a)Tested systems (b)Ventilation and air-cond. (c)Compliance with Spec.C3.15	Protection is required as appropriate. Details are to be submitted with CC.
C3.16 Construction joints	Construction joints, spaces and the like in and between building elements *required* to be *fire-resisting* with respect to *integrity* and *insulation* must be protected in a manner identical with a prototype tested in accordance with AS 1530.4 to achieve the *req.* FRL.	Compliance required as applicable.
C3.17	Columns protected with lightweight construction to achieve an FRL	Compliance required as applicable.

BCA Clause	Description of Requirement	Status/Action Required
PART C - SPECIFICATIONS		
SPECIFICATION C1.1 – Fire Resisting Construction		
2.1 Exposure to fire source features	(a) A part of a building element is exposed to a *fire-source feature* if any of the horizontal straight lines between that part and the *fire-source feature*, or vertical projection of the feature, is not obstructed by another part of the building that— (i) has an FRL of not less than 30/–/–; and (ii) is neither transparent nor translucent.	- Compliance achieved as doorway and window openings are 3m or more from the boundary.
2.2 Fire protection for a support of another part	(a) Where a part of a building *req.* to have an FRL depends upon direct vertical or lateral support from another part to maintain its FRL, that supporting part, subject to (b), must… (b) The following building elements need not comply with (a)(ii) and (a)(iii)(B): An element providing lateral support to an *external wall* complying with……..	FRL's will be satisfied as appropriate. Details will be submitted with CC.
2.3 Lintels	A lintel must have the FRL *req.* for the part of the building in which it is situated, unless …	Lintels are to be fire rated as appropriate.
2.4	Attachments not to impair fire resistance	Attachments are not proposed, however if the final design has attachments compliance with (a) and (b) is required.
2.5 General concessions	(a) Steel columns — A steel column, other than one in a *fire wall* or *common wall*, need not have an FRL in a building that contains— (i) or (ii) …… (c) Structures on roofs — A *non-combustible* structure situated on a roof need not comply with the other provisions of this Specification if it only contains - (i) or (ii) (d) Curtain walls and panel walls — A requirement for an *external wall* to have an FRL does not apply to a *curtain wall* or *panel wall* which is of *non-combustible* construction and fully protected by *automatic* external wall-wetting sprinklers. (f) Balconies-verandahs or the like and any incorporated supporting part, which is attached to or forms part of a building, need not comply with Tables 3 if— (i) and (ii)	Noted, compliance required as applicable.
2.6	Mezzanine floors: concessions	Not applicable to the proposed development.
2.7 Enclosure of shafts	*Shafts required* to have an FRL must be enclosed at the top and bottom by construction having an FRL not less than that *required* for the walls of a non- *loadbearing shaft* in the same building except that these provisions need not apply to— the top of a *shaft* extending beyond the roof covering, other than one enclosing a *fire-isolated stairway* or *ramp*; or the bottom of a *shaft* if it is *non-combustible* and laid directly on the ground.	Compliance required, will be satisfied as appropriate. Details will be submitted with CC.
2.8, 2.9	Carparks in class 2 & 3 buildings, Residential aged care building: Concession	Not applicable to the proposed development.

BCA Clause	Description of Requirement	Status/Action Required
Type A - Fire Resisting Construction		
C3.1 Fire resistance of building elements	In a building *required* to be of Type A construction— (a) each building element listed in Table 3 and any beam or column incorporated in it, must have an FRL not less than that listed in the Table for the particular Class of building concerned; and (b) *external walls*, *common walls* and the flooring and floor framing of lift pits must be *non-combustible*; and (c) any *internal wall required* to have an FRL with respect to *integrity* and *insulation* must extend to— (i) or (ii) or (iii) or (iv) and (d) a *loadbearing internal wall* and a *loadbearing fire wall* (including those that are part of a *loadbearing shaft*) must be of concrete or masonry; and (e) a non- *loadbearing*- (i) *internal wall required* to be *fire-resisting*; and (ii) lift, ventilating, pipe, garbage, or similar *shaft* that is not for the discharge of hot products of combustion, must be of *non-combustible* construction; and (f) the FRLs spec. in Table 3 for an external column apply also to those parts of an internal column that face and are within 1.5 m of a *window* and are exposed through that *window* to a *fire-source feature*.	All building elements are to have an FRL complying with Table 3 as applicable. Refer to Annexure A to view Table 3. Details will be submitted with CC.
C3.2 Concessions for floors	A floor need not comply with Table 3 if—(a) it is laid directly on the ground; or (d) it is within a *sole-occupancy unit* in a Class 2 or 3 building or Class 4 part;	Noted, compliance required as applicable.
C3.3 Floor loading of Class 5 & 9b bld.: Concession	If a floor in a Class 5 or 9b building is designed for a live load not exceeding 3 kPa— (a) the floor next above (including floor beams) may have an FRL of 90/90/90; or (b) the roof, if that is next above (including roof beams) may have an FRL of 90/60/30.	Compliance required as applicable.
C3.4	Roof superimposed on concrete slab: Concession	Not applicable to the proposed development.
C3.5 Roof: Concession	A roof need not comply with Table 3 if its covering is *non-combustible* and the building—(a)has a sprinkler system complying with Spec.E1.5 installed throughout; or(c) is of Class 2 ; or (d) has an EH of not more than 25 m and the ceiling immediately below the roof has a *resistance to the incipient spread of fire* to the roof space of not less than 60 minutes.	Noted, compliance required as applicable if the concession is to be used. Details will be submitted with CC.
C3.6 Roof lights	If a roof is *required* to have an FRL or its covering is *required* to be *non-combustible*, roof lights or the like installed in that roof must comply with (a), (b) and (c).	Any proposed future roof lights will be required to comply with this part. Details will be submitted with CC.
C3.7 Internal columns and walls: Concession	For a building with an *effective height* of not more than 25 m and having a roof without an FRL in accordance with Clause 3.5, in the *storey* immediately below that roof, internal columns other than those referred to in Clause 3.1(f) and *internal walls* other than *fire walls* and *shaft* walls may have—(a) in a Class 2 or 3 building: FRL 60/60/60;	Compliance required as applicable. Details are to be submitted with CC.
C3.8	Open spectator stands and indoor sports stadiums: Concession	Not applicable to the proposed development.

BCA Clause	Description of Requirement	Status/Action Required
C3.9 Car parks	(a) Notwithstanding Clause 3.1, a *carpark* may comply with Table 3.9 if it is protected with a sprinkler system complying with Specification E1.5 and is a part of a building— (B) which is located above or below another classification, and the floor separating the classifications complies	- Table 3.9 permits reduced fire ratings to walls, columns etc in a carpark provided with a sprinkler system. - Details are to be submitted with CC if sprinklers are proposed to be installed within the carpark levels.
C3.10	Class 2 buildings: Concession	Not applicable to the proposed development.
Type B – Fire Resisting Construction and Type C - Fire Resisting Construction		
4.1, 5.1	Fire resistance of building elements	Not applicable to the proposed development.
SPECIFICATION C1.8 – Structural tests for lightweight construction		
1. Scope	This Specification describes tests to be applied to and criteria to be satisfied by a wall system of *lightweight construction.*	Noted, details to be submitted with the CC if lightweight construction is proposed.
SPECIFICATION C1.10 – Fire Hazard Properties- General		
1. Scope	This Specification sets out requirements in relation to the *fire hazard properties* of linings, materials and assemblies in Class 2 to 9 buildings as set out in Table 1.	Noted. Details are to be submitted with CC.
2. Application	Linings, materials and assemblies in Class 2 to 9 buildings must comply with the appropriate provisions described in Table 1.	- Floor linings and coverings must comply with clause 3. - Wall linings and ceiling linings must comply with clause 4 - Air handling ductwork must comply with clause 5 - Lift cars must comply with clause 6
3. Floor linings and floor coverings	A floor lining or floor covering must have— (a) a *critical radiant flux* not less than that listed in Table 2; and (c) a group number complying with Clause 6(a)(ii), for any portion of the floor covering that is continued more than 150 mm up a wall.	General area's of Class 2, 6 and 7 buildings not fitted with a sprinkler system complying with Spec.E1.5 requires a CRF of 2.2. Fire isolated exits requires a CRF of 2.2
4. Wall and ceiling linings	(a) For the purposes of this Clause, the *group number* of a material is determined by either …….. (b) The *group number* of a material is as follows when tested or predicted in accordance with sub-clause (a): (c) A material used as a finish, surface, lining or attachment to a wall or ceiling must be a Group 1, Group 2 or Group 3 material used in accordance with Table 3 and for a building not fitted with a sprinkler system complying with Specification E1.5, have…	Wall and ceiling lining materials to comply with the specific requirements of the appropriate group. Class 2 and 3 building Wall/ceiling in fire isolated exits and fire control rooms require group 1 material. Public corridors, Specific areas (sole-occupancy units) and other area's require group 1, 2, 3.
5. Air handling ductwork	Rigid and flexible ductwork in a Class 2 to 9 building must comply with the *fire hazard properties* set out in AS 4254.	Will comply as applicable. Final details will be submitted with CC.
6. Lift cars	Materials used as— (a) floor linings and floor coverings must have a *critical radiant flux*	Compliance required as applicable.

BCA Clause	Description of Requirement	Status/Action Required
	not less than 2.2; and (b) wall and ceiling linings must be a Group 1 material or a Group 2 material in accordance with Clause 4(b).	Final details will be submitted with CC.
7. Other materials	Materials and assemblies in a Class 2 to 9 building not included in Clauses 3, 4, 5 or 6 must not exceed the indices set out in NSW Table 4.	Materials other than those included in clauses 3, 4, 5 or 6 must not exceed the indices set out in table 4.
SPECIFICATION C1.11 – Performance of External Walls in Fire		
1. Scope		Not applicable to the proposed development.
SPECIFICATION C2.5 – Smoke Proof Walls in Health Care and Aged Care Buildings		
1. Scope	This Specification sets out requirements for the construction of smoke-proof walls in Class 9a *health-care buildings* and Class 9c *aged care buildings*. Smoke proof walls required to have an FRL are to be in accordance with Clause A2.3.	Noted, not applicable to the proposed development except for sub-clause 2 to satisfy the requirements of C2.14.
2. Class 9a health care buildings	Smoke-proof walls *required* by C2.5 in Class 9a *health-care buildings* must comply with the following: (a) Be *non-combustible* and extend to the underside of—(i) the floor above; or (ii) a *non-combustible* roof covering; or (iii) a ceiling having a *resistance to the incipient spread of fire* to the space above itself of not less than 60 minutes. (b) Not incorporate any glazed areas unless glass is safety glass as defined in AS 1288. (c) Only have doorways which are fitted with smoke doors complying with Spec. C3.4. (d) Have all openings around penetrations and the junctions of the smoke-proof wall and the remainder of the building stopped with *non-combustible* material to prevent the free passage of smoke. (e) Incorporate smoke dampers where air-handling ducts penetrate the wall unless the duct forms part of a smoke hazard management system *required* to continue air movement through the duct during a fire.	Compliance with this clause is required as applicable. The smoke doors have been located to enable fire hose reels to achieve coverage throughout without the FHR going through the doorway. Final details will be submitted with CC.
SPECIFICATION C3.4 – Fire Doors, Smoke Doors, Fire Windows and Shutters		
1. Scope	This Specification sets out requirements for the construction of fire doors, smoke doors, fire *windows* and fire shutters.	Noted.
2. Fire doors	A *required* fire door must comply with AS 1905.1; and not fail by radiation through any glazed part during the period specified for *integrity* in the *required* FRL.	Any required fire door must comply with AS1905.1 Final details will be submitted with CC.
3. Smoke Doors	3.1 General requirements: Smoke doors must be constructed so that smoke will not pass from one side of the doorway to the other and, if they are glazed, there is minimal danger of a person being injured by accidentally walking into them.	

BCA Clause	Description of Requirement	Status/Action Required
	3.2 Construction deemed-to-satisfy: A smoke door of one or two leaves satisfies Clause 3.1 if it is constructed as follows: (a) The leaves are side-hung to swing (i) in the direction of egress; or (ii) in both directions. (b) (i) The leaves are capable of resisting smoke at 200°C for 30 minutes. (ii) Solid-core leaves at least 35 mm thick satisfy (i). (c) The leaves are fitted with smoke seals. (d) (i) The leaves are normally in the closed position; or (ii) (A) The leaves are closed *automatically* with the *automatic* closing operation initiated by smoke detectors, installed in accordance with the relevant provisions of AS 1670.1, located on each side of the doorway not more than 1.5 m horizontal distance from the doorway; and (B) in the event of power failure to the door, the leaves fail-safe in the closed position. (e) The leaves return to the fully closed position after each manual opening. (f) Any glazing incorporated in the door complies with AS 1288. (g) (i) If a glazed panel is capable of being mistaken for an unobstructed *exit*, the presence of the glass must be identified by opaque construction. (ii) An opaque mid-height band, mid-rail or crash bar satisfies (i).	Compliance required as applicable to satisfy the requirements of clause C2.14. Final details will be submitted with CC.
4. Fire shutters	(a) be a shutter that— (i) is identical with a tested prototype that has achieved the *required* FRL; and (ii) is installed in the same manner and in an opening that is not larger than the tested prototype; and (iii) did not have a rise in average temperature on the side remote from the furnace of more than 140 K during the first 30 minutes of the test; or (b) be steel shutter complying AS 1905.2 if a metallic fire shutter is not prohibited by C3.5.	Compliance required to protect openings as applicable. Final details will be submitted with CC.
5. Fire windows	(a) identical in construction with a prototype that has achieved the *required* FRL; and (b) installed in the same manner and in an opening not larger than the tested prototype.	Compliance required to protect openings as applicable. Final details will be submitted with CC.
SPECIFICATION C3.15 – Penetration of Walls, Floors and Ceilings by Services		
1. Scope	This Specification prescribes materials and methods of installation for services that penetrate walls, floors and ceilings *required* to have an FRL.	Noted.
2. Application	(a) This Specification applies to installations permitted under the DTS *Provisions* …….. (b) This Specification does not apply to installations in ceilings *required* to have a …….	Compliance with (a) and (b) required as applicable. Final details will be submitted with CC.
3. Metal pipe systems	(a) A pipe system comprised entirely of metal (excluding pipe seals or the like) that is (b) An opening for a pipe system comprised entirely of metal (c) A pipe system comprised entirely of metal (excluding pipe seals or the like) must….. (d) The gap between a metal pipe and the wall, floor or ceiling it penetrates must …..	Compliance with (a),(b), (c) and (d) required as applicable. Final details will be submitted with CC.

BCA Clause	Description of Requirement	Status/Action Required
4. Pipes penetrating sanitary compartments	If a pipe of metal or UPVC penetrates the floor of a *sanitary compartment* in accordance with C3.15(c)(i) - (a) and (b)…….	Compliance with (a),(b), (c) and (d) required as applicable. Final details will be submitted with CC.
5. Wires and cables	If a wire or cable or cluster of wires or cables penetrates a floor, wall or ceiling the opening must be neatly formed, cut or drilled and no closer than……(a), (b) and (c)	Compliance with (a),(b) and (c) required as applicable. Final details will be submitted with CC.
6. Electrical switches and outlets	If an electrical switch, outlet, socket or the like is accommodated in an opening or recess in a wall, floor or ceiling the opening or recess must not be located opposite …(a) and (b).	Compliance with (a),(b) and (c) required as applicable. Final details will be submitted with CC.
7. Fire stopping	(a) Material: (b) Installation: Fire-stopping material (c) Hollow construction: (d) Recesses: (e) Test:	Compliance with (a),(b),(c), (d) and (e) required as applicable. Final details will be submitted with CC.
SECTION D – Access and Egress		
PART D1 – PROVISION FOR ESCAPE		
D1.2 Number of exits required	(a) All buildings — Every building must have at least one *exit* from each *storey*. (b) Class 2 to 8 buildings — In addition to any *horizontal exit*, not less than 2 *exits* must be provided from the following: (i) Each *storey* if the building has an *effective height* of more than 25 m. (c) Basements — In addition to any *horizontal exit*, not less than 2 *exits* must be provided from any *storey* if egress from that *storey* involves a vertical rise within the building of more than 1.5 m, unless— (i) and (ii). (g) Access to exits — Without passing through another *sole-occupancy unit* every occupant of a *storey* or part of a *storey* must have access to— (i) an *exit*; or (ii) at least 2 *exits*, if 2 or more *exits* are *required*	- The number of exits on the residential levels comply for buildings having an Effective Height of < 25m. - This will be part of the proposed Alternative Solution to consider building "A" and "B" as having an EH of < 25m. - The carpark / basement levels also comply. - access to the exits comply with the requirements of (g) Final details will be submitted with CC.
D1.3 When Fire isolated exits are required	(a) Class 2 buildings — Every stairway or ramp serving as a *required exit* must be fire-isolated unless it connects, passes through or passes by not more than— (i) 3 consecutive *storeys* in a Class 2 building; or (b) Class 5 to 9 buildings — Every stairway or ramp serving as a *required exit* must be fire-isolated unless— (iii) in any other case except in a Class 9c *aged care building*, it connects, passes through or passes by not more than 2 consecutive *storeys* and one extra *storey* of any classification may be included if— (A) or (B)…..	Compliance achieved as required.
D1.4 Exit travel distances	(a) Class 2 buildings— (i) The entrance doorway of any *sole-occupancy unit* must be not more than— (A) 6 m from an *exit*…….; or (B) 20 m from a single *exit* serving the *storey* at the level of egress to a road or *open space*; and (ii) no point on the floor of a room which is not in a *sole-occupancy unit* must be more than 20 m from an *exit* or from a point	- Compliance appears to be achieved throughout.

BCA Clause	Description of Requirement	Status/Action Required
	at which travel in different directions to 2 *exits* is available. (c) Class 5 to 9 buildings — Subject to (d), (e) and (f)— (i) no point on a floor must be more than 20 m from an *exit*, or a point from which travel in different directions to 2 *exits* is available, in which case the maximum distance to one of those *exits* must not exceed 40 m; and (ii) in a Class 5 or 6 building, the distance to a single *exit* serving a *storey* at the level of access to a road or *open space* may be increased to 30 m.	
D1.5 Distance between alternative exits.	*Exits* that are *required* as alternative means of egress must be— (a) distributed as uniformly as practicable within or around the *storey* served and in positions where unobstructed access to at least 2 *exits* is readily available from all points on the floor including lift lobby areas; and (b) not less than 9 m apart; and (c) not more than (i) in a Class 2 building -45 m apart;or (iii) in all other cases 60 m apart; and (d) located so that alternative paths of travel do not converge such that they become less than 6 m apart.	- Compliance has been achieved.
D1.6 Dimensions of exits and paths of travel to exits	Dimensions of exits and paths of travel to exits, minimum unobstructed width of not less than 1000mm and minimum unobstructed height of not less than 2000mm is to be provided throughout.	- Compliance generally appears to have been achieved. - Final details confirming minimum unobstructed width of not less than 1000mm and minimum unobstructed height of not less than 2000mm is provided throughout will be submitted with the Construction Certificate.
D1.7 Travel via fire isolated exits	(a) A doorway from a room must not open directly into a stairway, passageway or ramp that is required to be fire-isolated unless it is from— (i) or (ii) or (iii) . (b) Each *fire-isolated stairway* or *fire-isolated ramp* must provide independent egress from each *storey* served and discharge directly, or by way of its own *fire-isolated passageway*— (i) to a road or *open space*; or (ii) to a point— (A) in a *storey* or space, within the confines of the building, that is used only for pedestrian movement, car parking or like and is open for at least 2/3 of its perimeter; and (B) from which an unimpeded path of travel, not further than 20 m, is available to a road or *open space*; or (iii) into a covered area that— (A) adjoins a road or *open space*; and (B) is open for at least 1/3 of its perimeter; and (C) has an unobstructed clear height throughout, including the perimeter openings, of not less than 3 m; and (D) provides an unimpeded path of travel from the point of discharge to the road or *open space* of not more than 6 m. (c) Where a path of travel from the point of discharge of a fire-isolated *exit* necessitates passing within 6 m of any part of an *external wall* of the same building, measured horizontally at right angles to the path of travel, that part of the wall must have— (i) an FRL of not less than 60/60/60; and (ii) any openings protected internally in accordance with C3.4, for a distance of 3 m above or below, as appropriate, the level of the path of travel, or for the height of the wall, whichever is the lesser.	Compliance with (a) and (b) generally is achieved throughout as required. A number of windows and other openings on the ground floor have been identified as being within 6.0m of the path of travel from the discharge point of the fire isolated exits serving the residential levels from Building “A” (stair A1) and Building “B” adjacent to ground floor lobby to the boundary of the allotment. Final details on the proposed method of achieving compliance will be submitted with the CC.

BCA Clause	Description of Requirement	Status/Action Required
D1.8	External stairways or ramps in lieu of fire-isolated exits.	Not applicable to the proposed development.
D1.9	Travel by non-fire-isolated stairways or ramps	Compliance achieved as applicable.
D1.10 Discharge from exits	(a) An *exit* must not be blocked at the point of discharge and where necessary, suitable barriers must be provided to prevent vehicles from blocking the *exit*, or access to it. (b) If a *required exit* leads to an *open space*, the path of travel to the road must have an unobstructed width throughout of not less than — (i) the minimum width of the *required exit*; or (ii) 1 m, whichever is the greater. (c) If an *exit* discharges to *open space* that is at a different level than the public road to which it is connected, the path of travel to the road must be by— (i) a ramp or other incline having a gradient not steeper than 1:8 at any part, or not steeper than 1:14 if *required* by the *Deemed-to-Satisfy Provisions* of Part D3; or (ii) except if the *exit* is from a Class 9a building, a stairway complying with the DTS *Provisions* of the BCA. (d) The discharge point of alternative *exits* must be located as far apart as practical.	Compliance generally appears to have been achieved, however a dedicated 1.0m wide path is required from discharge point of all exits to the roadway including fire stair A1. The 1.0m wide path should be located 6.0m or more from any openings within the building served by the exit, unless the openings are protected in accordance with the requirements of clause C3.2. and C3.4
D1.11, D1.12	Horizontal exits, Non required stairways, ramps or escalators	Not applicable to the proposed development.
D1.13 Number of persons accommodated	The number of persons accommodated in a *storey*, room or *mezzanine* must be determined with consideration to the purpose for which it is used and the layout of the *floor area* by— (a) calculating the sum of the numbers obtained by dividing the *floor area* of each part of the *storey* by the number of square metres per person listed in Table D1.13 according to the use of that part, excluding spaces set aside for— (i) and (ii) or (b) reference to the seating capacity in an *assembly building* or room; or (c) any other suitable means of assessing its capacity.	Noted, compliance with this clause will need to be considered when the use of the commercial suite is determined to satisfy the requirements for sanitary facilities. Final details will be submitted with CC.
D1.14 Measurement of distances	The nearest part of an *exit* means in the case of— (a), (b), (c), (d) and (e)	Noted, compliance achieved as applicable.
D1.15 Method of measurement	The following rules apply: (a), (b), (c), (d), (e), (f), (g) and (h) inclusive.	Noted, compliance required as applicable.
D1.16 Plant rooms and lift machine rooms: Concession	(a) A ladder may be used in lieu of a stairway to provide egress from—(i) a plant room with a *floor area* of not more than 100 m2; or (ii) all but one point of egress from a plant room, a lift machine room or a Class 8 electricity network substation with a floor area of not more than 200 m2. (b) A ladder permitted under (a)— (i) or (ii) and (iii) and (iv)	If applicable a ladder must comply with AS1657 Final details will be submitted with CC.
D1.17 Access to lift pits	Access to lift pits must—(a) where the pit depth is not more than 3 m, be through the lowest landing doors; or (b) where the pit depth is more than 3 m, be provided through an access doorway complying with the following…….(i)(ii)(iii)(iv)	Access to lift pits must comply with this clause and (i) to (iv) inclusive. Final details will be submitted with CC.

BCA Clause	Description of Requirement	Status/Action Required
PART D2 – CONSTRUCTION OF EXITS		
D2.1 Application of Part	Except for (b) D2.13, D2.14(a), D2.16, D2.17(d), D2.17(e) and D2.18, the D-T-S Provisions of this Part do not apply to the internal parts of a SOU in a Class 2 building.	Noted.
D2.2 Fire isolated stairways and ramps	A stairway or ramp (including any landings) that is *required* to be within a *fire resisting shaft* must be constructed of *non-combustible* materials; and so that if there is local failure it will not cause structural damage to, or impair the fire-resistance of, the *shaft*.	Compliance required as applicable. Final details will be submitted with CC.
D2.3, D2.4, D2.5, D2.6	Non-fire-isolated stairways and ramps, Separation of rising and descending stair flights, Open access ramps and balconies, Smoke lobbies	Not applicable to the proposed development.
D2.7 Installations in exits and paths of travel	(a) Access to service *shafts* and services other than to fire-fighting or detection equipment as permitted in the *Deemed to- Satisfy Provisions* of Section E, must not be provided from a *fire-isolated stairway*, *fire-isolated passageway* or *fire-isolated ramp*. (b) An opening to any chute or duct intended to convey hot products of combustion from a boiler, incinerator, fireplace or the like, must not be located in any part of a *required exit* or any corridor, hallway, lobby or the like leading to a *required exit*. (c) Gas or other fuel services must not be installed in a *required exit*. (d) Services or equipment comprising— electricity meters, distribution boards or ducts; central telecommunications distribution boards or equipment; electrical motors or other motors serving equipment in the building, may be installed in a *required exit*, except for fire-isolated *exits* specified in (a); or in any corridor, hallway, lobby or the like leading to a *required exit*, if the services or equipment are enclosed by *non-combustible* construction or a *fire-protective covering* with doorways or openings suitably sealed against smoke spreading from the enclosure. (e) Electrical wiring may be installed in a fire-isolated *exit* if the wiring is associated with a lighting, detection, or pressurisation system serving the *exit*; or a security, surveillance or management system serving the *exit*; or an intercommunication system or an audible or visual alarm system in accordance with D2.22; or the monitoring of hydrant or sprinkler isolating valves.	Compliance appears to be achieved. Final details will be submitted with CC.
D2.8 Enclosure of space under stairs and ramps	(a) Fire-isolated stairways and ramps — If the space below a *required fire-isolated stairway* or *fire-isolated ramp* is within the fire-isolated *shaft*, it must not be enclosed to form a cupboard or similar enclosed space. (b) Non fire-isolated stairways and ramps — The space below a *required* non *fire-isolated stairway* or non *fire-isolated ramp* must not be enclosed to form a cupboard or other enclosed space unless (i) the enclosing walls/ ceilings have an FRL of not less than 60/60/60;and(ii)any doorway to enclosed space fitted with *self-closing* –/60/30 fire door.	Compliance required as applicable. Final details will be submitted with CC.

BCA Clause	Description of Requirement	Status/Action Required
D2.9	Width of stairways	Not applicable to the proposed development.
D2.10 Pedestrian ramps	(b) A ramp serving as a *required exit* must where the ramp is also serving as an a*ccessible* ramp under Part D3, be in accordance with AS 1428.1; or in any other case, have a gradient not steeper than 1:8. (c) The floor surface of a ramp must have a non-slip finish.	Noted, compliance required as applicable. Final details will be submitted with CC.
D2.11 Fire isolated passageways	(a) The enclosing construction of a *fire-isolated passageway* must have an FRL when tested for a fire outside the passageway in another part of the building of if the passageway discharges from a *fire-isolated stairway* or *ramp* — not less than that *required* for the stairway or ramp *shaft*; or in any other case — not less than 60/60/60. (b) Notwithstanding (a)(ii), the top construction of a *fire-isolated passageway* need not have an FRL if the walls of the *fire-isolated passageway* extend to the underside of a *non-combustible* roof covering; or a ceiling having a *resistance to the incipient spread of fire* of not less than 60 minutes separating the roof space or ceiling space in all areas surrounding the passageway within the *fire compartment*.	Noted, compliance required as applicable. Final details will be submitted with CC.
D2.12 Roof as open space	If an *exit* discharges to a roof of a building, the roof must— (a) have an FRL of not less than 120/120/120; and (b) not have any roof lights or other openings within 3 m of the path of travel of persons using the *exit* to reach a road or *open space*.	Compliance required to all paths of travel from fire isolated exits to the allotment boundary. Final details will be submitted with CC.
D2.13 Goings and risers	(a) A stairway must have— (i) not more than 18 nor less than 2 risers in each *flight*; and (ii) except as permitted by (b) and (c), going (G), riser (R) and quantity (2R + G) in accordance with Table D2.13; and (iii) except as permitted by (b) and (c), goings and risers that are constant throughout in one *flight*; and (iv) risers which do not have any openings that would allow a 125 mm sphere to pass through between the treads; and (v) treads which have a non-slip finish or an adequate non-skid strip near the edge of the nosings; and (vi) treads of solid construction (not mesh or other perforated material) if the stairway is more than 10 m high or connects more than 3 *storeys*; and (viii) in the case of a *required* stairway, no winders in lieu of a landing.	Noted, compliance generally appears to be achieved. Final details will be submitted with CC.
D2.14 Landings	In a stairway landings having a maximum gradient of 1:50 may be used in any building to limit the number of risers in each *flight* and each landing must be not less than 750 mm long, and where this involves a change in direction, the length is measured 500 mm from the inside edge of the landing; and have a non-slip finish throughout or an adequate non-skid strip near the edge of the landing where it leads to a *flight* below;	To be noted, compliance appears to be achieved. Final details will be submitted with CC.

BCA Clause	Description of Requirement	Status/Action Required
D2.15 Thresholds	The threshold of a doorway must not incorporate a step or ramp at any point closer to the doorway than the width of the door leaf unless— (e) in other cases—(i) the doorway opens to a road or open space, external stair landing or external balcony; and (ii) the door sill is not more than 190 mm above the finished surface of the ground, balcony, or the like, to which the doorway opens. (c) in a building *required* to be *accessible* by Part D3, the doorway- (i) opens to a road or *open space*; and (ii) is provided with a threshold or step ramp in accord. with AS 1428.1	Compliance appears to be achieved. Final details will be submitted with CC.
D2.16 Balustrades and other barriers	(a) A continuous balustrade or other barrier, except for a barrier provided to an openable window covered by D2.24, must be provided along the side of any roof to which public access is provided, any stairway or ramp, any floor, corridor, hallway, balcony, deck, verandah, *mezzanine*, access bridge or the like and along the side of any delineated path of access to a building, if— (i) it not bounded by a wall; and (ii) its level above the surface beneath, is more than 1 m. (b) The requirements of (a) do not apply to— (i), (ii) and (iii) (c) A balustrade or other barrier in— (i) and (ii) (d) A balustrade or other barrier in stairways and ramps, other than those covered in (c), must comply with (g) and (h)(ii). (e) A balustrade or other barrier along the side of a horizontal or near horizontal surface such as a—(i) and (ii) (g) The height of a balustrade or other barrier must be constructed in accordance with the following (i), (ii), (iii) and (iv) (h) Openings in a balustrade or other barrier must be constructed in accordance with the following: (i) and (ii) (i) A wire balustrade must be constructed in accordance with the following and is deemed to meet the requirements of (h)(ii)(A): (i) , (ii) and (iii)	Balustrades will comply. Balustrade design details are to be in accordance with (a), (b), (c), (d), (e), (g), (h) and (i) as applicable and final details will be provided with the Construction Certificate.
D2.17 Handrails	(a) Except for handrails referred to in D2.18, handrails must be— (i) located along at least one side of the ramp or *flight*; and (ii) located along each side if the total width of the stairway or ramp is 2 m or more; and (iv) in any other case, fixed at a height of not less than 865 mm measured above the nosings of stair treads and the floor surface of the ramp, landing, or the like; and (v) continuous between stair *flight* landings and have no obstruction on or above them that will tend to break a hand-hold. (vi) in a *required exit* serving an area *required* to be *accessible*, designed and constructed to comply with clause 12 of AS 1428.1. (c) Handrails *req.* to assist people with a disability must be provided in accord. with D3.3. (d) Handrails to a stairway or ramp within a sole-occupancy unit in a Class 2 building or part must— (i) be located along at least one side of the flight or ramp; and (ii) be located	Compliance required as applicable. However the new access standards will require all stairs (except fire isolated stairs) to satisfy the requirements for access for disabled people. Subsequently handrails in common areas will be provided on both sides in accordance with AS1428.1-2009.

BCA Clause	Description of Requirement	Status/Action Required
	along the full length of the flight or ramp, except in the case where a handrail is associated with a balustrade, the handrail may terminate where the balustrade terminates; and (iii) have the top surface of the handrail not less than 865 mm vertically above the nosings of the stair treads or the floor surface of the ramp; and (iv) have no obstruction on or above them that will tend to break a handhold, except for newel posts, ball type stanchions, or the like. (e) The requirements of (d) do not apply to— (i), (ii), (iii) or (iv).	Allowance should be made to ensure 1.0m clear width between handrails is maintained.
D2.18 Fixed platforms, walkways, stairways and ladders	A fixed platform, walkway, stairway, ladder and any going and riser, landing, handrail, balustrade or other barrier attached thereto may comply with AS 1657 in lieu of D2.13, D2.14, D2.16 and D2.17 if it only serves: (a) machinery rooms, boiler houses, lift-machine rooms, plant-rooms, and the like; or (b) non- *habitable rooms*, such as attics, storerooms and the like that are not used on a frequent or daily basis in the internal parts of a *sole-occupancy unit* in a Class 2 building.	Compliance required as applicable. Final details will be submitted with CC.
D2.19 Doorways and doors	(b) A doorway serving as a *required exit* or forming part of a *required exit*, must not be fitted with a revolving door; and must not be fitted with a roller shutter or tilt-up door. (iii) must not be fitted with a sliding door unless it leads directly to a road or *open space*; and the door is able to be opened manually under a force of not more than 110 N; and (iv) if fitted with a door which is power-operated—(A) it must be able to be opened manually under a force of not more than 110 N if there is a malfunction or failure of the power source; and (B) if it leads directly to a road or *open space* it must open automatically if there is a power failure to the door or on the activation of a fire or smoke alarm anywhere in the *fire compartment* served by the door.	Compliance appears to be achieved. A power-operated door in a path of travel to a *required exit*, must be able to be opened manually under a force of not more than 110 N if there is a malfunction or failure of the power source. Final details will be submitted with CC.
D2.20 Swinging doors.	A swinging door in a *required exit* or forming part of a *required exit* must not encroach at any part of its swing by more than 500 mm on the *required* width (including any landings) of a *required* stairway; or ramp; or passageway,if it is likely to impede the path of travel of the people already using the *exit*; and when fully open, by more than 100 mm on the *required* width of the *required exit*, and the measurement of encroachment in each case is to include door handles or other furniture or attachments to the door; and must swing in the direction of egress must not otherwise impede the path or direction of egress.	Compliance achieved including the smoke doors on the residential levels which are required to open in both directions, as they are required to open in the direction of egress. Final details will be submitted with CC.
D2.21 Operation of latch	(a) A door in a *required exit*, forming part of a *required exit* or in the path of travel to a *required exit* must be readily openable without a key from the side that faces a person seeking egress, by—(i) a single hand downward action on a single device which is located between 900 mm and 1.1 m from the floor and if serving an area *required* to be *accessible* by Part D3— (A) be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch; and (B) have a clearance between	Noted, compliance required as applicable. Final details will be submitted with CC.

BCA Clause	Description of Requirement	Status/Action Required
	the handle and the back plate or door face at the centre grip section of the handle of not less than 35 mm and not more than 45 mm; or (ii) a single hand pushing action on a single device which is located between 900 mm and 1.2 m from the floor. (b) The requirements of (a) do not apply to a door that—(i) or (ii) or (iv)	
D2.22	Re-entry from fire isolated exits	Not applicable to a building < 25m Effective Height.
D2.23 Signs on doors	(a) A sign, to alert persons that the operation of certain doors must not be impaired, must be installed where it can readily be seen on, or adjacent to, a— (i) (A) *required* fire door providing direct access to a fire-isolated *exit*, except a door providing direct a *sole-occupancy unit* in a Class 2 or 3 building or Class 4 part; and (B) *required* smoke door,on the side of the door that faces a person seeking egress and, if the door is fitted with a device for holding it in the open position, on either the wall adjacent to the doorway or both sides of the door; and (ii) (A) fire door forming part of a *horizontal exit*; and (B) smoke door that swings in both directions; and (C) door leading from a fire isolated *exit* to a road or *open space*, on each side of the door.	A sign referred to in (a) must be in capital letters not less than 20 mm high in a colour contrasting with the background and state— (i) for an *automatic* door held open by an *automatic* hold open device— "**FIRE SAFETY DOOR—DO NOT OBSTRUCT**"; or (ii) for a *self-closing* door— "**FIRE SAFETY DOOR** **DO NOT OBSTRUCT** **DO NOT KEEP OPEN**"; or (iii) for a door discharging from a fire-isolated *exit*— "**FIRE SAFETY DOOR—DO NOT OBSTRUCT**".
D2.24 Protection of Openable Windows	(a) A window opening must be provided with protection, if the floor below the window is 2m or more above the surface beneath in— (i) a bedroom in a Class 2 building (b) Where the lowest level of the window opening is less than 1.7 m above the floor, a window opening covered by (a) must comply with the following: (i) The openable portion of the window must be protected with— (A) a device to restrict the window opening; or (B) a screen with secure fittings. (ii) A device or screen *required* by (i) must— (A) not permit a 125 mm sphere to pass through the window opening or screen; (B) resist an outward horizontal action of 250 N against the— (aa) window restrained by a device; or(bb) screen protecting the opening; and (C) have a child resistant release mechanism if the screen or device is able to be removed, unlocked or overridden. (c) A barrier with a height not less than 865 mm above the floor is *required* to an openable window— (i) in addition to window protection, when a child resistant screen release mechanism is *required* by (b)(ii)(C); and (ii) for openable windows 4 m or more above the surface beneath if the window is not covered by (a). (d) A barrier covered by (c) must not— (i) permit a 125 mm sphere to pass through it; and (ii) have any horizontal or near horizontal elements between 150 mm and 760 mm above the floor that facilitate climbing.	Compliance with this clause is required throughout all bedrooms as applicable. Details on the proposed method of achieving compliance will be submitted with the application for the Construction Certificate.

BCA Clause	Description of Requirement	Status/Action Required
PART D3 – ACCESS FOR PEOPLE WITH DISABILITIES		
D3.1 General building access requirements	Buildings and parts of buildings must be *accessible* as *required* by Table D3.1, unless exempted by D3.4 The BCA only requires access in class 2 buildings from a pedestrian entrance required to be accessible to at least 1 floor containing sole occupancy units and to the entrance doorway of each SOU on that level. Where a lift is provided – to the entrance doorway of each SOU located on the levels served by the lift. The retail area requires access to and within all areas normally used by occupants.	- Access in accordance with Table 3.1 is generally provided to and within all classifications. - A total of 12 adaptable class 2 units are to be provided. - Further details in relation to the post adaptable units fixtures, fittings and circulation space will be provided for review with the Construction Certificate. - Circulation space at the entrance doorway generally appears to be provided in accordance with AS1428.1-2009
D3.2 Access to buildings	(a) An *accessway* must be provided to a building *required* to be *accessible*) from the main points of a pedestrian entry at the allotment boundary; and from any *required accessible* carparking space on the allotment. (b) In a building *required* to be *accessible*, an *accessway* must be provided through the principal pedestrian entrance, and (i) through not less than 50% of all pedestrian entrances including the principal pedestrian entrance; and (ii) in a building with a total *floor area* more than 500 m2, a pedestrian entrance which is not *accessible* must not be located more than 50 m from an *accessible* pedestrian entrance, except for pedestrian entrances serving only areas exempted by D3.4. (e) Where a doorway on an *accessway* has multiple leaves, (except an automatic opening door) one of those leaves must have a clear opening width of not less than 850 mm in accordance with AS 1428.1.	- Compliance achieved as applicable. - A continuous accessway is provided from the allotment boundary of Merriwa Street and Fitzsimons Lane to the main lobby and carpark and is clearly visible to all occupants and or visitors in accordance with subclause (b). - It is recommended that the accessway from Merriwa Street be provided with directional signage to the entry adjacent to unit AO.10 in accordance with AS1428.1-2009. - The residential lobby entry doors require the main leaf to have a min. clear opening of 850mm when measured from the face of the opened door to the doorstop and circulation space both sides
D3.3 Parts of buildings to be accessible	In a building *required* to be *accessible*— (a) every ramp and stairway, except for ramps and stairways in areas exempted by D3.4, must comply with— (i) for a ramp, except a *fire-isolated ramp*, clause 10 of AS 1428.1; and (ii) for a stairway, except a *fire-isolated stairway*, clause 11 of AS 1428.1; and (iii) for a *fire-isolated stairway*, clause 11.1(f) and (g) of AS 1428.1; and (b) every passenger lift must comply with E3.6;and(c) *accessways* must have—(i) and (ii) (d) an intersection of *accessways* satisfies the spatial requirements for a passing and turning space; and (e) a passing space may serve as a turning space; and (f) a ramp complying with AS 1428.1 or a passenger lift need not be provided to serve a *storey* or level other than the entrance *storey* in a Class 5, 6, 7b or 8 building- (i) and (ii) (g) clause 7.4.1(a) of AS 1428.1 does not apply and is replaced with 'the pile height or pile thickness shall not exceed 11 mm and the carpet backing thickness shall not exceed 4 mm'; and (h) the carpet pile height or pile thickness dimension, carpet backing thickness dimension and their combined dimension shown in figure 8 of AS 1428.1 do not	- Compliance with this clause is required throughout and generally appears to have been achieved, however minor details and/or changes are required full compliance with AS 1428.1-2009 must be maintained. - All public corridors including the residential class 2 public corridors require turning spaces 1.540m x 2.070m within 2.0m of the end of all corridors, compliance achieved as applicable. - The lifts must comply with E3.6 - All doorways must have a minimum 850mm clear unobstructed width with circulation space in accordance with AS1428.1-2009, this also applies to the smoke doors provided on ground and level 1-4 inclusive.

BCA Clause	Description of Requirement	Status/Action Required
	apply and are replaced with 11 mm, 4 mm and 15 mm respectively.	Final details will to be submitted with CC.
D3.4 Exemptions	The following areas are not *required* to be *accessible*: (a) An area where access would be inappropriate because of the particular purpose for which the area is used. (b) An area that would pose a health or safety risk for people with a disability. (c) Any path of travel providing access only to an area exempted by (a) or (b).	Noted, however not applicable to the proposed development.
D3.5 Accessible carparking	*Accessible* carparking spaces— must be provided in accordance with Table D3.5 in—(i) a Class 7a building *required* to be *accessible*; and (c) subject to (d), must comply with AS/NZS 2890.6; and (d) need not be designated where there is a total of not more than 5 carparking spaces, so as to restrict the use of the carparking space only for people with a disability.	Compliance achieved as applicable, Full compliance with AS 1428.1-2009 and AS2890.6 will be maintained. Total number of parking spaces to be provided as applicable. Final details will be submitted with CC.
D3.6 Signage	In a building *required* to be *accessible* (a) (i) and (ii), (b) (i), (ii) and (iii), (c), (d), (e) and (f)	- Compliance to be achieved with AS1428.1-2009.
D3.7	Hearing augmentation	Not applicable to the proposed development.
D3.8 Tactile indicators	(a) For a building *required* to be *accessible*, tactile ground surface indicators must be provided to warn people who are blind or have a vision impairment that they are approaching— (i) a stairway, other than a *fire-isolated stairway*; and (iv) a ramp other than a *fire-isolated ramp*, step ramp, kerb ramp and (v) in the absence of a suitable barrier an overhead obstruction less than 2 m above floor level, other than a doorway; and an *access way* meeting a vehicular way adjacent to any pedestrian entrance to a building, excluding a pedestrian entrance serving an area referred to in D3.4, if there is no kerb or kerb ramp at that point, except for areas exempted by D3.4.	Compliance will be achieved as applicable, full compliance with AS 1428.1-2009 will be maintained. Tactile ground surface indicators *required* by (a) must comply with sections 1 and 2 of AS/NZS 1428.4.1. Final details will be submitted with CC.
D3.9, D3.10	Wheelchair seating spaces in Class 9b assembly buildings, Swimming pools	Not applicable to the proposed development.
D3.11 Ramps	On an *accessway* a series of connected ramps must not have a combined vertical rise of more than 3.6m; and a landing for a step ramp must not overlap a landing for another step ramp or ramp.	To be noted and complied with as applicable if ramps are to be provided.
D3.12 Glazing on an accessway	On an *accessway*, where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights and any glazing capable of being mistaken for a doorway or opening, must be clearly marked in accordance with AS 1428.1.	To be noted and complied with as applicable. Final details will be submitted with CC.
SPECIFICATION D3.6 – Braille and Tactile Signs		
1. Scope	This Specification sets out the requirements for the design and installation of braille and tactile signage as *required* by D3.	Subclause 2, 3, 4, 5 and 6 is be noted and complied with as applicable.

BCA Clause	Description of Requirement	Status/Action Required
SECTION E – Services and Equipment		
PART E1 – FIRE FIGHTING EQUIPMENT		
E1.3	Fire hydrants	Compliance required, fire hydrants must be installed throughout to achieve coverage to all parts of the building in accordance with AS2419.1. Final details will be submitted with CC.
E1.4	Fire hose reels	- Fire hose reels are required to be installed throughout in accordance with clause (a), (b), (c), (d), (e), (f) and (g) as applicable and AS 2441. - Note: The actual FHR must be located within 4m of the fire stair doorway. Final details will be submitted with CC.
E1.5 Sprinklers	A sprinkler system must— (a) be installed in a building or part of a building when *required* by Table E1.5; and (b) comply with Specification E1.5.	- Table E1.5 requires sprinklers in a building > 25m Effective Height. - The subject building is subject to an Alternative Solution to treat building “A” and “B” as < 25m EH. - Notwithstanding the above the class 7a part having more than 40 vehicles requires a sprinklers system complying with AS 2118. Final details will be submitted with CC.
E1.6 Portable fire extinguishers	Portable fire extinguishers must be provided as listed in Table E1.6 and must be selected, located and distributed in accordance with Sections 1, 2, 3 and 4 of AS 2444.	Noted, compliance required as applicable.
E1.8 Fire control centres	A fire control centre facility in accordance with Specification E1.8 must be provided for— (a) a building with an *effective height* of more than 25 m; and (b) a Class 6, 7, 8 or 9 building with a total *floor area* of more than 18 000 m2.	- The subject building is subject to an Alternative Solution to treat building “A” and “B” as < 25m EH. Therefore a fire control centre is not required.
E1.9 Fire precautions during construction	In a building under construction not less than one fire extinguisher to suit Class A, B and C fires and electrical fires must be provided at all times on each *storey* adjacent to each *required exit* or temporary stairway or *exit*; and after the building has reached an *effective height* of 12 m— (i) the *required* fire hydrants and fire hose reels must be operational in at least every *storey* that is covered by the roof or the floor structure above, except the 2 uppermost *storeys*; and (ii) any *required* booster connections must be installed.	To be noted and complied with during construction
E1.10	Provision for special hazards	Not applicable to the proposed development.

BCA Clause	Description of Requirement	Status/Action Required
SPECIFICATION E1.5 – Fire Sprinkler Systems		
1. Scope	This Specification sets out requirements for the design and installation of fire sprinkler systems.	- The subject building is subject to an Alternative Solution to treat building "A" and "B" as < 25m EH. - Compliance with subclause 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 and 13 is required as applicable as sprinklers are to be provided in the carpark in accordance with AS2118.
SPECIFICATION E1.8 – Fire Control Centres		
1. Scope	This Specification describes the construction and content of *required* fire control centres and rooms. A fire control room is a fire control centre in a dedicated room with additional specific requirements. Clauses 2 to 5 apply to fire control centres (including fire control rooms). Clauses 6 to 12 apply additional requirements to fire control rooms.	- The subject building is subject to an Alternative Solution to treat building "A" and "B" as < 25m EH. - Not applicable as the proposed building is to be determined to be less than 25m in Effective Height
PART E2 – SMOKE HAZARD MANAGEMENT		
E2.1 Application of Part	(a) The Deemed-to-Satisfy Provisions of this Part do not apply to - (i) any open deck carpark; or (iii) a Class 8 electricity network substation with a floor area not more than 200 m2, located within a multi-classified building. (b) The smoke exhaust and smoke-and-heat vent provisions of this Part do not apply to any area not used by occupants for an extended period of time such as a storeroom with a floor area less than 30 m2, sanitary compartment, plant room or the like.	Noted. Compliance required as applicable. Final details will be submitted with CC.
2.2 General requirements	(a) A building must comply with (b), (c), (d) and (i) Table E2.2a as applicable to Class 2 to 9 buildings such that each separate part complies with the relevant provisions for the classification; and (b) An air-handling system which does not form part of a smoke hazard management system in accordance with Table E2.2a or E2.2b and which recycles air from one *fire compartment* to another *fire compartment* or operates in a manner that may unduly contribute to the spread of smoke from one *fire compartment* to another *fire compartment* must— (i) be designed and installed to operate as a smoke control system in accordance with AS/NZS 1668.1; or (ii) (A) incorporate smoke dampers where the air-handling ducts penetrate any elements separating the *fire compartments* served; and (B) be arranged such that the air-handling system is shut down and the smoke dampers are activated to close by smoke detectors complying with clause 4.10 of AS/NZS 1668.1; and for the purposes of this provision, each SOU in a Class 2 or 3 building is treated as a separate *fire compartment*. (c) Miscellaneous air-handling systems covered by Sections 5 and 11 of AS/NZS 1668.1	-To be noted and complied with as applicable. - Final details will be submitted with CC. <u>Table E2.2a requires:</u> 1) Fire stairs serving any storey above 25m to be provided with stair pressurization. Not applicable 2) Fire stairs serving more than 2 below ground storey's not counted in the rise in storey's to be provided with stair pressurization. Not applicable. 3. Class 2 parts to be provided with automatic smoke detection in accordance with Spec E2.2a. 5. The basement carpark to be provided with mechanical ventilation in accordance with AS/NZS 1668.1

BCA Clause	Description of Requirement	Status/Action Required
	serving more than one *fire compartment* and not forming part of a smoke hazard management system must comply with that Section of the Standard. (d) A smoke detection system must be installed in accordance with Clause 5 of Specification E2.2a to operate AS/NZS 1668.1 systems that are provided for zone smoke control and *automatic* air pressurisation for fire-isolated *exits*.	
E2.3 Provision for special hazards	Additional smoke hazard management measures may be necessary due to the special mix of classifications within a building or *fire compartment*, which are not addressed in Tables E2.2a and E2.2b.	To be noted and complied with as applicable as identified above. Final details will be submitted with CC.
SPECIFICATION E2.2a – Smoke detection and alarm systems		
1. Scope	This Specification describes the installation and operation of *automatic* smoke detection and alarm systems.	To be noted and complied with as applicable.
2. Type of system	A *required automatic* smoke detection and alarm system must comply with the following: (a) Class 2 buildings : (i) Subject to (ii), a Class 2 building must be provided with—(A) a smoke alarm system complying with Clause 3; or (B) a smoke detection system complying with Clause 4; or (C) a combination of a smoke alarm system complying with Clause 3 within *sole-occupancy units* and a smoke detection system complying with Clause 4 in areas not within the *sole-occupancy units*. (b) Class 5, 6, 7, 8 buildings: A smoke detection system complying with Clause 4.	- To be noted and complied with as applicable. - Class 2 - Minimum to be provided is a smoke alarm system complying with clause 3 (AS3786), however compliance with clause 4 (AS1670) is also permitted. - Final details will be submitted with CC.
3. Smoke alarm system	(a) A smoke alarm system must (i) consist of smoke alarms complying with AS 3786; and (ii) be powered from the consumers mains source. (b) In kitchens and other areas where the use of the area is likely to result in smoke alarms causing spurious signals— (i) any other alarm deemed suitable in accordance with AS 1670.1 may be installed provided that smoke alarms are installed elsewhere in the *sole-occupancy unit* in accordance with Clause 3(c)(i); or (ii) an alarm acknowledgement facility may be installed, except where the kitchen or other area is sprinklered, the alarms need not be installed in the kitchen or other areas likely to result in spurious signals. (c) In a Class 2 building, smoke alarms must be installed— (i) within each *sole-occupancy unit*, located on or near the ceiling in any *storey*— (A) containing bedrooms— (aa) between each part of the *sole-occupancy unit* containing bedrooms and the remainder of the *sole-occupancy* (bb) where bedrooms are served by a hallway, in that hallway; and (B) not containing any bedrooms, in egress paths;	To be noted and complied with as applicable. Minimum to be provided is a smoke alarm system complying with clause 3 in the Class 2 portion. Final details will be submitted with CC.

BCA Clause	Description of Requirement	Status/Action Required
4. Smoke detection system	(a) A smoke detection system must—(i) subject to (c) and (d), comply with AS 1670.1 except for the provisions of—(A) Clause 3.26(f); and (ii) activate a building occupant warning system in accordance with Clause 6. (b) In kitchens and other areas where the use of the area is likely to result in smoke detectors causing spurious signals—(i) any other detector deemed suitable in accordance with AS 1670.1 may be installed provided that smoke detectors are installed elsewhere in the *sole-occupancy unit* in accordance with Clause 3(c)(i); or (ii) an alarm acknowledgement facility may be installed, except where the kitchen or other area is sprinklered, the detectors need not be installed in the kitchen or other areas likely to result in spurious signals. (c) In a Class 2 building smoke detectors must be installed—(i) within each SOU, located in accordance with the requirements for smoke alarms in Clause 3(c)(i)	To be noted. Final details will be submitted with CC.
5. Smoke detection for smoke control systems	(a) Smoke detectors *required* to activate air pressurisation systems for fire-isolated *exits* and zone smoke control systems must—(i) and (ii). (b) Smoke detectors *required* to activate—(i) , (ii), (iii) and (iv) (c) Smoke detectors provided to activate a smoke control system must—(i) and (ii)	To be noted and complied with as applicable. Final details will be submitted with CC.
6. Building occupant warning system	Subject to E4.9, a building occupant warning system provided as part of a smoke hazard management system must comply with Clause 3.22 of AS 1670.1 to sound through all occupied areas except— (a) in a Class 2 building provided with a smoke alarm system in accordance with Clause 3(c)(ii)— (i) and (ii) and (b) in a Class 2 building provided with a smoke detection system in accordance with Clause 4(c), the sound pressure level from a warning system need not be measured within a SOU if a level of not less than 100 dB(A) is provided at the door providing access to the SOU;	To be noted and complied with as applicable.
7.	System monitoring	Not applicable to the proposed development.
SPECIFICATION E2.2b – Smoke exhaust systems		
1. Scope	This Specification describes the requirements for mechanical smoke exhaust systems.	Not applicable to the proposed development.
PART E3 – LIFT INSTALLATIONS		
E3.1Lift Installations	An *electric passenger lift* installation and an *electrohydraulic passenger lift* installation must comply with Specification E3.1.	Compliance required as applicable. Final details will be submitted with CC.
E3.2 Stretcher facility in lifts	(a) A stretcher facility in accordance with (b) must be provided in at least one emergency lift *required* by E3.4; or where an emergency lift is not *required*, if passenger lifts are installed to serve any storey above an *effective height* 12 m, in at least one of those lifts to serve each floor served by the lifts. .	A stretcher facility will be provided to accommodate a raised stretcher with a patient lying on it horizontally by providing a clear space not less than 600 mm wide x 2000 mm long x 1400 mm high above the floor level.

BCA Clause	Description of Requirement	Status/Action Required
E3.3	Warning against use of lifts in fire	Warning signs must be provided in accordance (a) and (b).
E3.4	Emergency Lifts	Not applicable to the proposed development.
E3.5 Landings	Access and egress to and from liftwell landings must comply with the *Deemed-to- Satisfy Provisions* of Section D.	Compliance with clause (a),(b)and(c) is required as applicable.
E3.6 Passenger lifts	In an *accessible* building, every passenger lift must— (a) be one of the types identified in Table E3.6a, subject to the limitations on use specified in the Table; and (b) have *accessible* features in accordance with Table E3.6b; and (c) not rely on a constant pressure device for its operation if the lift car is fully enclosed.	Passenger lifts are required for persons with a disability in accordance with Table E3.6a with features provided in accordance with Table E3.6b. Minimum floor area 1400mm wide x 1600mm deep. Final details to be submitted with CC
E3.7	Fire service controls	Compliance required with clause (a) and (b) as applicable.
E3.8	Aged care buildings	Not applicable to the proposed development.
E3.9	Fire Service Recall Operation Switch	Compliance required with clause (a) and (b) as applicable.
E3.10	Lift Car Fire Service Drive Control Switch	Compliance with clause(a),(b),(c),(d)required as applicable.
Specification E3.1 – Lift Installations		
1. Scope	This Specification contains requirements for *electric passenger lift* installations and *electrohydraulic passenger lift* installations.	Compliance with the requirements of clause 2, 3, 4, 5 and 6 is required as applicable.
PART E4 – EMERGENCY LIGHTING, EXIT SIGNS AND WARNING SYSTEMS		
E4.2 Emergency Lighting requirements	An emergency lighting system must be installed— (a) in every *fire-isolated stairway*, *fire-isolated ramp* or *fire-isolated passageway*; and (b) in every *storey* of a Class 5, 6, 7, 8 or 9 building where the *storey* has a *floor area* more than 300 m2— (i), (ii) and (iii) (c) in every passageway, corridor, hallway, or the like, having a length of more than 6 m from the entrance doorway of any *sole-occupancy unit* in a Class 2 building to the nearest doorway opening directly to—(i), (ii), (iii) and (iv) (d) in every *required* non *fire-isolated stairway*;	Emergency lighting must be provided in accordance with AS 2293.as required by (a), (b), (c) and (d). Final details will be submitted with CC.
E4.3 Measurement of distance	Distances, other than vertical rise, must be measured along the shortest path of travel whether by straight lines, curves or a combination of both.	Compliance required as applicable.
E4.4 Design and operation of	Every *required* emergency lighting system must comply with AS 2293.1.	Emergency lighting must be provided throughout in accordance with AS 2293. Details to be submitted with CC.

BCA Clause	Description of Requirement	Status/Action Required
E4.5	Exit signs	Exit signage is required to be installed throughout in accordance with AS 2293.
E4.6 Directional signs	If an *exit* is not readily apparent to persons occupying or visiting the building then *exit* signs must be installed in appropriate positions in corridors, hallways, lobbies, and the like, indicating the direction to a *required exit*.	Directional Exit signage is required to be installed in accordance with AS 2293. Final details will be submitted with CC.
E4.7 Class 2 & 3 buildings and Class 4 parts: Exemptions	E4.5 does not apply to— (a) a Class 2 building in which every door referred to is clearly and legibly labelled on the side remote from the *exit* or balcony— (i) with the word "EXIT" in capital letters 25 mm high in a colour contrasting with that of the background; or (ii) by some other suitable method; and (b) an entrance door of a SOU in a Class 2 building.	Noted.
E4.8 Design and operation/ exit signs	Every *required exit* sign must comply with AS 2293.1; and be clearly visible at all times when the building is occupied by any person having the right of legal entry to the building.	Exit signage is to be installed in accordance with AS 2293. Final details will be submitted with CC.
E4.9	Sound systems and intercom systems for emergency purposes	Not applicable to the proposed development.
SECTION F – Health and Amenity		
PART F1 – DAMP AND WATERPROOFING		
F1.1 Stormwater	Stormwater drainage must comply with AS/NZS 3500.3.	Compliance required as applicable.
F1.4External Above Ground Membranes	*Waterproofing* membranes for external above ground use must comply with AS 4654 Parts 1 and 2.	Compliance required as applicable.
F1.5 Roof coverings	A roof must be covered with coverings complying with (a),(b), (c),(d),(e),and (f) inclusive as applicable.	Roof coverings must be manufactured and installed in accordance with the nominated Australian Standards in subclause (a) – (f) inclusive.
F1.6 Sarking	*Sarking-type materials* used for weatherproofing of roofs and walls.	Must comply with AS/NZS 4200 Parts 1 and 2.
F1.7Waterproofing of wet areas.	Waterproofing of wet areas in buildings must be completed in accordance with (a), (b), (c) (d) and (e) as applicable.	Waterproofing to be installed in accordance with AS3740 Final details will be submitted with CC.
F1.9 Damp proofing	(a) Except for a building covered by (c), moisture from the ground must be prevented from reaching— (i), (ii) and (iii).	Where a damp-proof course is provided, it must consist of a material that complies with AS/NZS 2904; or impervious termite shields in accordance with AS 3660.1.

BCA Clause	Description of Requirement	Status/Action Required
F1.10 Damp proofing of floors on the ground	If a floor of a room is laid on the ground or on fill, moisture from the ground must be prevented from reaching the upper surface of the floor and adjacent walls by the insertion of a vapour barrier in accordance with AS 2870, except damp-proofing need not be provided if weatherproofing is not *required*; or the floor is the base of a stair, lift or similar *shaft* which is adequately drained by gravitation or mechanical means.	To be noted and complied with as applicable. Final details will be submitted with CC.
F1.11 Provision of floor wastes	In a Class 2 building, the floor of each bathroom and laundry located at any level above a *sole-occupancy unit* or public space must be graded to permit drainage to a floor waste.	To be noted and complied with as applicable.
F1.12	Sub floor ventilation	Not applicable to the proposed development.
F1.13 Glazed assemblies	(a) Subject to (b) and (c), the following glazed assemblies in an *external wall*, must comply with AS 2047 requirements for resistance to water penetration: Windows, Sliding doors with a frame, Adjustable louvers, Shopfronts, Window walls.	Glazing must comply with AS2047 as applicable.
Part F2 - Sanitary and other facilities		
F2.1 Facilities in residential buildings	Sanitary and other facilities for Class 2 buildings must be provided in accordance with Table F2.1. Table F2.1 also requires facilities for employees if the building contains more than 10 SOU's: Facilities consisting of a closet pan and washbasin in a compartment or room at or near ground level is to be accessible to service employees.	- Table F2.1 requires provision of clothes drying facilities consisting of a clothes line or space for one heat-operated drying cabinet or appliance in the same room as the clothes washing machine in each Class 2 SOU . – Employees WC is located on basement level 2A.
F2.2 Calculation of number of occupants and facilities	(a) The number of persons accommodated must be calculated according to D1.13 if it cannot be more accurately determined by other means. (b) Unless the premises are used predominantly by one sex, sanitary facilities must be provided on the basis of equal numbers of males and females. (c) In calculating the number of sanitary facilities to be provided under F2.1 and F2.3, a unisex facility *required* for people with a disability may be counted once for each sex. (d) For the purposes of this Part, a unisex facility comprises one closet pan, one washbasin and means for the disposal of sanitary towels.	Subject to confirmation of the proposed use of the commercial unit located on ground floor building "B" the number of sanitary facilities can be calculated in accordance with (a), (b), (c) or (d). Final details will be submitted with CC.
F2.3 Facilities in class 3 to 9 buildings	(a) Sanitary facilities must be provided for Class 5, 6 buildings in accord. with Table F2.3. (b) If not more than 10 people are employed, a unisex facility may be provided instead of separate facilities for each sex. (c) If the majority of employees are of one sex, not more than 2 employees of the other sex may share toilet facilities if the facilities are separated by means of walls, partitions and doors to afford privacy. (e) Adequate means of disposal of sanitary towels must be provided in sanitary facilities for use by females. (i) Not less than one washbasin must be provided where closet pans or urinals are provided.	Noted, compliance required as applicable. Final details will be submitted with CC.

BCA Clause	Description of Requirement	Status/Action Required
F2.4	Accessible sanitary facilities	Noted, compliance with (a), (c), (d), (e), (f), (g), (h) and (i) is required as applicable.
F2.5	Construction of sanitary compartments	Compliance required with (a) and (b) as appropriate.
F2.6	Interpretation: Urinals and washbasins	Not applicable to the proposed development.
F2.7 Microbial (legionella) control	This clause is deleted from the BCA in NSW, as the installation of hot water, warm water and cooling water systems (and their operation and maintenance) is regulated in the Public Health Regulation, 2012, under the Public Health Act, 2010	Not applicable to the proposed development.
F2.8	Waste management	Not applicable to the proposed development.
Part F3 - Room Sizes		
F3.1 Height of rooms and other spaces	The ceiling height must be not less than—(a) in a Class 2 or 3 building or Class 4 part— (i) a kitchen, laundry, or the like - 2.1 m; and (ii) a corridor, passageway or the like — 2.1 m; and (iii) a *habitable room* excluding a kitchen - 2.4 m; and (iv) in a room or space with a sloping ceiling or projections below the ceiling line within- (A) and (B) (b) in a Class 5, 6, 7 or 8 building— (i) except as allowed in (ii) and (f) — 2.4 m; and (ii) a corridor, passageway, or the like — 2.1 m; and (f) in any building— (i) a bathroom, shower room, *sanitary compartment*, airlock, tea preparation room, pantry, store room, garage, car parking area, or the like - 2.1 m; and (ii) a commercial kitchen — 2.4 m; and (iii) above a stairway, ramp, landing or the like - 2 m measured vertically above the nosing line of stairway treads or the floor surface of the ramp, landing or like.	- Class 2 parts generally require 2.4m for habitable rooms and 2.1m for non habitable rooms in accordance with (a). - Class 5, 6 and 7 parts generally require 2.4m or 2.1m in corridors in accordance with (b). - Ceiling heights within any building must comply with (f) (i) and (ii). - Compliance achieved as applicable, final details will be submitted with the Construction certificate.
Part F4 – Light and ventilation		
F4.1 Natural light	Natural lighting must be provided in: (a) Class 2 buildings — to all *habitable rooms*.	To be noted and complied with as applicable.
F4.2 Methods and extent of natural lighting	(a) *Required* natural lighting must be provided by— (i) *windows*, excluding *roof lights*, that— (A) have an aggregate light transmitting area measured exclusive of framing members, glazing bars or other obstructions not less than 10% of the *floor area* of the room; and (B) are open to the sky or face a court or other space open to the sky or an open verandah, carport or the like; or (ii) *roof lights*, that— (A) and (B). (b) Except in a Class 9c *aged care building*, in a Class 2, 3 or 9 building or Class 4 part of a building a *required window* that faces a boundary of an adjoining allotment or a wall of the same building or another building on the allotment must not be less than a horizontal distance from that boundary or wall that is the greater of— (i) generally — 1 m; and (iii) 50% of the square root of the exterior height of the wall in which the *window* is located, measured in metres from its sill.	Compliance generally appears to be achieved as applicable to all habitable rooms in accordance with F4.1. Final details on method of achieving compliance in the following units will be submitted with the CC:

BCA Clause	Description of Requirement	Status/Action Required
F4.3 Natural light borrowed from adjoining room	(a) Natural lighting to a room in a Class 2 building or in a *sole-occupancy unit* of a Class 3 building, may come through a glazed panel or opening from an adjoining room (including an enclosed verandah) if……	If natural light is to be borrowed from an adjoining room, compliance with (a) and (b) will be required as appropriate.
F4.4	Artificial lighting	The artificial lighting where provided within a building as identified in (a) and (b) must comply with AS/NZS 1680.0.
F4.5 Ventilation of rooms	A *habitable room*, office, shop, factory, workroom, *sanitary compartment*, bathroom, shower room, laundry and any other room occupied by a person for any purpose must have natural ventilation complying with F4.6; or a mechanical ventilation or air-conditioning system complying with AS 1668.2 and AS/NZS 3666.1.	- Compliance achieved as applicable to all habitable rooms in accordance with F4.6 including the bedrooms.
F4.6 Natural Ventilation	(a) Natural ventilation provided in accordance with F4.5(a) must consist of permanent openings, windows, doors or other devices which can be opened— (i) with an aggregate opening or openable size not less than 5% of the floor area of the room required to be ventilated; and (ii) open to—(A) a suitably sized court, or space open to the sky; or (B) an open verandah, carport, or the like; or (C) an adjoining room in accordance with F4.7.	Compliance required throughout as applicable, details on the method of achieving compliance to the same units as identified in F4.5 above will be submitted with the Construction Certificate.
F4.7 Ventilation of rooms	Natural ventilation to a room may come through a *window*, opening, ventilating door or other device from an adjoining room (including an enclosed verandah) if both rooms are within the same *sole-occupancy unit* or the enclosed verandah is common property, and— (a) in a Class 2 building, (i) the room to be ventilated is not a *sanitary compartment*; and (ii) the *window*, opening, door or other device has a ventilating area of not less than 5% of the *floor area* of the room to be ventilated; and (iii) the adjoining room has a *window*, opening, door or other device with a ventilating area of not less than 5% of the combined *floor areas* of both rooms;	- Natural ventilation appears to be is provided in accordance with this clause as applicable. - Details will be submitted with the CC confirming compliance with this clause throughout.
F4.8Restriction on position of water closets and urinals	A room containing a closet pan or urinal must not open directly into— (a) a kitchen or pantry; (b) a public dining room or restaurant; or (e) a workplace normally occupied by more than one person.	To be noted and complied with as applicable.
F4.9 Airlocks	If a room containing a closet pan or urinal is prohibited under F4.8 from opening directly to another room— (a) in a *sole-occupancy unit* in a Class 2 or Class 3 part of a building— (i) access must be by an airlock, hallway or other room; or (ii) the room containing the closet pan or urinal must be provided with mechanical exhaust ventilation; (b) in a Class 5-9 building (i) access must be by an airlock, hallway or other room with a *floor area* of not less than 1.1 m2 and fitted with *self-closing* doors at all access doorways; or (ii) the room containing the closet pan or urinal must be provided with mechanical exhaust ventilation and the doorway to the room adequately screened- view.	To be complied with as applicable. Details will be submitted with CC

BCA Clause	Description of Requirement	Status/Action Required
F4.11 Car parks	(a) Every storey of a carpark, must have— (i) a system of ventilation complying with AS 1668.2; or (ii) an adequate system of permanent natural ventilation. (b) A mechanical ventilation system, serving a carpark with more than 40 vehicle spaces and controlled by an atmospheric contaminant monitoring system in accordance with AS 1668.2, may be stopped when the monitored condition is below the determined maximum concentration if— (i) the system operates intermittently to provide a minimum of 0.5 air changes per hour (ACH) during any 24 hour period; or (ii) a supplemental natural ventilation system equivalent to (i) is provided.	To be complied with as applicable. Mechanical supply and exhaust ventilation is required in accordance with AS1668.2 Details will be submitted with CC
F4.12	Kitchen local exhaust ventilation	Not applicable to the proposed development.
Part F5 – Sound transmission and insulation		
F5.2	Determination of airborne sound insulation ratings	Clause (a) and (b) require compliance as applicable
F5.3	Determination of impact sound insulation ratings	Clause (a), (b) and (c) to be complied with as applicable. Discontinuous construction required in the class 2 part.
F5.4	Sound insulation rating of floors	Clause (a) to be complied with as applicable.
F5.5	Sound insulation rating of walls	Sound insulation in walls to comply with (a), (b), (e) and (f) as applicable.
F5.6. Sound insulation rating	Sound insulation rating of services	Sound insulation of services must comply with Clause (a) and (b) to be satisfied as applicable.
F5.7. 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.	To be complied with as applicable. Details will be submitted with CC
SPECIFICATION F5.2 – Sound Insulation for Building Elements		
1. Scope	(a) This Specification lists the weighted sound reduction index Rw for some common forms of construction. (b) Wall systems listed in Table 2 having a minimum 20 mm cavity between 2 separate leaves, with(i) for masonry, where wall ties are required to connect leaves, the ties are of the resilient type; and(ii) for other than masonry, there is no mechanical linkage between leaves except at the periphery, are deemed to be discontinuous construction.	The requirements of this part including clause 2 are to be complied with as applicable. Details will be submitted with CC
SPECIFICATION F5.5 – Impact Sound – Test of Equivalence		
1. Scope	This Specification describes a method of test to determine the comparative resistance of walls to the transmission of impact sound.	To be complied with as applicable. Details will be submitted with CC

BCA Clause	Description of Requirement	Status/Action Required
SECTION G – Ancillary Provisions		
PART G1 Minor Structures and Components		
G1.2. Refrigerated chambers, strong rooms and vaults	Provision for cleaning windows (a) A building must provide for a safe manner of cleaning any *windows* located 3 or more *storeys* above ground level.(b) A building satisfies (a) where – (i) the *windows* can be cleaned wholly from within the building; or (ii) provision is made for the cleaning of the *windows* by a method complying with the Occupational Health and Safety Act 2000 and regulations made under that Act.	Will comply as applicable. Details will be submitted with the CC
SECTION I - MAINTENANCE		
Part I1 – Equipment and Safety Installations		
I1.1. Safety measures	*Safety measures* must(a) perform to a standard not less than they were originally *required* to achieve;and (b) for those safety measures listed in Tables I1.1- I1.13, perform to a standard not less than that determined using the corresponding BCA provisions	To be noted and complied with as applicable.
I1.2.Mech.Vent. Hot, warm, cooling water systems	Mechanical ventilation and hot water, warm water and cooling water systems in a building other than a system only serving a single *sole-occupancy unit* in a Class 2 or 3 building or Class 4 part must be maintained in accordance with AS/NZS 3666.2.	Will comply as applicable. Details will be submitted with CC
PART I2 – Energy Efficiency Installations		
I2.1. Application of part	The *Deemed-to-Satisfy Provisions* of this Part do not apply to *services* serving only one *sole-occupancy unit* of a Class 2 building or serving a Class 4 part of a building.	To be noted and complied with as applicable.
I2.2. Components of services	Components of *services* must be maintained to ensure that they perform to a standard not less than they were originally *required* to achieve, including—(a) to (h) inclusive..	To be noted and complied with as applicable.
SECTION J – Energy efficiency		
Part J0 Energy Efficiency		
J0.1. Application of Section J	*Performance Requirements* JP1, JP2 and JP3 are satisfied by complying with— (a) for reducing the heating or cooling loads— (i) of SOU of a Class 2 building, J0.2 and J0.3; and (ii) of a Class 2 to 9 building, other than the *sole-occupancy units* of a Class 2 building, Parts J1, J2 and J3; and (b) for *air-conditioning* and ventilation, Part J5; and (c) for artificial lighting and power, Part J6; and (d) for hot water supply and *swimming pool* and spa pool plant, Part J7; and (e) for facilities for maintenance and monitoring, Part J8.	Not part of this report, however compliance with Part J1 to Part J8 is required as applicable. An independent report is to be submitted with the Construction certificate.

5.0 CONCLUSION

This report highlights the items that need to be implemented to fully comply with the Deemed-to-Satisfy provisions of BCA 2013 –Volume One as applicable, final details on the proposed method of achieving compliance will be submitted with the application for the Construction certificate..

Compliance with BCA 2013, as adopted on 1st May 2013 will generally be satisfied, including the requirements of the Disability (Access to Premises-Buildings) Standards 2010 , AS 1428.1-2009 and AS2890.6

This will ensure that the provisions of Fire Safety and/or Fire Safety awareness is adequate to prevent the spread of fire or ensure or promote the safety of persons in the event of fire and to ensure that the maintenance or use of the premises does not constitute a significant fire hazard.

Where a technical non-compliance with the prescriptive requirements has been identified and full compliance cannot be achieved, an Alternative Solution prepared by an appropriately qualified person to demonstrate compliance with the performance requirements will be appropriate.

I confirm that following the review and assessment of the architectural plans and documentation provided it has been resolved that the proposed development generally complies and/or is capable of complying with the Deemed-to-Satisfy and/or Performance Provisions of the Building Code of Australia and associated Australian Standards.

ANNEXURE A

Table 3 TYPE A CONSTRUCTION: FRL OF BUILDING ELEMENTS

Building element	Class of building — FRL: (in minutes)			
	Structural adequacy/ *Integrity*/ *Insulation*			
	2, 3 or 4 part	5, 7a or 9	6	7b or 8
EXTERNAL WALL (including any column and other building element incorporated therein) or other external building element, where the distance from any *fire-source feature* to which it is exposed is—				
For *loadbearing* 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- *loadbearing* 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	–/–/–	–/–/–	–/–/–	–/–/–
EXTERNAL COLUMN not incorporated in an *external wall*—				
For *loadbearing* columns—				
	90/–/–	120/–/–	180/–/–	240/–/–
For non- *loadbearing* columns—				
	–/–/–	–/–/–	–/–/–	–/–/–
COMMON WALLS and FIRE WALLS—	90/ 90/ 90	120/120/120	180/180/180	240/240/240
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 *shafts* 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

Table 3.9 REQUIREMENTS FOR CARPARKS

Building element				FRL (not less than) ***Structural adequacy/Integrity/Insulation***
				ESA/M (not greater than)
Wall				
(a)	*external wall*			
	(i)	less than 3 m from a *fire-source feature* to which it is exposed:		
			Loadbearing	60/60/60
			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 Table 3
Column				
(a)	supporting only the roof (not used for carparking) and 3 m or more from a *fire-source feature* to which it is exposed			–/–/–
(b)	steel column, other than one covered by (a) and one that does not support a part of a building that is not used as a *carpark*			60/–/– or 26 m^2/tonne
(c)	any other column not covered by (a) or (b)			60/–/–
Beam				
(a)	steel floor beam in continuous contact with a concrete floor slab			60/–/– or 30 m^2/tonne
(b)	any other beam			60/–/–
Fire-resisting lift and stair shaft (within the *carpark* only)				60/60/60
Floor slab and vehicle ramp				60/60/60
Roof (not used for carparking)				–/–/–
Notes:				
1.	ESA/M means the ratio of exposed surface area to mass per unit length.			
2.	Refer to Specification E1.5 for special requirements for a sprinkler system in a *carpark* complying with Table 3.9 and located within a multi-classified building.			