BCA COMPLIANCE ASSESSMENT REPORT

PROPOSED MIXED USE DEVELOPMENT

614 – 632 HIGH ST PENRITH

URBAN PROPERTY GROUP

REPORT NO. B9U015A1
18TH NOVEMBER 2019

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Project: Proposed mixed use development – 614 – 632 High St, Penrith

The following report register documents the development and issue of this and each subsequent report(s) undertaken by Certified Building Specialists Pty Ltd.

Revision History	Date	Remarks
B9U015A1	18th November 2019	Report issued to client

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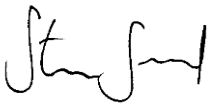

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BCA COMPLIANCE ASSESSMENT REPORT

Executive Summary

The following BCA compliance assessment report has been prepared at the request of Urban Property Group for the purpose of assessing the proposed design of a mixed-use development on the site located at 614 – 632 High St, Penrith.

The purpose of this report is to assess the proposed architectural plans and details for compliance with: -

- The prescriptive Deemed to Satisfy (DtS) Provisions of the Building Code of Australia (BCA) Volume One Edition 2019

BCA DTS departures have been identified in relation to:

- The fire stairs throughout the development discharge into DTS non-compliant locations
- The discharge path of travel from the fire stairs involves passing within 6m of external wall openings
- The fire control room is not provided with one exit opening directly into open space
- Various parts of the building are provided with a single exit in lieu of two.
- The entry doors to Retail Space 3 swing against the direction of egress
- The distance between alternative exits within the car parking areas on ground floor and the mezzanine level exceeds 60m apart
- The southern part of the ground floor car parking area exceeds 20m to a point of choice and exceeds 40m to one of two alternative exits
- The public corridors in Tower B (in both the Class 2 & Class 3 parts) exceeds a length of 40m and are not provided with smoke doors and smoke walls
- The travel distance from the most disadvantaged corners of the communal open space areas on Levels 4 – 6 & on the sky garden on Level 40 exceeds 20m to a point of choice.
- The travel distance between alternative exits on Level 4 exceeds 45m.
- The fire hydrant booster assembly is not located within sight of the main pedestrian entrance
- The southern dual key hotel rooms in Tower B exceeds 12m to a point of choice
- The sprinkler control valve assembly is located in an enclosure that does not open directly into open space.

It is considered that these BCA DTS departures may be addressed via obtaining fire engineering alternative solutions as required, to achieve compliance with the BCA and applicable codes and standards.

The outcomes of this compliance assessment conclude that the proposed design will be capable of achieving compliance subject to the implementation of the requirements detailed in this report, in accordance with the BCA and applicable codes and standards.

1.0 Introduction

1.1 General

The following BCA compliance assessment report has been prepared at the request of Urban Property Group for the purpose of assessing the proposed design of a mixed-use development for compliance with: -

- The prescriptive Deemed to Satisfy (DtS) Provisions of the Building Code of Australia (BCA) Volume One Edition 2019

The proposed new residential flat building the subject of this assessment is proposed to be constructed on the site located at and comprises: -

- Ground floor contains 5 retail tenancies, lobby areas and electrical substations
- Car parking provisions are provided on Ground Floor – Level 3 (including the mezzanine level). These levels contain a total of 350 parking spaces and 1 loading bay
- Levels 4 – 6 of Tower A contain various commercial tenancies
- Levels 4 – 9 of Tower B contain hotel rooms
- Levels 10 – 45 of Tower B contain residential apartments
- A swimming pool is proposed on Level 4
- Each storey of the building is served by fire isolated exit stairways and a passenger lift.

1.2 Purpose of Report

The purpose of this report is to assess the proposed architectural plans and details for compliance with the applicable requirements of building regulations.

Where non-compliances have been identified during our assessment, suitable recommendations are provided to achieve compliance with the BCA and applicable legislation.

1.3 Report Basis

The content of this report is based assessment of –

a) Architectural documentation prepared by DKO Architecture (NSW) P/L, Issue A, Dated 08/11/2019
b) The DTS provisions of the Building Code of Australia 2019

1.4 Report Exclusions

It is conveyed that this report should not construed to infer that an assessment for compliance, with the following, has been undertaken –

a) Compliance with structural provisions of the proposed building design;
b) Compliance of existing and proposed building services including Mechanical, Hydraulic and Electrical services;
c) The individual requirements of regulatory approval authorities (i.e Council and Government Authorities)

d) Compliance with the accessibility provisions of Part D3 of the BCA, AS1428 series of standards, AS4299-1995 and Access to Premises Standards 2010;
e) The individual requirements of service providers (i.e. Sydney Water, RTA, Energy Supply Authorities and the like);
f) Compliance with Disability Discrimination Act (DDA);
g) Compliance with the conditions of the approved Development Consent;
h) Compliance with the energy provisions of Section J and Basix.
i) Compliance with Bush Fire Risk and any associated requirements.
j) Compliance with planning legislation and requirements.

2.0 BCA (2019) Compliance Assessment Report

The following table below details the compliance assessment requirements in terms of each prescriptive provision of the Building Code of Australia 2019.

For those instances of "Deemed To Satisfy (DTS) non-compliance", a detailed analysis and commentary is provided. Where items are nominated as 'Compliance Achievable" it is considered that the existing plans are capable of achieving compliance subject to further design development during the pre-Construction Certification phase of the development.

3.0 Detailed BCA (2019) Compliance Assessment Report

The following table below provides a detailed BCA compliance assessment of the proposed building in terms of each relevant prescriptive provision of the Building Code of Australia.

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
BCA PART AO – APPLICATION						
A0.1 - 0.9 Application	BCA Introductory Clauses.	Noted.			✓	
BCA PART A1 – INTERPRETATION						
A1.1 - 1.7 Interpretation	BCA Interpretation Clauses.	Noted.			✓	
BCA PART A2 – ACCEPTANCE OF DESIGN & CONSTRUCTION						
A2.1 - 2.5 Acceptance of Design & Construction	BCA Suitability Requirements.	Noted.			✓	
BCA PART A3 – CLASSIFICATIONS OF BUILDINGS & STRUCTURES						
A3.1 Principles of Classification	---	Noted.			✓	
A3.2 Classifications	BCA Building Classifications.	The proposed building is classified as: ▪ Class 2 - Residential;			✓	

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
		▪ Class 3 – Hotel Rooms; ▪ Class 5 – Offices; ▪ Class 6 – Retail/Commercial ▪ Class 7a – Carpark; ▪ Class 8 – Substation; and ▪ Class 10b – Swimming Pool				
A3.3 Multiple Classification	Parts of Building to be classified separately.	Noted.			✓	
A3.4 Parts with more than one Classification	Each Classification to comply with relevant provisions of the BCA.	BCA compliance provisions of the Class 2, Class 3, Class 5, Class 6, Class 7a, Class 8 and Class 10b parts of the building required to comply as separate classifications.			✓	
BCA PART A1.3 – SPECIFICATIONS						
Spec A1.3 Standards Adopted by Reference	This Specification calls up Australian Standards adopted by the BCA.	Noted.			✓	
BCA PART A4 – UNITED BUILDINGS						
A4.1 When Buildings are United	Definitions of United Buildings.	Not Applicable.			✓	
A4.2 Alterations in a United Building	Compliance when no longer united.	Not Applicable.			✓	

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
BCA PART B1 – STRUCTURAL PROVISIONS						
B1.0 Deem to Satisfy Provisions	Specifies DTS means to satisfy Performance Requirements BP1.1 and BP1.2.	Noted.			✓	
B1.1 Resistance to Actions	Structural resistance to external actions.	The proposed building elements shall be designed and certified by a professional structural engineer in accordance with either clauses B1.1, B1.2 and B1.4 or clauses B1.3 and B1.4 of the BCA. The design of the structural elements is to include the design certification of Fire Resistance Levels (FRL) as identified in Specification C1.1 of this report.				✓
B1.2 Determination of Individual Actions	Various actions and methods of determination.	See B1.0 above.				✓
B1.3 Loads	Resistance requirements for imposed loads.	See B1.0 above.				✓
B1.4 Determination of Structural Resistance	Determination structural resistance.	Materials and forms of construction shall be designed to comply (where proposed) with the following:- ▪ AS 3700-2011 – Masonry ▪ AS 3600-2018– Concrete ▪ AS 4100 – 1998 – Steel Structures ▪ AS/NZS 1664.1 or 2 – 1997 – Aluminium ▪ AS 1562.3-1996- Plastics ▪ AS 1288-2006 & AS 2047-1999 - Glazing. Where a primary building element is subject to attack by subterranean termites compliance with AS 3660.1-2014 is required.				✓

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
BCA PART C1 – FIRE RESISTANCE & STABILITY						
C1.0 Deemed to Satisfy Provisions	Specifies DTS means to satisfy Performance Requirements CP1 to CP9.	Noted.			✓	
C1.1 Table C1.1 Type of Construction Required	"Type of Construction" required based on a building's "Rise in Storeys". Also see C2.2.	The building has a Rise is Storeys of Forty-Seven (47). Type A construction required based on the application of Table C1.1. Construction shall ensure that the Fire Resistance Levels (FRL) for Type A construction for all building elements in each respective classification requirements are achieved. Refer to BCA Specification C1.1 below detailing the minimum requirements.				✓
C1.2 Calculation of Rise in Storeys	Building's "Rise in Storeys".	The building has a "Rise in Storeys" of Forty-Seven (47). The building has an effective height greater than 50m.			✓	
C1.3 Buildings of Multiple Classification	The type of construction required for building of multiple classifications.	The type of construction applying to the building is Type A construction.			✓	
C1.4 Mixed Types of Construction	Allows mixed types of construction if parts are fire separated.	Type A construction to the entire building			✓	
C1.5 Two Storey Class 2 or 3 Buildings	Gives concessions for construction of certain residential buildings.	Not Applicable.			✓	
C1.6 Class 4 Parts of Building	Specified FRLs and separation for Class 4 parts.	Not Applicable.			✓	

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
C1.7 Open Spectator Stands and Indoor Sports Stadiums	Requirements for construction of stands / stadiums.	Not Applicable			✓	
C1.8 Lightweight Construction	Lightweight construction must comply with Specification C1.8 if it is used in a fire rated wall system or as a fire resisting covering to structural elements.	Further details required during the Construction Certificate design phase. Should lightweight fire rated construction be used to achieve an FRL including but not limited to closure of wall openings, concealed services, fire rated stud walls and fire rated ceilings. Further details required during the Construction Certificate design phase.				✓
C1.9 Non-Combustible Building Elements	Materials that may still be used where "non-combustible" finishes are specified.	All building elements designed & constructed throughout the building shall achieve compliance as a non-combustible material as required by the DTS provisions of the BCA.				✓
C1.10 Fire Hazard Properties	Materials and assemblies to comply with Fire Hazard Properties as outlined in Specification C1.10 as applicable.	Further details required during the Construction Certificate design phase ensuring all floor, wall and ceiling linings and assemblies comply with the fire hazard properties of Clause C1.10 and Specification C1.10 as required.				✓
C1.11 Performance of External Walls in Fire	Requirements for tilt-up walls and fixings.	Not Applicable			✓	
C1.13 Fire Protected Timber	Specifies the concessions available for the use of fire protected timber in various building Types and the requirement to comply with BCA Specification C1.13	Not Applicable			✓	

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
BCA PART C2 – COMPARTMENTATION & SEPARATION						
C2.0 Deemed to Satisfy Provisions	Specifies DTS means to satisfy Performance Requirements CP1 to CP9.	Noted.			✓	
C2.1 Application of Part	Fire compartmentation sizes and volumes do not apply to either a carpark provided with a sprinkler system or an open deck carpark or a spectator stand.	Noted.			✓	
C2.2 General Floor Area & Volume Limitations	Maximum floor areas and volumes for all classes of buildings and for each type of construction.	The maximum floor areas and volumes permitted in this Clause are not exceeded.			✓	
C2.3 Large Isolated Buildings	Fire compartments can exceed specified areas / volumes under certain open space, fire protection and vehicular access conditions.	Not Applicable.			✓	
C2.4 Requirements for Open Spaces & Vehicular Access	Conditions applying to vehicular access required by Clause C2.3.	Not Applicable.			✓	
C2.5 Class 9a & Class 9c Buildings	Additional fire and smoke compartmentation that is required for Class 9a Healthcare and 9c Aged Care buildings.	Not Applicable.			✓	
C2.6 Vertical Separation of Openings in External Walls	Vertical separation for buildings of unsprinklered Type A Construction to reduce risk of fire spread between floors via external windows.	Not Applicable.			✓	

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
C2.7 Separation by Fire Walls	Design & construction of firewalls.	Not Applicable.			✓	
C2.8 Separation of Classifications in the Same Storey	Fire separation requirements within the same storey.	Not Applicable.			✓	
C2.9 Separation of Classifications in Different Storeys	When to / how to fire separate classifications in different storeys.	The floor (and supporting parts providing direct vertical or lateral support) between the storeys is required to achieve compliance with BCA Specification C1.1.				✓
C2.10 Separation of Lift Shafts	Requirements for fire separation of lift shafts in various building types.	The proposed lift shafts shall achieve the following FRL's ▪ Carpark, Ground Floor & Level One - 120/120/120 loadbearing or -/120/120 for non-loadbearing; ▪ Level Two – 180/180/180 loadbearing or -/180/180 for non-loadbearing; and ▪ Residential - 90/90/90 loadbearing or -/90/90 for non-loadbearing.				✓
C2.11 Stairways & Lifts in One Shaft	Prevents lift and stairs being in the one shaft if the lift and/or stair shaft is required to achieve an FRL.	The proposed location of the stairs and lift shafts are not within the same enclosure.	✓			
C2.12 Separation of Equipment	Certain equipment (lift motors, lift control panels, emergency generators, central smoke control plant, boilers, batteries, and certain pumps) must be separated from the remainder of the building with construction	Further details relating to the proposed location and type of equipment required for compliance assessment during the Construction Certificate design phase.				✓

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
	achieving an FRL of not less than 120/120/120.					
C2.13 Electricity Supply System	Certain electricity supply equipment must be protected with construction of not less than 120/120/120 FRL. Equipment includes: Electricity substations; Main switchboards "which sustain emergency equipment operating in emergency mode"; and Electricity conductors that supply main switchboard.	Further details relating to the proposed location and type of equipment required for compliance assessment during the Construction Certificate design phase.				✓
C2.14 Public Corridors in Class 2 & 3 Buildings	Public corridors in Class 2 and Class 3 buildings to be divided into smoke compartments if length is more than 40 metres.	Public corridors in the Class 2 & Class 3 parts exceed 40metres in length and are not proposed to be provided with smoke doors and smoke walls. **Non-Compliant** Obtain a performance solution report from a qualified fire engineer to address this DTS Departure.		**X**		✓
BCA PART C3 – PROTECTION OF OPENINGS						
C3.0 Deemed to Satisfy Provisions	Specifies DTS means to satisfy Performance Requirements CP1 to CP9.	Noted.			✓	
C3.1 Application of Part	Exempts openings such as control joints, weep holes, non-combustible ventilators for sub floor or cavity ventilation, etc, from protection requirements.	Noted.			✓	
C3.2 Protection of Openings in External Walls	Openings less than 3m from a side or rear boundary or 6m from the far boundary of a road or 6m from another building on the site must be protected, and such openings must not exceed 1/3 of wall area.	The external wall openings throughout the development achieve compliance with this Clause			✓	

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
C3.3 Separation of External Walls and Associated Openings in Different Fire Compartments	Separation required between external openings in different fire compartments.	Not Applicable.			✓	
C3.4 Acceptable Methods of Protection	Acceptable methods of protecting openings in external walls.	Not Applicable.			✓	
C3.5 Doorways in Fire Walls	Construction of non-required doorways in firewalls.	Not Applicable.			✓	
C3.6 Sliding Fire Doors	Installation requirements for sliding fire doors.	Not Applicable.			✓	
C3.7 Protection of Doorways in Horizontal Exits	Construction of horizontal exits in firewalls.	Not Applicable.			✓	
C3.8 Openings in Fire Isolated Exits	Construction details of doorways and windows to fire isolated exits.	All fire isolated exit entry doorways are required to be protected by -/60/30 FRL self-closing doorsets.				✓
C3.9 Service Penetrations in Fire Isolated Exits	Services shall not be installed in fire-isolated exits, except as permitted in this Clause.	The fire isolated exits are not to be penetrated by any services with the exception water supply and electrical wiring associated with fire services. Further details relating to the proposed location and type of services shall be provided for compliance assessment during the Construction Certificate design phase.				✓

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C3.10 Openings in Fire Isolated Lift Shafts	Construction details of doorways to fire isolated lift shafts and construction of lift indicator panels.	Doorways to the lift shaft are required to be provided with fire rated lift landing doors with an FRL of -/60/- and in accordance with AS 1735.11- 1986.				✓
C3.11 Bounding Construction Class 2, 3, & 4 Buildings	Stipulates how to protect openings in bounding construction (residential building / parts).	All unit entry doorways shall be protected by self-closing -/60/30 fire doorsets. Further details shall be provided for compliance assessment during the Construction Certificate design phase.				✓
C3.12 Openings in Floors & Ceilings for Services	Services passing through fire rated floors or ceilings shall be suitably protected to maintain the FRL of the building element(s). See also C3.15.	Penetrations to all floors and walls are required to achieve the FRL required for the respective classification as detailed in Specification C1.1 below. Protection shall be achieved by either by a fire rated shaft or in accordance with C3.15 of the BCA. Further details relating to the proposed service and/or shaft location and type of passive protection shall be provided for compliance assessment during the Construction Certificate design phase.				✓
C3.13 Openings in Shafts	Any openings into fire rated shafts shall be protected in accordance with this Clause.	Any openings located within service shafts are required to be protected. Details relating to the installation and protection of openings shafts shall be provided for compliance assessment during the Construction Certificate design phase. Further details required.				✓
C3.14---	Clause deliberately left blank.	---				

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
C3.15 Openings for Service Installations	Systems where passing through fire rated floor or walls shall be suitably protected to maintain the FRL of the building element(s), either using approved AS 1530.4 / AS 4072.1 systems, or limited alternative systems to Spec C3.15.	Service penetrations such as PVC pipes, mechanical ductwork, wiring penetrations shall be protected as required by fire collars, fire dampers, fire pillows etc. Further details relating to the proposed service and/or shaft location and type of passive protection shall be provided for compliance assessment during the Construction Certificate design phase.				✓
C3.16 Construction Joints	Construction joints shall achieve the same FRL as the building component in which it is installed.	All construction joints in and between building elements required to be fire resisting (integrity and insulation) must be protected in accordance with a prototype tested in accordance with AS1530.4-2005.				✓
C3.17 Columns Protected with Lightweight Construction to achieve an FRL	Any column protected with lightweight construction should maintain the fire integrity of a building element through which it passes.	Columns to be confirmed during the Construction Certificate design phase.				✓
SPECIFICATION C1.1 – FIRE RESISTING CONSTRUCTION						
Spec C1.1 Clause 2.1 Exposure to Fire Source Features	This Clause stipulates when a building element is exposed to a fire source feature.	Noted.			✓	
Spec C1.1 Clause 2.2 Fire Protection for a Support of Another Part	The structural integrity of any part of a building required to have a particular FRL shall not be reduced by reason of it being supported by a part of the building that does not have at least the same FRL.	The design by a professional structural engineer is to ensure that where building elements requiring an FRL depends on direct vertical or lateral support to maintain its FRL, the supporting part itself, and the part itself must achieve the greater FRL. (See Spec C1.1 Clause 3.1 below).				✓

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Spec C1.1 Clause 2.3 Lintels	Details where lintels over doorways or openings require an FRL.	Lintels installed above fire doors within load-bearing walls must have the FRL required for the wall it is installed. (See Spec C1.1 Clause 3.1 below).				✓
Spec C1.1 Clause 2.4 Attachments not to impair fire resistance	Details use of combustible materials if they form an attachment to a building element which has an FRL.	Not Applicable.			✓	
Spec C1.1 Clause 2.5 General Concessions	Outlines general FRL concessions that can be applied for various building components.	Noted.			✓	
Spec C1.1 Clause 2.6 Mezzanine Floors Concession	Stipulates that a mezzanine and its supports do not need to achieve a fire rating provided other measures are adopted.	Not Applicable.			✓	
Spec C1.1 Clause 2.7 Enclosure of Shafts	Requires enclosure of various shafts both at the top and the bottom.	Details relating to relating to the proposed location and type of services and risers shall be provided for compliance assessment during the Construction Certificate design phase.				✓
Spec C1.1 Clause 2.8 Car parks in Class 2 & 3 Buildings	This Clause allows for a concession to fire rating to carparks in Class 2 and 3 buildings.	Not Applicable.			✓	
Spec C1.1 Clause 2.9 Residential Aged Care Building: Concession	Allows FRL concessions to sprinklered residential aged care buildings.	Not Applicable.			✓	

Spec C1.1 Clause 3.1 & Table 3 **Type A Fire Resisting Construction**	This Clause & Table outline the Fire Resistance Levels of various building elements for Type A Construction. The following FRL of building elements are required and shall be designed by a professional structural engineer: -				✓

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*, where the distance from any *fire-source feature* to which it is exposed is—				
less than 3 m	90/–/–	120/–/–	180/–/–	240/–/–
3 m or more	–/–/–	–/–/–	–/–/–	–/–/–
COMMON WALLS and FIRE WALLS—	90/ 90/ 90	120/120/120	180/180/180	240/240/240

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Table 3 TYPE A CONSTRUCTION: FRL OF BUILDING ELEMENTS *— continued*

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**
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

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Spec C1.1 Clause 3.2 Concessions for Floors	Outlines general FRL concessions to floors where they satisfy the provisions as outlined in this Clause.	Noted. Concession is available to the car park basement slab laid on the ground.			✓	
Spec C1.1 Clause 3.3 Floor Loading of Class 5 & 9b Buildings: Concession	Outlines general FRL concessions for Class 5 / 9b if the floor live load does not exceed 3kPa.	Not Applicable.			✓	
Spec C1.1 Clause 3.4 Roof Superimposed on a Concrete Slab: Concession	A roof superimposed on a concrete slab roof does not require an FRL if it is of non-combustible construction.	Not Applicable.			✓	
Spec C1.1 Clause 3.5 Roof: Concession	Outlines general FRL concessions to roofs where they satisfy the provisions as outlined in this Clause.	Concession for the roof could be available should roof covering be non-combustible. Confirmation of the proposed roof structure is required to confirm this concession during the Construction Certificate design phase.				✓
Spec C1.1 Clause 3.6 Roof Lights	Stipulates requirements for roof lights in fire rated / non-combustible roofs.	Not Applicable.			✓	
Spec C1.1 Clause 3.7 Internal Columns & Walls: Concession	Walls & columns in the storey under the roof can have a reduced FRL.	Not Applicable.			✓	
Spec C1.1 Clause 3.8 Open Spectator Stands & Indoor Sports Stadiums: Concession	Concessions to FRL for open spectator stands and indoor sport stadiums.	Not Applicable.			✓	

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
Spec C1.1 Clause 3.9 Table 3.9 Carparks (Type A)	Outlines construction of open deck carpark portions or sprinklered carparks in Type A construction.	Not Applicable.			✓	
Spec C1.1 Clause 3.10 Class 2 Buildings: Concession (Type A)	Concessions for low rise residential buildings of Type A construction.	Not Applicable.			✓	
BCA PART D1 – PROVISION FOR ESCAPE						
D1.0 Deem to Satisfy Provisions	Specifies DTS means to satisfy Performance Requirements DP1 to DP9.	Noted.			✓	
D1.1 Application of Part	Part D of the BCA does not apply to the internal parts of a sole occupancy unit in a Class 2, 3, or 4 part building.	Noted			✓	
D1.2 Number of Exits Required	Number of exits required from each part of the building.	Class 5 The commercial tenancies on Levels 5 & 6 of Tower A are provided with a single exit in lieu of two exits. Lift Lobbies The ground floor lift lobby areas are provided with a single exit in lieu of two exits. **Non-Compliant** Obtain a Fire Engineering Report for these DTS Departure. Class 2, Class 3, Class 6 & Class 7a Parts of the Development		X		✓

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
		Each storey is provided with a minimum of 2 required exits.				
D1.3 When Fire Isolated Exits are Required	When fire isolated exits are required in buildings.	The proposed exit stairways serving the entire development are required to be fire isolated exits.				✓
D1.4 Exit Travel Distances	Travel distances to exits in various building types.	Class 7a (Ground Floor) The travel distance from the southern side of the car parking area on ground floor exceeds 20m to a point of choice and exceeds 40m to one of two alternative exits. Communal Open Space Areas The travel distance from various parts of the communal open space areas on Levels 4 – 6 exceeds 20m to a point of choice in which travel to alternative exits is provided. **Non-Compliant** Obtain a Fire Engineering Report for this DTS Departure. Class 5 The office tenancies on Level 5 & 6 exceeds 20m to an exit. **Non-Compliant** Obtain a Fire Engineering Report for this DTS Departure. Class 2		**X**		✓

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
		The sky garden on Level 40 exceeds 20m to a point of choice. **Non-Compliant** Obtain a performance solution report from a qualified fire engineer to address this departure.				
		Class 3 The exit travel distances from the southern dual key hotel rooms in Tower B exceed 12 metres to a point of choice in which travel to alternative exits is provided. **Non-Compliant** Obtain a Fire Engineering Report for this DTS Departure.				
D1.5 Distances between Alternative Exits	Distribution and distances between exits.	The distance between the alternative exits within the car parking areas exceeds 60m (when measured back through the point of choice). **Non-Compliant** Obtain a Fire Engineering Report for this DTS Departure.				
		Communal Open Space – Level 4 The distance between alternative exits within the communal open space area on Level 4 exceeds 45m apart. **Non-Compliant** Obtain a Fire Engineering Report for this DTS Departure.		**X**		✓

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
D1.6 and NSW D1.6(f) & (h) Dimensions of Exits and Paths of Travel to Exits	Unobstructed dimensions and widths of exits.	All required paths of travel to the exits shall achieve an unobstructed height of not less than 2m (except for doorways reduced to not less than 1.98m). The unobstructed width of each exit or path of travel to an exit from the residential levels and the Class 5 part of the building (except for doorways) shall not be less than 1m. The unobstructed width of each exit or path of travel to an exit from Level 1 (except for doorways) shall not be less than 1.75m this aggregate exit width shall not diminish from this storey all the way down to open space.				✓
D1.7 Travel via Fire Isolated Exits	Connection into and discharge from fire isolated stairs / passageways.	• The external path of travel discharging from the fire isolated exits involves passing within 6m of the unprotected openings on ground floor. • The north-eastern fire stairs discharge within the confines of the building to an area which is not open for 2/3 of the perimeter. • The fire stairs discharging at New Road and Union Lane discharge into a covered area which is not open for 1/3 of the perimeter and does not achieve a head clearance of 3m. **Non-Compliant** Obtain a Fire Engineering Report for these DTS Departures.		**X**		✓
D1.8 External Stairways or Ramps in Lieu of Fire Isolated Exits	Use of an external stair or ramp instead of a fire isolated stair.	Not Applicable.			✓	

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
D1.9 Travel by Non Fire Isolated Stairways or Ramps	Utilisation of an open stair for egress (distances, discharge, etc).	Not Applicable.			✓	
D1.10 Discharge from Exits	Clear width and disposition of exit discharges.	Discharges from exits achieve an unobstructed width of 1m leading to the street frontage.				✓
D1.11 Horizontal Exits	Use and construction of horizontal exits.	Not Applicable.			✓	
D1.12 Non-Required Stairways, Ramps or Escalators	Non-required stairways, ramps, and escalators – use and permissible storeys connected.	Not Applicable.			✓	
D1.13 & Table D1.13 Number of Persons Accommodated	Calculation of the nominal number of occupants in each part of a building based on floor area. (Note: actual populations may vary from nominal BCA population densities).	Noted.			✓	
D1.14 Measurement of Distances	Details where distances are measured in relation to egress design.	Noted.			✓	
D1.15 Method of Measurement	Details how distances are measured in relation to egress design.	Noted.			✓	
D1.16 Plant Rooms and Lift Motor Rooms: Concession	Egress dispensations in relation to Plant Rooms and Lift Motor Rooms.	Not Applicable.			✓	

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
D1.17 Access to Lift Pits	Advises how access to Lift Pits is to be provided.	Where lift pits are not more than 3m deep, access to the lift pit(s) shall be through the lowest landing doors. Where lift pits are more than 3m deep, D1.17(b) shall be complied with. Further details shall be provided for compliance assessment during the Construction Certificate design phase.				✓
BCA PART D2 – CONSTRUCTION OF EXITS						
D2.0 Deem to Satisfy Provisions	Specifies DTS means to satisfy Performance Requirements DP1 to DP9.	Noted.			✓	
D2.1 Application of Part	Relieves the interior of SOUs in Class 2 and 3 buildings from stair, landing and balustrade requirements.	Noted.			✓	
D2.2 Fire Isolated Stairways & Ramps	Structural design of fire isolated stair shafts.	Fire resisting stair shafts must be constructed of non-combustible materials. The structural engineering design shall ensure that if there is local failure it will not cause structural damage to, or impair the fire resistance of the shaft. Further details shall be provided for compliance assessment during the Construction Certificate design phase.				✓
D2.3 Non Fire Isolated Stairways & Ramps	Construction of required open stairs where the rise in storeys of the building exceeds 2.	Not Applicable.			✓	
D2.4	Fire isolated stairways must not connect storeys both above and below street level.	The proposed design of the fire isolated exits achieves compliance with this clause.			✓	

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
Separation of Rising & Descending Stair Flights						
D2.5 Open Access Ramps & Balconies	Construction of open access ramps and balconies in lieu of pressurised stairs.	Not Applicable.			✓	
D2.6 Smoke Lobbies	Construction of smoke lobbies required by D1.7.	Not Applicable.			✓	
D2.7 Installations In Exits & Paths of Travel	Service installations located in exit paths, suitable separation / enclosure to be provided.	Further confirmation is required relating to the proposed location of Electrical/Communication Distribution Boards, main switchroom and the like for compliance assessment during the Construction Certificate design phase.				✓
D2.8 Enclosure of Space Under Stairs & Ramps	Specifies the design of storerooms under an open stair. Also storage under fire-isolated stairs is not permissible if the room opens into the stairshaft.	The space beneath the exit stairways shall not be enclosed to form a cupboard or similar space. Where storerooms beneath the stairways and ramps occur, they shall be enclosed with fire rated construction achieving an FRL of not less than 60/60/60 and be protected with /60/30 fire doorsets.				✓
D2.9 Width of Stairways	Stipulates how stair widths and heights are measured.	The clear unobstructed stairway widths shall not be less than 1m width and not less than 2m in height.				✓
D2.10 Pedestrian Ramps	Stipulates how a pedestrian ramp can serve as a required exit.	Not Applicable.			✓	
D2.11 Fire Isolated Passageways	Fire isolated passageways to have an FRL of 60/60/60 or that of the fire-isolated stair from which it extends.	Not Applicable.			✓	

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
	2-way FRL is required.					
D2.12 Roof as Open Space	If the roof is considered "open space" then the slab must have an FRL of 120/120/120, and rooflights and the like must be located not less than 3m from path of travel.	Not Applicable.			✓	
D2.13 & NSW D2.13 Goings & Risers	Construction of stairs.	Stairway design and construction shall strictly comply with the requirements specified in the clause. Generally, riser (R) dimensions shall be between 115mm-190mm and going (G) dimensions between 250mm -355mm. The quantity (2R+G) shall be between 550mm-700mm.				✓
D2.14 Landings	Construction of landings.	Stairway landing design and construction shall strictly comply with the requirements specified in the clause. Generally, landings shall be not less than 750mm long and a maximum gradient of 1:50. The fire isolated exits must discharge to a landing having gradients not exceeding the requirements of this clause. Adjustments to be made in the pre-Construction Certificate design phase.				✓
D2.15 & NSW D2.15 Thresholds	Construction of thresholds at doorways.	Threshold design and construction shall strictly comply with the requirements specified in the clause. Generally, the threshold of a doorway must not incorporate a step or ramp at any point closer than the width of the door leaf.				✓
D2.16 & NSW D2.16 Balustrades or Other Barriers	Height and construction of balustrades to voids, stairs, balconies, etc.	Balustrade design and construction shall strictly comply with the requirements specified in the clause.				✓

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
		Generally, the height of the balustrade shall be not less than 1m above the floor.				
D2.17 Handrails	Where handrails need to be incorporated along stairways.	Handrail design and construction shall strictly comply with the requirements specified in the clause. Generally, handrails must be provided to all stairways at a height not less than 865mm measured above the nosings of the stair treads. In addition, within fire isolated exit stairways, at least one handrail shall comply with clause 12 of AS1428.1-2009. Further details shall be provided for compliance assessment during the Construction Certificate design phase.				✓
D2.18 Fixed Platforms, Walkways, Stairways, & Ladders	Details compliance with AS1657 in respect to walkways, stairways and ladders serving machinery rooms, boiler houses, lift motor rooms, plant rooms, and the like.	Further clarification is required relating to relating to the proposed location and type of equipment, including plant rooms etc and services for compliance assessment.				✓
D2.19 & NSW D2.19 Doorways & Doors	Type, design and operation of doors serving as required exits	Noted.			✓	
D2.20 Swinging Doors	Specifies door swing requirements and encroachments for "required exit" doors.	The exit doorways of Retail Tenancy 3 on ground floor swing against the direction of egress and the tenancy has a floor area exceeding 200m^2 **Non-Compliant** Obtain a Fire Engineering Report for these DTS Departures.		**X**		✓
D2.21	Lock or latch hardware / operating requirements for doors in a required exit,	The operation of latches on all doors in, forming part of, or in the path of travel to a required exit must be				✓

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
Operation of Latch	forming part of a required exit or in the path of travel to a required exit.	readily openable without a key from the side that faces a person seeking egress. This is required to be achieve by a device comprising a single handed downward action or pushing action on a single device. An example of a suitable device is a keyless lever door handle.				
D2.22 Re-entry from Fire Isolated Exits	Stipulates whether you can lock a fire stair entry door from the inside.	Further confirmation is required during the pre-Construction Certificate design phase verifying the proposed method of ensuring compliant re-entry is provided to the fire isolated exits serving greater than 25m in effective height.				✓
D2.23 Signs on Doors	"Fire Door, Do Not Obstruct, Do Not Keep Open" and similar signage required to exit doors opening to and from fire isolated passageways, and stairways.	Signage shall be provided to comply with this clause.				✓
D2.24 Protection of openable Windows	Specifies the requirements for the protection of Openable windows in bedrooms in class 2 and 3 buildings and class 9b early childhood centres	Where the floor below the windows of all bedrooms is greater than 2m, one of the following protection methods shall be adopted: 1) Raise the window sill height to 1.7m; 2) Install a device to restrict the openable part of window no greater then 125mm; 3) Install screen with openings no greater then 125mm; The adopted method shall ensure the ventilation requirements of Clause F4.2 are complied with. Compliance to be confirmed during the Construction Certificate design phase.				✓
BCA PART E1 – FIRE FIGHTING EQUIPMENT						

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
E1.0 Deemed to Satisfy Provisions	Specifies DTS means to satisfy Performance Requirements EP1 to EP10.	Noted.			✓	
E1.1---	This Clause deliberately left blank.	Noted.			✓	
E1.2---	This Clause deliberately left blank.	Noted.			✓	
E1.3 Hydrants	This Clause stipulates when fire hydrants are required.	A fire hydrant system is required to serve the building as the total building exceeds a floor area of 500m2. The fire hydrant system is required to comply with A2419.1-2005. Further details shall be provided for compliance assessment during the Construction Certificate design phase. The fire hydrant booster assembly is not located within sight of the main pedestrian entrance. **Non-Compliant** Obtain a Fire Engineering Report for these DTS Departures.		**X**		✓
E1.4 Fire Hose Reels	This Clause stipulates when fire hose reels are required.	A fire hose reel system is required to serve the car park in accordance with AS2441-2005. Further details shall be provided for compliance assessment during the Construction Certificate design phase.				✓
E1.5 & Table E1.5 Sprinklers	This Clause stipulates when sprinklers are required.	An automatic fire sprinkler system is required to installed throughout the entire building.		**X**		✓

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
		The sprinkler system is required to comply with Specification E1.5a of the BCA and one of the following standards: • AS 2118.1-2017; • AS 2118.6-2012 Further details shall be provided for compliance assessment during the Construction Certificate design phase. The sprinkler control valve assembly is located within the building rather than opening directly into open space. **Non-Compliant** Obtain a Fire Engineering Report for these DTS Departures.				
E1.6 & Table E1.6 Portable Fire Extinguishers	This Clause stipulates where extinguishers need to be installed.	Portable Fire Extinguishers are to be installed in accordance with the requirements of AS 2444-2001. Further details shall be provided for compliance assessment during the Construction Certificate design phase.				✓
E1.7---		This Clause deliberately left blank.			✓	
E1.8 Fire Control Centres	This Clause stipulates when a fire control centre is required.	A fire control room is required to be provided to serve the building. Further details including sizing shall be provided for compliance assessment during the Construction Certificate design phase. The fire control room does not open directly into open space as required by this Clause.		**X**		✓

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
		Non-Compliant Obtain a Fire Engineering Report for these DTS Departures.				
E1.9 Fire Precautions during Construction	Fire services must be provided and be operational during the construction phase in accordance with Clause E1.9.	In the building under construction, not less than 1 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 exit stairway. The required fire hydrants and hose reels must be operational after the building has reached an effective height of 12m.				✓
E1.10 Provision for Special Hazards	Suitable additional provisions must be made if there are specific fire risks.	Not Applicable.			✓	
BCA PART E1 – SPECIFICATIONS						
Spec E1.5 Fire Sprinkler Systems	This Specification sets out requirements for the design and installation of fire sprinkler systems.	Compliance required.				✓
Spec E1.8 Fire Control Centres	This Specification describes the construction & content of required Fire Control Centres or Rooms.	Compliance required.				✓
BCA PART E2 – SMOKE HAZARD MANAGEMENT						
E2.0 Deemed to Satisfy Provisions	Specifies DTS means to satisfy Performance Requirements EP2.1 and EP2.2	Noted.			✓	
E2.1	Stipulates where Smoke Hazard Management provisions do not apply.	Noted.			✓	

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
Application of Part						
E2.2, Table E2.2a & E2.2b & NSW E2.2 General Requirements	How compliance is achieved with both Smoke Hazard Management Provisions including treatment of systems that may not be part of the overall Smoke Hazard Management System.	The building requires the following fire safety measures as contained within Table E2.2a of the BCA: ▪ An automatic fire detection and alarm system in accordance with Clauses 2, 3, 4, 5, 6 and 7 of Specification E2.2a. ▪ Automatic shutdown and smoke dampers for any air handling system between fire compartments which does not form part of the smoke hazard management system; ▪ Automatic air pressurisation of all fire isolated exits in accordance with AS1668.1-1998. ▪ Mechanical ventilation system in the carpark in accordance with AS1668.2 – 2012 and clause 5.5 of AS16681.-1998. ▪ A building occupant warning system in accordance with AS1670.4-2004. Refer to clause E4.9 for EWIS requirements. ▪ A zone smoke control system in accordance with AS1668.1-2015 Engineering details and specifications shall be provided for compliance assessment during the Construction Certificate design phase.				✓
E2.3 Provision for special hazards	Requirements for additional smoke hazard management measures necessary for special characteristics, function and material quantity of specific buildings.	Not Applicable.			✓	
BCA PART E2 – SPECIFICATIONS						

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
Spec E2.2a Smoke Detection & Alarm Systems	This Specification outlines the design of various smoke detection and alarm systems, OWS and monitoring connections.	The required automatic smoke detection and alarm system serving this building must be provided in accordance with Table E2.2a and Specification E2.2a of the BCA. An automatic fire detection and alarm system in accordance with Clauses 2, 3, 4, 5, 6 and 7 of Specification E2.2a. Details relating to the proposed smoke detection and alarm system shall be provided for compliance assessment during the Construction Certificate design phase.				✓
Spec E2.2b Smoke Exhaust Systems	This Specification highlights the DTS requirements for mechanical smoke exhaust systems.	Not Applicable.			✓	
Spec E2.2c Smoke & Heat Vents	Details use and construction of smoke & heat vents.	Not Applicable.			✓	
BCA PART E3 – LIFT INSTALLATIONS						
E3.0 Deemed to Satisfy Provisions	Specifies DTS means to satisfy Performance Requirements E3.1 to E3.8.	Noted.			✓	
E3.1---	Clause E3.1 deliberately left blank in the BCA.	Noted.			✓	
E3.2 Stretcher Facilities in Lifts	Requirements for Stretcher Facilities in buildings over 12m and in emergency lifts.	As the effective height of the building exceeds 12m, a passenger lift with stretcher facilities is required. A stretcher facility must accommodate a raised stretcher with dimensions not less than 600mm wide x 2000mm long x 1400mm high above floor level.				✓

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
		Further details shall be provided for compliance assessment during the Construction Certificate design phase.				
E3.3 Warning Against Use of Lifts in Fire	Requirements for "Do Not Use Lifts" signs.	Signage indicating "DO NOT USE LIFTS IF THERE IS A FIRE" will be required to be displayed near every passenger lift call button.				✓
E3.4 Emergency Lifts	Emergency lifts in buildings over 25m, also 9a.	At least two (2) emergency lifts must be provided in separate shafts and achieve compliance with AS1735.1-2003 and AS1735.2 – 2001. Further details shall be provided for compliance assessment during the Construction Certificate design phase.				✓
E3.5 Landings	Lift landing requirements.	Access and egress to lift landings shall comply with this clause. Further details shall be provided for compliance assessment during the Construction Certificate design phase.				✓
E3.6, Tables E3.6a & E3.6b Passenger Lifts	Requirements for lifts in accessible buildings.	The proposed lift installation shall demonstrate compliance with clause E3.6, Table E3.6a and Table E3.6b of the BCA. Further details shall be provided for compliance assessment during the Construction Certificate design phase.				✓
E3.7 Fire Service Controls	Fire Service Controls in all lifts.	Fire service controls shall be provided to the passenger lifts.				✓
E3.8	Lifts or ramps in multi storey aged care.	Not Applicable.			✓	

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
Aged Care Buildings						
E3.9 Fire Service Recall Operation Switch	Specifies activation of fire service recall operation.	Each group of lifts shall be provided with one fire service recall control switch as required by this Clause and Clause E3.7 above.				✓
E3.10 Lift Car Fire Service Drive Control Switch	Specifies the activation of the lift car fire service drive control switch.	The lift car fire service drive control switch as required by Clause E3.7 above shall ensure that it is activated from within the car including the specified operation detailed in this Clause.				✓
BCA PART E4 – EMERGENCY LIGHTING, EXIT SIGNS, & WARNING SYSTEMS						
E4.0 Deemed to Satisfy Provisions	Specifies DTS means to satisfy performance requirements E4.1 to E4.9.	Noted.			✓	
E4.2 - E4.4 Emergency Lighting	Design and installation requirements for emergency lighting.	Emergency Lighting shall be designed and installed throughout the carpark and common areas of the building in accordance with AS 2293.1-2005. Further details shall be provided for compliance assessment during the Construction Certificate design phase.				✓
E4.5 – E4.8 Exit Lighting	Design and installation requirements for exit lighting.	Emergency exit signs shall be designed and installed on, above or adjacent to the exits including directional exit signs as required in accordance with AS 2293.1-2005. Further details shall be provided for compliance assessment during the Construction Certificate design phase.				✓

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
E4.9 Emergency Warning & Intercom Systems	Where a EWIS system is required.	An Emergency Warning & Intercom System (EWIS) is required to be provided throughout the building in accordance with AS 1670.4-2004 and this clause.			✓	
BCA PART F1 – DAMP AND WEATHERPROOFING						
F1.0 Deemed to Satisfy Provisions	Specifies DTS means to satisfy performance requirements F1.1 to F1.13.	Noted.			✓	
F1.1 Stormwater Drainage	Specifies that stormwater drainage must comply with AS/NZS 3500.3.	The proposed stormwater system shall be designed and certified by a professional hydraulic engineer in accordance with clause F1.1 of the BCA and AS/NZ 3500.3-2003. Further details shall be provided for compliance assessment during the Construction Certificate design phase.				✓
F1.2---	Clause deliberately left blank.	---			✓	
F1.3---	Clause deliberately left blank.	---			✓	
F1.4---	Clause deliberately left blank.	---			✓	
F1.5 Roof Coverings	States what type roof covering is acceptable.	Further details are required in relation to the specific construction of the roof shall be provided for compliance assessment during the Construction Certificate design phase.				✓
F1.6 Sarking	Specifies that sarking used for weatherproofing roofs and walls must comply with AS/NZS 4200 Parts 1 & 2.	Further details shall be provided for compliance assessment during the Construction Certificate design phase.				✓

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
F1.7 Water Proofing Wet Areas in Buildings	Wet areas must be water-resistant or waterproof in accordance with AS 3740.	Wet areas shall be waterproofed in accordance with AS3740-2010. Further details shall be provided for compliance assessment during the Construction Certificate design phase.				✓
F1.8---	Clause deliberately left blank.	---			✓	
F1.9 Damp-proofing	States that moisture from the ground must be prevented from entering the building.	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 3660.1-2000. Further details shall be provided for compliance assessment during the Construction Certificate design phase.				✓
F1.10 Damp-proofing Floors on Ground	Requires a vapour barrier to be inserted under floors laid on ground to prevent moisture penetration.	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 2870-1996, 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.				✓
F1.11 Floor wastes	Requires floor wastes in bathroom and laundries of Class 2, 3 & 4 buildings.	Bathrooms and laundries must be provided with a floor waste.				✓
F1.12	Stipulates requirements for the sub-floor area of buildings.	Further details are required in relation to the specific construction of the floor and subfloor (if any).				✓

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
Sub-floor ventilation						
F1.13 Glazed assemblies	Lists which glazed assemblies need/ need not comply with AS2047 in terms of water penetration.	The installation of all glazed assemblies shall comply with AS 2047 - 1999.				✓
BCA PART F2 – SANITARY AND OTHER FACILITIES						
F2.0 Deemed to Satisfy Provisions	Specifies DTS means to satisfy Performance Requirements F2.1 to F2.8.	Noted.			✓	
F2.1 & Table F2.1 Facilities in residential buildings	States when facilities are required in Class 2, 3, 4 & 9c buildings.	The proposed number of sanitary and other facilities serving residential sole occupancy units is required to be installed to comply with this clause.				✓
F2.2 Calculation of number of occupants & fixtures	States facilities are to be based on population worked out under D1.13 unless more accurate means of determining numbers is available.	Noted.			✓	
F2.3 & Table F2.3 Facilities in Class 3 to 9 buildings	States when facilities are required in Class 3, 5, 6, 7, 8 & 9 buildings.	Not Applicable.			✓	
F2.5 Construction of sanitary compartments	Describes how sanitary compartments are to be constructed.	The design and construction of sanitary compartments in each sole occupancy unit shall ensure compliance with this clause. Where there is not a clear space of 1.2m between the closet pan and the doorway, the sanitary compartment door shall either open outwards, slide, or be readily removable from the outside.				✓

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
F2.6 Interpretation: Urinals and washbasins	Clarifies what constitutes a urinal and washbasin.	Noted.			✓	
F2.8 Waste management	States what waste management facilities are required in a Class 9a & 9c buildings.	Not Applicable.			✓	
BCA PART F3 – ROOM SIZES						
F3.0 Deemed to Satisfy Provisions	Specifies DTS means to satisfy Performance Requirements F3.1.	Noted.			✓	
F3.1 Room heights	Specifies ceiling heights of various rooms in Class 2 - 9 buildings.	Ceiling heights for the development to achieve compliance throughout.				✓
BCA PART F4 – LIGHT AND VENTILATION						
F4.0 Deemed to Satisfy Provisions	Specifies DTS means to satisfy Performance Requirements F4.1 TO F4.12.	Noted.			✓	
F4.1 Provision of Natural Light	Requires natural light to be provided to all habitable rooms in Class 2, 3, 4 & 9 buildings.	The provision of natural lighting is required to be provided to all habitable rooms.				✓

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
F4.2 Method & Extent of Natural Lighting	Requires the light transmitting glazing to be not less than 10% of the floor area of the room	The proposed windows sizes and habitable floor areas shall be provided to demonstrate the minimum requirement of 10% of the floor area for the provision of natural light to habitable areas is achieved.				✓
F4.3 Natural light from adjoining room	Able to borrow natural light from adjoining room where there is a shortfall in the provision of natural light.	Further details required if required to borrow light from adjoining rooms.				✓
F4.4 Artificial Lighting	Stipulates in what circumstances artificial lighting is required.	The design and installation of artificial lighting for safe movement shall be in accordance with this clause and AS 1680.0-2009.				✓
F4.5 Ventilation of Rooms	States those habitable rooms, Shops, offices etc need to be either naturally ventilated or mechanically ventilated.	Further details relating to the proposed natural or mechanical ventilation systems to be provided. Engineering details and specifications shall be provided for compliance assessment during the Construction Certificate design phase.				✓
F4.6 Natural Ventilation	States natural ventilation must be provided via openings such as windows and doors that equate to a minimum 5% of the floor area of the room.	The proposed windows sizes and habitable floor areas shall be provided to demonstrate the minimum requirement of 5% of the floor area for the provision of natural ventilation is achieved. Opening sizes of the proposed windows shall be sufficient to equal no less than 5% of the floor area of each sole occupancy unit.				✓
F4.7 Ventilation Borrowed from Adjoining room	Allows natural ventilation to be borrowed from adjoining rooms.	Further details relating to the proposed natural and mechanical ventilation systems to be provided.				✓
F4.8	Restricts the areas onto which a water closet can open.	The design and positioning of a room containing a closet pan or urinal must comply with the provisions of this clause. Where closet pans open directly onto				✓

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
Restriction on position of water closets and urinals		kitchens, they shall be provided with mechanical ventilation.				
F4.9 Airlocks	Requires an airlock to those rooms prohibited under F4.8 from having a water closet from opening directly into them.	The design and positioning of a room containing a closet pan or urinal must comply with the provisions of this clause including the provision of mechanical ventilation as required.				✓
F4.10 ---	Clause deliberately left blank.	---			✓	
F4.11 Carparks	Requires ventilation to Carparks.	Further details required in relation to the proposed mechanical and/or natural ventilation system serving the car park. Engineering details and specifications shall be provided for compliance assessment during the Construction Certificate design phase.				✓
F4.12 Kitchen Local Exhaust Ventilation	Requires commercial kitchens to be provided with a compliant exhaust hood.	Not Applicable.			✓	
BCA PART F5 – SOUND TRANSMISSION AND INSULATION						
F5.0 Deemed to Satisfy Provisions	Specifies DTS means to satisfy Performance Requirements FP 5.1 TO FP.5.6	Noted.			✓	
F5.1 Application of Part	Stipulates the application of Part F5 limited to Class 2, 3 and 9c buildings.	Noted.			✓	
F5.2 Determination of airborne sound insulation ratings	Offers options for compliance of forms of construction to determine aribrone sound insulation ratings either determined in	Noted.			✓	

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
	accordance with AS/NZ 1276.1-1999 or ISO 717.1 or comply with Specification F5.2.					
F5.3 Determination of impact sound insulation ratings	Offers options for compliance of floors to determine impact sound insulation ratings either in accordance with ISO 717.2 or comply with Specification F5.2. The provision also specifies the requirements of wall construction.	The walls within the building are required to be of discontinuous construction (i.e a minimum 20mm cavity between 2 separate leaves) where a bathroom, sanitary compartment, laundry or kitchen in one sole occupancy unit from a habitable room (other than a kitchen), plant room or lift shaft in an adjoining unit. Further details shall be provided for compliance assessment during the Construction Certificate design phase.				✓
F5.4 Sound insulation rating of floors	Stipulates the requirements for sound insulation of floors.	The floors in the building separating sole occupancy units must have an $R_w C_{tr}$ (airborne) not less than 50 and an $L_{n,w} C_l$ (impact) not more than 60. Further details shall be provided for compliance assessment during the Construction Certificate design phase.				✓
F 5.5 Sound insulation rating of walls	Stipulates the requirements for sound insulation of walls.	The walls in the building separating sole occupancy units must have an $R_w C_{tr}$ (airborne) and an R_w (airborne) not less than 50 if it separates a sole occupancy unit from a public corridor or the like. The doors incorporated with the bathroom walls are required to have R_w (airborne) not more than 30. Further details shall be provided for compliance assessment during the Construction Certificate design phase.				✓
F5.6 Sound insulation rating of services	Stipulates the requirements for sound insulation of services.	Details relating to services and proposed pipes runs etc are required. Should waste or water pipes transverse through sole occupancy units, the ducts or pipes must have an $R_w C_{tr}$ (airborne) not less than 40 if the adjacent room is a				✓

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
		habitable room (other than a kitchen); or 25 if the adjacent room is a kitchen or non-habitable room. Further details shall be provided for compliance assessment during the Construction Certificate design phase.				
F5.7 Sound insulation rating of pumps	Stipulates the requirements for sound insulation of pumps.	Flexible couplings are required at service pump connections. Further details required to demonstrate this is achieved.				✓
SPECIFICATION F5.2 – SOUND INSULATION FOR BUILDING ELEMENTS						
Spec F5.2 Sound insulation for building elements	This specification lists the weighted sound reduction index R_w for some common forms of construction.	Compliance with this specification required.				✓
SPECIFICATION F 5.5 – IMPACT SOUND- TEST OF EQUIVALENCE						
Spec F 5.5 Impact Sound- Test of Equivalence	This specification describes the method of test to determine the comparative resistance of walls to the transmission of impact sound.	Compliance with this specification required.				✓
BCA PART F6 – CONDENSATION MANAGEMENT						
F6.0 Deemed to Satisfy Provisions	Specifies DTS means to satisfy Performance Requirements FP 6.1	Noted.			✓	
F6.1	Stipulates the application of Part F6 limited to Class 2 & Class 4 parts of buildings.	Noted.			✓	

BCA/DAPS DEEMED TO SATISFY (DTS) PROVISION	COMPLIANCE REQUIREMENT	COMMENTS	COMPLIES	NON COMPLIANT	NOTED /NOT APPLICABLE	COMPLIANCE ACHIEVABLE
Application of Part						
F6.2 Pliable Building Membrane	This Clause stipulates the requirements for pliable building membranes in external walls for condensation management.	A pliable building membrane is required to be installed in external walls in accordance with AS/NZS4200.1-2017 and AS4200.2-2017. Further details shall be provided for compliance assessment during the Construction Certificate design phase.				✓
F6.3 Flow Rate & Discharge of Exhaust Systems	The Clause specifies the flow rate and discharge requirements for kitchen, bathroom, laundries and sanitary compartments.	Mechanical engineer to ensure the design achieves compliance for a minimum flow rate of 25L/s for bathrooms or sanitary compartments and 40L/s for kitchens or laundries. Ventilation discharge is to comply with this Clause. Further details shall be provided for compliance assessment during the Construction Certificate design phase.				✓
F6.4 Ventilation of Roof Spaces	The Clause specifies the discharge requirements where exhausts are discharging into roof spaces.	Mechanical engineer to ensure ventilation to roof spaces complies with this Clause should any discharge occur within roof spaces. Further details shall be provided for compliance assessment during the Construction Certificate design phase.				✓