

**BCA 2022
Indicative Compliance Report
For DA Lodgment**



Client: Bryon Burke & Tina Kamyab

Address: U4&U7, 1a Greycliffe Street, Queenscliff NSW 2096

Subject: Proposed Additions to Existing Strata Units

Date: 26 June 2024

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Report Limitations and Exclusions

The limitations and exclusions of this report are as follows:

- These plans have been assessed indicatively to the extent necessary to proceed to construction certificate stage whereby assessment will be undertaken pursuant to Part 4A of the Environmental Planning and Assessment Act 1979. This means that the design has been assessed to be able to comply with the BCA (i.e. the submitted plans are consistent with the BCA but certain design details may not be specified at this stage due to the plans and specifications being at pre-DA stage).
- This Report does not address issues in relation to the following:
 - a) The structural adequacy of the building including the Fire Resistance Levels (FRL's) of any building elements (unless specifically referred to).
 - b) The design, maintenance or operation of electrical, mechanical, hydraulic or fire protection services.
 - c) Environmental Planning and Assessment Act and Regulations (unless specifically referred to).
 - d) Local Government Act and Regulations.
 - e) Occupational Health and Safety Act and Regulations.
 - f) Workcover Authority requirements.
 - g) Requirements of other Regulatory Authorities including, but not limited to, Telstra, Sydney Water, Electricity Supply Authority, RTA, Council and the like.
 - h) Disability Discrimination Act (DOA) other than minimum requirements under the Disability (Access to Premises-Buildings) Standards 2010. ODA is a Case-by-Case Assessment, this building will comply with the set items under the Premises Standards.
 - i) Construction Safety Act.
 - j) Conditions of Development Consent issued by the relevant Local Council.
- This assessment does not incorporate the detailed requirements of the Australian Standards.

Referenced Documents

The following documentation was relied upon when preparing this report:

- Assessment of design documentation referenced in Part 4 of this report.
- The performance and deemed-to-satisfy provisions of the Building Code of Australia 2022 incorporating the NSW Appendices where applicable.
- Guide to the National Building Code of Australia.
- Disability (Access to Premises - Buildings) Standards 2010.
- Environmental Planning & Assessment Act 1979 (As Amended).
- Environmental Planning & Assessment Regulation 2021.
- Environmental Planning & Assessment (Development Certification & Fire Safety) Regulation 2021.

Report Reading Guide

The scope of this Building Code of Australia Report (BCAR) is to assess the proposed building against the “Deem-to-Satisfy” the Building Code of Australia (BCA) Performance Requirements:

- EXECUTIVE SUMMARY
- INTRODUCTION
- DESIGN OBJECTIVES
- PRINCIPAL BUILDING CHARACTERISTICS
- BUILDING CODE OF AUSTRALIA ASSESSMENT
- REFERENCE INFORMATION
- CONCLUSIONS
- VALIDITY AND LIMITATIONS

The project stakeholders will have varying degrees of involvement in the fire engineering process with an interest in different sections. It is recommended that each stakeholder read the entire document, paying particularly attention to the sections indicated in Table A.

Table A – Recommended reading guide table for project stakeholders

Stakeholder	Executive Summary	1	2	3	4	5	6	7
Client	✓	✓	✓	✓	✓	✓	✓	✓
Architect	✓	✓	✓	✓	✓	✓	✓	✓
Certifying Authority	✓	✓	✓	✓	✓	✓	✓	✓
Project Manager	✓	✓	✓	✓	✓	✓	✓	✓
Services Engineers	✓	✓	✓	✓	✓	✓	✓	✓
Fire Brigades	✓	✓	✓	✓	✓	✓	✓	✓
Managing Contractor	✓	✓	✓	✓	✓	✓	✓	✓
Sub-Contractor	✓	✓	✓	✓	✓	✓	✓	✓

Executive Summary

This report is prepared in preparation of a Development Application (DA) lodgement and is for assessment purposes, it comprises a Building Code of Australia (BCA) assessment of the proposed alterations to the existing strata units U4 & U7 and is subject to Clauses 64 & 69 of the Environmental Planning and Assessment Regulation 2021.

The existing building is situated on land at 1a Greycliffe Street, Queenscliff NSW 2096 and is a block of strata residential units.

In considering the requirements of the BCA for the purposes of the proposed additions, consideration is required of Clauses 64 and 69 of the Environmental Planning and Assessment Regulation 2021, wherein the following applies –

- Clause 64 – Consent authority may require upgrade of buildings. This clause requires the whole of the building to comply with the BCA if over the previous 3 years building works represents 50% or more of the total volume of the building.
- Clause 69 – Compliance with the Building Code of Australia. This clause requires building works must be carried out in accordance with the requirements of the Building Code of Australia.

Having regard to the proposed building works compliance issues of compliance with the BCA will only relate to the proposed new building works to U4 & U7, and not the whole building. Further, it should be noted that the proposed building works do not represent an increase in the total volume of the existing building by 50%.

The overall fire safety strategy for this building is based on the application of the Environmental Planning & Assessment Regulation 2021 and the fire safety measures arising from compliance with BCA DtS Provisions and other additional requirements resulting from assessing the BCA DtS. The following table details to proposed buildings compliance with the BCA in Section 4.2 of this report.

Based on the Building code assessment presented in this report, it is our considered opinion that, the proposed additions to the existing residential flat building are capable of satisfying the BCA Performance Requirements, subject to the provision of the request detail for variation and compliance Architectural plan.

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PART 1 INTRODUCTION

1.1 Introduction

This report is prepared in preparation of a Development Application (DA) lodgement and is for assessment purposes, it comprises a Building Code of Australia (BCA) assessment of the proposed alterations to the existing strata units U4 & U7 and is subject to Clauses 64 & 69 of the Environmental Planning and Assessment Regulation 2021.

1.2 The Project

It is proposed to construct new building works to the existing units U4 & U7 at the subject site.

1.3 Site Description

The existing building is situated on land at 1a Greycliffe Street, Queenscliff NSW 2096, as shown by the aerial view below.



Photo – Aerial view: 1a Greycliffe Street, Queenscliff NSW 2096– Courtesy Google Maps

1.4 Terms of Reference

All State Building Surveying has been appointed by Bryon Burke to identify for the proposed new building works, the relevant Deemed-to-Satisfy Provisions of the Building Code of Australia (BCA) under Sections Parts C, D (excluding Part D4 – Access) E and F and to identify any non-compliances; and to provide a list of proposed fire safety measures for the development.

1.5 Building Code of Australia Report Scope

This report is based on the Deemed-to-Satisfy (DtS) Provisions of the Building Code of Australia 2022, Volume 1 and the NSW variations where applicable.

1.6 Relevant Project Stakeholders

The relevant project stakeholders that have been nominated by the Client for purposes of participating in the fire engineering process are outlined in Table 1-1.

Table 1-1 - Project Stakeholders

Representative	Entity	Role
Bryon Burke & Tina Kamyab	U4 & U7	Owners
Strata Secretary	Strata Plan	Building Owners
Adam Hobbs	Hobbs Jamieson Architecture	Architect
TBC	Northern Beaches Council	Consent Authority
TBC	TBC	Certifying Authority
Sean O'Brien	All State Building Surveying Pty Ltd	Building Code Consultant

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1.7 Definitions

The following definitions apply to terminology used in this report -

The proposed building works – refers to U4&U7, 1a Greycliffe Street, Queenscliff NSW 2096

BCA – refers to the Building Code of Australia

BCA DtS – refers to the Building Code of Australia 2022 (BCA) Deemed-to-Satisfy Provision (DtS)

Certifying Authority – refers to (Certifier) BPB: TBC

Owner – refers to Bryon Burke & Tina Kamyab, U4 & U7, 1a Greycliffe Street, Queenscliff NSW 2096

Building Code of Australia Report (BCAR) – refers to the Building Code of Australia Report (This document)

Building Code Consultant – refers to All State Building Surveying Pty Ltd

FRL – refers to Fire Resistance Level as defined in the BCA

FRNSW – refers to Fire & Rescue NSW

NCC – refers to National Construction Code

Effective height - the vertical distance between the floor of the lowest storey included in the calculation of rise in storeys and the floor of the topmost storey (excluding the topmost storey if it contains only heating, ventilating, lift or other equipment, water tanks or similar service units).

Exit –

(a) any, or any combination of the following if they provide egress to a road or open space: (i) An internal or external stairway.

(ii) A ramp.

(iii) A fire-isolated passageway.

(iv) A doorway opening to a road or open space.

(b) A horizontal exit or a fire-isolated passageway leading to a horizontal exit.

Rise in storeys - the greatest number of storeys calculated in accordance with C2D3 of the BCA.

Sole-occupancy unit - a room or other part of a building for occupation by one or joint owner, lessee, tenant, or other occupier to the exclusion of any other owner, lessee, tenant, or other occupier and includes-(a) a dwelling; or (b) a room or suite of rooms in a Class 3 building which includes sleeping facilities; or (c) a room or suite of associated rooms in a Class 5, 6, 7, 8 or 9 building; or (d) a room or suite of associated rooms in a Class 9c building, which includes sleeping facilities and any area for the exclusive use of a resident.

Storey - a space within a building which is situated between one floor level and the floor level next above, or if there is no floor above, the ceiling or roof above, but not-(a) a space that contains only— (i) a lift shaft, stairway or meter room; or (ii) a bathroom, shower room, laundry, water closet, or other sanitary compartment; or (iii) accommodation intended for not more than 3 vehicles; or (iv) a combination of the above; or (b) a mezzanine.

PART 2 DESIGN OBJECTIVES

2.1 Building Code Objectives

The design objectives for this building code assessment are contained in the relevant BCA Performance Requirements in Sections C, D, E and F, which may be summarised as:

- Occupant Life Safety – to safeguard people from illness or injury due to a fire in a building and whilst evacuating a building during a fire.
- Protection of adjacent property – to avoid the spread of fire between buildings and protect other property from physical damage caused by structural failure of a building as a result of fire.
- Fire Brigade Intervention – to facilitate the activities of emergency services personnel.

The building code objectives are based on acceptable levels of occupant life safety as absolute fire safety within buildings is not attainable. Accordingly, the BCA is utilised as a benchmark for establishing an acceptable level of fire safety. The process used to define the acceptance criteria for this project will include community representation via the Regulatory Authorities such as Certifying Authority and Fire & Rescue NSW along with input from other relevant project stakeholders.

This assessment will be consistent with the objectives and limitations of the BCA and therefore specifically excludes arson (other than as a source of initial ignition), multiple ignition sources, acts of terrorism, protection of property (other than adjoining property), business interruption or losses, personal or moral obligations of the owner/occupier, reputation, environmental impacts, broader community issues etc. Specific building owner objectives relating to any of the above matters have not been identified by the relevant stakeholders and were therefore not considered in this report.

As a Performance Solution is not identical to a BCA Deemed-to-Satisfy (DtS) Solution, the property losses resulting from a fire in the subject building may under some circumstances vary from a building complying fully with the BCA DtS Provisions.

2.2 BCA Compliance Objectives

In terms of BCA Compliance, the primary objective of this report is to identify the BCA DtS requirements identified in Section 4.1 of this report.

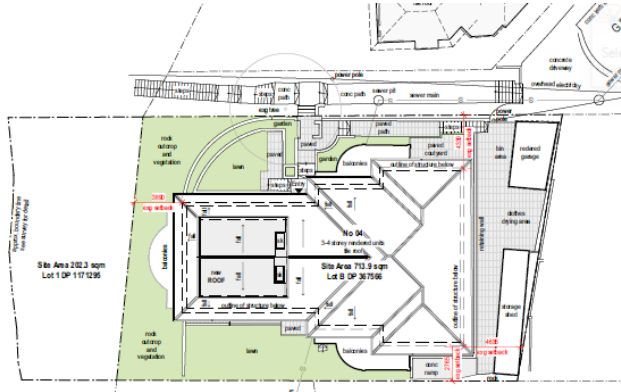
2.3 Fire Brigade Objectives

Fire brigade objectives with respect to building design and fire brigade intervention are to be addressed in accordance with the relevant BCA Performance Requirements. It should be noted that the Fire & Rescue NSW (FRNSW) have their own charter for the protection of life, property and environment are beyond the scope of this report.

PART 3 PRINCIPLE BUILDING CHARACTERISTICS

3.1 Building Description

This Building Code of Australia Report (BCAR) relates to the proposal additions to Units 4 & 7 in the existing residential building located at 1a Greycliffe Street, Queenscliff NSW 2096.



3.2 Classification

The existing building is classified as a Class 2 Building – Residential with a freestanding Class 10a – Garage and a freestanding Class 10b – storage shed. The proposed works will not alter the existing building classifications.

3.3 Rise in Storeys

The existing buildings has a Rise in storeys – four (4). The proposed building works will not add to the rise in storeys.

3.4 Number of Storeys Contained

The existing building with the proposed new works will contain five (5) storeys.

3.5 Type of Construction

The building is required to satisfy Type A construction.

3.6 Effective Hight

The proposed building is estimated to achieve an effective height of approximately 12.0m.

3.7 Climate Zone

The proposed residential building complex is in located in climate zone 5.

3.8 Floor Area and Volume Limitations

The building is subject to maximum floor area and volume limits of:-

Class 2 Class 2 buildings are not subject to floor area and volume limitations of Clause C3D3 as Clause S5C11 – Type A Construction and Clause C4D12 of the BCA regulates the compartmentation and separation provisions applicable to Class 2 buildings.

3.9 Fire Compartments

The following fire compartments are assumed - Each separate Residential Storey within of Building.

3.10 Exits

The building is provided with the following points of egress - The ground floor building entry door opens directly to open space.

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PART 4 BUILDING CODE of AUSTRALIA ASSESSMENT (BCA)

The overall fire safety strategy for this building is based on the application of the Environmental Planning & Assessment Regulation 2021 and the fire safety measures arising from compliance with BCA DtS Provisions and other additional requirements resulting from assessing the BCA DtS. The following table details to proposed buildings' compliance with the BCA in Section 4.2 of this report.

4.1 Environmental Planning & Assessment Regulation 2021

In considering the requirements of the BCA for the purposes of the proposed additions, consideration is required of Clauses 64 and 69 of the Environmental Planning and Assessment Regulation 2021, wherein the following applies –

1. Clause 64 – Consent authority may require the upgrade of buildings. This clause requires the whole of the building to comply with the BCA if over the previous 3 years building works represent 50% or more of the total volume of the building.
2. Clause 69 – Compliance with the Building Code of Australia. This clause requires building works must be carried out in accordance with the requirements of the Building Code of Australia.

Having regard to the proposed building works compliance issues of compliance with the BCA will only relate to the proposed new building works to U4 & U7, and not the whole building. Further, it should be noted that the proposed building works do not represent an increase in the total volume of the existing building by 50%.

4.2 BCA Assessment Table

For the purposes of this Report and the BCA, the proposed building (see copy of site plan below) has been assessed in the following manner –

Table 4 2 – BCA Assessment Table.

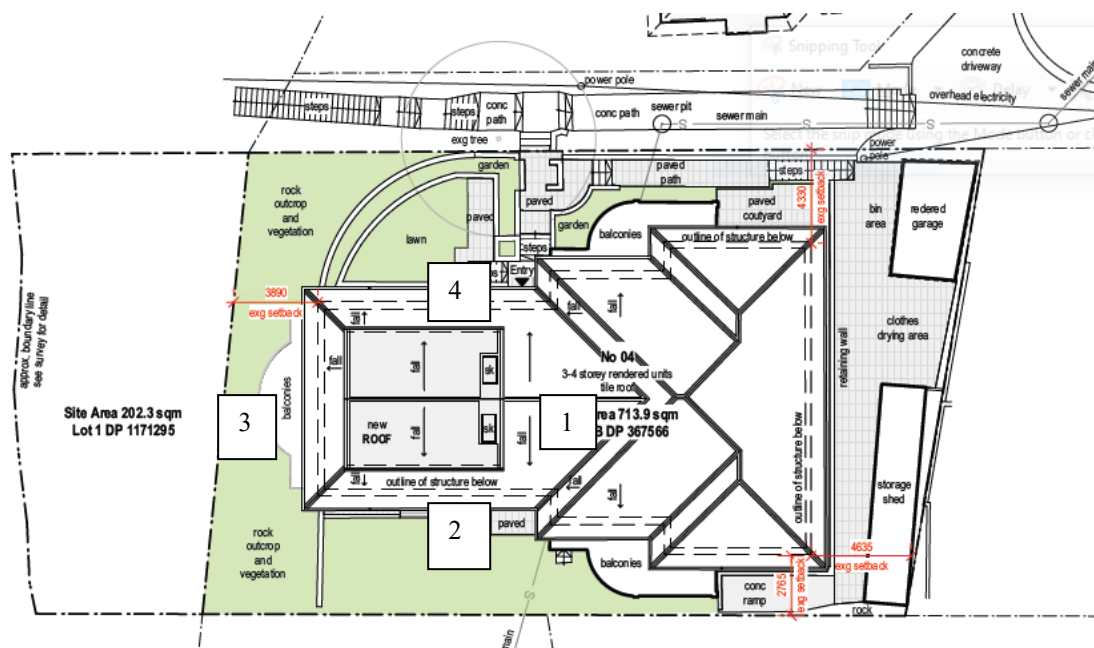
Item	Description	Status	Comments
SECTION B – Structure			
	The building or structure, during construction and use, with appropriate degrees of reliability, must— • perform adequately under all reasonably expected design actions, and withstand extreme or frequently repeated design actions; and be designed to sustain local damage, with the structural system as a whole remaining stable and not being damaged to an extent disproportionate to the original local damage; and avoid causing damage to other properties, by resisting the actions to which it may reasonably expect to be subjected. The structural resistance of materials and forms of construction must be determined using five percentile characteristic material properties with appropriate allowance for— • known construction activities; and type of material; and characteristics of the site; and the degree of accuracy inherent in the methods used to assess the structural behaviour; and action effects arising from the differential settlement of foundations, and from restrained dimensional changes due to temperature, moisture, shrinkage, creep and similar effects. Any glass installations that are at risk of being subjected to human impact must have glazing that— • if broken on impact, will break in a way that is not likely to cause injury to people; and • resists a reasonably foreseeable human impact without breaking; and is protected or marked in a way that will reduce the likelihood of human impact		Structure engineering details are to be provided at Construction Stage

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Item	Description	Status	Comments
SECTION C - FIRE RESISTANCE			
Part C1 Fire Resistance			
Objectives, Functional Statements, Performance Requirements & Verification methods - For Notation			
Part C2 Fire resistance and stability - the proposed new building works are limited to the internal alterations and additions to U4 & U7.			
C2D1	Deemed-to-Satisfy Provisions	For Notation	N/A
C2D2	Type of Construction	Type A Construction	The development is required to comply with the FRL requirements of Building Elements in Specification S5C11 and Table S5C11. <u>Comment</u> Structural Engineer to certify FRL of structural elements

Table C2D2: Type of construction required

Rise in storeys	Class of building 2, 3, 9	Class of building 5, 6, 7, 8
4 or more	A	A
3	A	B
2	B	C
1	C	C



Fire Source Features	Applies	Openings and Building Elements are to comply the provisions Clauses C4D3, C4D5 and Spec 5 Table S5C11	Fire Source features – nominated below
	External Wall 1 – Side boundary – North	Applies > FSF greater than 3m setback	Loadbearing and non-loadbearing portions of the external walls require FRL 90/90/90, windows and other openings do not need protection
	External Wall 2 – Side Boundary - East	Applies > FSF greater than 3m setback	Loadbearing and non-loadbearing portions of the external walls require FRL 90/90/90, windows and other openings do not need protection
	External Wall 3 – Rear Boundary - South	Applies > FSF greater than 3m setback	Loadbearing and non-loadbearing portions of the external walls require FRL 90/90/90, windows and other openings do not need protection
	External Wall 4 – Side Boundary – Unnamed Laneway	Applies > FSF is the far side of the laneway (road)	Loadbearing and non-loadbearing portions of the external walls require FRL 90/90/90, windows and other openings do not need protection
	Other buildings on site	Noted	No other buildings appear on the same allotment

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Item	Description	Status	Comments		
Specification 5 Fire-resisting construction					
S5C1	Scope	Applies	Noted		
S5C2	Exposure to fire-source features	Applies	Noted		
S5C3	Fire protection for a support of another part	Applies	Noted		
S5C4	Lintels	N/A	N/A		
S5C4	Method of attachment not to reduce the fire-resistance of building elements	N/A	N/A		
S5C6	General concessions	Applies	Noted		
S5C7	Mezzanine floors: Concession	N/A	N/A		
S5C8	Enclosure of shafts	N/A	N/A		
S5C9	Carparks in Class 2 and 3 buildings	N/A	N/A		
S5C10	Residential care building: Concession	N/A	N/A		
S5C11	Type A Fire-Resisting Construction				
(1)	In a building required to be of Type A construction –				
	(a) each building element listed in Tables S5C11a, S5C11b, S5C11c, S5C11d, S5C11e, S5C11f, and S5C11g and any beam or column incorporated in it, must have an FRL not less that listed in the Table for the particular class of building concerned: and				
	(b) any internal wall required to have an FRL with respect to integrity and insulation must extend to – (i) the underside of the floor next above: or (ii) the underside of a roof complying with S5C11g: or (iii) if under S5C15 the roof is not required to comply with Table S5C11g, the underside of the non-combustible roof covering and, except for the roof battens with dimensions of 75mm x 50mm or less or sarking-type material, must not be crossed by timber or other combustible elements; or (iv) a ceiling that is immediately below the roof and has a resistance to the incipient spread of fire to the roof space between the ceiling and the roof of not less than 60 minutes.				
	(c) a loadbearing internal wall and a loadbearing fire wall (including those that are part of a loadbearing shaft must be constructed from – (i) concrete; or (ii) masonry; or (iii) subject to (2), fire-protected timber, or (iv) any combination of (i) to (iii); and				
	(d) the FRLs specified in Table S5C11c for an external column apply also to those parts of an internal column that face and are within 1.5m of a window and are exposed through that window to a fire source feature.				
(2)	For the purposes of (1)(c)(iii), fire-protected timber may be used, provided that – (a) the building is – (i) a separate building: or (ii) a part of a building – (A) which only occupies part of a storey, and is separated from the remaining part by a fire wall: or (B) which is located above or below a part not containing fire-protected timber and the floor between the adjoining parts is provided with an FRL not less than prescribed for a fire wall for the lower storey: and (b) the building has an effective height of not more than 25m: and (c) the building has a sprinkler system (other than a FPAA10D or a FPAA10H system) throughout complying with Specification 17: and (d) any insulation installed in the cavity of the timber element require to have a FRL is non- combustible: and (e) cavity barriers are provided in accordance with Specification 9.				
(3)	For the purposes of Table S5C11a and Table S5C11b, external wall includes, any column and other building elements incorporated within it or other external building element.				
Table S5C11a: Type A construction: FRL of Loadbearing parts of external walls					
Distance from a fire-source feature		FRL (in minutes): <i>Structural adequacy/ Integrity / Insulation</i>			
		Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Less than 1.5 m		90/90/90	120/120/120	180/180/180	240/240/240
1.5 to less than 3 m		90/60/60	120/90/90	180/180/120	240/240/180
3 m or more		90/60/30	120/60/30	180/120/90	240/180/90

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

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

Table S5C11c: Type A construction: FRL of external columns not incorporated in an external walls

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

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

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

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

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

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

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

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

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

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S5C12 Type A fire-resisting construction - concessions for floors	
A floor need not comply with Table S5C11g if –	
(a) it is laid directly on the ground: or (b) in a Class 2, 3 5 or 9 building, the space below is not a storey, does not accommodate motor vehicles, is not a storage or work area, and is not used for any other ancillary purpose: or (c) it is a timber stage floor in a class 9b building laid over a floor having the required FRL and the space below the stage is not used as a dressing room, store room or the like: or (d) it is within a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building; or (e) it is an open-access floor (for the accommodation of electrical and electronic services and the like) above a floor with the required FRL.	
S5C13 Type A fire-resisting construction - floor loading of Class 5 and 9b buildings: Concession	
If a floor in a Class 5 or 9b building is designed for a live load not exceeding 3kPa-	
(a) the floor next above (including floor beams) may have a 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.	
S5C14 Type A fire-resisting construction - roof superimposed on concrete slab: Concession	
A roof superimposed on a concrete slab roof need not comply with S5C11 as to fire resisting construction if –	
(a) the superimposed roof and any construction between it and the concrete slab roof are non-combustible throughout: and (b) the concrete slab roof complies with S5C11g.	
S5C15 Type A fire-resisting construction - roof: Concession	
A roof need not comply with S5C11g if its covering is non-combustible and the building -	
(a) has a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17 installed throughout; or (b) has a rise in storeys of 3 or less; or (c) is of Class 2 or 3; or (d) has an effective height of not more than 25m 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.	
S5C16 Type A fire-resisting construction - roof lights	
If a roof is required to have a FRL or its covering is required to be non-combustible, roof lights or the like installed in that roof must -	
(a) have an aggregate area of not more than 20% of the roof surface; and (b) be not less than 3m from – (i) any boundary of the allotment other than the boundary with a road or public place; and (ii) any part of the building which projects above the roof unless that part has the FRL required of a fire wall and any openings in that part of the wall for 6m vertically above the roof light or the like are protected in accordance with C4D5; and (iii) any roof or the like in an adjoining sole-occupancy unit if the walls bounding the unit are required to have an FRL; and (iv) any roof light or the like in an adjoining fire-separated section of the building; and (c) if a ceiling with a resistance to the incipient spread of fire is required, be installed in a way that will maintain the level of protection provided by the ceiling to the roof space.	
S5C17 Type A fire-resisting construction - internal columns and walls: Concession	
For a building with an effective height of not more than 25m and having a roof without an FRL in accordance with S5C15, in the storey immediately below that roof, internal columns other than those referred to in S5C11(1)(d) and the internal walls other than fire walls and shaft walls may have -	
(a) in a Class 2 or 3 building: FRL60/60/60; or (b) in a Class 5, 6, 7, 8 or 9 building - (i) with rise in storeys exceeding 3: FRL 60/60/60: or (ii) with rise in storeys exceeding 3: no FRL.	
S5C18 Type A fire-resisting construction - open spectator stands and indoor sports stadiums: Concession	
In an open spectator or indoor sports stadium, the following building elements need not have the FRL specified in Tables S5C11a, S5C11b, S5C11c, S5C11e and S5C11g:	
(a) The roof if it is non-combustible. (b) Columns and loadbearing walls supporting only the roof if they are non-combustible. (c) Any non-loadbearing part of an external wall less than 3 m- (i) From any fire-source feature to which it is exposed, if it has an FRL of not less than -/60/60 and is non-combustible: or (ii) From an external wall of another open spectator stand if it is non-combustible.	
S5C19 Type A fire-resisting construction - Carparks	
(1)	Notwithstanding S5C11, a carpark may comply with this clause if it is an open-deck carpark or is protected with a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17 and is – (a) a separate building; or (b) a part of a building – (i) which only occupies part of a storey, and is separated from the remaining part by a fire wall; or (ii) which is located above or below another classification, and the floor separating the classifications complies with C3D10; or (iii) which is located above another Class 7 part of the building not used for carparking, and the floor separating the parts complies with Table S5C11g for a Class 7 part other than a carpark; or (iv) which is located below another Class 7 part of the building not used for carparking, and the floor separating the parts complies with this clause.

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(2)	For the purposes of this Clause, a carpark – (i) includes – (A) an administration area associated with the functioning of the carpark; and (B) where the carpark is sprinklered, is associated with a Class 2 or 3 building and provides carparking for separate sole-occupancy units, each carparking area with an area not greater than 10% of its floor area for purposes ancillary to the sole-occupancy units; but (ii) excludes – (A) except for b(i), any area of another classification, or other part of a Class 7 building not used for carparking; and (B) a building or part of a building specifically intended for the parking of trucks, buses, vans and the like.
(3)	For building elements in a carpark as described in (1) and (2), the following minimum FRLs are applicable: (a) External wall: (i) Less than 3 m from a fire-source feature to which it is exposed: (A) Loadbearing: 60/60/60. (B) Non-loadbearing: –/60/60. (ii) 3 m or more from a fire-source feature to which it is exposed: –/–/–. (b) Internal wall: (i) Loadbearing, other than one supporting only the roof (not used for carparking): 60/–/–. (ii) Supporting only the roof (not used for carparking): –/–/–. (iii) Non-loadbearing: –/–/–. (c) Fire wall: (i) From the direction used as a carpark: 60/60/60. (ii) From the direction not used as a carpark: as required by Table S5C11d. (d) Columns: (i) Supporting only the roof (not used for carparking) and 3 m or more from a fire-source feature to which it is exposed: –/–/–. (ii) Steel column, other than one covered by (i) and one that does not support a part of a building that is not used as a carpark— (A) 60/–/–; or (B) an ESA/M of not greater than 26m²/tonne. (iii) Any other column not covered by (i) or (ii): 60/–/–. (e) Beams: (i) Steel floor beam in continuous contact with a concrete floor slab— (A) 60/–/–; or (B) an ESA/M of not greater than 30m²/tonne. (ii) Any other beam: 60/–/–. (f) Fire-resisting lift and stair shaft (within the carpark only): 60/60/60. (g) Floor slab and vehicle ramp: 60/60/60. (h) Roof (not used for carparking): –/–/–.
(4)	For the purposes of sub-clause (3): (a) ESA/M means the ratio of exposed surface area to mass per unit length. (b) Refer to Specification 17 for special requirements for a sprinkler system in a carpark complying with (3) and located within a multi-classified building.
S5C20 Type A fire-resisting construction – Class 2 & 3 buildings: Concession	
(1)	In a Class 2 or 3 building with a rise in storeys of not more than 3— (a) notwithstanding C2D10(1) and (2) and C3D7, timber framing may be used for— (i) external walls; and (ii) common walls; and (iii) the floor framing of lift pits; and (iv) non-loadbearing internal walls which are required to be fire-resisting; and (v) non-loadbearing shafts, except shafts used for the discharge of hot products of combustion; and (vi) spandrels or horizontal construction provided for the purposes of C3D7; and (b) notwithstanding S5C3(1)(c), for loadbearing internal walls and loadbearing fire walls— (i) timber framing may be used; and (ii) non-combustible materials may be used; and (c) notwithstanding S5C3(1)(c), timber framing may be used for a part of a building that provides support to a part of a building constructed of timber framing or non-combustible material in accordance with (a) and (b).
(2)	A Class 2 or 3 building having a rise in storeys of not more than 4 may have the top three storeys constructed in accordance with (1) provided— (a) the lowest storey is used solely for the purpose of parking motor vehicles or for some other ancillary purpose; and (b) the lowest storey is constructed of concrete or masonry including the floor between it and the Class 2 or 3 part of the building above; and (c) the lowest storey and the storey above are separated by construction having an FRL of not less than 90/90/90 with no openings or penetrations that would reduce the fire-resisting performance of that construction except that a doorway in that construction may be protected by a –/60/30 self-closing fire door.
(3)	In a Class 2 or 3 building complying with (1) or (2) and fitted with a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17, any FRL criterion prescribed in Tables S5C11a, S5C11d, S5C11e, S5C11f and S5C11g— (a) for any floor and any loadbearing wall, may be reduced to 60, except any FRL criterion of 90 for an external wall must be maintained when tested from the outside; and (b) for any non-loadbearing internal wall, need not apply if— (i) it is lined on each side with 13 mm standard grade plasterboard or similar non-combustible material; and (ii) it extends—

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	(A) to the underside of the floor next above; or (B) to the underside of a ceiling with a resistance to the incipient spread of fire of 60 minutes; or (C) to the underside of a non-combustible roof covering; and (iii) any insulation installed in the cavity of the wall is non-combustible; and (iv) any construction joint, space or the like between the top of the wall and the floor, ceiling or roof is smoke sealed with intumescent putty or other suitable material; and (v) any doorway in the wall is protected by a self-closing, tight fitting, solid core door not less than 35 mm thick.																	
S5C21	Type B Fire-Resisting Construction	N/A	N/A															
S5C22	Type C Fire-Resisting Construction	N/A	N/A															
C2D3	Rise in storeys	Noted	RIS = Four (4) Storeys															
C2D4	Mixed class & topmost storey	Noted	Class 2 building															
Table C2D2: Type of construction required																		
<table><tr><th>Rise in storeys</th><th>Class of building 2, 3, 9</th><th>Class of building 5, 6, 7, 8</th></tr><tr><td>4 or more</td><td>A</td><td>A</td></tr><tr><td>3</td><td>A</td><td>B</td></tr><tr><td>2</td><td>B</td><td>C</td></tr><tr><td>1</td><td>C</td><td>C</td></tr></table>				Rise in storeys	Class of building 2, 3, 9	Class of building 5, 6, 7, 8	4 or more	A	A	3	A	B	2	B	C	1	C	C
Rise in storeys	Class of building 2, 3, 9	Class of building 5, 6, 7, 8																
4 or more	A	A																
3	A	B																
2	B	C																
1	C	C																
C2D5	Mixed types of construction	Noted	Type A Required															
C2D6	Two storey Class 2, 3 or 9 buildings concession	N/A	N/A															
C2D7	Class 4 parts of buildings	N/A	N/A															
C2D8	Open spectator stands and indoor sports stadiums	N/A	N/A															
C2D9 and Spec 6	Lightweight construction	N/A	N/A															
C2D10	Non-combustible building elements	Applies	Details to be provided at Construction Stage															
C2D11 NSW Spec 7, 14 & 32	Fire hazard properties	Applies	The fire hazard properties of the following internal linings, materials, and assemblies within a Class 2 to 9 building must comply with Specification 7 for Floor linings and floor coverings, Wall linings and ceiling linings. See Specification 7 – Clause S7C3 and Table S7C3 for floor linings and Coverings. See Specification 7 – Clause S7C4 and Table S7C4 for Walls and Ceiling linings															
C2D12 and Spec 8	Performance of external walls in fire	N/A	N/A															
C2D13	Fire-protected timber	N/A	N/A															
C2D14	Ancillary Elements	Applies	Details to be provided at Construction Stage															
C2D15	Fixing of bonded laminated cladding panels	N/A	N/A															
PART C3 COMPARTMENTATION AND SEPARATION																		
C3D1	Deemed-to-Satisfy Provisions																	
C3D2	Application of Part																	
C3D3	General floor area and limitations	Complies	The max floor area and volume limitations do not apply to Class 2 buildings.															
C3D4	Large-isolated buildings	N/A	N/A															
C3D5	Requirements for open spaces and vehicular access	N/A	N/A															
C3D6	Class 9a buildings	N/A	N/A															
C3D7	Vertical separation of openings in external walls	Applies	The proposed new windows to U4 & U7 on the eastern elevation need to be addressed. Details of the distance between the window openings are needed to determine compliance.															
C3D8	Separation by firewalls	N/A	Not required by proposed works															
C3D9	Separation of classifications in the same storey	N/A	Not required by proposed works															

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Item	Description	Status	Comments
C3D10	Separation of classifications in different storeys	N/A	Not required by proposed works
C3D11	Separation of lift shafts	N/A	Not required by proposed works
C3D12	Stairways and lifts in one shaft	N/A	Not required by proposed works
C3D13	Separation of equipment	N/A	Not required by proposed works
C3D14	Electricity supply system	N/A	Not required by proposed works
C3D15	Public corridors in Class 2 and 3 buildings	N/A	Existing circumstances remain unchanged by the proposed new works
PART C4 PROTECTION OF OPENINGS			
C4D1	Deemed-to-Satisfy Provisions		
C4D2	Application of Part	Noted	
C4D3	Protection of openings in external walls that are required to have an FRL	N/A	Not required by proposed works
C4D4	Separation of openings in different fire compartments	N/A	Not required by proposed works
C4D5	Acceptable methods of protection	N/A	Not required by proposed works
C4D6	Doorways in fire walls	N/A	Not required by proposed works
C4D7	Sliding fire doors	N/A	Not required by proposed works
C4D8	Protection of doorways in horizontal exits	N/A	Not required by proposed works
C4D9	Openings in fire isolated exits	N/A	Not required by proposed works
C4D10	Service penetrations in fire isolated exits	N/A	Not required by proposed works
C4D11	Openings in fire isolated lift shafts	N/A	Not required by proposed works
C4D12 NSW	Bounding construction: Class 2, 3 & 4 buildings	Applies	Details to be provided at Construction Stage – a Fire resistance wall achieving a FRL of not less than 60/60/60 is required with door openings protected by a self-closing fire door achieving an FRL of -/60/30.
C4D13	Openings in floors for services	N/A	Not required by proposed works
C4D14	Openings in shafts	N/A	Not required by proposed works
C4D15	Openings for service installations	N/A	Not required by proposed works
C4D16	Construction joints	N/A	Not required by proposed works
C4D17	Columns protected with lightweight construction to achieve an FRL	N/A	Not required by proposed works
SECTION D - ACCESS & EGRESS			
PART D2 PROVISION FOR ESCAPE – the proposed new building works are limited to the internal alterations and additions to U4 & U7.			
The Deemed-to-Satisfy provisions of this Part do not apply to the internal parts of a sole-occupancy unit in a Class 2 or 3 building or a Class 4 part of a building. Where a Deemed-to-Satisfy Solution is proposed, Performance Requirements D1P1 to D1P6, D1P8 and D1P9 are satisfied by complying with D2D2 to D2D23, D3D2 to D3D30 and D4D2 to D4D13. The proposed private internal non-fire-isolated stairway is to comply with the construction requirements of clauses D3D14, D3D15(a), D3D17, D3D18, D3D19, D3D20, D3D21, D3D22(5), D3D22(6), D3D23 and D3D29 in accordance Clause D3D2 of the BCA.			
D2D1	Deemed-to-Satisfy Provisions		
D2D2	Application of part	Noted	The Deemed-to-Satisfy provisions of this Part do not apply to the internal parts of a sole-occupancy unit in a Class 2 or 3 building or a Class 4 part of a building.
PART D3 CONSTRUCTION OF EXITS			
D3D1	Deemed-to-Satisfy Provisions		
D3D2	Application of part	Applies	The proposed private internal non-fire-isolated stairway is to comply with the construction requirements of clauses D3D14, D3D15(a), D3D17, D3D18, D3D19, D3D20, D3D21, D3D22(5), D3D22(6), D3D23 and D3D29 in accordance Clause D3D2 of the BCA.

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Item	Description	Status	Comments															
D3D14	Goings and risers	Applies	Details to be provided at Construction Stage															
D3D15 NSW & Table D3D15	Landings	Applies	Details to be provided at Construction Stage															
Table D3D15: Slip-resistance classification																		
<table><tr><th>Application</th><th>Dry surface conditions</th><th>Wet surface conditions</th></tr><tr><td>Ramp steeper than 1:14</td><td>P4 or R11</td><td>P5 or R12</td></tr><tr><td>Ramp steeper than 1:20 but not steeper than 1:14</td><td>P3 or R10</td><td>P4 or R11</td></tr><tr><td>Tread or landing surface</td><td>P3 or R10</td><td>P4 or R11</td></tr><tr><td>Nosing or landing edge strip</td><td>P3</td><td>P4</td></tr></table>				Application	Dry surface conditions	Wet surface conditions	Ramp steeper than 1:14	P4 or R11	P5 or R12	Ramp steeper than 1:20 but not steeper than 1:14	P3 or R10	P4 or R11	Tread or landing surface	P3 or R10	P4 or R11	Nosing or landing edge strip	P3	P4
Application	Dry surface conditions	Wet surface conditions																
Ramp steeper than 1:14	P4 or R11	P5 or R12																
Ramp steeper than 1:20 but not steeper than 1:14	P3 or R10	P4 or R11																
Tread or landing surface	P3 or R10	P4 or R11																
Nosing or landing edge strip	P3	P4																
D3D17	Barriers to falls	Applies	Balustrades are to be a minimum of 1m in height and have no openings greater than 125mm. <u>Comment</u> Details to be provided at Construction Stage															
D3D18	Height of barriers	Applies	Details to be provided at Construction Stage															
D3D19	Openings in barriers	Applies	Details to be provided at Construction Stage															
D3D20	Barrier climbability	Applies	Details to be provided at Construction Stage															
D3D21	Wire barriers	Applies	Details to be provided at Construction Stage															
D3D22	Handrails	Applies	Handrails in a stairway are to be continuous between stair flight landings and have no obstruction on or above them that will tend to break a handhold. In a required exit serving an area required to be accessible, designed and constructed to comply with clause 12 of AS 1428.1, except that clause 12(d) does not apply to a handrail required by (a)(iii)(B). <u>Comment</u> Details to be provided at Construction Stage															
D3D23	Fixed platforms, walkways, stairways and ladders	N/A	Not required by proposed works															
D3D29	Protection of openable windows	N/A	Not required by proposed works															
PART D4 ACCESS FOR PEOPLE WITH A DISABILITY – Excluded from Assessment																		
SECTION E-SERVICES & EQUIPMENT																		
PART E1 FIRE FIGHTING EQUIPMENT																		
E1D1	Deemed-to-Satisfy Provisions		Noted															
E1D2	Fire Hydrants	Performance Solution required	When a building has a total floor area greater than 500m², a fire hydrant system is required. Fire hydrant coverage is required by AS 2419.1 for the whole of the building. <u>Comment</u> Street Hydrant provided in footpath directly outside of the property, but details of fire hose coverage not provided.															
AS2419.1 :2005 3.2.2.2 Location External fire hydrants shall be located as follows: (a) In a position that provides pedestrian access to the building for the fire brigade. (b) When installed as a feed fire hydrant [See Figure 3.2.2.2(a), (b), (d) and (e)], within 20 m of a hardstand such that when a fire brigade pumping appliance is connected to it- (i) all portions of the building shall be within reach of a 10 m hose stream, issuing from a nozzle at the end of a 60 m length of hose laid on the ground; and (ii) a minimum of 1 m of hose shall extend into any room served.																		
E1D3	Fire Hose reels	N/A	A fire hose reel system complying with AS 2441 is to be provided in a building where internal fire hydrants are to be installed. Use of street hydrant is noted															
E1D4 and Spec 17&18	Sprinklers	Noted	Not required by proposed works – base building issue															
E1D5	Where sprinklers required	Noted	Not required by proposed works – base building issue															
E1D6	Sprinklers: Class 2 & 3 Blds	Noted	Not required by proposed works – base building issue															
E1D7	Sprinklers: Class 9c Blds	N/A	N/A															
E1D8	Sprinklers: Class 6 Blds	N/A	N/A															

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Item	Description	Status	Comments
E1D9	Sprinklers: Class 7a Blds	N/A	N/A
E1D10	Sprinklers: Class 9a Blds	N/A	N/A
E1D11	Sprinklers: Class 9b Blds	N/A	N/A
E1D12	Sprinklers: Additional Requirements	Noted	N/A
E1D13	Sprinklers: Excessive Hzd	Noted	N/A
E1D14	Portable fire extinguishers	Noted	Not required by proposed works
E1D15	Fire control centres	N/A	N/A
E1D16	Fire precautions during construction	Noted	Noted
E1D17	Provision for special hazards	Noted	Noted
PART E2 SMOKE HAZARD MANAGEMENT			
E2D1	Deemed-to-Satisfy Provisions	Applies	Estimated Effective Height less than 25m
E2D2	Application of part	Noted	Noted
E2D3	General requirements	Noted	N/A
E2D4	Fire-isolated exits	N/A	N/A
E2D5	Buildings more than 25 m in effective height: Class 2 and 3 and Class 4 part of a building	Noted	<u>Sole Occupancy Units</u> Install complying AS 3786 interconnected fire alarms within the SOUs, being hardwired to mains 240V power. <u>Base Building</u> Install a compliant AS 1670.1 fire alarm system with external strobe and occupant warning system to the existing non-fire-isolated stairway, except that no monitoring of the system by the Fire Brigade is required <u>Comment</u> Details to be provided at Construction Stage
E2D6	Buildings more than 25 m in effective height: Class 5, 6, 7b, 8 and 9b buildings	N/A	N/A
E2D7	Buildings more than 25 m in effective height: Class 9a blds	N/A	N/A
E2D8	Buildings not more than 25 m in effective height: Class 2 and 3 and Class 4 part of a bldg	N/A	N/A
E2D9	Buildings not more than 25 m in effective height: Class 5, 6, 7b, 8 and 9b buildings	N/A	N/A
E2D10	Buildings not more than 25 m in effective height: large isolated blds subject to C3D4	N/A	N/A
E2D11	Buildings not more than 25 m in effective height: Class 9a and 9c buildings	N/A	N/A
E2D12	Class 7a buildings	N/A	N/A
E2D13	Basements (other than Class 7a buildings)	N/A	N/A
E2D14	Class 6 buildings – in fire compartments more than 2000 m2: not containing an enclosed common walkway or mall serving more than one Class 6 sole-occupancy unit	N/A	N/A
E2D15	Class 6 buildings – in fire compartments more than 2000 m2: containing an enclosed common walkway or mall serving more than one Class 6 sole-occupancy unit	N/A	N/A
E2D16	Class 9b – assembly buildings: nightclubs, discotheques and the like	N/A	N/A
E2D17	Class 9b – assembly buildings: exhibition halls	N/A	N/A
E2D18	Class 9b – assembly buildings: theatres and public halls	N/A	N/A
E2D19	Class 9b – assembly buildings: theatres and public halls (not listed in E2D18) including lecture theatres and cinema/auditorium complexes	N/A	N/A

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Item	Description	Status	Comments
E2D20	Class 9b assembly buildings: other assembly buildings (not listed in E2D16 to E2D19)	N/A	N/A
E2D21	Provision for special hazards	N/A	N/A
PART E3 LIFT INSTALLATIONS – lift not provided in buildings – excluded from assessment			
PART E4 EMERGENCY LIGHTING, EXIT SIGNS & WARNING SYSTEMS – base building issue, excluded from assessment			
SECTION F HEALTH & AMENITY			
PART F4 SANITARY & OTHER FACILITIES			
F4D1	Deemed-to-Satisfy Provisions		
F4D2	Facilities in Residential Buildings	Complies	Each SOU in a Class 2 building is required to have; • Kitchen sink and facilities for the preparation and cooking of food • A bath or shower • A closet pan • A washbasin • Laundry facilities
F4D3	Calculation of occupant numbers	N/A	N/A
F4D4	Facilities in Class 3 to 9 Buildings	N/A	N/A
F4D5	Accessible sanitary facilities	N/A	N/A
F4D6	Accessible unisex sanitary compartments	N/A	N/A
F4D7	Accessible unisex showers	N/A	N/A
F4D8	Construction of sanitary compartments	N/A	N/A
F4D11	Waste management	N/A	N/A
F4D12	Accessible adult change facilities	N/A	N/A
PART F5 Room Heights			
F5D1	Deemed-to-Satisfy Provisions		
F5D2	Height of rooms and other spaces	Complies	(a) in a Class 2 or 3 building or Class 4 part of a building— (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) a habitable room— (aa) in an attic — a height of not less than 2.2 m for not less than two-thirds of the floor area of the room or space; and (bb) in other rooms — a height of not less than 2.4 m for not less than two-thirds of the floor area of the room or space; and (B) a non-habitable room — a height of not less than 2.1 m for not less than two-thirds of the floor area of the room or space; and when calculating the floor area of a room or space, any part that has a ceiling height of less than 1.5 m is not included; and (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;
Part F6 Light and ventilation			
F6D1	Deemed-to-satisfy Provisions	Noted	
F6D2	Provision of natural light	Complies	Natural light provided
F6D3	Methods & extend of natural light	Noted	
F6D4	Natural light borrowed from adjoining room	N/A	N/A

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Item	Description	Status	Comments
F6D5	Artificial light	Applies	Artificial lighting must be provided in required stairways, passageways, ramps, sanitary compartments, bathrooms, laundries and other spaces used in common by occupants of the building complying with AS1680. <u>Comment</u> Details required to be submitted prior to construction approval stage.
F6D6	Ventilation of rooms	Applies	Ventilation shall be provided throughout the building by means of natural ventilation or mechanical ventilation complying with the requirements of AS1668.2 and AS3666.1. <u>Comment</u> Details required to be submitted prior to construction approval stage.
F6D7	Natural Ventilation	Applies	Openings to be 5% of floor area directly vented to the sky
F6D8	Ventilation borrowed from adjoining room	Applies	N/A
F6D9	Sanitary compartment location	Applies	Compliant
F6D10	Airlocks	Applies	Noted
F6D11	Carparks	N/A	N/A
F6D12	Kitchen local exhaust	N/A	N/A
Part F7 Sound transmission and insulation			
F7D1	Deemed-to-satisfy Provisions	Noted	N/A
F7D2	Application of Part	Noted	N/A
F7D3	Determination of airborne sound ratings	Applies	Details Required
F7D4	Determination of impact sound ratings	Applies	Details Required
F7D5	Sound insulation rating of floors	Applies	Details Required
F7D6	Sound insulation rating of walls	Applies	Details Required
F7D7	Sound Insulation rating of internal services	Applies	Details Required
F7D8	Sound isolation of Pumps	Applies	Details Required

Legend:

N/A	= Not applicable
Applies	= Applicable for project
Complies	= Compliant
Capable	= Capable of Compliance with design
Non-compliant	= Design does not comply with Deemed-to-Satisfy provisions of BCA

4.3 Proposed Fire Safety Measures

In accordance with the provisions of Clause 78 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021, the following fire safety measures are proposed, being -

Essential Fire and Other Safety Measures	Standard of Performance	Proposed
Automatic fire detection and alarm system	BCA E2D8.2, Spec 20, Clause S20C3, AS1670.1-2018 (fire), AS3786-2014 (stand alone for SOUs)	✓
Path of travel	BCA D2D5	✓
Warning and operational signage (e.g., stairway notices)	EP&A Reg 2021 Clause 107 (fire exits), D3D28 (signs on exit doors)	✓

4.5 Emergency Control Procedures

Emergency Control Organisation and Procedures in accordance with Clause 43 of the Work Health & Safety Regulation (2011) and AS 3745:2010 shall be developed and implemented incorporating the following:

- Exit paths are to be kept clear of items that constitute a fire load or impede occupant egress.
- Appropriate signage and management in use measures to prohibit storage on egress path and the use of the Plant Room for storage.
- Identify the procedures to be followed in the event of a fire including emergency evacuation drills.
- The emergency evacuation drills are to be held at least every 12 months.
- Training is to include initial attack on a fire when safe to do so using portable fire extinguishers and/or fire hose reels.
- Occupants who have not been trained to use fire extinguishers and/or fire hose reels should evacuate the building immediately and notify the Fire Brigades.
- Emergency evacuation plans and fire orders are to be prepared and displayed adjacent to each exit comprising the location of fire protection equipment.
- Emergency evacuation and management procedures for persons with disabilities are to be developed, including training to assist persons with disabilities.
- Hot works permits are to be provided including Insurance notification forms.

PART 5 REFERENCE INFORMATION

5.1 Contractual Framework

The design team will be responsible for developing the designs to tender documentation so the Client can obtain market pricing and engage a builder to undertake construction.

5.2 Regulatory Framework

The Construction Team for purposes of assessing an application for a Construction Certificate (CC) for this project have commissioned All State Building Surveying Pty Ltd to identify the BCA DtS compliance issues as identified in Section 4.1 of this Report. The proposed plans should be amended, or additional information should be returned to the All State Building Surveying Pty Ltd to determine whether this Report will show how the proposed new building is to comply with the provisions of the BCA.

5.3 Reference Legislation

This assessment is based on the following reference legislation:

- a) NSW Environmental Planning and Assessment Act, 1979 As Amended.
- b) NSW Environmental Planning and Assessment Regulation, 2021.
- c) NSW Environmental Planning and Assessment(Development Certification & Fire Safety) Regulation, 2021.
- d) Building Code of Australia 2022 Amt 1, Australian Building Codes Board, 2022.

5.4 Reference Codes & Guidelines

This assessment is based on the following reference codes and guidelines:

- a) International Fire Engineering Guidelines, Australian Building Code Board, 2005.
- b) Guide to the BCA, Australian Building Codes Board, 2022.

5.5 Documents Considered

This assessment is based on the following documentation:

- a) Architectural drawings by Hobbs Jamieson Architecture, Job No. 24/003, Marked Preliminary and undated as per Table 5-1.

Table 5-1 – Architectural Drawings

Drawing No.	Title	Date/Issue
DA00	Cover Page	Undated – Preliminary
DA01	Basix Certificate	Undated – Preliminary
DA02	Site Analysis	Undated – Preliminary
DA03	Demolition Unit 4 Floor Plan	Undated – Preliminary
DA04	Demolition Unit 7 Floor Plan	Undated – Preliminary
DA05	Demolition Attic/Roof Plan	Undated – Preliminary
DA06	Proposed Site Plan	Undated – Preliminary
DA07	Proposed Unit 4 Floor Plan	Undated – Preliminary
DA08	Proposed Unit 7 Floor Plan	Undated – Preliminary
DA09	Proposed Attic Floor Plan	Undated – Preliminary
DA10	Proposed Roof Plan	Undated – Preliminary
DA11	Proposed South Elevation	Undated – Preliminary
DA12	Proposed North Elevation	Undated – Preliminary
DA13	Proposed East Elevation	Undated – Preliminary
DA14	Proposed West Elevation	Undated – Preliminary
DA15	Proposed Section A-A	Undated – Preliminary
DA20	Proposed External Finishes - Front	Undated – Preliminary

PART 6 CONCLUSIONS

6.1 General Conclusions

This report is prepared in preparation of a Development Application (DA) lodgement and is for assessment purposes, it comprises a Building Code of Australia (BCA) assessment of the proposed alterations to the existing strata units U4 & U7 and is subject to Clauses 64 & 69 of the Environmental Planning and Assessment Regulation 2021.

The existing building is situated on land at 1a Greycliffe Street, Queenscliff NSW 2096 and is a block of strata residential units.

In considering the requirements of the BCA for the purposes of the proposed additions, consideration is required of Clauses 64 and 69 of the Environmental Planning and Assessment Regulation 2021, wherein the following applies –

- Clause 64 – Consent authority may require upgrade of buildings. This clause requires the whole of the building to comply with the BCA if over the previous 3 years building works represents 50% or more of the total volume of the building.
- Clause 69 – Compliance with the Building Code of Australia. This clause requires building works must be carried out in accordance with the requirements of the Building Code of Australia.

Having regard to the proposed building works compliance issues of compliance with the BCA will only relate to the proposed new building works to U4 & U7, and not the whole building. Further, it should be noted that the proposed building works do not represent an increase in the total volume of the existing building by 50%.

The overall fire safety strategy for this building is based on the application of the Environmental Planning & Assessment Regulation 2021 and the fire safety measures arising from compliance with BCA DtS Provisions and other additional requirements resulting from assessing the BCA DtS. The following table details to proposed buildings compliance with the BCA in Section 4.2 of this report.

Based on the Building code assessment presented in this report, it is our considered opinion that, the proposed additions to the existing residential flat building are capable of satisfying the BCA Performance Requirements, subject to the provision of the request detail for variation and compliance Architectural plan.

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PART 7 VALIDITY & LIMITATIONS

The reader's attention is drawn to the following limitations concerning the fire engineering assessment undertaken in this report:

- a. This report is provided under the All State Building Surveying Pty Ltd (hereafter referred to as ASBS") Fee Proposal and Agreement for the provision of Building Code of Australia Assessment Services executed between ASBS and the Client on the subject project. No obligation in contract exists between ASBS and any other party.
- b. The report is limited to the assessment of BCA DtS variations identified in Section 4.1 of this report for compliance with relevant BCA Performance Requirements.
- c. This assessment is not a full compliance or conformance audit for any fire safety system. Therefore, operational checks of fire safety equipment, verification of construction techniques, fire resistance levels or the witnessing of fire drills or exercises are specifically excluded from the scope of this assessment. The operational status of systems, items of equipment and staff training should be addressed as part of the inspection, commissioning, enforcement, maintenance, testing, training and management procedures for the building.
- d. This assessment will be consistent with the objectives and limitations of the BCA and therefore specifically excludes arson (other than as a source of initial ignition), multiple ignition sources, acts of terrorism, protection of property (other than adjoining property), business interruption or losses, personal or moral obligations of the owner/occupier, reputation, environmental impacts, broader community issues etc.
- e. Arson has been shown statistically to contribute to fire. This report has addressed the incidence of minor forms of arson as a single ignition source. However major arson involving accelerants and/or multiple ignition sources are beyond the scope of this assessment and have been excluded.
- f. Egress and fire safety provisions for persons with disabilities have only been considered to the same degree as the BCA DtS Provisions.
- g. Reports marked 'Draft' are subject to change and ASBS accepts no liability pending release of the final version of the report.
- h. The design concepts outlined in this report are for a complete and operational building and do not address protection of the building during construction, renovation or demolition.
- i. Any change in building, occupant or fuel conditions from those considered in this report, or any deviation from the implementation of the fire safety strategy outlined in this brief, may result in outcomes not anticipated by the proposed strategy and should be reviewed.
- j. Evaluation of the expected level of fire induced property damage with respect to the contents and building structure is specifically excluded.
- k. The recommendations in this assessment are based on information provided by others. Lote has not verified the accuracy and/or completeness of this information and accepts no responsibility or liability for any errors or omissions which may be incorporated into this assessment as a result.
- l. It is considered that the scope of works arising from this report and limitations of this report are read, understood and implemented. ASBS shall be contacted in relation to any queries on the report content and takes no responsibility for misinterpretation of the report content by others.
- m. The recommendations, data and methodology documented in this assessment are based on the documentation in Section 4.0 and specifically apply to the subject

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building / project and must not be utilised for any other purpose. Any modifications or changes to the building, fire safety management system, or building usage from that described may invalidate the findings of this assessment necessitating a re-assessment. No warranty is intended or implied for use by any other third party and no responsibility is undertaken to any other third party for material contained herein.



Report prepared by Sean O'Brien MAIBS
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Disclaimer: It is noted that this Building Code of Australia Report does not constitute a Part 4A Compliance Certificate under the NSW Environmental Planning and Assessment Act (1979).