

# BCA Report Class 2-9

NCC BCA 2022 Volume 1

REPORT NO: BCA-6523556

ADDRESS: UNIT 25 / 37-38 EAST ESPLANADE MANLY NSW 2095

COMPLETION DATE: 26 APRIL 2023

PREPARED BY CHEN WU, DIRECTOR OF BEYOND CERTIFICATION





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# 2. Document Control

Reference/Revision	Date	Description	DA Stage Combined BCA &
Reference/Revision  DA Final		Description	Access Compliance Report
DA Final	26 April 2023	Reviewed by	Chen Wu Director, Beyond Certification BSR (All Classes of building) BDC3224

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## 3. Introduction

#### 3.1. Proposed Development

The proposed development comprises internal and external alterations and additions to the penthouse unit, including the extension of the top floor level and attached awning.

#### 3.2. Executive Summary

The reviewed documentation referenced in <u>Annexure A</u> of this report has been assessed against both the accessibility provisions as outlined in <u>Part 5</u> of this report, as well as the Deemed-to-Satisfy (DtS) provisions of the Building Code of Australia 2022 Volume 1 (BCA) as outlined in <u>Annexure B</u> of this report, and it is considered the documentation is capable of complying with all such requirements subject to clarification and satisfaction of the matters in <u>Part 8</u> of this report.

#### 3.3. Objectives

This report provides an assessment against both legislation related to accessibility and the BCA, addressing relevant clauses therein to identify where the subject building achieves (or is capable of achieving) compliance, as well as to identify where Performance Solutions may be appropriate, the details of which are not included in the scope of this report and will not be provided by Beyond Certification .

It is presumed the assumptions, content, and limitations of this report are reviewed, noted, understood, acknowledged. Beyond Certification are to be contacted to clarify any queries or assumptions made in relation to the contents of this report and furthermore, Beyond Certification take no responsibility for misinterpretation of any of the content herein.

This report has been prepared in good faith. To the best of our knowledge, the information contained herein is neither false nor misleading, with content based on information that was correct at the time of writing. Beyond Certification accepts no responsibility or liability for any errors, omissions, nor consequences, including, but not limited to, any loss or damage arising from reliance on the information within this document.

### 3.4. Exclusions & Limitations

- 1. This report does not include, nor imply, any audit, assessment, or upgrading of the following matters except where explicitly addressed:
  - a) Property at 35-36 East Esplanade, Manly;
  - b) The structural design of the building;
  - c) The capacity or design of any services, including, but not limited to, electrical, fire, hydraulic, goods/passenger lifts, and mechanical services;
  - d) Existing consents and/or illegal/unauthorised work.
- 2. This report does not include, nor imply, any assessment of, or compliance with:
  - a) Any Development Consent conditions;

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- b) State Environmental Planning Policy No 65—Design Quality of Residential Apartment Development except as specifically outlined within this report;
- c) The Disability Discrimination Act 1992 (Cth) (DDA);
- d) The Disability (Access to Premises Building) Standards 2010 except as specifically outlined within this report;
- e) The Liquor Licencing Act 1997;
- f) The Work Health and Safety Act 2011;
- g) The Swimming Pools Act 1992; and
- h) Requirements of Authorities including, but not limited to, WorkCover, RMS, Council (including LEPs and DCPs), Telecommunications Supply Authority, Electricity Supply Authority, Water Supply Authority, Gas Supply Authority and the like.
- 3. This report is not a compliance certificate under the Environmental Planning & Assessment Act nor Regulation.
- 4. This report includes assessment of the following Parts of the BCA only, as relevant: B, C, D, E, F, G, I and J.

#### 3.5. Reviewed Documentation

This report has been based on the documentation referenced in Annexure A of this report.

# 4. Building Description

#### 4.1. Location and Construction

The development comprises a mixed-use building with two towers over two separate lots and connected via a basement level car park. The building forms SP3235 at 35-36 East Esplanade and SP3035 at 37-38 East Esplanade. The focus of this report, however, solely relates to 37-38 East Esplanade, Manly.

The building is comprised of basement level (and part ground floor) car parking (Class 7a), ground (and part first) floor commercial premises (Class 5), and residential units (Class 2) above. The construction generally comprises concrete walls, slabs, and roof, masonry brickwork walls, and glazed elements.

#### 4.2. Classification

The building is comprised of basement level (and part ground floor) car parking (Class 7a), ground (and part first) floor commercial premises (Class 5), and residential units (Class 2) above.

#### 4.3. Rise in Storeys

The Rise in Storeys of the building is ten (10), which is also the no. of storeys to the building.

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#### 4.4. Type of Construction

The Type of Construction is A.

#### 4.5. Effective Height

The effective height is considered to be greater than 25m, being approx. 26.4m.

#### 4.6. Fire Compartmentation

The building is assumed to be compartmentalised by classification.

#### 4.7. Required Exits

The exit from the subject unit is via a fire-isolated stairway, which discharges internally to the residential lobby area on the ground floor, and which is connected to open space that is also roof as open space.

#### 4.8. Climate Zone

The building is located within Climate Zone 5, being within the Northern Beaches Council local government area.

# 5. Accessibility

Given the works are to private areas of a sole occupancy unit, no accessibility provisions are relevant to the development proposal.

# 6. Fire Safety Measures (FSM)

It is noted that 37-38 East Esplanade, Manly is subject to a Council Fire Safety Order (FSO), Reference No: EPA2018/0205 (AFSS02360), dated 25/07/2022. Therefore, the FSO and associated documentation should be referred to for the required FSM for the building.

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# 7. Fire Resistance Levels

The FRLs stated in the table below are those required to be achieved by the building elements unless as altered by concessions within the BCA as listed beneath the table and as discussed and specified within this report.

Building Element – Type A Construction	Class 2	Class 5, 7a
Loadbearing External Walls - Less than 1.5m from a FSF - 1.5 to < 3m from a FSF - 3m or more from a FSF	90/90/90 90/60/60 90/60/30	120/120/120 120/90/90 120/60/30
Non-Loadbearing External Walls - Less than 1.5m from a FSF - 1.5 - 3m from a FSF - 3m or more from a FSF	-/90/90 -/60/60 -/-/-	-/120/120 -/90/90 -/-/-
Loadbearing External Columns (not incorporated into an external wall)	90/-/-	120/-/-
Non-loadbearing External Columns (not incorporated into an external wall)	-/-/-	-/-/-
Common Walls and Fire Walls	90/90/90	120/120/120
Internal Walls - Fire resisting lift and stair shafts – - Loadbearing - Non-loadbearing	90/90/90 -/90/90	120/120/120 -/120/120
Internal Walls – Bounding public corridors, public lobbies and the like –  - Loadbearing - Non-loadbearing	90/90/90 -/60/60	120/-/- -/-/-
Internal Walls – Between or bounding sole-occupancy units – - Loadbearing - Non-loadbearing	90/90/90 -/60/60	120/-/- -/-/-
Ventilating, pipe, garbage, and like shafts not used for the discharge of hot products of combustion— - Loadbearing - Non-loadbearing	90/90/90 -/90/90	120/90/90 -/90/90
Other loadbearing internal walls, internal beams, trusses and columns	90/-/-	120/-/-
Floors	90/90/90	120/120/120
Roofs	90/60/30	120/60/30

	Concessions available in Specification 5
•	The floor within the SOU is not required to have an FRL.

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## 8. Matters for Further Consideration

#### 8.1. Assessment

The reviewed documentation referenced in <u>Annexure A</u> of this report has been assessed against the Deemed-to-Satisfy (DtS) provisions of the BCA and it is considered the documentation is capable of complying with the BCA as outlined in <u>Annexure B</u> subject to appropriate exemptions relating to design compliance of certain fire safety measures at the CC stage of the development, as well as the eventual satisfaction of the existing Council Fire Safety Order.

<u>Annexure B</u> of this report provides a detailed assessment of the proposal against each of the relevant DtS provisions of the BCA.

#### 8.2. Performance Solutions

No Performance Solutions are proposed.

#### 8.3. Additional Information Required

No further information is required for the purposes of this report.

# 9. Annexure A – Reviewed Documentation

This report is based upon the information provided within the documentation listed below:

Architectural Deta	ails prepared	by Hobbs Jan	nieson Architecture, Project Reference 21/008
Drawing Number	Revision	Date	Title
DA 00		21/02/2023	Cover Page
DA 01	Α	21/02/2023	Existing Site Plan
DA 02	Α	21/02/2023	Existing Plan – Unit 25 Level 7
DA 03	Α	21/02/2023	Existing Plan – Unit 25 Level 8
DA 04	Α	21/02/2023	Proposed Plan – Unit 25 Level 7
DA 05	Α	21/02/2023	Proposed Plan – Unit 25 Level 8
DA 06	Α	21/02/2023	Area Calculations GFA

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# 10. Annexure B – Detailed Assessment

Outlined below is a detailed assessment of the proposal against the DtS provisions of the BCA. Given the existing Council Fire Safety Order on the property, the detailed assessment strictly only provides comment on those BCA matters in within the scope of the development proposal.

All relevant DtS Clauses applicable to the subject building are referenced, whereas those clauses not applicable whatsoever are excluded.

The following abbreviations have been used in the tables below:

PS A Performance Solution is proposed to achieve compliance with this Clause.

CRA "Compliance Readily Achievable" – it is considered that whilst there is insufficient information currently provided to determine strict compliance with the DtS provisions

of the BCA, the proposed design is capable of comply subject to noting the requirements of the Clause.

Additional information or documentation is necessary to confirm compliance. This may be in the form of additional drawing, a specification or design certification.

Complies The proposal shows compliance with the DtS Clause.

**DNC** The design does not comply with the DtS Clause.

FI Further information is required for assessment of the proposal relative to the DtS

Clause.

N/A The DtS Clause is not applicable at this stage to this design.

Noted The DtS Clause provides information not requiring specific assessment of the proposed

design.

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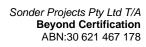




SECTIO	ON B – STRUCTURE		
Clause	e	Comments	Assessment
Part B	1 – Structural Provision	s	
B1D1	DtS Provisions	Information only.	Noted
B1D2	Resistance to actions	Resistance to actions must be in accordance with the relevant	CRA
		requirements of this Clause. Structural Engineer to certify.	
B1D3	Determination of	The magnitude of individual actions must be determined in	Noted
	individual actions	accordance with the relevant requirements of this Clause.	
B1D4	Determination of	The structural resistance of materials and forms of construction must	CRA
	structural resistance of	be determined in accordance with the relevant requirements of this	
	materials and forms of	Clause. Structural Engineer to certify.	
	construction		
B1D5	Structural software	Structural software used in computer aided design of a building or	CRA
		structure must comply with the ABCB Protocol for Structural Software	
		in accordance with the relevant requirements of this Clause.	
		Structural Engineer to certify.	
B1D6	Construction in	A Class 4 part of a building in a flood hazard area must comply with	N/A
	buildings in flood	this Clause.	
	hazard areas		

SECTIO	N C – FIRE RESISTANCE		
Clause		Comments	Assessment
Part C2	- Fire Resistance and	Stability	
C2D1	DtS Provisions	Information only.	Noted
C2D2	Type of construction required	Type A Construction required.	CRA
C2D3	Calculation of rise in storeys	The building has a RIS of ten (10) as the basement area satisfies the definition of a storey under this Clause.	Noted
C2D4	Buildings of multiple classification	Type A Construction required.	CRA
C2D5	Mixed types of construction	No mixed Types of Construction proposed.	Noted
C2D7	Class 4 parts of buildings	No Class 4 parts.	N/A
C2D9	Lightweight construction	Lightweight construction used to achieve an FRL is to comply with this clause and as necessary Specification 6.	CRA
C2D10	Non-combustible building elements	Buildings of Type A or B Construction require building elements to be non-combustible as listed within this Clause.	CRA
		This Clause also provides a list of materials permitted to be used wherever non-combustible materials are required.	
NSW C2D11	Fire hazard properties	Fire hazard properties of all materials to comply with this Clause and Specification 7.	CRA
C2D14	Ancillary elements	Ancillary elements are to be non-combustible when fixed, installed or attached to internal parts or external faces of an external wall unless in compliance with this Clause.	CRA
Part C3	- Compartmentation	and Separation	
C3D1	DtS Provisions	Information only.	Noted
C3D2	Application of Part	Information only.	Noted
C3D3	Floor area and volume limits	Class 2 parts of buildings are not subject to floor area and volume limits.	Noted
C3D7	Vertical separation of openings in	If in a building of Type A construction, any part of a window or other opening in an external wall is above another opening in the storey	N/A

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	external walls	next below and its vertical projection falls no further than 450 mm	
		outside the lower opening (measured horizontally), the openings	
		must be separated by—	
		(i) a spandrel which—	
		(A) is not less than 900 mm in height; and	
		(B) extends not less than 600 mm above the upper surface of the	
		intervening floor; and	
		(C) is of non-combustible material having an FRL of not less than	
		60/60/60; or	
		(iv) a slab or other horizontal construction that—	
		(A) projects outwards from the external face of the wall not less than	
		1100 mm; and	
		(B) extends along the wall not less than 450 mm beyond the openings	
		concerned; and	
		·	
Capa	Cananatian bu fina	(C) is non-combustible and has an FRL of not less than 60/60/60.	NI/A
C3D8	Separation by fire walls	Not applicable to the proposed development.	N/A
C3D9	Separation of	Not applicable to the proposed development.	N/A
	classifications in the		
	same storey		
C3D10	Separation of	Not applicable to the proposed development.	N/A
	classifications in		
	different storeys		
C3D11	Separation of lift	Not applicable to the proposed development.	N/A
	shafts	and the second s	,
C3D12	Stairways and lifts in	Not applicable.	N/A
CSD12	one shaft	Not applicable.	14//
C3D13	Separation of	Not applicable to the proposed development.	N/A
CJDIJ	equipment	Not applicable to the proposed development.	11/75
C3D14	Electricity supply	Not applicable to the proposed development.	N/A
C3D14		Not applicable to the proposed development.	IN/A
C2D1F	system Public corridors in	Not applicable to the proposed development	N1 / A
C3D15		Not applicable to the proposed development.	N/A
	Class 2 and 3		
	buildings		
Part C4	<ul> <li>Protection of Open</li> </ul>	ings	
C4D1	DtS Provisions	Information only.	Noted
C4D2	Application of Part	Information only.	Noted
	Protection of	No openings are exposed to a fire source feature.	N/A
C4D3	openings in external		•
	walls		
C4D4	Separation of	Not applicable to the proposed development.	N/A
	external walls and	1 h h . h	
	associated openings		
	in different fire		
	compartments		
C4D5		Not applicable to the proposed development	NI/A
C4D5	Acceptable methods	Not applicable to the proposed development.	N/A
6456	of protection	Niet englische te the green in the sign	
C4D6	Doorways in fire	Not applicable to the proposed development.	N/A
	walls		
C4D7	Sliding fire doors	Not applicable to the proposed development.	N/A
C4D8	Protection of	Not applicable to the proposed development.	N/A
	doorways in		
	havinantal avita		
	horizontal exits		

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	fire-isolated exits		
C4D10	Service penetrations in fire-isolated exits	Not applicable to the proposed development.	N/A
C4D11	Openings in fire-isolated lift shafts	Not applicable to the proposed development.	N/A
C4D12	Bounding Construction: Class 2 and 3 buildings and Class 4 parts	Not applicable to the proposed development.	N/A
C4D13	Openings in floors and ceilings for services	<ul> <li>(1) Where a service passes through—</li> <li>(a) a floor that is required to have an FRL with respect to integrity and insulation; or</li> <li>(b) a ceiling required to have a resistance to the incipient spread of fire, the service must be installed in accordance with (2).</li> <li>(2) A service must be protected—</li> <li>(a) in a building of Type A construction, by a shaft complying with Specification 5; or</li> <li>(b) in a building of Type B or C construction, by a shaft that will not reduce the fire performance of the building elements it penetrates; or</li> <li>(c) in accordance with C4D15.</li> <li>(3) Where a service passes through a floor which is required to be protected by a fire-protective covering, the penetration must not reduce the fire performance of the covering.</li> </ul>	CRA
C4D14	Openings in shafts	Not applicable to the proposed development.	N/A
C4D15	Openings for service installations	Service penetrations through fire rated building elements are to be fire sealed in accordance with the relevant requirements of this Clause.	CRA
C4D16	Construction joints	Construction joints, spaces and the like in and between building elements required to be fire-resisting with respect to integrity and insulation must be protected in accordance with the requirements of this Clause.	CRA
C4D17	Columns protected with lightweight construction	A column protected by lightweight construction to achieve an FRL which passes through a building element that is required to have an FRL or a resistance to the incipient spread of fire, must be installed using a method and materials identical with a prototype assembly of the construction which has achieved the required FRL or resistance to the incipient spread of fire.	CRA
Specific	ation 5 – Fire Resistir	ng Construction	
S5C1	Scope	This Specification contains the requirements for fire resisting construction of building elements.	Noted
-	General Requirements	-	-
S5C2	Requirements  Exposure to  Fire-source features	The building is not exposed to any fire-source features.	Noted
S5C3	Fire protection for support of another part	Where a part of a building required to have a FRL depends on direct vertical or lateral support from another part to maintain its FRL. That supporting part must have a FRL not less than that required by other provisions as set out in this Clause.	Noted
S5C4	Lintels	A lintel must have the FRL required for the part of the building in which it is situated unless it does not contribute to the support of a fire door, fire window or fire shutter and it otherwise complies with this Clause.	CRA
	Method of	The method of attaching or installing a finish, lining, ancillary element	CRA

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	attachment not to	or service installation to a building element must not reduce the	
	reduce the	fire-resistance of that element to below that required.	
	fire-resistance of		
S5C8	building elements Enclosure of shafts	Not applicable to the proposed development.	N/A
-	Type A Construction	-	-
S5C11	Fire-resistance of	The building elements are to have FRLs as determined by this Clause.	CRA
55011	building elements	See Part 7 of the Report.	Citi
Specific		Tests for Lightweight Construction	
S6C1	Scope	This Specification describes test methods to be applied to and criteria	Noted
3001	эсорс	to be satisfied by a wall system of light weight construction.	Noted
S6C2	Application	Information only.	Noted
-	Tests	-	CRA
S6C6	Walls generally	An external and internal wall of lightweight construction that is	CRA
3000	wans generally	required to be fire-resisting, other than one covered by S6C3, S6C4 or	CNA
		S6C5, must be subjected to the tests and must be subjected to the	
		tests, and fulfil the criteria within, this Clause.	
	Test Specimens	-	
- S6C7	General	Testing must be carried out on either—	CRA
3007	requirements for	(a) construction in-situ; or	CNA
	testing	(b) a laboratory specimen of the construction.	
S6C8	Testing in-situ	If testing is carried out in-situ, it must be done on that part of the	CRA
3008	resting in-situ	construction least likely, because of the particular combination of the	CNA
		height of the walls, the support conditions and other aspects of the	
		construction, to resist the loads.	
S6C9	Testing of	If a laboratory specimen is tested, the specimen must span only in the	CRA
3009	specimens	direction corresponding to the height of the wall and testing must be	CNA
	specimens	done in accordance with this Clause.	
	Test Methods and	done in accordance with this clause.	
	Compliance Criteria		
S6C10	Test methods	Tests must be carried out in accordance with this Clause.	CRA
S6C11	Criteria for	The wall system or the specimen of it must fulfil the criteria within	CRA
30011	compliance		CIVA
Spacific	compliance	I this ( lause	
	ration 7 - Fire Hazard	this Clause.	
-	cation 7 – Fire Hazard	Properties	Natad
_	Scope	Properties  This Specification sets out requirements in relation to the fire hazard	Noted
-		Properties  This Specification sets out requirements in relation to the fire hazard properties of linings, materials and assemblies in Class 2 to 9 buildings	Noted
S7C1	Scope	Properties  This Specification sets out requirements in relation to the fire hazard properties of linings, materials and assemblies in Class 2 to 9 buildings as set out in Table S7C2.	
S7C1		Properties  This Specification sets out requirements in relation to the fire hazard properties of linings, materials and assemblies in Class 2 to 9 buildings as set out in Table S7C2.  Linings, materials and assemblies must comply with the appropriate	Noted CRA
S7C1 S7C2	Scope Application	Properties  This Specification sets out requirements in relation to the fire hazard properties of linings, materials and assemblies in Class 2 to 9 buildings as set out in Table S7C2.  Linings, materials and assemblies must comply with the appropriate requirement described in Table S7C2.	CRA
S7C1 S7C2	Scope  Application  Floor linings and	Properties  This Specification sets out requirements in relation to the fire hazard properties of linings, materials and assemblies in Class 2 to 9 buildings as set out in Table S7C2.  Linings, materials and assemblies must comply with the appropriate requirement described in Table S7C2.  Fire hazard properties of the floor linings and floor coverings are to	
\$7C1 \$7C2 \$7C3	Application  Floor linings and floor coverings	Properties  This Specification sets out requirements in relation to the fire hazard properties of linings, materials and assemblies in Class 2 to 9 buildings as set out in Table S7C2.  Linings, materials and assemblies must comply with the appropriate requirement described in Table S7C2.  Fire hazard properties of the floor linings and floor coverings are to comply with this Clause.	CRA CRA
\$7C1 \$7C2 \$7C3	Application  Floor linings and floor coverings  Wall and ceiling	Properties  This Specification sets out requirements in relation to the fire hazard properties of linings, materials and assemblies in Class 2 to 9 buildings as set out in Table S7C2.  Linings, materials and assemblies must comply with the appropriate requirement described in Table S7C2.  Fire hazard properties of the floor linings and floor coverings are to comply with this Clause.  Fire hazard properties of the wall and ceiling linings are to comply	CRA
57C1 57C2 57C3 57C4	Application  Floor linings and floor coverings  Wall and ceiling linings	Properties  This Specification sets out requirements in relation to the fire hazard properties of linings, materials and assemblies in Class 2 to 9 buildings as set out in Table S7C2.  Linings, materials and assemblies must comply with the appropriate requirement described in Table S7C2.  Fire hazard properties of the floor linings and floor coverings are to comply with this Clause.  Fire hazard properties of the wall and ceiling linings are to comply with this Clause.	CRA CRA
57C1 57C2 57C3 57C4	Application  Floor linings and floor coverings  Wall and ceiling linings  Air-handling	Properties  This Specification sets out requirements in relation to the fire hazard properties of linings, materials and assemblies in Class 2 to 9 buildings as set out in Table S7C2.  Linings, materials and assemblies must comply with the appropriate requirement described in Table S7C2.  Fire hazard properties of the floor linings and floor coverings are to comply with this Clause.  Fire hazard properties of the wall and ceiling linings are to comply with this Clause.  Fire hazard properties of the air-handling ductwork are to comply	CRA CRA
57C1 57C2 57C3 57C4 57C5	Application  Floor linings and floor coverings  Wall and ceiling linings  Air-handling ductwork	Properties  This Specification sets out requirements in relation to the fire hazard properties of linings, materials and assemblies in Class 2 to 9 buildings as set out in Table S7C2.  Linings, materials and assemblies must comply with the appropriate requirement described in Table S7C2.  Fire hazard properties of the floor linings and floor coverings are to comply with this Clause.  Fire hazard properties of the wall and ceiling linings are to comply with this Clause.  Fire hazard properties of the air-handling ductwork are to comply with this Clause.	CRA CRA CRA
\$7C1 \$7C2 \$7C3 \$7C4 \$7C5	Application  Floor linings and floor coverings  Wall and ceiling linings  Air-handling	Properties  This Specification sets out requirements in relation to the fire hazard properties of linings, materials and assemblies in Class 2 to 9 buildings as set out in Table S7C2.  Linings, materials and assemblies must comply with the appropriate requirement described in Table S7C2.  Fire hazard properties of the floor linings and floor coverings are to comply with this Clause.  Fire hazard properties of the wall and ceiling linings are to comply with this Clause.  Fire hazard properties of the air-handling ductwork are to comply with this Clause.  Materials used as—	CRA CRA
\$7C1 \$7C2 \$7C3 \$7C4 \$7C5	Application  Floor linings and floor coverings  Wall and ceiling linings  Air-handling ductwork	Properties  This Specification sets out requirements in relation to the fire hazard properties of linings, materials and assemblies in Class 2 to 9 buildings as set out in Table S7C2.  Linings, materials and assemblies must comply with the appropriate requirement described in Table S7C2.  Fire hazard properties of the floor linings and floor coverings are to comply with this Clause.  Fire hazard properties of the wall and ceiling linings are to comply with this Clause.  Fire hazard properties of the air-handling ductwork are to comply with this Clause.  Materials used as—  (a) floor linings and floor coverings must have a critical radiant flux	CRA CRA CRA
\$7C1 \$7C2 \$7C3 \$7C4 \$7C5	Application  Floor linings and floor coverings  Wall and ceiling linings  Air-handling ductwork	Properties  This Specification sets out requirements in relation to the fire hazard properties of linings, materials and assemblies in Class 2 to 9 buildings as set out in Table S7C2.  Linings, materials and assemblies must comply with the appropriate requirement described in Table S7C2.  Fire hazard properties of the floor linings and floor coverings are to comply with this Clause.  Fire hazard properties of the wall and ceiling linings are to comply with this Clause.  Fire hazard properties of the air-handling ductwork are to comply with this Clause.  Materials used as—  (a) floor linings and floor coverings must have a critical radiant flux not less than 2.2; and	CRA CRA CRA
\$7C1 \$7C2 \$7C3 \$7C4 \$7C5	Application  Floor linings and floor coverings  Wall and ceiling linings  Air-handling ductwork	Properties  This Specification sets out requirements in relation to the fire hazard properties of linings, materials and assemblies in Class 2 to 9 buildings as set out in Table S7C2.  Linings, materials and assemblies must comply with the appropriate requirement described in Table S7C2.  Fire hazard properties of the floor linings and floor coverings are to comply with this Clause.  Fire hazard properties of the wall and ceiling linings are to comply with this Clause.  Fire hazard properties of the air-handling ductwork are to comply with this Clause.  Materials used as—  (a) floor linings and floor coverings must have a critical radiant flux not less than 2.2; and (b) wall and ceiling linings must be a Group 1 material or a Group 2	CRA CRA CRA
\$7C1 \$7C2 \$7C3 \$7C4 \$7C5 \$7C6	Application  Floor linings and floor coverings  Wall and ceiling linings  Air-handling ductwork	Properties  This Specification sets out requirements in relation to the fire hazard properties of linings, materials and assemblies in Class 2 to 9 buildings as set out in Table S7C2.  Linings, materials and assemblies must comply with the appropriate requirement described in Table S7C2.  Fire hazard properties of the floor linings and floor coverings are to comply with this Clause.  Fire hazard properties of the wall and ceiling linings are to comply with this Clause.  Fire hazard properties of the air-handling ductwork are to comply with this Clause.  Materials used as—  (a) floor linings and floor coverings must have a critical radiant flux not less than 2.2; and	CRA CRA CRA

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	ND—ACCESS AND EGRI	E33	
Clause		Comments	Assessment
Part D2	- Provisions for Escap	ee	<u> </u>
D2D1	DtS Provisions	Information only.	Noted
D2D2	Application of Part	Information only.	Noted
D2D3	Number of exits required	Not applicable to the proposed development.	N/A
D2D4	When fire-isolated stairways and ramps are required	Not applicable to the proposed development.	N/A
D2D5	Exit travel distances	Not applicable to the proposed development.	N/A
D2D6	Distance between alternative exits	Not applicable to the proposed development.	N/A
D2D7	Heights of exits, paths of travel to exits and doorways	Not applicable to the proposed development.	N/A
D2D8	Width of exits and paths of travel to exits	Not applicable to the proposed development.	N/A
NSW D2D9	Width of doorways in exits or paths of travel to exits	Not applicable to the proposed development.	N/A
D2D10	Exit width not to diminish in direction of travel	Not applicable to the proposed development.	N/A
D2D11	Determination and measurement of exits and paths of travel to exits	Information only.	Noted
D2D12	Travel via fire-isolated exits	Not applicable to the proposed development.	N/A
D2D13	External stairways or ramps in lieu of fire-isolated exits	Not applicable.	N/A
D2D14	Travel by non-fire-isolated stairways or ramps	Not applicable to the proposed development.	N/A
D2D15	Discharge from exits	Not applicable to the proposed development.	N/A
D2D16	Horizontal exits	Not applicable to the proposed development.	N/A
D2D17	Non-required stairways, ramps or escalators	Not applicable to the proposed development.	N/A
D2D18	Number of persons accommodated	Not applicable to the proposed development.	N/A
D2D19	Measurement of distances	Information only.	Noted
D2D20	Method of measurement	Information only.	Noted
D2D21	Plant rooms, lift machine rooms and electricity network substations:	Not applicable to the proposed development.	N/A
	Concession		

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	5.05 1.1		
D3D1	DtS Provisions	Information only.	Noted
NSW D3D2	Application of Part	Information only.	Noted
D3D3	Fire-isolated stairways and ramps	Not applicable to the proposed development.	N/A
D3D4	Non-fire-isolated stairways and ramps	Not applicable to the proposed development.	N/A
D3D5	Separation of rising and descending stair flights	Not applicable to the proposed development.	N/A
D3D6	Open access ramps and balconies	Not applicable.	N/A
D3D7	Smoke lobbies	Not applicable.	N/A
D3D8	Installations in exits and paths of travel	Not applicable to the proposed development.	N/A
D3D9	Enclosure of space under stairs and ramps	Not applicable to the proposed development.	N/A
D3D10	Width of required stairways and ramps	Not applicable to the proposed development.	N/A
D3D11	Pedestrian ramps	Not applicable to the proposed development.	N/A
D3D12	Fire-isolated passageways	Not applicable to the proposed development.	N/A
D3D13	Roof as open space	Not applicable to the proposed development.	N/A
D3D14	Goings and risers	Stair geometry and the slip-resistance of treads must comply with the relevant requirements of this Clause.	CRA
D3D15	Landings	In a stairway—  (a) landings having a maximum gradient of 1:50 may be used in any building to limit the number of risers in each flight and each landing must—  (i) be not less than 750mm long, and where this involves a change in direction, the length is measured 500mm from the inside edge of the landing; and  (ii) have—  (A) a surface with a slip-resistance classification not less than that listed in Table D3D15 when tested in accordance with AS 4586; or  (B) a strip at the edge of the landing with a slip-resistance classification not less than that listed in Table D3D15 when tested in accordance with AS 4586, where the edge leads to a flight below.	CRA
NSW D3D16	Thresholds	The threshold of a doorway must not incorporate a step or ramp at any point closer to the doorway than the width of the door leaf unless as excepted by this Clause.	CRA
D3D17	Barriers to prevent falls	A continuous barrier must be provided in accordance with the relevant requirements of this Clause.	CRA
D3D18	Height of barriers	Barrier heights are to comply with the relevant requirements of this Clause.	CRA
D3D19	Openings in barriers	Barrier openings are to comply with the relevant requirements of this Clause.	CRA
D3D20	Barrier climbability	(1) A barrier required by D3D17, located on a floor more than 4m above the surface beneath, must not incorporate horizontal or near horizontal elements that could facilitate climbing between 150mm and 760mm above the floor.	CRA

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		(2) The requirements of (1) do not apply to—	
		(a) fire-isolated stairways, fire-isolated ramps and other areas used	
		primarily for emergency purposes, other than—	
		(i) external stairways; and	
		(ii) external ramps; and	
		(b) Class 7 (other than carparks) and Class 8 buildings.	
D3D21	Wire barriers	Not applicable to the proposed development.	N/A
D3D22	Handrails	Handrails are to comply with the relevant requirements of this Clause.	CRA
D3D23	Fixed platforms,	Not applicable.	N/A
	walkways, stairways		
	and ladders		
D3D24	Doorways and doors	Not applicable to the proposed development.	N/A
D3D25	Swinging doors	Not applicable to the proposed development.	N/A
D3D26	Operation of latch	Not applicable to the proposed development.	N/A
D3D27	Re-entry from	Not applicable to the proposed development.	N/A
	fire-isolated exits		
D3D28	Signs on doors	Not applicable to the proposed development.	N/A
D3D29	Protection of	A window opening must be provided with protection in accordance	CRA
	openable windows	with the relevant requirements of this Clause.	
Part D4	– Access for People w	rith a Disability	
This Part	is not relevant to the pr	oposed development.	

SECTIO	N E – SERVICES AND EQ	UIPMENT	
Clause		Comments	Assessment
Part E1	. – Fire Fighting Equipm	nent	
E1D1	DtS Provisions	Information only.	Noted
E1D2	Fire hydrants	There is no existing fire hydrant coverage provided to the relevant SOU. However, the property is subject to a Council Fire Safety Order and it is reasonably assumed that appropriate fire hydrant coverage will be provided to the SOU as part of the Order (rather than at the CC stage of the development).	Noted
E1D3	Fire hose reels	Not applicable to the proposed development.	N/A
E1D4	Sprinklers	There is no existing sprinkler coverage provided to the relevant SOU. However, the property is subject to a Council Fire Safety Order and it is reasonably assumed that appropriate sprinkler coverage will be provided to the SOU as part of the Order (rather than at the CC stage of the development).	Noted
E1D5	Where sprinklers are required: all classifications	Sprinklers are required throughout the whole building if any part of the building has an effective height of more than 25m—  (a) including an open-deck carpark within a multi-classified building; but  (b) excluding—  (i) an open-deck carpark being a separate building; and  (ii) a Class 8 electricity network substation, with a floor area not more than 200 m2, located within a multi-classified building.	Noted
E1D6	Where sprinklers are required: Class 2 and 3 buildings other than residential care buildings	<ul> <li>(1) In a Class 2 or 3 building, or any multi-classified building containing a Class 2 or 3 part, sprinklers are required throughout the whole building if any part of the building has—</li> <li>(a) a rise in storeys of 4 or more; and</li> <li>(b) an effective height of not more than 25m.</li> <li>(2) The requirements of (1) do not apply to a residential care building.</li> </ul>	Noted
E1D9	Where sprinklers are required: Class 7a	Not applicable to the proposed development.	N/A

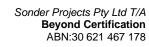
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	building, other than an open-deck carpark		
E1D14	Portable fire	Not applicable to the proposed development.	N/A
LIDIT	extinguishers (PFEs)	Not applicable to the proposed development.	N/A
E1D15	Fire control centres	Not applicable to the proposed development.	N/A
E1D16	Fire precautions	In a building under construction—	CRA
	during construction	(a) not less than one fire extinguisher to suit Class A, B and C fires and electrical fires must be provided at all times on each storey adjacent to each required exit or temporary stairway or exit; and (b) after the building has reached an effective height of 12m— (i) the required fire hydrants and fire hose reels must be operational in at least every storey that is covered by the roof or the floor structure above, except the 2 uppermost storeys; and	V
		(ii) any required booster connections must be installed.	
E1D17	Provisions for special hazards	Suitable additional provision must be made if special problems of fighting fire could arise because of—  (a) the nature or quantity of materials stored, displayed or used in a building or on the allotment; or  (b) the location of the building in relation to a water supply for fire-fighting purposes.	N/A
Part E2	- Smoke Hazard Mana	agement	
E2D1	DtS Provisions	Information only.	Noted
E2D2	Application of Part	Information only.	Noted
E2D3	General requirements	An air-handling system which does not form part of a smoke hazard management system in accordance with E2D4 to E2D20 and which recycles air from one fire compartment to another fire compartment or operates in a manner that may unduly contribute to the spread of smoke from one fire compartment to another fire compartment must, subject to (2), be designed and installed—  (a) to operate as a smoke control system in accordance with AS 1668.1; or  (b) such that it—  (i) incorporates smoke dampers where the air-handling ducts penetrate any elements separating the fire compartments served; and (ii) is arranged such that the air-handling system is shut down and the smoke dampers are activated to close automatically by smoke detectors complying with clause 7.5 of AS 1670.1.  (2) For the purposes of (1), each sole-occupancy unit in a Class 2 or 3 building is treated as a separate fire compartment.  (3) Miscellaneous air-handling systems covered by Sections 5 and 6 of AS 1668.1 serving more than one fire compartment (other than a carpark ventilation system) and not forming part of a smoke hazard management system must comply with these Sections of the Standard.  (4) A smoke detection system must be installed in accordance with S20C6 to operate AS 1668.1 systems that are provided for zone	Noted
		pressurisation and automatic air pressurisation for fire-isolated exits.	
E2D4	Fire-isolated exits	Not applicable to the proposed development.	N/A
E2D5	Buildings more than 25m in effective height: Class 2 and 3 buildings and Class 4	The SOU must be provided with smoke alarms in accordance with the requirements of Specification 20.	CRA

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	part of a building				
E2D8	Buildings not more	Not applicable.	N/A		
	than 25m in effective				
	height: Class 2 and 3				
	buildings and Class 4				
	part of a building				
E2D12	Class 7a buildings	Not applicable to the proposed development.	N/A		
E2D21	Provision for special	Additional smoke hazard management measures may be necessary	N/A		
	hazards	due to the—			
		(a) special characteristics of the building; or			
		(b) special function or use of the building; or			
		(c) special type or quantity of materials stored, displayed or used in a			
		building; or			
		(d) special mix of classifications within a building or fire compartment,			
		which are not addressed in E2D4 to E2D20.			
Part E3	Part E3 – Lift Installations				
This Part is not relevant to the proposed development.					
Part E4 – Emergency Lighting, Exit Signs and Warning Systems					
This Part	is not relevant to the pro	oposed development.			

SECTION	N F— HEALTH AND AME	ENITY	
Clause		Comments	Assessment
Part F1	<ul> <li>Surface water mana</li> </ul>	gement, rising damp and external waterproofing	
F1D1	DtS Provisions	Information only.	Noted
F1D2	Application of part	Information only.	Noted
F1D3	Stormwater drainage	Stormwater drainage must be designed and constructed in accordance with AS/NZS 3500.3.	CRA
F1D4	Exposed joints	Exposed joints in the drainage surface on a roof, balcony, podium or similar horizontal surface part of a building must—  (a) be protected in accordance with Section 2.9 of AS 4654.2; and  (b) not be located beneath or run through a planter box, water feature or similar part of the building.	CRA
F1D5	External waterproofing membranes	A roof, balcony, podium or similar horizontal surface part of a building must be provided with a waterproofing membrane—  (a) consisting of materials complying with AS 4654.1; and  (b) designed and installed in accordance with AS 4654.2.	CRA
F1D6	Damp-proofing	Damp-proofing is to be provided in accordance with the relevant requirements of this Clause. Where a damp-proof course is provided the material must comply with AS 2904 or impervious termite shields in accordance with the relevant requirements of AS 3660.1.	CRA
Part F2	- Wet Areas & Overfl	ow Protection	
F2D1	DtS Provisions	Information only.	Noted
F2D2	Wet area construction	<ul> <li>(1) In a Class 2 and 3 building and a Class 4 part of a building, building elements in wet areas must—</li> <li>(a) be water resistant or waterproof in accordance with Specification 26; and</li> <li>(b) comply with AS 3740.</li> </ul>	CRA
F2D4	Floor wastes	<ul> <li>(1) In a Class 2 or 3 building or Class 4 part of a building, a bathroom or laundry located at any level above a sole-occupancy unit or public space must have a floor waste.</li> <li>(2) Where a floor waste is installed—</li> <li>(a) the minimum continuous fall of a floor plane to the waste must be</li> </ul>	CRA

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		1:80; and	
		(b) the maximum continuous fall of a floor plane to the waste must be 1:50.	
Specifica	ation 26 – Waterprod	fing and water-resistance requirements for building elements in v	vet areas
S26C1	Scope	This Specification sets out requirements for building elements in wet areas that are required to be—  (a) water resistant; or (b) waterproof.	Noted
\$26C2	Application	(1) The requirements of this Specification apply to— (a) shower areas (enclosed and unenclosed); and (b) areas outside a shower area; and (c) areas adjacent to baths and spas; and (d) other areas as set out in clause S26C6.  (2) Where a shower is above a bath or spa, use requirements for a shower.	CRA
\$26C3	Shower area (enclosed and unenclosed)	(1) For a shower area with a hob, step-down or level threshold, the following applies: (a) The floor of the shower area must be waterproof, including any hob or step-down; and (b) The walls of the shower area must be waterproof not less than 1800mm above the floor substrate. (c) Wall junctions and joints within the shower area must be waterproof. (d) Wall/floor junctions within the shower area must be waterproof. (e) Penetrations within the shower area must be waterproof. (2) A shower with a preformed shower base must also comply with the requirements of (1), except for (a) which is not applicable.	CRA
S26C4	Area outside shower area	<ul> <li>(1) For concrete, compressed fibre-cement and fibre-cement sheet flooring, the floor of the room must be water resistant.</li> <li>(2) For timber floors including particleboard, plywood and other timber based flooring materials, the floor of the room must be waterproof.</li> <li>(3) Wall/floor junctions must be waterproof.</li> </ul>	CRA
S26C5	Areas adjacent to baths and spas without showers	For areas adjacent to a bath and spa and a non-freestanding bath and spa the relevant requirements of (1) and (2) of this Clause apply.  For inserted baths and spas, the requirements as set out in (3) of this Clause applies.	CRA
S26C6	Other areas	Other areas as stated within this Clause are to comply with their respective relevant requirements of this Clause.	CRA
	- Roof & Wall Claddir		
F3D1	DtS Provisions	Information only.	Noted
F3D2 F3D3	Roof coverings  Sarking	A roof must be covered with materials set out in this Clause in accordance with the relevant associated Standard.  Sarking type materials used for weatherproofing of roofs and walls	CRA
		must comply with AS 4200.1 and AS 4200.2.	
F3D4	Glazed assemblies	Subject to the exceptions listed within this Clause, the following glazed assemblies in an external wall, must comply with AS 2047 requirements for resistance to water penetration:  (a) Windows.  (b) Sliding and swinging glazed doors with a frame, including French	CRA

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		(a) in a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of	
F6D10	Airlocks	If a sanitary compartment is prohibited under F4.8 from opening directly to another room—	Complies
F6F9	Restriction on location of sanitary compartments	Sanitary compartments must not open directly into the areas specified under this Clause.	Complies
F6D8	ventilation borrowed from adjoining room	Natural ventilation is not proposed to be borrowed from any adjoining room.	N/A
	Ventilation	relevant requirements of this Clause.	
F6D7	Natural ventilation	Where provided, natural ventilation is to be in accordance with the	CRA
NSW F6D6	Ventilation of rooms	Ventilation is to be provided to the buildings in accordance with the relevant requirements of this Clause.	CRA
F6D5	Artificial lighting	Artificial lighting is to be provided in accordance with the relevant requirements of this Clause.	CRA
F6D4	Natural light borrowed from adjoining room	No natural light proposed to be borrowed from an adjoining room.	N/A
F6D3	Methods and extent of natural light	Required natural light is to be provided in accordance with the relevant requirements of this Clause.	CRA
FODZ	natural light		IN/A
F6D1 F6D2	DtS Provisions Provisions of	Information only.  Natural light is not required to be provided.	Noted N/A
	- Light and Ventilation		Notad
Dowt FC	and other spaces	relevant requirements of this Clause.	
F5D2	Height of rooms	Heights of rooms and other spaces are to be in accordance with the	CRA
F5D1	DtS Provisions	Information only.	Noted
	- Room Heights		
	compartments		
. 120	sanitary	relevant requirements of this Clause.	JIV.
F4D8	Construction of	Construction of sanitary compartments is to be in accordance with the	CRA
F4D4	Facilities in Class 3 to 9 buildings	Required facilities are provided in accordance with this Clause to the subject SOU.	Complies
	occupants and facilities		
F4D3	Calculation of number of	Information only.	Noted
1 702	residential buildings	relevant requirements of this Clause.	CIA
F4D1 F4D2	Facilities in	Information only.  Facilities in residential buildings are required to comply with the	CRA
F4D1	<ul> <li>Sanitary and Other I</li> <li>DtS Provisions</li> </ul>		Noted
Dout F4	Southann and Other I	(c) Metal wall cladding: AS 1562.1.	
	-	cladding must comply with one or a combination of the following:  (a) Masonry, including masonry veneer, unreinforced and reinforced masonry: AS 3700.  (b) Autoclaved aerated concrete: AS 5146.3.	
F3D5	Wall cladding	(e) Window walls with one piece framing.  Subject to the exceptions listed within this Clause, external wall	CRA
		(d) Shopfronts.	
		(c) Adjustable louvres.	

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		a building—	
		(i) access must be by an airlock, hallway or other room; or	
		(ii) the sanitary compartment must be provided with mechanical	
F6D11	Carparks	exhaust ventilation; and  Not applicable to the proposed development.	N/A
	- Sound Transmission		IN/A
F7D1	DtS Provisions	Information only.	Noted
F7D2	Application of Part	Information only.	Noted
F7D2 F7D3	Determination of	A form of construction required to have an airborne sound insulation	CRA
F/D3	airborne sound	rating must—	CNA
	insulation ratings	(a) have the required value for weighted sound reduction index (Rw)	
	insulation ratings	or weighted sound reduction index with spectrum adaptation term	
		(Rw + Ctr) determined in accordance with AS/NZS ISO 717.1 using	
		results from laboratory measurements; or	
		(b) comply with Specification 28.	
F7D4	Determination of	Impact sound insulation ratings and associated construction are to be	CRA
F/D4	impact sound	in accordance with the relevant requirements of this Clause.	CNA
	insulation ratings	in accordance with the relevant requirements of this clause.	
F7D5	Sound insulation	Sound insulation ratings of floors and associated construction are to	CRA
1703	rating of floors	be in accordance with the relevant requirements of this Clause.	CIVA
F7D6	Sound insulation	Sound insulation ratings of walls and associated construction are to be	CRA
1700	rating of walls	in accordance with the relevant requirements of this Clause.	CIVA
F7D7	Sound insulation	Sound insulation ratings of internal services and associated	CRA
1707	rating of internal	construction are to be in accordance with the relevant requirements	CIVA
	services	of this Clause.	
F7D8	Sound isolation of	A flexible coupling must be used at the point of connection between	CRA
1700	pumps	the service pipes in a building and any circulating or other pump.	CIA
Specific		lation for Building Elements	
S28C1	Scope	This Specification lists the weighted sound reduction index Rw for	CRA
32001	эсорс	some common forms of construction.	CIA
S28C2	Discontinuous	Wall systems listed in S28C4 to S28C7 having a minimum 20 mm	CRA
32002	construction	cavity between 2 separate leaves are deemed to be discontinuous	Civi
	construction	construction if—	
		(a) for masonry, where wall ties are required to connect leaves, the	
		ties are of the resilient type; and	
		(b) for other than masonry, there is no mechanical linkage between	
		leaves except at the periphery.	
S28C3	Construction	(1) The forms of wall construction described in S28C4 to S28C7 and	CRA
	Deemed-to-satisfy	floor construction described in S28C8 to S28C10, are considered to	-
	,	have the Rw, Rw + Ctr and Ln,w stated in those clauses.	
		, ,	
		(2) The forms of construction referred to in (1) must be installed in	
		accordance with the relevant requirements of this Clause.	
S28C4	Acceptable forms	Acceptable forms of construction for masonry walls are set out in (2)	CRA
	of construction for	to (9) of this Clause.	
	walls — masonry		
S28C5	Acceptable forms	Acceptable forms of construction for concrete walls are set out in (3)	CRA
	of construction for	to (12) of this Clause.	
	walls — concrete		
S28C6	Acceptable forms	Acceptable forms of construction for autoclaved aerated concrete	CRA
	of construction for	walls are set out in (2) to (5) of this Clause.	
	walls — autoclaved		
	aerated concrete		
S28C7	Acceptable forms	Acceptable forms of construction for timber and steel framing walls	CRA

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	of construction for walls — timber and	are set out in (2) to (11) of this Clause.	
	steel framing		
S28C8	Acceptable forms	Acceptable forms of construction for concrete floors are set out in (2)	CRA
32000	of construction for	to (4) of this Clause.	CIA
	floors — concrete	to (1) or this clause.	
S28C9	Acceptable forms	An acceptable form of construction for autoclaved aerated concrete	CRA
	of construction for	floors is set out in (2) of this Clause.	
	floors —		
	autoclaved aerated		
	concrete		
S28C10	Acceptable forms	Acceptable forms of construction for timber floors are set out in (2)	CRA
	of construction for	and (3) of this Clause.	
	floors — timber		
Specifica	tion 29 – Impact Sou	nd – Test of Equivalence	
S29C1	Scope	This Specification describes a method of test to determine the	CRA
		comparative resistance of walls to the transmission of impact sound.	
S29C2	Construction to be	(1) The test is conducted on a specimen of prototype wall	CRA
	tested	construction and on a specimen of one or other of the constructions	
		specified in S28C4 to S28C7.	
		(2) 71	
		(2) The testing of a construction specified in S28C4 to S28C7 need not	
		be repeated for subsequent comparisons provided complete records	
		of the results, the test equipment and the technique of testing are kept so that identical equipment can be employed and an identical	
		technique can be adopted in the testing of specimens of prototype	
		wall construction.	
S29C3	Method	The wall constructions to be compared must be tested in accordance	CRA
32303	Wickhou	with this Clause.	Citi
Part F8 –	Condensation Mana		
F8D1	DtS Provisions	Information only.	Noted
F8D2	Application of Part	Information only.	Noted
F8D3	External wall	(1) Where a pliable building membrane is installed in an external wall,	CRA
	construction	it must—	
		(a) comply with AS 4200.1; and	
		(b) be installed in accordance with AS 4200.2; and	
		(c) be located on the exterior side of the primary insulation layer of	
		wall assemblies that form the external envelope of a building.	
		(2) Where a pliable building membrane, sarking-type material or	
		insulation layer is installed on the exterior side of the primary	
		insulation layer of an external wall it must have a vapour permeance of not less than—	
		(a) in climate zones 4 and 5, 0.143 μg/N.s; and (b) in climate zones 6, 7 and 8, 1.14 μg/N.s.	
		(ω) in climate zones σ, / and σ, 1.14 μg/N.s.	
		(3) Except for single skin masonry and single skin concrete, where a	
		pliable building membrane is not installed in an external wall, the	
		primary water control layer must be separated from water sensitive	
		materials by a drained cavity.	
F8D4	Exhaust systems	(1) An exhaust system installed in a kitchen, bathroom, sanitary	CRA
	•	compartment or laundry must have a minimum flow rate of—	
		(a) 25L/s for a bathroom or sanitary compartment; and	
		(b)40L/s for a kitchen or laundry.	
		(b)40L/3 for a kitchen or launury.	

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(2) Exhaust from a kitchen, kitchen range hood, bathroom, sanitary compartment or laundry must discharge directly or via a shaft or duct to outdoor air.
(3) Where space for a clothes drying appliance is provided in accordance with F4D2(1)(b), space must also be provided for ducting from the clothes drying appliance to outdoor air.
(4) (3) does not apply if a condensing-type clothes drying appliance is installed.
<ul> <li>(5) An exhaust system that is not run continuously and is serving a bathroom or sanitary compartment that is not ventilated in accordance with F6D7 must—</li> <li>(a) be interlocked with the room's light switch; and</li> <li>(b) include a run-on timer so that the exhaust system continues to operate for 10 minutes after the light switch is turned off.</li> </ul>
(6) Except for rooms that are ventilated in accordance with F6D7, a room with space for ducting a clothes drying appliance to outdoor air in accordance with (3) must be provided with make-up air in accordance with AS 1668.2.

SECTIO	SECTION G – ANCILLARY PROVISIONS				
Clause		Comments	Assessment		
Part G1	- Minor Structures ar	nd Components			
G1D1	DtS Provisions	Information only.	Noted		
NSW G1D5	Provision for cleaning windows	<ul> <li>(1) A building must provide for a safe manner of cleaning any windows located 3 or more storeys above ground level.</li> <li>(2) A building satisfies (1) where—</li> <li>(a) the windows can be cleaned wholly from within the building; or</li> <li>(b) provision is made for the cleaning of the windows by a method complying with the Work Health and Safety Act 2011 and regulations made under that Act.</li> </ul>	CRA		

SECTION I – SPECIAL USE BUILDINGS			
Clause Comments Assessmen		Assessment	
This Section is not relevant to the proposed development.			

SECTION J – ENERGY EFFICIENCY							
Clause		Comments	Assessment				
Part J2 – Energy Efficiency							
J2D1	DtS Provisions	Information only.	Noted				
NSW	Application of	Information only.	Noted				
J2D2	Section J						
Part J3 – Building Fabric							
J3D1	DtS Provisions	Information only.	Noted				
NSW	Application of Part	The Deemed-to-Satisfy Provisions of this Part apply to building	Noted				
J3D2		elements forming the external building fabric of a sole-occupancy unit					
		of a Class 2 building and a Class 4 part of a building.					

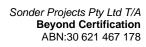
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J3D5	Roof thermal breaks of a sole-occupancy unit of a Class 2 building or a Class 4 part of a building	<ul> <li>(1) A roof that—</li> <li>(a) has metal sheet roofing directly fixed to metal purlins, metal rafters or metal battens; and</li> <li>(b) does not have a ceiling lining or has a ceiling lining fixed directly to those metal purlins, metal rafters or metal battens, must have a thermal break, consisting of a material with an R-Value of greater than or equal to R0.2, installed between the metal sheet roofing and its supporting metal purlins, metal rafters or metal battens.</li> <li>(2) The requirements of (1) do not apply to roofs constructed using insulated sandwich panels.</li> </ul>	CRA
J3D6	Wall thermal breaks of a sole-occupancy unit of a Class 2 building or a Class 4 part of a building	<ul> <li>(1) A metal-framed wall that forms part of the building envelope must have a thermal break, consisting of a material with an R-Value of not less than R0.2, installed at all points of contact between the external cladding and the metal frame if the wall— <ul> <li>(a) does not have a wall lining or has a wall lining that is fixed directly to the same metal frame; and</li> <li>(b) is clad with weatherboards, fibre-cement or the like, or metal sheeting fixed to a metal frame.</li> </ul> </li> <li>(2) The requirements of (1) do not apply to walls constructed using insulated sandwich panels.</li> </ul>	CRA
J3D10	Floors of a sole-occupancy unit of a Class 2 building or a Class 4 part of a building	(1), (2) & (4) do not apply in NSW. (3) A concrete slab-on-ground with an in-slab or in-screed heating or cooling system must have insulation with an R-Value at least 1.0 installed around the vertical edge of tis perimeter.  (5) Insulation required by (3) must— (a) be water resistant; and (b) be continuous from the adjacent finished ground level— (i) to a depth of not less than 300mm; or (ii) for at least the full depth of the vertical edge of the concrete slab-on-ground.  (6) The requirements of (3) do not apply to an in-screed heating or cooling system used solely in a bathroom, amenity area or the like.	CRA
Part I4	– Building Fabric	Cooling system used solely in a bathroom, amenity area of the like.	
J4D1	DtS Provisions	Information only.	Noted
NSW J4D2	Application of Part	<ul> <li>(1) The Deemed-to-Satisfy Provisions of this Part apply to building elements forming the envelope of a Class 3 and Class 5 to 9 building.</li> <li>(2) NSW J4D3, applies to building elements forming the envelope of a sole-occupancy unit in a Class 2 building and a Class 4 part of a building.</li> <li>(3) (2) only applies to thermal insulation in a sole-occupancy unit in a Class 2 building and a Class 4 part of a building where a development consent specifies that the insulation is to be provided as part of the</li> </ul>	Noted
		development.	
NSW J4D3	Thermal construction— general	Where required, insulation must comply with AS/NZS 4859.1 and be installed in accordance with the relevant requirements of this Clause.	CRA
	<ul> <li>Building Sealing</li> </ul>		
J5D1	DtS Provisions	Information only.	Noted

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1003-101		the relevant requirements of these Clauses.	CNA
J6D3-J6I	113	building.  All air-conditioning and ventilation requirements are to comply with	CRA
J6D2		Class 8 electricity network substation.  (2) J6D10 does not apply to a Class 2 building or a Class 4 part of a	
NSW	Application of Part	(1) The Deemed-to-Satisfy Provisions of this Part do not apply to a	Noted
J6D1	DtS Provisions	Information only.	Noted
Part J6	- Air-conditioning & \		
		(3) The requirements of (1) do not apply to openings, grilles or the like required for smoke hazard management.	
		(ii) expanding foam, rubber compressible strip, caulking or the like.	
		(i) close fitting architrave, skirting or cornice; or	
		(b) sealed at junctions and penetrations with—	
		wall and floor junctions; or	
		(a) enclosed by internal lining systems that are close fitting at ceiling,	
		(2) Construction required by (1) must be—	
		(b) in climate zones 4, 5, 6, 7 or 8.	
		(a) when forming part of the envelope; or	
	floors	minimise air leakage in accordance with (2)—	
	ceilings, walls and	door frame, roof light frame or the like must be constructed to	
J5D7	Construction of	(1) Ceilings, walls, floors and any opening such as a window frame,	CRA
		(b) a habitable room in climate zones 4, 5, 6, 7 or 8.	
		self-closing damper or the like when serving—  (a) a conditioned space; or	
J5D6	Exhaust fans	An exhaust fan must be fitted with a sealing device such as a	CRA
IED?	- I	with the relevant requirements of this Clause.	07.1
J5D5	Windows and doors	New windows and doors are to be sealed as applicable in accordance	CRA
		electronically by the occupant.	
		(c) a shutter system readily operated either manually, mechanically or	
		internal lining level; or (b) a weatherproof seal; or	
		(a) an imperforate ceiling diffuser or the like installed at the ceiling or	
		sealed, must be constructed with—	
		(2) A roof light required by (1) to be sealed, or capable of being	
		(b) a habitable room in climate zones 4, 5, 6, 7 or 8.	
		(a) a conditioned space; or	
J5D4	Roof lights	(1) A roof light must be sealed, or capable of being sealed, when serving—	CRA
IED 4	Deaf Balet	or flue.	CD A
		provided with a damper or flap that can be closed to seal the chimney	
J5D3	Chimneys and flues	The chimney or flue of an open solid-fuel burning appliance must be	CRA
		(d) parts of buildings that cannot be fully enclosed.	
		pressurisation to prevent infiltration; or	
		(c) in a Class 3 or Class 5 to 9 building, a building or space where the mechanical ventilation required by Part F6 provides sufficient	
		located, that is necessary for the safe operation of a gas appliance; or	
		(b) a permanent building opening, in a space where a gas appliance is	
		air-conditioning is by using an evaporative cooler; or	
		(a) a building in climate zones 1, 2, 3 and 5 where the only means of	
		forming the envelope of a Class 2 to 9 building, other than—	

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Part J7	Part J7 – Artificial Lighting & Power					
This Par	t is not relevant to the pr	oposed development.				
Part J8 – Heated water supply & swimming pool & spa pool plant						
J8D1	DtS Provisions	Information only.	Noted			
J8D2	Heated water supply	A heated water supply system for food preparation and sanitary	CRA			
		purposes must be designed and installed in accordance with Part B2				
		of NCC Volume Three — Plumbing Code of Australia.				
Part J9	<ul> <li>Energy monitoring an</li> </ul>	nd on-site distributed energy resources				
This Par	t is not relevant to the pr	oposed development.				
Specific	cation 36 – Material Pr	operties				
S36C1	Scope	This Specification lists the thermal properties of some common	Noted			
		construction materials.				
S36C1	Construction DtS	Information only.	Noted			
Specific	Specification 37 – Calculation of U-Value & Solar Admittance					
S37C1	Scope	This specification describes the methods of calculating the U-Value	Noted			
		and solar admittance of a wall-glazing construction.				
S37C2	General	Information only.	Noted			
S37C3	'Calculation	Calculations are to be in accordance with the relevant requirements	CRA			
to	Methods'	of these Clauses as applicable.				
S37C7						

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