

# BUILDING CODE OF AUSTRALIA REPORT

# 1289 PITTWATER ROAD NARRABEEN NSW 2101

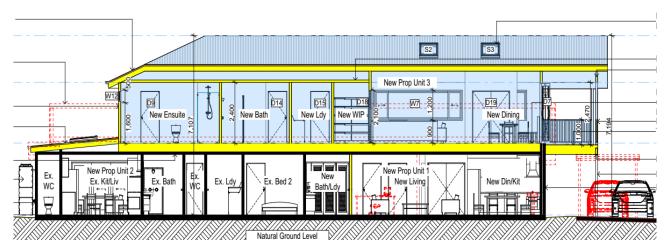
Double storey 3 residential units and converting to class 2 building

Report: BCA342013-R1.1

Date: 24/07/2024

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Proposed development at 1289 Pittwater Road Narrabeen NSW 2101

# **DOCUMENT RECORD**

Document # BCA342013-R1.1

Details: 1289 Pittwater Road Narrabeen NSW 2101

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Prepared by

Signature

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Manish Kumar



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# 1 GENERAL

#### **1.1 Location and description**

The building is located at 1289 Pittwater Road Narrabeen NSW 2101. The building comprises a twostorey with Unit 1 and Unit 2 located on the ground floor, and Unit 3 situated on the first floor. Effective height of the building is 2.85m. Total floor area of the building is approximately 340 m<sup>2</sup>. Total volume of the building is approximately 1,000 m<sup>3</sup>. The building is located on a standard lot and each unit has own direct access to open space. As there are three sole occupancy units located above each other, the building is required to be classified as Class 2 building under the BCA 2022 Governing Requirements.

#### 1.2 Purpose

Purpose of this report is to identify the overall building status of compliance with current building regulations for the purpose of issuing development consent for Change of use, Alterations and additions to existing building, including:

- Provides detailed assessment in accordance with the Deemed to Satisfy provisions of the National Construction Code 2022 Volume 1.
- Provides a summary of fire resistance levels applicable to various building elements.
- Provides a schedule of proposed fire safety measures and relevant standard of performance.

#### **1.3 Building Code of Australia**

This report is based on the Deemed to Satisfy provisions of the National Construction Series 2022 Volume 1– Building Code of Australia 2022 - Class 2-9 buildings (BCA).

#### **1.4 Limitations**

This report is not a Part 6 certificate. It is based on plans that reflect early design that is subject to further modification. This report is based on the review of referenced documents only. All parties are responsible to ensure that design and construction fully reflects the requirements described in this report.

The assessment of disability access requirements is based on the provisions of the National Construction Code (NCC) 2022. The assessment does not cover all details of all relevant access requirements described in referenced documents such as AS1428.1-2009 and liveable housing design. Compliance with Part D4 of NCC 2022 does not preclude the possibility of a future complaint made under the Disability Discrimination Act 1992.

The report does not address matters in relation to:

- Structural adequacy of building materials or any other building material properties, including Fire Resistance Revels (FRL) of existing building elements. Where assumptions of FRL or other building material properties are made, these are based on expert opinion and are indicative only. Actual FRL and material properties are determined by tests and are outside the scope of this report.
- Status of maintenance of existing fire safety measures in the building and their capability to perform to a standard to which these fire safety measures were originally designed.

- Actual standard of performance of existing fire safety measures.
- Work health and safety regulations;
- Requirements of any other regulatory authorities including but not limited to RMS, Water services authorities, Energy supply authorities, Telecommunications Authorities, Local authorities;
- Requirements of referenced standards;
- Assessment of supporting documentation;
- Assessment of Performance solutions; and
- General condition of building fabric and building services.

Compliance status for some building elements may not be ascertainable because of elements not accessible or evidence for compliance not available. Examples are fire resistance levels of walls, slabs and similar elements. The report is summarising the current BCA requirements. Except in the case where non-compliances are apparently evident, it is deemed that such building elements have been constructed or upgraded to comply with the BCA requirements applicable at the time of construction for the current building use. Where the current building use requires equivalent or higher fire protection capacity, it is considered that the building meets the requirements of the new use.

All definitions included in the BCA and referenced regulations are relevant and are applied accordingly in this report.

In line with limitations listed in the Preface of Building Code of Australia Volume 1, no representation or warranty is made or given as to the currency, accuracy, reliability, merchantability, fitness for any purpose or completeness of this report and any information which may appear on any referenced websites, or in other linked information sources including referenced drawings, beyond those as stated in the Building Code of Australia. All such representations and warranties are excluded to the extent permitted by law.

Where in doubt of any information provided in this report, the user of the report should make all necessary inquiries to achieve the needed level of clarity by contacting the Australin Building Codes Board on:

Phone: 1300 134 631

#### Email: ncc@abcb.gov.au

This report reflects the deemed-to-satisfy provisions of the BCA. The report does not represent any legal, professional or design advice. Persons relying on this report are expected to have the necessary qualifications, understanding and ability to assess the appropriateness of the information included in this report and apply it as needed in the process of design development and approval of the finalised design. Persons rely on this report entirely at their own discretion and must take responsibility for assessing the relevance and accuracy of provided information in relation to their particular circumstances.

This report has been prepared and/or reviewed by a registered building surveyor with registration corresponding to the building type.

#### **1.5 Documentation**

The following documentation has been viewed and assessed for the purposes of this revision in accordance with the conditions of the service proposal:

Drawing number & Rev no.	Title	Date
DA1000 -	COVER SHEET	03/06/2024
DA1002-	SITE SURVEY	03/06/2024
DA1003-	SITE PLAN	03/06/2024
DA1004-	EXISTING GROUND FLOOR PLAN	03/06/2024
DA1005-	EXISTING ROOF PLAN	03/06/2024
DA1006-	DEMOLITION GROUND FLOOR PLAN	03/06/2024
DA1007-	DEMOLITION ROOF PLAN	03/06/2024
DA1008-	EXCAVATION & FILL PLAN	03/06/2024
DA1009-	LANDSCAPE OPEN SPACE PLAN EXISTING	03/06/2024
DA1010-	LANDSCAPE OPEN SPACE PLAN PROPOSED	03/06/2024
DA1011-	LANDSCAPE PLAN	03/06/2024
DA1012-	SEDIMENT & EROSION PLAN	03/06/2024
DA1013-	WASTE MANAGEMENT PLAN	03/06/2024
DA1014-	STORMWATER PLAN	03/06/2024
DA2001-	GROUND FLOOR	03/06/2024
DA2002-	FIRST FLOOR PLAN	03/06/2024
DA2003-	ROOF	03/06/2024
DA3000-	SECTION 1	03/06/2024
DA3001-	SECTION 2	03/06/2024
DA3002-	SECTION DRIVE	03/06/2024
DA4000-	ELEVATIONS 1	03/06/2024
DA4001-	ELEVATIONS 2	03/06/2024
DA4002-	ELEVATION FRONT FENCE	03/06/2024
DA5000-	PERSPECTIVE	03/06/2024
DA5001-	MATERIAL & COLOUR SAMPLE BOARD	03/06/2024
DA5002-	SHADOW PLAN 21ST JUNE 9AM	03/06/2024



DA5003-	SHADOW PLAN 21ST JUNE 12PM	03/06/2024
DA5004-	SHADOW PLAN 21ST JUNE 3PM	03/06/2024
DA5005-	WALL ELEVATION SHADOWS	03/06/2024
DA6000 -	NATHERS CERTIFICATE	03/06/2024

#### **1.6 Recommendations**

The majority of the works, with minor exceptions, can be carried out in accordance with BCA Deemed-to-Satisfy DTS requirements. It is recommended that a modification of the design or performance solutions are considered to address deviations from DTS requirements C4D3, C4D5, D3D25, F6D3 & F6D7.

It is recommended an access report is obtained at the construction certificate stage to clarify details regarding compliance with Part D4, clauses F4D5, F4D6 and also Part E3 where applicable. The review also identified several occasions where additional details or specifications need to be provided on architectural, electrical, hydraulic or fire services plans to ensure full compliance with the Deemed-to-Satisfy requirements of the BCA.

# **2 BCA COMPLIANCE SUMMARY**

The following table summarises the status of BCA 2022 compliance.

Abbreviations used in the summary are:

Complies - the building complies with the BCA requirements.

Capable of Complying – plans do not show non-compliance and the building is capable of complying with the Deemed-to-satisfy (DTS) requirements of the BCA providing that details of building elements and their characteristics as well as methods of installation where applicable are included in the design documentation. In some cases, compliance can be ensured during routine construction practice when carried out in accordance with manufacturer specifications, Australian standards and specifications provided in the BCA. It is recommended that requirements are detailed in drawings and building specifications as applicable. Where existing elements are considered, it is deemed that building elements and services have been constructed to comply with the BCA requirements applicable at the time of construction for the current building use. Where there are no regulatory requirements for upgrade of existing building elements, or the current building use requires equivalent or higher fire protection capacity, it is considered that the building meets the requirements of the new use and compliance with the requirements is assumed.

Solution Required – refers to a DTS non-compliance that needs to be addressed by a performance solution or modifications to building elements to achieve compliance with DTS.

Performance Solution – Performance solution has been developed to address the DTS deviations. Assessment of performance solutions is not part of this report - refer section 1.4 Limitations.

Information Required – aspects of the design need to be clarified to confirm if the building falls in the category Capable of Complying or Solution Required.

Note - a notation only, a statement summarising DTS requirements.

n/a – requirement is not applicable to this building or building elements are not affected by the proposed work, deemed that compliance of exiting part has been achieved at the time of construction.

Other miscellaneous notations are used in several occasions – In such cases, please refer to details of the assessment in Part 5 of the report.

	Part C2 Fire Resistance and Stability	
C2D1	Deemed-to-Satisfy Provisions	Note
C2D2	Type of construction required	Туре С
Specific	ation 5 - Fire Resisting Construction	Capable of complying
C2D3	Calculation of rise in storeys	2 storeys
C2D4	Buildings of multiple classification (Building classification)	Class 2
C2D5	Mixed types of construction	n/a
C2D6	Two storey Class 2, 3, or 9c buildings	Complies



0007		- /-
C2D7	Class 4 parts of buildings	n/a
C2D8	Open spectator stands and indoor sports stadiums	n/a
C2D9	Lightweight construction	Capable of complying
C2D10	Non-combustible building elements	n/a
NSW C2D11	Fire hazard properties	Capable of complying
C2D12	Performance of external walls in fire	n/a
C2D13	Fire-protected timber: Concession	n/a
C2D14	Ancillary elements	n/a
C2D15	Fixing of bonded laminated cladding panels	n/a
	Part C3 Compartmentation and Separation	
C3D1	Deemed-to-Satisfy Provisions	Note
C3D2	Application of Part	Note
C3D3	General floor area and volume limitations	Complies
C3D4	Large, isolated buildings	n/a
C3D5	Requirements for open spaces and vehicular access	n/a
C3D6	Class 9 buildings	n/a
C3D7	Vertical separation of openings in external walls	n/a
C3D8	Separation by fire walls	n/a
C3D9	Separation of classifications in the same storey	n/a
C3D10	Separation of classifications in different storeys	n/a
C3D11	Separation of lift shafts	n/a
C3D12	Stairways and lifts in one shaft	n/a
C3D13	Separation of equipment	n/a
C3D14	Electricity supply system	n/a
C3D15	Public corridors in Class 2 and 3 buildings	n/a
	Part C4 Protection of Openings	
C4D1	Deemed-to-Satisfy Provisions	Note
C4D2	Application of Part	Note
C4D3	Protection of openings in external walls	Solution required
C4D4	Separation of external walls and associated openings in different fire compartments	n/a

C4D5	Acceptable methods of protection	Solution required
C4D6	Doorways in fire walls	n/a
C4D7	Sliding fire doors	n/a
C4D8	Protection of doorways in horizontal exits	n/a
C4D9	Openings in fire-isolated exits	n/a
C4D10	Service penetrations in fire-isolated exits	n/a
C4D11	Openings in fire-isolated lift shafts	n/a
C4D12	Bounding construction: Class 2 and 3 buildings and Class 4 Parts	n/a
C4D13	Openings in floors and ceilings for services	Capable of complying
C4D14	Openings in shafts	n/a
C4D15	Openings for service installations	Capable of complying
C4D16	Construction joints	Capable of complying
C4D17	Columns protected with lightweight construction to achieve an FRL	n/a
	Part D2 Provision for Escape	
D2D1	Deemed-to-Satisfy Provisions	Note
D2D2	Application of Part	Note
D2D3	Number of exits required	Complies
D2D4	When fire-isolated stairways and ramps are required	n/a
D2D5	Exit travel distances	Complies
D2D6	Distance between alternative exits	n/a
D2D7	Height of exits, paths of travel to exits and doorways	Capable of complying
D2D8	Width of exits and paths of travel to exits	Capable of complying
NSW D2D9	Width of doorways in exits and paths of travel to exits	Capable of complying
D2D10	Exit width not to diminish in direction of travel	Complies
D2D11	Determination and measurement of exits and paths of travel to exits	Note
D2D12	Travel via fire-isolated exits.	n/a
D2D13	External stairways or ramps in lieu of fire-isolated exits	n/a
D2D14	Travel by non-fire-isolated stairways or ramps	Complies
D2D15	Discharge from exits	Capable of complying
D2D16	Horizontal exits	n/a

D2D17	Non-required stairways, ramps or escalators	n/a
D2D18	Number of persons accommodated	Note
D2D19	Measurement of distances	Note
D2D20	Method of measurement	Note
D2D21	Plant rooms, lift machine rooms and electricity network substations: Concession	n/a
D2D22	Access to lift pits	n/a
D2D23	Egress from primary schools	n/a
	Part D3 Construction of Exits	
D3D1	Deemed-to-Satisfy Provisions	Note
NSW D3D2	Application of Part	Note
D3D3	Fire-isolated stairways and ramps	n/a
D3D4	Non-fire-isolated stairways and ramps	n/a
D3D5	Separation of rising and descending stair flights	n/a
D3D6	Open access ramps and balconies	n/a
D3D7	Smoke lobbies	n/a
D3D8	Installations in exits and paths of travel	Capable of complying
D3D9	Enclosure of space under stairs and ramps	n/a
D3D10	Width of required stairways and ramps	n/a
D3D11	Pedestrian ramps	n/a
D3D12	Fire-isolated passageways	n/a
D3D13	Roof as open space	n/a
D3D14	Goings and risers	Capable of complying
D3D15	Landings	Capable of complying
NSW D3D16	Thresholds	Capable of complying
D3D17	Barriers to prevent falls	Capable of complying
D3D18	Height of barriers	Capable of complying
D3D19	Openings in barriers	Capable of complying
D3D20	Barrier climbability	Capable of complying
D3D21	Wire barriers	Capable of complying

D3D22	Handrails	Capable of complying
D3D23	Fixed platforms, walkways, stairways and ladders	n/a
NSW D3D24	Doorways and doors	Capable of complying
D3D25	Swinging doors	Solution required
D3D26	Operation of latch	Capable of complying
D3D27	Re-entry from fire-isolated exits	n/a
D3D28	Signs on doors	n/a
D3D29	Protection of openable windows. Class 2, 3, 4, 9b	Capable of complying
D3D30	Timber stairways: Concession	n/a
NSW D3D31	Doorways in paths of travel to an entertainment venue	n/a
	Part D4 Access for People with a Disability	
D4D1	Deemed-to-Satisfy Provisions	Note
D4D2	General building access requirements	Capable of complying
D4D3	Access to buildings	Capable of complying
D4D4	Parts of buildings to be accessible	Capable of complying
D4D5	Exemptions	Note
D4D6	Accessible carparking	Capable of complying
D4D7	Signage	n/a
D4D8	Hearing augmentation	n/a
D4D9	Tactile indicators	Capable of complying
D4D10	Wheelchair seating spaces in Class 9b assembly buildings	n/a
D4D11	Swimming pools	n/a
D4D12	Ramps	n/a
D4D13	Glazing on an accessway	n/a
	Part E1 Fire Fighting Equipment	
E1D1	Deemed-to-Satisfy Provisions	Note
E1D2	Fire hydrants	n/a
E1D3	Fire hose reels	n/a
E1D4	Sprinklers	n/a
E1D5	Where sprinklers are required: all classifications	n/a

E1D6	Where sprinklers are required: Class 2 and 3 buildings	n/a
E1D7	Where sprinklers are required: Class 3 building used as a residential care building	n/a
E1D8	Where sprinklers are required: Class 6 building	n/a
E1D9	Where sprinklers are required: Class 7a building	n/a
E1D10	Where sprinklers are required: Class 9a health-care building used as a residential care building, Class 9c buildings	n/a
E1D11	Where sprinklers are required: Class 9b buildings	n/a
E1D12	Where sprinklers are required: additional requirements	n/a
E1D13	Where sprinklers are required: occupancies of excessive hazard	n/a
E1D14	Portable fire extinguishers	n/a
E1D15	Fire control centres	n/a
E1D16	Fire precautions during construction	Capable of complying
E1D17	Provision for special hazards	n/a
	Part E2 Smoke Hazard Management	
E2D1	Deemed-to-Satisfy Provisions	Note
E2D2	Application of requirements	Note
E2D3	General requirements	n/a
E2D4	Fire-isolated exits	n/a
E2D5	Buildings more than 25 m in effective height: Class 2 and 3 buildings and Class 4 part of a building	n/a
E2D6	Buildings more than 25 m in effective height: Class 5, 6, 7b, 8 or 9b buildings	n/a
E2D7	Buildings more than 25 m in effective height: Class 9a buildings	n/a
E2D8	Buildings not more than 25 m in effective height: Class 2 and 3 buildings and Class 4 part of a building	Capable of complying
E2D9	Buildings not more than 25 m in effective height: Class 5, 6, 7b, 8 and 9b buildings	n/a
NSW E2D10	Buildings not more than 25 m in effective height: large isolated buildings subject to C3D4	n/a
E2D11	Buildings not more than 25 m in effective height: Class 9a and 9c buildings	n/a
	Class Za huildinge	n/a
E2D12	Class 7a buildings	11/a

E2D14	Class 6 buildings – in fire compartments more than 2000 m2: Class 6 building (not containing an enclosed common walkway or mall serving more than one Class 6 sole-occupancy unit)	n/a
E2D15	Class 6 buildings – in fire compartments more than 2000 m2: Class 6 building (containing an enclosed common walkway or mall)	n/a
NSW E2D16	Class 9b – assembly buildings: all	n/a
NSW E2D17	Class 9b – assembly buildings: nightclubs discotheques and the like	n/a
NSW E2D18	Class 9b – assembly buildings: exhibition halls, museums art galleries	n/a
NSW E2D19	Class 9b – assembly buildings: other assembly buildings	n/a
NSW E2D20	Class 9b assembly buildings: other assembly buildings (not listed in E2D16 to E2 D19)	n/a
E2D21	Provision for special hazards	n/a
	Part E3 Lift Installations	
	This part is not applicable to the development	
	Part E4 Emergency Lighting, Exit Signs and Warning Syst	ems
E4D1	Deemed-to-Satisfy Provisions	Note
E4D2	Emergency lighting requirements	n/a
E4D2 E4D3	Emergency lighting requirements Measurement of distance	n/a Note
E4D3	Measurement of distance	Note
E4D3 E4D4	Measurement of distance Design and operation of emergency lighting	Note n/a
E4D3 E4D4 E4D5 NSW	Measurement of distance Design and operation of emergency lighting Exit signs	Note n/a n/a
E4D3 E4D4 E4D5 NSW E4D6	Measurement of distance Design and operation of emergency lighting Exit signs Direction signs	Note n/a n/a n/a
E4D3 E4D4 E4D5 NSW E4D6 E4D7	Measurement of distance Design and operation of emergency lighting Exit signs Direction signs Class 2 and 3 buildings and Class 4 parts: Exemptions	Note n/a n/a n/a n/a
E4D3 E4D4 E4D5 NSW E4D6 E4D7 E4D8	Measurement of distance         Design and operation of emergency lighting         Exit signs         Direction signs         Class 2 and 3 buildings and Class 4 parts: Exemptions         Design and operation of exit signs	Note           n/a           n/a           n/a           n/a           n/a           n/a           n/a
E4D3 E4D4 E4D5 NSW E4D6 E4D7 E4D8	Measurement of distance         Design and operation of emergency lighting         Exit signs         Direction signs         Class 2 and 3 buildings and Class 4 parts: Exemptions         Design and operation of exit signs         Emergency warning and intercom systems	Note           n/a           n/a           n/a           n/a           n/a           n/a           n/a
E4D3 E4D4 E4D5 NSW E4D6 E4D7 E4D8 E4D9	Measurement of distance         Design and operation of emergency lighting         Exit signs         Direction signs         Class 2 and 3 buildings and Class 4 parts: Exemptions         Design and operation of exit signs         Emergency warning and intercom systems         Part F1 Surface Water Management, Rising Damp and External W	Note n/a n/a n/a n/a n/a n/a n/a /aterproofing
E4D3 E4D4 E4D5 NSW E4D6 E4D7 E4D8 E4D9 F1D1	Measurement of distance         Design and operation of emergency lighting         Exit signs         Direction signs         Class 2 and 3 buildings and Class 4 parts: Exemptions         Design and operation of exit signs         Emergency warning and intercom systems         Part F1 Surface Water Management, Rising Damp and External W         Deemed-to-Satisfy Provisions	Note n/a n/a n/a n/a n/a n/a n/a <u>/aterproofing</u> Note
E4D3 E4D4 E4D5 NSW E4D6 E4D7 E4D8 E4D9 F1D1 F1D2	Measurement of distance         Design and operation of emergency lighting         Exit signs         Direction signs         Class 2 and 3 buildings and Class 4 parts: Exemptions         Design and operation of exit signs         Emergency warning and intercom systems         Part F1 Surface Water Management, Rising Damp and External W         Deemed-to-Satisfy Provisions         Application of Part	Note           n/a           n/a           n/a           n/a           n/a           n/a           n/a           Note           Note
E4D3 E4D4 E4D5 NSW E4D6 E4D7 E4D8 E4D9 E4D9 F1D1 F1D2 F1D3	Measurement of distance         Design and operation of emergency lighting         Exit signs         Direction signs         Class 2 and 3 buildings and Class 4 parts: Exemptions         Design and operation of exit signs         Emergency warning and intercom systems         Part F1 Surface Water Management, Rising Damp and External W         Deemed-to-Satisfy Provisions         Application of Part         Stormwater drainage	Note n/a

F1D6	Damp-proofing	Capable of complying
F1D7	Damp-proofing of floors on the ground	Capable of complying
F1D8	Sub-floor ventilation	n/a
	Part F2 Wet Areas and Overflow Protection	
F2D1	Deemed-to-Satisfy Provisions	Note
F2D2	Wet area construction	Capable of complying
F2D3	Rooms containing urinals	n/a
F2D4	Floor wastes	Capable of complying
	Part F3 Roof and Wall Cladding	
F3D1	Deemed-to-Satisfy Provisions	Note
F3D2	Roof coverings	Capable of complying
F3D3	Sarking	Capable of complying
F3D4	Glazed assemblies	Capable of complying
F3D5	Wall Cladding	Capable of complying
	Part F4 Sanitary and Other Facilities	
F4D1	Deemed-to-Satisfy Provisions	Note
F4D2	Facilities in residential buildings	Complies
F4D3	Calculation of number of occupants and facilities	Note
F4D4	Facilities in Class 3 to 9 buildings	n/a
F4D5	Accessible sanitary facilities	n/a
F4D6	Accessible unisex sanitary compartments	n/a
F4D7	Accessible unisex showers	n/a
F4D8	Construction of sanitary compartments	Capable of complying
F4D9	Interpretation: Urinals and washbasins	Note
NSW		
F4D10	Microbial (legionella) control	n/a
F4D11	Waste management	n/a
F4D12	Accessible adult change facilities	n/a
	Part F5 Room Heights	
F5D1	Deemed-to-Satisfy Provisions	Note
F5D2	Height of rooms and other spaces	Complies

	Part F6 Light and Ventilation	
F6D1	Deemed-to-Satisfy Provisions	Note
F6D2	Provision of natural light	Complies
F6D3	Methods and extent of natural lighting	Solution required
F6D4	Natural light borrowed from adjoining room	n/a
F6D5	Artificial lighting	Capable of complying
NSW F6D6	Ventilation of rooms	See F6D7
F6D7	Natural ventilation	Solution required
F6D8	Ventilation borrowed from adjoining room	n/a
F6D9	Restriction on location of sanitary compartments	See F6D10
F6D10	Airlocks	Capable of complying
F6D11	Carparks	n/a
F6D12	Kitchen local exhaust ventilation	n/a
	Part F7 Sound Transmission and Insulation	
F7D1	Deemed-to-Satisfy Provisions	Note
F7D2	Application of Part	Note
F7D3	Determination of airborne sound insulation ratings	Capable of complying
F7D4	Determination of impact sound insulation ratings	Capable of complying
F7D5	Sound insulation rating of floors	Capable of complying
F7D6	Sound insulation rating of walls	Capable of complying
F7D7	Sound insulation rating of internal services	Capable of complying
F7D8	Sound isolation of pumps	Capable of complying
	Part F8 Condensation Management	
F8D1	Deemed-to-Satisfy Provisions	Note
F8D2	Application of Part	Note
F8D3	External wall construction	Capable of complying
F8D4	Exhaust systems	Capable of complying
F8D5	Ventilation of roof spaces	Capable of complying
	Part G1 Minor Structures and Components	
	This part is not applicable to the building except NSW G1D5	

G1D5 Provision for cleaning windows

n/a

#### Part G2 Heating Appliances, Fireplaces, Chimneys and Flues

This part is not applicable to the development

Part G3 Atrium Construction

This part is not applicable to the development

Part G4 Construction in Alpine Areas

This part is not applicable to the development

Part G5 Construction in Bushfire Prone Areas

This part is not applicable to the development

Part G6 Occupiable Outdoor Areas

This part is not applicable to the development

Part G7 Livable Housing Design

This part is not applicable to the development

Section I Special Use Buildings

This section is not applicable to the development

Section J Energy Efficiency

This section is not included in the scope of services

# 3. FIRE RESISTANCE LEVELS SUMMARY

ltem	FRL
External walls:	
<ul> <li>Less than 1.5 m from side boundary</li> </ul>	90/90/90
<ul> <li>1.5 m to less than 3 m from side boundary</li> </ul>	-/-/-
– 3 m or more	-/-/-
External columns not incorporated into external walls:	
<ul> <li>Less than 1.5 m from side boundary</li> </ul>	90/-/-
<ul> <li>1.5 m to less than 3 m from side boundary</li> </ul>	-/-/-
– 3 m or more	-/-/-
Common walls and fire walls, loadbearing or non-loadbearing	90/90/90
Internal walls:	
- Bounding public corridors, public lobbies and the like	60/60/60
- Bounding sole occupancy units	60/60/60
- Binding a stair if required to be fire rated	60/60/60
Floors	30/30/30
	or 60 minutes RISF* or
	protective covering underfloor
Roof	Non-combustible

RISF - resistance to incipient spread of fire

# 4. FIRE SAFETY MEASURES SUMMARY

Required fire safety measure	Standard of performance
Smoke alarm system	BCA E2D8, S20C3, AS 3786-2014

Note: Other fire safety measures may be required after detailed design is completed

# 5. BCA ASSESSMENT

# **SECTION C - FIRE RESISTANCE**

#### Part C2 Fire Resistance and Stability

C2D1 Deemed-to-Satisfy Provisions

Purpose:

To clarify the application of Performance Solutions to Part C2 when DTS provisions are not met.

Comments: Defines how Performance Requirements are met for part C2.

#### C2D2 Type of construction required.

Purpose:

To establish the minimum fire-resisting construction required for the building.

#### Comments:

Each of the dwellings has own egress to open space. Concession under Clause C2D6 is relevant to this building, the building can be constructed to the requirements of Type C construction.

Clause S5C24 of Specification 5 requires that in a class 2 or 3 building, any internal wall required to have FRL with respect to integrity and insulation needs to extend to:

- the underside of floor achieving FRL of not less than 30/30/30 or
- the underside of ceiling having resistance to incipient spread of fire of not less than 60 minutes or
- the underside of roof covering that is non-combustible or
- 450 mm above the non-combustible roof covering.

Details of wall systems are required to be shown with FRL requirements in accordance with the tables under S5C24 and Section 3 of this report to determine if the building complies with requirements. Providing these details are shown on construction certificate plans, compliance is achievable during construction

#### C2D3 Calculation of rise in storeys

Purpose:

To establish a method for the calculation of the rise in storeys of the building, as a means of helping determine the building's required type of construction.

Comments: The rise in storeys is two storeys

#### C2D4 Buildings of multiple classification

Purpose:

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To establish the type of construction required for a building that contains more than one Class.

Comments:

The building comprises the following areas of different classification:

 Class 2 – a building containing two or more sole occupancy units each being a separate dwelling

# C2D5 Mixed types of construction

# Purpose:

To specify the circumstances in which the building may be of more than one type of construction.

Comments: This clause is not applicable to the building.

# C2D6 Two storey Class 2, 3 or 9c buildings

# Purpose:

This clause provides concessions for

- low-rise Class 2 and Class 3 buildings provided with a good means of egress; and
- sprinkler protected Class 9c buildings.

### Comments:

A Class 2 building having the rise of storeys of 2 may be of Type C construction if each sole occupancy unit has access to at least 2 exits or its own direct access to a road or open space. The development complies with this clause.

# C2D7 Class 4 parts of buildings

### Purpose:

To specify that Class 4 parts of buildings are subject to the same requirements for fire resistance levels (FRLs) and separation as would apply to Class 2 parts in similar circumstances.

Comments: This clause is not applicable to the building.

# C2D8 Open spectator stands and indoor sports stadiums

Purpose:

To grant a concession for open spectator stands and indoor sports stadiums

Comments: This clause is not applicable to the development.

### C2D9 Lightweight construction

Purpose:



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To specify the requirements for the use of lightweight construction in:

- circumstances which require walls with a fire-resistance level (FRL);
- certain high use buildings; and
- fire-resisting covering of steel columns or the like

#### Comments:

Lightweight construction must comply with Specification 6 if used in a wall system required to achieve FRL. Evidence for compliance needs to be provided by the supplier.

#### C2D10 Non-combustible building elements

### Purpose:

To specify the non-combustibility for building elements and to permit the use of certain materials that are known to provide acceptable levels of fire safety where an element is required to be non-combustible.

Comments: This clause is not applicable to the building.

### NSW C2D11 Fire hazard properties

### Purpose:

To stipulate the minimum fire hazard properties of materials susceptible to the effects of flame or heat.

### Comments:

Where floor covering and wall linings are used, materials must comply with the requirements of BCA Specification 7. Where a building is not fitted with a sprinkler system, the floor covering must have a critical radiant flux of not less than 2.2 kW/m<sup>2</sup> and may be reduced to 1.2 kW/m<sup>2</sup> where sprinklers have been provided. Any wall or ceiling linings must comply with the material requirements under AS 5637.1. Details need to be included in the building specifications for construction certificate to demonstrate compliance with these requirements.

### C2D12 Performance of external walls in fire

#### Purpose:

To minimise the risk of any concrete external wall collapsing outwards as a complete panel during a fire.

Comments: This clause is not applicable to the building.

### C2D13 Fire-protected timber: Concession

# Purpose:

To permit fire-protected timber to be used where an element is required to be noncombustible. Return to summary

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Comments: This clause is not applicable to the building.

#### C2D14 Ancillary elements

Purpose:

To permit certain building components that may contain a limited amount of combustible material to be attached to an external wall required to be non-combustible

Comments: This clause is not applicable to the building.

### C2D15 Fixing of bonded laminated cladding panels

Purpose:

To specify the types of cladding panels that may be attached to an external wall.

Comments: This clause is not applicable to the building.

# Part C3 Compartmentation and Separation

#### C3D1 Deemed-to-Satisfy Provisions

Purpose:

To clarify the application of Performance Solutions to Part C3 when DTS provisions are not met.

Comments: Defines how Performance Requirements are met for part C3.

### C3D2 Application of Part

Purpose:

To clarify that the floor area limitations of Part C2 do not apply to certain buildings.

Comments: Defines application of part C3.

### C3D3 General floor area and volume limitations

#### Purpose:

To limit the size of any fire in a building by limiting the size of the floor area and volume of a fire compartment.

Comments: The building complies with this clause.

# C3D4 Large isolated buildings

Purpose:



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To grant concessions for large isolated buildings from the floor area and volume limitation.

Comments: This clause is not applicable to the building.

#### C3D5 Requirements for open spaces and vehicular access

#### Purpose:

To set the minimum requirements for open space around a building and the provision of vehicular access for the fire brigade.

Comments: This clause is not applicable to the building.

### C3D6 Class 9 buildings

Purpose:

To protect patients in a health-care building and residents in an aged care building from the spread of fire and smoke.

Comments: This clause is not applicable to the building.

#### C3D7 Vertical separation of openings in external walls

Purpose:

To minimise the risk of fire spreading from one floor to another via openings in external walls in buildings of Type A construction.

Comments: This clause is not applicable to the building.

#### C3D8 Separation by fire walls

Purpose:

To explain that buildings separated by a fire wall may be considered as fire compartments or be regarded as separate buildings.

Comments: Refer comment in C3D9.

#### C3D9 Separation of classifications in the same storey

#### Purpose:

To minimise the risk of a fire in one classification on a storey causing the failure of building elements in another classification on the same storey.

Comments: This clause is not applicable to the building.

#### C3D10 Separation of classifications in different storeys

Purpose:

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To minimise the risk of a fire in one classification causing the failure of building elements in another classification in a different storey.

Comments: This clause is not applicable to the building.

#### C3D11 Separation of lift shafts

Purpose:

To minimise the risk of a fire spreading from one floor to another floor of a building by way of a lift opening.

Comments: This clause is not applicable to the building.

#### C3D12 Stairways and lifts in one shaft

Purpose:

To maintain a safe evacuation route for people using a fire-isolated stairway, by separating the stairway shaft from the lift shaft.

Comments: This clause is not applicable to the building.

#### C3D13 Separation of equipment

Purpose:

To limit the spread of fire from service equipment having a high fire hazard or potential for explosion and to ensure emergency equipment continues to operate during a fire.

Comments: This clause is not applicable to the building.

### C3D14 Electricity supply system

Purpose:

To limit the spread of fire from electrical equipment and to enable the uninterrupted operation of emergency equipment during a fire.

Comments: This clause is not applicable to the building.

C3D15 Public corridors in Class 2 and 3 buildings

Purpose:

To minimise the risk of long public corridors in Class 2 and Class 3 buildings becoming smoke logged.

Comments: There are no corridors exceeding 40 m, this clause is not applicable to the building.



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# Part C3 Protection of Openings

C4D1 Deemed-to-Satisfy Provisions

Purpose:

To clarify the application of Performance Solutions to Part C4 when DTS provisions are not met.

Comments: Defines how Performance Requirements are met for part C4.

### C4D2 Application of Part

Purpose:

To clarify which openings must comply with the Deemed-to-Satisfy Provisions of Part C4.

Comments: Defines application of part C4.

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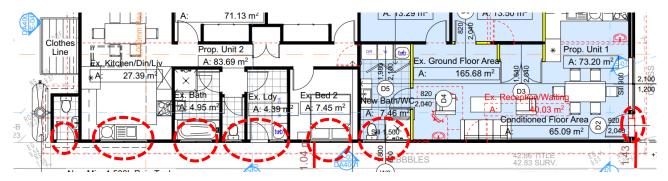
# C4D3 Protection of openings in external walls

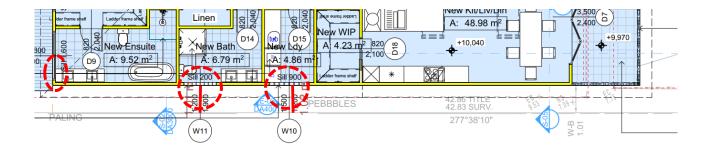
Purpose:

To require any opening in external walls to be protected, only where the wall is required to have an FRL, to prevent the spread of fire from the boundary of an adjoining allotment, or one building to another building on the same allotment.

Comments:

Plans show openings along the east, south and west elevations closer than 3 m from the side property boundary, shown below. Where these openings are not protected in accordance with clause C4D5 below, a modification of the design or performance solution is required to address these deviations. The plans indicate that the few first-floor window will be made of fire-rated glass blocks, however the FRL of the glass block needs to be added.





#### C4D4 Separation of external walls and associated openings in different fire compartments

Purpose: To limit the spread of fire between fire compartments through external walls and the openings in them.

Comments: This clause is not applicable to the building.

#### C4D5 Acceptable methods of protection

#### Purpose:

To set out acceptable methods of protection required for different types of openings in a building.

#### Comments:

A modification of the design or performance solution is required where the openings identified at clause C4D3 above, are not permanently closed and achieving FRL -/60- or protected with fire shutters achieving this FRL or protected with internal or external drenchers. In order to comply with this clause doors in affected openings need be self-closing, achieving FRL of -/60/30.

#### C4D6 Doorways in fire walls

Purpose:

To maintain the integrity of walls required to have FRL by limiting the spread of fire through doorways.

Comments: This clause is not applicable to the building.

### C4D7 Sliding fire doors

Purpose:

To avoid danger to occupants caused by the automatic closing of a sliding fire door.

Comments: Plans do not show sliding fire doors, the clause is not applicable to the building.

### C4D8 Protection of doorways in horizontal exits

#### Purpose:

To provide occupants using a horizontal exit with the same protection as those using a fire isolated exit.

Comments: This clause is not applicable to the building.

#### C4D9 Openings in fire-isolated exits

#### Purpose:

To maintain the integrity of a fire-isolated exit and to protect people using fire-isolated exits by providing adequately protected door and window openings.

Comments: This clause is not applicable to the building.



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#### C4D10 Service penetrations in fire-isolated exits

#### Purpose:

To maintain the integrity of a fire-isolated exit and to protect the people using them by providing protection to service penetrations.

Comments: This clause is not applicable to the building.

#### C4D11 Openings in fire-isolated lift shafts

### Purpose:

To maintain the integrity of a fire-isolated lift shaft and to limit the spread of fire from one floor of a building to another floor by way of a lift shaft.

Comments: This clause is not applicable to the building.

# C4D12 Bounding construction: Class 2 and 3 buildings and Class 4 parts

### Purpose:

To maintain the performance of a wall bounding any sole-occupancy unit or public corridor in Class 2 or Class 3 buildings; and any sole-occupancy unit (SOU) in a Class 4 part.

#### Comments:

Each SOU is provided with direct access to an open space. This clause is not applicable to the building.

### C4D13 Openings in floors and ceilings for services

#### Purpose:

To limit the spread of fire through service openings in floors and ceilings required to resist the spread of fire.

#### Comments:

Services penetrating fire resisting construction in a building construction Type C need to be enclosed in a shaft complying with Specification 5 or be protected in accordance with C4D15. Details need to be provided on construction certificate plans or in building specifications. Passive fire services report may also be provided at the construction certificate stage to address requirements.

### C4D14 Openings in shafts

Purpose:

To maintain the fire performance of the floor by limiting the spread of fire through openings in shafts.

Comments: This clause is not applicable to the building.



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#### C4D15 Openings for service installations

Purpose:

To maintain the fire performance of building elements by limiting fire spread by way of service penetrations.

Comments:

Where an electrical, electronic, plumbing, mechanical ventilation, air-conditioning or other service penetrates a building element (other than an external wall or roof) that is required to have an FRL that installation must comply with Specification 13. Details need to be provided on plans or building specifications to show that compliance will be achieved. Passive fire services report may also be provided to address requirements.

#### C4D16 Construction joints

Purpose:

To limit the spread of fire between building elements required to be fire-resisting.

Comments:

Construction joints, spaces and the like in and between building elements required to be fire-resisting with respect to integrity and insulation must be protected in a manner identical with a prototype tested in accordance with AS1530.4 to achieve the required FRL. Providing that required fire resistance levels are met, the building will comply with this clause. Details need to be provided on plans or in building specifications. Passive fire services report may also be provided to address requirements.

#### C4D17 Columns protected with lightweight construction to achieve an FRL

Purpose:

To prohibit columns with lightweight fire protection from lowering the fireresistance levels (FRLs) of other building elements.

Comments: This clause is not applicable to the development.

# **SECTION D - ACCESS AND EGRESS**

### Part D2 Provision for Escape

D2D1 Deemed-to-Satisfy Provisions

Purpose:

To clarify the application of Performance Solutions to Part D2 when DTS provisions are not met.

Comments: Defines how Performance Requirements are met for part D2.

# D2D2 Application of Part

Purpose:

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To exempt internal parts of sole-occupancy units in Class 2 and Class 3 buildings and Class 4 parts from the Part D1 Deemed-to-Satisfy Provisions.

Comments: Defines application of part D2.

#### D2D3 Number of exits required

Purpose:

To require the provision of sufficient exits to enable safe egress in case of an emergency.

Comments: The building complies with this clause.

#### D2D4 When fire-isolated stairs and ramps are required

Purpose:

To indicate when fire-isolated stairways and ramps are required to enable safe egress in case of a fire.

Comments: This clause is not applicable to the building.

### D2D5 Exit travel distances.

Purpose:

To maximise the safety of occupants by enabling them to be close enough to an exit to safely evacuate.

Comments: The building complies with this clause.

#### D2D6 Distance between alternative exits

Purpose:

To require that if an exit is inaccessible, access to any required alternative exit must be available within a reasonable distance and the access to an alternative exit is unaffected.

Comments: This clause is not applicable to the building.

D2D7 Height of exits, paths of travel to exits and doorways.

#### Purpose:

To require exits and paths of travel to an exit to have dimensions to allow all occupants to evacuate safely within a reasonable time.

#### Comments:

Height throughout exits must be not less than 2 m, except the unobstructed height of any doorway may be reduced to not less than 1980 mm. Room heights indicate that the building will comply with this clause.

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D2D8 Width of exits and paths of travel to exits.

Purpose:

To require exits and paths of travel to an exit to have dimensions to allow all occupants to evacuate safely within a reasonable time.

#### Comments:

Corridors and passageways or stairways serving as exits or path of travel to exits need to be at least 1 m wide. Details are required to be shown on plans.

NSW D2D9 Width of doorways in exits or paths of travel to exits

Purpose:

To require exits and paths of travel to an exit to have dimensions to allow all occupants to evacuate safely within a reasonable time.

Comments: Compliance is achievable during normal construction practice.

### D2D10 Exit width not to diminish in direction of travel

Purpose:

To require exits and paths of travel to an exit to have dimensions to allow all occupants to evacuate safely within a reasonable time.

Comments: The building complies with this clause.

#### D2D11 Determination and measurement of exits and paths of travel to exits

Purpose:

To require exits and paths of travel to an exit to have dimensions to allow all occupants to evacuate safely within a reasonable time.

Comments: Provides requirements for determining required widths.

D2D12 Travel via fire-isolated exits

Purpose:

To enable occupants to safely enter a fire-isolated exit which discharges to a safe location.

Comments: This clause is not applicable to the building.

# D2D13 External stairways or ramps in lieu of fire-isolated exits

Purpose:



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To detail the circumstances in which an external stairway or ramp can be provided instead of a fireisolated stairway or fire-isolated ramp.

Comments: This clause is not applicable to the building.

#### D2D14 Travel by non-fire-isolated stairways or ramps

Purpose:

To require that a person using a non-fire-isolated stairway or ramp be provided with a safe evacuation path.

Comments: This clause is not applicable to the building.

#### D2D15 Discharge from exits.

Purpose:

To require the safe discharge from an exit to a road or open space.

#### Comments:

Width of paths of travel to the road from the exits, including ramps and stairs, need to be at least 1000 mm and shown on construction certificate drawings.

#### **D2D16 Horizontal exits**

Purpose:

To detail how the installation of horizontal exits in a building is permitted as an alternative to a conventional exit.

Comments: This clause is not applicable to the building.

#### D2D17 Non-required stairways, ramps or escalators

Purpose:

To limit the spread of fire and smoke through unprotected openings for stairways, ramps, escalators and moving walkways.

Comments: This clause is not applicable to the building.

### D2D18 Number of persons accommodated.

Purpose:

To establish a methodology for calculating Deemed-to-Satisfy building populations which are deemed acceptable for use in the design and checking of applications when more accurate figures are not available.

Comments: Provides a methodology for establishing number of occupants.

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**D2D19** Measurement of distances

Purpose:

To identify the nearest part of an exit for the purposes of measuring travel distance.

Comments: Provides requirements for determining distance between building elements.

#### D2D20 Method of measurement

Purpose:

To specify the method of measuring the distance of travel to an exit in various situations.

Comments: Provides requirements for determining distance between building elements.

D2D21 Plant rooms, lift machine rooms and electricity network substations: Concession

#### Purpose:

To provide concessions for small plant rooms, lift motor rooms and Class 8 electricity network substations.

Comments: This clause is not applicable to the building.

#### D2D22 Access to lift pits

Purpose:

To provide requirements for lift pits and means for accessing lift pits.

Comments: This clause is not applicable to the building.

#### D2D23 Egress from primary schools

Purpose:

To provide requirements for egress of primary schools.

Comments: This clause is not applicable to the building.

# Part D3 Construction of Exits

### D3D1 Deemed-to-Satisfy Provisions

Purpose:

To clarify the application of Performance Solutions to Part D3 when DTS provisions are not met.

Comments: Defines how Performance Requirements are met for part D3.

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#### NSW D3D2 Application of Part

Purpose:

To clarify that Part D2 does not apply within a sole-occupancy unit in a Class 3 building (except for D3D14, D3D15(a), D3D17, D3D18, D3D19, D3D20, D3D22(5), D3D22(6), D3D23 and D3D29) nor within a sole occupancy unit in a Class 2 building or Class 4 part (except for D3D14, D3D15(a), D3D17, D3D18, D3D19, D3D20, D3D22(5), D3D22(6), D3D23 and D3D29)

Comments: Defines application of part D3.

#### D3D3 Fire-isolated stairways and ramps

Purpose:

To maintain a sufficient level of fire safety to enable the use of fire-isolated stairways and ramps during an emergency.

Comments: This clause is not applicable to the building.

#### D3D4 Non-fire-isolated stairways and ramps

Purpose:

To maintain a sufficient level of safety for the use of stairways and ramps during an emergency.

Comments: This clause is not applicable to the building.

### D3D5 Separation of rising and descending stair flights

#### Purpose:

To minimise the risk that an occupant mistakenly passes the lowest storey providing escape when evacuating.

Comments: This clause is not applicable to the building.

### D3D6 Open access ramps and balconies

#### Purpose:

To specify the requirements for natural ventilation of smoke from an open access ramp or balcony which forms part of a required exit system.

Comments: This clause is not applicable to the building.

#### D3D7 Smoke lobbies

Purpose:

To prevent smoke entering a fire-isolated exit.

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Comments: This clause is not applicable to the building.

D3D8 Installations in exits and paths of travel

#### Purpose:

To maximise the safety of occupants evacuating to or within exits by limiting the types of services which may be located in exits and paths of travel.

#### Comments:

Services must not be installed or accessed from fire isolated exits unless these are firefighting or detection equipment. Electrical and telecommunication services may be installed in corridors and lobbies leading to exits providing that these are located under a fire-protective covering or within a non-combustible enclosure with doors smoke sealed. Requirements need to be included in building specifications.

#### D3D9 Enclosure of space under stairs and ramps

Purpose:

To minimise the risk of a fire starting under a stairway and endangering the safe evacuation of the building occupants.

#### Comments:

Fire isolated stairs must not contain enclosures underneath. Where stairs form an enclosure, the ceiling and walls must have an FRL of at least 60/60/60. Plans indicate this clause is not applicable to the building.

#### D3D10 Width of required stairways and ramps

Purpose:

To establish requirements for the safe use of wide stairways and ramps.

Comments: This clause is not applicable to the building.

#### D3D11 Pedestrian ramps

Purpose:

To allow the use of a ramp as a required exit, instead of a stairway.

Comments: This clause is not applicable to the building.

#### D3D12 Fire-isolated passageways

Purpose:

To make a fire-isolated passageway safe from a fire outside.

Comments: This clause is not applicable to the building.



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#### D3D13 Roof as open space

Purpose:

To allow a roof of a building (or part of a building) to be used as a point of discharge from an exit.

Comments: This clause is not applicable to the building.

D3D14 Goings and risers

Purpose:

To enable the safe movement of people using stairways.

Comments: Compliance is achievable during normal construction practice.

D3D15 Landings

Purpose:

To enable the safe movement of people using stairways.

Comments: Compliance is achievable during normal construction practice.

#### NSW D3D16 Thresholds

Purpose:

To reduce the risk of a person tripping on an unseen step in a doorway.

Comments: Floor levels are not modified. Compliance is assumed.

#### D3D17 Barriers to prevent falls

Purpose:

To minimise the risk of a person falling from a roof, stairway, raised floor level or the like.

Comments: Compliance is achievable during normal construction practice.

# D3D18 Height of barriers

Purpose:

To minimise the risk of a person falling from a roof, stairway, raised floor level or the like.

Comments: Compliance is achievable during normal construction practice.

#### D3D19 Openings in barriers

Purpose:

To minimise the risk of a person falling from a roof, stairway, raised floor level or the like.

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Comments: Compliance is achievable during normal construction practice.

D3D20 Barrier climbability

Purpose:

To minimise the risk of a person falling from a roof, stairway, raised floor level or the like.

Comments: Compliance is achievable during normal construction practice.

# D3D21 Wire barriers

Purpose:

To minimise the risk of a person falling from a roof, stairway, raised floor level or the like.

Comments: Compliance is achievable during normal construction practice.

# D3D22 Handrails

# Purpose:

To provide handrails to a stairway or ramp, in corridors in Class 9a and 9c buildings and in corridors required to be accessible by people with a disability.

# Comments:

At least one handrail needs to be provided at all stairs. Non fire isolated exits and all other stairs must be provided with two handrails. Handrails need to be shown on construction certificate plans. Compliance with remaining requirements is achievable during normal construction practice.

D3D23 Fixed platforms, walkways, stairways and ladders

Purpose:

To provide appropriate access and egress from infrequently used areas.

Comments: This clause is not applicable to the building.

# D3D24 Doorways and doors

# Purpose:

To minimise the risk that a door may obstruct a person evacuating the building.

# Comments:

Where a sliding door is used at a required exit or in the path of travel to a fire isolated exit, the door must be able to be opened manually under a force of not more than 110 N, including power operated doors in case there is a malfunction or failure of the power source. Compliance is achievable during normal construction practice.

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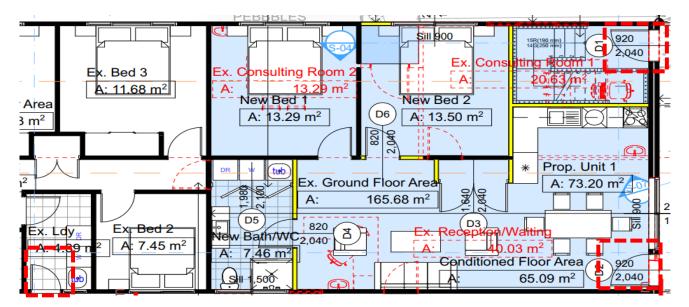
#### D3D25 Swinging doors

#### Purpose:

To minimise the risk that a door may obstruct a person evacuating the building.

#### Comments:

Plans show doors swing against egress on ground level, show below. A modification of the design or performance solution is required to address this deviation



#### D3D26 Operation of latch

Purpose:

To minimise the risk that evacuation will be delayed by the operation of a door latch.

Comments: Compliance is achievable during normal construction practice.

#### D3D27 Re-entry from fire-isolated exits

Purpose:

To minimise the risk that a person becomes trapped in a fire-isolated exit.

Comments: This clause is not applicable to the building.

#### D3D28 Signs on doors

Purpose:

To require the use of signs warning against impairing certain doors.

Comments: This clause is not applicable to the building.

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# D3D29 Protection of openable windows

Purpose:

To limit the risk of a person (especially a young child) falling through an openable window.

Comments: Compliance is achievable during normal construction practice.

D3D30 Timber stairways: Concession

Purpose:

To provide a concession to D3.3 for timber stairways to be used in fire isolated exits.

Comments: This clause is not applicable to the building.

NSW D3D31 Doorways in paths of travel to an entertainment venue

Purpose:

To minimise the risk that a door may obstruct a person evacuating the building.

Comments: This clause is not applicable to the building.

# Part D4 Access for People with a Disability

D4D1 Deemed-to-Satisfy Provisions

Purpose:

To clarify the application of Performance Solutions to Part D4 when DTS provisions are not met.

Comments: Defines how Performance Requirements are met for part D4.

D4D2 General building access requirements

Purpose:

To specify when access for people with a disability must be provided to buildings and parts of buildings.

Comments:

The class 2 part of the building is required to be accessible at common areas and to the doorway of each sole occupancy units on floors provided with a lift. Compliance is achievable when the provisions of D4D3 to D4D13 are achieved.

# D4D3 Access to buildings

Purpose:

To specify the extent of access for people with a disability that must be provided.

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#### Comments:

An accessway needs to be provided to a building required to be accessible. Requirements for accessway (continuous accessible path of travel) are defined in AS 1428.1-2009. Assessment by an access consultant is recommended.

#### D4D4 Parts of buildings to be accessible

Purpose:

To specify the requirements for accessways within buildings which must be accessible.

Comments:

In a building required to be accessible, accessways, ramps and stairways need to comply with requirements listed in AS 1428.1-2009. Assessment by an access consultant is recommended.

#### **D4D5** Exemptions

Purpose:

To provide exemptions to the Deemed-to-Satisfy Provisions for access by people with a disability.

Comments: This clause is not applicable to the building.

#### D4D6 Accessible carparking

Purpose:

To clarify the minimum Deemed-to-Satisfy Provisions for accessible carparking.

Comments:

Any parking space for persons with disability needs not be identified with signage as there are not more than 5 parking spaces on the allotment. Assessment by an access consultant is recommended.

#### D4D7 Signage

#### Purpose:

To assist people with a disability to easily identify the facilities, services, exits and features provided in a building.

Comments: This clause is not applicable to the building

#### **D4D8** Hearing augmentation

Purpose:

To assist people with a hearing impairment to be made aware of communications associated with a building's use.

Comments: This clause is not applicable to the building.



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#### D4D9 Tactile indicators

#### Purpose:

To assist blind or vision impaired people to avoid hazardous situations.

#### Comments:

Tactile Ground Surface Indicators (TGSI) are required at all non-fire isolated stairs and ramps and need to comply with AS/NZS 1428.4.1:2009. Assessment by an access consultant is recommended.

D4D10 Wheelchair seating spaces in Class 9b assembly buildings

#### Purpose:

To specify the requirements for wheelchair seating spaces in Class 9b assembly buildings.

Comments: This clause is not applicable to the building.

#### D4D11 Swimming pools

Purpose:

To specify the requirements for accessible swimming pools.

Comments: This clause is not applicable to the building.

#### D4D12 Ramps

Purpose:

To specify the requirements for ramps forming part of an accessway.

Comments: This clause is not applicable to the building.

#### D4D13 Glazing on an accessway

Purpose:

To specify the requirements for glazing within an accessway.

Comments: This clause is not applicable to the building.

# SECTION E - SERVICES AND EQUIPMENT

# PART E1 Fire Fighting Equipment

#### E1D1 Deemed-to-Satisfy Provisions

Purpose:



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E1D7 Where sprinklers are required: Class 3 building used as a residential

To clarify the application of Performance Solutions to Part E1 when DTS provisions are not met.

Comments: Defines how Performance Requirements are met for part E1.

# E1D2 Fire hydrants

# Purpose:

To require the installation of suitable fire hydrant systems to facilitate the fire brigade's firefighting operations [2]

Comments: This clause is not applicable to the building.

# E1D3 Fire hose reels

# Purpose:

To require the installation of suitable fire hose reel systems to enable, where appropriate, a building's occupants to undertake initial attack on a fire.

Comments: This clause is not applicable to the building.

# E1D4 Sprinklers

Purpose:

Sprinkler system is required to be comply with Specification 17 and Specification 18 as applicable.

Comments: This clause is not applicable to the building.

# E1D5 Where sprinklers are required: all classifications

# Purpose:

To require the installation of suitable fire sprinkler systems where necessary to address specific hazards.

Comments: This clause is not applicable to the building.

# E1D6 Where sprinklers are required: Class 2 and 3 buildings other than residential care buildings

Purpose:

To require the installation of suitable fire sprinkler systems where necessary to address specific hazards.

Comments: This clause is not applicable to the building.

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#### Purpose:

To require the installation of suitable fire sprinkler systems where necessary to address specific hazards.

Comments: This clause is not applicable to the building.

# E1D8 Where sprinklers are required: Class 6 building

Purpose:

To require the installation of suitable fire sprinkler systems where necessary to address specific hazards.

Comments: This clause is not applicable to the building.

# E1D9 Where sprinklers are required: Class 7a building, other than an open-deck carpark

#### Purpose:

To require the installation of suitable fire sprinkler systems where necessary to address specific hazards.

Comments: This clause is not applicable to the building.

E1D10 Where sprinklers are required: Class 9a health-care building used as a residential care building, Class 9c buildings

Purpose:

To require the installation of suitable fire sprinkler systems where necessary to address specific hazards.

Comments: This clause is not applicable to the building

# E1D11 Where sprinklers are required: Class 9b buildings

Purpose:

To require the installation of suitable fire sprinkler systems where necessary to address specific hazards.

Comments: This clause is not applicable to the building

# E1D12 Where sprinklers are required: additional requirements

Purpose:

To require the installation of suitable fire sprinkler systems where necessary to address specific hazards.

Comments: This clause is not applicable to the building

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# E1D13 Where sprinklers are required: occupancies of excessive hazard

#### Purpose:

To require the installation of suitable fire sprinkler systems where necessary to address specific hazards.

Comments: This clause is not applicable to the building.

#### E1D14 Portable fire extinguishers

#### Purpose:

To require the installation of suitable portable fire extinguishers, where necessary, to address specific hazards.

Comments:

This clause is not applicable to the building.

# E1D15 Fire control centres

Purpose:

To require the provision of suitable fire control centres to facilitate fire brigade operations.

Comments: This clause is not applicable to the building.

# E1D16 Fire precautions during construction

# Purpose:

To require adequate firefighting equipment within a building during its construction.

#### Comments:

Not less than one fire extinguisher to suit Class A, B and C fires and electrical fires must be provided on each storey at all times during construction. Compliance can be achieved during construction.

# E1D17 Provision for special hazards

Purpose:

To require the installation of additional fire safety measures where special hazards exist.

Comments: This clause is not applicable to the building.

# PART E2 Smoke Hazard Management

E2D1 Deemed-to-Satisfy Provisions

Purpose:



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To clarify the application of Performance Solutions to Part E2 when DTS provisions are not met.

Comments: Defines how Performance Requirements are met for part E2.

E2D2 Application of requirements Purpose: To specify when E2.2 and E2.3 do not apply.

E2D3 General requirements

Comments: Defines application of part E2

Purpose: To specify the requirements for minimising the smoke risks.

Comments: This clause is not applicable to the building.

E2D4 Fire-isolated exits

Purpose: To specify the requirements for minimising the smoke risks for certain buildings.

Comments: This clause is not applicable to the building as the effective height is less than 25 m.

E2D5 Buildings more than 25 m in effective height: Class 2 and 3 buildings and Class 4 part of a building

Purpose: To specify the requirements for minimising the smoke risks for certain buildings.

Comments: This clause is not applicable to the building.

E2D6 Buildings more than 25 m in effective height: Class 5, 6, 7b, 8 or 9b buildings

Purpose: To specify the requirements for minimising the smoke risks for certain buildings.

Comments: This clause is not applicable to the building.

E2D7 Buildings more than 25 m in effective height: Class 9a buildings

Purpose: To specify the requirements for minimising the smoke risks for certain buildings.

Comments: This clause is not applicable to the building.

E2D8 Buildings not more than 25 m in effective height: Class 2 and 3 buildings and Class 4 part of a building

Purpose: To specify the requirements for minimising the smoke risks for certain buildings.

Comments:

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#### Automatic fire detection and alarm system – smoke alarm system must be installed throughout the Class 2 part. Location of smoke alarms needs to be shown on construction certificate plans.

E2D9 Buildings not more than 25 m in effective height: Class 5, 6, 7b, 8 and

Purpose: To specify the requirements for minimising the smoke risks for certain buildings.

Comments: This clause is not applicable to the building. Return to summary E2D10 Buildings not more than 25 m in effective height: large isolated buildings subject to C3D4 Purpose: To specify the requirements for minimising the smoke risks for certain buildings. Comments: This clause is not applicable to the building. Return to summary E2D11 Buildings not more than 25 m in effective height: Class 9a and 9c buildings Purpose: To specify the requirements for minimising the smoke risks for certain buildings. Comments: This clause is not applicable to the building. E2D12 Class 7a buildings Return to summary

E2D14 Class 6 buildings – in fire compartments more than 2000 m<sup>2</sup>: Class 6 building (not containing an enclosed common walkway or mall serving more than one Class 6 sole-occupancy unit)

Purpose: To specify the requirements for minimising the smoke risks for certain buildings.

Comments: This clause is not applicable to the building.

E2D15 Class 6 buildings – in fire compartments more than 2000 m<sup>2</sup>: Class 6 building (containing an enclosed common walkway or mall)

Purpose: To specify the requirements for minimising the smoke risks for certain buildings.

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9b buildings

Purpose: To specify the requirements for minimising the smoke risks for certain buildings.

Comments: This clause is not applicable to the building.

E2D13 Basements (other than Class 7a buildings)

Purpose: To specify the requirements for minimising the smoke risks for certain buildings.

Comments: This clause is not applicable to the building.

Comments: This clause is not applicable to the building.

NSW E2D16 Class 9b – assembly buildings: all

Purpose: To specify the requirements for minimising the smoke risks for certain buildings.

Comments: This clause is not applicable to the building.

NSW E2D17 Class 9b – assembly buildings: discotheques and the like Purpose:

To specify the requirements for minimising the smoke risks for certain buildings.

Comments: This clause is not applicable to the building.

NSW E2D18 Class 9b – assembly buildings: exhibition halls, museums and art galleries

Purpose: To specify the requirements for minimising the smoke risks for certain buildings.

Comments: This clause is not applicable to the building.

NSW E2D19 Class 9b – assembly buildings: other assembly buildings

Purpose:

To specify the requirements for minimising the smoke risks for certain buildings.

Comments: This clause is not applicable to the building.

E2D20 Class 9b assembly buildings: other assembly buildings (not listed in E2D16 to E2D19)

Purpose: To specify the requirements for minimising the smoke risks for certain buildings.

Comments: This clause is not applicable to the building.

E2D21 Provision for special hazards

Purpose:

To state that some special hazards may require additional smoke hazard management measures.

Comments: This clause is not applicable to the building.

# **PART E3 Lift Installations**

This part is not applicable to the building

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# Part E4 Visibility in an Emergency, Exit Signs and Warning Systems

# E4D1 Deemed-to-Satisfy Provisions

# Purpose:

To clarify the application of Performance Solutions to Part E4 when DTS provisions are not met.

Comments: Defines how Performance Requirements are met for part E4.

# E4D2 Emergency lighting requirements

# Purpose:

To minimise the risk of death or injury to occupants during an emergency because of an inability to see their way along an exit path of travel.

Comments: This clause is not applicable to the building.

# E4D3 Measurement of distance

Purpose:

To clarify how distance must be measured for the purposes of emergency lighting required under E4.2.

Comments: Defines the method for measuring distance.

# E4D4 Design and operation of emergency lighting

# Purpose:

To specify how an emergency lighting system must operate, to minimise the risk of death or injury to occupants during an emergency because of an inability to see their way along an exit path of travel.

Comments: This clause is not applicable to the building.

# E4D5 Exit signs

# Purpose:

To minimise the risk of death or injury to occupants during an emergency because of an inability to find an exit.

Comments: This clause is not applicable to the building.

# NSW E4D6 Direction signs

Purpose:



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To minimise the risk of death or injury to occupants during an emergency because of an inability to find their way along an exit path of travel.

Comments: This clause is not applicable to the building.

# E4D7 Class 2 and 3 buildings and Class 4 parts: Exemptions

Purpose:

To specify some circumstances where risk levels do not warrant compliance with E4.5.

Comments:

Provides a concession for Class 2 and 3 buildings, not applied to this building.

# E4D8 Design and operation of exit signs

Purpose:

To specify how exit signs must be designed and operate, to minimise the risk of death or injury to occupants during an emergency because of an inability to find an exit.

Comments: This clause is not applicable to the building.

# E4D9 Emergency warning and intercom systems

Purpose:

To minimise the risk of death or injury to occupants through lack of knowledge that an emergency exists or an evacuation is required.

Comments: This clause is not applicable to the building.

# SECTION F - HEALTH AND AMENITY

# Part F1 Surface Water Management, Rising Damp and External Waterproofing

# F1D1 Deemed-to-Satisfy Provisions

Purpose:

To clarify the application of Performance Solutions to Part F1 when DTS provisions are not met.

Comments: Defines how Performance Requirements are met for part F1.

# F1D2 Application of Part

Purpose:

To clarify the application of this part in relation to ground floor installations and certain roof.

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Comments: Defines application of part F1.

#### F1D3 Stormwater drainage

Purpose:

Requires compliance with AS/NZS 3500.3 to achieve compliance with the Performance Requirements

Comments:

Stormwater design to be provided by registered engineer at the construction certificate stage.

#### F1D4 Exposed Joints

#### Purpose:

Requires compliance with AS 4654.2 to achieve compliance with the Performance Requirements

Comments: Details to be provided in building specifications

#### F1D5 External waterproofing membranes

#### Purpose:

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.

Comments: Diagrams of waterproofing demonstrating compliance need to be provided on plans

#### F1D6 Damp-proofing

#### Purpose:

To prevent moisture from ground penetrating the building which could cause:

- unhealthy and dangerous conditions or loss of amenity for occupants or;
- dampness and deterioration of building elements.

Comments: Details to be provided in building specifications at the construction certificate stage

#### F1D7 Damp-proofing of floors on the ground

#### Purpose:

To prevent moisture from ground penetrating the building which could cause:

- unhealthy and dangerous conditions or loss of amenity for occupants or;
- dampness and deterioration of building elements.

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Comments: Details to be provided in building specifications at the construction certificate stage

#### F1D8 Subfloor ventilation

#### Purpose:

To prevent raising dampness which could cause:

- unhealthy and dangerous conditions or loss of amenity for occupants or;
- dampness and deterioration of building elements.

Comments: This clause is not applicable to the building.

#### Part F2 Wet areas and overflow protection

#### F2D1 Deemed-to-Satisfy Provisions

Purpose:

To clarify the application of Performance Solutions to Part F2 when DTS provisions are not met.

Comments: Defines how Performance Requirements are met for part F2.

#### F2D2 Wet area construction

#### Purpose:

To prevent water from any bathroom or laundry in Class 2 and Class 3 buildings or Class 4 parts, as well as showers in other building classifications, by requiring areas to be water resistant or waterproof in accordance with Specification 26 and comply with AS 3740.

Comments: Details demonstrating compliance need to be provided on construction certificate plans.

#### F2D3 Rooms containing urinals

Purpose:

Provides requirements when urinals are installed.

Comments: This clause is not applicable to the building.

#### F2D4 Floor wastes

#### Purpose:

To prevent water from any bathroom or laundry in Class 2 and Class 3 buildings or Class 4 parts from penetrating any sole-occupancy unit or public space, which is in a level below, which could cause:

- unhealthy and dangerous conditions or loss of amenity for occupants or;
- dampness and deterioration of building elements.

Comments: Details demonstrating compliance need to be provided on construction certificate plans.

# Part F3 Roof and wall cladding

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#### F3D1 Deemed-to-Satisfy Provisions

Purpose:

To clarify the application of Performance Solutions to Part F3 when DTS provisions are not met.

Comments: Defines how Performance Requirements are met for part F3.

#### F3D2 Roof coverings

#### Purpose:

To prevent water penetration of roofs which could cause:

- unhealthy and dangerous conditions or loss of amenity for occupants or;
- dampness and deterioration of building elements.

#### Comments:

Compliance is achievable during normal construction practice. Details need to be provided in building specifications at the construction certificate stage.

#### F3D3 Sarking

Purpose:

To prevent water penetration of roofs which could cause:

- unhealthy and dangerous conditions or loss of amenity for occupants or;
- dampness and deterioration of building elements.

#### Comments:

Compliance is achievable during normal construction practice. Details need to be provided in building specifications at the construction certificate stage

F3D4 Glazed assemblies

#### Purpose:

To prevent water penetration through windows, which could cause:

- unhealthy and dangerous conditions or loss of amenity for occupants or;
- dampness and deterioration of building elements.

#### Comments:

Compliance is achievable during normal construction practice. Details need to be provided in building specifications at the construction certificate stage

#### F3D5 Wall cladding

Purpose:

Specifies the materials that must be used for wall construction when external cladding is present.

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Comments:

Compliance is achievable during normal construction practice. Details need to be provided in building specifications at the construction certificate stage.

# Part F4 Sanitary and Other Facilities

F4D1 Deemed-to-Satisfy Provisions

Purpose:

To clarify the application of Performance Solutions to Part F4 when DTS provisions are not met.

Comments: Defines how Performance Requirements are met for part F4.

#### F4D2 Facilities in residential buildings

Purpose:

To specify the minimum acceptable sanitary, bathing, laundry and cooking facilities required in Class 2 buildings, Class 3 buildings (for residents only), Class 9c buildings (for residents only) and Class 4 parts of a building.

Comments: The building complies with this clause

#### F4D3 Calculation of number of occupants and facilities

Purpose:

To provide a method for calculating the number of occupants and facilities for the purposes of Part F2.

Comments: Provides a method for determining the number of occupant and facilities

#### F4D4 Facilities in Class 3 to 9 buildings

Purpose:

To specify the minimum acceptable sanitary, bathing, laundry and cooking facilities required in Class 3 buildings (for employees only) and in Class 5-9 buildings.

Comments: This clause is not applicable to the building.

#### F4D5 Accessible sanitary facilities

Purpose:

To specify the construction of acceptable sanitary and bathing facilities required for people with a disability in Class 1b, Class 2, Class 3, Class 5-9 and Class 10a buildings.

Comments: This clause is not applicable to the building.

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# **F4D6** Accessible unisex sanitary compartments Purpose:

To specify the minimum number of accessible unisex sanitary **compartments** required for people with a disability in Class 1b, Class 2, Class 3, Class 5-9 and Class 10a buildings.

Comments: This clause is not applicable to the building.

# **F4D7** Accessible unisex showers Purpose:

To specify the minimum number of accessible unisex showers required for people with a disability in Class 1b, Class 2, Class 3, Class 5-9 and Class 10a buildings.

Comments: This clause is not applicable to the building.

# F4D8 Construction of sanitary compartments

Purpose:

To specify the construction expected to provide an acceptable level of privacy in toilets while facilitating assistance in an emergency.

Comments: Compliance is achievable during construction.

# F4D9 Interpretation: Urinals and washbasins

Purpose:

To clarify what is meant by the expressions 'urinal' and 'washbasin'.

Comments: Note

#### F4D10 Microbial (legionella) control

Purpose:

To make sure that hot water, warm water and cooling water systems in certain facilities minimises the risk of a major disease outbreak.

Comments: This clause is not applicable to the building.

#### F4D11 Waste management

Purpose:

To require adequate devices in Class 9a and 9c buildings containing ward areas or bedrooms for the emptying of containers of sewage and dirty water.

Comments: This clause is not applicable to the building.



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#### F4D12 Accessible adult change rooms

Purpose:

To specify the minimum number of accessible adult change facilities required for people with a disability in Class 1b, Class 2, Class 3, Class 5-9 and Class 10a buildings.

Comments: This clause is not applicable to the building.

# Part F5 Room Heights

F5D1 Deemed-to-Satisfy Provisions

Purpose:

To clarify the application of Performance Solutions to Part F5 when DTS provisions are not met.

Comments: Defines how Performance Requirements are met for part F5.

#### F5D2 Height of rooms and other spaces

Purpose:

To establish a range of reasonable ceiling heights suitable for particular rooms and spaces.

Comments: Drawings show complies with this clause.

# Part F6 Light and Ventilation

F6D1 Deemed-to-Satisfy Provisions

Purpose:

To clarify the application of Performance Solutions to Part F6 when DTS provisions are not met.

Comments: Defines how Performance Requirements are met for part F6.

#### F6D2 Provision of natural light

Purpose:

To specify the rooms in Classes of buildings where natural light is required.

Comments: The building complies with this clause.

#### F6D3 Methods and extent of natural lighting

#### Purpose:

To specify the requirements for the size and location of windows, including roof lights to provide required natural light.

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### Comments:

Plans indicate that the new work will not comply with this clause at Unit 1 living room. One window of 2.52m<sup>2</sup> is provided to a room of 40.03m<sup>2</sup>, where approx. 4m<sup>2</sup> combined window size will be required. Plans also show one window at the living room/kitchen at Unit 3 that is 4.8m<sup>2</sup> provided to a room of 48.98m<sup>2</sup>, where approx. 5m<sup>2</sup> combined window size will be required. A modification of the design or performance solution is required to address these deviations.

#### F6D4 Natural light borrowed from adjoining room

Purpose:

To allow natural light to be "borrowed" from an adjoining room.

Comments: This clause is not applicable to the building.

#### F6D5 Artificial lighting

Purpose:

To specify the location and other requirements for required artificial lighting.

Comments:

Artificial lighting must comply with AS1680.0. Compliance is achievable during construction.

## NSW F6D6 Ventilation of rooms

Purpose:

To state the natural and mechanical ventilation requirements for rooms and buildings.

Comments:

Where natural ventilation in accordance with F6D7 is not possible, a mechanical ventilation or air conditioning system complying with AS 1668.2 and AS/NZS 3666.1 is required. Refer F6D7.

# F6D7 Natural ventilation

Purpose:

To specify the requirements for the size and location of windows providing required natural ventilation.

Comments:

See clause F6D7 above. Windows are not sufficiently large to provide natural ventilation. A modification of the design or performance solution is required to address these deviations.

F6D8 Ventilation borrowed from adjoining room

Purpose:

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To allow natural ventilation to be "borrowed" from adjoining rooms.

Comments: This clause is not applicable to the building.

F6D9 Restriction on location of sanitary compartments

## Purpose:

To minimise the impact of unpleasant smells.

#### Comments:

A sanitary compartment must not open directly into a kitchen or pantry, Refer to F6D10.

F6D10 Airlocks

#### Purpose:

To specify requirements for airlocks or mechanical ventilation where toilets open directly into other rooms.

#### Comments:

Where compliance with F6D9 is not achieved, access to the sanitary facilities must be by an airlock, hallway or other room with a floor area of not less than  $1.1 \text{ m}^2$  and fitted with self-closing doors at all access doorways; or the sanitary compartment must be provided with mechanical exhaust ventilation Details need to be provided on specifications at the construction certificate stage.

#### F6D11 Carparks

Purpose:

To specify ventilation requirements for carparks, to ensure car fumes are adequately removed.

Comments: This clause is not applicable to the building.

#### F6D12 Kitchen local exhaust ventilation

Purpose:

To minimise the spread of cooking odours and fire from commercial kitchens.

Comments: This clause is not applicable to the building.

# Part F7 Sound Transmission and Insulation

# F7D1 Deemed-to-Satisfy Provisions

#### Purpose:

To clarify the application of Performance Solutions to Part F7 when DTS provisions are not met.

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Comments: Defines how Performance Requirements are met for part F7.

### F7D2 Application of Part

Purpose:

To clarify that Part F7 only applies to Class 2, Class 3 and Class 9c buildings.

Comments: Note.

F7D3 Determination of airborne sound insulation ratings

Purpose:

To clarify the means of determining the airborne sound insulation rating ( $R_w$ ,  $R_w + C_{tr}$ ).

Comments:

A construction must have the required values for  $R_w$  and  $R_w + C_{tr}$  determined in accordance with AS/NZS ISO 717.1 or comply with Specification 28. Discussed further under F7D5 and F7D6.

F7D4 Determination of impact sound insulation ratings

Purpose:

To clarify the means of determining the impact sound insulation ratings.

Comments:

A floor must have the required value for weighted normalised impact sound pressure level ( $L_{n,w}$ ) determined in accordance with AS/NZS ISO 717.2 or comply with Specification 28. Discussed further under F7D5 and F7D6.

A wall required to have impact sound insulation must be of discontinuous construction for Class 2 or 3 building, refer F7D6.

F7D5 Sound insulation rating of floors

Purpose:

To minimise the transmission of sound through floors separating sole-occupancy units, and floors separating sole-occupancy units and certain types of space.

Comments:

A floor separating a sole occupancy unit (SOU) from another SOU or public area, lift shaft, plant room or different classification must have  $R_w + C_{tr}$  (airborne) not less than 50 and  $L_{n,w}$  (impact) not more than 62. Details showing compliance with Specification 28 need to be shown on construction certificate plans. Alternatively, certification by an acoustic consultant confirming that the proposed construction will achieve compliance is required.

F7D6 Sound insulation rating of walls

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### Purpose:

To minimise the transmission of sound through walls separating sole-occupancy units and walls separating sole-occupancy units and certain types of spaces.

#### Comments:

A wall separating a sole occupancy unit (SOU) from another must have  $R_w + C_{tr}$  (airborne) not less than 50 and  $R_w$  (airborne) not less than 50 if it separates an SOU from public area including stairway and lift shaft, plant room or different classification.

A wall in a Class 2 building required to have impact sound insulation rating must be of discontinuous construction when required to have impact sound insulation rating, i.e. separates:

- a bathroom, sanitary compartment, laundry or kitchen in one sole-occupancy unit from a habitable room (other than a kitchen) in an adjoining unit;
- a sole-occupancy unit from a plant room or lift shaft

A door assembly in a wall that separates a sole-occupancy unit from a stairway, public corridor, public lobby or the like, must have an  $R_w$  rating of not less than 30.

Details showing compliance with Specification 28 need to be shown on construction certificate plans. Alternatively, certification by an acoustic consultant confirming that the proposed construction will achieve compliance is required.

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#### F7D7 Services

#### Purpose:

To minimise the transmission of sound that may arise from services that pass through more than one sole-occupancy unit.

#### Comments:

A duct, waste or a water supply pipe must be separated from the rooms of a SOU by construction must have  $R_w + C_{tr}$  not less than 40 if the room is a habitable room and not less than 25 if the room is a kitchen or a non-habitable room. Compliance can be achieved during construction. Requirements need to be shown in building specifications.

#### F7D8 Isolation of pumps

Purpose:

To minimise transmission of sound from a pump [2]

#### Comments:

Flexible couplings must be used at the point of connection between service pipes and pumps. Compliance can be achieved during construction. Requirements need to be shown in building specifications.

# Part F8 Condensation management

F8D1 Deemed-to-Satisfy Provisions

Purpose:

To clarify the application of Performance Solutions to Part F8 when DTS provisions are not met.

Comments: Defines how Performance Requirements are met for part F8.

F8D2 Application of Part

Purpose:

To clarify that Part F8 only applies to Class 2 buildings and Class 4 part of a building.

Comments: Note.

F8D3 External wall construction

Purpose:

To set out the requirements relating to pliable building membranes that are installed as a sarking.

Comments:

Pliable building membrane in an external wall must comply with AS/NZS 4200.1 and be installed in accordance with AS4200.2. The membrane must be located on the exterior side of the primary insulation layer and must be separated from water sensitive materials by a drained cavity. Details to be provided in building specifications to show that compliance will be achieved.

F8D4 Flow rate and discharge of exhaust fans

Purpose: To reduce risk of condensation associated with mechanical ventilation [2]

Comments:

An exhaust system installed in a kitchen or a bathroom must have a minimum flowrate of 25 l/s for a bathroom or a sanitary compartment and 40 l/s for a kitchen or laundry. Exhaust must be discharged via shaft or duct to outdoor air. Exhaust from a bathroom or a sanitary compartment may be discharged to a ventilated roof space.

Details need to be provided on mechanical plans for construction certificate to address these requirements.

F8D5 Ventilation of roof spaces

Purpose: To set out the ventilation requirements relating to roof spaces [2]

Comments: This clause applies when exhaust is discharged into a roof space.

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# **SECTION G – ANCILLARY PROVISIONS**

### Part G1 Minor Structures and Components

NSW G1D5 Provision for cleaning windows

Purpose: To set out requirements for window cleaning in buildings of 3 storeys or more [2]

Comments: This clause is not applicable to the building.

# Part G2 Boilers, Pressure Vessels, Heating Appliances, Fireplaces, Chimneys and Flues

This part is not applicable to the building

#### Part G3 Atrium Construction

This part is not applicable to the building

#### Part G4 Construction in Alpine Areas

This part is not applicable to the building

#### Part G5 Construction in Bushfire Prone Areas

This part is not applicable to the building

#### Part G6 Occupiable Outdoor Areas

This part is not applicable to the building

# Part G7 Livable Housing Design

This part is not applicable to the building.

# 6. CONCLUSION

A review of the status of BCA compliance for the proposed development at 1289 Pittwater Road Narrabeen NSW 2101 was provided in this report.

The majority of the works, with minor exceptions, can be carried out in accordance with BCA Deemed-to-Satisfy DTS requirements. It is recommended that a modification of the design or performance solutions are considered to address deviations from DTS requirements C4D3, C4D5, D3D25, F6D3 & F6D7.

It is recommended an access report is obtained at the construction certificate stage to clarify details regarding compliance with Part D4, clauses F4D5, F4D6 and also Part E3 where applicable. The review also identified several occasions where additional details or specifications need to be provided on architectural, electrical, hydraulic or fire services plans to ensure full compliance with the Deemed-to-Satisfy requirements of the BCA.

# 7. REFERENCES

Volume 1 of the National Construction Code 2022 (NCC 2022) has been referenced throughout this Report. References to NCC 2022 are not listed within the body of the Report, however the Report is substantially based upon the requirements of that document and citations of NCC 2022 may appear in multiple occasions within the Report.

List of referenced and relevant documents:

- [1] National Construction Code Series 2022 Vol 1 Building code of Australia 2022 Vol 1
- [2] (This line remains blank)
- [3] Disability (Access to premises Buildings) Standards 2010
- [4] NSW Environmental Planning and Assessment Regulation 2021

[5] NSW Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021