

BUILDING CODE OF AUSTRALIA 2022 COMPLIANCE CAPABILITY REPORT

35 INGLIS STREET, MUDGEE

Prepared for: Terri-Ann Box
Project No.: 23/0519
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1.0. DOCUMENT HISTORY AND DRAWING SCHEDULE

1.1. Document History

Date	Issue	Status	Prepared by	Reviewed by
31.10.2023	Issue 1.0	Final Version 1.0	Tim O'Reilly BDC 3184	Robin Howard BDC 0802

1.2. Drawing Schedule

Drawing By	Project No.	Drawing No.	Drawing Title	Issue
Barnson	-	8767-C01	Site Plan	-
Nordon Jago	-	8767-C02	Basement Floor Plan – Part 2	-
Nordon Jago	-	8767-C03	Proposed Elevations & Sections	-

2.0. EXECUTIVE SUMMARY

The development being the subject of this report relates to a single storey industrial building comprising four separate tenancies

This report has been prepared for Terri-Ann Box and will be used to assist in ensuring the proposal is **capable** of complying with the current BCA.

The following potential non-compliances have been identified with the Deemed-to-Satisfy Provisions of the BCA. It is proposed that these non-compliances will be dealt with by justification against the Performance Requirements of the BCA in accordance with A2G2.

C2D2 – Type of Construction

If the external wall located within 3m of the eastern boundary does not achieve an FRL as required under BCA Specification 5, a fire-engineered Performance Solution may be required

D3D5 – Swinging Doors

A fire-engineered Performance Solution may be required to address the inward swinging exit doors, they cannot open in the direction of egress.

F4D5 – Accessible bathrooms

If the bathrooms cannot accommodate a person with a mobility impairment by complying with the requirements of AS 1428.1-2009, a Performance Solution prepared by an Access Consultant, may be required.

3.0. INTRODUCTION

3.1. Location and Description

The development being the subject of this Report is located at 35 Inglis Street, Mudgee. The property is bounded by adjoining properties to the east and west, Inglis Street to the north and a rail corridor to the south.



The proposed development is made up of a single storey industrial building comprising four separate tenancies.

3.2. Report Purpose

This Report has been prepared by Building Certificates Australia Pty Ltd as an indicative Building Code of Australia 2022 (BCA) compliance review of the proposed development. The assessment has been undertaken against the Deemed-To-Satisfy (DTS) provisions of the BCA relating to Parts C, D, E, F and G (as applicable) only. This review is provided to assist in ensuring the building is capable of complying with the BCA.

3.3. Basis of Report

This Report is based upon:

- A desktop review of the documentation submitted for assessment (refer to drawing schedule section 1.2); and
- The Deemed-to-Satisfy provisions of Parts C, D, E, F and G (as applicable) of the BCA.

3.4. Referenced Documents

The following documentation was relied upon when preparing this Report:

- The performance and deemed-to-satisfy provisions of the 2022 Building Code of Australia, Volume One (BCA) incorporating the NSW Appendices where applicable.
- Guide to the National Construction Code Volume 1.

3.5. Limitations and Exclusions

The limitations and exclusions of this Report are as follows:

- This Report is based on a review of the referenced documents only.
- No assessment has been undertaken with respect to the Disability Discrimination Act 1992 (DDA). Separate advice from an appropriately qualified access consultant should be obtained by the client to be satisfied that their obligations under the DDA have been addressed.

Please note that whilst the BCA specifies a minimum standard of compliance with AS1428.1 and Part D4 of the BCA for access and facilities for people with disabilities, compliance with such requirements may not necessarily preclude the possibility of a future complaint made under the Disability Discrimination Act 1992 (DDA). The DDA is a complaint-based legislation and is presently not identified by the State Building Codes and Regulations. In this regard the client should be satisfied that their obligations under the DDA have been addressed.

- This Report does not address issues in relation to the following:
 - a) The structural adequacy of the building including the Fire Resistance Levels (FRL's) of any existing building elements (unless specifically referred to).

- b) The design, maintenance or operation of any existing electrical, mechanical, hydraulic or fire protection services.
 - c) Environmental Planning and Assessment Act and Regulations.
 - d) Local Government Act and Regulations.
 - e) Workplace Health and Safety Act and Regulations.
 - f) SafeWork requirements.
 - g) Requirements of other Regulatory Authorities including, but not limited to, Telstra, Sydney Water, Electricity Supply Authority, RMS, Council and the like.
 - h) Disability Discrimination Act.
 - i) Construction Safety Act.
 - j) Any previous conditions of Development Consent issued by the relevant Local Council.
- Building Certificates Australia Pty Ltd cannot guarantee acceptance of this Report by the Local Council, Fire and Rescue NSW or other approval authorities.
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Compliance with the Building Code of Australia

The BCA is a performance-based document whereby compliance can be achieved by satisfying the Deemed-to-Satisfy (DtS) requirements, or by formulating a Performance Solution to address the relevant Performance Requirements (or a combination of both).

As specified above, the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021 requires all new building work to comply with the relevant requirements of the BCA (as in force at the time the application for the CC is made). This means that the plans and documentation submitted with the CC application must demonstrate full compliance with the relevant provisions of the BCA.

Disability (Access to Premises — Buildings) Standards 2010

The Disability (Access to Premises — Buildings) Standard 2010 does not apply to this building as it is considered to be entirely new. Rather, disabled access is dealt with under BCA Part D4.

3.6. Terminology

- *Building Code of Australia* - Document published on behalf of the Australian Building Codes Board. The BCA is a uniform set of technical provisions for the design and construction of buildings and other structures throughout Australia and is adopted in NSW under the provisions of the Environmental Planning & Assessment Act & Regulation.
- *Fire-Resistance Level (FRL)* - means the grading periods in minutes tested in accordance with AS 1530.4-2005 for the following criteria -
 - (a) structural adequacy;
 - (b) integrity; and
 - (c) insulation,

and expressed in that order (e.g. 90/90/90).

- *Fire Source Feature (FSF)* - the far boundary of a road adjoining the allotment; or a side or rear boundary of the allotment; or an external wall of another building on the allotment which is not a Class 10 building.
- *Open space* - means a space on the allotment, or a roof or other part of the building suitably protected from fire, open to the sky and connected directly with a public road.
- *Performance Requirements of the BCA* - A Building Solution will comply with the BCA if it satisfies the Performance Requirements. A Performance requirement states the level of performance that a Building Solution must achieve.

Compliance with the Performance Requirements can only be achieved by-

- (a) complying with the Deemed-to-Satisfy Provisions; or
- (b) formulating an Alternative Solution which-
 - (i) complies with the Performance Requirements; or
 - (ii) is shown to be at least equivalent to the Deemed-to-Satisfy Provisions; or
- (c) a combination of (a) and (b).

- *Sole Occupancy Unit (SOU)* - means a room or other part of a building for occupation by one or joint owner, lessee, tenant, or other occupier to the exclusion of any other owner, lessee, tenant, or other occupier.

4.0 BUILDING DESCRIPTION – PROPOSED DEVELOPMENT

BUILDING CHARACTERISTICS	
BCA Year/Version	BCA 2022
BCA Referenced Standards	Refer to Appendix 1
Intended Building Uses	Industrial
BCA Classifications	Class 8
Number of storeys	1
Rise In storeys	1
Storeys not counted in rise	0
Effective Height of Building	<p>The effective height has been determined at <12m</p> <p>Note: The BCA definition of effective height is as follows: “Effective height means the vertical distance between the floor of the lowest storey included in a determination of rise in storeys and the floor of the topmost storey (excluding the topmost storey if it contains only heating, ventilating, lift or other equipment, water tanks or similar service units).”</p>
Type of Construction	Type C Construction
Floor area and Volume limitations	Class 8 – Carpark: 2,000m ² and/or 12,000m ³
Fire Compartments and Sole Occupancy Units	The building is considered to be a single fire compartment

Exits	<p>The following points in the building have been considered as the exits:</p> <ul style="list-style-type: none"> ▪ Each tenancy is provided with two separate and alternative exits.
Climate Zone	The building is located within Climate Zone 6
Fire Source Features	<p>North: The far side of Inglis Street South: The far side of the rail corridor East: The allotment boundary West: The allotment boundary</p> <p><i>Note:</i> A fire-source feature is defined in Section A1.1 of the BCA as –</p> <ul style="list-style-type: none"> a) the far boundary of a road, river, lake or the like adjoining the allotment; or b) a side or rear boundary of the allotment; or c) an external wall of another building on the allotment which is not a Class 10 building. <p>A building element is exposed to a fire-source feature if any of the horizontal straight lines between that part and the fire-source feature, or vertical projection of the feature, is not obstructed by another part of the building that</p> <ul style="list-style-type: none"> ▪ has an FRL of not less than 30/–/–; and ▪ is neither transparent nor translucent.

5.0 FIRE SAFETY SCHEDULES

5.1 Proposed Fire Safety Schedule

As a result of the works proposed under this development application, the **DRAFT** fire safety schedule for the site will be as follows.

The final fire safety schedule is to be prepared for issue with the Construction Certificate.

Statutory Fire Safety Measure	Minimum Standard of Performance – BCA 2022	Status*
Emergency lighting	<p>NCC E4D2 (Emergency Lighting Requirements) (FKA BCA E4.2)</p> <p>NCC E4D4 (Design and Operation of Emergency Lights) (FKA BCA E4.4)</p> <p>AS/NZS 2293.1 –2018 (Emergency lighting and exit signs for buildings - System design, installation and operation (incorporating amendment 1))</p>	N
Exit and Directional signs	<p>NCC E4D5 (Exit Signs) (FKA BCA E4.5)</p> <p>NCC (NSW) E4D6 (Direction Signs) (FKA BCA E4.6)</p> <p>NCC E4D8 (Design and operation of exit signs) (FKA BCA E4.8)</p> <p>AS/NZS 2293.1 –2018 (Emergency lighting and exit signs for buildings - System design, installation and operation (incorporating amendment 1))</p>	N
Fire Hose reel systems	<p>NCC E1D3 (Fire Hose Reels) (FKA BCA E1.4)</p> <p>AS 2441 – 2005 (Installation of fire hose reels (incorporating amendment 1))</p>	N
Fire hydrant systems - NSW Storz Couplings	<p>NCC E1D2 (Fire Hydrants) (FKA BCA E1.3)</p> <p>AS 2419.1 – 2021 (Fire hydrant installations - System design, installation, and commissioning)</p>	N
Portable fire extinguishers	<p>NCC E1D14 (Portable Fire Extinguishers) (FKA BCA E1.6)</p> <p>AS 2444 – 2001 (Portable fire extinguishers and fire blankets - Selection and location)</p>	N

5.2 Certification of Essential Fire Safety Measures

Pursuant to Section 41 of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021, it will be necessary for the owner of the building, on completion of work to furnish a Final Fire Safety Certificate with regard to each essential fire safety measure identified in the proposed Fire Safety Schedule listed above.

The Final Fire Safety Certificate must state that each essential fire safety measure specified in the fire safety schedule for the building to which the certificate relates:

- (a) has been assessed by a properly qualified person, and
- (b) was found, when it was assessed, to be capable of performing to at least the standard required by the current fire safety schedule for the building for which the certificate is issued.

Every year, the owner(s) will need to sign and submit an Annual Fire Safety Statement to the Local Council and the NSW Fire Brigade, which confirms that all essential fire safety measures have been tested and maintained and perform to the original design and installation standard. A copy of the Annual Fire Safety Statement must also be displayed in a prominent area of the buildings (i.e. the main entrance foyers).

6.0 CONCLUSION

Based on our assessment as detailed in Appendix B of this Report, we believe the development can comply with the BCA without significant modification.

PREPARED BY:



Tim O'Reilly

Associate

Building Certificates Australia Pty Ltd

Graduate Diploma U.W.S – Building Surveying (MAIBS) (MAAC)

Graduate Certificate U.W.S – Fire Safety Engineering

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Registered Building Surveyor (unrestricted) (NSW Fair Trading)

APPENDIX A – FIRE RESISTENCE LEVELS

Table S5C24a: Type C construction: FRL of parts of external walls

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

Table S5C24b: Type C construction: FRL of external columns not incorporated into an external wall

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

Table S5C24c: Type C construction: FRL of common walls and fire walls

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

Table S5C24d: Type C construction: FRL of internal walls

Location	FRL (in minutes): <i>Structural adequacy / Integrity / Insulation</i>			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Bounding <i>public corridors</i> , public lobbies and the like	60/60/60	–/–/–	–/–/–	–/–/–
Between or bounding <i>sole-occupancy units</i>	60/60/60	–/–/–	–/–/–	–/–/–
Bounding a stair if <i>required</i> to be rated	60/60/60	60/60/60	60/60/60	60/60/60

Table S5C24e: Type C construction: FRL of roof

Location	FRL (in minutes): <i>Structural adequacy / Integrity / Insulation</i>			
	Class 2, 3 or 4 part	Class 5, 7a or 9	Class 6	Class 7b or 8
Roofs	–/–/–	–/–/–	–/–/–	–/–/–

S5C24 Type C fire-resisting construction — fire-resistance of building elements

(1) In a building required to be of Type C construction—

- (a) incorporated in it, must have an FRL not less than that listed in those Tables for the particular Class of building concerned; and
- (b) an external wall that is required by Table S5C24a to have an FRL need only be tested from the outside to satisfy the requirement; and
- (c) a fire wall or an internal wall bounding a sole-occupancy unit or separating adjoining units must comply with Specification 6 if it is of lightweight construction and is required to have an FRL; and
- (d) in a Class 2 or 3 building, an internal wall which is required by Table S5C24c or S5C24d to have an FRL must extend— covering on the underside of the floor; or to the underside of the floor next above if that floor has an FRL of at least 30/30/30 or a
 - (i) fire-protective

- (ii) to the underside of a ceiling having a resistance to the incipient spread of fire to the space above itself of not less than 60 minutes; or
- (iii) to the underside of the roof covering if it is non-combustible, and except for roof battens with dimensions of 75 mm x 50 mm or less or sarking-type material, must not be crossed by timber or other combustible building elements; or
- (iv) 450 mm above the roof covering if it is combustible; and
- (e) in a Class 2 or 3 building, except where within the one sole-occupancy unit, or a Class 9a health-care building, or a Class 9b building, a floor separating storeys, or above a space for the accommodation of motor vehicles or used for storage or any other ancillary purpose, and any column supporting the floor, must—
 - (i) have an FRL of at least 30/30/30; or
 - (ii) have a fire-protective covering on the underside of the floor including beams incorporated in it and around the column, if the floor or column is combustible or of metal; and
- (f) in a Class 9c building a floor above a space for the accommodation of motor vehicles or used for storage or any other ancillary purpose, and any column supporting the floor, must—
 - (i) have an FRL of at least 30/30/30; or
 - (ii) have a fire-protective covering on the underside of the floor including beams incorporated in it and around the column, if the floor or column is combustible or of metal.
- (2) For the purposes of Table S5C24a and Table S5C24b, external wall includes any column and other building element incorporated within it or other external building element.

S5C25 Type C fire-resisting construction — carparks

- (1) Notwithstanding S5C24, a carpark may comply with this clause if it is an open-deck carpark or is protected with a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17 and is—
 - (a) a separate building; or
 - (b) a part of a building, and if occupying only part of a storey, is separated from the remaining part by a fire wall.
- (2) For the purposes of this clause, a carpark—
 - (a) includes—
 - (i) an administration area associated with the functioning of the carpark; and
 - (ii) where the carpark is sprinklered, is associated with a Class 2 or 3 building and provides carparking for separate sole-occupancy units, each carparking area with an area not greater than 10% of its floor area for purposes ancillary to the sole-occupancy units; but
 - (b) excludes—
 - (i) except for (a), any area of another classification, or other part of a Class 7 building not used for carparking; and
 - (ii) a building or part of a building specifically intended for the parking of trucks, buses, vans and the like.
- (3) For building elements in a carpark as described in (1) and (2), the following minimum FRLs are applicable:
 - (a) External walls:
 - (i) Less than 1.5 m from a fire-source feature to which it is exposed:
 - (A) Loadbearing: 60/60/60.
 - (B) Non-loadbearing: —/60/60.
 - (ii) 1.5 m or more from a fire-source feature to which it is exposed: —/—/—.
 - (b) Internal walls
 - (c) Fire walls:
 - (i) From the direction used as a carpark: 60/60/60.
 - (ii) From the direction not used as a carpark: 90/90/90.
 - (d) Columns:
 - (i) Steel column less than 1.5 m from a fire-source feature—
 - (A) 60/—/—; or
 - (B) ESA/M not greater than 26 m²/tonne.
 - (ii) Any other column not less than 1.5 m from a fire-source feature: 60/—/—.
 - (iii) Any other column not covered by (i) or (ii): —/—/—.
 - (e) Beams:

(i) Steel floor beam, less than 1.5 m from a *fire-source feature*, in continuous contact with a concrete floor slab—

(A) 60/—/—; or

(B) An ESA/M of not greater than 30 m²/tonne.

(ii) any other beam: 60/—/—.

(iii) more than 1.5 m from a *fire-source feature*: —/—/—.

(f) Roof, floor slab and vehicle ramp: —/—/—.

(4) For the purposes of (3), ESA/M means the ratio of exposed surface area to mass per unit length.

APPENDIX B: BCA REQUIREMENTS - CLAUSE BY CLAUSE ASSESSMENT

An indicative compliance assessment of the referenced documents identified in section 1.2 of this report has been undertaken against the Deemed-to-Satisfy Provisions of the Building Code of Australia 2022.

In the table below is a summary of the Deemed-to-Satisfy Provisions of the BCA. All Deemed-to-Satisfy clauses that are applicable to the subject building have been referred to below, including a comment adjacent to each clause of the proposal's ability to satisfy each respective clause.

The abbreviations outlined below have been used in the following tables:

N/A	The Deemed-to-Satisfy clause does not apply to the subject Building.
Complies	The relevant provisions of the Deemed-to-Satisfy clause have been demonstrated by the proposed design and existing building features.
CRA	'Compliance Readily Achievable'. It is considered that the level of detail included in the DA documentation will not determine strict compliance with the individual BCA clause requirement. Further detailed documentation can be submitted as part of the Construction Certificate application, demonstrating compliance with the requirement of the BCA. Where this abbreviation is used, demonstrating BCA compliance is not expected to fundamentally change the DA approved building design.
FI	Further information is necessary to determine the compliance potential of the building design.
PS	Preparation of a Performance Solution with respect to this Deemed-To-Satisfy Provision is possible to satisfy the relevant BCA Performance Requirements.
DNC	Does Not Comply.
DTS	Deemed-To-Satisfy provisions as defined by the Building Code of Australia 2022.

BCA 2022 Clause by Clause Assessment

Clause	Description	Status	Comments
SECTION C – FIRE RESISTANCE			
Part C2 – Fire Resistance and Stability			
C2D2	Type of construction required	CRA / PS	The building must be constructed in accordance with the Type C fire-resisting construction requirements outlined in BCA Specification 5. Where fire-rated construction cannot achieve the required FRL, a performance based design approach may be considered.
C2D3	Calculation of rise in storeys	Noted	The building has an overall rise in storeys of one.
C2D4	Buildings of multiple Classification	Noted	Type C construction applicable to the whole building.
C2D5	Mixed types of Construction	N/A	
C2D6	Two storey Class 2, 3 or 9c buildings	N/A	
C2D7	Class 4 parts of buildings	N/A	
C2D8	Open spectator stands and indoor sports stadiums	N/A	
C2D9	Lightweight construction	N/A	
C2D10	Non-combustible building elements	N/A	Type C Construction
NSW C2D11	Fire hazard properties	CRA	The fire hazard properties of all floor linings and floor coverings, wall linings, and ceiling linings must comply with BCA Specification 7. Fire Test Certificates will be required for all chosen products unless exempt by this Clause.
C2D12	Performance of external walls in fire	Noted	Concrete walls that could collapse as complete panels in a building with a rise in storeys of more than 2, must comply with Specification 8.
C2D13	Fire-protected timber: Concession	N/A	
C2D14	Ancillary elements	N/A	Type C Construction
C2D15	Fixing of bonded laminated cladding panels	N/A	Type C Construction

Clause	Description	Status	Comments
Part C3 – Compartmentation and Separation			
C3D2	Application of Part	Noted	<p>Clauses C3D3, C3D4 and C3D5 do not apply to a carpark provided with a sprinkler system (other than a FPAA101D or FPAA101H system) complying with Specification 17, an open-deck carpark or an open spectator stand.</p> <p>Clause C3D13(1)(e) does not apply to a Class 8 electricity network substation</p>
C3D4	General floor area and volume limitations	Complies	The floor area and volume does not exceed the imposed limitations
C3D4	Large isolated buildings	N/A	
C3D5	Requirements for open spaces and vehicular access	N/A	
NSW C3D6	Class 9 buildings	N/A	
C3D7	Vertical separation of openings in external walls	N/A	Type C Construction
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	Complies	No building corridor exceeds 40m in length.
Part C4 – Protection of Openings			
C4D2	Application of Part	Noted	
C4D3	Protection of openings in external walls	N/A	
C4D4	Separation of external walls and associated openings in different	N/A	

Clause	Description	Status	Comments
	fire compartments		
C4D5	Acceptable methods of Protection	N/A	
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	
NSW C4D12	Bounding construction: Class 2, 3 buildings and Class 4 parts	N/A	
C4D13	Openings in floors and ceilings for services	N/A	
C4D14	Openings in shafts	N/A	
C4D15	Openings for service Installation	N/A	
C4D16	Construction Joints	CRA	Construction joints are to be installed in accordance with a tested prototype compliant with AS 1530.4. Details of proposed products are to be included within the regulated designs.
C4D17	Columns protected with lightweight construction	Noted	Columns must be protected in accordance with the identical tested prototype.

SECTION D – ACCESS AND EGRESS

Part D2 – Provision for Escape

Clause	Description	Status	Comments
D2D2	Application of Part	Noted	The Deemed to Satisfy provisions of this part do not apply to the internal parts of a sole occupancy unit in a Class 2, 3 or 4 building.
NSW D2D3	Number of exits required	Complies	A minimum of 1 exit is required from each storey of the building.
D2D4	When fire-isolated exits	N/A	

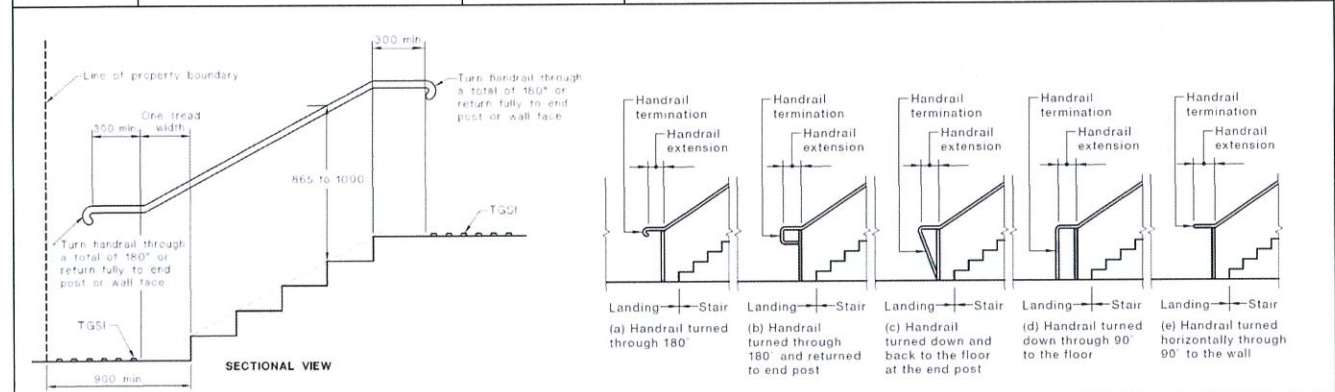
Clause	Description	Status	Comments
	are required		
D2D5	Exit travel distances	CRA	No point in is to be more than 20m from an exit or 20m to a point of choice where total travel distance to one exit (from point of origin) does not exceed 40m. This is measured along a path of travel.
D2D6	Distance between alternative exits	Complies	The distance between alternate exits is to not be closer than 9m or further apart then 60m.
D2D7	Height of exits, paths of travel to exits and doorways	CRA	In a required exit or path of travel to an exit, the unobstructed height throughout must be not less than 2m except the unobstructed width of any doorway may be reduced to not less than 1,980mm
NSW D2D8	Width of exits and paths of travel to exits	CRA	All paths of travel including common stairways and ramps in which lead to an exit or serving as an exit must have an unobstructed width of no less 1,000mm, measured clear of any obstructions. This should be clearly detailed on the final <i>regulated designs</i> .
NSW D2D9	Width of doorways in exits or paths of travel to an exit	CRA	A doorway is required to achieve the unobstructed width of the path of travel minus 250mm. In addition to this requirement, consider any doorways which are required to be accessible.
D2D10	Exit width not to diminish in direction of travel	Noted	The unobstructed width of a required exit must not diminish in the direction of travel.
D2D11	Determination and measurement of exits and paths of travel to exits	Noted	the measurement of all exits and paths of travel must be taken free of any obstructions such has handrails and the like.
D2D12	Travel via fire-isolated exits	N/A	
D2D13	External stairways in lieu of fire-isolated exits	N/A	
D2D14	Travel by non-fire-isolated stairways or ramps	N/A	
NSW D2D15	Discharge from exits	CRA	An exit must not be blocked at the point of discharge and where necessary suitable barriers must be provided to prevent vehicles from blocking the exit.
D2D16	Horizontal exits	N/A	
D2D17	Non-required stairs, ramps or escalators	N/A	
NSW D2D18	Number of persons accommodated	Noted	

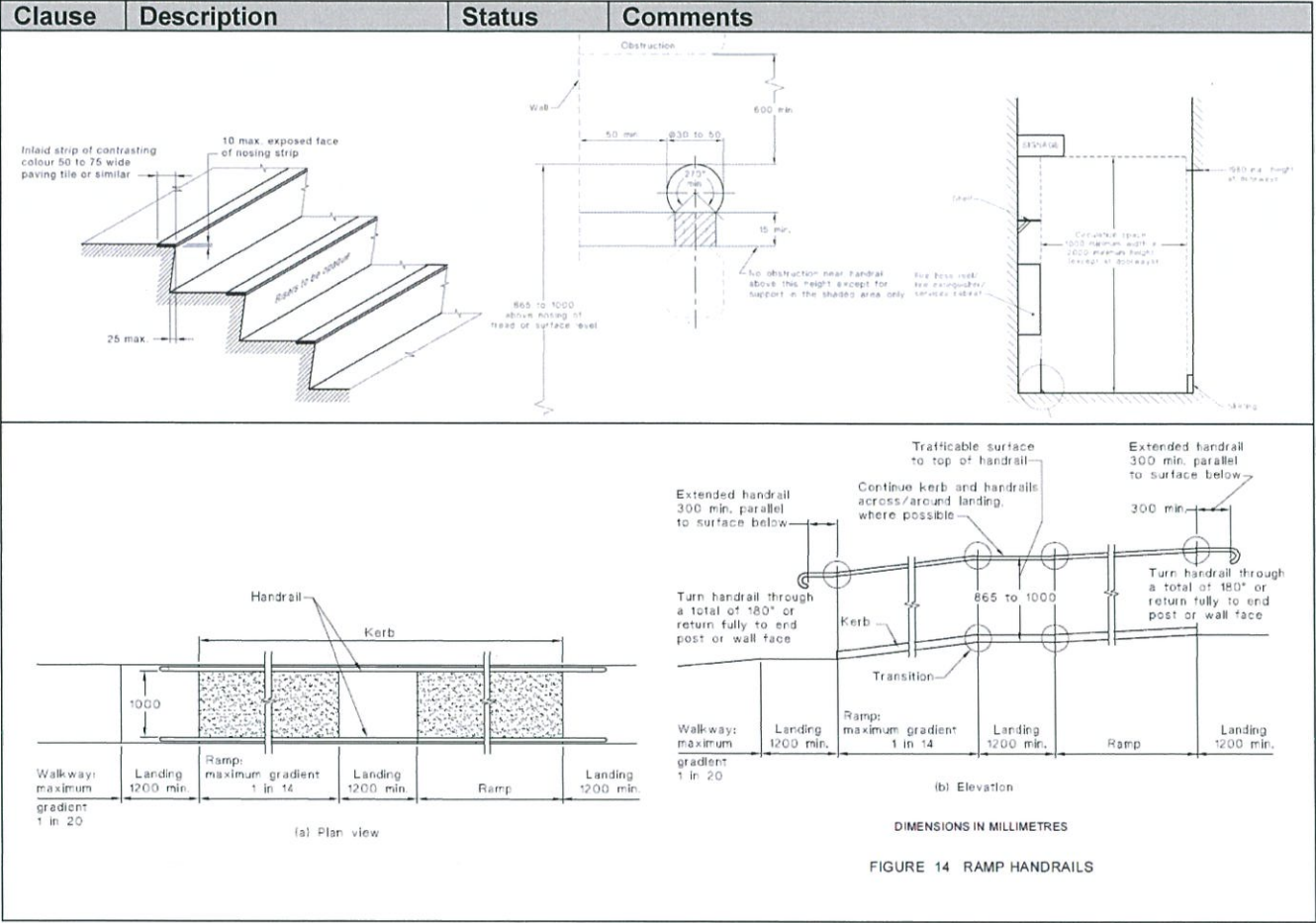
Clause	Description	Status	Comments
D2D19	Measurement of distance	Noted	
D2D20	Method of measurement	Noted	
D2D21	Plant rooms and lift machine rooms: Concession	N/A	
D2D22	Access to lift pits	N/A	
D2D23	Egress from primary schools	N/A	
Part D3 – Construction of Exits			
NSW D3D2	Application of Part	Noted	<p>Except for—</p> <p>D3D14, D3D15(a), D3D17, D3D18, D3D19, D3D20, D3D21, D3D22(5), D3D22(6), D3D26 and D3D29, the deemed-to-satisfy provisions of this part do not apply to the internal parts of a sole-occupancy unit in a Class 3 building, and</p> <p>D3D14, D3D15(a), D3D17, D3D18, D3D19, D3D20, D2D21, D2D22(5), D2D22(6), D2D23 and D2D29, the deemed-to-satisfy provisions of this part do not apply to the internal parts of a sole-occupancy unit in a Class 2 building or Class 4 part of a building.</p> <p>In a Class 9b building used as an entertainment venue, Clauses NSW D3D14(1)(i), (j) and (k), NSW D3D16(d), NSW D3D18(1)(d) and NSW D3D24(2)(e) apply to only those parts of the building used by the public, and The general requirements of Part D3 apply to all other parts of the building.</p>
D3D3	Fire-isolated stairs and ramps	N/A	
D3D4	Non-fire-isolated stairways and ramps	N/A	
D3D5	Separation of rising and descending stair flights	N/A	
D3D46	Open access ramps and balconies	N/A	
D3D7	Smoke lobbies	N/A	
D3D8	Installations in exits and paths of travel	CRA	<p>Electrical distribution boards and other services or equipment must be located wholly within, and enclosed by, non-combustible construction, or have a fire-protective covering, with the doorway suitably sealed against smoke spreading from the enclosure.</p> <p><i>This should be included as part of the regulated designs.</i></p>

Clause	Description	Status	Comments
D3D9	Enclosure of space under stairs and ramps	N/A	
D3D10	Width of stairways	CRA	The common stairways are required to have a minimum width of 1m <u>between handrails</u> .
D3D11	Pedestrian ramps	N/A	No ramps proposed
D3D12	Fire-isolated passageways	N/A	
D3D13	Roof as open space	N/A	
NSW D3D14	Goings and risers	CRA	<p>The stairway leading to the loft must be designed in accordance with BCA clause D2.13, including the provision of slip-resistance in accordance with BCA Table D2.14 and AS 4586-2013.</p> <p>This means providing</p> <ul style="list-style-type: none"> - risers between 115mm and 190mm - goings between 250mm and 355mm <p>The quantity (which is 2 risers + 1 going) is to be between 550 and 700.</p> <p>Details are required as part of the <i>regulated design</i>.</p>
D3D15	Landings	N/A	
NSW D3D16	Thresholds	CRA	Thresholds are to comply with the requirements of AS 1428.1-2009.
D3D17	Barriers to prevent falls	CRA	A balustrade is to be provided to the loft space
NSW D3D18	Height of barriers	CRA	The balustrade is to be a minimum 1m high above FFL
D3D19	Openings in barriers	CRA	The balustrade is to contain no gaps greater than 125mm
D3D20	Barrier climbability	N/A	
D3D21	Wire barriers	N/A	
D3D22	Handrails	CRA	The stairway if required to be accessible under D4 in the BCA, is to have a handrail installed on both sides of the stairs in accordance with AS 1428.1-2009. This means ensuring the stairway is a minimum 1.2m wide to allow for a clear width of 1m between handrails.
D3D23	Fixed platforms walkways, stairways and ladders	N/A	
NSW D3D24	Doorways and doors	N/A	

Clause	Description	Status	Comments
D3D25	Swinging doors	CRA / PS	<p>A swinging door in a required exit or forming part of a required exit must swing in the direction of egress.</p> <p>Where an exit door swings against the direction of egress, a performance design option may be used.</p>
NSW D3D26	Operation of latch	CRA	<p>A door in a required exit, forming part of a required exit or in the path of travel to a required exit must be readily openable without a key from the side that faces a person seeking egress, by—</p> <p>(i) a single hand downward action on a single device which is located between 900 mm and 1.1 m from the floor and if serving an area required to be accessible by Part D4—</p> <p>(A) be such that the hand of a person who cannot grip will not slip from the handle during the operation of the latch; and</p> <p>(B) have a clearance between the handle and the back plate or door face at the centre grip section of the handle of not less than 35 mm and not more than 45 mm; or</p> <p>(ii) a single hand pushing action on a single device which is located between 900 mm and 1.2 m from the floor</p>
D3D27	Re-entry from fire-isolated exits	N/A	
D3D28	Signs on doors	N/A	
D3D29	Protection of openable windows	N/A	
D3D30	Timber stairways: concession	N/A	
NSW D3D31	Doors in paths of travel to an entertainment venue	N/A	
SECTION D4 – ACCESS FOR PEOPLE WITH DISABILITIES			
D3.0	Deemed-to-Satisfy Provisions	Noted	
D4D2	General Building Access Requirements	CRA	<p>Accessibility must be provided to all parts of the building normally used by the occupants.</p> <p>This should be reviewed by a suitably qualified access consultant.</p>
D4D3	Access to Buildings	CRA	<p>(a) An accessway must be provided to a building required to be accessible</p> <p>(i) from the main points of a pedestrian entry at the allotment boundary; and</p>

Clause	Description	Status	Comments
			<p>(ii) from another accessible building connected by a pedestrian link; and</p> <p>(iii) from any required accessible carparking space on the allotment.</p> <p>(b) In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance, and—</p> <p>(i) through not less than 50% of all pedestrian entrances including the principal pedestrian entrance; and</p> <p>(ii) in a building with a total floor area more than 500 m², a pedestrian entrance which is not accessible must not be located more than 50 m from an accessible pedestrian entrance, except for pedestrian entrances serving only areas exempted by BCA clause D3.4.</p> <p>Note, accessible entry is currently not provided through the eastern entry.</p> <p>This should be reviewed by a suitably qualified access consultant and further details provided accordingly.</p>
D4D4	Parts of buildings to be accessible	CRA	<p>The ramps, stairways, lifts, accessways, and floor coverings must comply with BCA clause D4D4. This includes internal and external paths of travel.</p> <p>This should be reviewed by a suitably qualified access consultant.</p>





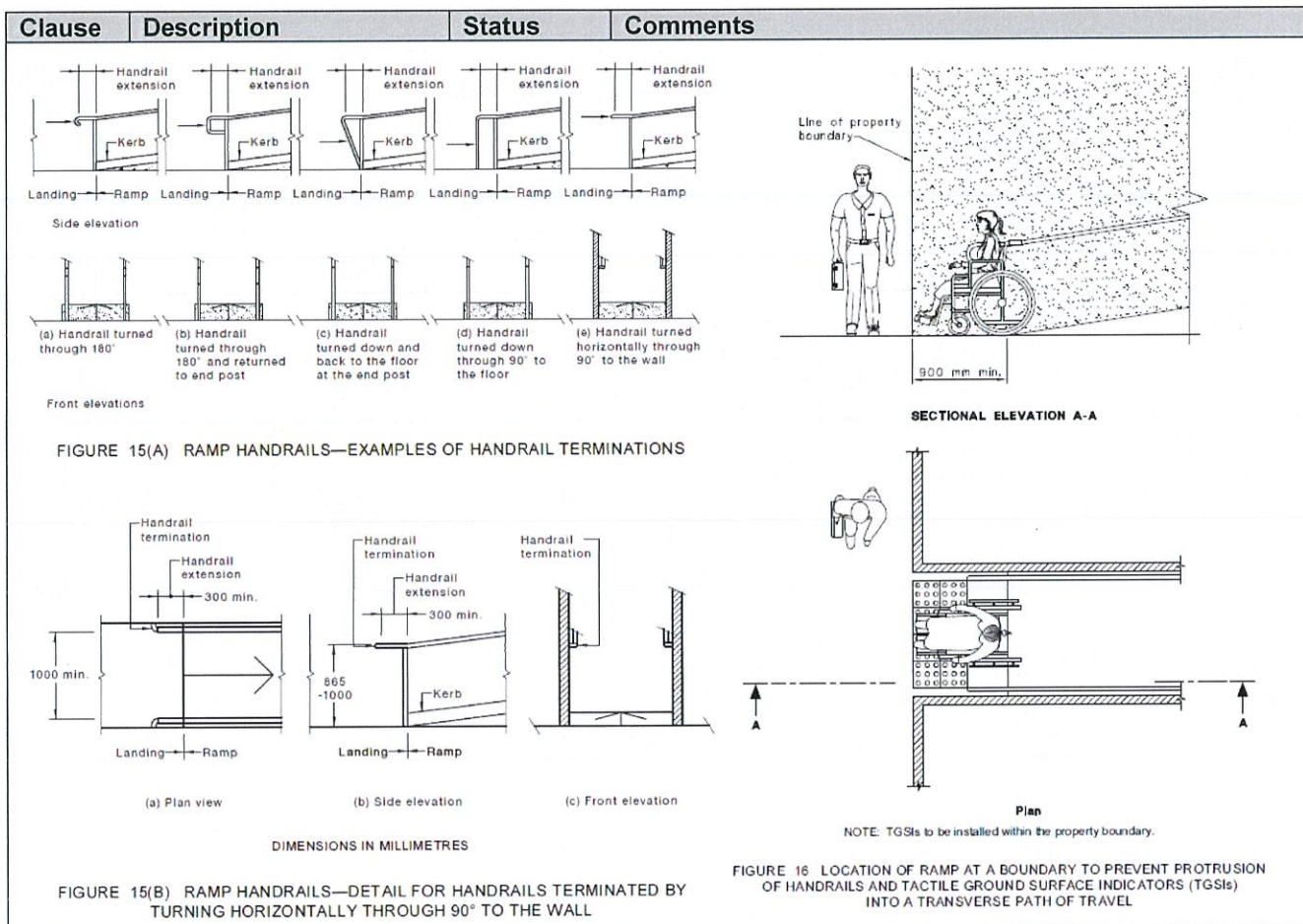


FIGURE 15(A) RAMP HANDRAILS—EXAMPLES OF HANDRAIL TERMINATIONS

FIGURE 16 LOCATION OF RAMP AT A BOUNDARY TO PREVENT PROTRUSION OF HANDRAILS AND TACTILE GROUND SURFACE INDICATORS (TGSIs) INTO A TRANSVERSE PATH OF TRAVEL

Extraction from Standards Australia Handbook 197:1999

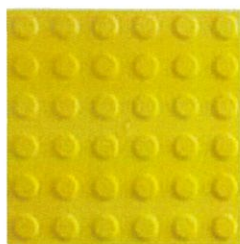
TABLE 3

PEDESTRIAN FLOORING SELECTION GUIDE – MINIMUM PENDULUM OR RAMP RECOMMENDATIONS FOR SPECIFIC LOCATIONS

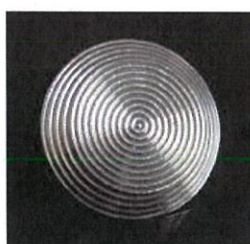
Location	Pendulum	Ramp
External colonnade, walkway and pedestrian crossings	W	R10
External ramps	V	R11
Entry foyers hotel, office, public buildings - wet	X	R10
Entry foyers hotel, office, public buildings - dry	Z	R9
Shopping centre excluding food court	Z	R9
Shopping centre – food court	X	R10
Internal ramps, slopes (greater than 2 degrees) - dry	X	R10
Lift lobbies above external entry level	Z	R9
Other separate shops inside shopping centres	Z	R9
Other shops with external entrances – entry area	X	R10
Fast food outlets, buffet food servery areas	X	R10
Hospitals and aged care facilities – dry areas	Z	R9
Hospital and aged care facilities – ensuites	X	A or R10
Supermarket aisles except fresh food areas	Z	R9
Shop and supermarket fresh fruit and vegetable areas	X	R10
Communal changing rooms	X	A
Swimming pool surrounds and communal shower rooms	W	B
Swimming pool ramps and stairs leading into water	V	C
Toilet facilities in offices, hotels, shopping centres	X	R10
Undercover concourse areas of sports stadium	X	R10
Accessible internal stair nosings (dry) – handrails present	X	R10
Accessible internal stair nosings (wet) – handrails present	W	B or R11
External stair nosings	W	R11

D4D5	Exemptions	N/A	
D4D6	Accessible carparking	CRA	Accessible carparking spaces are required at a rate of 1 space per 100. These spaces are to comply with AS 2890.6.
D4D7	Signage	CRA	Signage compliant with BCA clause D3.6 must be provided to and throughout the building.
D4D8	Hearing augmentation	N/A	
D4D9	Tactile Ground Surface indicators (TGSIs)	CRA	Where required, TGSIs must comply with the requirements of AS1428.4-2009.

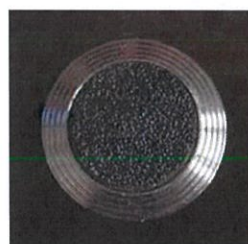
There are three (3) distinct types of TGSIs, these each need to be assessed as to the most appropriate based on the surface it is to be applied and lighting conditions. AS1428.4.1 – 2009 clearly provides installation requirements.



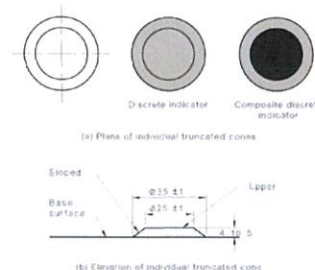
30% contrast to surface



45% Contrast to Surface



60% Contrast to Surface



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	NA	

SECTION E – SERVICES AND EQUIPMENT			
Part E2 – Fire Fighting Equipment			
Clause	Description	Status	Comments
E1D2	Fire Hydrants	CRA	The total floor area of the subject building is greater than 500m ² . Therefore, a hydrant system is required to be provided in accordance with AS 2419.1-2021
E1D3	Hose Reels	CRA	Fire hose reels in accordance with AS 2441-2005 are required to serve the carpark if the floor area exceeds 500m ² .
E1D4	Sprinklers	N/A	
E1D5	Where sprinklers are required: all classifications	N/A	
E1D6	Where sprinklers are required: Class 2 and 3 buildings other than residential care buildings	N/A	
E1D6	Where sprinklers are required: Class 6 building	N/A	
E1D9	Where sprinklers are required Class 7a building, other than an open-deck carpark	N/A	
E1D10	Where sprinklers are required: Class 9a health-care building used as a residential care building and 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	CRA	Portable fire extinguishers are required to be provided in accordance with AS 2444-2001.
E1D15	Fire control centres	N/A	
E1D16	Fire precautions during construction	N/A	
E1D17	Provisions for special	N/A	

	hazards		
Part E2 – Smoke Hazard Management			
E2D2	Application of Part	Noted	
E2D3	General requirements	N/A	
E2D4	Fire-isolated exits	N/A	
E2D5	Buildings more than 25m in effective height: Class 2 and 3 buildings and Class 4 part of a building	N/A	
E2D6	Buildings more than 25m in effective height: Class 5, 6, 7b, 8 and 9b buildings	N/A	
E2D7	Buildings more than 25m in effective height: Class 9a buildings	N/A	
E2D8	Buildings not more than 25m in effective height: Class 2 and 3 buildings and Class 4 part of a building	N/A	
E2D9	Buildings not more than 25m in effective height: Class 5, 6, 7b, 8 and 9b buildings	N/A	
NSW E2D10	Buildings not more than 25m in effective height: large isolated buildings	N/A	
E2D11	Buildings not more than 25m in effective height: Class 9a and 9c buildings	N/A	
E2D12	Class 7a buildings	N/A	
E2D13	Basements (other than Class 7a buildings)	N/A	
E2D14	Class 6 buildings – in fire compartments more than 2000m ² : 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 2000m ² : Class 6 building (containing an enclosed common walkway or mall serving more than one Class 6 sole-occupancy unit)	N/A	
NSW E2D16	Class 9b – assembly buildings: all	N/A	
NSW E2D17	Class 9b – assembly building: exhibition halls	N/A	
NSW E2D18	Class 9b – assembly buildings: theatres and public halls	N/A	
NSW E2D19	Class 9b – assembly buildings: theatres and public halls (not listed in E2D18) including lecture theatres and cinema/auditorium complexes	N/A	
NSW E2D20	Class 9b assembly buildings: other assembly building (not listed in E2D16)	N/A	
E2D20	Provisions for special Hazards	N/A	
Part E3 – Lift Installations			
E3D2	Lift installations	N/A	
E3D3	Stretcher facility in lifts	N/A	
E3D4	Warning against use of lifts in fire	N/A	
E4D5	Emergency lifts	N/A	
E3D6	Landings	N/A	
E3D7	Passenger lift types and their limitations	N/A	
E3D8	Accessible features required for passenger lifts	N/A	
E3D9	Fire Services Control	N/A	
E3D10	Residential care buildings	N/A	

E3D11	Fire service recall control switch	N/A	
E3D12	Lift car fire service drive control switch	N/A	
Part E4 – Emergency Lighting, Exit Signs and Warning Systems			
E4D2	Emergency lighting requirements	CRA	Emergency lighting is to be provided throughout the common parts of the building.
E4D3	Measurement of distance	Noted	
E4D4	Design and operation of emergency lighting	Noted	Every required emergency lighting system must comply with AS 2293.1-2018.
E4D5	Exit signs	CRA	Exit signage is to be provided
NSW E4D6	Direction signs	CRA	Where an exit location is not clear to a person unfamiliar with the building, exit signs with directional arrows must be installed in appropriate positions.
E4D7	Class 2 and 3 buildings and Class 4 parts: exemptions	N/A	
E4D8	Design and operation of exit signs	Noted	Exit signs are to operate in accordance with AS 2293.1-2018 and be clearly visible at all times while the building is occupied.
E4D9	Emergency warning and intercom systems	N/A	
SECTION F – HEALTH AND AMENITY			
Part F1 – Surface water management, rising damp and external waterproofing			
Clause	Description	Status	Comments
F1D2	Application of part	Noted	
F1D3	Stormwater drainage	CRA	Stormwater drainage is to comply with AS 3500.3-2021
F1D4	Exposed joints	CRA	Exposed joints on a roof, balcony, podium or similar horizontal surface part of a building must be protected in accordance with Section 2.9 of AS 4654.2, and not be located beneath or run through a planter box, water feature or similar part of the building.
F1D5	External waterproofing membranes	CRA	Waterproofing membranes must comply with AS 4654 Parts 1 and 2
F1D6	Damp-proofing	N/A	
F1D7	Damp-proofing of floors on the ground	CRA	If the floor or room is laid on the ground or on fill, moisture must be prevented from reaching the upper surface of the

			floor and adjacent walls by the insertion of a vapour barrier in accordance with AS 2870
F1D8	Subfloor ventilation	N/A	
Part F2 – Wet areas and overflow protection			
F2D2	Wet area construction	CRA	Bathrooms are required to be waterproofed in accordance with AS 3740-2021
F2D3	Rooms containing urinals	N/A	
F2D4	Floor wastes	N/A	
Part F3 – Roof and wall cladding			
F3D2	Roof coverings	CRA	Metal sheet roofing is to comply with AS 1562.1-2018
F3D3	Sarking	CRA	Sarking type material is to comply with AS 4200
F3D4	Glazed assemblies	CRA	Glazed assemblies in external walls are required to comply with AS 2047
F3D5	Wall cladding	CRA	External wall cladding must comply with one or a combination of the following: Masonry, including masonry veneer, unreinforced and reinforced masonry: AS 3700 Autoclaved aerated concrete: AS 5146.3 Metal wall cladding: AS 1562.1
Part F4 – Sanitary and other facilities			
F2D4	Facilities in residential buildings	N/A	
F4D3	Calculation of number of occupants and facilities	Noted	
NSW F4D4	Facilities in Class 3 to 9 buildings	Complies	Bathroom facilities are provided within each tenancy
F4D5	Accessible sanitary facilities	DNC	The bathrooms provided within each tenancy are required to be accessible in accordance with AS 1428.1-2009
F4D6	Accessible unisex sanitary compartments	N/A	
F4D7	Accessible unisex showers	N/A	

F4D8	Construction of sanitary compartments	CRA	Doors to fully enclosed toilets are to open outwards, slide or be readily removable from the outside of the sanitary compartment unless there is a clear space of at least 1.2m between the closet pan within the sanitary compartment and the nearest part of the doorway.
F4D9	Interpretation: urinals and washbasins	Noted	
NSW F4D10	Microbial (legionella) control	N/A	Not Applicable in NSW
F4D11	Waste Management	N/A	
F4D12	Accessible adult change facilities	N/A	
Part F5 – Room heights			
F5D2	Height of rooms and other spaces	CRA	<p>Ceiling heights must be not less than—</p> <ul style="list-style-type: none"> (a) in a habitable room excluding a kitchen — 2.4 m; and (b) in a kitchen — 2.1 m; and (c) in a corridor, passageway or the like — 2.1 m; and (d) in a bathroom, shower room, laundry, sanitary compartment, airlock, pantry, storeroom, garage, car parking area or the like — 2.1 m; and (e) in a room or space with a sloping ceiling or projections below the ceiling line within— <ul style="list-style-type: none"> (i) a habitable room— <ul style="list-style-type: none"> (A) in an attic — a height of not less than 2.2 m for at least two-thirds of the floor area of the room or space; and (B) in other rooms — a height of not less than 2.4 m over two-thirds of the floor area of the room or space; and (ii) a non-habitable room — a height of not less than 2.1 m for at least two-thirds of the floor area of the room or space, (f) and when calculating the floor area of a room or space, any part that has a ceiling height of less than 1.5 m is not included; and (g) in a stairway — 2.0 m measured vertically above the nosing line.
Part F6 – Light and ventilation			
F6D2	Provisions of natural light	Noted	Natural light is required to all habitable rooms within the Class 2 part.
F6D3	Methods and extent of natural light	N/A	

F6D4	Natural light borrowed from adjoining room	Noted	If required natural light can be borrowed via an adjoining room in accordance with this clause.
F6D5	Artificial lighting	CRA	Artificial lighting must be provided in required stairways, passageways, ramps, sanitary compartments and other spaces used in common by occupants of the building complying with AS1680.0-2009 in accordance with the requirements of BCA clause F4.4.
NSW F6D6	Ventilation of rooms	CRA	Ventilation must be provided throughout the building by natural or mechanical means. If ventilation is provided by a mechanical system, it must comply with AS 1668.2-2012. This will need to be detailed on the <i>regulated design</i> .
F6D7	Natural ventilation	CRA	If natural ventilation is proposed, the aggregate size of any window opening must not be less than 5% of the floor area of the room served.
F6D8	Ventilation borrowed from adjoining room	Noted	Natural ventilation can be borrowed from an adjoining room in accordance with this clause.
F6D9	Restriction on location of sanitary compartments	N/A	
F6D10	Airlocks	N/A	
F6D11	Carparks	N/A	
F6D12	Kitchen local exhaust	N/A	
Part F7 – Sound transmission and insulation			
F7D1	Application of part	Noted	Applicable to Class 2 buildings
F7D2	Determination of airborne sound insulation ratings	N/A	
F7D3	Determination of airborne sound insulation ratings	N/A	
F7D4	Determination of impact sound installation ratings	N/A	
F7D5	Sound insulation rating for floors	N/A	

F7D6	Sound insulation rating of walls	N/A	
F7D7	Sound insulation rating of services	N/A	
F7D8	Sound isolation of pumps	N/A	
Part F8 – Condensation Management			
F8D2	Application of part	Noted	This part applies to a Class 2 building or a Class 4 part.
F8D3	External wall construction	N/A	
F8D4	Exhaust systems	N/A	
F8D5	Ventilation of roof spaces	N/A	

