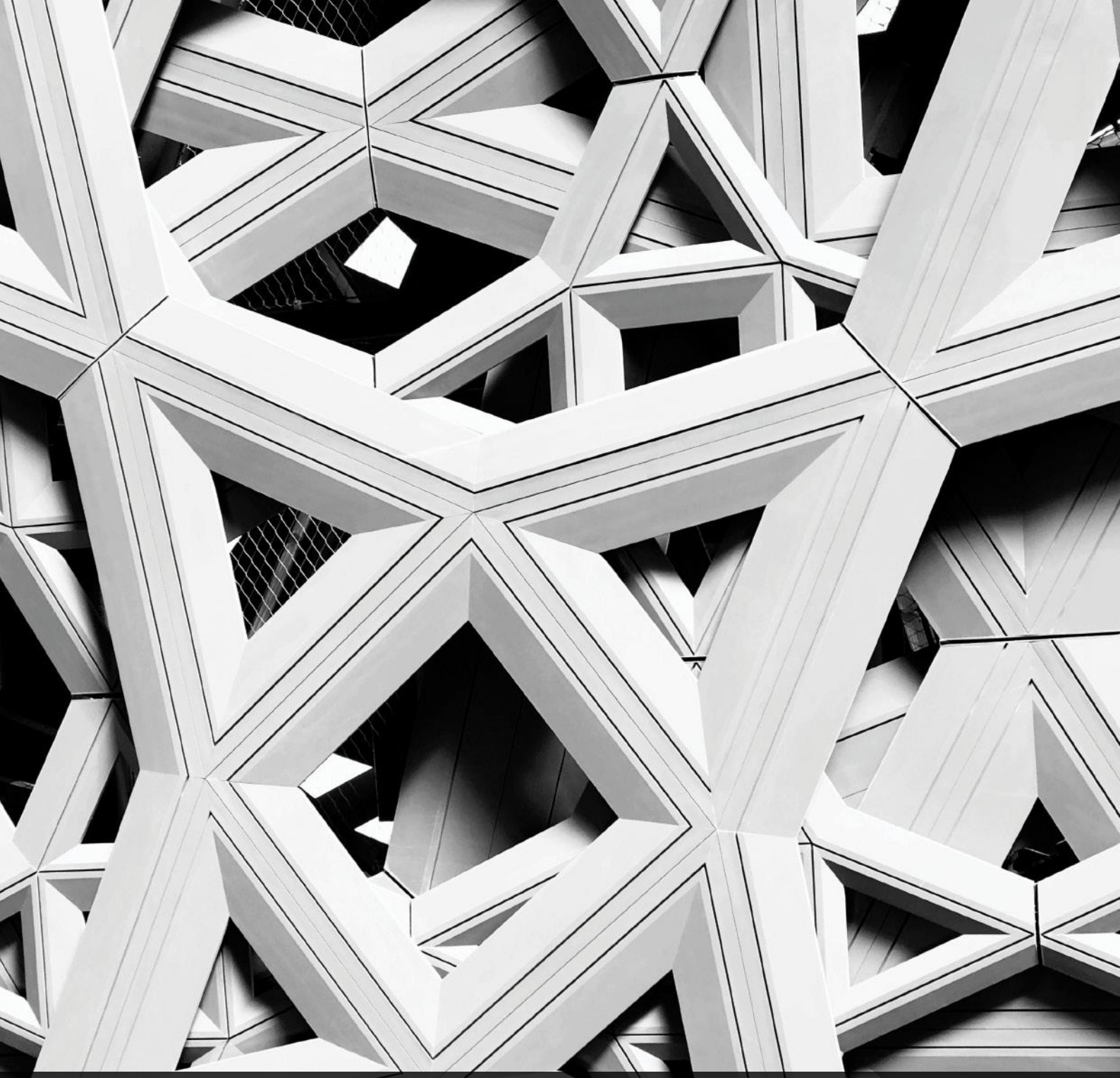


BCA & DDA Assessment Report

Review of Environmental Factors Submission

Warrawong CHC

91 Cowper St, Warrawong, NSW 2052

Prepared for:

Health Infrastructure & Savills

Revision 1

22 December 2023

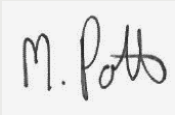
Reference: 210596

bmplusg.com.au

+ Contents

+ Report Status

+ Date	22.12.23
+ Revision	1
+ Status	For REF submission
+ Author	Michael Potts & Priyanshu Chibber
+ Reviewed	Michael Potts



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+ Revision History

+ Revision	0	**+ Date**	29.09.23
+ Status	For Schematic Design		

+ Revision	1	**+ Date**	22.12.23
+ Status	For REF submission		

1.0 Description of Project

1.1 Proposal

BM+G Pty Ltd have been commissioned by Health Infrastructure & Savills to undertake an assessment of the Warrawong CHC at 91 Cowper St, Warrawong, NSW 2052 against the relevant provisions of the Building Code of Australia 2022 (BCA) and Disability (Access to Premises – Buildings) Standards 2010.

An assessment of BCA compliance with respect to the new works is included within Section 3.0.

An assessment of Access/DDA compliance with respect to the new works is included within Section 4.0.

1.2 Aim

The aim of this report is to:

- Confirm that the referenced REF plans has been reviewed by an appropriately qualified Building Surveyor and Accredited Certifier.
- Outline the BCA Compliance Strategy for the building and certification pathway for the project.
- Undertake an assessment of the proposed development against the deemed-to-satisfy provisions of the BCA.
- Undertake an assessment of the proposed development against the Disability (Access to Premises – Buildings) Standards 2010 and Part D4 deemed-to-satisfy provisions of the BCA;
- Identify matters that require plan amendments in order to achieve compliance with the BCA, Access to Premises Standard and Part D4 of the BCA;
- Identify matters that are required to be addressed by Performance Solutions.
- Enable the certifying authority to satisfy its statutory obligations under Clause 19(1) of the Environmental Planning and Assessment (Development Certification and Fire Safety) Regulation 2021.
- Enable the Public Authority to satisfy its statutory obligations under Section 6.28 of the Environmental Planning and Assessment Act, 1979.

1.3 Project Team

The following bm+g team members have contributed to this Report:

- **Priyanshu Chibber** – Report Preparation (Cadet Building Surveyor)
- **Michael Potts** –Report Preparation (Director) | Building Surveyor-Unrestricted

1.4 Referenced Documentation

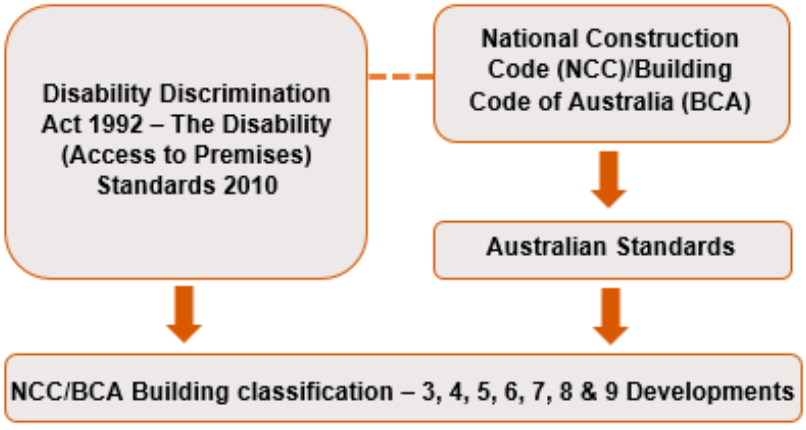
The following documentation has been reviewed, referenced and/or relied upon in the preparation of this report:

- Building Code of Australia 2022 (BCA)
- Disability (Access to Premises – Buildings) Standards 2010
- The Guide to the Building Code of Australia 2019 Amendment 1
- AS 1428.1:2009 Design for access and mobility - General requirements for access - New building work
- AS1428.2:1992 Design for access and mobility - Enhanced and additional requirements - Buildings and facilities
- AS1428.4.1:2009 Design for access and mobility - Means to assist the orientation of people with vision impairment - Tactile ground surface indicators.
- HB198:2014 Guide to the specification and testing of slip resistance of pedestrian surfaces.
- Architectural Plans prepared by Cox Architecture & Silver Thomas Hanley dated 20/11/2023 for the REF submission

1.5 Regulatory Framework

- Pursuant to S6.28 of the Environmental Planning and Assessment Act 1979, the proposed building is subject to compliance with the relevant requirements of the BCA as in force at the time of the date of invitation for tenders to carry out the Crown building work.

The below figure represents the statutory framework addressing accessibility as noted in the below Act, Code and Standards.



The Disability Discrimination Act 1992 (DDA) is Commonwealth legislation enacted in 1993 that seeks to ensure that all new building infrastructure, refurbishments, services and transport projects provide independent and equitable access. The DDA is a complaints based legislation administered by the Australian Human Rights Commission (AHRC).

Subordinate to the DDA are the Disability Standards, which include; Disability (Access to Premises – Buildings) Standards 2010, Disability Standards for Education 2005, and the Disability Standards for Accessible Public Transport 2002. These Disability standards refer back to the AS 1428 suite of standards and Building Code of Australia.

Since 2011, the Building Code of Australia has adopted the key accessibility provisions of the Disability (Access to Premises – Buildings) Standards 2010, with compliance with AS 1428.1 – 2009, AS 1428.4.1 – 2009, and AS 2890.6 – 2009 becoming mandatory. As such, compliance with the relevant sections of the BCA ensures compliance with the Disability (Access to Premises – Buildings) Standards 2010 and vicariously the DDA.

With respect to existing works, there are statutory upgrade requirements within the Disability (Access to Premises – Buildings) Standards 2010 that apply to all building works which require consent (including Crown building work). This relates to the upgrade of any 'affected part' of the building, which includes;

+ The principal pedestrian entry (i.e. entry door and ramp), and
+ The pathway / corridor / lift / ramp which form an accessible path of travel to any area of new work (note: only one accessible path of travel is required to any new part under this requirement).

Section 23 of the Disability Discrimination Act DDA 1992 states;

It is unlawful for a person to discriminate against another person on the ground of the other person's disability:

- *By refusing to allow the other person access to, or the use of, any premises that the public or a section of the public is entitled or allowed to enter or use (whether for payment or not); or*
- *In the terms or conditions on which the first-mentioned person is prepared to allow the other person access to, or the use of, any such premises; or*
- *In relation to the provision of means of access to such premises.*

The DDA Act 1992 is a complaints-based legislation whilst compliance with The Disability (Access to Premises) Standards 2010 affords some certainty regarding the minimum compliance requirements it does not prevent a claim being made under the DDA Act 1992. Whilst implementing the minimum compliance requirements under the Disability (Access to Premises) Standards 2010 and BCA will satisfy the minimum compliance requirements there is nothing preventing a greater degree of access than those minimum requirements specified.

Note: The below report also includes recommendations for best practice/non mandatory items for consideration by the project team stakeholders and as applicable have been identified in the below report in *italics.*

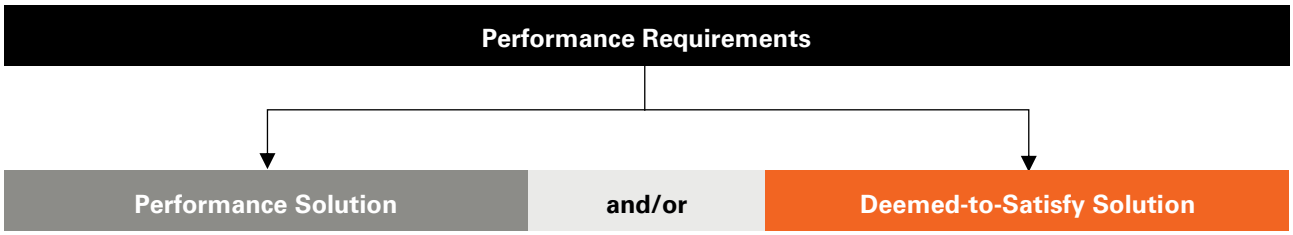
1.6 Relevant Version of the Building Code of Australia

Pursuant to Section 6.28 of the Environmental Planning and Assessment Act 1979, the proposed building is subject to compliance with the relevant requirements of the BCA as in force at the time of the date of invitation for tenders to carry out the Crown building work. The current BCA that is in force is BCA 2022, with BCA 2025 coming in to force 1 May 2025. As the invitation to tender is likely to be / has been lodged after 1 May 2023, this report assesses the design against compliance with the requirements of BCA 2022.

(Note to all pathways) The following parts of the BCA are subject to transitional provisions:

+ NCC 2022 Energy Efficiency provisions – 1 October 2023.
+ NCC 2022 Condensation Management provisions under BCA Part F8 – 1 October 2023.

1.7 Compliance with the National Construction Code



Compliance with the NCC is achieved by complying with:

- the Governing Requirements of the NCC; and
- the Performance Requirements.

Performance Requirements are satisfied by one of the following, as shown in the Figure below:

- A Performance Solution.
- A Deemed-to-Satisfy Solution.
- A combination of the above two options.

Where a *Performance Requirement* is proposed to be satisfied by a *Performance Solution*, the following steps must be undertaken:

- Prepare a performance-based design brief in consultation with relevant stakeholders.
- Carry out analysis, using one or more of the Assessment Methods listed in A2G2(2), as proposed by the performance-based design brief.
- Evaluation the results against the acceptance criteria in the performance-based design brief.
- Prepare a final report that includes:
  - All Performance Requirements and/or Deemed-to-Satisfy provisions identified through A2G2(3) or A2G4(3) as applicable; and
  - Identification of all Assessment Methods used; and
  - Details of steps (a) to (c); and
  - Confirmation that the Performance Requirement has been met; and
  - Details of conditions or limitations, if any exist, regarding the Performance Solution.

1.8 Limitations and Exclusions

The limitations and exclusions of this report are as follows:

- This report is prepared in accordance with the Conflicts of Interest provisions of Part 4 of the Building and Development Certifiers Regulation 2020. BM+G confirm that this report is prepared specifically to address the requirements of Clause 25(5) and (9) of the Regulation with respect to the role of the Registered Certifier. This assessment report is not to be construed as extending any further into providing design advice, which would be contrary to the aims of this legislation.

- Evacuation of occupants with a disability. No assessment has been undertaken to consider the equitable evacuation of all occupants.
- No assessment has been undertaken unless it explicitly relates to the Access to Premises Standard of Part D4 of the BCA. As an example, AS 1428.2-1992 has not been assessed.
- Please note that whilst the BCA specifies a minimum standard of compliance with AS1428 (Parts 1-3) 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 DDA 1992. The DDA is a complaint based legislation and is presently not identified by the State Building Codes and Regulations. In this regard the building owner should be satisfied that their obligations under the DDA have been addressed.
- No assessment has been undertaken with respect to the following areas of the NCC:
  - Structural
  - Weatherproofing
  - Waterproofing
  - Acoustic
  - Passive Fire Protection
  - Section J / ESD
  - Fire Safety Engineering
- Where relevant to this development, it is assumed that these assessments will be undertaken by others.
- This report does not consider BCA Part G5 (Volume 1) which makes provision for construction of buildings in bushfire-prone areas, therefore no assessment has been undertaken in consideration of RFS, Planning for Bushfire Protection and AS 3959. Where Part G is applicable to the site, then it is required that assessment / due diligence is undertaken by a specialist consultant to verify compliance.
- This report does not constitute a detailed assessment of the architectural documentation against the requirements of Section J. It is understood that a suitably qualified consultant will be engaged to determine compliance in this regard.
- BM+G has not undertaken an assessment of any Performance Solution Reports at the time of the preparation of this report.
- The Report does not address matters in relation to the following Local Government Act and Regulations:
  - Work Health and Safety Act and Regulations.
  - Work Cover Authority requirements.
  - Water, drainage, gas, telecommunications and electricity supply authority requirements.
  - Disability Discrimination Act 1992.
- BM+G Pty Ltd cannot guarantee acceptance of this report by Local Council, Fire & Rescue NSW or other approval authorities.
- This report may not be relied upon under the provisions of the Design and Building Practitioners Act & Regulation for the purposes of issuing a Design Compliance Declaration.
- This report is based solely on client instructions, and therefore should not be used by any third party without prior knowledge of such instructions.

1.9 Report Terminology

Access for People with Disabilities - Access to a building which is planned to minimise obstacles or hazard to disabled persons.

Accessible – Means having features to permit use by people with disabilities

Accessway – Means a continuous accessible path of travel to or within a building suitable for people with disabilities as defined in AS 1428.1

BCA Completion Certificate – A certificate issued at the completion of works which confirms the building is suitable for occupation in accordance with its classification under the BCA.

BCA Crown Certificate – A certificate issued against building works carried out by or on behalf of the Crown which verifies that the works comply with the requirements of the BCA prior to works commencing, subject to S6.28 of the Environmental Planning and Assessment Act 1979.

Braille – A system of touch reading for the blind, which employs raised dots that are evenly arranged in quadrangular letter spaces or cells.

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.

Climatic Zone – Means an area defined in Figure 2 and in Table 2 (of BCA Schedule 3) for specific locations, having energy efficiency provisions based on a range of similar climatic characteristics.

Construction Certificate – Building Approval issued by the Certifying Authority pursuant to Part 6 of the EP&A Act 1979.

Construction Type – The construction type is a measure of a buildings ability to resist a fire. The minimum type of fire-resisting construction of a building must be that specified in Table C2D2 and Specification 5, except as allowed for:

- certain Class 2, 3 or 9c buildings in C2D6; and
- a Class 4 part of a building located on the top storey in C2D4(2); and
- open spectator stands and indoor sports stadiums in C2D8.

Note: *Type A construction is the most fire-resistant and Type C the least fire-resistant of the types of construction.*

Dedicated Parking Space – a parking space set aside exclusively for the parking of a single vehicle for a person with a disability.

Deemed-to-Satisfy (DTS) Provisions of the BCA – Means the prescriptive provisions of the BCA which are deemed to satisfy the performance requirements.

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

Exit – Any, or any combination of the following if they provide egress to a road or open space:

- An internal or external stairway.
- A ramp.
- A fire-isolated passageway.
- A doorway opening to a road or open space.

Fire Compartment – The total space of the building; or when referred to in

- The Performance Requirements – any part of a building separated from the remainder by barriers to fire such as walls and/or floors having an appropriate resistance to the spread of fire with any openings adequately protected; or
- The Deemed-to-Satisfy Provisions – any part of a building separated from the remainder by walls and/or floors each having an FRL not less than that required for a fire wall for that type of construction and where all openings in the separating construction are protected in accordance with the Deemed-to-Satisfy Provisions of the relevant part.

Fire Resistance Level (FRL) – The grading periods in minutes for the following criteria:

- structural adequacy; and
- integrity; and
- insulation.

and expressed in that order.

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.

Health-care building: A building whose occupants or patients undergoing medical treatment generally need physical assistance to evacuate the building during an emergency and includes—

- a public or private hospital; or
- a nursing home or similar facility for sick or disabled persons needing full-time care; or
- a clinic, day surgery or procedure unit where the effects of the predominant treatment administered involve patients becoming non-ambulatory and requiring supervised medical care on the premises for some time after the treatment.

Hearing Augmentation – The communication of information for people who are deaf or hearing impaired by using a combination of audio, visual, and tactile means.

Horizontal exit: A required doorway between 2 parts of a building separated from each other by a fire wall.

Luminance Contrast - The light reflected from one surface or component, compared to the light reflected from another surface or component.

National Construction Code Series (NCC) – The NCC was introduced 1 May 2011 by the Council of Australian Governments (COAG). The BCA Volume One (Class 2 to 9 Buildings) is now referenced as the National Construction Code Series Volume One — BCA.

Occupiable outdoor area means a space on a roof, balcony or similar part of a building:

- that is open to the sky; and
- to which access is provided, other than access only for maintenance; and

- that is not open space or directly connected with open space.

Occupation Certificate (OC) – Building Occupation Approval issued by the Principal Certifying Authority pursuant to Part 6 of the EPA Act 1979.

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.

People with Ambulant Disabilities - People who have a mobility disability but are able to walk.

Performance-based Design Brief – Means the process and the associated report that defines the scope of work for the performance-based analysis, the technical basis for analysis, and the criteria for acceptance of any relevant Performance Solution as agreed by stakeholders.

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 meet.

Compliance with the Performance Requirements can only be achieved by-

- complying with the Deemed-to-Satisfy Provisions; or
- formulating an Alternative Solution which-
  - complies with the Performance Requirements; or
  - is shown to be at least equivalent to the Deemed-to-Satisfy Provisions; or
- a combination of the above.

Performance Solution – Means a method of complying with the performance requirements other than by a Deemed-To-Satisfy Solution.

Sensory Impairment - Any significant loss of hearing or vision.

Shared Area (for carparking) – An area adjacent to a dedicated space provided for access or egress to or from a parked vehicle and which may be shared with any other purpose that does not involve other than transitory obstruction of the area, e.g. a walkway, a vehicular aisle, dual use with another adjacent dedicated space.

Slip Resistant – A property of a surface having a frictional force-opposing movement of an object across a surface.

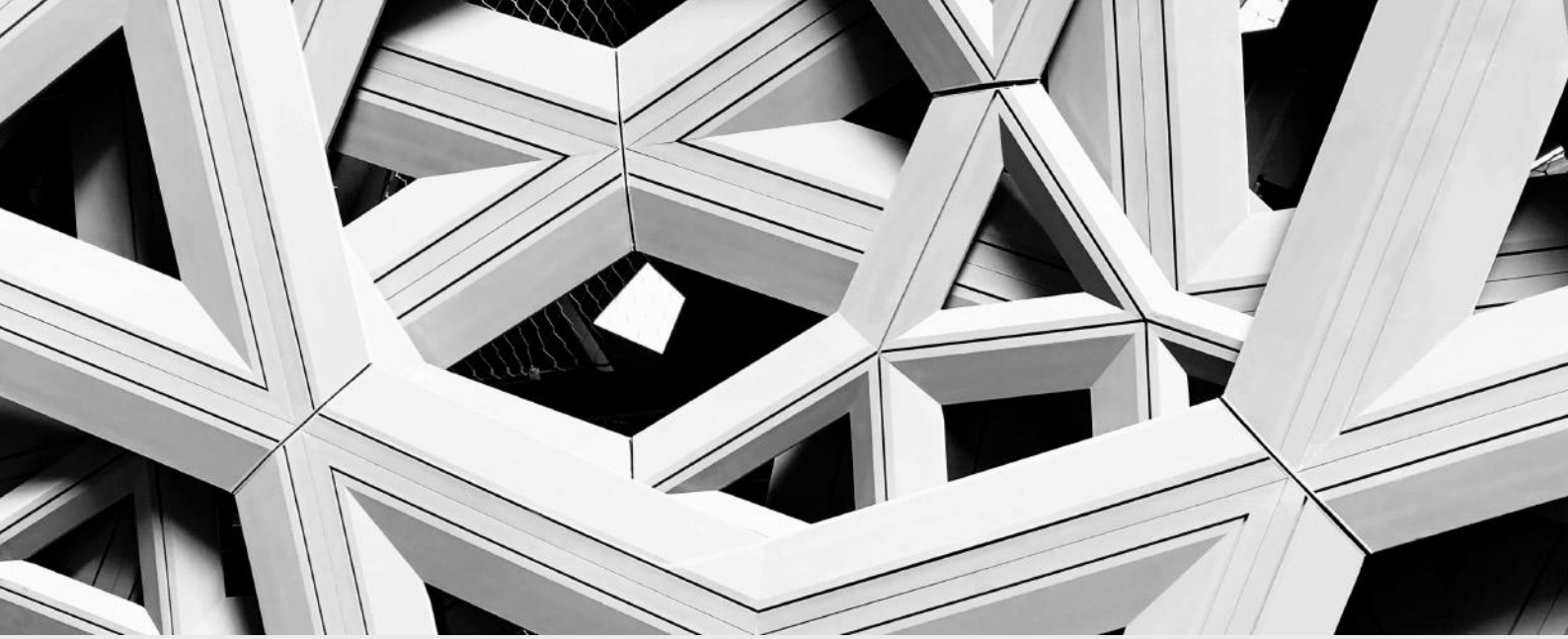
Sole Occupancy Unit – means a room or other part of a building for occupation by one or joint owner, lessee, tenant, or other occupier to the exclusion of any other owner, lessee, tenant, or other occupier and can include a dwelling and/or office suite

Tactile Ground Surface Indicators (TFSI) - Truncated cones and/or bars installed on the ground or floor surface, designed to provide pedestrians who are blind or vision-impaired with warning or directional orientation information.

Tactile Sign - Signage incorporating raised text, and/or symbols and Braille to enable touch reading by people who are blind or who are vision impaired.

Treatment area – An area within a patient care area such as an operating theatre and rooms used for recovery, minor procedures, resuscitation, intensive care and coronary care from which a patient may not be readily moved.

Ward area – That part of a patient care area for resident patients and may contain areas for accommodation, sleeping, associated living and nursing facilities.



2.0 Building Characteristics

2.1 Proposed Development

The proposed development consists of a new office spaces and storage areas.

The building is classified as follows:

BCA Classifications:	5 (Professional Services), 7b (Storage) – *see note 1*
Rise in Storeys:	Two (2)
Storeys Contained:	Two (2)
Type of Construction:	Type C Construction
Importance Level (Structural)	2 – *to be verified by the structural engineer*
Sprinkler Protected Throughout	No
Effective Height	TBC, but will be <12m
Total Floor Area	1,940m^2 (GF 1,471m^2 + FF 469m^2)
Largest Fire Compartment	Class 5 - 3,000m^2 and 18,000m^3 Class 7b - **2,000m^2** and 12,000m^3
Climate Zone	Zone 5

Note 1: Storage areas account for 190m2 of the 1,471m2 ground floor which is more than 10% of the floor area for the storey so class 7b applies in addition to class 5.

2.2 Distance to Fire Source Features

Based upon a review of the plans, it is noted that each elevation of the building is located within the following distances from fire source features on the site.

+ Elevation	+ Fire Source Feature	+ Distance
North	Cowper St	>6m
East	Fairfax Rd	>6m
West	Building on allotment	>6m
South	Building on allotment	>6m

Note 1: 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.

2.3 Overview of Access Requirements

The project site is located.

	+ Requirements for Accessibility
Class 5 & 7b	+ For Class 5 & 7b buildings, access must be provided to and within all areas normally used by the occupants.

2.4 Accessibility Exemptions

The use of certain parts of the building are not required to be accessible in the following instances:

- An area where access would be inappropriate because of the particular purpose for which the area is used.
- An area that would pose a health or safety risk for people with a disability.
- Any path of travel providing access only to an area exempted by the above two items

Some examples of the above include:

- Equipment Loan Pool Store
- Clean and dirty utility rooms
- Other storerooms and equipment bays
- Plantrooms, switchrooms and specialty equipment rooms (e.g. comms, UPS, distribution boards etc.)

2.5 Performance Solutions

Where there are any departures from achieving compliance with the BCA, there is an opportunity to address the compliance issue by the development of a Performance Solution.

This report does not currently identify any Performance Solutions, however, they are likely to be developed during the Detailed Design and Construction Documentation Phase.

3.0 BCA Assessment

+ Legend	
Complies	The referenced plans show compliance with this clause
Compliance Readily Achievable	The referenced plans do not show sufficient information to establish compliance with this clause. Design certification, should be submitted with the application for the BCA Crown Certificate.
Further Information Required	The referenced plans do not show sufficient information to establish compliance with this clause. Further details, should be submitted with the application for the BCA Crown Certificate.
Performance Solution	The referenced plans do not comply with this clause and a Performance Solution is required/proposed to demonstrate compliance with the Performance Requirements
Does Not Comply	The proposal does not comply with this clause and redesign is required.
Note	Provisions contained within this BCA clause are provided for guidance, or are to be read in conjunction with other BCA clauses.

+ Clause	+ Reference	+ Comment	
Section B	**Structure**		
Part B1	**Structural Provisions**		
B1D3 (Previously B1.2) Determination of Individual Actions	Structural engineering details prepared by an appropriately qualified structural engineer to be provided to demonstrate compliance with Part B1 in relation to the new structural elements of the building. Design Statement from a Professional Engineer to be provided confirming that the design achieves compliance with the following is required at the time of BCA Crown Certificate. Application, inclusive of reference to the following Australian Standards (where relevant): + AS 1170.0 – 2002 General Principles + AS 1170.1 – 2002, including certification for balustrading (dead and live loads) + AS 1170.2 – 2021, Wind loads + AS 1170.4 – 2007, Earthquake loads + AS 3700 – 2018, Masonry code + AS 3600 – 2018, Concrete code + AS 4100 – 2021, Steel Structures + AS 4600 – 2018, Cold formed steel. + AS 2047 – 2014, Windows in buildings	**Compliance Readily Achievable:** A compliance certificate from a Structural Engineer registered on the NER is required for all structural works at the completion of building works and prior to the issuance of a BCA Completion Certificate. Provision must be made in the design by all consultants (i.e. non-structural.	

+ Clause	+ Reference	+ Comment	
	+ AS 1288 – 2021, Glass in buildings		
B1D4 **(Previously B1.4)** Determination of Structural Resistance of Materials	The structural resistance of materials and forms of construction must be determined in accordance with the requirements of this clause.	**Compliance Readily Achievable:** Detail and design certification to be provided at the BCA Crown Certificate. Stage.	
Section C	**Fire resistance**		
Part C2	**Fire Resistance and Stability**		
C2D2 **(Previously C1.1)** Type of Construction Required	The minimum type of fire-resisting construction of a building must be that specified in Table C2D2 and Specification C2D2 except as allowed for in this clause. Table C2D2 does not apply to Class 2, 3 or 9c buildings classified in Part C2D6 or open spectator stands/indoor sports stadiums.	**Note:** Type C Construction applies to the building. Refer to Spec 5 of the BCA & APPENDIX 1 of this Report for the applicable FRLs to the project. Reference shall also be made to the project Fire Engineering Report.	
C2D9 **(Previously C1.8)** Lightweight Construction	Lightweight construction must comply with Specification 6 if used in a wall system that is required to have an FRL.	**Compliance Readily Achievable:** Detail to be included in the design to ensure compliance with this clause.	
C2D11 **(Previously C1.10)** Early Fire Hazard Properties	The fire hazard properties of the outlined linings, materials and assemblies in a Class 2 to 9 building must comply with Specification 7. Refer below to extracts from Tables S7C3 and S7C4 of Spec 7. as relevant to wall, floor, an ceiling linings. For additional detailed requirements relating to additional building elements, refer to the relevant clause of Spec 7. as outlined below: + Floor linings and coverings – S7C3 + Wall linings and ceiling linings – S7C4 + Air-handling ductwork – S7C5. + Lift Cars – S7C6. + Fire control rooms and fire-isolated exits – S7C7 + Fixed seating and proscenium curtains in Class 9b theatres, public halls and the like – S7C7 + Escalators, moving walkways, and non-required non-fire-isolated stairways and ramps – S7C7. + Sarking-type materials – S7C7.	**Further Information Required:** A schedule of all wall, floor, and ceiling linings along with associated test reports are to be provided for review to ensure compliance with the fire hazard property requirements of the BCA. Noting: + Minimum Group Numbers apply to wall and ceiling linings. AS 5637 test reports must be provided to determine compliance. + Minimum Critical Radiant Flux values apply to floor linings. AS ISO 9239.1 test reports must be provided to determine compliance. + Test Reports from Accredited Testing Laboratories are required to be provided. Pursuant to Clause A5G6, reports from a professional engineer as to the 'likely performance' will not be accepted. All specified materials and products must be	

+ Clause	+ Reference	+ Comment
	+ Attachments to internal floors, walls, and ceilings – S7C7. + Other materials – S7C7	tested to the required standards. Details to be provided at the Crown Certificate stage.

+ Table S7C3 of Specification 7– Critical Radiant Flux of Floor Linings and Floor Coverings

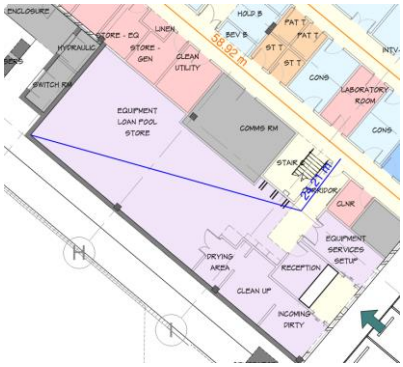
+ Class of building	+ Building not fitted with a sprinkler system
Class 5 & 7, excluding— Class 3 accommodation for the aged; and	2.2 kW/m2

+ Table S7C4 of Specification 7 – Wall and Ceiling Lining Materials (Materials Groups Permitted)

+ Class of building	+ Fire-isolated exits and fire control rooms	+ Public corridors	+ Specific areas	+ Other areas
Class 5 & 7, Unsprinklered	Walls: 1 Ceilings: 1	Walls: 1, 2 Ceilings: 1, 2	Walls: 1, 2, 3 Ceilings: 1, 2	Walls: 1, 2, 3 Ceilings: 1, 2, 3

Part C2	Fire Compartmentation and Separation	
C3D13 (Previously C2.12) Separation of Equipment	Equipment as listed below must be separated from the remainder of the building with construction that achieves an FRL of 120/120/120 (or that required by Spec 5, whichever is greater) and doorways being self-closing -/120/30 fire doors: + Lift motors and lift control panels; or + Emergency generators used to sustain emergency equipment operating in the emergency mode; or + Central smoke control plant; or + Boilers; or + A battery or batteries installed in the building that have a voltage exceeding 12 volts and a capacity exceeding 200kWh. + Separation of on-site fire pumps must comply with the requirements of AS 2419.1.	**Further Information Required:** Service designers are required to confirm what equipment needs to be fire separated. Details to be provided at the Crown Certificate stage.
C3D14 (Previously C2.13) Electricity Supply System	An electrical substation located within a building or a main switchroom which sustains emergency equipment, must: + Be separated from the building by construction achieving an FRL of 120/120/120; and + Have any doorway protected with a self-closing fire door achieving an FRL of -/120/30. + Electrical conductors within a building must be protected in accordance with sub-clause (3).	**Further Information Required:** Service designers are required to confirm what equipment needs to be fire separated. Details to be provided at the Crown Certificate stage.

+ Clause	+ Reference	+ Comment	
Part C4	**Protection of Openings**		
C4D5 **(Previously C3.4)** Acceptable Methods of Protection	Where protection is required, doorways, windows and other openings must be protected as follows: + Doorways – - Internal or external wall-wetting sprinklers as appropriate used with doors that are self-closing or automatic closing; or - -/60/30 fire doors that are self-closing or automatic closing. + Windows – - Internal or external wall-wetting sprinklers as appropriate used with windows that are automatic closing or permanently fixed in the closed position; or - -/60/- automatic closing fire shutters. + Other openings – - Excluding voids – internal or external wall-wetting sprinklers, as appropriate; or - Construction having FRL not less than -/60/-.	**Compliance Readily Achievable:** Detail to be included in the design where applicable.	
C4D15 **(Previously C3.15)** Openings for Service Installations	When a service penetrates a building element that is required to have an FRL with respect to integrity or insulation or a resistance to the incipient spread of fire, that penetration must: + Be identical to a tested prototype assembly, tested in accordance with AS4072.1 and AS1530.4. + In the case of ventilating or air-conditioning ducts/equipment, the installation must comply with AS1668.1.	**Compliance Readily Achievable:** Detail and design certification to be provided at the BCA Crown Certificate. stage.	
Part C Specifications			
Spec 5 **(Previously Spec C1.1)** Fire-Resisting Construction	The new building works are required to comply with the requirements detailed within Specification 5 for Type C Construction.	**Compliance Readily Achievable:** No fire-rating is required unless fire walls are introduced to comply with other requirements.	
Spec 12 **(Previously Spec C3.4)** Fire Doors and Smoke Doors	Fire doors must comply with AS1905.1 and not fail the period specified for integrity in the required FRL due to glazed parts. A required fire shutter or fire window must be identical with a tested prototype that has met the required FRL as well as installed in	**Compliance Readily Achievable:** Details to be included into the design.	

+ Clause	+ Reference	+ Comment	
	the same manner. If a metallic fire shutter is not prohibited by C4D6, a required fire shutter must be a steel shutter complying with AS1905.2.		
Section D	**Access and Egress**		
Part D2	**Provision for Escape**		
D2D3 **(Previously D1.2)** Number of Exits Required	In addition to horizontal exits, following buildings/areas are required to be provided with two exits- + Class 5 & 7: Each storey if the building has an effective height >25m.	**Complies:** Both storeys are provided with at least two exits.	
D2D5 **(Previously D1.4)** Exit Travel Distances	For Class 5 & 7 buildings: + Maximum 20m to an exit or to a point of choice between alternative exits. + In a Class 5 or 6 building, the distance to a single exit serving a storey at the level of access to a road or open space may be increased to 30m. + Maximum distance to one of those exits is 40m.	**Performance Solution** The distance to a point of choice from the equipment loan pool store is 25m in lieu of 20m. Either provide an additional exit or address as a fire engineered performance solution.  **Complies:** All other travel distances comply.	
D2D6 **(Previously D1.5)** Distances Between Alternative Exits	Exits that are required as alternative means of egress must be- + Distributed as uniformly as practical within the storey served. + Located so that unobstructed access to 2 exits is available from all points. + Not less than 9m apart + Not more than - Class 2/3: 45m apart - Class 9a patient care: 45m - In all other cases – 60m. Located so that alternative paths of travel do not converge <6m.	**Complies:** The distances between alternative exits are <60m. Note: An alternative path of egress is up to 58m between exits so any modifications might push the distance beyond 60m which would need to be addressed as a fire engineered performance solution.	
D2D7	In a required exit or path of travel to an exit the unobstructed height throughout must be not less than 2 m, except the unobstructed	**Compliance Readily Achievable:** Detail to be included in the design.	

+ Clause	+ Reference	+ Comment
(Previously D1.6(a)) Dimensions of Exits	height of any doorway may be reduced to not less than 1980 mm.	
D2D8 **(Previously D1.6(b), (c), (d) and (e))** Width of exits, paths of travel to exits and doorways	The unobstructed width of each required exit or path of travel to an exit, except for ladders provided in accordance with D2D21, D3D23 or I3D5, and doorways, must be not less than— + 1m; or If the storey, mezzanine or open spectator stand accommodates more than 100 persons but not more than 200 persons, the aggregate unobstructed width of each required exit or path of travel to an exit, except for doorways, must be not less than— + 1 m plus 250 mm for each 25 persons (or part) in excess of 100; or If the storey, mezzanine or open spectator stand accommodates more than 200 persons, the aggregate unobstructed width of each required exit or path of travel to an exit, except for doorways, must be not less than— + 2 m plus 500 mm for every 60 persons (or part) in excess of 200 persons if egress involves a change in floor level by a stairway or ramp with a gradient steeper than 1 in 12; or + in any other case, 2 m plus 500 mm for every 75 persons (or part) in excess of 200.	**Complies:**
D2D9 **(Previously D1.6(f))** Width of doorway in exits or paths of travel to exits	In a required exit or path of travel to an exit, the unobstructed width of a doorway must be not less than — + where the doorway referred to in (i) is fitted with two leaves and one leaf is secured in the closed position in accordance with D3D26(3)(e), the other leaf must permit an unobstructed opening not less than 800 mm wide; or + the unobstructed width of each exit provided to comply with D2D8(1), (2), (3) or (4), minus 250 mm; or	**Compliance Readily Achievable:** Detail to be included in the design.
D2D10 **(Previously D1.6(g))** Exit width not to diminish in	The unobstructed width of a required exit must not diminish in the direction of travel to a road or open space, except where the width is increased in accordance with D2D8(1)(b) or D2D9(a)(i).	**Complies:** The unobstructed width of the required exits does not diminish in the direction of travel to a road or open space.

+ Clause	+ Reference	+ Comment	
direction of travel			
D2D11 (Previously D1.6(h) and (i)) Determination and measurement of exits and paths of travel to exits	For the purposes of D2D7 to D2D10 the following apply: + The required width of a stairway or ramp in a required exit or path of travel to an exit must— - be measured clear of all obstructions such as handrails, projecting parts of barriers and the like; and - extend without interruption, except for ceiling cornices, to a height not less than 2 m vertically above a line along the nosings of the treads or the floor surface of the ramp or landing. + To determine the aggregate unobstructed width, the number of persons accommodated must be calculated according to D2D18.	**Complies:**	
D2D14 **(Previously D1.9)** Travel by Non-Fire Isolated Stairways or Ramps	In a Class 5 building, the distance from any point on a floor to a point of egress to a road or open space by way of a required non-fire-isolated stairway or ramp must not exceed 80m. A required non-fire isolated stairway or non-fire-isolated ramp must discharge at a point not more than- + Class 5 & 7 – 20m from a doorway or fire-isolated exit providing egress to road or open space, or 40m from one of 2 such exits if travel to each is in opposite or approximate opposite directions.	**Complies:** The distance to an exit from level 1 via the non-fire-isolated stairs to exits to open space is <80m. There is also alternative paths from each stairway on the ground floor.	
D2D15 **(Previously D1.10)** Discharge From Exits	The path of travel to the road from a required exit leading to open space must have an unobstructed exit width of that of the required exit, or if larger, 1m. If the discharge point of the exit is at a different level from the road, a stairway or ramp achieving no more than 1:14 must be provided. The discharge point of alternative exits must be located as far apart as practical and be suitably protected from vehicles potentially blocking the exit.	**Compliance Readily Achievable:** Paths are required to be detailed from each exit doorway to the roadway.	
D2D18	Outlines the number of persons accommodated in a storey as per Table D2D18 of BCA 2022.	Noted.	

+ Clause	+ Reference	+ Comment	
(Previously D1.13) Number of Persons Accommodated			
D2D21 **(Previously D1.16)** Plant Rooms & Lift Motor Rooms Concession	A ladder may be used in lieu of a stairway to provide egress from a plant room with a floor area of not more than 100m^2 or all but one point of egress from a plant room or a lift machine room with a floor area not more than 200m^2. Sub-clause (2) sets out the parameters for the ladders permitted to be used in this circumstance.	**Compliance Readily Achievable:** Details to be included into the design.	
D2D22 **(Previously D1.17)** Access to Lifts Pits	Access to lift pits with a depth of under 3m must be provided through the lowest landing doors. If a lift pit exceeds 3m in depth, access must be provided in accordance with sub-clause (b).	**Compliance Readily Achievable:** Details to be included into the design.	
Part D3	**Construction of Exits**		
D3D4 **(Previously D2.3)** Non-Fire-Isolated Stairways and Ramps	In a building with a rise in storeys of more than 2, required non-fire-isolated stairways and ramps must be either constructed in accordance with D3D3 or – + Reinforced or prestressed concrete; or + Steel at least 6mm thick at all points; or Timber that has a finished thickness of at least 44mm, has an average density of at least 800 kg/m^3 at a moisture content of 12% and has not been joined by means of glue unless it has been laminated and glued with resorcinol/phenol formaldehyde.	**Compliance Readily Achievable:** Details to be included into the design.	
D3D8 **(Previously D2.7)** Installations in Exits and Paths of Travel	If installed in a path of travel to an exit, electrical distribution boards, communication cupboards and the like containing motors, etc. are to be enclosed with non-combustible construction (or a fire protective covering), and doors are to be provided with smoke seals to the perimeter.	**Compliance Readily Achievable:** Details to be included into the design.	
D3D9 **(Previously D2.8)** Enclosure of Space Under Stairs and Ramps	The space below a required fire-isolated stairway or ramp in a fire-isolated shaft must not be enclosed to form a cupboard or other enclosed space. If the required stairway or ramp is non-fire-isolated, (including an external stairway) any cupboard underneath must have an FRL of 60/60/60, with a self-closing -/60/30 door.	**Further Information Required:** The storeroom under stair 1 and the hydraulic plant under stair 2 are required to be in 60min fire-rated rooms. Details to be provided at the Crown Certificate stage.	
D3D14	The stairs must comply with the tread, riser and going dimensions of this clause and the	**Compliance Readily Achievable:**	

<table>
<tr><th>+ Clause</th><th>+ Reference</th><th>+ Comment</th></tr>
<tr><td>(Previously D2.13)
Goings and Risers</td><td>nosing of the stairs must be provided with a non-slip treads and meet the provisions of AS1428.1-2009.
The following will apply in relation to the construction of all stairways:
+ Stairway must have not more than 18 and not less than 2 risers in each flight.
+ Goings and risers within the stair flights must be constant throughout.
+ Risers must be solid construction with no gaps and treads must have non slip finishes and stair nosings.
+ Goings and risers are to be in accordance with BCA Table D3D14.</td><td>Details to be included into the design.</td></tr>
<tr><td>D3D15
(Previously D2.14)
Landings</td><td>In a stairway –
+ Landings must be a minimum of 750mm long, and where it involves a change of direction the length is measured 500mm from the inside edge of the landing
+ Have a slip resistance of the surface of the nosing strip in accordance with Table D3D15 and tested in accordance with AS 4586.
<table><tr><th rowspan="2">+ Application</th><th colspan="2">+ Surface Conditions</th></tr><tr><th>+ Dry</th><th>+ Wet</th></tr><tr><td>Ramps steeper than 1:14</td><td>P4/R11</td><td>P5/R12</td></tr><tr><td>Ramp steeper than 1:20 but not steeper than 1:14</td><td>P3/R10</td><td>P4/R11</td></tr><tr><td>Tread or landing surface</td><td>P3/R10</td><td>P4/R11</td></tr><tr><td>Nosing or landing strip</td><td>P3</td><td>P4</td></tr></table></td><td>Compliance Readily Achievable:
Details to be included into the design.

Provide a AS 4586 slip resistance certificate for the surfaces of the nosing strips.</td></tr>
<tr><td>D3D16
(Previously D2.15)
Thresholds</td><td>The threshold of a doorway must not incorporate a step or ramp at any point closer to the doorway than the width of the door leaf unless –
+ In a building required to be accessible –
- The doorway opens to a road or open space; and
- Is provided with a threshold ramp or step ramp in accordance with AS 1428.1.
+ In other cases –
- the doorway opens to a road or open space, external stair landing or external balcony; and
- the door sill is not more than 190 mm above the finished surface of the ground, balcony, or the like, to which the doorway opens.</td><td>Compliance Readily Achievable:
Details to be included into the design.</td></tr>
</table>

+ Clause	+ Reference	+ Comment
D3D17 **(Previously D2.16(a), (b) and (c))** Balustrades	A continuous barrier must be provided along the side of— + a roof to which general access is provided; and + a stairway or ramp; and + a floor, corridor, hallway, balcony, deck, verandah, mezzanine, access bridge or the like; and + any delineated path of access to a building, if the trafficable surface is 1 m or more above the surface beneath. The above requirements of do not apply to— + the perimeter of a stage, rigging loft, loading dock or the like; or + areas referred to in D3D23; or + a retaining wall unless the retaining wall forms part of, or is directly associated with a delineated path of access to a building from the road, or a delineated path of access between buildings; or + a barrier provided to an openable window covered by D3D29. A barrier required by this clause must be constructed in accordance with D3D18, D3D19, D3D20 and, if a wire barrier is used, D3D21.	**Compliance Readily Achievable:** Details to be included into the design where applicable.
D3D18 **(Previously D2.16a)** Height of Balustrades	The height of a barrier required by D3D17 must be not less than the following: + For stairways or ramps with a gradient of 1:20 or steeper — 865 mm. + For landings to a stair or ramp where the barrier is provided along the inside edge of the landing and does not exceed 500 mm in length — 865 mm. + In front of fixed seating on a mezzanine or balcony within an auditorium in a Class 9b building, - 1m; or - 700mm where the horizontal projection extends not less than 1m outwards from the top of the barrier; or + For all other locations — 1 m. For a barrier provided from D3D17 — + barrier heights are measured vertically from the surface beneath, except that for stairways the height must be measured	**Compliance Readily Achievable:** Details to be included into the design where applicable.

+ Clause	+ Reference	+ Comment
	above the nosing line of the stair treads; and + a transition zone may be incorporated where the barrier height changes from 865 mm on a stair flight or ramp to 1 m at a landing or floor.	
D3D19 (Previously D2.16a) Openings in Balustrades	Openings in a required balustrade must not allow a 125 mm sphere to pass through unless in a fire-isolated stairway, fire-isolated ramp or other area used primarily for emergency purposes. This is to the exception of fire-isolated stairs and ramps serving a Class 9b early childhood centre, or generally external stairways, which must still comply with the 125mm gap requirement. In a fire-isolated stairway, fire-isolated ramps or other areas used primarily for emergency purposes openings in a required balustrade – + must not allow a 300mm sphere to pass through; or + where rails are used – - a 150 mm sphere must not be able to pass through the opening between the nosing line of the stair treads and the rail or between the rail and the floor of the landing, balcony, or the like; and - the opening between rails must not be more than 460 mm. In a class 7 and Class 8 buildings, opening in a required balustrade – + must not allow a 300 mm sphere to pass through; or + where rails are used - - a 150 mm sphere must not be able to pass through the opening between the nosing line of the stair treads and the rail or between the rail and the floor of the landing, balcony or the like; and - the opening between the rails must not be more than 460 mm. The maximum 125 mm balustrade opening for a stairway, such as a non-fire isolated stairway, is measured above the nosing line of the stair treads. Where a required balustrade is fixed to the vertical face forming an edge of a landing, balcony, deck, stairway or the like, the opening formed between the balustrade and the face must not exceed 40 mm. The	**Compliance Readily Achievable:** Details to be included into the design where applicable.

+ Clause	+ Reference	+ Comment
	opening is measured horizontally from the edge of the surface to the nearest internal face of the balustrade	
D3D20 (Previously D2.16a) Barrier Climbability	A barrier required by D3D17, located on a floor more than 1m above the surface beneath, must not incorporate horizontal or near horizontal elements that could facilitate climbing between 150mm and 760mm above the floor. This does not apply to – + Fire isolated stairways, fire-isolated ramps and other areas used primarily for emergency purposes, other than – - external stairways; and - external ramps; and + Class 7 (other than carparks).	**Compliance Readily Achievable:** Details to be included into the design where applicable.
D3D22 (Previously D2.17) Handrails	Handrails must be located along at least one side of a ramp or flight unless the width is 2m or more requiring handrails on both sides. (other cases) Handrails must fixed at a minimum height of 865mm and be continuous between stair flight landings and have no on or above them that may break the hand hold. If in a required exit serving an accessible area, must comply with AS 1428.1.	**Compliance Readily Achievable:** Details to be included into the design and compliance to be achieved with AS 1428.1-2009.
D3D25 (Previously D2.20) Swinging Doors	A swinging door forming part of a required exit must not encroach the required width of a required exit by way of the swing of the door, or the door itself including associated hardware whilst in the open position. A swinging door must not swing against the direction of egress unless + it serves a building or part with a *floor area* not more than 200m^2, it is the only *required exit* from the building or part and it is fitted with a device for holding it in the open position; or + it serves a *sanitary compartment* or airlock (in which case it may swing in either direction);	**Further Information Required:** The eastern exit doorway between the switchroom and reception needs to swing out. Details to be provided at the Crown Certificate stage. 
D3D26 (Previously D2.21) Operation of Latch	A door in a path of travel to an exit must be readily openable via the provision of single downward lever action hardware located between 900mm and 1.1m from FFL in area required to be accessible, otherwise single	**Compliance Readily Achievable:** Details to be included into the design.

+ Clause	+ Reference	+ Comment
	pushing action hardware between 900mm and 1.2m form FFL is permitted. These requirements do not apply to a door serving: + a vault, strong-room, sanitary compartment, or the like, + a space which is otherwise inaccessible to persons at all times when the door is locked; or In addition, provided that the door can be immediately unlocked by a fail-safe control switch, not contained within a protective enclosure, to actuate a device to unlock the door; or by hand by a person or persons, specifically nominated by the owner, properly instructed as to the duties and responsibilities involved and available at all times when the building is lawfully occupied so that persons in the building or part may immediately escape if there is a fire.	
D3D28 **(Previously D2.23)** Signs on Doors	It is a requirement that signs to alert persons that the operation of smoke doors, fire doors, and doors discharging from fire isolated exits, must not be impaired must be installed where they can be readily seen.	**Compliance Readily Achievable:** Details to be included into the design.

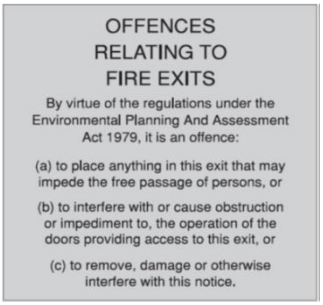
+ A sign, to alert persons that the operation of certain doors must not be impaired, must be installed where it can readily be seen on, or adjacent to, a—
  - A required fire door providing direct access to a fire-isolated exit; and
  - A required smoke door, on the side of the door that faces a person seeking egress and, if the door is fitted with a device for holding it in the open position, on either the wall adjacent to the doorway or both sides of the door; and
  - Fire door forming part of a horizontal exit; and
  - Smoke door that swings in both directions; and
  - Door leading from a fire isolated *exit* to a road or *open space*, on each side of the door.
+ A sign referred to in (a) must be in capital letters not less than 20 mm high in a colour contrasting with the background and state—

Any new self-closing fire and/or smoke doors leading into the fire stair or forming part of a Horizontal Exit or smoke compartment are to be provided with signage as follows:

Any new automatic closing fire and/or smoke doors which are held on hold open devices that leads into the fire stair or forming part of a Horizontal Exit or smoke compartment are to be provided with signage as follows:

+ Clause	+ Reference	+ Comment

In addition to the above, the doors which provide access to the fire isolated exits and also the Horizontal Exits must have signage provided adjacent to the entry doorway which states the following (ref Clause 109 of EP&A DCFS Reg 2021):

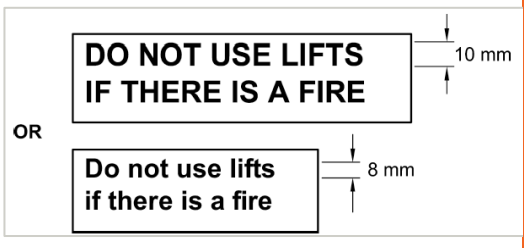


D3D29 **(Previously D2.24)** Protection of Openable Windows	A barrier no less than 865mm is required to an openable window when a child resistant release mechanism is required, as well as when the floor below the window is >4m above the surface beneath. The design requirements for this balustrade are specified within the clause.	**Compliance Readily Achievable:** Details to be included into the design.
Section E	**Services and Equipment**	
Part E1	**Fire Fighting Equipment**	
E1D2 **(Previously E1.3)** Fire Hydrants	A Hydrant system is required to be installed in accordance with AS 2419.1 – 2021 given the total floor area of the building exceeding 500msq. Note: The below comprises a limited summary of requirements under AS 2419.1 – 2021. Refer to the full standard for all applicable requirements. + Fire Brigade Booster Assemblies: A fire brigade booster assembly shall be located (including but not limited to) - + within or affixed to the facade of the building containing the principal pedestrian entrance and not more than 20 m from the principal pedestrian entrance; + within or affixed to the facade of the building containing the principal pedestrian entrance and identified by a visual alarm device (VAD) in accordance with Clause 7.3.2; or + remote from the building and within sight of the principal pedestrian entrance to the building - - adjacent to the site boundary and the principal vehicle access for the fire brigade pumping appliance to the building or site; or	**Further Information Required:** Provide details on the location of the booster assembly and hydrant locations. **Compliance Readily Achievable:** Design statement to be provided at BCA Crown Certificate. stage.

+ Clause	+ Reference	+ Comment
	- not more than 20 m from the facade of the building containing the principal pedestrian entrance and not more than 20 m from the main pedestrian entrance. In addition, a fire brigade booster assembly shall be (including but not limited to): + Not more than 10m from a hardstand + Not less than 10m from: - Any high voltage electrical distribution equipment such as transformers and distribution boards - Any electric vehicle charging station regardless of voltage - Any stored quantity of dangerous goods - Any external combustible storage + Not less than 3m from the vent terminal of any gas assembly or gas measurement systems + Not less than 3m from the discharge outlet of any building exhaust system when operating in fire mode. Where located less than 10m from a non-sprinkler protected building, the booster shall be protected in accordance with the requirements of Cl. 7.6.2 of AS 2419.1 - 2021. **+ Internal Hydrants** Any Internal Hydrants are to be located within the fire isolated exits or within 4m of the top riser of the non-fire isolated exits (external stairs in lieu of fire stairs). In addition, if floor coverage cannot be achieved a Performance Solution is required to locate hydrants >4m from an exit in Class 5-9 buildings. **+ External Hydrants** External hydrants are required to be located: + Not less than 10m from: - Any high voltage electrical distribution equipment such as transformers an distribution boards - Any electric vehicle charging station regardless of voltage. - Any stored quantity of dangerous goods - Any external combustible storage	

+ Clause	+ Reference	+ Comment
	+ Not less than 3m from the vent terminal of any gas assembly or gas measurement systems + Not less than 3m from the discharge outlet of any building exhaust system when operating in fire mode. **+ Hydrant Pump Rooms** Where required, a hydrant pump room is required to have a door opening to a road or open space, or a door opening direct into a fire isolated airlock connected to a fire stair. Pump rooms shall be weatherproof and only contain firefighting pump sets and associated equipment. A minimum of 1m clearance must be provided around all sides of each pump set. For additional requirements refer to Cl. 6.11 of AS 2419.1 – 2017. **+ Applicability of AS 2419.1 – 2021** A Performance Solution is required for a hydrant system serving: + A Class 7b building. + Buildings that include automatic racked storage systems. + Buildings having an effective height of more than 135m. + Buildings and associated areas that include special hazards.	
E1D3 **(Previously E1.4)** Fire Hose Reels	Does not apply to Class 5. A fire hose reel system must be provided to serve a building where one or more internal fire hydrants are installed or in a building with a floor area greater than 500m². Fire Hose Reels are to be located within 4m of an exit, or located adjacent to an internal hydrant (other than one within a fire isolated exit). Where system coverage is not achieved by the above, additional FHR may be located in paths of travel to an exit. Fire hose reels must be located internally, externally or in any combination to achieve the system coverage specified in AS 2441. Fire hose reels must not pass through any fire or smoke doors except if it is a doorway referred to in BCA Clause C3D6 (1)(e), C3D6(5)(d), C3D13, C3D14 or C4D14. Fire hose reels must only serve the storey on which they are located except for an SOU or not more than 2 storeys for a Class 5 / 6 / 7 / 8 or 9 may be served by a single fire hose reel located at the level of egress.	**Further Information Required / Performance Solution** Provide details on the location of fire hose reels required to class 7b storage parts of the building or address the omission of fire hose reels as a fire engineered performance solution. **Compliance Readily Achievable:** Design statement to be provided at BCA Crown Certificate. stage.

+ Clause	+ Reference	+ Comment	
E1D14 (Previously 1.6 and Table E1.6) Portable Fire Extinguishers	Portable fire extinguishers must be provided as listed in Table E1D14 and must be selected, located and distributed in accordance with Sections 1, 2, 3 and 4 of AS 2444.	**Compliance Readily Achievable** Design statement to be provided at BCA Crown Certificate. stage.	
E1D16 (Previously E1.9) Fire Precautions During Construction	In buildings under construction at least one fire extinguisher to suit Class A, B and C fires and electrical fires must be provided at all times on each storey adjacent to a required exit and if the building has reached an effective height of 12m the required hydrant and hose reel systems must be installed, as set out in (b)(ii) and be operational and any required booster connections must be installed.	**Contractor to Note**	
Part E2	**Smoke Hazard Management**		
E2D3 **(Previously E2.2)** General Requirements	+ An air-handling system which does not form part of a smoke hazard management system in accordance with E2D4 to E2D20 and which recycles air from one fire compartment to another fire compartment or operates in a manner that may unduly contribute to the spread of smoke from one fire compartment to another fire compartment must be designed and installed— - to operate as a smoke control system in accordance with AS 1668.1; or - such that it— ▪ incorporates smoke dampers where the air-handling ducts penetrate any elements separating the fire compartments served; and ▪ is arranged such that the air-handling system is shut down and the smoke dampers are activated to close automatically by smoke detectors complying with clause 7.5 of AS 1670.1. + Miscellaneous air-handling systems covered by Sections 5 and 6 of AS 1668.1 serving more than one fire compartment (other than a carpark ventilation system) and not forming part of a smoke hazard management system must comply with these Sections of the Standard. + A smoke detection system must be installed in accordance with S20C6 to operate AS 1668.1 systems that are provided for zone pressurisation and	**Compliance Readily Achievable:** Design statement to be provided at BCA Crown Certificate. stage.	

+ Clause	+ Reference	+ Comment	
	automatic air pressurisation for fire-isolated exits.		
Part E3	**Lift Installations**		
E3D4 **(Previously E3.3)** Warning Against Use of Lifts in Fire	Warning signs required be provided must be displayed where they can be readily seen and must comply with the details and dimensions of Figure E3.3 below.  	**Compliance Readily Achievable:** Detail to be included in the design.	
E3D6 **(Previously E3.5)** Landings	Access and egress to and from lift well landings must comply with the *Deemed-to-Satisfy Provisions* of Parts D2, D3 and D4.	**Compliance Readily Achievable:** Design statement to be provided at BCA Crown Certificate. stage.	
E3D7 **(Previously E3.6, Table E3.6a, Table E3.6b)** Passenger Lift types and their limitations	In an accessible building, every passenger lift must be one of the types identified in this clause, have accessible features in accordance with Table E3D8 and not rely on a constant pressure device for its operation if the lift car is fully enclosed.	**Compliance Readily Achievable:** Design statement to be provided at BCA Crown Certificate. stage.	
Part E4	**Emergency Lighting, Exit Signage and Warning Systems**		
E4D2 **(Previously E4.2)** Emergency Lighting	This clause details when emergency lighting must be installed in Class 2 to 9 buildings. The requirements for buildings and parts of buildings are detailed in sub-clauses (a) to (i) and each sub-clause must be considered as more than one may apply to any single building.	**Compliance Readily Achievable:** Design statement to be provided at BCA Crown Certificate. stage.	
E4D3 **(Previously E4.3)** Measurement of Distances	Distance, other than vertical rise, must be measured along the shortest path of travel whether by straight lines, curves or a combination of both.	Noted	
E4D4 **(Previously E4.4)** Design and Operation of Emergency Lighting	Every required emergency lighting system must comply with AS2293.1 - 2018	**Compliance Readily Achievable:** Design statement to be provided at BCA Crown Certificate. stage.	
E4D5 **(Previously E4.5)** Exit Signs	An exit sign must be clearly visible to persons approaching the exit and must be installed on, above or adjacent to each door providing egress from a building. Sub-clauses (a) to (d) set out the situations where exit signs are required to be installed.	**Compliance Readily Achievable:** Design statement to be provided at BCA Crown Certificate. stage.	

+ Clause	+ Reference	+ Comment	
E4D6 **(Previously E4.6)** Direction Signs	If an exit is not readily apparent to persons occupying or visiting the building then exit signs must be installed in appropriate positions in corridors, hallways, lobbies, and the like, indicating the direction to a required exit.	**Compliance Readily Achievable:** Design statement to be provided at BCA Crown Certificate. stage.	
E4D8 **(Previously E4.8)** Design and Operation of Exit Signs	Every required exit sign must comply with AS/NZS 2293.1 - 2018 and be clearly visible at all times when the building is occupied by any person having the legal right of entry into the building.	**Compliance Readily Achievable:** Design statement to be provided at BCA Crown Certificate. stage.	
Section F	**Health and Amenity**		
Part F1	**Surface water management, rising damp and external waterproofing**		
F3P1 **(Previously FP1.4)** Weatherproofing	A roof and external wall (including openings around windows and doors) must prevent the penetration of water that could cause— + unhealthy or dangerous conditions, or loss of amenity for occupants; and + undue dampness or deterioration of building elements. Note: There are limited Deemed-to-Satisfy Provisions for this Performance Requirement in respect of external walls.	**Performance Solution:** A performance solution report is required to be prepared to Performance Requirement FP1.4 in relation to weatherproofing of external walls. This may be through Verification Method FV1.1, or an alternative suitable method. This will be required from the Façade Engineer.	
F1D3 **(Previously F1.1)** Stormwater Drainage	Stormwater drainage must comply with AS/NZ 3500.3 – 2021 Note: The requirements of this clause do not apply to a balcony, podium or similar horizontal surface part of a building— + where the flooring is of timber decking or other perforated flooring; or + which is located directly above ground.	**Compliance Readily Achievable:** Design statement to be provided at BCA Crown Certificate. stage.	
F1D4 Exposed joints	Exposed joints in the drainage surface 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. Note: The requirements of this clause do not apply to— + a balcony, podium or similar horizontal surface part of a building—	**Compliance Readily Achievable:** Design statement to be provided at BCA Crown Certificate. stage.	

+ Clause	+ Reference	+ Comment
	- where the flooring is of timber decking or other perforated flooring; or - which is located directly above ground. - A roof with a covering complying with F3D2(a) to (d).	
F1D5 **(Previously F1.4)** External waterproofing membranes	A roof, balcony, podium or similar horizontal surface part of a building must be provided with a waterproofing membrane— + consisting of materials complying with AS 4654.1; and + designed and installed in accordance with AS 4654.2. Note: The requirements of this clause do not apply to— + a balcony, podium or similar horizontal surface part of a building— - where the flooring is of timber decking or other perforated flooring; or - which is located directly above ground. + A roof with a covering complying with F3D2(a) to (d).	**Compliance Readily Achievable:** Design statement to be provided at BCA Crown Certificate. stage.
F1D6 **(Previously F1.9)** Damp-proofing	Moisture from the ground must be prevented from reaching— + the lowest floor timbers and the walls above the lowest floor joists; and + the walls above the damp-proof course; and + the underside of a suspended floor constructed of a material other than timber, and the supporting beams or girders. The following buildings need not comply with the above: + A Class 7 building where in the particular case there is no necessity for compliance. + A garage, tool shed, sanitary compartment, or the like, forming part of a building used for other purposes. An open spectator stand or open-deck carpark. Where a damp-proof course is provided, it must consist of—	**Compliance Readily Achievable:** Certification to be provided at the BCA Crown Certificate. stage.

+ Clause	+ Reference	+ Comment
	+ a material that complies with AS/NZS 2904; or + impervious sheet material in accordance with AS 3660.1.	
F1D7 **(Previously F1.10)** Damp-proofing of floors on the ground	If a floor of a room is laid on the ground or on fill, moisture from the ground must be prevented from reaching the upper surface of the floor and adjacent walls by the insertion of a vapour barrier in accordance with AS 2870. The above requirements of do not apply where— + weatherproofing is not required; + or the floor is the base of a stair, lift or similar shaft which is adequately drained by gravitation or mechanical means.	**Compliance Readily Achievable:** Certification to be provided at the BCA Crown Certificate. Stage.
Part F2	**Wet Areas and Overflow Protection**	
F2D2 **(Previously F1.7)** Wet area construction	This clause requires that wet areas in Class 2 to 9 buildings must be waterproofed. It prescribes the standards to which the work must be carried on the construction of rooms containing urinals and their installation.	**Compliance Readily Achievable:** Certification to be provided at the BCA Crown Certificate. stage.
F2D4 **(Previously F1.11)** Floor wastes	In a Class 2 or 3 building or Class 4 part of a building, a bathroom or laundry located at any level above a sole-occupancy unit or public space must have a floor waste. Where a floor waste is installed— + the minimum continuous fall of a floor plane to the waste must be 1:80; and + the maximum continuous fall of a floor plane to the waste must be 1:50.	**Compliance Readily Achievable:** Certification to be provided at the BCA Crown Certificate. stage.
Part F3	**Roof and Wall Cladding**	
F3D2 **(Previously F1.5)** Roof coverings	A roof must be covered with— + roof tiles complying with AS 2049, fixed in accordance with AS 2050; or + metal sheet roofing complying with AS 1562.1; or + plastic sheet roofing designed and installed in accordance with AS 1562.3; or + terracotta, fibre-cement and timber slates and shingles designed and installed in accordance with AS 4597, except in cyclonic areas; or + an external waterproofing membrane complying with F1D5.	**Compliance Readily Achievable:** Certification to be provided at the BCA Crown Certificate. stage.

+ Clause	+ Reference	+ Comment
F3D3 **(Previously F1.6)** Sarking	Sarking-type materials used for weatherproofing of roofs must comply with AS/NZS 4200 parts 1 and 2	**Compliance Readily Achievable:** Details to be included into the design.
F3D4 **(Previously F1.13)** Glazed assemblies	The following glazed assemblies in an *external wall*, must comply with AS 2047 requirements for resistance to water penetration: + Windows. + Sliding and swinging glazed doors with a frame, including French and bi-fold doors with a frame. + Adjustable louvres. + Shopfronts. + Window walls with one piece framing. The following buildings need not comply with: + A Class 7 building where in the particular case there is no necessity for compliance. + A garage, tool shed, sanitary compartment, or the like, forming part of a building used for other purposes, except where the construction of the garage, tool shed, sanitary compartment or the like contributes to the weatherproofing of the other part of the building. The following glazed assemblies need not comply: + All glazed assemblies not in an external wall. + Revolving doors. + Fixed louvres. + Skylights, roof lights and windows in other n the vertical plane. + Sliding and swinging glazed doors without a frame. + Windows constructed on site and architectural one-off windows, which are not design tested in accordance with AS 2047. + Second-hand windows, re-used windows and recycled windows. Heritage windows.	**Compliance Readily Achievable:** Details to be included into the design.
F3D5 Wall cladding	External wall cladding must comply with one or a combination of the following:	**Compliance Readily Achievable:** Certification to be provided at the BCA Crown Certificate stage.

+ Clause	+ Reference	+ Comment
	+ Masonry, including masonry veneer, unreinforced and reinforced masonry: AS 3700. + Autoclaved aerated concrete: AS 5146.3. + Metal wall cladding: AS 1562.1. The following buildings need not comply: + A Class 7 building where in the particular case there is no necessity for compliance. + A garage, tool shed, sanitary compartment, or the like, forming part of a building used for other purposes, except where the construction of the garage, tool shed, sanitary compartment or the like contributed to the weatherproofing of another part of the building that is required to be weatherproofed.	
Part F4	**Sanitary and Other Facilities**	
F4D3 **(Previously F2.2)** Calculation of Number of Occupants and Fixtures	This clause sets out the requirements for the calculation of the number of occupants and the number of sanitary facilities required to be installed in Class 2 to 9 buildings.	**Compliance Readily Achievable:** Certification to be provided at the BCA Crown Certificate. Stage.
F4D4 **(Previously F2.3)** Facilities in Class 3 to 9 buildings	This clause provides the requirements for sanitary facilities to be installed in Class 5 & 7 buildings. When accessible sanitary facilities are provided, they account once for each sex. Unisex sanitary compartments (other than strictly unisex accessible sanitary facilities) are not permitted for use, other than solely by staff in circumstances where not more than 10 persons are employed.	**Further Information Required:** The proposed staff sanitary facilities can serve a population of up to 80. Confirm the staff population for the entire building. **Complies:** There is no BCA minimum requirement for visitors/public in a class 5 building. The provided visitor/public sanitary facilities are considered to be adequate.

+ Staff

3 WC's proposed on the ground floor

1 accessible WC proposed on the ground floor

1 accessible WC proposed on the first floor

	Closet Pans		Urinals		Washbasins		Complies
	Proposed	Pop Served	Proposed	Pop Served	Proposed	Pop Served	Yes/No
Male	2	80	2	80	3	80	TBA
Female	3	80	-	-	3	80	TBA

+ Clause	+ Reference	+ Comment

Note 1: The accessible toilet facilities have been counted once for each sex in accordance with BCA clause F4D3.

+ Public

4 WC's proposed

1 accessible WC proposed

1 accessible/parent WC proposed

	Closet Pans		Urinals		Washbasins		Complies
	Proposed	Pop Served	Proposed	Pop Served	Proposed	Pop Served	Yes/No
Male	2	*adequate*	2	*adequate*	3	*adequate*	Yes
Female	3	*adequate*	-	-	3	*adequate*	Yes

Note 1: The accessible toilet facilities have been counted once for each sex in accordance with BCA clause F4D3.

Note 2: There is no BCA minimum requirement for visitors/public in a class 5 building. The provided visitor/public sanitary facilities are considered to be adequate.

F4D8 **(Previously F2.5)** Construction of Sanitary Compartments	Sanitary compartments must have doors and partitions that separate adjacent compartments and extend – + from floor level to the ceiling in the case of a unisex facility; or + a height of not less than 1.5m above the floor if primary school children are the principal users; or + 1.8m above the floor in all other cases. The door to a fully enclosed sanitary compartment must open outwards; or slide: or be readily removable from the outside of the sanitary compartment, unless there is a clear space of at least 1.2m, measured in accordance with Figure F4D8 between the closet pan within the sanitary compartment and the doorway.	**Compliance Readily Achievable:** Details to be included into the design.	
F4D9 **(Previously F2.6)** Interpretation: Urinals and Wash Basins	A urinal may be an individual stall or wall-hung urinal, each 600mm length of a continuous urinal trough or a closet pan used in place of a urinal. A washbasin may be an individual basin or a part of a hand washing trough served by a single water tap.	Noted	
Part F1	**Room Heights**		
F5D2 **(Previously F3.2)** Height of Rooms and Other Spaces.	The ceiling heights are prescribed and should be checked for all classes and parts during assessment or the design process. The minimum ceiling heights in a Class 5 & 7 building are as follows: + Generally – 2.4m.	**Compliance Readily Achievable:** Details to be included in the design at detailed design stage.	

+ Clause	+ Reference	+ Comment	
	+ Corridor, passageways, or the like – 2.1m. In any building: + Bathrooms, sanitary compartments, tea preparations rooms, pantries, store rooms or the like – 2.1m, + A commercial kitchen – 2.4m, + Above a stairway, ramp, landing or the like – 2m.		
F6D5 **(Previously F4.4)** Artificial Lighting	Artificial lighting must be provided in required stairways, passageways, and ramps and where natural light is insufficient. The artificial lighting system must comply with AS/NZS 1680.0. Windows or the like are to have an aggregate light transmitting area of not less than 10% of the floor area of the room. Artificial lighting must be provided where occupants seeking egress in an emergency, in— + Class 5 & 7 buildings — to all rooms that are frequently occupied, all spaces required to be accessible, all corridors, lobbies, internal stairways, other circulation spaces and paths of egress.	**Compliance Readily Achievable:** Design statement to be provided at BCA Crown Certificate. stage.	
F6D6 **(Previously F4.5)** Ventilation of Rooms	A habitable room, office, shop, factory, workroom, sanitary compartment, bathroom, shower room, laundry and any other room occupied by a person for any purpose must have natural ventilation complying with F6D7 or a mechanical or air-conditioning system complying with AS1668.2 and AS/NZS 3666.1. Note: NSW F6D6 - a mechanical ventilation or air-conditioning system complying with AS 1668.2 – the reference to AS/NZS 3666.1 is deleted from the BCA in NSW as the need to comply with this standard is regulated under the relevant section of the Public Health Act 1991.	**Compliance Readily Achievable:** Design statement to be provided at BCA Crown Certificate. stage.	
F6D7 **(Previously F4.6)** Natural Ventilation	Natural ventilation must consist of openings, windows, doors or other devices which can be opened— with a ventilating area not less than 5% of the floor area of the room required to be ventilated. Additionally, open to a suitably sized space open to the sky or an adjoining room in accordance with F6D8.	**Compliance Readily Achievable:** Design statement to be provided at BCA Crown Certificate. stage.	
F6D8	Natural ventilation to a room may come through a window, opening ventilating door	Noted	

+ Clause	+ Reference	+ Comment	
(Previously F4.7) Ventilation Borrowed From Adjoining Rooms	or other device from an adjoining room (including an enclosed verandah) if both rooms are within a sole-occupancy unit or the enclosed verandah is common property and be carried out in accordance with the requirements of sub-clauses (a), (b) & (c).		
F6D9 **(Previously F4.8)** Restriction on Position of Water Closets and Urinals	A room containing a water closet pan or urinal must not open directly into a kitchen or pantry, public dining room or restaurant, a dormitory in a Class 3 building, a room used for public assembly (which is not an early childhood centre, primary school, or open spectator stand) or a workplace normally occupied by more than 1 person.	**Complies:** All sanitary facilities open into corridors.	
Section J	**Energy Efficiency**		
J1V3 **(Previously JV3)**	Verification using referenced building.	**Compliance Readily Achievable:** We understand that a JV3 report may be provided to achieve compliance in accordance with Section J.	
J4 **(Previously J1)** Building Fabric	This Part contains Deemed-to-Satisfy Provisions for compliance with Part J1. It sets out provisions for the building envelope including roofs, ceilings, roof lights, walls, glazing and floors.	**Compliance Readily Achievable:** Design statement and Section J Report to be provided at BCA Crown Certificate. stage.	
J5 **(Previously J3)** Building Sealing	This Part contains Deemed-to-Satisfy Provisions for compliance with Part J1. It sets out provisions for the sealing of a building's glazing, doors, exhaust fans and the like in order to increase thermal comfort for occupants and reduce the energy consumption of any installed air-conditioning systems.	**Compliance Readily Achievable:** Design statement and Section J Report to be provided at BCA Crown Certificate. stage.	
J6 **(Previously J5)** Air-conditioning and ventilation	This Part contains Deemed-to-Satisfy Provisions for compliance with Part J1. It sets out the provisions for the efficiency and control of air-conditioning, space heating and ventilation equipment, the efficiency, sealing and insulation requirements for ductwork systems containing fans, and for the efficiency and insulation of pipework and pump systems.	**Compliance Readily Achievable:** Design statement and Section J Report to be provided at BCA Crown Certificate. stage.	
J7 **(Previously J6)** Artificial lighting and power	This Part contains Deemed-to-Satisfy Provisions for compliance with Part J1. It sets out provisions for the design and configuration of artificial lighting and power, boiling and chilled water units, lifts and escalators and moving walkways.	**Compliance Readily Achievable:** Design statement and Section J Report to be provided at BCA Crown Certificate. stage.	
J8 **(Previously J7)** Heated Water	This Part contains Deemed-to-Satisfy Provisions for compliance with Part J1. It sets out provisions for ensuring water	**Compliance Readily Achievable:**	

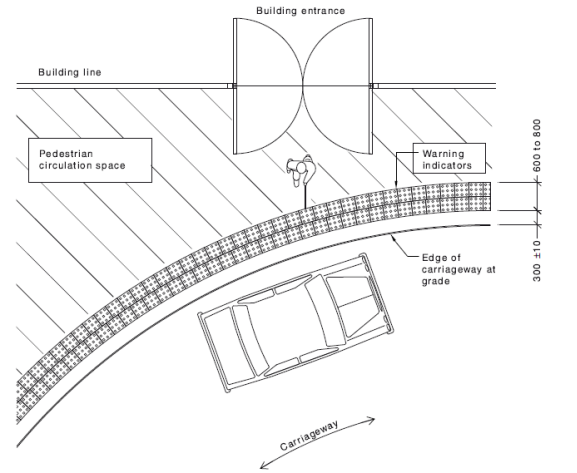
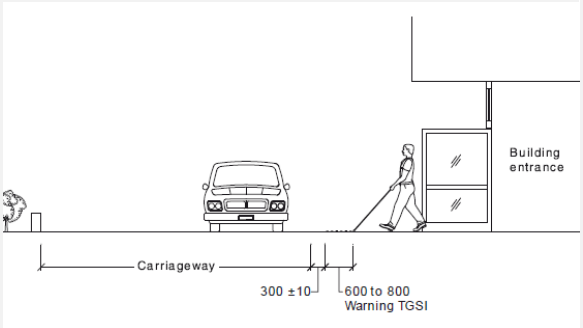
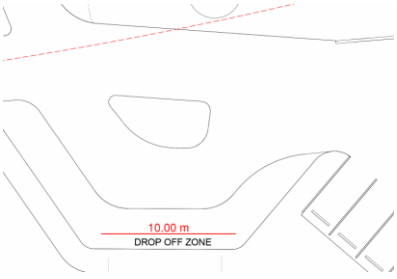
+ Clause	+ Reference	+ Comment	
Supply and Swimming Pool and Spa Pool Plant	heaters, swimming pool and spa heaters and pump systems use energy efficiently.	Design statement and Section J Report to be provided at BCA Crown Certificate. stage.	
J9 **(Previously J8)** Energy monitoring and on-site distributed energy resources	This Part contains Deemed-to-Satisfy Provisions for compliance with Part J1. It sets out provisions that enable the monitoring of energy use (other than for billing purposes) and facilitate easy retrofit of renewable energy and electric vehicle charging equipment.	**Compliance Readily Achievable:** Design statement and Section J Report to be provided at BCA Crown Certificate. stage.	

4.0 Accessibility Assessment

+ Legend	
Complies	The referenced plans show compliance with this clause
Compliance Readily Achievable	The referenced plans do not show sufficient information to establish compliance with this clause. Design certification, should be submitted with the application for the BCA Crown Certificate.
Further Information Required	The referenced plans do not show sufficient information to establish compliance with this clause. Further details, should be submitted with the application for the BCA Crown Certificate.
Performance Solution	The referenced plans do not comply with this clause and a Performance Solution is required/proposed to demonstrate compliance with the Performance Requirements
Does Not Comply	The proposal does not comply with this clause and redesign is required.
Note	Provisions contained within this BCA clause are provided for guidance or are to be read in conjunction with other BCA clauses.

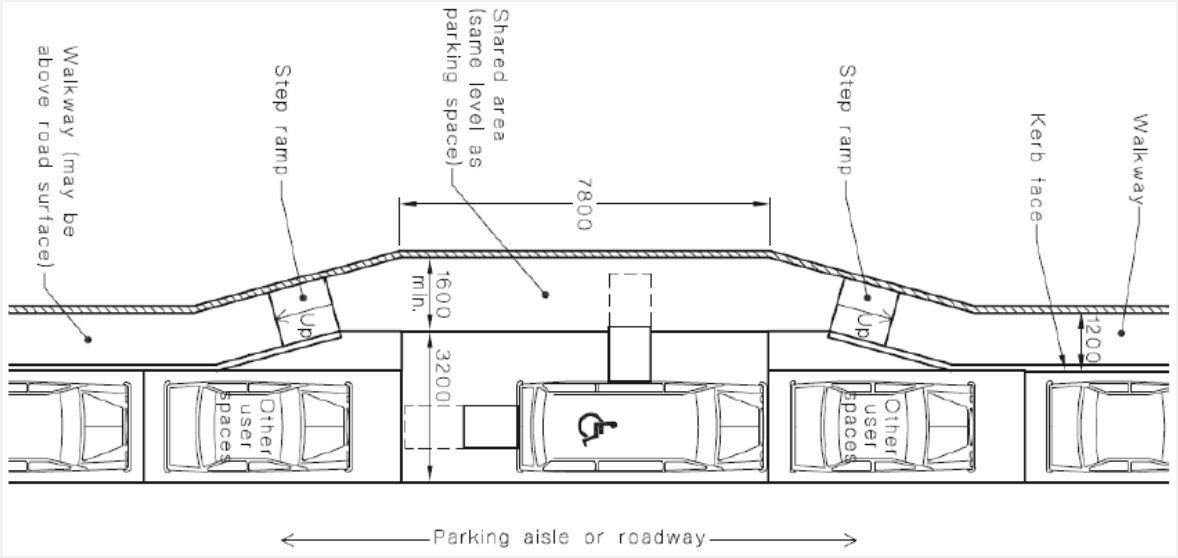
4.1 BCA Part D4 & AS 1428.1-2009 Assessment

+ Clause	+ Reference	+ Comment
Section D	**Access and Egress**	
Part D4	**Access for people with a disability**	
D4D2 (Previously D3.1) General building access requirements	Buildings and parts of buildings must be accessible as required by this clause, unless exempted by D4D5. For Class 5, 6, 7b, 8 and 9a buildings, access must be provided to and within all areas normally used by the occupants.	**Compliance Readily Achievable:** Detail to be included in the design.
D4D3 (Previously D3.2) Access to buildings	Accessways must be provided to accessible buildings from the main points of pedestrian entry at the allotment boundary and any accessible car parking space or accessible associated buildings connected by a pedestrian link. An accessway must be provided to a building required to be accessible- + From the main points of a pedestrian entry at the allotment boundary; and + From another accessible building connected by a pedestrian link; and	**Further Information Required:** There are now two pedestrian entries at the allotment boundary. 1. Cowper St – provide details of the accessible ramp (the landscape set of drawings does have plans of the ramp). 2. Fairfax Rd – there is a stairway to the road here. Please advise if this is considered one of the 'main points' of pedestrian entry.

+ Clause	+ Reference	+ Comment
	+ From any required accessible car parking space on the allotment. In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance and through not less than 50% of all pedestrian entrances including the principal pedestrian entry.	Accessible car parking spaces need to be shown. A path between the carpark and the front entry is readily achievable.
AS1428.4.1 Cl.2.5 Pedestrians and Carriageway at same grade	Where a pedestrian area joins a carriageway at grade (same level) or to delineate the pedestrian area from the carriageway, TFSI's shall be provided in accordance with Figures 2.5(A) and 2.5(B)B	**Compliance Readily Achievable:** Details to be developed at Design Development stage
	 Figure 25(A)	 Figure 25(A)
AS1428.4.1 Cl.2.5 Set Down Areas:	For public drop off / setdown areas, if a kerb is provided separating the drop-off area from the pavement, a compliant kerb ramp will need to be provided. The detailing of the parallel set down will need to satisfy the provisions of AS 2890.6 – 2006. Where the pedestrian pathway and the driveway is at the same grade it will be necessary to achieve a 30% luminous contrast between the walkway and the driveway. Details of the materials, colour and texture will need to be provided as part of the detailed Design Development / Construction Issue Architectural Documentation.	**Further Information Required:** Provide details of the accessible drop off zone to ensure it is at least 7800mm x 3200mm. It appears enough space should be available. 

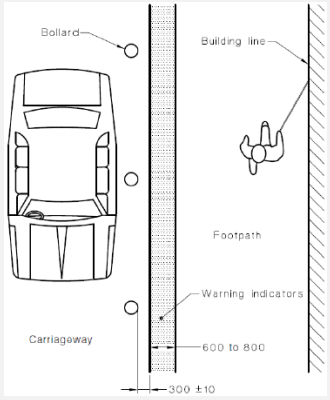
+ Clause	+ Reference	+ Comment

Set Down Areas



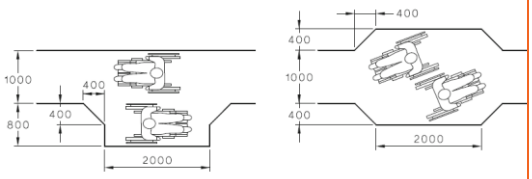
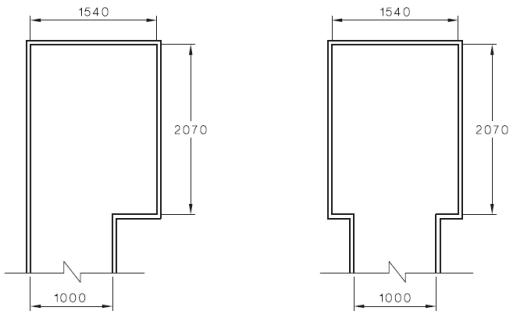
Requirements for parallel parking

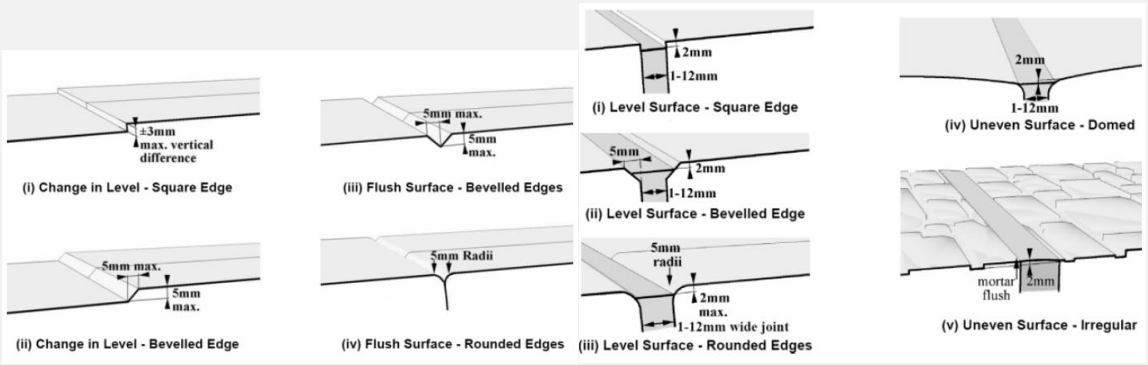
If the set down area is level with the pavement, tactile indicators and bollards are required to be provided as required by AS 1428.4.1 – 2009.



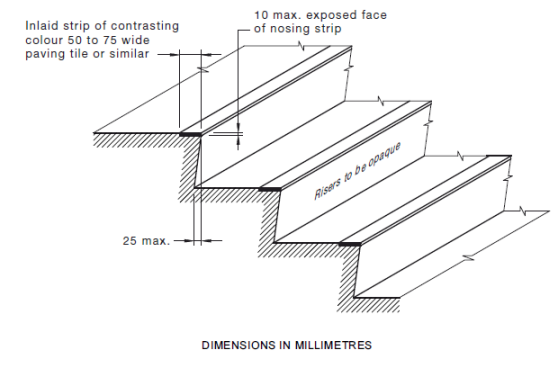
Requirements tactiles / bollards

D4D4 (Previously D3.3) Parts of buildings to be accessible	The works are required to comply with the requirements of AS 1428.1-2009.	**Compliance Readily Achievable:**	
AS1428.1 Cl. 6.1 General	A continuous accessible path of travel shall not include a step, stairway, turnstile, revolving door, escalator, moving walk or other impediment.	**Compliance Readily Achievable:** No impediments are noted in the design at this stage	
AS1428.1 Cl. 6.2 Height of paths	The minimum unobstructed height of a continuous accessible path of travel shall be 2000 mm or 1980 mm at doorways	**Compliance Readily Achievable:** Details to be included in the design.	
AS1428.1 Cl. 6.3	Unless otherwise specified (such as at doors, curved ramps and similar), the minimum unobstructed width of a continuous accessible path of travel shall be 1000 mm	**Complies:**	

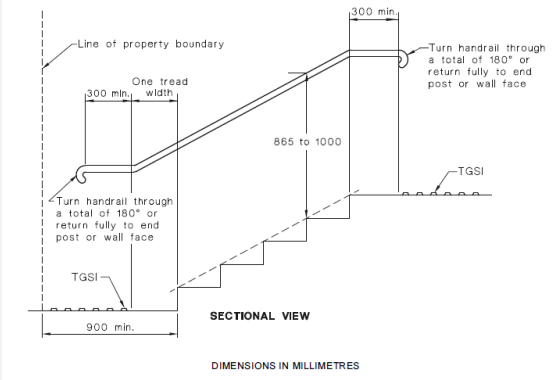
+ Clause	+ Reference	+ Comment
Widths of paths	and the following shall not intrude into the minimum unobstructed width of a continuous accessible path of travel: + Fixtures and fittings such as lights, awnings, windows that, when open, intrude into the circulation space, telephones, skirtings and similar objects. + Essential fixtures and fittings such as fire hose reels, fire extinguishers and switchboards. + Door handles less than 900 mm above the finished floor level.	The unobstructed width of a continuous path of travel is >1000mm.
AS1428.1 Cl. 6.4 Passing Space	Accessways must have passing spaces complying with AS 1428.1 at maximum 20m intervals on those parts of an accessway where a direct line of sign is not available.  DIMENSIONS IN MILLIMETRES	**Complies:** The majority of corridors are 1800mm wide and there is only a narrower corridor (outside ground floor meeting rooms which is 1700mm). Passing spaces comply for the building.
AS1428.1 Cl. 6.5 Turning Space	Turning spaces must comply with AS1428.1 and located within 2m of the end of accessways where it is not possible to continue travelling along the accessway, and at maximum 20m intervals along the accessway.  (a) Space required in corridor (b) Space required in corrid	**Complies:** All corridors are shown as 1800mm wide. Dead end turning spaces of >1540mm wide are consequently provided.
AS1428.1 Cl. 7 Floor Transition/s	<u>Tolerances for Abutment of Surfaces:</u> Transitions between floor finishes will need to comply with Clause 7.2 of AS1428.1-2009. <u>Recessed / Soft Floor Coverings:</u> + Pile height or pile thickness shall not exceed 11mm and the carpet backing thickness shall not exceed 4mm. + Exposed edges of floor coverings be fastened to the floor with a trim along any exposed edges.	**Compliance Readily Achievable:** Detail to be included in the design.

+ Clause	+ Reference	+ Comment
	+ At leading edges, carpet or other soft materials shall have a vertical face no higher than 3mm or a rounded bevelled edge no higher than 5mm. Up to 10mm is permitted at a 1:8 gradient. + Recessed matting must be no more than a 3mm vertical, or 5mm rounded, proud of the adjacent floor surface. This also applies when the matting is depressed below surface level. <u>Grates:</u> Grates shall comply with the following: + Circular openings shall be not greater than 13 mm in diameter. + Slotted openings shall be not greater than 13 mm wide and be oriented so that the long dimension is transverse to the dominant direction of travel. *NOTE: Where slotted openings are less than 8 mm, the length of the slots may continue across the width of paths of travel.*	
	<u>Tolerances for Abutment of Surfaces:</u>  	
AS1428.1 **Cl. 11.1** Stairway Construction	+ Where the intersection is at the property boundary, the stair shall be set back by a minimum of 900 mm so that the handrail (complying with Clause 12) and TGSIs do not protrude into the transverse path of travel. + Where the intersection is at an internal corridor, the stair shall be set back so that handrails or TGSIs do not protrude in to the path of travel. + Stairs shall have opaque risers. + Stair nosings shall not project beyond the face of the riser and the riser maybe vertical or have a splay backwards up to a maximum 25 mm. + Stair nosing profiles shall— – have a sharp intersection; – be rounded up to 5 mm radius; or	**Compliance Readily Achievable:** Details to be included in the design at construction documentation stage. Landscape plans require detailed drawings of the stairway to Fairfax Rd. The intent is shown on the area plans.

+ Clause	+ Reference	+ Comment
	– be chamfered up to 5 mm × 5 mm. + At the nosing, each tread shall have a strip not less than 50 mm and not more than 75 mm deep across the full width of the path of travel. The strip may be set back a maximum of 15 mm from the front of the nosing. The strip shall have a minimum luminance contrast of 30% to the background. Where the luminous contrasting strip is affixed to the surface of the tread, any change in level shall comply with Clause 7.2 and Clause 7.3. + Where the luminance contrasting strip is not set back from the front of the nosing then any area of luminance contrast shall not extend down the riser more than 10 mm. + TGSIs shall be installed in accordance with AS 1428.4.1.	

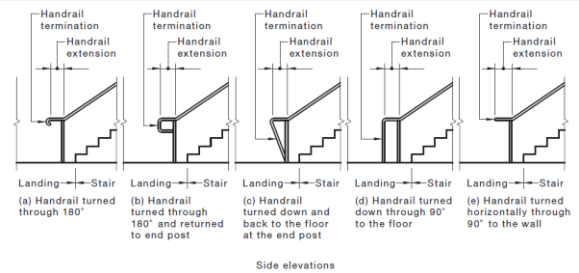
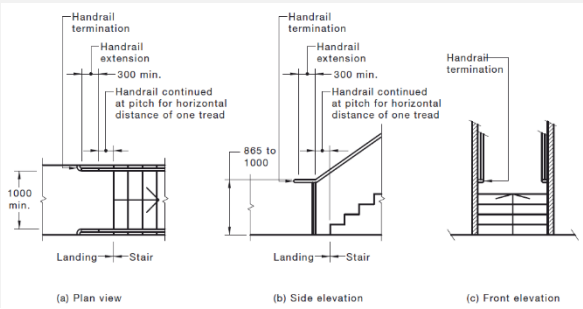
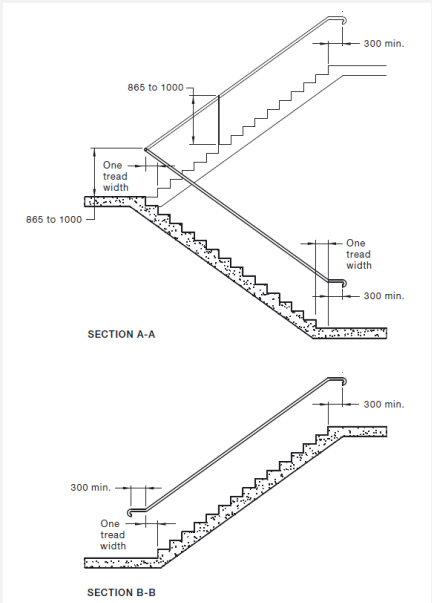


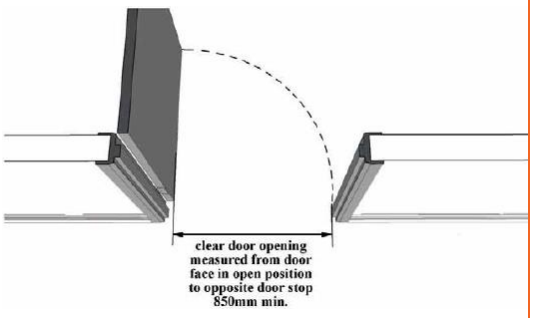
Example of Compliant Nosing Strip Detail

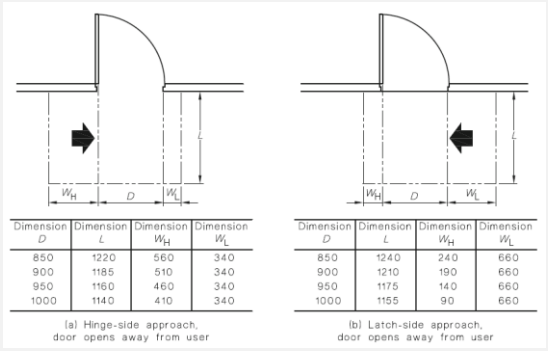


Example of Compliant Stairway Design

AS1428.1 **Cl. 11.2** Stairway Handrails	Handrails shall be continuous throughout the stair flight and, where practicable, around landings and have no obstruction on or above up to a height of 600 mm and as follows: + The design and construction of handrails shall comply with Clause 12 of AS 1428.1 – 2009. + Handrails shall be installed on both sides of the stairs. + Handrails shall have no vertical sections and shall follow the angle of the stairway nosings. + Where a handrail terminates at the bottom of a flight of stairs, the handrail shall extend at least one tread depth parallel to the line of nosings plus minimum of 300 mm horizontally from the last riser. + The handrail shall extend a minimum of 300 mm horizontally past the nosing on the top riser.	**Compliance Readily Achievable:** Details to be included in the design at detailed design stage

+ Clause	+ Reference	+ Comment
	+ Where the handrail is continuous, the 300 mm extension is not required in the inner handrail at intermediate landings. + The dimensions indicating the heights of handrails shall be taken vertically from the nosing of the tread to the top of the handrail or from the landing to the top of the handrail.	
	  	
AS1428.1 Cl. 12 Handrails	The design and construction of handrails shall comply with the following: + The cross-section of handrails shall be circular or elliptical, between 30-50mm dia. for a width of not less than 270° around the uppermost surface. + Exposed edges shall have a radius of not less than 5mm. + The top of handrails shall be between 865-1000mm above the nosing line of a stairway, or the plane of finished floor otherwise. + The height of the top of the handrail shall be consistent through any stair, ramp, and landing. + Handrails shall be securely fixed and rigid, and their ends shall be turned through a total of 180°, or to the ground, or returned fully to end post or wall face. The clearance between a handrail and an adjacent wall surface or other obstruction shall be not less than 50mm.	**Compliance Readily Achievable:** Details to be included in the design at detailed design stage
AS1428.1 Cl. 13.1	All doorways shall have a minimum luminance contrast of 30% provided between—	**Compliance Readily Achievable:** Detail to be included in the design.

+ Clause	+ Reference	+ Comment
Luminance Contrast	+ door leaf and door jamb; + door leaf and adjacent wall; + architrave and wall; + door leaf and architrave; or + door jamb and adjacent wall. The minimum width of the area of luminance contrast shall be 50 mm.	**Compliance Readily Achievable:** Details to be included in the design at construction documentation stage. NOTE: framed glazed doors must achieve luminance contrast to any adjoining framed glazed walls
AS1428.1 Cl. 13.2 / 13.3 Doorways	The minimum width of an accessible doorway must have a *clear opening* width of not less than 850mm in accordance with AS1428.1. Where double doors are provided, at least one leaf must have a clear unobstructed width of 850mm.  Clear Unobstructed Width of Doorway Circulation space is required to all doorways throughout the building that are required to be accessible in accordance with Section 13 of AS 1428.1 – 2009 (see diagrams below). Circulation space is not required to be provided to rooms where access for a person with a disability is not required i.e. dirty utility / clean utility rooms, plant rooms, comms rooms etc. See below required doorway circulation space for swinging and sliding doors.	**Further Information Required:** FF&E plans are required at design development stage to determine doorway circulation compliance.

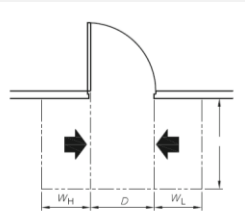


Dimension D	Dimension L	Dimension W_H	Dimension W_L
850	1220	560	340
900	1185	510	340
950	1160	460	340
1000	1140	410	340

(a) Hinge-side approach, door opens away from user

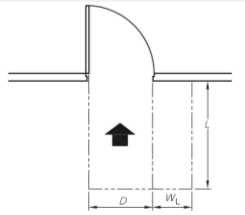
Dimension D	Dimension L	Dimension W_H	Dimension W_L
850	1240	240	660
900	1210	190	660
950	1175	140	660
1000	1155	90	660

(b) Latch-side approach, door opens away from user



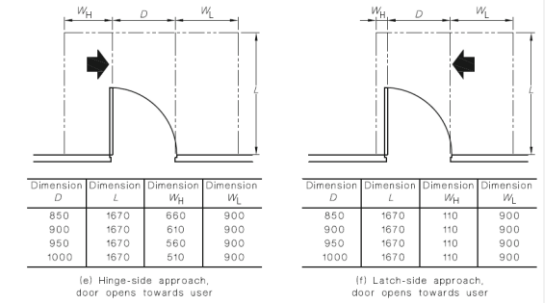
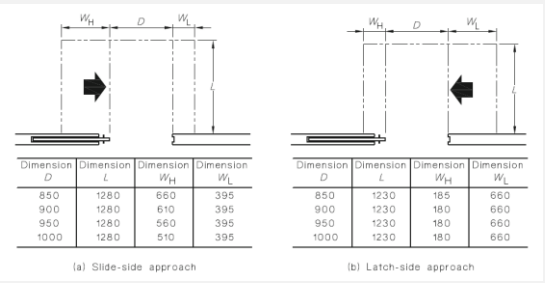
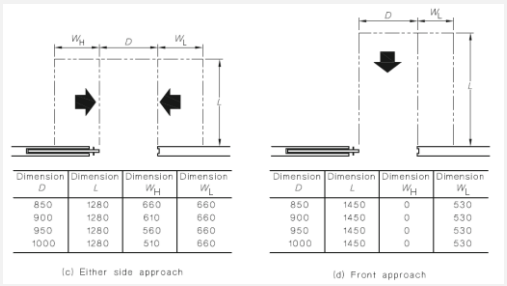
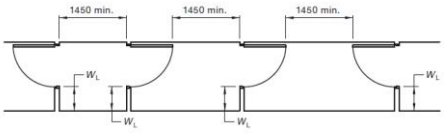
Dimension D	Dimension L	Dimension W_H	Dimension W_L
850	1240	560	660
900	1210	510	660
950	1175	460	660
1000	1155	410	660

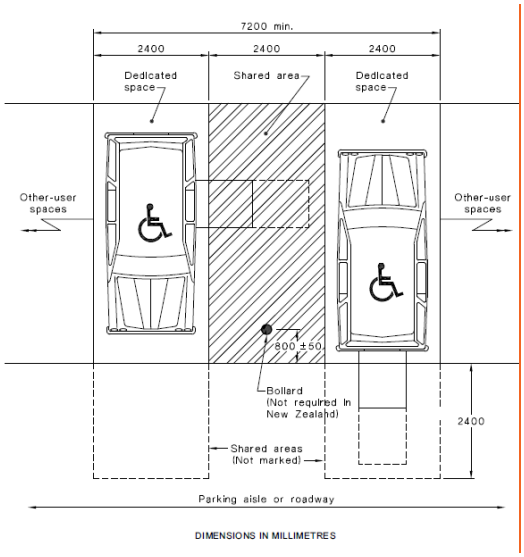
(c) Either side approach, door opens away from user



Dimension D	Dimension L	Dimension W_H	Dimension W_L
850	1450	0	510
900	1450	0	510
950	1450	0	510
1000	1450	0	510

(d) Front approach, door opens away from user

+ Clause	+ Reference	+ Comment	
	 (e) Hinge-side approach, door opens towards user (f) Latch-side approach, door opens towards user (g) Either side approach, door opens towards user (h) Front approach, door opens towards user  (a) Slide-side approach (b) Latch-side approach  (c) Either side approach (d) Front approach		
	AS1428.1 Cl. 13.4 Successive Doorways in Passages	The distance between doorways in vestibules, air locks and other similarly enclosed spaces shall be not less than 1450 mm. Where the doors encroach into space, the distance shall be not less than 1450 mm plus the door leaf width.  (a) Continuous accessible path of travel DIMENSIONS IN MILLIMETRES FIGURE 34 (in part) DISTANCE BETWEEN SUCCESSIVE DOORWAYS IN VESTIBULES AND AIR LOCKS	There is no successive doorways associated with air-locks or the like.	
	AS1428.1 Cl.13.5 Door Controls	Door handles and hardware to rooms required to be accessible must comply with the requirements of Clause 13.5 of AS 1428.1 – 2009.	**Compliance Readily Achievable:** Details to be included in the design at construction documentation stage.	
	AS1428.1 Cl.14.1 Switches and GPO's	All switches and controls shall be positioned at a height of 900-1000mm above the FFL and be no closer than 500mm to any corner	**Compliance Readily Achievable:** Details to be included in the design at construction documentation stage.	
	AS1428.1 Cl.14.2 Switches	Accessible SOU's and accessible WC's are required to be provided with 30mm x 30mm toggle switches Where push button switches are located associated with the security system of the entry doors, then the push button will need to be the mushroom type.	**Compliance Readily Achievable:** Details to be included in the design at construction documentation stage.	
	D4D5 (Previously D3.4)	The following areas, and any path of travel providing access only to these areas, are not required to be accessible:	**Further Information Required:**	

+ Clause	+ Reference	+ Comment
Exemptions	+ An area deemed inappropriate to access due to the areas particular use + An area that would pose a health or safety risk for people with a disability.	A full mark-up of all required D3.4 exempt areas is required at detailed design stage for review. Some examples include: + Equipment Loan Pool Store + Other storerooms and equipment bays + Clean and dirty utility rooms + Plantrooms, switchrooms and specialty equipment rooms (e.g. comms, UPS, distribution boards etc.) The LHD will need to provide a letter confirming what areas are subject to a concession during the Construction Documentation stage.
D4D6 **(Previously D3.5)** Accessible carparking	Accessible carparking spaces – + Must be provided in accordance with the ratios set out in this clause. + Must comply with AS 2890.6-2009	**Compliance Readily Achievable:** Details to be included in the design at detailed design stage
AS1428.6 Cl.2.2 Parking Spaces		**Further Information Required:** Detail all gradients around accessible carparking areas for the on-grade carpark.
AS1428.6 Cl.2.2 Pavement	Each accessible parking space and shared area must have a maximum crossfall of 1:40 (or 1:33 for bitumen) and have a slip resistance surface	**Compliance Readily Achievable:** Details to be included in the design at detailed design stage
D4D7 **(Previously D3.6)** Signage	In a building required to be accessible, braille and tactile signage must be provided to all: + Required accessible sanitary facilities + Spaces with hearing augmentation + Ambulant sanitary facilities	**Compliance Readily Achievable:** Details to be included in the design at construction documentation stage

+ Clause	+ Reference	+ Comment
	+ Non-accessible pedestrian entrances + Each door required to be provided with an exit sign Braille and tactile signage is to comply with sub-clause (a) and Specification 15.	
AS1428.1 Cl.8.1 Forms of Signage	The below signs are examples of required sanitary facility signage. The signs shall be positioned so that the raised braille is between 1200-1600mm above FFL.	

Spec 15
Braille and tactile signage

Signage Specification: -

The signage is to be: -

(a) Located between 1200-1600mm above FFL
(b) Signs with single lines of characters are to have the line of the tactile characters between 1250mm-1350mm above FFL
(c) Signage tactile characters must be raised or embossed to a height between 1mm-1.5mm
(d) Upper case letter to be between 20mm-55mm
(e) Signage is to be contrasting & is to comply with BCA Specification E3.6.

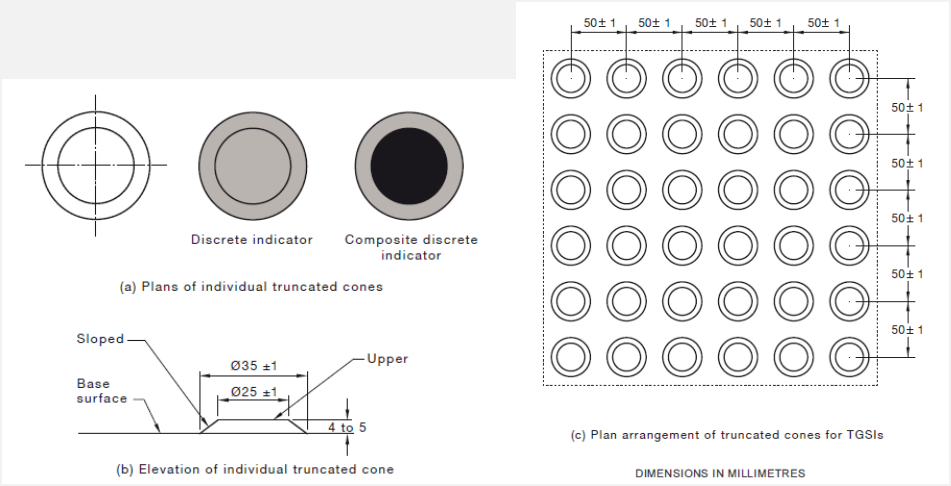
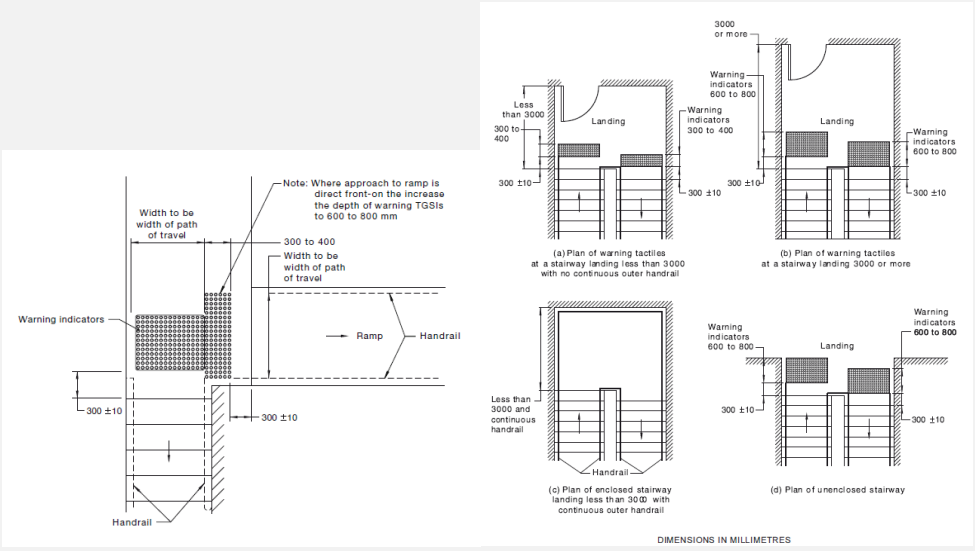
Signage Locations

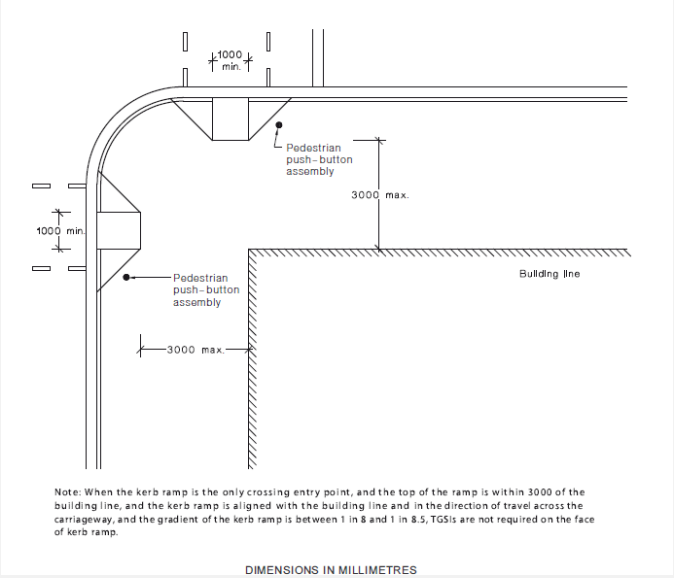
The Braille & tactile egress signage is to be located adjacent or on (see above) each door that:-

(a) Provides direct egress into a fire isolated stairway
(b) Provides direct discharge from the storey into a passageway or lobby (airlock) associated with the fire isolated stairway
(c) Provide direct discharge from a fire isolated stairway to open space (discharge door)
(d) Forms part of a horizontal exit (–/120/30 fire doors in the fire compartment walls)

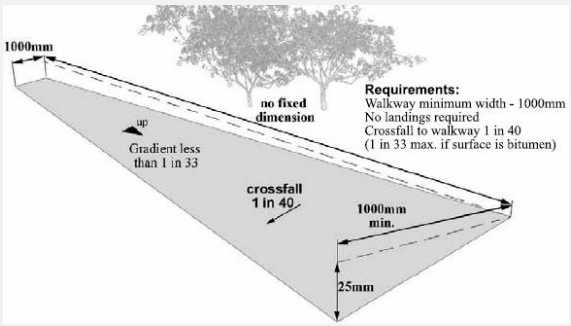
The below signage is an *example* of what is required –

+ Clause	+ Reference	+ Comment
D4D8 **(Previously D3.7)** Hearing Augmentation	A hearing augmentation system must be provided where an inbuilt amplification system (excluding emergency warning systems) is present in the following areas: + In an conference room, meeting room, A hearing augmentation system is required to comply in the following way: + An induction loop – it must serve >80% of the floor area of the spaced served by the inbuilt amplification system; or + A system requiring the use of receivers or the like. It must be available to not less than 95% of the floor of the space served and provide the applicable number of receivers; – 500 people – 1 receiver for every 25 persons and a minimum of 2 receivers; and – 500-1000 people – 20 receivers plus 1 receiver for every 33 people in excess of 500; and – 1000-2000 people – 35 receivers plus 1 receiver for every 50 people in excess of 1000; and – >2000 people – 55 receivers plus 1 receiver for every 100 people in excess of 2000. Any screen or scoreboard capable of displaying public announcements must be capable of supplementing any public address system. The below symbol shall be provided on a sign in ultramarine blue in accordance with clause 5.1 of AS 1428.5-2010  	**Compliance Readily Achievable:** Confirm any meeting rooms which have in-built amplification systems and confirm the type of hearing augmentation system proposed.
D4D9 **(Previously D3.8)** Tactile Indicators	Tactile ground surface indicators must be provided to: + A stairway, other than a fire-isolated stairway; and + An escalator or passenger conveyor; and	**Compliance Readily Achievable:** Details to be included in the design at detailed design stage

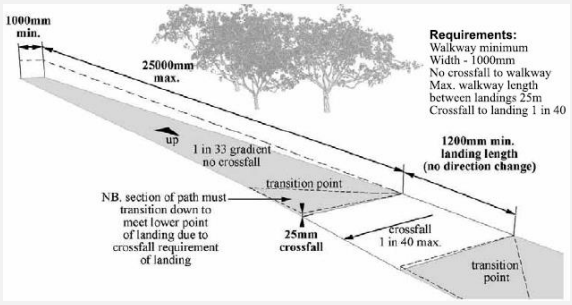
+ Clause	+ Reference	+ Comment
	+ A ramp other than a fire-isolated ramp; and + In the absence of a suitable barrier- – An overhead obstruction <2m above floor level; and – An accessway meeting a vehicular way adjacent to any pedestrian entrance to a building including a pedestrian entrance serving an area referred to in D4D5, if there is no kerb or kerb ramp at that point. Tactile indicators are required to be designed in accordance with AS 1428.4.1-2009.	
AS1428.4.1 Cl.2.2.3 Placement		
AS1428.4.1 Cl.2.4 Stairways		
AS1428.4.1 C3 Kerb Ramps	TGSI's are <u>not</u> required on kerb ramps if – + the distance between the building line/boundary and the top of the kerb ramp is less than 3 m; + the change in gradient between that of the pedestrian surface at the top of the kerb ramp and the gradient of the kerb ramp surface lies between 1 in 8 to 1 in 8.5; and + the kerb ramp is aligned with the building line and	

+ Clause	+ Reference	+ Comment
	 Tactiles are required when a kerb ramp where the gradient is shallower than 1 in 8.5.	
D4D12 **(Previously D3.11)** Ramps	Ramps may be used as part of an accessway where there is a change of level and must comply with the requirements set out in AS1428.1 On an accessway— + a series of connected ramps must not have a combined vertical rise of more than 3.6 m; and + a landing for a step ramp must not overlap a landing for another step ramp or ramp.	**Further Information Required:** A series of ramps needs to be provided between Cowper Street and the main entry of the building.
AS1428.1 **Cl 10.1** Walkways, Ramps, and Landings - Generally	Walkways, ramps and landings that are provided on a continuous accessible path of travel shall be as follows: + Sharp transitions shall be provided between the planes of landings and ramps. + Landings shall be provided at all changes in direction in accordance with Clause 10.8. + Landing or circulation space shall be provided at every doorway, gate, or similar opening. + For walkways and landings having gradients in the direction of travel shallower than 1 in 33, a camber or crossfall shall be provided for shedding of water and shall be no steeper than 1 in 40, except that bitumen surfaces shall have a camber or crossfall no steeper than 1 in 33. *NOTE: For requirements for ground surfaces, see Clause 7.*	**Compliance Readily Achievable:** Details to be included in the design at detailed design stage

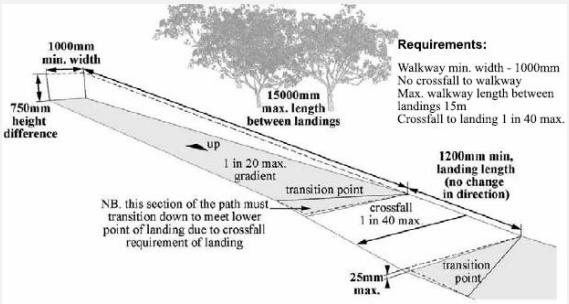
+ Clause	+ Reference	+ Comment
AS1428.1 Cl. 10.2 Walkways	The requirements for walkways are as follows: + Walkways can have a gradient up to 1:20. Anything steeper is a ramp and requires kerbs or kerb rails plus handrails to both sides. + A walkway with a gradient less than 1 in 33 does not require landings but does require a crossfall of maximum 1 in 40 (maximum cross fall of 1 in 33 if the surface is bitumen). + Walkways steeper than 1 in 33 do not require a crossfall to the main walkway but do require a crossfall of 1 in 40 to landings	**Compliance Readily Achievable:** Details to be included in the design at detailed design stage



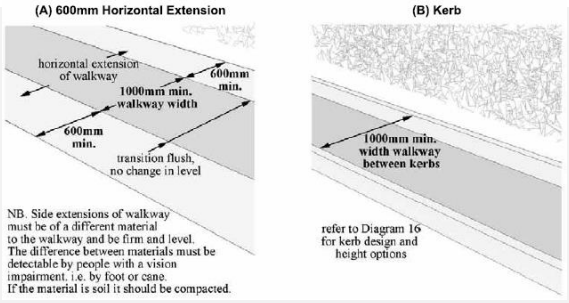
Requirements for a Walkway with a Gradient Less Than 1 in 33

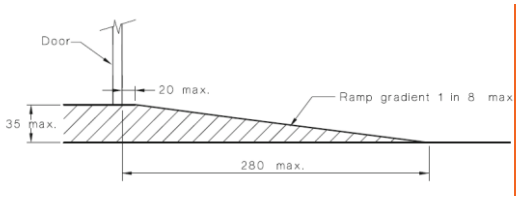
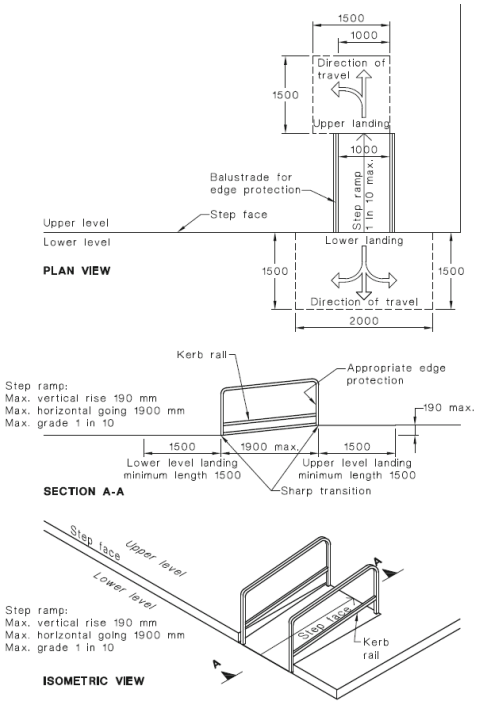


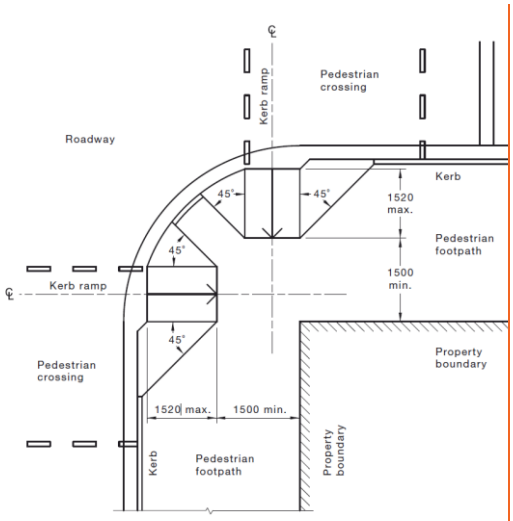
Requirements for a Walkway with a 1 in 33 Gradient



Requirements for a Walkway with a 1 in 20 Gradient

+ Clause	+ Reference	+ Comment
	 Requirements for Edges of Walkways	
AS1428.1 Cl. 10.3 Ramps	Ramps to comply with the following: + Maximum gradient of a ramp exceeding 1900mm shall be 1 in 14. + The gradient of a ramp shall be constant throughout its length. + Ramps shall be provided with landings: – For ramp gradients of 1 in 14, at intervals not greater than 9m. – For ramp gradients steeper than 1 in 20, at intervals not greater than 15m. – For ramp gradients between 1 in 14 and steeper than 1 in 20, at interpolated intervals. + Handrails must be provided on either side complying with Clause 12. + TGSIs shall be installed in accordance with AS 1428.4.1. + Ramps shall be set-back at internal corridors so that handrail extensions do not protrude in to paths of travel. + Ramps and intermediate landings shall have kerbs or kerb rails on either side.	**Compliance Readily Achievable:** Details to be included in the design at detailed design stage
AS1428.1 Cl. 10.4 Curved Walkways, Ramps, and Landings	Curved ramps, walkways, and landings shall comply with the following: + Curved walkways shall have a width not less than 1500mm. + Any cross-fall shall be towards the centre of curvature. + The gradient of curved ramps and walkways shall comply with the graph in Figure 20 within AS 1428.1 – 2009.	**Compliance Readily Achievable:** Details to be included in the design at detailed design stage
AS1428.1 Cl. 10.5 Threshold Ramps	Threshold ramps at doorways on a continuous path of travel shall have— + a maximum rise of 35 mm; + a maximum length of 280 mm; + a maximum gradient of 1:8; and + be located within 20 mm of the door leaf which it serves.	**Compliance Readily Achievable:** Details to be included in the design at detailed design stage

+ Clause	+ Reference	+ Comment
		
AS1428.1 Cl. 10.6 Step Ramps	Step ramps shall have— + a maximum rise of 190 mm; + a length not greater than 1900 mm; and + a gradient not steeper than 1 in 10. The edges of step ramp shall have a 45° splay where there is pedestrian cross traffic. Otherwise, it shall be protected by a suitable barrier, such as— + a wall or suitable barrier with a minimum height of 450 mm; or + where an open balustrade is provided a kerb or kerb rail shall be provided. 	No step ramps are shown in the plans
AS1428.1 Cl. 10.7 Kerb Ramps	Kerb ramps shall have + a maximum rise of 190 mm; and + a length not greater than 1520 mm; and + a gradient not steeper than 1 in 8, located within or attached to a kerb; and be aligned in the direction of travel as shown below.	**Compliance Readily Achievable:** Details to be included in the design at detailed design stage

+ Clause	+ Reference	+ Comment
	 Refer to Clause 10.7 of AS 1428.1 - 2009 for the full requirements for Kerb Ramps.	
AS1428.1 Cl. 10.8 Landings	<u>Walkways and ramps</u> The length of landings at walkways (up to a gradient of 1 in 33) and ramps shall comply with one of the following: + Where there is no change in direction, the length shall be not less than 1200 mm, as shown in **Figure 25(A).** + Where there is a change of direction not exceeding 90°, the landing shall be not less than 1500 mm. The internal corner shall be truncated for a minimum of 500 mm in both directions, as shown in **Figure 25(B).** + For a 180° turn, the landing shall be as shown in **Figure 25(C).** <u>Step ramps</u> + The length of landings at step ramps shall be not less than 1200 mm in the direction of travel, as shown in **Figures 22(A)** and **22(B).** + Where a change in direction is required, the length of step ramp landings shall be a minimum of 1500 mm, as shown in **Figure 22(A).** + Where doorways are at landings, the dimensions of the landings shall be in accordance with the requirements of Clause 13.3 for circulation spaces at doorways shown in **Figure 25(D).** <u>Kerb ramps</u> The length of landings at kerb ramps shall be not less than 1200 mm in the direction nof travel.	**Compliance Readily Achievable:** Details to be included in the design at detailed design stage.

+ Clause	+ Reference	+ Comment
	Where a 'T' junction occurs, the kerb ramp landing shall be a minimum of 1500 × 2000 mm, as shown in Figure 24(B). Where a single change in direction is required, the ramp landings shall be a minimum of 1500 mm × 1500 mm. See Below for Figures	

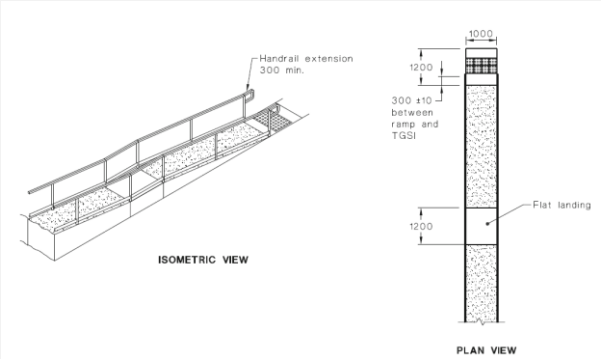


Figure 25A

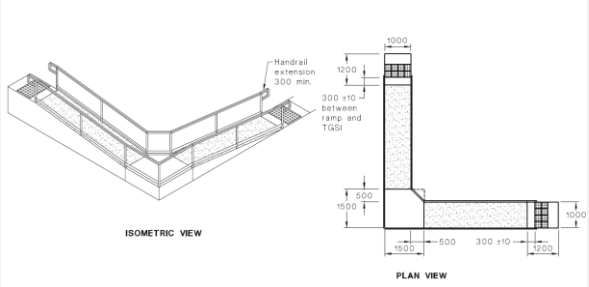


Figure 25B

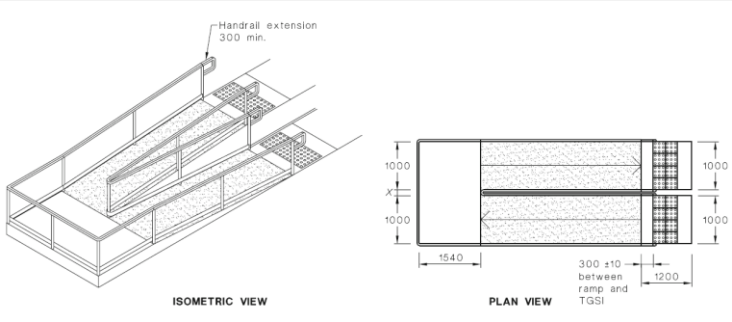
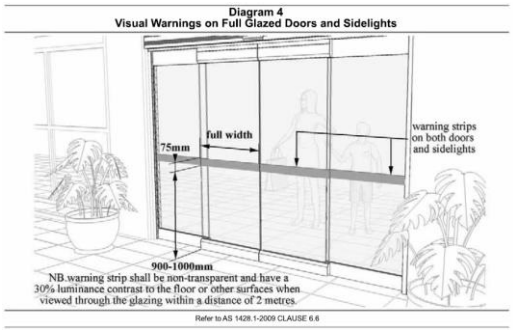


Figure 25C

D4D13 **(Previously D3.12)** Glazing on an Accessway	Where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights, including any glazing capable of being mistaken for a doorway or opening, shall be clearly marked for their full width with a solid and non-transparent contrasting line.	**Compliance Readily Achievable:** Detail to be included in the design.
AS1428.1 Cl. 6.6	The contrasting line shall be not less than 75 mm wide and shall extend across the full width of the glazing panel. The lower edge of the contrasting line shall be located between	

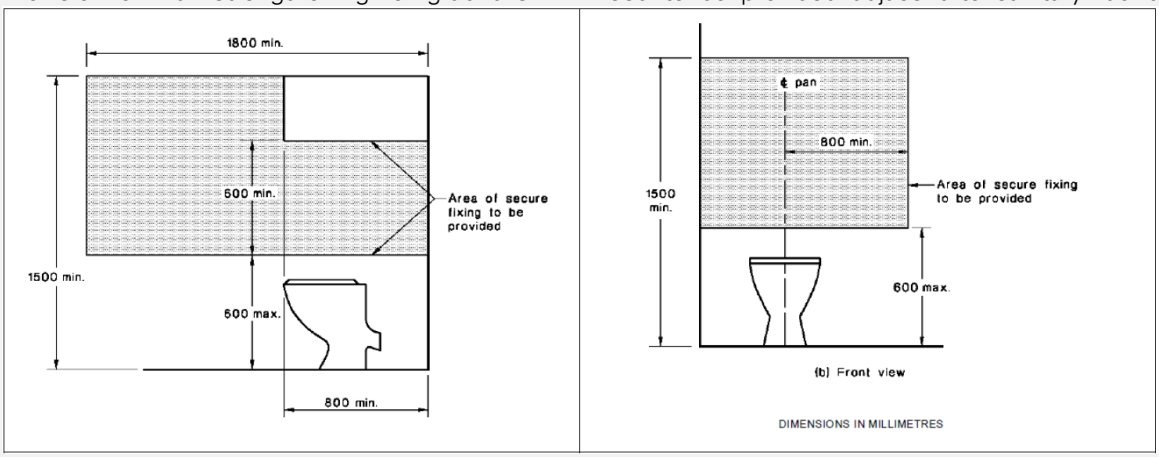
+ Clause	+ Reference	+ Comment
Visual Indicators on Glazing	900 mm and 1000 mm above the plane of the finished floor level. Any contrasting line on the glazing shall provide a minimum of 30% luminance contrast when viewed against the floor surface or surfaces within 2 m of the glazing on the opposite side.  	
Section E	**Services and Equipment**	
Part E3	**Lift installations**	
E3D7 **(Previously E3.6, Table E3.6a, Table E3.6b)** Passenger Lift types and their limitations	In an accessible building, every passenger lift must be one of the types identified in this clause, have accessible features in accordance with Table E3D8 and not rely on a constant pressure device for its operation if the lift car is fully enclosed.	**Compliance Readily Achievable:** Design statement to be provided at BCA Crown Certificate. stage.
Section F	**Health and Amenity**	
Part F4	**Sanitary and Other Facilities**	
F4D5 **(Previously F2.4)** Accessible Sanitary Facilities	Accessible unisex sanitary compartments must be provided, in accordance with F4D6 and unisex showers must be provided in accordance with Table F4D7, in buildings or parts that are required to be accessible.	**Compliance Readily Achievable:** Accessible WC's and ambulant WC's are provided. Details to be reviewed at Crown Certificate stage.

+ Unisex Accessible WCs

+ Tap sets will need to be specified with lever of capstan handles in the accessible sanitary facilities.

+ Clause	+ Reference	+ Comment

+ Provision of wall strengthening for grab-rails will need to be provided adjacent to sanitary facilities.



+ The location and installation of washbasins must comply with the requirements of AS 1428.1-2009.

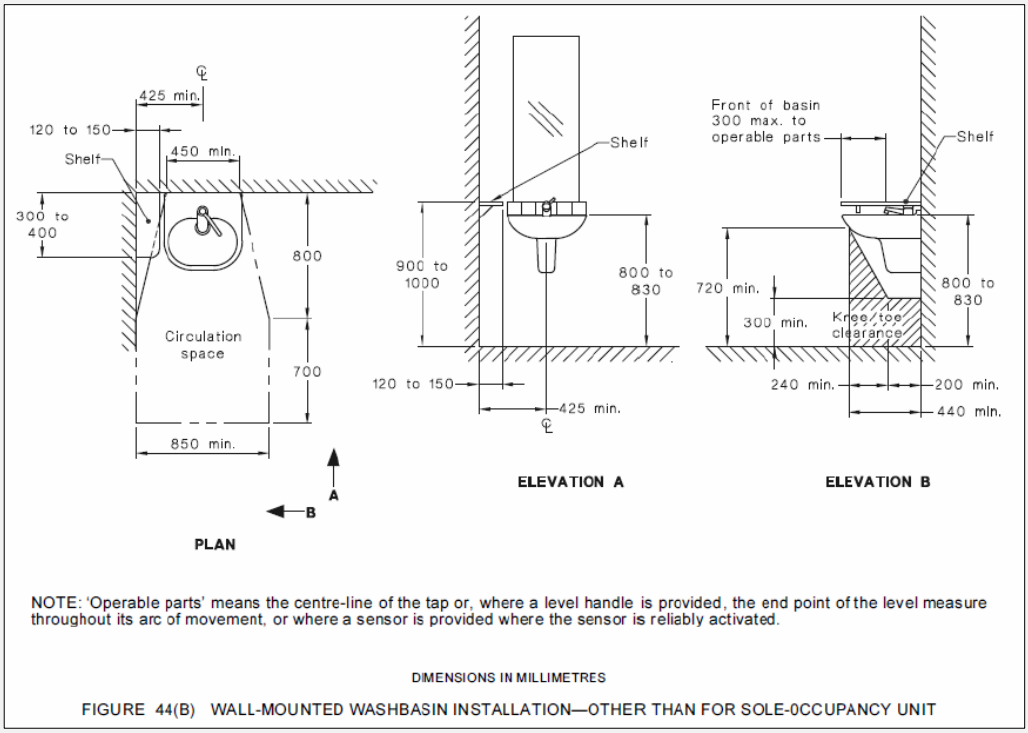


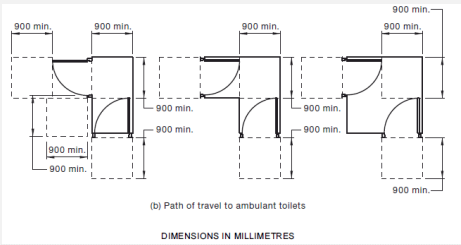
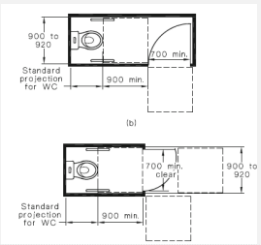
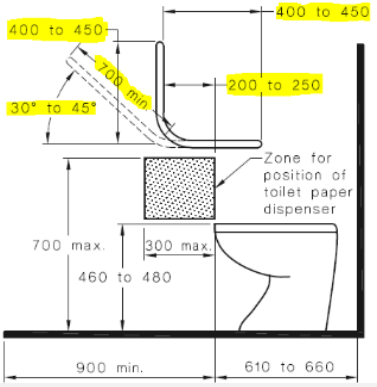
FIGURE 44(B) WALL-MOUNTED WASHBASIN INSTALLATION—OTHER THAN FOR SOLE-OCCUPANCY UNIT

+ Checklist for Accessible WCs	
+ Entry Door	The detailing of the circulation at doorways shall comply with the provisions of Clause 13 of AS1428.1:2009
+ Entry Door	The luminance contrast provisions at the doorway shall comply with the provisions of Clause 13.1 of AS1428.1:2009
+ Force Required to Operate Door	The force required to operate the door if fitted with a door closer is a maximum of 20N. It is assumed that auto-doors will not be installed
+ Door Hardware	The position of door hardware is to be located between 900-1100mm AFFL.
+ WC Pan Circulation	1900×2300mm
+ Hand Basin Circulation	850×1500mm, the basin may encroach a maximum of 100 mm into the circulation space of the adjacent WC pan circulation
+ WC Pan Offset From Side Wall	450/460 mm
+ WC Pan Offset From Rear Wall	800±10 mm

+ Clause	+ Reference	+ Comment
+ WC Pan Backrest		To code requirements
+ WC Pan Toilet Seat		The toilet seat will need to be the full round type, securely fixed in position, be rated 250 KG and have a minimum limits contrast of 30% with the background pan, wall or floor against which it is viewed.
+ WC Pan Grab Rails		Grab rail to be mounted 800 mm above finish floor level, length of grab rail to be 1050 mm from rear wall, install 300mm grab rail to left-hand side of the WC pan. It is assumed that the walls to which the grab rails are fixed will have the required 1100N force rating wall reinforcement required by the standard
+ Hand Basin Mounting Height		Top of hand basin to be 800/830 mm above finish floor level
+ Hand Basin Clearances		The clearances around and under the hand basin need to comply with the provisions of clause 15.3 of AES 1428.1:2009. Specific attention is drawn to the plumbing installation where the required clearances under the hand basin necessitate special consideration of the bottle trap associated with the hand basin
+ Hand Basin Selection		The detailing of the hand basin requires the installation of a shelf unit. It may be possible to specify a hand basin that incorporates a shelf section thereby eliminating an additional component to be installed in the USAT
+ Hand Basin Mirror		The mirror is to be flush mounted on the wall above the sink the bottom of the mirror is to be no more than 900 mm above the finish floor level and the top of the mirror is to be a minimum of 1850 mm above the finish floor level
+ Hand Basin Tap		It is recommended that a lever hand basin tap be installed in lieu of the capstan type
+ Toilet Roll Holder		The position of the toilet roll holder is to be in accordance with code requirements
+ Coat Hooks		Coat hooks are to be installed 1200 to 1350 mm above finish floor level and not closer than 500 mm from an internal corner. The coat hook can be installed on the wall or on the back of the door
+ Soap Dispensers/Hand Towel		These items are to be able to be operated by one hand and shall be installed so that the tap or dispenser is not less than 900 and not more than 1100 mm above the finish floor level.
+ Braille Tactile Signage		The detailing of the Braille Tactile Signage will need to comply with the provision of NCC Clause D3.6 and NCC Specification D3.6. The location of the Braille Tactile sign is to be mounted on the latchside wall. The sign is to indicate the handing of the grabrails to the WC Pan. The following is an example of the type of information to be provided in the Braille Tactile Sign.

+ Ambulant WCs

+ Checklist for Ambulant WCs	
+ Entry Door	The entry doorway is to achieve a clear width of no less than 750mm.
+ Door Hardware	+ Shall be provided with an in-use indicator and a bolt or catch. + Where a snip catch is used, the snib-handle shall have a minimum length of 45mm from the centre of the spindle. + In an emergency, the latch mechanism shall be openable from the outside.
+ Internal Dimensions	Width between internal walls is to achieve between 900 – 920mm. A 900x900 clear area must be provided in front of the toilet pan, fixtures (including door swing) cannot encroach on this distance, except for grab rails.

+ Clause	+ Reference	+ Comment
	 	
+ Grab Rails		Grab rails are to be located on either side of the toilet pan and must be located between 800 – 810mm above finished floor level. + Grab rail length and up-turn to be in accordance with Figure 53(A) of AS 1428.1 – 2009. + Grab rails shall have an outside diameter of 30 – 40mm. + Exposed edges and corners of grab rails shall have a radius of not less than 5mm.  + The fastenings and the materials and construction of grab rails shall be able to withstand a force of 1100 N applied at any position. + Clearance between the grab rail and the adjacent wall shall be between 50 – 60mm.
+ Toilet Roll Holder		The position of the toilet roll holder is to be in accordance with code requirements
+ Coat Hook		A coat hook shall be provided within the sanitary compartment at a height between 1350mm to 1500mm from the floor.
+ Braille Tactile Signage		The detailing of the Braille Tactile Signage will need to comply with the provision of NCC Clause D3.6 and NCC Specification D3.6. The location of the Braille Tactile sign is to be mounted on the latch-side wall. Signage content is to comply with the requirements of Clause 8 of AS 1428.1 – 2009.

5.0 Conclusion

This report contains an assessment of the referenced architectural documentation for the proposed Warrawong CHC at 91 Cowper St, Warrawong, NSW 2052 against the deemed-to-satisfy provisions of the Building Code of Australia 2022.

Arising from the assessment, key compliance issues have been identified that require further resolution, either by way of fire engineered Performance Solutions or plan amendments prior to the BCA Crown Certificate stage.

Notwithstanding the above, it is considered that the proposed development can readily achieve compliance with the BCA and Disability (Access to Premises – Buildings) Standards 2010 and Part D4 provisions of the BCA subject to resolution of the matters identified in the Section 3.0 and 4.0 of this report.

Appendices

+ Appendix 1 – Fire Resisting Construction Requirements

TYPE C CONSTRUCTION: FRL OF BUILDING ELEMENTS				
+ Building Element	+ Class of Building - FRL: (in minutes) Structural adequacy/integrity/insulation			
	2, 3 or 4 part	**5, 7a or 9**	**6**	**7b or 8**
EXTERNAL WALL – (Including any column and other building element incorporated within it) or other external building element, where the distance from any fire-source feature to which it is exposed is**:**				
For loadbearing parts:				
Less than 1.5m	90/90/90	90/90/90	90/90/90	90/90/90
1.5 to less than 3m	–/–/–	60/60/60	60/60/60	60/60/60
3m or more	–/–/–	–/–/–	–/–/–	–/–/–
EXTERNAL COLUMN - Not incorporated in an external wall				
Less than 1.5m	90/–/–	90/–/–	90/–/–	90/–/–
1.5 to less than 3m	–/–/–	60/–/–	60/–/–	60/–/–
3m or more	–/–/–	–/–/–	–/–/–	–/–/–
COMMON WALLS and FIRE WALLS	90/90/90	90/90/90	90/90/90	90/90/90
INTERNAL WALLS				
Bounding public corridors, public lobbies and the like:	60/60/60	–/–/–	–/–/–	–/–/–
Between or bounding sole-occupancy units:	60/60/60	–/–/–	–/–/–	–/–/–
Bounding a stair if required to be rated:	60/60/60	60/60/60	60/60/60	60/60/60
ROOFS	–/–/–	–/–/–	–/–/–	–/–/–

Notes:

1. New external walls that are located 1.5m or more from an allotment boundary / fire source feature require no FRL's.
2. Where a part of a building required to have an FRL depends upon direct vertical or lateral support from another part to maintain its FRL, that supporting part must typically achieve the same FRL. Where that part is also required to be non-combustible, the supporting part must also be non-combustible.
3. An external wall required to have an FRL is only required from the outside.
4. Any lightweight construction in a fire wall or an internal wall required to have an FRL is to comply with Specification 6.
5. The method of attaching or installing a finish, lining, ancillary element, or service installation to a building must not reduce the fire-resistance of that element to below that required.
6. No structural elements are permitted to pass through fire-rated walls.

+ Appendix 2 – Fire Safety Schedule

The following table is a list of the required fire safety measures within the building. These measures may be subject to further change pending the outcomes of the final Fire Safety Engineering Review to confirm the works are permissible and do not contradict the base building Performance Solutions.

+ Statutory Fire Safety Measure	+ Design/Installation Standard	+ Proposed
Automatic Fail-Safe Devices - *potential*	BCA 2022 Clause D3D26	✓
Automatic Fire Detection & Alarm System	BCA 2022 Spec. 20 & BCA Spec 23 AS 1670.1 – 2018	✓
Building Occupant Warning System	Clause 3.22 of AS 1670.1 – 2018	✓
Emergency Lighting	BCA 2022 Clause E4D2 & E4D4 AS 2293.1 – 2018	✓
Emergency Evacuation Plan	AS 3745 - 2010	✓
Exit Signs	BCA 2022 Clauses E4D5, NSW E4D6 & E4D8 AS 2293.1 – 2018	✓
Fire Blankets	AS 3504 – 1995 & AS2444 – 2001	✓
Fire Dampers - *potential*	BCA 2022 Clause C4D15 AS 1668.1 – 2015 & AS 1682.1 & 2 – 2015 and Manufacturer's Specification	✓
Fire Doors - *potential*	BCA 2022 Clause C3D13, C3D14, C4D3, C4D5, C4D6, C4D7, C4D8 & C4D12 AS 1905.1 – 2015 and Manufacturer's Specification	✓
Fire Hose Reels	BCA 2022 Clause E1D3 AS 2441 – 2005	✓
Fire Hydrant Systems	BCA 2022 Clause E1D2 AS 2419.1 – 2021	✓
Fire Seals	BCA 2022 Clause C4D15, AS 1530.4 – 2014 & AS 4072.1 – 2014 and Manufacturer's Specification	✓
Lightweight Construction - *potential*	BCA 2022 Clause C2D9 AS 1530.4 – 2014 and Manufacturer's Specification	✓
Portable Fire Extinguishers	BCA 2022 Clause E1D14 AS 2444 – 2001	✓
Required Exit Doors (Power Operated)	BCA 2022 Clause D3D24(2)	✓
Warning & Operational Signs	BCA 2022 Clause C4D7, D3D28, D4D7, E4D4 & I4D14. AS 1905.1 – 2015 & Section 108 of the EP&A (DCFS) Regulation 2021	✓