

Job No: IAC-1764

Thursday, 13 February 2025

**CLARENCE VALLEY CONSERVATORIUM
C/-DRA ARCHITECTS PTY LTD
PO BOX 1637
GRAFTON NSW 2460**Reference: **CLARENCE VALLEY CONSERVATORIUM**

Attention: Mr Warren Steele

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Phone No: +61 2 6643 4939

Dear Mr Steele,

Thank you for inviting iAccess Consultants to undertake this access assessment of the proposed Development Application documentation for the renovations and additions of Clarence Valley Conservatorium.

This access report has been structured in accordance with the provisions of the Disability (Access to Premises) Standard 2010, the applicable National Construction Code 2022 as well as the provisions of the relevant Australian Standards.

Several issues have been identified which will need to be addressed by the project team in the finalisation of the documents for this project.

Please do not hesitate to contact us should you wish to discuss any aspect of this Access Report.

Yours sincerely,

**RICHARD SEIDMAN
DIRECTOR
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ACCESS REPORT – DEVELOPMENT APPLICATION

**CLARENCE VALLEY CONSERVATORIUM
RENOVATIONS & ADDITIONS
8 VILLIERS STREET
GRAFTON NSW 2460**

Prepared by

iAccess Consultants

A division of iAccess Group Pty Ltd

ABN 37 002 648 615

Revision [-]

13 February 2025

Document Control

Project: **CLARENCE VALLEY CONSERVATORIUM
8 VILLIERS STREET
GRAFTON NSW 2460**

Document Type: Access Report – Development Application
Report Number: IAC-1764

The following report register documents the development and issue of this and each subsequent report(s) undertaken by iAccess Consultants.

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Revision History:

Rev	Remarks	Issue Date
-	Concept Design access report prepared and submitted to client	13 February 2025



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Summary of Actions to be undertaken

The following table summarises the actions yet to be undertaken as part of the detailed Construction Certificate and Construction documentation to be prepared for this project. The schedule indicates the report number and report page number.

3.02.6. Circulation – The detailed construction documentation to be prepared for this project will need to indicate compliance with the circulation provisions of Clause 6 of AS1428.1:2009.	24
3.05.10 Luminance & Colour Contrast - Details of the braille tactile WC signage is to be provided for review as part of the detailed Construction documentation to be prepared for this project. <i>Please note that aluminium signs on a white wall will not achieve compliance</i>	36
3.05.11 Braille Tactile Press to Exit Signage - Details of the braille tactile 'Press to Exit' signage to be installed will need to be provided for review as part of the detailed construction documentation to be prepared for this project. Specific attention is directed to the font type, size of lettering and the selection of a field colour of the sign which will achieve a 30% luminance contrast with the wall or door the sign is installed on.	37
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3.05.8 Lift Signage - Details of the braille tactile signage to be installed will need to be provided for review as part of the detailed construction documentation to be prepared for this project.	34
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3.06.4. TGSIs – Requirements to be satisfied - The selection of TGSIs will need to satisfy the requirements of NCC Clause D3.8 and the provisions of AS1428.4.1:2009. The TGSIs documentation prepared as part of the detailed Construction Certificate documentation will need to demonstrate compliance.	40
3.06.6. Setout of TGSIs associated with Ramps – Detailed TGSIs setout plans will need to be prepared as part of the detailed construction documentation to be prepared for this project. The details will need to indicate the setout of the TGSIs from the edge of the ramp and the nominated depth of TGSIs depending on the landing length.	41
3.06.7. Setout of TGSIs associated with Stairs – Detailed TGSIs setout plans will need to be prepared as part of the detailed construction documentation to be prepared for this project. The details will need to indicate the setout of the TGSIs from the face of risers and the nominated depth of TGSIs depending on the landing length.	41
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3.09 Handrails - The detailed construction documentation will need to demonstrate compliance with these requirements.	49
3.10.1. Clear Door Width - The detailed documentation to be prepared for this project will need to demonstrate compliance with these provisions.	50

3.10.3 Luminance Contrast - A table indicating wall colour and door colour with the associated luminance contrast level achieved will need to be prepared and provided to demonstrate compliance with the requirements of Clause 13.1 of AS1428.1:2009.	51
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3.11 Switches – Details of the setout of switches will need to be provided as part of the detailed construction documentation to be prepared for this project.	58
3.12 Accessible WCs – The documentation to be prepared as part of the detailed construction documentation will need to indicate compliance with the requirements for accessible WCs as nominated at Clause 15 of AS1428.1:2009. Plans may require to be amended to include the provision of accessible toilet on the first floor.	64
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3.17.4. Carparking – Linemarking – Linemarking details are to be provided as part of the detailed construction documentation to be prepared for this project.	74
3.18 Hearing augmentation Detailed documentation will need to be provided as part of the further documentation to be prepared for this project.	77
 OC 3.03.1. Visual Indicators - On completion of the works certification will need to be provided for the issue of the OC Access Installation Certificate, indicating that visual indicators have been applied to full height glazing in accordance with the requirements of Clause 6.6 of AS1428.1:2009.	27
OC 3.04.1. Slip Resistance - floor and ground surfaces – On completion of the works certification is to be provided by the contractors indicating the slip resistance of the flooring materials installed This information is required for the issue of the access installation certificate required for the issue of the Occupation Certificate.	28

OC 3.04.3. Carpet – On completion of the works certification is to be provided by the carpet contractor that the specified carpet has been installed and that the provisions of NCC Clauses D4D4(g) & (h) have been satisfied.	29
OC 3.10.6. Door Closers – Certification of compliance that the doors installed with a door closer (other than fire rated doors) satisfy the provisions of Clause 13.5(e) of AS1428.1:2009 (20N Force) will be required for the issue of the Occupation Certificate.	55
OC 3.14.3 Vertical transport - A lift installation certificate referencing the NCC performance requirement of EP4, NCC Clause E3.6 and AS1735.12:2020 will need to be provided for the issue of the OC Access Installation Certificate.	71
OC 3.16 Lighting Levels – On completion of the works certification of lighting levels achieved indicating compliance with these requirements will need to be provided for the issue of the Access Installation Certificate at OC	73

Abbreviations

The following abbreviations are employed in this Checklist:

- ACA Access Consultants Association
- AS Australian Standard
- BCA Building Code of Australia
- NCC National Construction Code
- Dts Deemed to satisfy
- CAPT Continuous Accessible Path of Travel
- GPO General Power Outlet
- USAT Unisex Accessible Sanitary Toilet
- AFFL Above Finished Floor Level
- TGSI Tactile Ground Surface Indicator
- PPE Principal Pedestrian Entrance
- DAPB Designated Accessible Parking Bay

Legend

The following list of differing colour toning are indicators of access compliance throughout this report:

	The design as proposed is capable of satisfying the NCC Performance Requirement and or the relevant clauses of AS1428.1:2009, AS1428.4.1:2009, AS2890.6:2009, AS1735.12:1999.
	Not Compliant, Design to be revised and resubmitted
	Information to be provided as part of the detailed documentation to be prepared for this project.
	Information to be provided for the issue of the OC Access Installation Certificate
	To be addressed by way of a Performance Based Design Solution.

Examples of these compliance summaries include:

Compliance:	An accessible path of travel is provided from the set-down point to the Principal Pedestrian Entry to the event.
Compliance:	Door circulation zones are not compliant. Ensure door latch-side clearance achieves a minimum of 530mm.
Compliance:	The doorways luminance contrast levels is not able to be assessed. Information is to be provided.

Lines that are written in red and highlighted in yellow (like this line of text) indicate an item that may require action by the project team, impacting on the overall design.

1. EXECUTIVE SUMMARY

This access report has been prepared to provide commentary on the Development Application documentation prepared for the proposed upgrade works to Clarence Valley Conservatorium.

The purpose of this access report is to highlight and review key accessible topics as they relate to design elements of the proposed development. The key accessible areas of assessment noted in the Legislative Frameworks and considered by this access report are: -

- Disability (Access to Premises – Buildings) 2010
- the National Construction Code 2022 addressing Access & Egress, Lift services, Sanitary facilities.
- The Australian Standards referenced by the National Construction Code

There is generally a high level of compliance throughout the project, however there are several items where additional information will need to be provided as part of the detailed documentation to be prepared for this project.

1.1. Access Declaration

This report confirms that the provisions for compliance with the accessible requirements nominated in the Disability (Access to Premises – Building) Standard 2010 where possible have been incorporated into the proposed design.

1.2. Scope of Works

The works include the following:

Ground Floor Plan

- *Sanitary facilities and change rooms*
- *Foyer*
- *Reception/ Office Area*
- *Director Area*
- *Meeting room*
- *Practice room*
- *Meals/ Staff room*

First Floor Plan

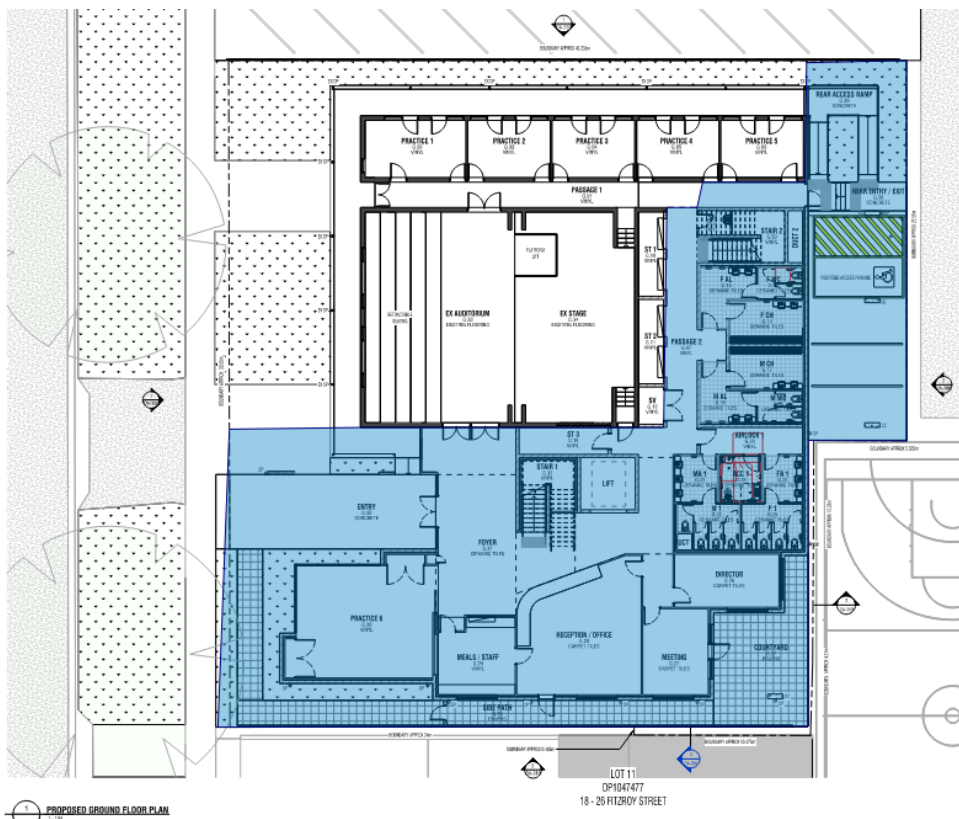
- *Practice rooms*
- *Common room*
- *Sanitary facilities*
- *Storeroom*

A passenger lift and two circulation stairs connect the two floors.

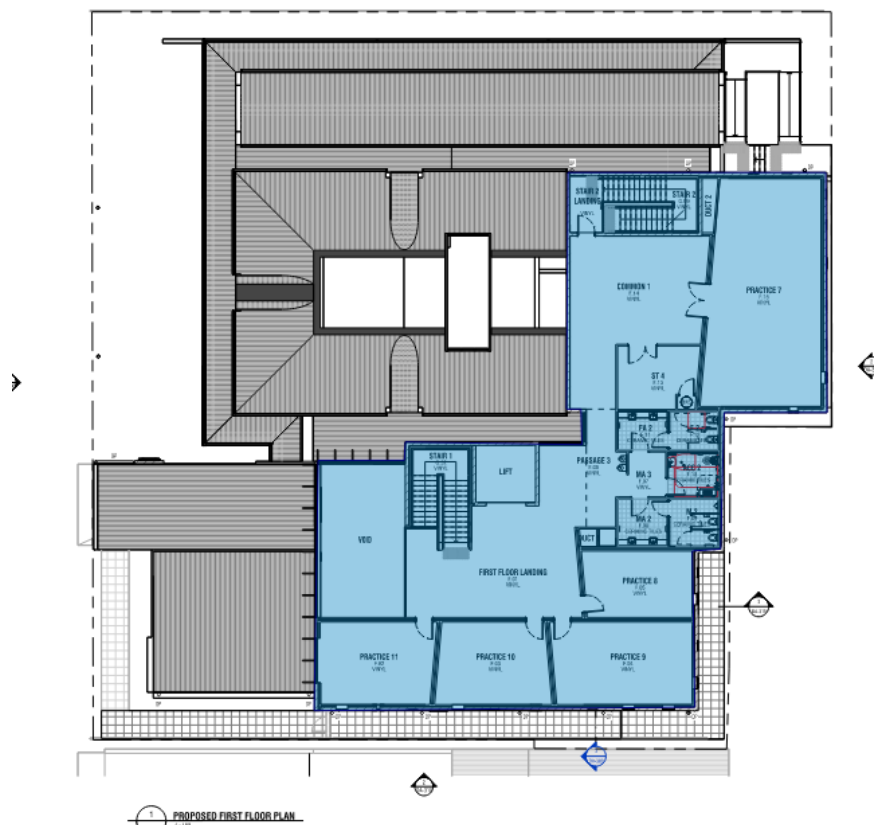
A rear access ramp adjacent to external rear entry stairs is proposed in addition to an undercover accessible parking space located adjacent to the rear entry.

Please refer to report exclusions for details on what is excluded from this scope of works due to base build existing status.

The markup of the plans following indicate the affected part of this project.



Ground Floor Plan



First Floor Plan

1.3. Building Classification

The NCC classification for this Development is:

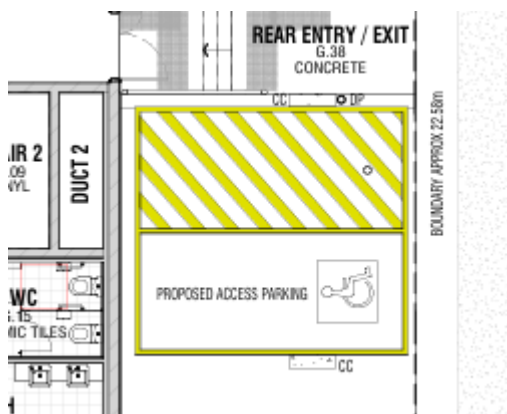
Building Class A6G10(2)(b) Class 9b - An assembly building

1.4. Report Exclusions

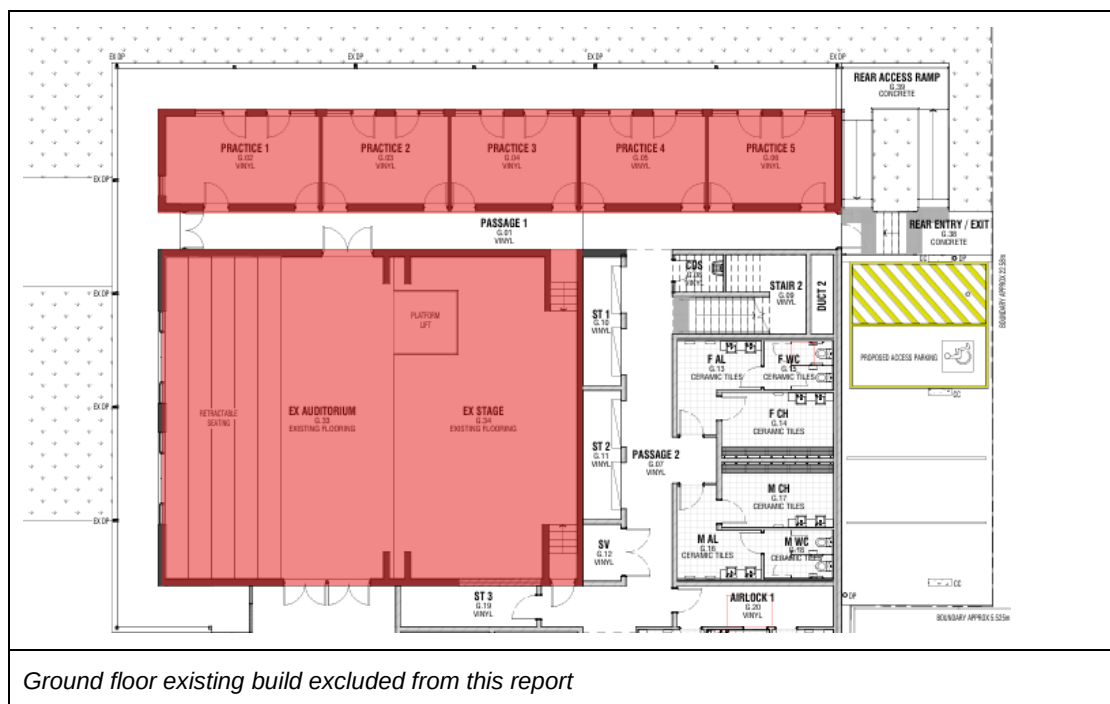
The assessment discussed in this report is limited to the Scope of Works highlighted in the above Executive Summary.

Our access assessment covered in this report specifically excludes the following areas of this development:

- Parking areas with *exception of* the proposed accessible parking space adjacent to the rear entry of ground floor, highlighted in yellow as indicated below:



- All other areas that are not part of the alterations and upgrades, and as infilled in red below



1.5. Performance Solutions

The proposed design does not rely upon any Performance Based Design Solution.

1.6. Equitable Egress Strategy - NCC Clauses D1P4 Exits & D1P6 Paths of travel to exits

An NCC Deemed to Satisfy solution addressing egress from a building satisfies the provisions of D1P4 and D1P6.

1.7. NCC Clause D4D5 Concession

The NCC Clause **D4D5** notes a concession for accessibility to particular areas/rooms:

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

The building has some rooms of which the NCC **D4D5** concession applies:

- Storerooms
- Rooms where access is only permitted by specialist technicians.

1.8. Architectural Documentation

This Access Report references the following architectural documentation.

Dwg No	Title	Revision
DA100	Proposed Ground Floor Plan	DA-1
DA110	Proposed First Floor Plan	DA-1

1.9. Occupation Certificate Checklist – Access NCC Section D, Clauses E3D7, E3P4, E3D8, F4P1, F4D6 and F4D8.

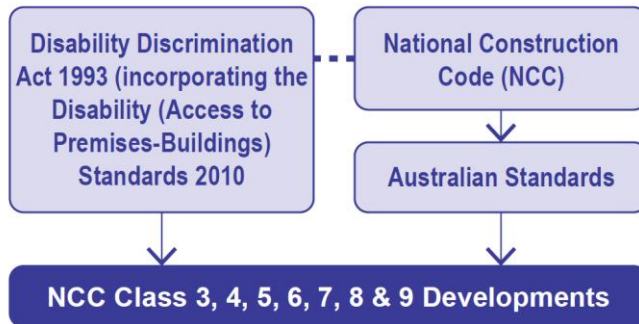
The following requirements are to be provided for the issue of the Occupation Certificate Access Installation Certificate.

- Lift installation certificate for each lift nominating compliance with NCC 2022 Clause E3D8 Accessible features required for passenger lifts and AS1735.12.
- Slip resistance rating for internal floor finishes to corridors and wet areas of rooms required to be accessible.
- Slip resistance rating of stair nosing
- Slip resistance rating of stair going
- Slip resistance rating of TGSIs
- Luminous contrast of TGSIs to background floor finish
- Luminous contrast of stair nosing to going.
- Gradients of ramps to be between 1:14 and 1:20
- Luminous contrast of Visual Indicators installed to full height glazing.
- Luminous contrast at doorways

- Installation of wall strengthening to locations where grabrails are installed.
- Setout of Accessible WCs to the requirements of Clause 15 of AS1428.1:2009
- Setout of Ambulant WCs to the requirements of Clause 16 of AS1428.1:2009
- Certification of hearing augmentation systems installed to the provisions of NCC Clause D4D8 and AS1428.5:2021.
- Certification that the Statutory Braille Tactile signage is designed and installed to NCC Clause D4D7, NCC Specification 15 and Section 5 of AS1428.5:2010 where hearing augmentation is installed.
- Detailing of handrails to stairs to the provisions of Clause 10, 11 & 12 of AS1428.1:2009
- Line marking of any accessible parking spaces to be to Section 3 of AS2890.6:2009.
- Certification of force to operate doors other than fire or smoke doors fitted with door closers to be not more than 20N force
- Setout of door release buttons
- Location of switches to be not closer than 500mm to an internal corner

2. STATUTORY FRAMEWORK

The legislation addressing accessibility is documented in the following Act, Code and Standards:



2.1. Disability Discrimination Act 1992

Section 23 of the Disability Discrimination Act 1992 states:

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

- a) *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*
- b) *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*
- c) *in relation to the provision of means of access to such premises; or*
- d) *by refusing to allow the other person the use of any facilities in such premises that the public or a section of the public is entitled or allowed to use (whether for payment or not); or*
- e) *in the terms or conditions on which the first-mentioned person is prepared to allow the other person the use of any such facilities; or*
- f) *by requiring the other person to leave such premises or cease to use such facilities.*

The Disability Discrimination Act 1992 is complaints-based legislation and the Commissioner once having heard and assessed the level of discrimination may issue orders to rectify.

2.2. Legislative Framework (including Australian Standards referenced by NCC 2022)

- Disability Discrimination Act 1992
- Disability (Access to Premises - Buildings) Standards 2010 (DDA 1992)
- National Construction Code 2022
- AS1428.1:2009 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
- AS1680.2.1:2008 Interior and workplace lighting - Specific applications - Circulation spaces and other general areas
- AS1735.12:1999 Lifts, escalators and moving walks - Facilities for persons with disabilities.
- AS2890.6:2009 Parking facilities - Off-street parking for people with disabilities

2.3. Australian Standards not referenced by NCC 2022

The following Australian Standards address accessibility and may be referenced by this access report. The following Australian Standards are not referenced by National Construction Code 2019 Amend 1 or National Construction Code 2022 (yet to come into effect).

- AS1428.1:2021 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
- AS1428.4.2:2018 Means to assist the orientation of people with vision impairment - Wayfinding signs.
- AS1428.5:2021 Design for access and mobility - Communication for people who are deaf or hearing impaired.
- AS1735.12:2020 Lifts, escalators and moving walks - Facilities for persons with disabilities.
- HB198:2014 Guide to the specification and testing of slip resistance of pedestrian surfaces.

3. ACCESS REPORT

3.1. Access Report Preamble

The Access Report following has adopted the headings of the Disability (Access to Premises) Standard 2010. The Standard provides a framework for analysis and when coupled with the technical provisions of the current National Construction Code 2022 and the provisions of Australian Standards AS1428.

Australian Standards provide certainty and direction to address accessibility compliance.

3.1.1. AS1428.1:2009 (Referenced Standard)

Appendix 2 of NCC 2022 nominates the reference Australian Standards. This appendix references AS1428.1:2009 and not AS1428.1:2021. Please ensure that the documentation prepared for this project references AS1428.1:2009.

3.1.2. Disability (Access to Premises – Buildings) Standard

The Disability (Access to Premises – Buildings) Standard was revised in November 2024. The revised Standard is yet to be enacted by Federal Parliament.

The main differences between the existing and the pending editions of the Standard generally relate to:

- Numbering of clauses
- Editorial changes
- Reference to AS1428.1:2021 in lieu of AS1428.1:2009.
- Revised diagrams

The previous edition of the Disability (Access to Premises – Buildings) Standard will be relied upon for the purpose of this access report.

3.2. Continuous Accessible Paths of Travel

3.2.1. Legislative references

NCC 2022	D1P1 Access for people with a disability
	D1P2 Safe movement to and within a building
	D4D2 General building access requirements
	D4D3 Access to buildings
	D4D4(c) Parts of buildings to be accessible.

AS Reference: Clause 6 (Continuous Accessible Paths of Travel) of AS1428.1 2009

3.2.2. Preamble

This section discusses Continuous Accessible Paths of Travel (CAPT) throughout the development. The requirements for Continuous Accessible Paths of Travel are noted in the National Construction Code at Clauses D1P1 and D4D3.

A continuous accessible path of travel to accessible facilities will need to be provided to enable people to '*approach the building from the road boundary*' so that they can '*access work and public spaces, accommodation and facilities for personal hygiene*' in accordance with the requirements of **D1P1** of the National Construction Code 2022.

The NCC Clause **D4D3(1)** identifies that

An accessway must be provided to a building required to be accessible—

- (a) from the main points of a pedestrian entry at the allotment boundary; and*
- (b) from another accessible building connected by a pedestrian link; and*
- (c) from any required accessible carparking space on the allotment.*

Compliance: It has been assumed that the provisions of NCC D4D3 are capable of being satisfied as part of the base building works. Assessment of these requirements are external to alternation scope and have not been considered by this access assessment.

3.2.3. Site

The location of the proposed additions to the conservatorium are highlighted in yellow infill below. Access and parking to the site remain the same, except that an additional accessible parking space will be included in the proposed additions adjacent to the rear entry to the building alongside several other additional carparks.



3.2.4. Lighting Levels

The lighting level along path of travels will need to achieve a minimum level of 150lx as noted at Clause 19 of AS1428.2:1992 or the minimum lighting levels noted at AS1680.

3.2.5. Height and Width of Continual Accessible Paths of Travel

The minimum unobstructed height of a continuous accessible path of travel shall be 2000mm or 1980mm at doorways.

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 and the following shall not intrude into the minimum unobstructed width of a continuous accessible path of travel:

- (a) *Fixtures and fittings such as lights, awnings, windows that, when open, intrude into the circulation space, telephones, skirtings and similar objects.*
- (b) *Essential fixtures and fittings such as fire hose reels, fire extinguishers and switchboards.*
- (c) *Door handles less than 900 mm above the finished floor level.*

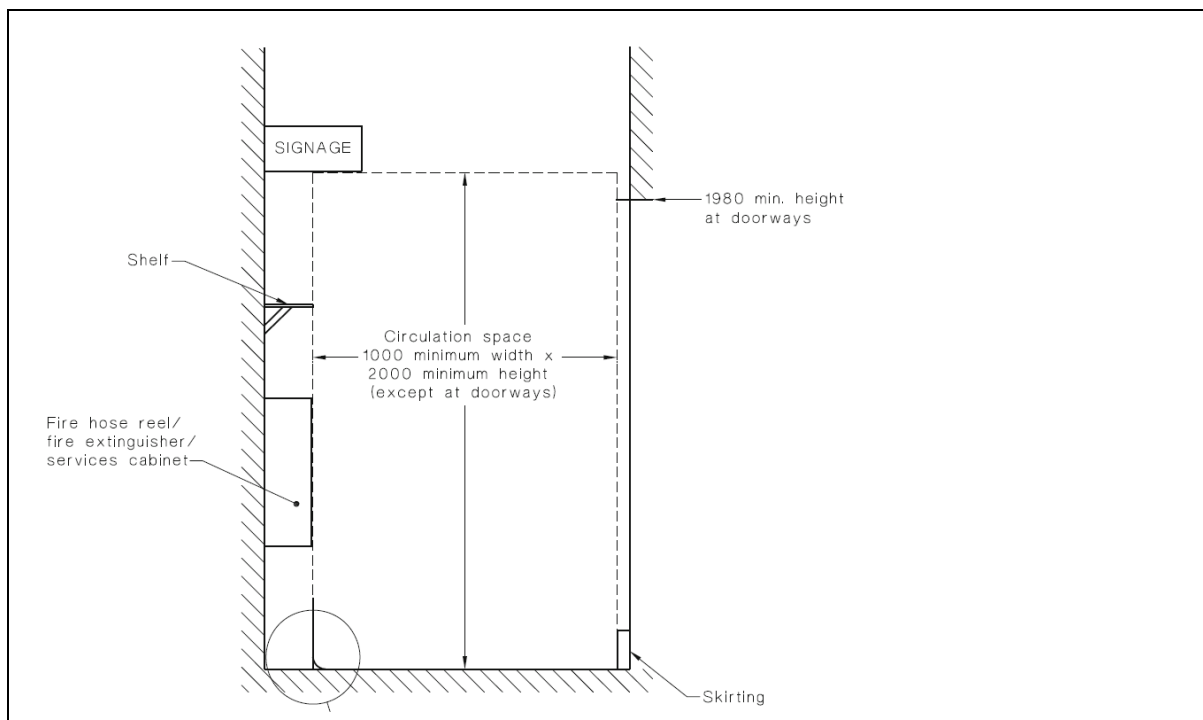


Figure 1 – Fig. 2 of Section 6, AS1428.1:2009

Compliance: The documentation provided indicates that the requirements of Clause 6.3 of AS1428.1:2009 are capable of being satisfied.

3.2.6. Circulation Zones

A minimum pathway of 1m width is required throughout all accessible areas.

The design also requires locations where a wheelchair user can make a 180deg turn (1540 x 2070mm) at corridor/pathway ends in accordance with the provisions of Fig. 5, Clause 6 of AS1428.1 2009 as well as 1500x1500 circulation zones where the path of travel changes direction.

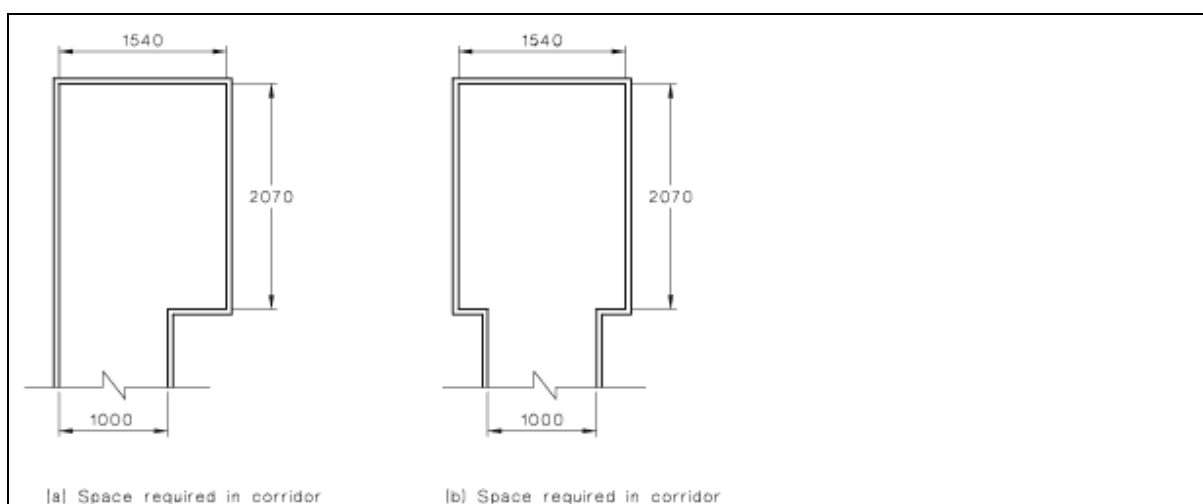
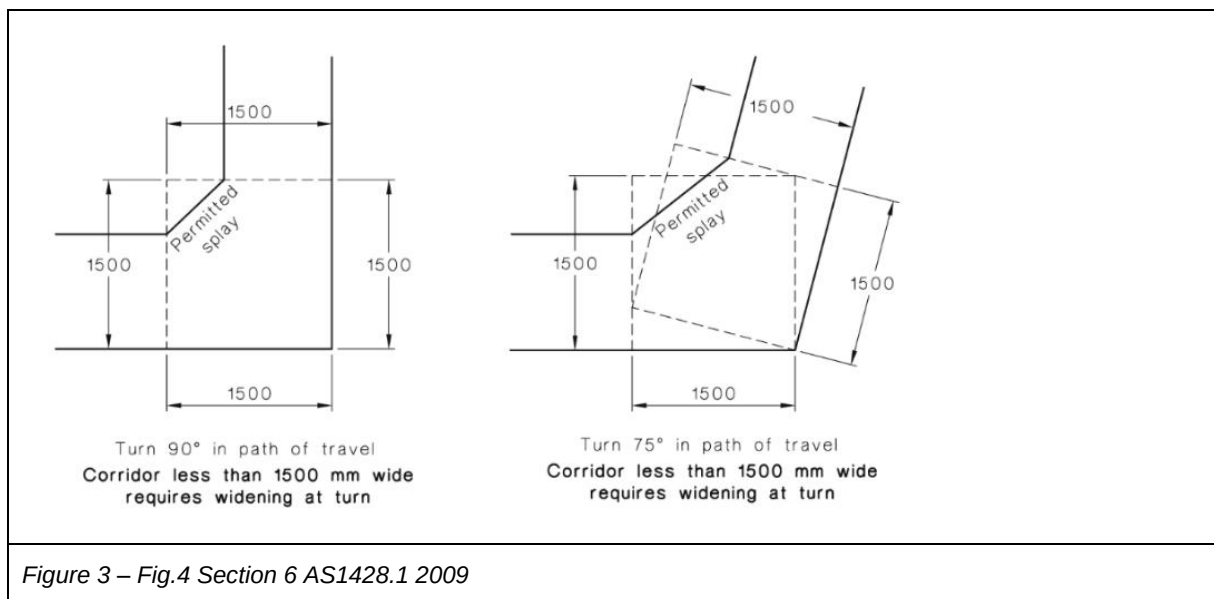


Figure 2 – Fig.3 Section 6 AS1428.1 2009



3.2.6. Circulation– The detailed construction documentation to be prepared for this project will need to indicate compliance with the circulation provisions of Clause 6 of AS1428.1:2009.

3.3. Visual Indicators on Glazing

3.3.1. Visual Indicators - Legislative references

NCC 2022 D1P1(a)(iii) Access for people with a disability
 D4D13 Glazing on an accessway.

AS Reference: Clause 6.6 (Visual Indicators on Glazing) of AS1428.1 2009

3.3.2. Visual Indicators - Assessment

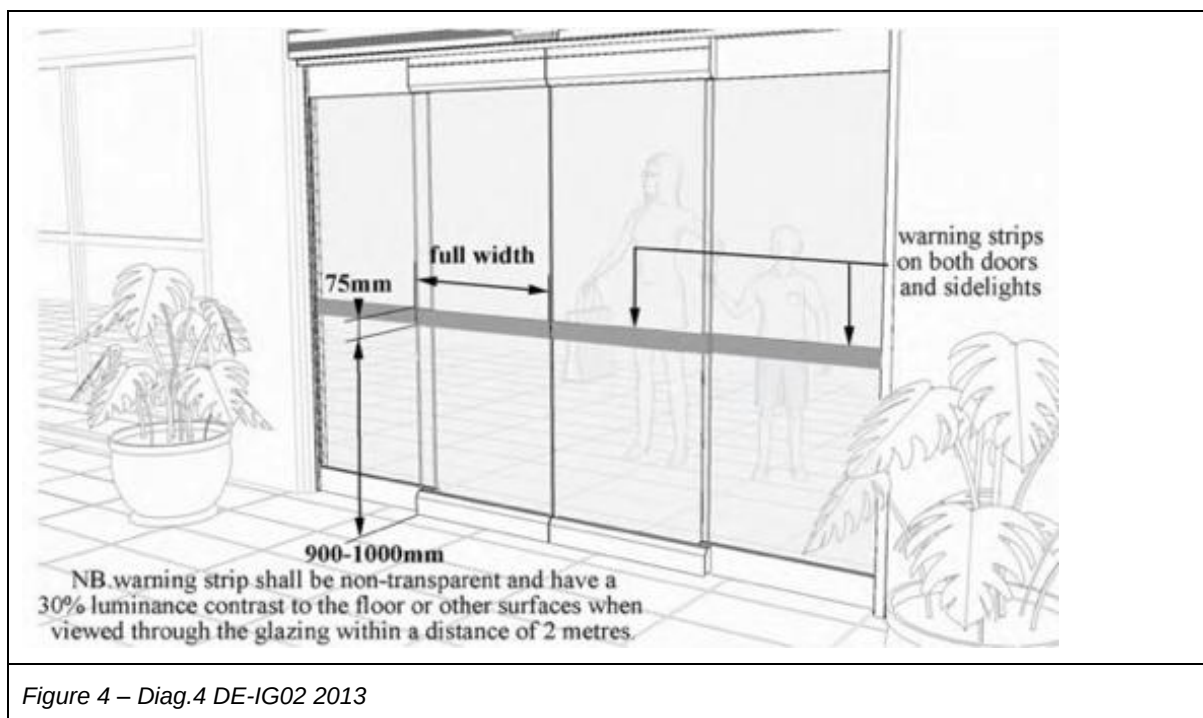
The design as proposed may include locations of full height glazing. Visual indicators will need to be applied in locations where full height glazing is provided in external facades and internal glazed walls.

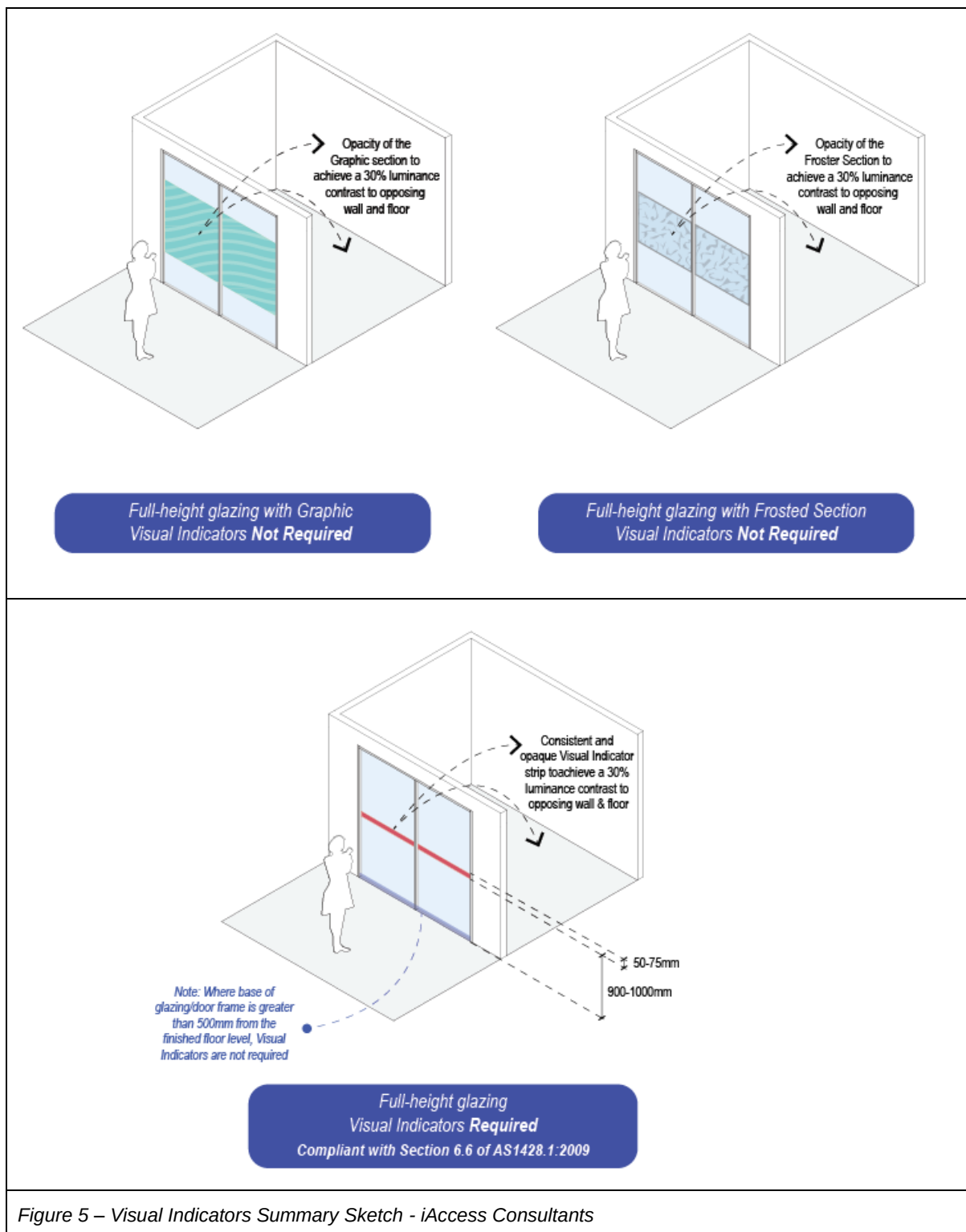
3.3.3. Visual Indicators - Informational

Where full height glazing is proposed, visual indicators will need to be fixed to the glazing in accordance with Clause 6.6 of AS1428.1:2009:

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. 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 900 mm and 1000 mm above the plane of the finished floor level.

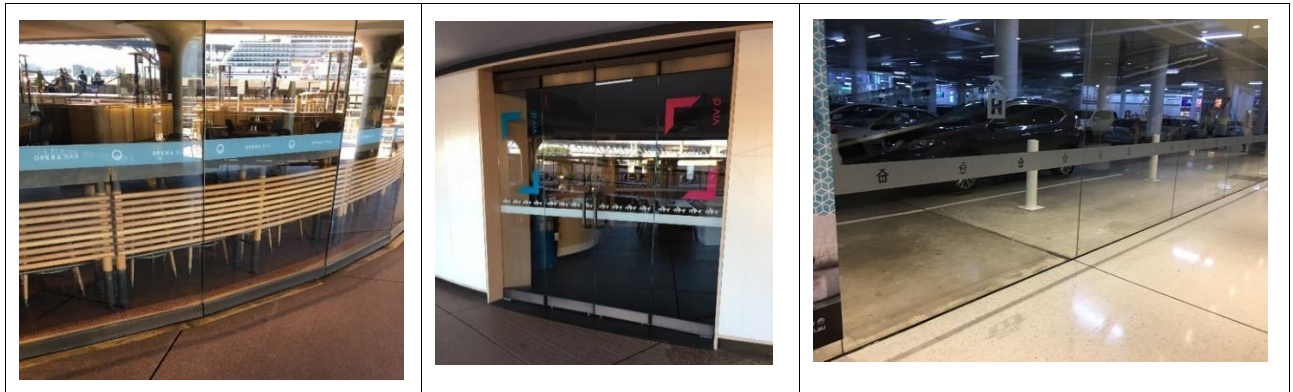
Any contrasting line on the glazing shall provide a minimum of 30% luminance contrast when viewed against the floor surface or surfaces within 2 m of the glazing on the opposite side.





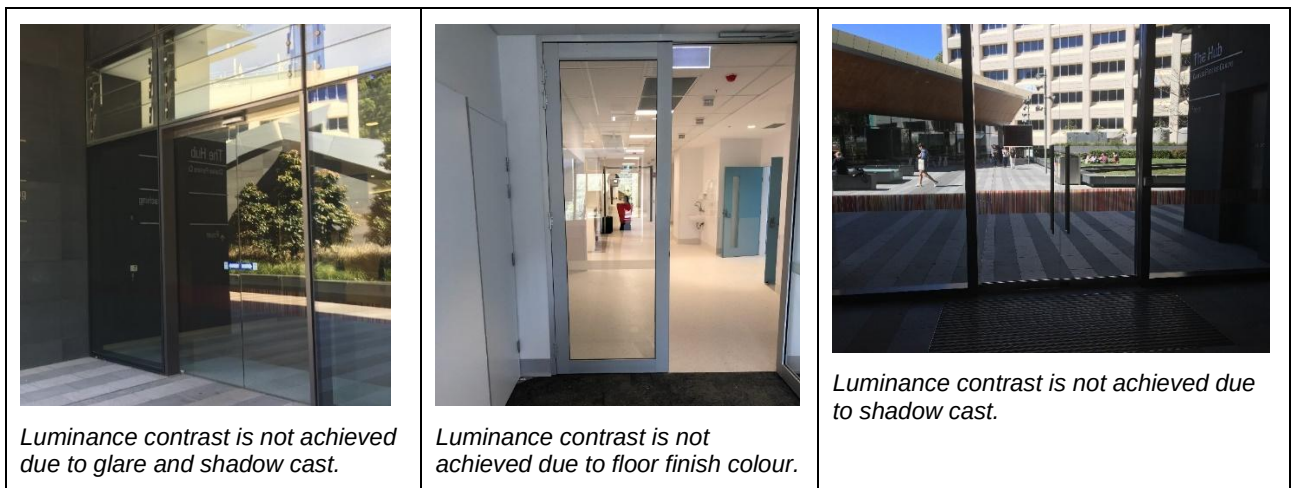
3.3.4. Visual Indicators - Examples

The following are some compliant examples of the application of Visual Indicators on glazing.



In considering the statutory requirements for Visual Indicators on glazing, it is important to note other contextual factors, such as glare, lighting, floor finishes, furniture placement and casted shadows from building lines.

The following are some non-compliant examples of the application of Visual Indicators on glazing as a result of these contextual factors.



3.3.1. Visual Indicators - On completion of the works certification will need to be provided for the issue of the OC Access Installation Certificate, indicating that visual indicators have been applied to full height glazing in accordance with the requirements of Clause 6.6 of AS1428.1:2009.

3.4. Floor or Ground Surfaces

3.4.1. Floor or Ground Surfaces - Legislative references

NCC 2022 D1P1(a)(iii) Access for people with a disability
 D1P2 Safe movement to and within a building
 D3D15(a) Landings
 Table D3D15: Slip-resistance classification

AS Reference: Clause 7 of AS1428.1:2009
 HB198:2014 (slip resistance)

3.4.2. Slip Resistance - Informational

The slip resistance of the floor finishes will need to satisfy the minimum requirements of NCC Table D3D15 and the slip resistance ratings noted within HB198.

Certification indicating compliance with the slip resistance provisions will need to be provided from the respective flooring suppliers.

The table following summarises the minimum slip resistance levels of flooring materials to be achieved within this development.

Location	NCC Table D3D15	HB198	Criterion Satisfied
Ramp steeper than 1:14	Dry P4/R11 – Wet P5/R12	P5/R12	Not Applicable
Ramp steeper than 1:20 but not steeper than 1:14	Dry P3/R10 – Wet P4/R11		Not Applicable
Tread or landing surface	Dry P3/R10 – Wet P4/R11	Dry P3/R10 – Wet P4/R11	Additional Information to be provided
Nosing	Dry P3 – Wet P4	Dry P3 – Wet P4	Additional Information to be provided
Transition Areas		P2/R9	Additional Information to be provided
External ramps including sloping driveways, footpaths, etc., under 1:14, external sales areas (e.g. markets), external carpark areas, external colonnades, walkways, pedestrian crossings, balconies, verandas, carports, driveways, courtyards and roof decks		P4/R11	Additional Information to be provided
External Ramps (including sloping driveways, footpaths etc.) steeper than 1 in 14		P5/R12	Not Applicable
Wet area / sanitary facilities		P3/R10	Additional Information to be provided

3.4.1. Slip Resistance - floor and ground surfaces – On completion of the works certification is to be provided by the contractors indicating the slip resistance of the flooring materials installed. This information is required for the issue of the access installation certificate required for the issue of the Occupation Certificate.

3.4.3. Carpet

The finishes schedule may propose carpet finishes within this development.

It will be necessary that the specification and application of the carpet satisfy the provisions of NCC Clause D4D4 (g) & (h) which states:

- (g) *Clause 7.4.1(a) of AS 1428.1 does not apply and is replaced with 'the pile height or pile thickness shall not exceed 11 mm and the carpet backing thickness shall not exceed 4 mm'; and*
- (h) *the carpet pile height or pile thickness dimension, carpet backing thickness dimension and their combined dimension shown in Figure 8 of AS 1428.1 do not apply and are replaced with 11 mm, 4 mm and 15 mm respectively.*

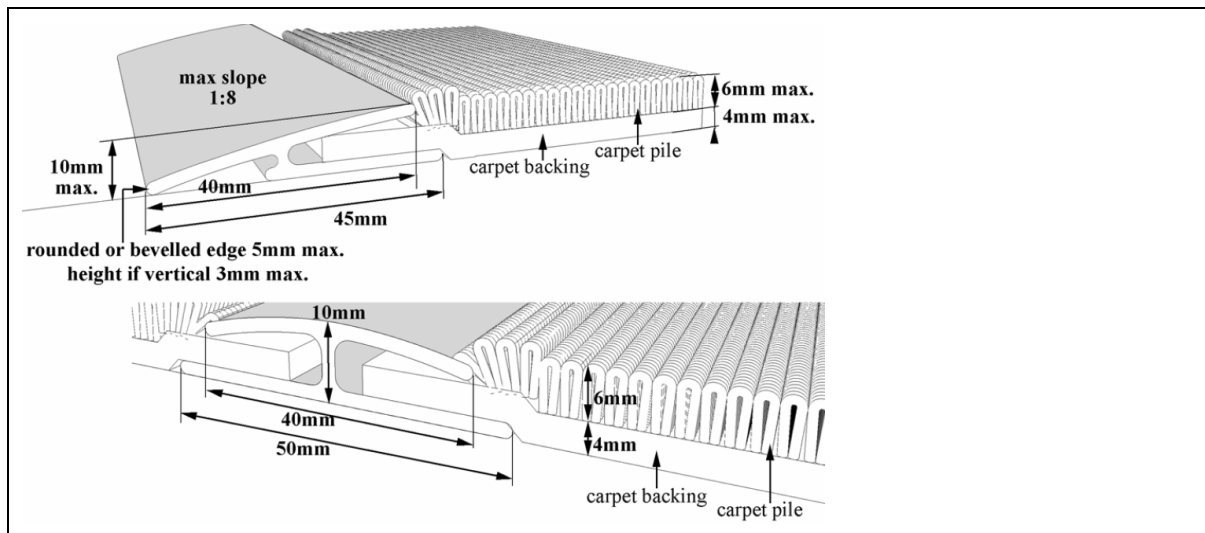
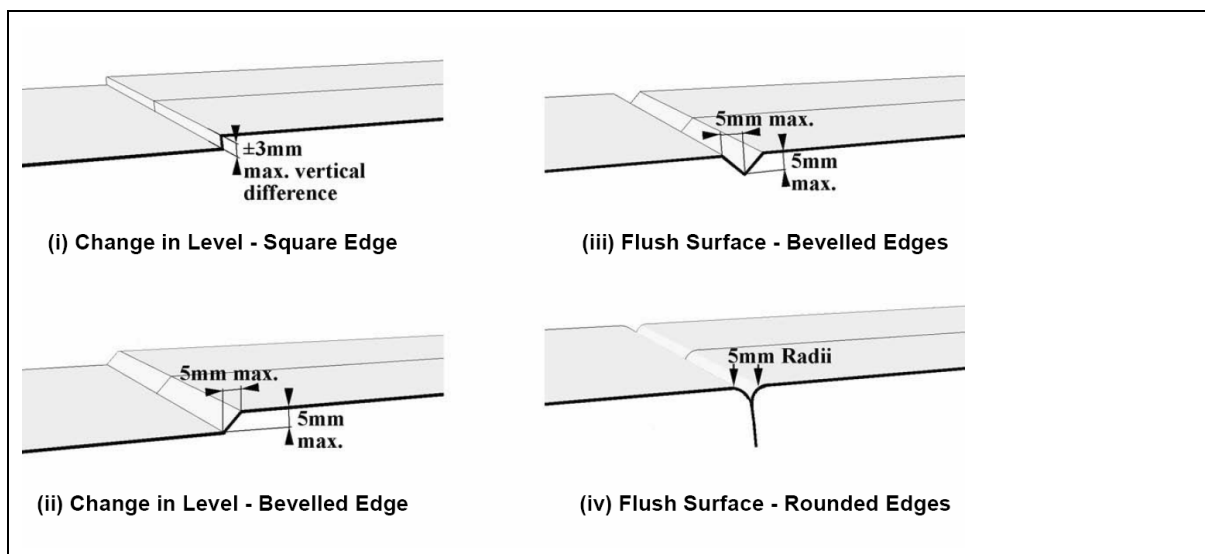


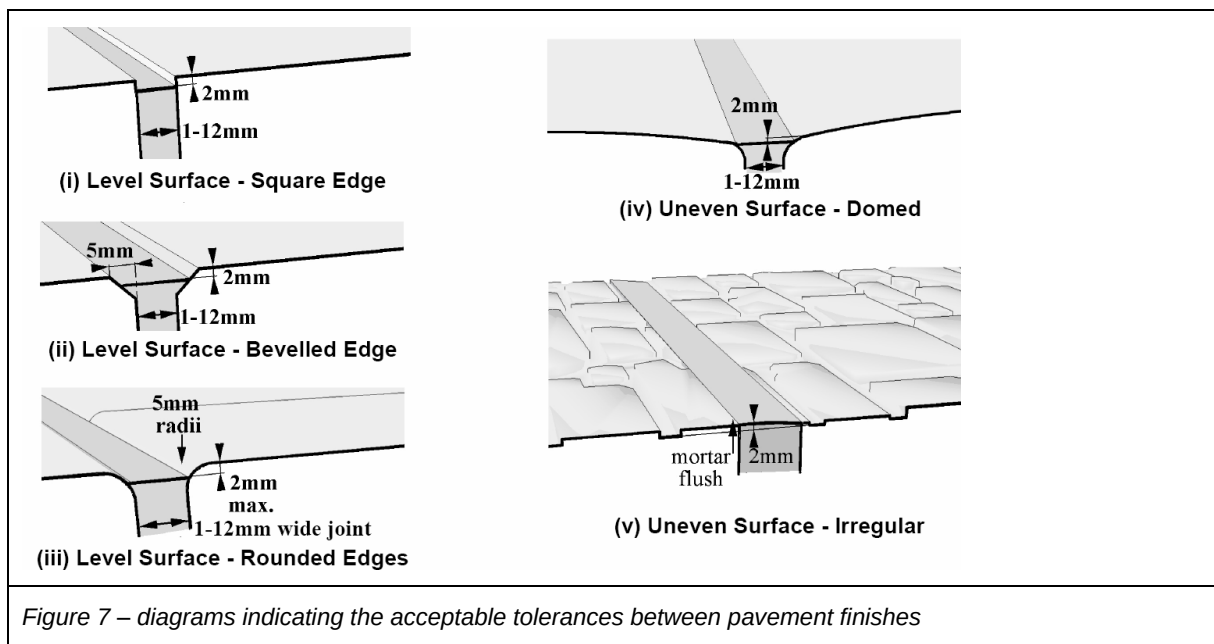
Figure 6 – Examples of carpet joints on an accessible path of travel

3.4.3. Carpet – On completion of the works certification is to be provided by the carpet contractor that the specified carpet has been installed and that the provisions of NCC Clauses D4D4 (g) & (h) have been satisfied.

3.4.4. Floor transitions

Transitions between floor finishes will need to comply with Clause 7.2 of AS1428.1:2009.





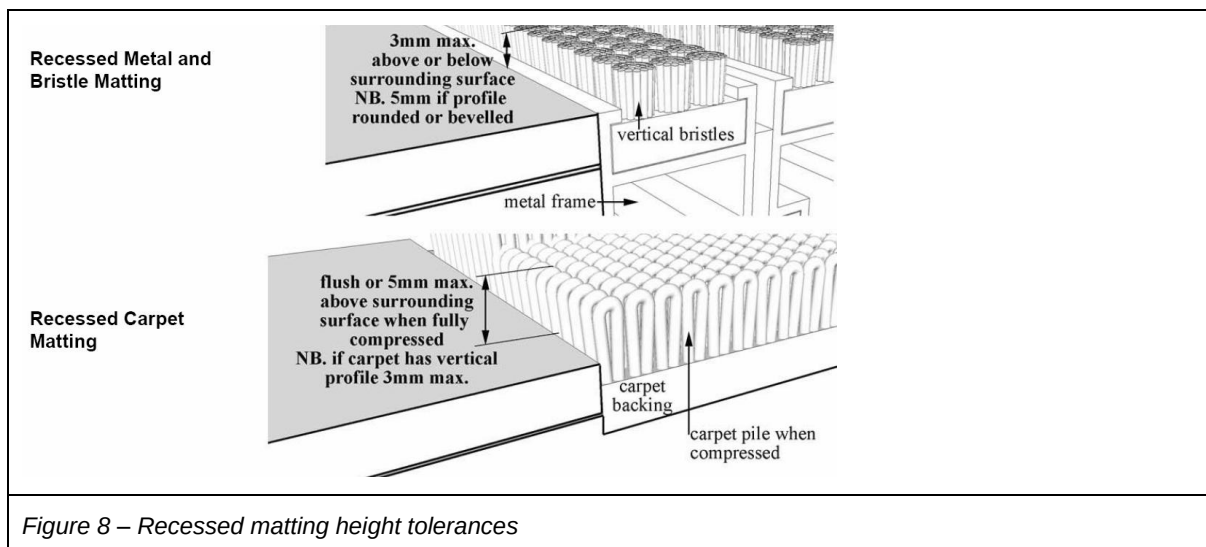
3.4.5. Recessed Matting

The design may propose the installation of recessed matting.

The installation will need to satisfy the following requirements from Clause 7.4.2 of AS1428.1:2009.

Matting recessed within a continuous accessible path of travel—

- (a) *where of metal and bristle type construction or similar, its surface shall be no more 3 mm if vertical or 5 mm if rounded or bevelled, above or below the surrounding surface; and*
- (b) *where of a mat or carpet type material, shall have the fully compressed surface level with or above the surrounding surface with a level difference no greater than 3 mm if vertical or 5 mm if rounded or bevelled.*



3.5. Statutory Braille Tactile Signage

3.5.1. Legislative references

NCC 2022	D1P1(a)(iii) Access for people with a disability Clause D3D26(2)(b) Operation of latch Clause D4D7 Signage Specification 15 Braille Tactile Signs
AS Reference:	Clause 8 – Signage, AS1428.1 2009 Design for access and mobility - Means to assist the orientation of people with vision impairment. Clause 16 – Symbols, AS1428.2 1992 Design for access and mobility - Enhanced and additional requirements - Buildings and facilities Clause 17 – Signs, AS1428.2 1992 Design for access and mobility - Enhanced and additional requirements - Buildings and facilities AS1428.4.2:2018 Design for access and mobility – Wayfinding

3.5.2. Braille Tactile Signage - Preamble

The NCC nominates the statutory requirements for Braille Tactile signage. Braille Tactile signs are to be provided in the following locations:

- WC locations
- Exits
- Locations where hearing augmentation is provided.
- Directional information to accessible entrances.
- Push to Exit locations.

3.5.3. Statutory Signage Requirements to be satisfied

NCC Section **D4D7 Signage** states:

In a building required to be accessible—

- (a) *braille and tactile signage complying with **Specification 15** must—*
 - (i) *incorporate the international symbol of access or deafness, as appropriate, in accordance with AS 1428.1 and identify each—*
 - (A) *sanitary facility, except a sanitary facility within a sole-occupancy unit in a Class 1b or Class 3 building; and*
 - (B) *space with a hearing augmentation system; and*
 - (ii) *identify each door required by E4.5 to be provided with an exit sign and state—*
 - (A) **"Exit"**; and
 - (B) **"Level"**; and either
 - (aa) *the floor level number; or*
 - (bb) *a floor level descriptor; or*
 - (cc) *a combination of (aa) and (bb); and*

- (b) *signage including the international symbol for deafness in accordance with AS 1428.1 must be provided within a room containing a hearing augmentation system identifying—*
 - (i) *the type of hearing augmentation; and*
 - (ii) *the area covered within the room; and*
 - (iii) *if receivers are being used and where the receivers can be obtained; and*
- (c) *signage in accordance with AS 1428.1 must be provided for accessible unisex sanitary facilities to identify if the facility is suitable for left or right-handed use; and*
- (d) *signage to identify an ambulant accessible sanitary facility in accordance with AS 1428.1 must be located on the door of the facility; and*
- (e) *where a pedestrian entrance is not accessible, directional signage incorporating the international symbol of access, in accordance with AS 1428.1 must be provided to direct a person to the location of the nearest accessible pedestrian entrance; and*
- (f) *where a bank of sanitary facilities is not provided with an accessible unisex sanitary facility, directional signage incorporating the international symbol of access in accordance with AS 1428.1 must be placed at the location of the sanitary facilities that are not accessible, to direct a person to the location of the nearest accessible unisex sanitary facility.*

3.5.4. Wayfinding Signs (Not referenced by the NCC)

AS 1428.4.2-2018 The Australian Standard for design for access and mobility – Wayfinding, specifies the minimum wayfinding sign requirements to enable pedestrians, particularly those who are blind, deafblind or have low vision, to enter and to navigate within buildings and/or sites, including a return route, in a safe and independent manner.

This Standard will also be of use to people with other disabilities who require enhanced information to communicate wayfinding information within buildings.

3.5.5. Braille Tactile Exit Signage

Braille tactile Exit signage will need to be provided at each level of the building associated with the fire egress door and at horizontal exits between fire compartments.

Examples of Braille Tactile Signage include:



(Figure 9 – Examples of Braille Tactile Signage from www.brailletactilesigns.com.au)

3.5.5. Statutory Braille Tactile Exit Signage – The detailed construction documentation will need to document the braille tactile exit signage to be installed.

3.5.6. WC Signage

Braille tactile WC signage will need to be provided at each sanitary facility entrance.

Examples of Braille Tactile Signage to be provided in this project include:

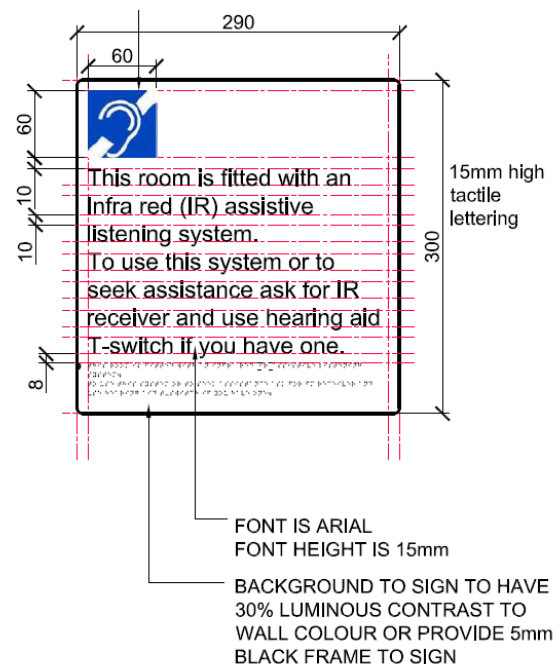
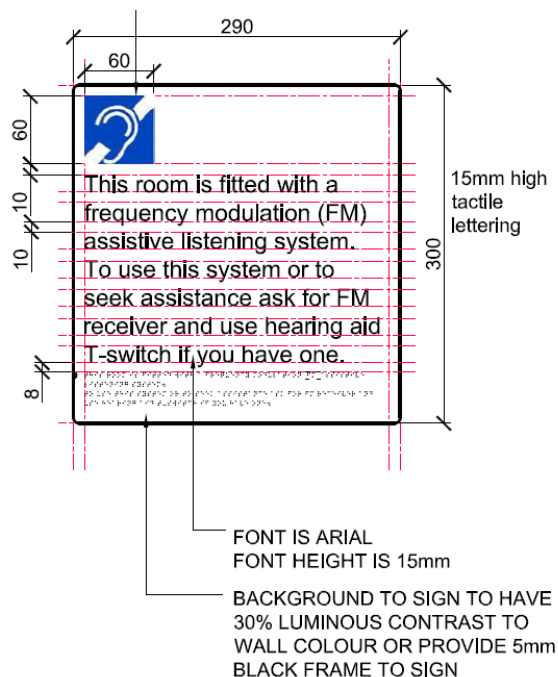
			
			

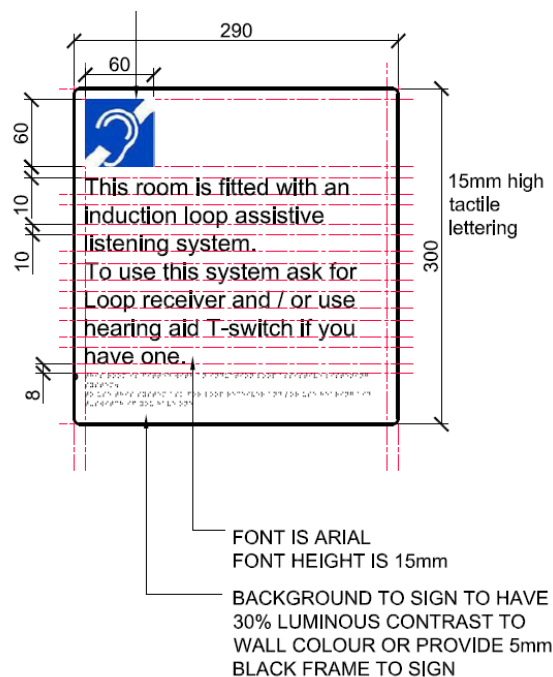
NB: Text "Unisex Toilet RH" to be used where the toilet is configured adjacent to a wall on the right, and similarly text "Unisex Toilet LH" is to be used where the toilet is adjacent to a wall on the left of the toilet pan.

3.5.6. Statutory Braille Tactile WC Signage – The detailed construction documentation will need to document the braille tactile WC signage to be installed.

3.5.7. Hearing Augmentation Signage

Braille tactile hearing augmentation signage will need to be provided in a room or area in which an inbuilt communication system is installed. The text on the hearing augmentation signage will need to satisfy the requirements of Section 5 of AS1428.5:2010(Superseded).





3.5.7. Hearing Augmentation Signage - Details of the braille tactile hearing augmentation signage is to be provided for review as part of the detailed Construction documentation to be prepared for this project.

3.5.8. Lift Signage (Not referenced by the NCC)

Clause ZA5.2 of AS1735.12:2020 requires the provision of Braille, tactile level identification signs to be installed on the lift door jambs.



3.5.8 Lift Signage - Details of the braille tactile signage to be installed will need to be provided for review as part of the detailed construction documentation to be prepared for this project.

3.5.9. Mounting Heights – General signs

The mounting heights of signage will need to incorporate the viewing zones as identified in AS1428.2:1992.

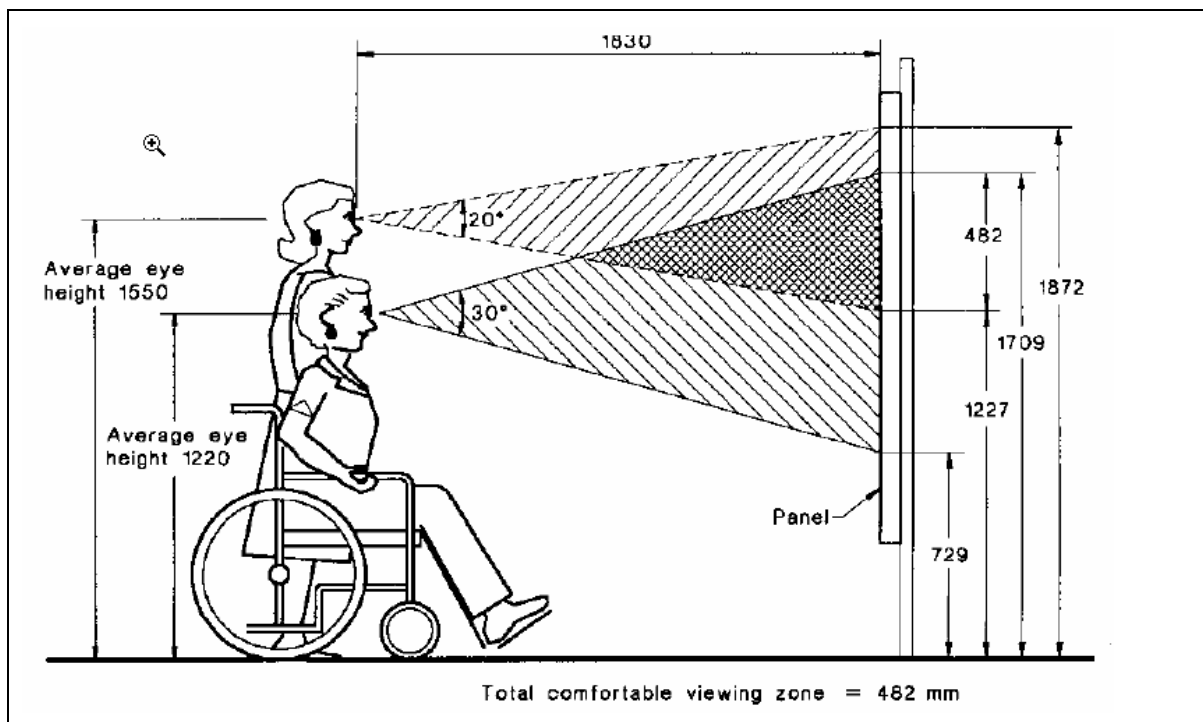


Figure 10 – Extract from Australian Standard indicating acceptable view range for signage

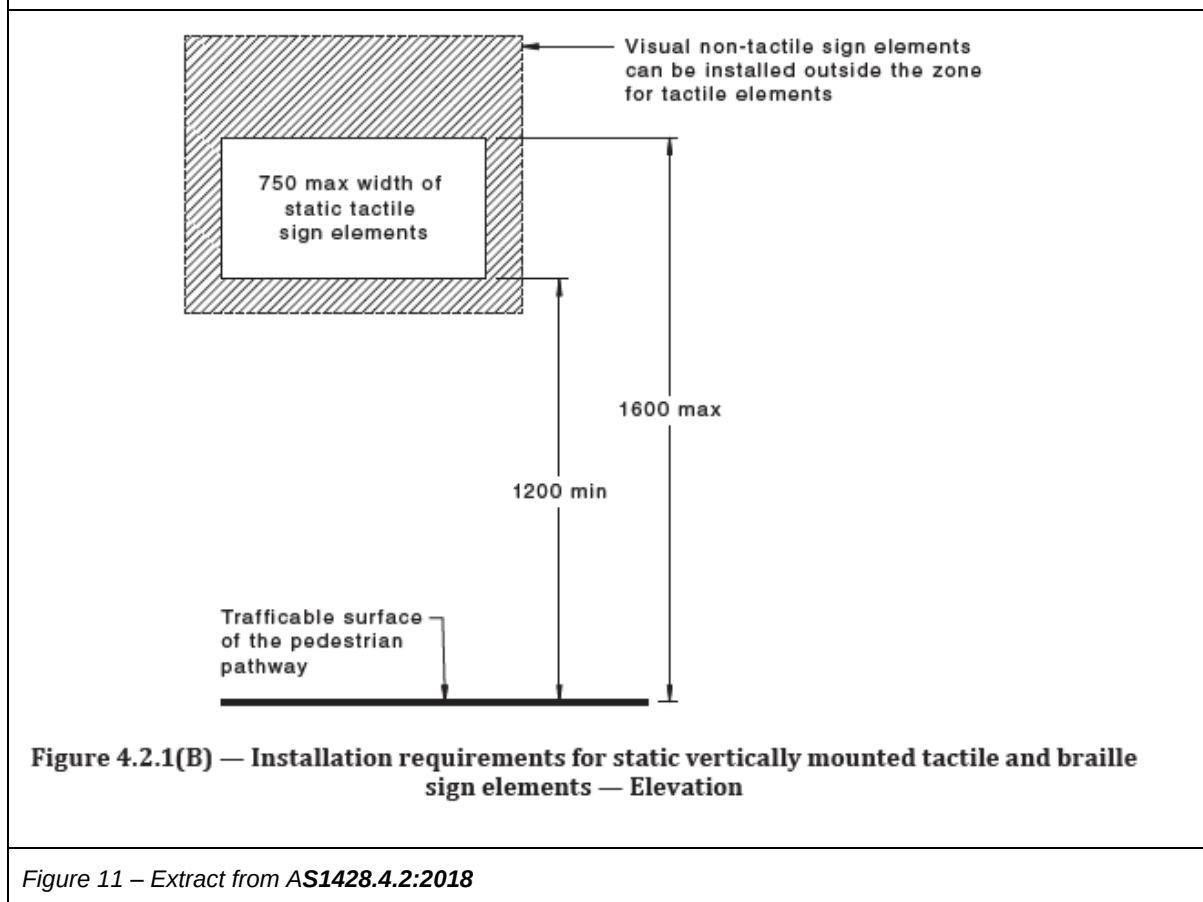


Figure 4.2.1(B) — Installation requirements for static vertically mounted tactile and braille sign elements — Elevation

Figure 11 – Extract from AS1428.4.2:2018

3.5.10. Luminance & Colour Contrast

Signs should be matt in colour, instead of a gloss finish to avoid any glare.

The minimum recommended luminance contrast for lettering on signage to the sign background is 30%.

The minimum recommended luminance contrast of a sign to its context is 30%.

This can be achieved by the sign field colour achieving a 30% luminous contrast with the wall surface the sign is mounted on **or** by providing a 5mm black border to the sign as per the following examples.



3.5.10 Luminance & Colour Contrast - Details of the braille tactile WC signage is to be provided for review as part of the detailed Construction documentation to be prepared for this project. *Please note that aluminium signs on a white wall will not achieve compliance.*

3.5.11. Push to release door locations.

The design may include door release by way of push buttons.

NCC Clause D3D26(2)(b) states:

Where the latch operation device referred to in (1)(b) is not located on the door leaf itself braille and tactile signage complying with S15C3 and S15C6 must identify the latch operation device.

The following are examples of sign types for this instance.



3.5.11 Braille Tactile Press to Exit Signage - Details of the braille tactile 'Press to Exit' signage to be installed will need to be provided for review as part of the detailed construction documentation to be prepared for this project. Specific attention is directed to the font type,

size of lettering and the selection of a field colour of the sign which will achieve a 30% luminance contrast with the wall or door the sign is installed on.

3.5.12. Locations of Braille Tactile door signs

The following sketches have been prepared to indicate the preferred installation locations for the placement of Braille Tactile signs.

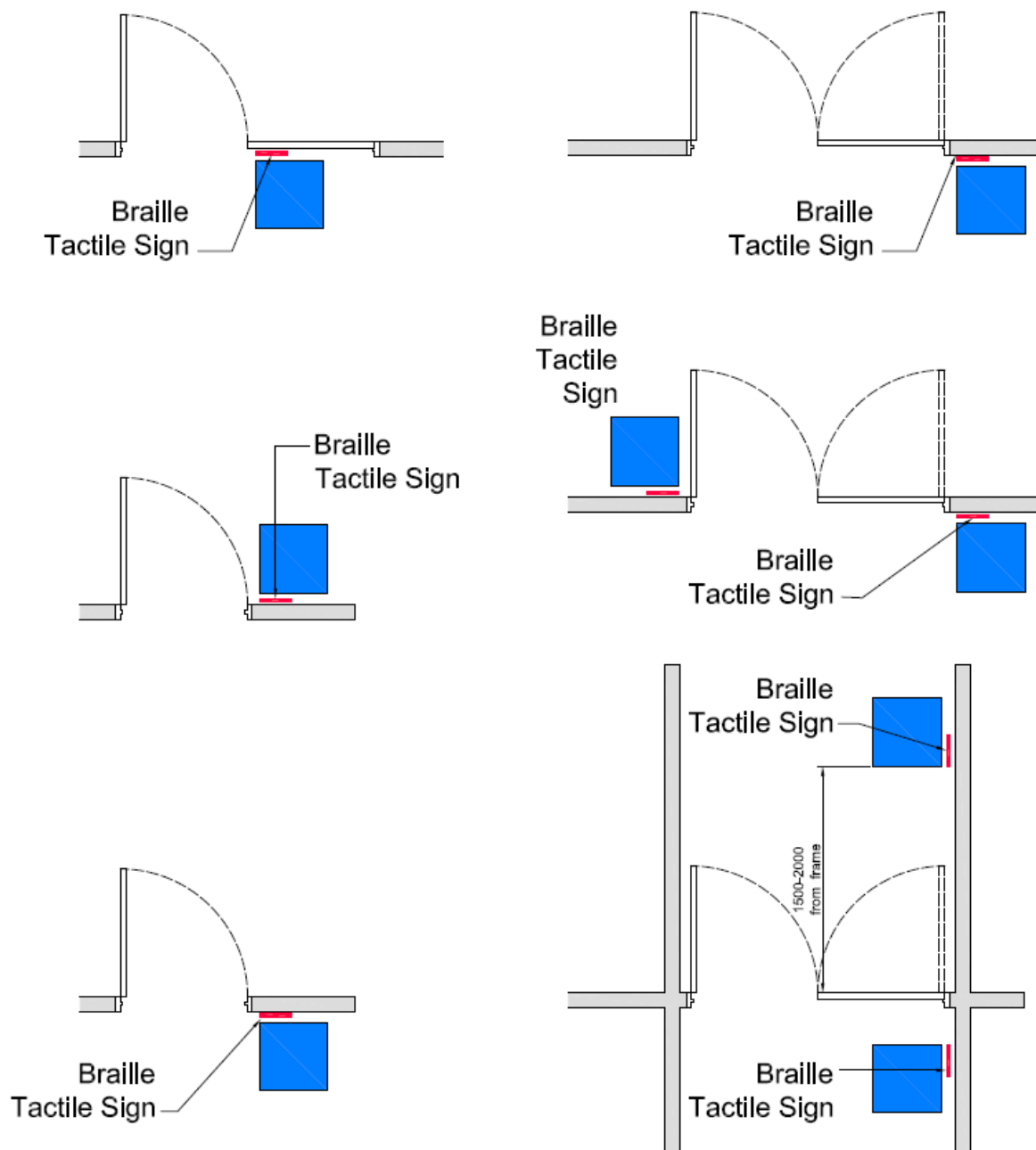


Figure 12 – Possible locations of Braille tactile signage in relation to door setouts

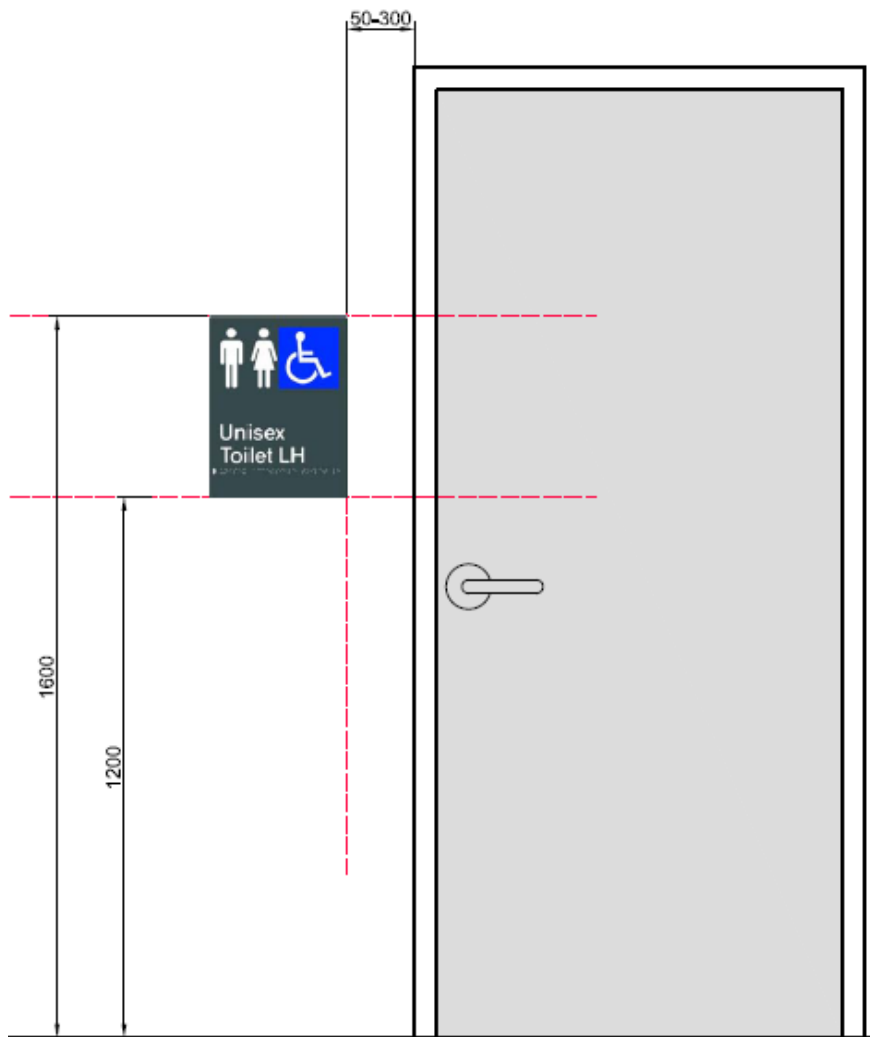


Figure 13 – Elevation setout of Braille Tactile signs adjacent to doors

3.6. Tactile Indicators (TGSIs)

3.6.1. Legislative references

NCC 2022	D1P1(a)(iii) Access for people with a disability Clause D4D9 Tactile Indicators
AS Reference:	Clause 9 (Tactile Ground Surface Indicators (TGSIs) of AS1428.1 2009 AS 1428.4.1 2009 Design for access and mobility - Means to assist the orientation of people with vision impairment.

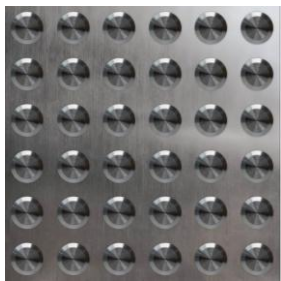
3.6.2. TGSIs – Overview

The design proposes stairs and ramps as part of this development. TGSIs will need to be provided in these locations.

3.6.3. TGSIs – Luminance Contrast

Clause 2.2 of AS1428.4.1:2009 requires that luminance contrast be provided between the TGSIs and the adjacent base as follows:

- (i) *Where the integrated TGSIs are of the same colour as the underlying surface—not less than 30% across its entire area.*
- (ii) *Where discrete TGSIs—not less than 45%.*
- (iii) *Where discrete TGSIs are constructed using two colours or materials, the raised surface shall have a section that has 60% luminance contrast for a diameter of 25 ±1 mm.*

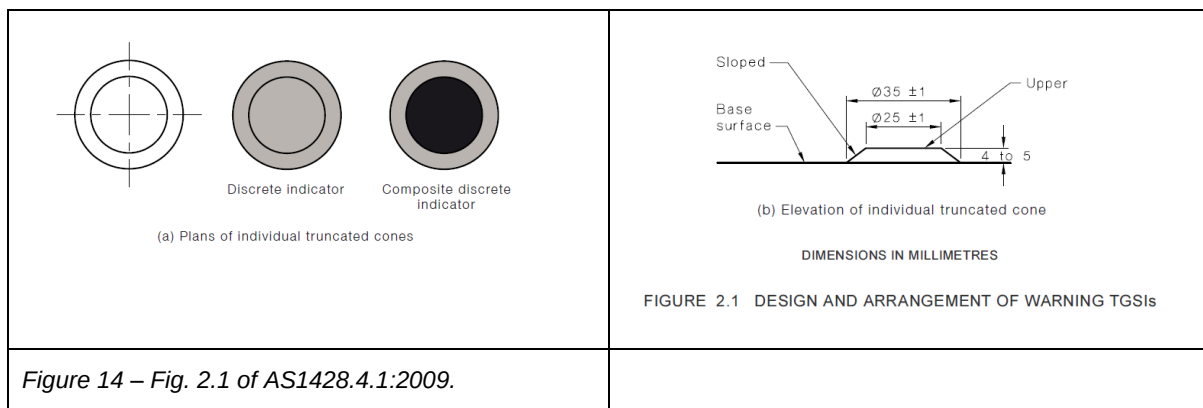
		
<i>The above integrated TGSIs format requires 30% luminous contrast to adjacent floor finish</i>	<i>The above discrete TGSIs format requires 45% luminous contrast to adjacent floor finish</i>	<i>The above two colour/material discrete TGSIs format requires 60% luminous contrast to adjacent floor finish</i>

3.6.3 TGSIs – Luminance Contrast – The specification of the TGSIs to be installed is to be provided for review as part of the detailed Construction documentation to be prepared for this project. The TGSIs specification will need to address compliance with the luminance contrast and slip resistance requirements for TGSIs.

3.6.4. TGSIs – Requirements to be satisfied

TGSIs to warn people of hazards shall comply with AS/NZS 1428.4.1.

The design and arrangement of warning tactile ground surface indicators (TGSIs) shall comply with Figure 2.1 of AS1428.4.1:2009.



3.6.4. TGSIs – Requirements to be satisfied - The selection of TGSIs will need to satisfy the requirements of NCC Clause D3.8 and the provisions of AS1428.4.1:2009. The TGSi documentation prepared as part of the detailed Construction Certificate documentation will need to demonstrate compliance.

3.6.5. Warning TGSIs – Requirements to be satisfied

Warning indicators shall be installed as follows:

- For the full width of the path of travel.
- Perpendicular to the direction of travel when approaching the hazard.
- Set back 300 +/- 10 mm from the edge of the hazard
- Where integrated warning TGSIs are used, they shall be arranged according to Figures 2.1(c), over the required area [see Figures 2.2(A), 2.2(B), 2.3(A), 2.3(B), 2.4, 2.5(A), 2.5(B), 2.6(A) and 2.6(B)].
- Where integrated warning TGSIs need to be detected by a person approaching at an angle to the continuous accessible path of travel, the TGSIs shall be arranged as shown in Figure 2.1, over a minimum depth of 600 mm to 800 mm from the direction of approach.
- Where discrete warning TGSIs are used over a depth of 300 mm to 400 mm, the arrangement shall be as shown in Figure 2.1 with a minimum of 6 discrete truncated cones in the direction of travel.
- Where discrete warning TGSIs need to be detected by a person approaching at an angle to the continuous accessible path of travel, the TGSIs shall be arranged as shown in Figure 2.1 with a minimum of 12 discrete truncated cones in the direction of travel.

Refer to AS1428.4.1:2009 for detailed information as to the specific placement of TGSIs for varying stairway and ramp configurations.

3.6.6. Setout of TGSIs associated with 1:14 Ramps

TGSIs to warn people of hazards shall comply with AS/NZS 1428.4.1. TGSIs are to be provided to ramps where the gradient of the ramp is between 1:20 and 1:14.

TGSIs are setout from the end of the ramp. The first row of TGSIs is located 300mm from the end of the ramp. The depth of the TGSIs is generally 600-800mm where length of the landing is greater than 3m. Where the length of the landing is less than 3m the depth of the TGSIs is reduced to 300mm.

TGSIs are not located at mid landings where no additional population is address to the ramp system.

3.6.6. Setout of TGSIs associated with Ramps– Detailed TGSi setout plans will need to be prepared as part of the detailed construction documentation to be prepared for this project.

The details will need to indicate the setout of the TGSIs from the edge of the ramp and the nominated depth of TGSIs depending on the landing length.

3.6.7. Setout of TGSIs associated with Stairs

TGSIs to warn people of hazards shall comply with AS/NZS 1428.4.1. TGSIs are to be provided to stairways which are not fire isolated stairways. These stairways are general access stairs and are available for use by all. TGSIs are not required to be installed within fire isolated stairs unless the fire isolated stair also functions as a general circulation stair

TGSIs are setout from the face of the riser at the top and bottom of the stair. The first row of TGSIs is located 300mm from the face of the riser. The depth of the TGSIs is generally 600-800mm where length of the landing is greater than 3m. Where the length of the landing is less than 3m the depth of the TGSIs is reduced to 300mm.

TGSIs are not located at mid landings where no additional population is address to the stair system.

3.6.7. Setout of TGSIs associated with Stairs – Detailed TGSi setout plans will need to be prepared as part of the detailed construction documentation to be prepared for this project. The details will need to indicate the setout of the TGSIs from the face of risers and the nominated depth of TGSIs depending on the landing length.

3.7. Walkways, Ramps and Landings

3.7.1. Legislative references

NCC 2022	D1P1(a)(iii) Access for people with a disability D1P2(c) Safe movement to and within a building D4D4(a)(i) Parts of buildings to be accessible.
AS Reference:	Clause 10 of AS 1428.1:2009 Clause 12 of AS1428.1:2009

3.7.2. Preamble

The documentation provided do not indicate any walkway or ramps as part of these works.

The design includes ramps and walkways as part of these works. The detailed documentation will need to nominate the locations of ramps and walkways connecting these buildings to the surrounding ground surface.

The maximum length of any ramp with a gradient between 1:20 and 1:14 is to be not more than 6m in length to comply with the Education facility Guidelines.

3.7.3. Walkways

Clause 10.2 of AS1428.1:2009 states:

Walkways shall comply with the following:

- (a) *The floor or ground surface abutting the sides of the walkway shall provide a firm and level surface of a different material to that of the walkway at the same level of the walkway, follow the grade of the walkway and extend horizontally for a minimum of 600 mm unless one of the following is provided:*
 - (i) *Kerb in accordance with Figure 18.*
 - (ii) *Kerb rail and handrail in accordance with Figure 19.*
 - (iii) *A wall not less than 450 mm in height.*
- (b) *Walkways shall be provided with landings, as specified in Clause 10.8, at intervals not exceeding the following:*
 - (i) *For walkway gradients of 1 in 33, at intervals no greater than 25 m.*
 - (ii) *For walkway gradients of 1 in 20, at intervals no greater than 15 m.*
 - (iii) *For walkway gradients between 1 in 20 to 1 in 33, at intervals that shall be obtained by linear interpolation.*

For walkways shallower than 1 in 33, no landings are required.

The intervals specified above may be increased by 30% where at least one side of a walkway is bounded by—

- (A) *a kerb or kerb rail as specified in Clause 10.3(j) and a handrail as specified in Clause 12; or*
- (B) *a wall and a handrail as specified in Clause 12.*

Clause 10.8 of AS1428.1:2009 states:

The length of landings at walkways (up to a gradient of 1 in 33) and ramps shall comply with one of the following:

- (a) *Where there is no change in direction, the length shall be not less than 1200 mm, as shown in Figure 25(A).*
- (b) *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).*
- (c) *For a 180° turn, the landing shall be as shown in Figure 25(C),*

3.7.4. 1:14 Ramps

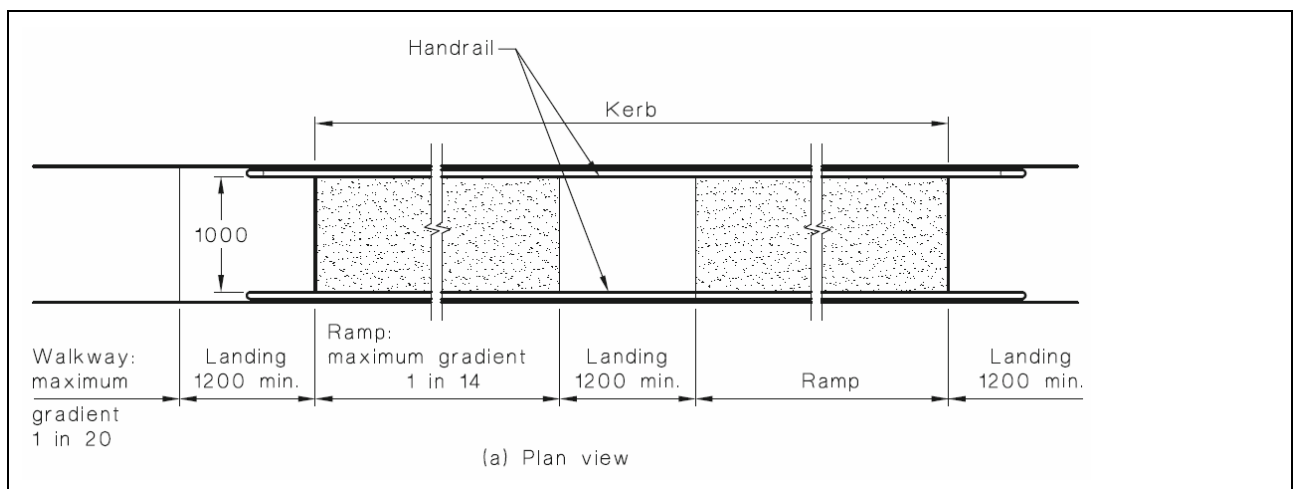
The NCC Clause D4D4(a)(i) identifies that:

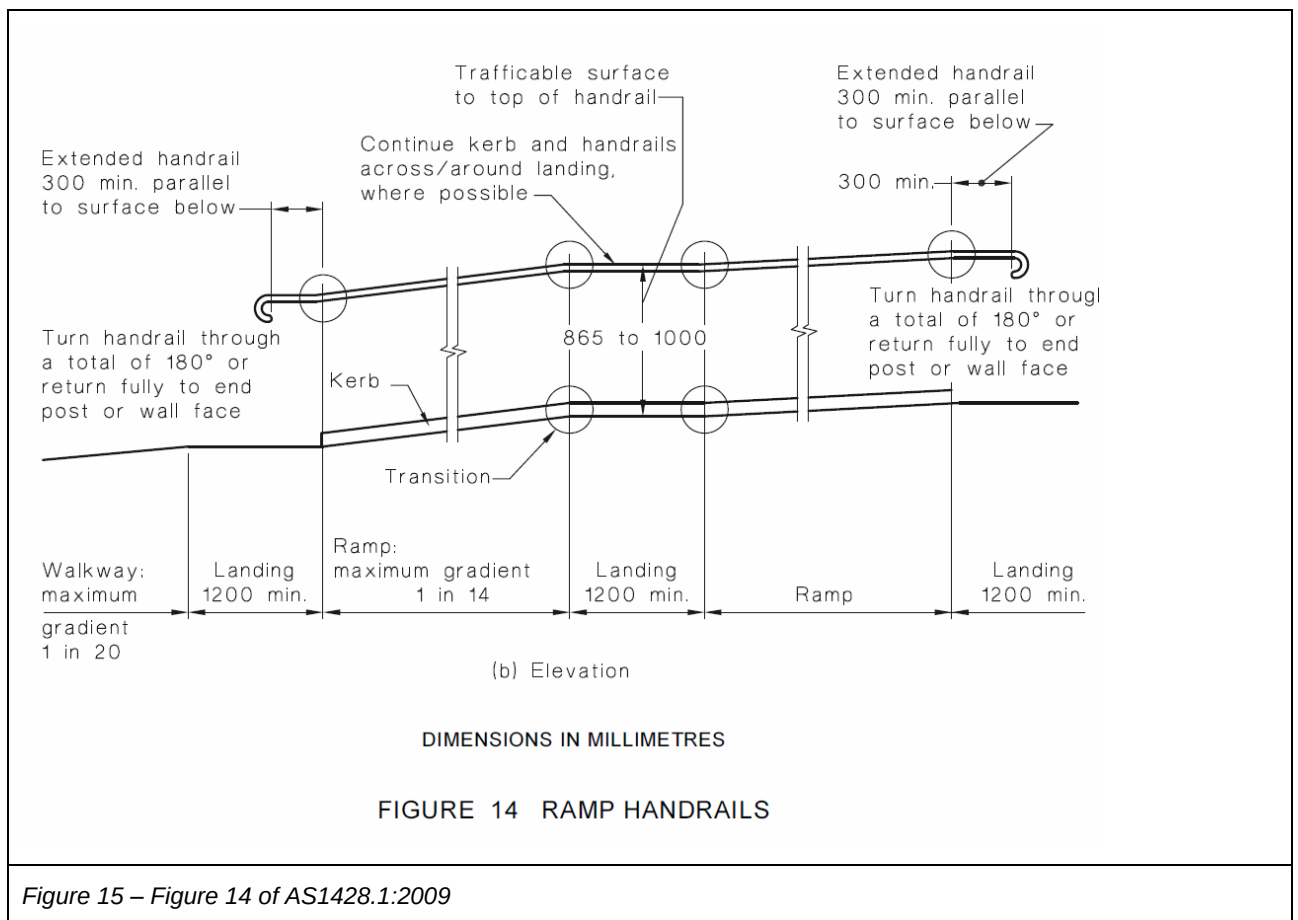
In a building required to be accessible—

- (a) *every ramp and stairway, except for ramps and stairways in areas exempted by D3.4, must comply with—*
- (i) *for a ramp, except a fire-isolated ramp, clause 10 of AS 1428.1*

The following extracts have been provided by way of information for the detailing of ramps with gradients of 1:20-1:14.

Ramp setout specifications for ramps of gradient 1:14 are provided at Figure 14 of AS1428.1:2009.





The sectional details for handrails associated with ramps is as follows:

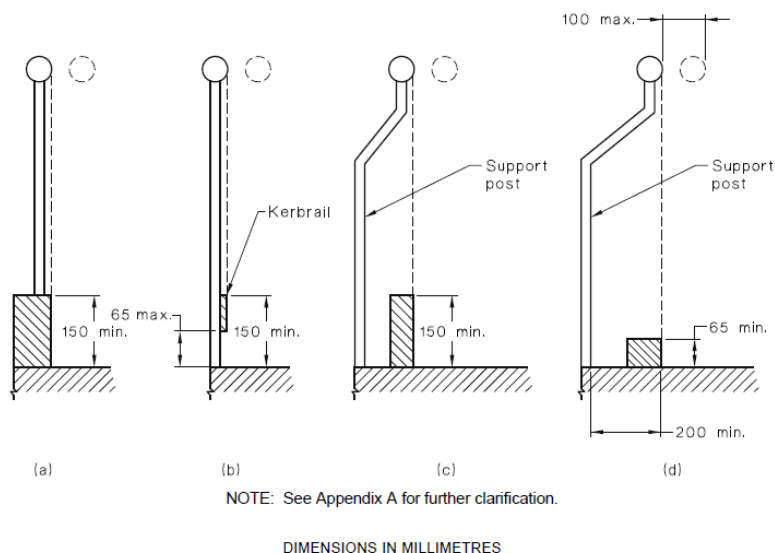


FIGURE 19 SECTION SHOWING LOCATION OF KERB OR KERB RAIL IN RELATION TO HANDRAIL WITH VERTICAL SUPPORT

3.8. Stairways

3.8.1. Stairways - Legislative references

NCC 2022 D1P1(a)(iii) Access for people with a disability
 D1P2(c) Safe movement to and within a building
 D4D4(a)(i) Parts of buildings to be accessible.
 Table D3D15 Slip Resistance Classification

AS Reference: Clause 11 Stairways AS1428.1:2009

3.8.2. Stairs

The design proposes multiple circulation stair within this upgrade and development scope.

3.8.3. Circulation Stairs

The circulation stairs will need to comply with the provisions noted at Clause 11 and 12 of AS1428.1:2009.

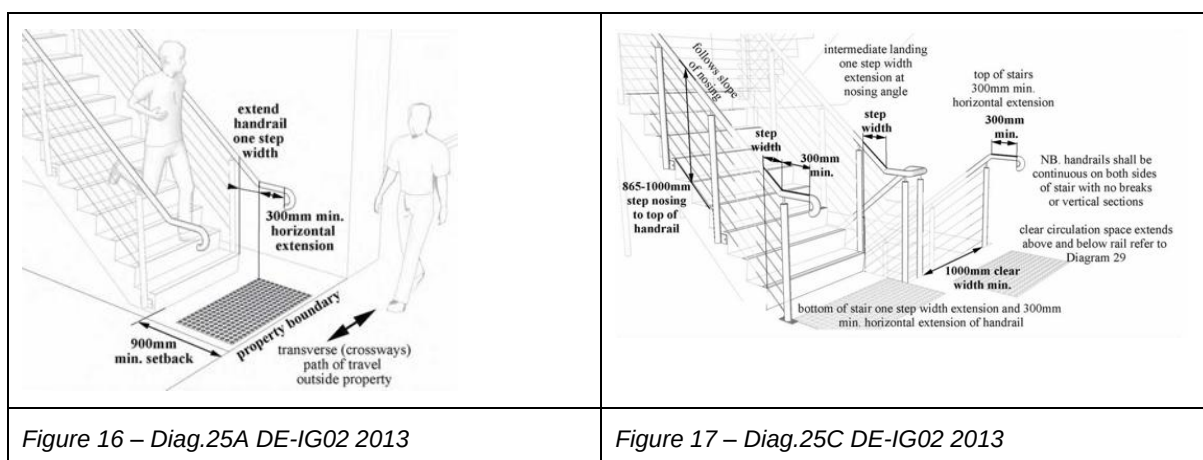
Specific attention is directed to the following:

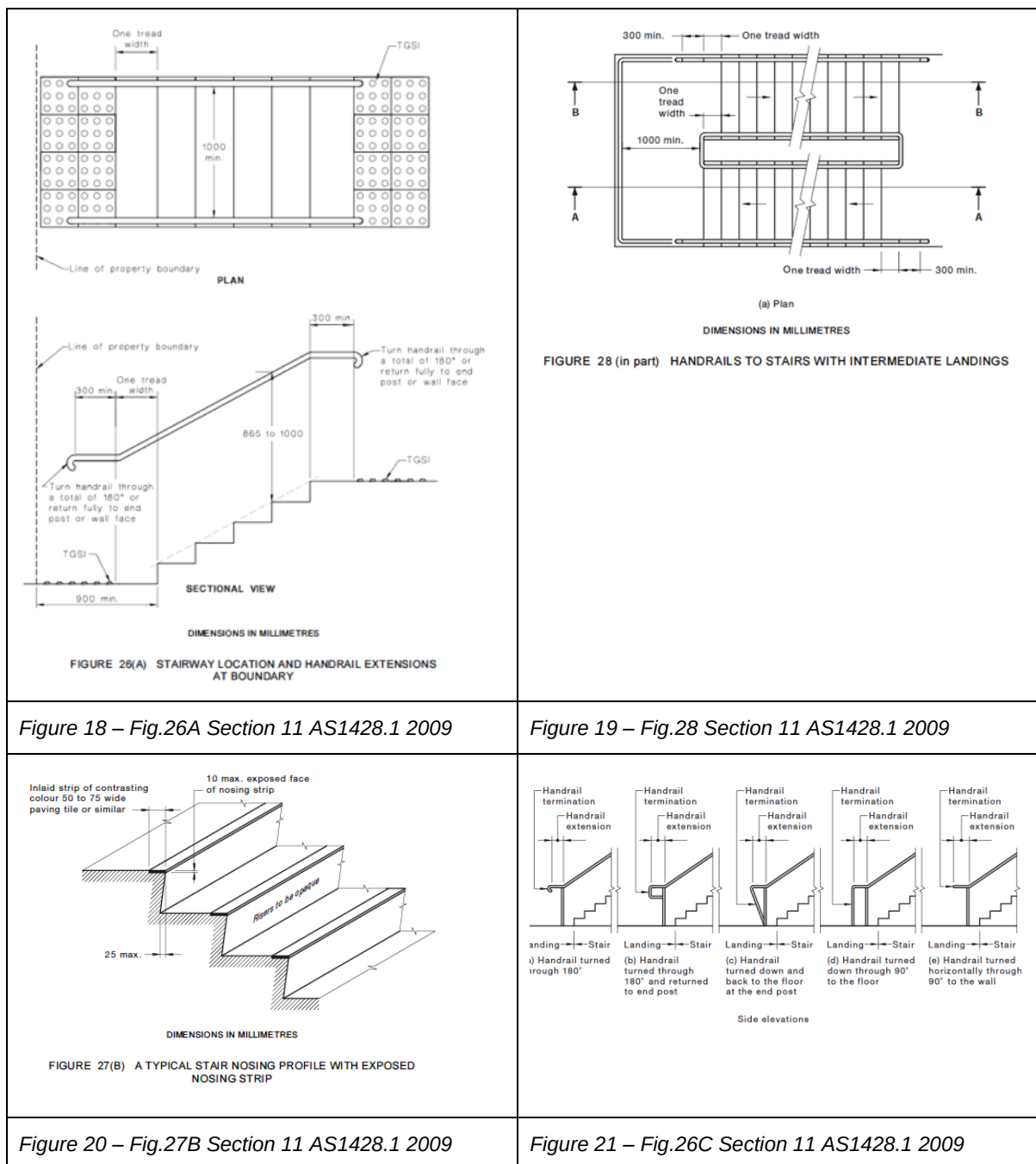
- Compliant handrail designs
- Compliant handrail extensions to the top and bottom of each flight
- Non-slip finish to going (Refer to NCC Table D2.14)
- Non-slip 50-75 nosing fixed to each going
- Opaque risers
- Compliant TGSIs located at the top and bottom of each flight. TGSIs are not required at mid-landings where no additional pedestrians are added to the stair system

Note: TGSIs shall be 600mm in width (or 300mm wide where the stair is closer than 3m to an adjacent wall.)

- Minimum lighting level of 150 lx to be achieved

The following extract Figures below highlight the main features of a compliant stair design.





3.8.1. Stairs - Stair details and handrail drawings will need to be provided as part of the detailed construction documentation to be prepared for this project. Shop drawings of the proposed stairs and associated handrails will need to be prepared and submitted for review.

3.8.4. Stair nosing

The stair nosing are to meet the following performance requirements:

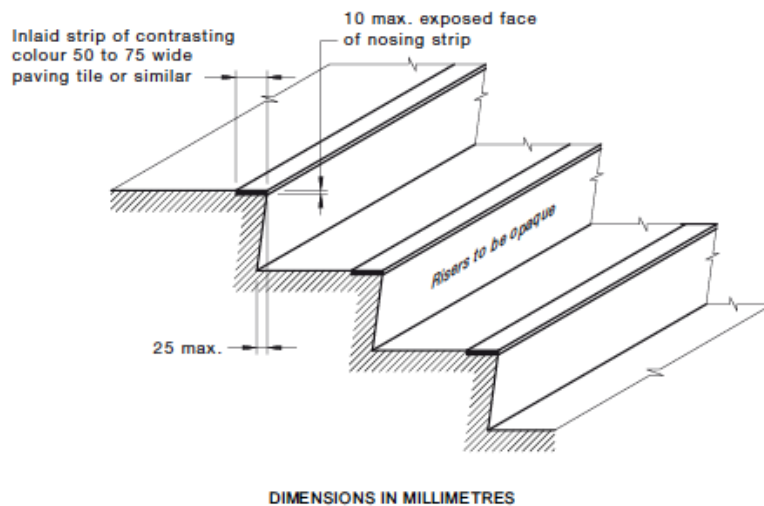
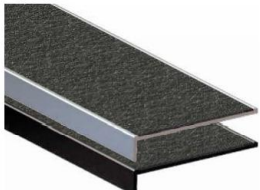
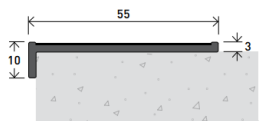
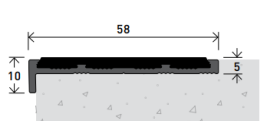
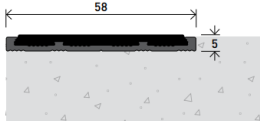
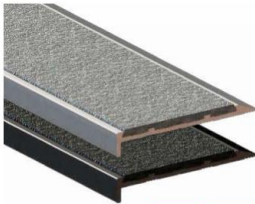
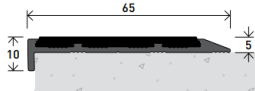
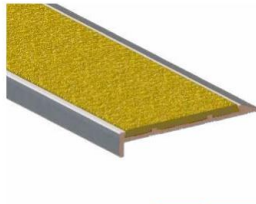
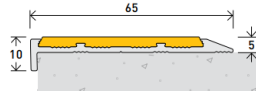


FIGURE 27(B) A TYPICAL STAIR NOSING PROFILE WITH EXPOSED NOSING STRIP

Examples of compliant nosing include:

 NCC COMPLIANT P5 GRIP PEMKO® SUEDE EDGING 50X3 PRODUCT CODES: NATURAL ANODISED DE0500C Slip resistant insert BLACK ANODISED DE0500B Slip resistant insert 	 NCC COMPLIANT P5 GRIP PEMKO® SUEDE EDGING 10X50X3 PRODUCT CODES: NATURAL ANODISED DE0510C Slip resistant insert BLACK ANODISED DE0510B Slip resistant insert 	 NCC COMPLIANT P5 GRIP PEMKO® URBAN EDGING 10X58X5 PRODUCT CODES: NATURAL ANODISED DE0680C Grey silicon carbide infill BLACK ANODISED DE0680B Black silicon carbide infill 	 NCC COMPLIANT P5 GRIP PEMKO® URBAN EDGING 58X5 PRODUCT CODES: NATURAL ANODISED DE0690C Grey silicon carbide infill BLACK ANODISED DE0690B Black silicon carbide infill 
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  PEMKO® URBAN EDGING 10X65X5 PRODUCT CODES: NATURAL ANODISED DE0700C Grey silicon carbide infill BLACK ANODISED DE0700B Black silicon carbide infill 	  PEMKO® URBAN EDGING 10X65X5 PRODUCT CODES: NATURAL ANODISED DE0700CY Yellow silicon carbide infill 
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3.9. Handrails

3.9.1. Handrails - Legislative references

NCC Reference:	D1P2(c)(ii) Safe movement to and within a building
	D1P2(c)(v) Safe movement to and within a building
	D4D4(a) Parts of buildings to be accessible.
AS Reference:	Clause 12 Handrails AS1428.1:2009

The design and construction of handrails shall comply with the following:

- (a) *Handrails and balustrades shall not encroach into required circulation spaces.*
- (b) *The cross-section of handrails shall be circular or elliptical, not less than 30 mm or greater than 50 mm in height or width for not less than 270° around the uppermost surface as shown in Figures 29(a) and 29(b). Elliptical handrails shall have the greater dimension in the horizontal axis as shown in Figure 29(b).*
- (c) *Exposed edges at ends and corners of handrails shall have a radius of not less than 5 mm.*
- (d) *The top of handrails shall be not less than 865 mm nor more than 1000 mm above the nosing of stairway tread or the plane of the finished floor of the walkway, ramp or landing.*
- (e) *The height of the top of the handrail, measured in accordance with Item (d), shall be consistent through the ramp (or stairs) and any landings.*
- (f) *If a balustrade is required at a height greater than the handrail, both shall be provided.*
- (g) *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*
- (h) *The clearance between a handrail and an adjacent wall surface or other obstruction shall be not less than 50 mm. This clearance shall extend above the top of the handrail by not less than 600 mm.*
- (i) *Handrails shall have no obstruction to the passage of a hand along the rail*
- (j) *The inside handrail at landings shall always be continuous.*

3.9 Handrails - The detailed construction documentation will need to demonstrate compliance with these requirements.

3.10. Doorways

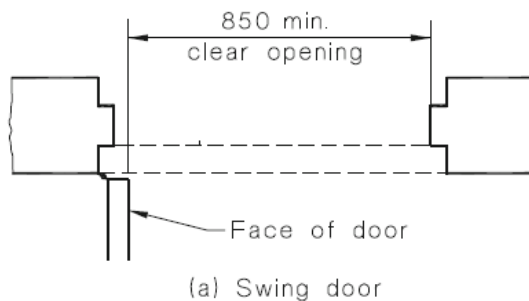
NCC Reference: D1P1 Access for people with a disability
D4D2(8) General building access requirements

AS Reference: Clause 13 (Doorways, Doors and Circulation Spaces at Doorways) of AS1428.1 2009

3.10.1. Clear Door Width

The minimum clear width of all doorways (including swing and sliding doorways) to rooms required to be accessible is to be not less than 850mm clear.

Where double doors are proposed, the active leaf is to have a minimum clear width of 850mm.



3.10.1. Clear Door Width - The detailed documentation to be prepared for this project will need to demonstrate compliance with these provisions.

3.10.2. Luminance Contrast

Rooms that are not required to be accessible do not need to satisfy the requirements for doorway luminance contrast.

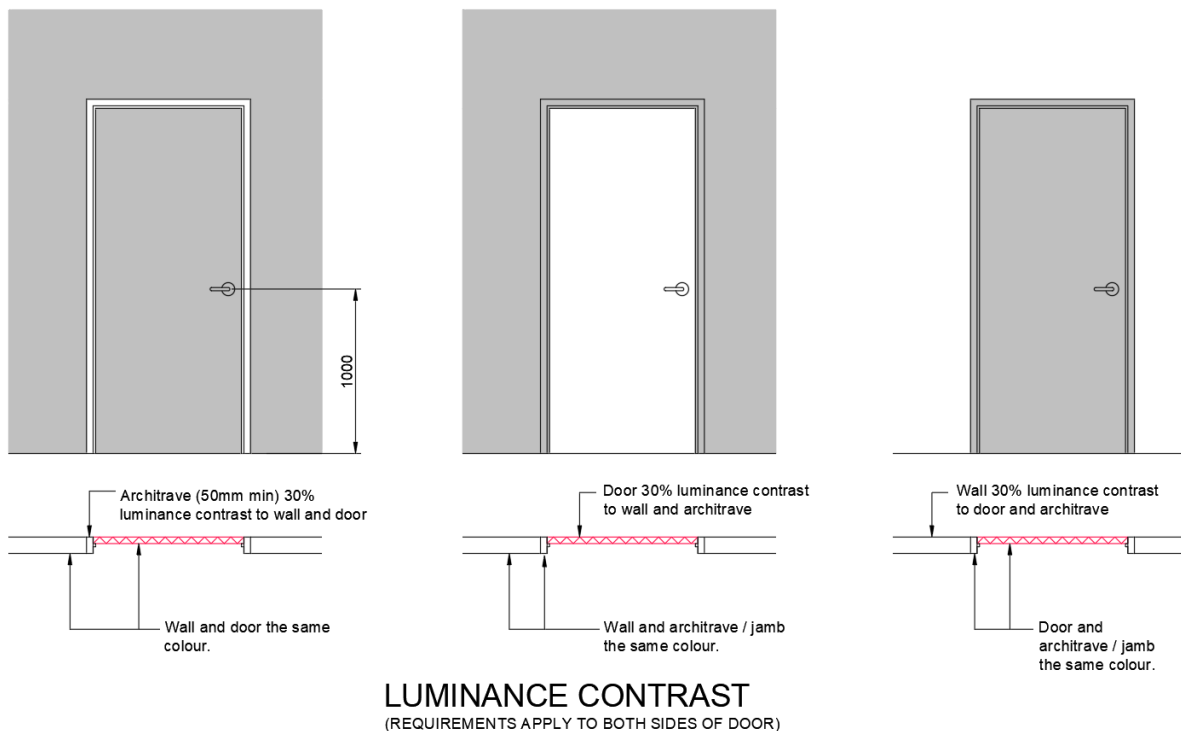
All other rooms required to be accessible require compliance with doorway luminance contrast requirements noted at Clause 13.1 of AS1428.1:2009:

All doorways shall have a minimum luminance contrast of 30% provided between—

- (a) door leaf and door jamb;*
- (b) door leaf and adjacent wall;*
- (c) architrave and wall;*
- (d) door leaf and architrave; or*
- (e) door jamb and adjacent wall.*

The minimum width of the area of luminance contrast shall be 50 mm

The prevailing view is that option (b) – indicating luminance contrast between the *door leaf and adjacent wall* is the preferred option.



3.10.3. Luminance Contrast - Facade

A detailed study of the colour combinations of the façade elements will need to be undertaken to ensure that luminous contrast between the aluminium framing at doorways and the adjacent wall surfaces achieve a minimum 30% luminous contrast.

3.10.3 Luminance Contrast - A table indicating wall colour and door colour with the associated luminance contrast level achieved will need to be prepared and provided to demonstrate compliance with the requirements of Clause 13.1 of AS1428.1:2009.

3.10.4. Door Controls

The Australian Standard requires that door hardware be located within 900-1100mm AFFL.

If lever hardware is proposed to be utilised it will be necessary for the design of the lever to comply with the provisions of Clause 13.5 of AS1428.1:2009.



 <i>Lockwood Lever 80</i>	 <i>Lockwood Lever 70</i>
 <i>Lockwood Lever 96</i>	 <i>Lockwood Lever 77</i>
 <i>The above image indicates a privacy latch set provided to accessible WC facilities as viewed from within the facility</i>	 <i>The above image indicates a privacy latch set provided to accessible WC facilities as viewed from the outside</i>
<i>Figure 23 – The above images are examples of compliant hardware</i>	

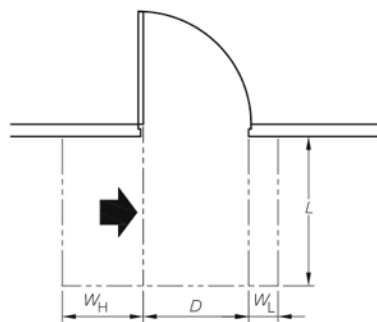
3.10.4. Door Controls – The selection of door hardware will need to be provided as part of the detailed Construction Certificate and construction documentation to be prepared for this project.

3.10.5. Circulation at Doorways (Informational)

Clause 13.3 of AS1428.1:2009 provides direction as to the required circulation space to approach and enter rooms required to be accessible. Doorways to rooms that are not required to be accessible do not need to comply with the requirements for circulation at doorways.

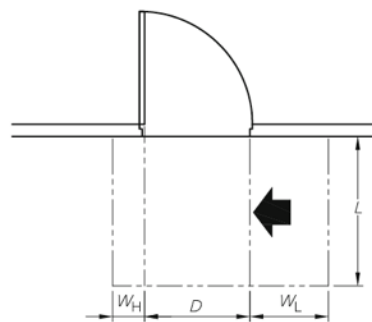
If the furniture arrangement of the rooms precludes compliant circulation from being achieved, the commitment by the school will be to modify the workspace to meet the specific needs of the occupants. The work-place policy statement will need to be provided to substantiate this approach.

The following extracts from the Standard is provided by way of information.



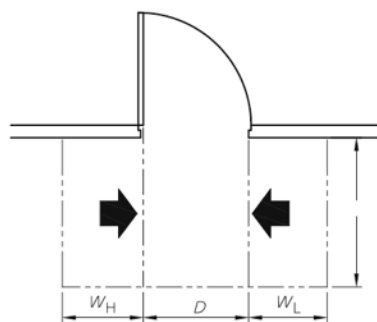
Dimension D	Dimension L	Dimension W_H	Dimension W_L
850	1220	560	340
900	1185	510	340
950	1160	460	340
1000	1140	410	340

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



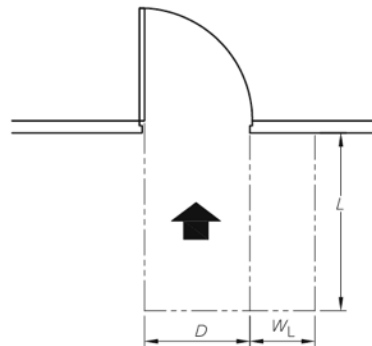
Dimension D	Dimension L	Dimension W_H	Dimension W_L
850	1240	240	660
900	1210	190	660
950	1175	140	660
1000	1155	90	660

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



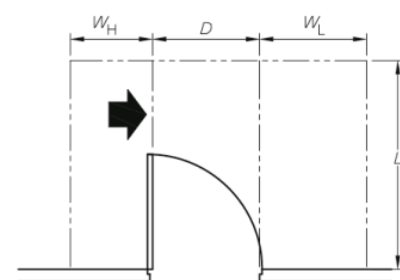
Dimension D	Dimension L	Dimension W_H	Dimension W_L
850	1240	560	660
900	1210	510	660
950	1175	460	660
1000	1155	410	660

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



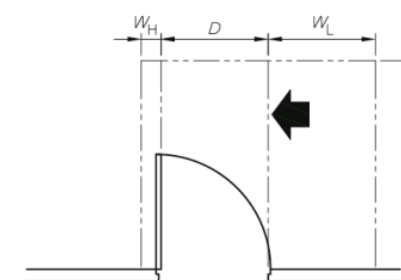
Dimension D	Dimension L	Dimension W_H	Dimension W_L
850	1450	0	510
900	1450	0	510
950	1450	0	510
1000	1450	0	510

(d) Front approach,
door opens away from user



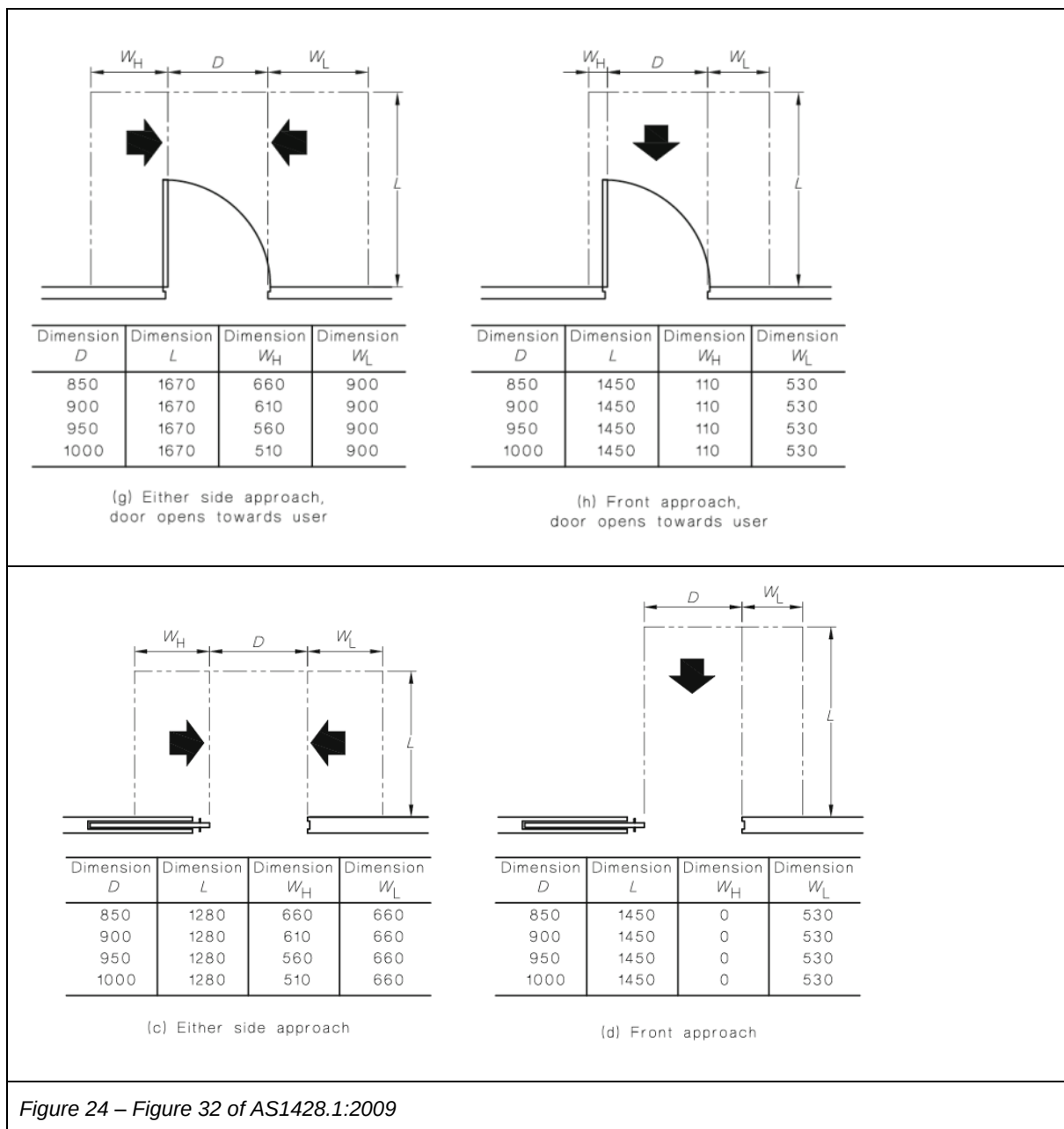
Dimension D	Dimension L	Dimension W_H	Dimension W_L
850	1670	660	900
900	1670	610	900
950	1670	560	900
1000	1670	510	900

(e) Hinge-side approach,
door opens towards user



Dimension D	Dimension L	Dimension W_H	Dimension W_L
850	1670	110	900
900	1670	110	900
950	1670	110	900
1000	1670	110	900

(f) Latch-side approach,
door opens towards user



3.10.5 **Circulation at Doorways** – The detailed construction documentation to be prepared for this project will need to indicate compliance with the circulation at doorway provisions of Clause 13.3 of AS1428.1:2009.

3.10.6. Door Closers (20N Force)

Where door closers are fitted to doors, other than fire doors associated with the fire stairs, the maximum force required to be applied to the door to open the door is not to be greater than 20N force. (Clause 13.5.2(e) AS1428.1:2009).

3.10.6. Door Closers – Confirmation that the proposed door closer(s) can satisfy this requirement will need to be provided as part of the detailed construction documentation to be prepared for this project. Certification of compliance will be required for the issue of the Occupation Certificate.

3.10.6. Door Closers – *Certification of compliance that the doors installed with a door closer (other than fire rated doors) satisfy the provisions of Clause 13.5(e) of AS1428.1:2009 (20N Force) will be required for the issue of the Occupation Certificate.*

3.10.7. Doorway Thresholds

Doors to all accessible rooms require a level threshold whereby the maximum lip shall be 3mm high for a straight edge or 5mm high for a bevelled edge. Specific attention is drawn to the doorways leading to outdoor areas.

3.10.7. Doorway Thresholds *Level and smooth transitions are required between internal and external doorways. The detailed construction documentation will need to detail this junction.*

3.11. Switches

3.11.1. Legislative references

NCC 2022 D1P1 Access for people with a disability

D4D2(8) General building access requirements

AS Reference: Clause 14 (Switches and General Purpose Outlets) of AS1428.1 2009

3.11.2. General

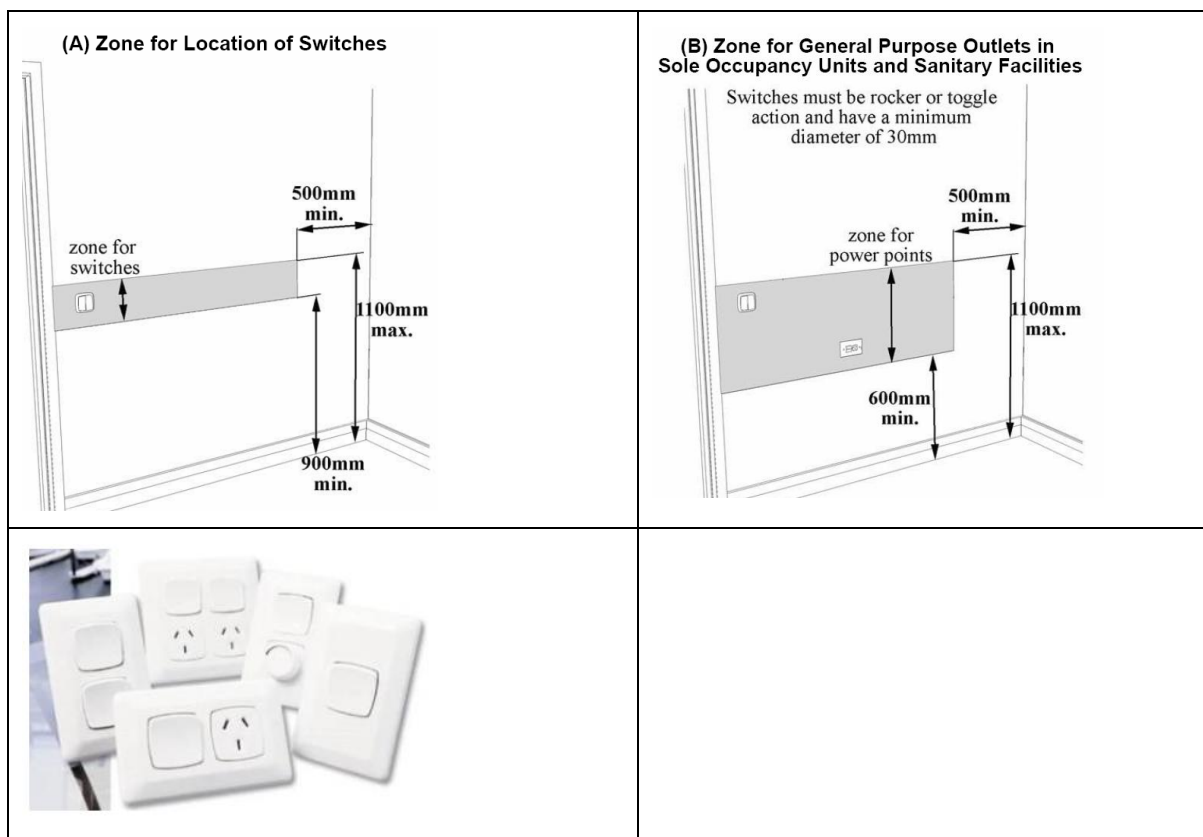
The operation of some of the doors within this building will be connected to the building access control system.

All switches and controls on an accessible path of travel, other than general purpose outlets, shall be located not less than 900 mm nor more than 1100 mm above the plane of the finished floor and not less than 500 mm from internal corners.

3.11.3. Access Control

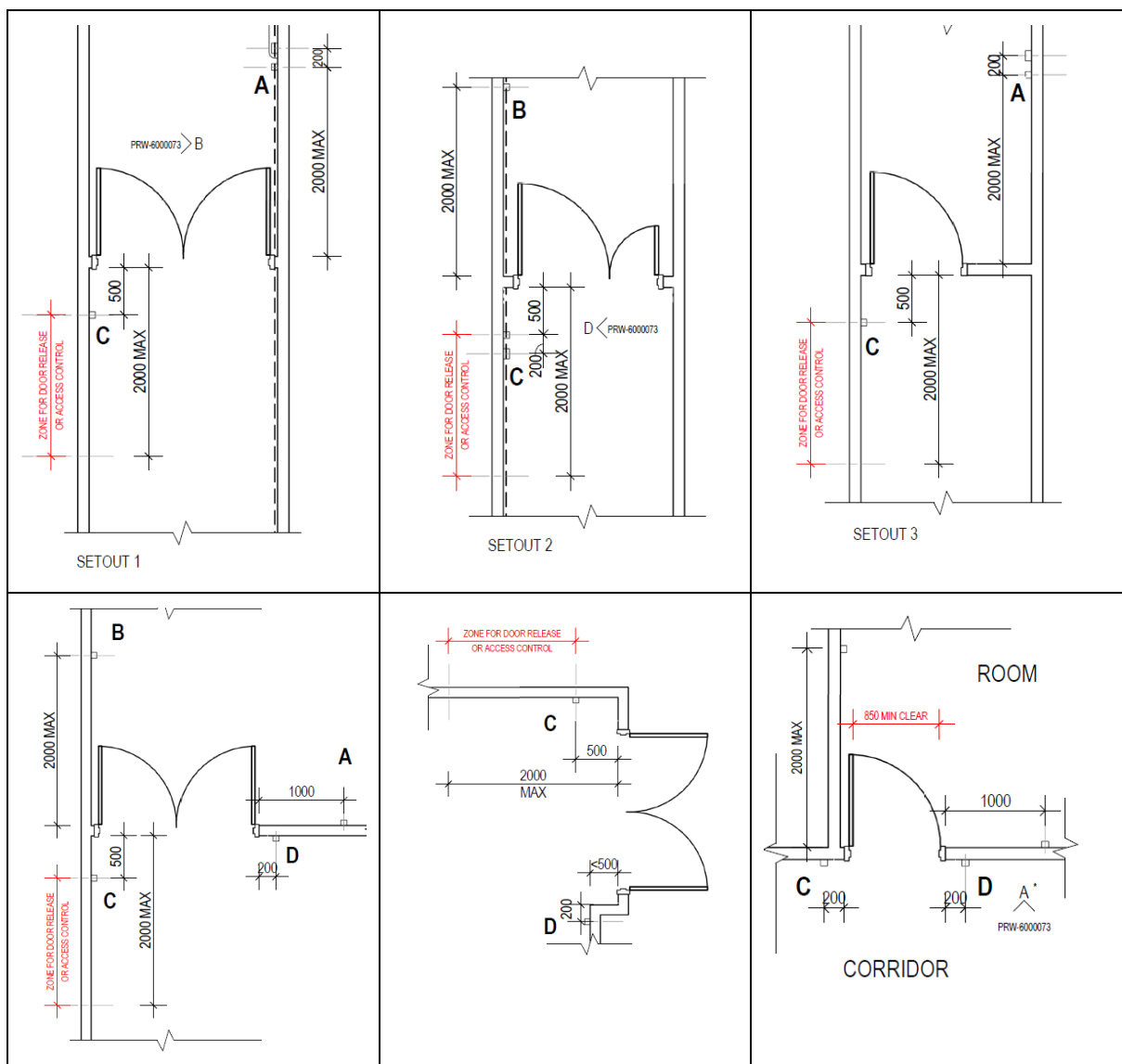
Access control swipe or fob readers will need to be installed between 900-1100mm AFFL and not closer than 500mm to an internal corner.

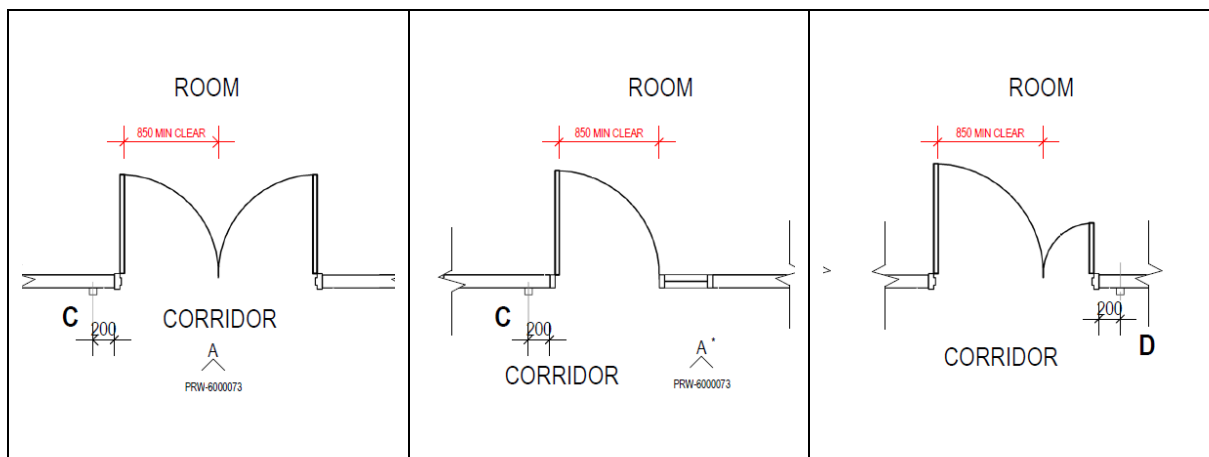
Door release buttons will need to be located between 900-1100mm AFFL and not closer than 500mm to an internal corner. The door release button will need to be the large format switches (35 x 35mm rocker switch) or the “mushroom” push button type.





The following diagrams have been prepared to indicate the location of Light switches card readers, push to exit buttons and the like in relation to doorways.





3.11 Switches – Details of the setout of switches will need to be provided as part of the detailed construction documentation to be prepared for this project.

3.12. Accessible Sanitary Facilities

3.12.1. Legislative references

NCC 2022 D1P1(a)(iii) Access for people with a disability
 F4P1 Personal hygiene facilities
 F4D5 Accessible sanitary facilities
 F4D6 Accessible unisex sanitary compartments
 D4D7 Signage
 Specification 15 Braille and tactile signs

AS Reference: Clause 15 of AS1428.1:2009

The design proposes two (2) accessible WC, one on ground floor and another on first floor of this development.

The table following summarises the NCC requirements to be satisfied.

Accessible WC requirements as nominated at NCC Clause F4D5	Additional criteria to be satisfied	Criteria satisfied by the proposed design
(a) accessible unisex sanitary compartments must be provided in accessible parts of the building in accordance with F4D5(a) and	Accessible WC facilities are to be provided (a) 1 on every storey containing sanitary compartments; and (b) where a storey has more than 1 bank of sanitary compartments containing male and female sanitary compartments, at not less than 50% of those banks.	Satisfied
(b) accessible unisex showers must be provided in accordance with F4D5(b); and	Where 1 or more showers are provided, not less than 1 for every 10 showers or part thereof.	Not applicable
(c) at each bank of toilets where there are one or more toilets in addition to an accessible unisex sanitary compartment at that bank of toilets, a sanitary compartment suitable for a person with an ambulant disability in accordance with AS 1428.1 must be provided for use by males and females; and		Satisfied
(d) an accessible unisex sanitary compartment must contain a closet pan, washbasin, shelf or bench top and adequate means of disposal of sanitary towels; and		Information to be provided

Accessible WC requirements as nominated at NCC Clause F4D5	Additional criteria to be satisfied	Criteria satisfied by the proposed design
(e) the circulation spaces, fixtures and fittings of all accessible sanitary facilities provided in accordance with F4D5(e) must comply with the requirements of AS 1428.1; and		Information to be provided
(f) an accessible unisex sanitary facility must be located so that it can be entered without crossing an area reserved for one sex only; and		Satisfied
(g) where two or more of each type of accessible unisex sanitary facility are provided, the number of left and right handed mirror image facilities must be provided as evenly as possible; and		Satisfied
(h) where male sanitary facilities are provided at a separate location to female sanitary facilities, accessible unisex sanitary facilities are only required at one of those locations; and		Satisfied
(i) an accessible unisex sanitary compartment or an accessible unisex shower need not be provided on a storey or level that is not required by D4D4(f) to be provided with a passenger lift or ramp complying with AS 1428.1.		Not applicable

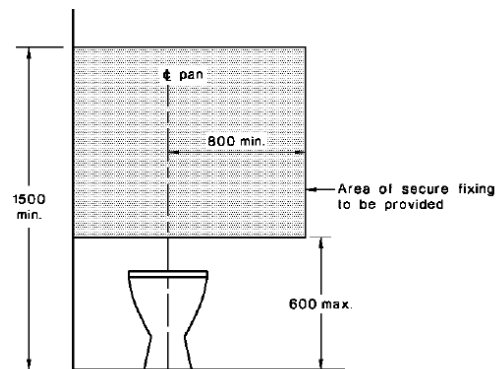
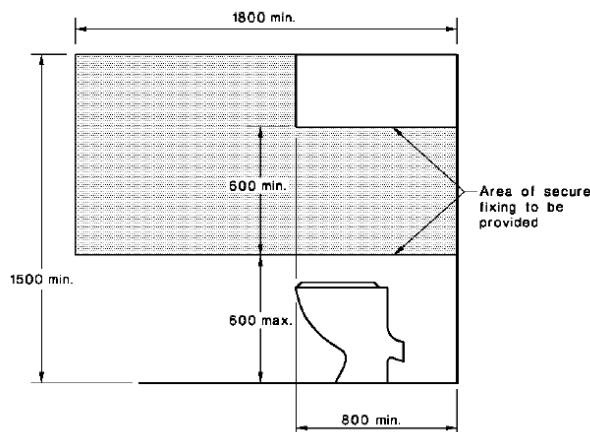
Details of the non-slip floor finish to the bathrooms will need to be provided.

Locations of TMV(s) are to be provided as part of the Construction Certificate documentation.

Tap sets will need to be specified with lever or capstan handles.

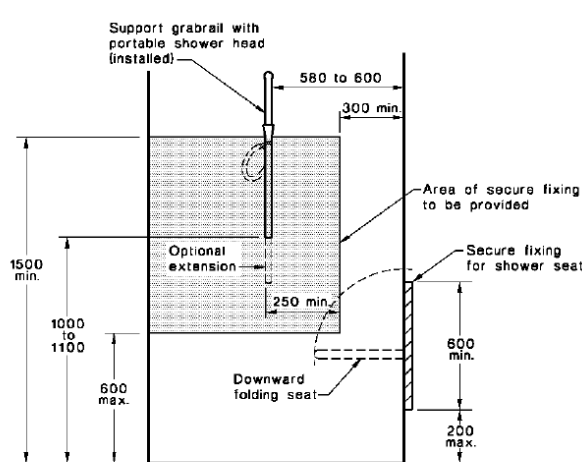
3.12.2. Wall Reinforcement

Provision of wall strengthening for grabrails will need to be provided adjacent to the WC and shower of all accessible sanitary facilities.

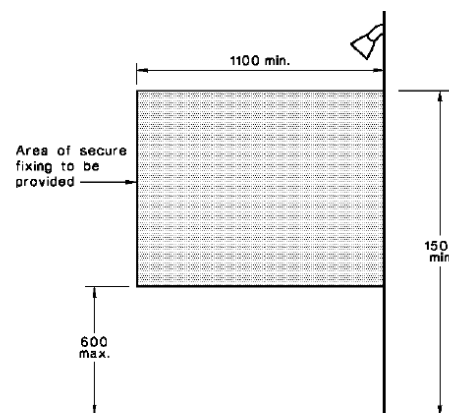


(b) Front view

DIMENSIONS IN MILLIMETRES



(a) Back wall

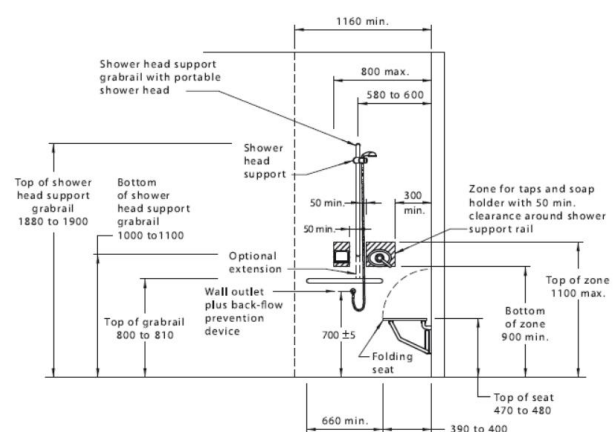
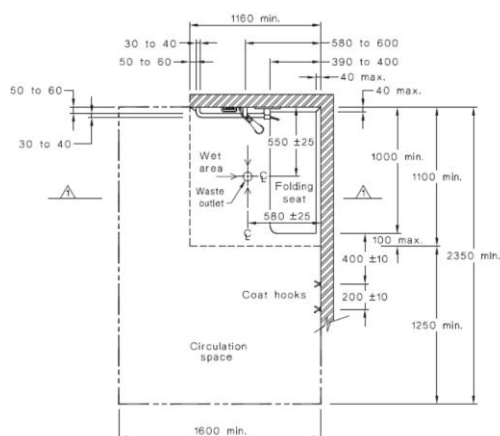


(b) Side wall

DIMENSIONS IN MILLIMETRES

3.12.3. Shower Compartment

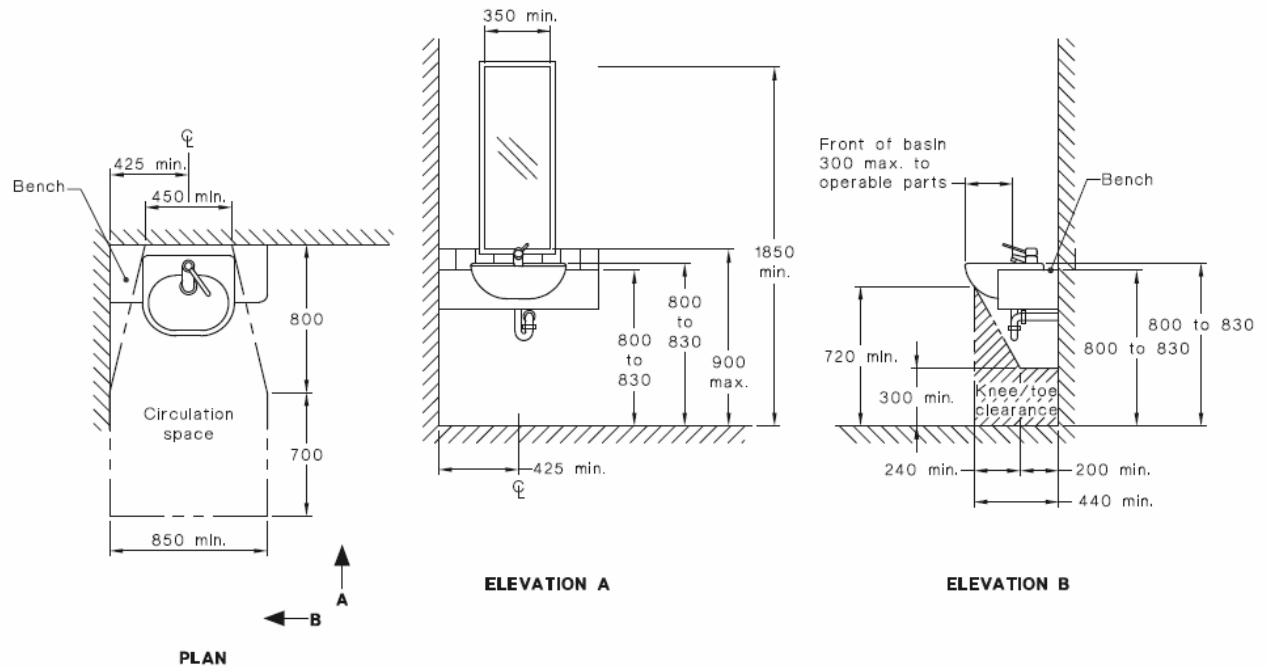
The shower compartment will need to have an area of 1160 x 1100mm. The position of the shower rose, tapware and the soap holder recess will need to be compliant to the provisions of Clause 15 of AS1428.1.



Specific attention is directed to the requirement of the length of the hose associated with the shower rose. The Standard requires the length of the hose to be 1500mm. The placement of the hose

connection point results in the possibility of the shower head reaching the WC bowl which is prohibited by the Australian Standards. The detailing of this configuration will need to be resolved as part of the detailed documentation of detailed construction certificate documentation.

3.12.4. Hand-basins



NOTE: 'Operable parts' means the centre-line of the tap, or where a level handle is provided, the end point of the level measure throughout its arc of movement, or where a sensor is provided where the sensor is reliably activated.

DIMENSIONS IN MILLIMETRES

FIGURE 44(A) SEMI-RECESSED WASHBASIN INSTALLATION —OTHER THAN FOR SOLE-OCCUPANCY UNIT

A wash basin with compliant circulation to AS1428.1 will need to be provided.

3.12.5. Toilet Roll Dispensers

The location of toilet roll dispensers shall be fixed within the zone specified in Figure 41 of AS1428.1:2009.

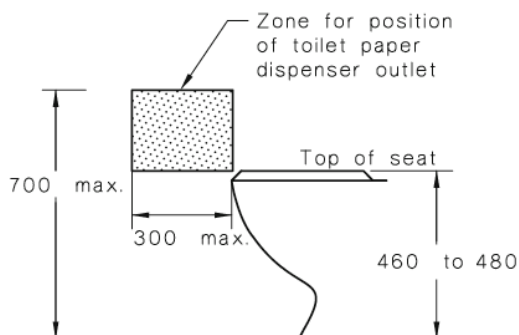


Figure 25 – Fig.41 AS1428.1 2009

3.12.6. Grabrails

Clause 17-Handrails of AS1428.1:2009 specifies the clearance requirement for grabrails.

The clearance between a grabrail and the adjacent wall surface or other obstruction shall be not less than 50 mm and not more than 60 mm. The clearance above a horizontal grabrail shall extend above the top of the grabrail by not less than 600 mm. The clearance below a horizontal or angled rail shall be a minimum of 50 mm except at fixing points.

Grabrails shall be fixed so that there is no obstruction to the passage of the hand along the top 270° arc of horizontal and angled grabrails. There shall be no obstruction to the passage of the hand for the full length of vertical grabrails.

The toilet roll dispenser shall therefore not be installed less than 50mm from underneath the grabrail.

3.12.7. Summary

The following is a summary of requirements to satisfy the WC provisions of AS1428.1:2009:

- | | |
|----------------------------------|---|
| • 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 autodoors 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 |
| • 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 300 mm 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 |

- Hand basin tap
finish floor level and the top of the mirror is to be a minimum of 1850 mm above the finish floor level
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 can 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.
Details of Braille tactile signage are highlighted in the above Signage section of this report.

3.12 Accessible WCs – The documentation to be prepared as part of the detailed construction documentation will need to indicate compliance with the requirements for accessible WCs as nominated at Clause 15 of AS1428.1:2009. Plans may require to be amended to include the provision of accessible toilet on the first floor.

3.13. Ambulant Sanitary Facilities

3.13.1. Legislative references

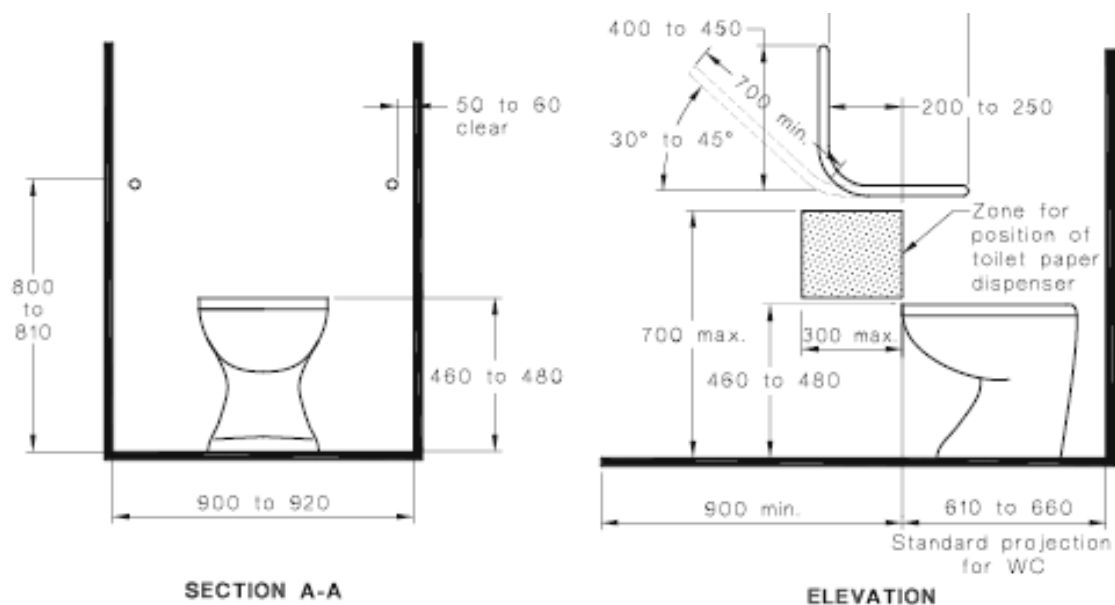
NCC 2022	D1P1(a)(iii) Access for people with a disability
	F4P1 Personal hygiene facilities
	F4D5(c) Accessible sanitary facilities
	D4D7 Signage
	Specification 15 Braille and tactile signs
AS Reference:	Clause 16 of AS1428.1:2009

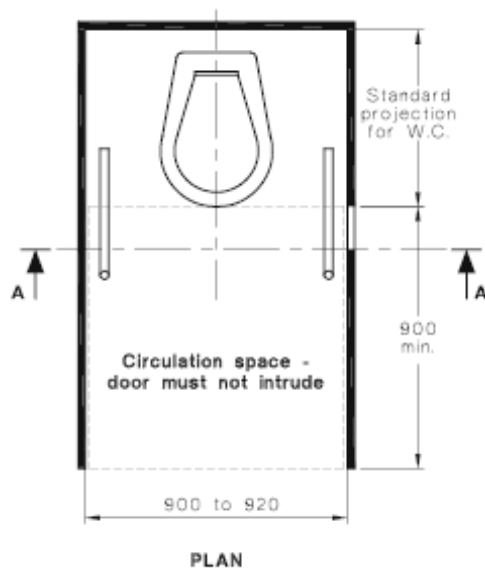
3.13.2. Requirements to be satisfied

The NCC Clause F2.4(c) nominates *at each bank of toilets where there are one or more toilets in addition to an accessible unisex sanitary compartment at that bank of toilets, a sanitary compartment suitable for a person with an ambulant disability in accordance with AS 1428.1 must be provided for use by males and females.*

3.13.3. Features of ambulant WC Cubicles

The following extracts from the Australian Standard nominate the requirements for the fitout of the ambulant WC Cubicles.





3.13.3. Ambulant WC Features – The documentation to be prepared will need to indicate compliance with these requirements.

3.13.4. Ambulant WC Cubicles - Circulation

The following extracts from the Australian Standard nominate the circulation requirements for ambulant WC Cubicles.

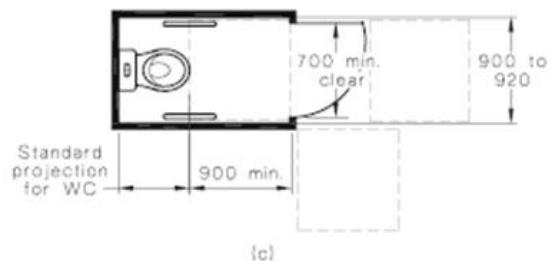
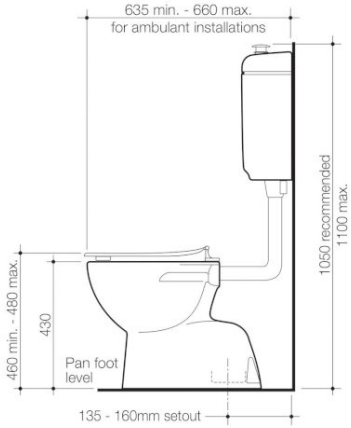
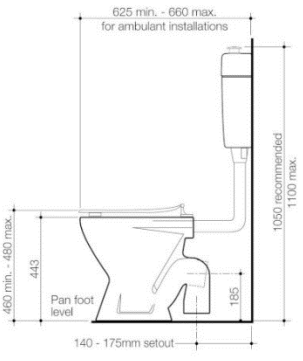
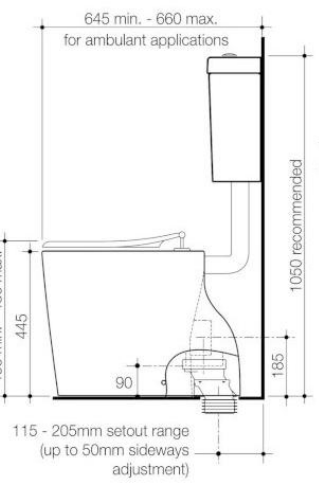
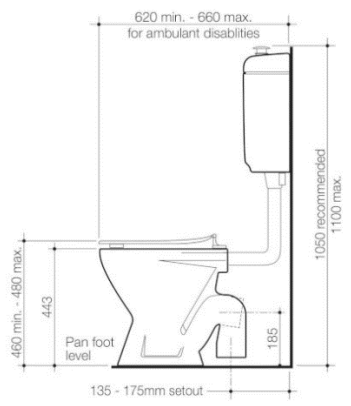


Figure 26 – Fig.53 AS1428.1 2009

3.13.4 Ambulant WC Circulation – The documentation to be prepared will need to indicate compliance with these requirements.

3.13.5. Ambulant WC Pans (Examples)

The following selection from CAROMA are examples of compliant Ambulant WC Pans.

 CARE 400 CONNECTOR SUITE	 CARE 100 V2 CONNECTOR SUITE	 CARE 610 CLEANFLUSH CONNECTOR SUITE and CARE 200 V2 CONNECTOR SUITE
 CARE 300 CONNECTOR SUITE	 URBANE WALL FACED TOILET SUITE	

3.13.5. Ambulant WC Pans – The documentation to be prepared will need to indicate compliance with these requirements.

3.13.6. Ambulant WC Hardware (Examples)

The fit off of the ambulant WC Cubicles will need to include for the following hardware.

	 <i>A sliding lock can be specified</i>
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Robe Hook to be located between 1350-1500mm AFFL

3.13.6. Ambulant WC Hardware– *The documentation to be prepared will need to indicate compliance with these requirements.*

3.14. Vertical Transport

3.14.1. Legislative references

NCC 2022 D1P1(a)(iii) Access for people with a disability
 E3P4 Lift access for people with a disability
 D4D4(b Parts of buildings to be accessible
 E3D7 Passenger lift types and their limitations
 E3D8 Accessible features required for passenger lifts

AS Reference: AS1735.12:1999 Lifts, Escalators and Moving Walks
 AS1735.12:2020 Lifts, Escalators and Moving Walks

3.14.2. Lifts - Overview

Passenger lifts will be provided as part of this development.

The detailing of the lift cars will need to satisfy the requirements of NCC Clauses E3D7, E3D8 and the provisions of AS1735.12.

The provision of a lift service designed to the provisions of AS1735.12:2020 will address the Categories of Disability considered at Annex A of AS1735.12.

This service is not intended to be a Destination Control System.

3.14.3. AS1735.12:2020 Assessment

The lift design will need to satisfy the provisions of AS1735.12:2020. The following table identifies the accessible features to be provided.

CI	Requirement	Status																																		
5.1.2	Luminance Contrast (comply with Table 2) Table 2 — Minimum difference of light reflectance value (LRV) <table><tr><th rowspan="2">Clause</th><th rowspan="2">Item</th><th colspan="2">At landings</th><th colspan="2">In the car</th></tr><tr><th>Minimum LRV point difference</th><th>Viewing angle</th><th>Minimum LRV point difference</th><th>Viewing angle</th></tr><tr><td>Table 4, item c)</td><td>Active part of push buttons to their surrounding</td><td>30</td><td>45° above horizontal</td><td>30</td><td>45° above horizontal</td></tr><tr><td>Table 4, item d)</td><td>Face plate to its surrounding</td><td>30</td><td>Perpendicular</td><td>30</td><td>Perpendicular</td></tr><tr><td>Table 4, item j)</td><td>Symbols on push buttons to active areas</td><td>30 (60 recommended)</td><td>45° above horizontal</td><td>30 (60 recommended)</td><td>45° above horizontal</td></tr><tr><td>5.4.3.3 c)</td><td>Lift identification to background</td><td>30 (60 recommended)</td><td>Perpendicular</td><td>-</td><td>-</td></tr></table>	Clause	Item	At landings		In the car		Minimum LRV point difference	Viewing angle	Minimum LRV point difference	Viewing angle	Table 4, item c)	Active part of push buttons to their surrounding	30	45° above horizontal	30	45° above horizontal	Table 4, item d)	Face plate to its surrounding	30	Perpendicular	30	Perpendicular	Table 4, item j)	Symbols on push buttons to active areas	30 (60 recommended)	45° above horizontal	30 (60 recommended)	45° above horizontal	5.4.3.3 c)	Lift identification to background	30 (60 recommended)	Perpendicular	-	-	Additional Information to be provided
Clause	Item			At landings		In the car																														
		Minimum LRV point difference	Viewing angle	Minimum LRV point difference	Viewing angle																															
Table 4, item c)	Active part of push buttons to their surrounding	30	45° above horizontal	30	45° above horizontal																															
Table 4, item d)	Face plate to its surrounding	30	Perpendicular	30	Perpendicular																															
Table 4, item j)	Symbols on push buttons to active areas	30 (60 recommended)	45° above horizontal	30 (60 recommended)	45° above horizontal																															
5.4.3.3 c)	Lift identification to background	30 (60 recommended)	Perpendicular	-	-																															
5.1.3	When an audible signal or voice announcement is required, the sound shall be adjustable between 35dB(A) and at least 65dB(A) to suit the site conditions.	Additional Information to be provided																																		
5.2.1	The clear opening door width shall be at least 900mm for Type 2 cars	Additional Information to be provided																																		
5.2.2	Minimum door dwell time – 6s	Additional Information to be provided																																		

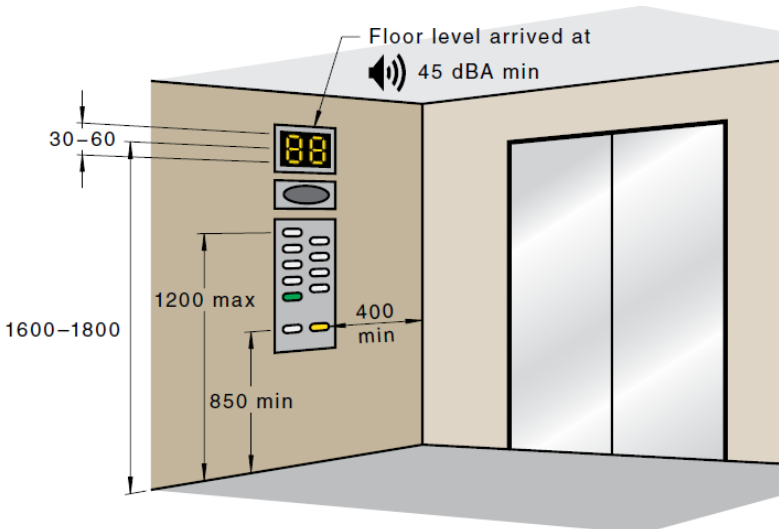
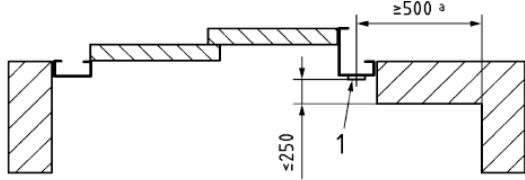
CI	Requirement	Status
5.3.1	Table 3 Minimum car dimensions - Type 2 lift car - 1100 x 1400mm (630kg) Car decorations that reduce the minimum car dimensions shall not exceed 15mm in thickness. Any protruding decorations shall not extend below 800mm AFFL.	Additional Information to be provided
5.3.2.1	A handrail shall be installed on the side wall where the car operating panel is located.	Additional Information to be provided
	(a) The handrail shall be interrupted where the car operating panel is located	Additional Information to be provided
	(b) Handrail length to be a minimum of 400mm	Additional Information to be provided
	(c) The cross section of the handrail is to be between 30-45mm with a minimum radius of 10mm	Additional Information to be provided
	(d) The distance between the wall and the gripping part of the handrail shall be at least 35mm	Additional Information to be provided
	(e) The top of the rail shall be 900+/-25mm AFFL	Additional Information to be provided
	(f) The ends of the rail shall be closed.	Additional Information to be provided
5.3.2.3	For Type 2 cars a device shall be installed to enable passengers to observe obstacles behind them when moving backwards out of the car	Additional Information to be provided
5.3.2.4	The car floor shall be slip resistant (P3/R10)	Additional Information to be provided
5.4.2	Control devices and signals for collective control systems (Refer to Table 4 of AS1735.12:2020) 	Additional Information to be provided

Figure ZA.1 — In car control station

CI	Requirement	Status
5.4.2.2	Landing control devices The minimum setout of landing control devices is to be as follows:  Key 1 landing button a preferably 700 Figure 3 — Arrangement of landing buttons	Additional Information to be provided
ZA.5.2	Raised tactile and braille signs identifying both the lift car and building level shall be provided on both sides of every lift landing door frame. Signs shall be visible from inside the lift car. 	Additional Information to be provided
ZA.6	Lift identification sign content shall be in accordance with AS1428.4.2.	Additional Information to be provided

3.14.3 Vertical transport - Detailed lift drawings will need to be prepared and provided for review.

3.14.3 Vertical transport - A design certificate will need to be provided from the lift supplier indicating compliance with AS1735.12:2020.

3.14.3 Vertical transport - A lift installation certificate referencing the NCC performance requirement of EP4, NCC Clause E3.6 and AS1735.12:2020 will need to be provided for the issue of the OC Access Installation Certificate.

3.15. Furniture and Fitments

3.15.1. Legislative references

NCC 2022: D1P1(a)(iii) Access for people with a disability
D4D2(8)(a) General building access requirements
AS Reference: Clause 24 (Furniture and Fitments) of AS1428.2 1992

3.15.2. Counters

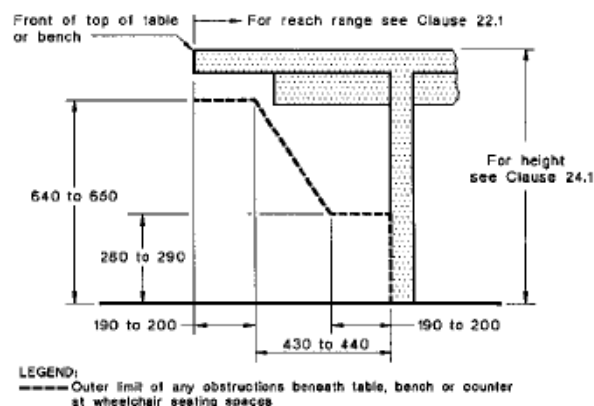
All reception counters associated with the building entrance are to include a portion of the counter that is accessible.

The accessible desks will need to be adjustable to meet the needs of the student. The preferred range of adjustability is 750-850mm AFFL.

The height of clearance beneath the unit from the finished floor should be 820 ± 20 mm.

Where there are two tables/counters provided, the following dimensions apply:

- (a) Height from the finished floor to the top of the unit:
 - (i) 1st unit: 750 ± 20 mm.
 - (ii) 2nd unit: 850 ± 20 mm.
- (b) Height of clearance beneath unit, from the finished floor:
 - (i) 1st unit: 730 ± 20 mm.
 - (ii) 2nd unit: 820 ± 20 mm.



NOTE: For width of seating spaces see Clause 24.1.3.

DIMENSIONS IN MILLIMETRES

FIGURE 25 KNEE AND FOOT CLEARANCE BENEATH A TABLE, BENCH OR COUNTER

Figure 27 – Fig.25 AS1428.2:1992

3.16. Lighting

3.16.1. Legislative references

NCC 2022	D1P1(a)(iii) Access for people with a disability
AS Reference:	Clause 19 of AS1428.2:1992
	Appendix D of AS1680.2.1:2008

The plans presently do not indicate the minimum lighting levels to be achieved. It will be necessary that the Construction Certificate documentation confirm that the minimum lighting levels nominated by the Australian Standards are achieved.

In addition to the minimum lighting levels identified at Clause 19 of AS1428.2:1992 the provisions of Table D1 of AS168.2.1:2008 which nominates interior light levels to be achieved must be considered.

The following table schedules the lighting levels nominated within the Australian Standards for accessibility:

LOCATION	CLAUSE 19 AS1428.2:1992	APPENDIX D AS1680.2.1:2008
Entrances, passages & walkways	150lx	160lx
Corridors Passageways	-	40lx
Toilets and locker Rooms	200lx	80lx
Counter tops	250lx	320lx

The electrical documentation will need to indicate compliance with these minimum lighting levels.

3.16. Lighting Levels – On completion of the works certification of lighting levels achieved indicating compliance with these requirements will need to be provided for the issue of the Access Installation Certificate at OC.

3.17. Carparking

3.17.1. Legislative references

NCC 2022	D1P1(a)(iii) Access for people with a disability
	D1P8(a) and (b)
	D4D6 Accessible Parking
AS Reference:	AS 2890.6:2009 Carparking

3.17.2. Carparking - overview

The design proposes one accessible parking space in addition to existing parking on site.

Compliance:	The provision of 1 accessible parking spaces satisfies the provisions of NCC Table D4D6
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3.17.3. Carparking – Parking Bay Size

The spatial requirements for a commercial accessible parking space are as per the figure following, which details a 2.4 x 5.4m wide parking space with a 2.4 x 5.4m wide shared zone.

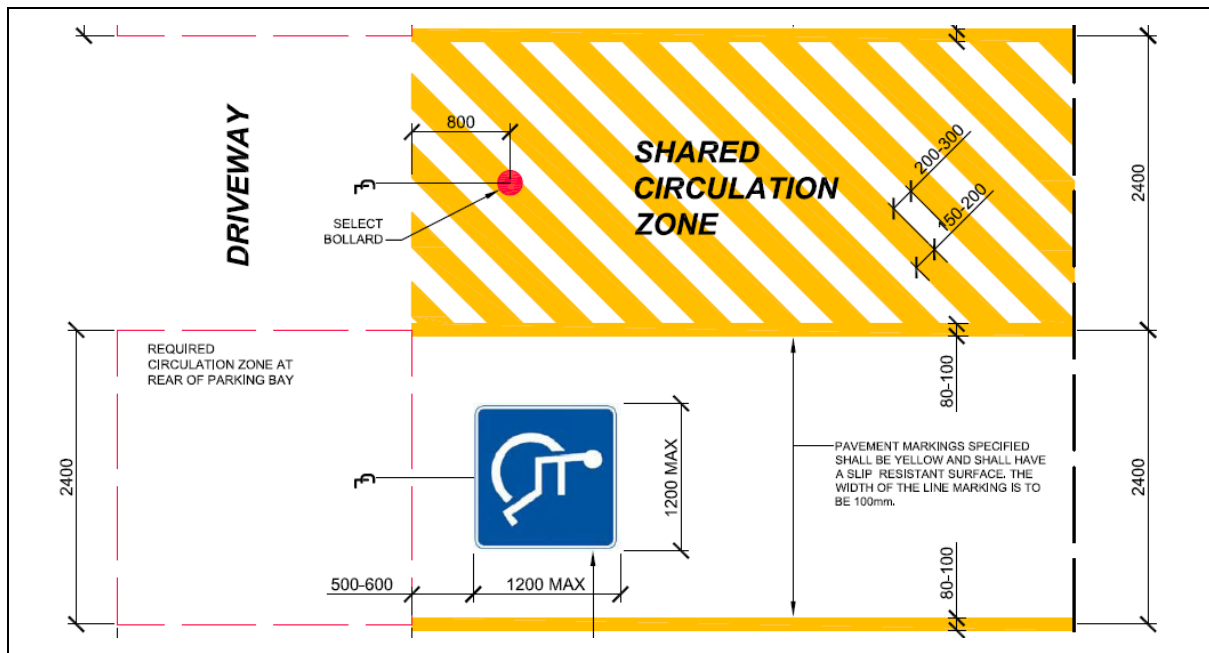
3.17.3.	<i>Carparking – Parking Bay size – The detailed Construction Documentation will need to indicate compliance with this requirement.</i>
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3.17.4. Carparking - linemarking

The line marking associated with the accessible parking spaces for the commercial component of this development will need to satisfy the provisions of Section 3 of AS2890.6:2009. The international symbol for access shall be marked in accordance with Figure 3.1 of AS2890.6:2009.

The following sketch indicate the minimum linemarking requirements to be achieved.

3.17.4.	<i>Carparking – Linemarking – Linemarking details are to be provided as part of the detailed construction documentation to be prepared for this project.</i>
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3.18. Hearing augmentation (If provided)

3.18.1. Legislative references

NCC Reference:	D1P1(a)(iii) Access for people with a disability
	D1P9 Communication systems for people with hearing impairment
	D4D8 Hearing augmentation.
	D4D7 Signage
	Specification 15 Braille and tactile signs
AS Reference:	AS1428.5:2010 Design for access and mobility - Communication for people who are deaf or hearing impaired

3.18.2. Hearing augmentation - Preamble

Details of the AV installation was not provided. Where a built-in amplification system is provided then hearing augmentation systems will need to be provided.

3.18.3. Hearing augmentation - requirements

A hearing augmentation system is to be provided in locations where a built-in amplification system is provided and to rooms provided for judicatory purposes.

A built-in amplification system is a system where either speakers are installed within a room or the wall mounted monitor has built-in speakers. Such installations are typically found in meeting rooms, training rooms and waiting areas.

Where the wall mounted screen is not capable of broadcasting sound and any audio is provided by way of the speakers attached to a laptop or that are portable, the hearing augmentation provisions will not need to be applied.

Rooms with inbuilt communication systems will need to provide a hearing augmentation system.

Section 2.3 of AS1428.1:2010 highlights the types of hearing augmentation system:

Persons with a hearing loss may or may not have a personal hearing aid or a cochlear implant fitted. When choosing an ALS the outcome should enable communication by all people with hearing impairment whether they wear hearing aids, or have hearing aids or cochlear implants without a telecoil (T-switch), or have hearing aids or cochlear implants with a telecoil (T-switch).

ALS types include—

- (a) *audio frequency induction loop systems (AFILSs);*
- (b) *modulated radio systems (commonly referred to as FM systems); and*
- (c) *infra-red (IR) systems.*

Details of the proposed method of hearing augmentation to be installed will need to be provided as part of the detailed documentation provided for this project.

3.18.4. Hearing augmentation – Braille Tactile signs

Where hearing Augmentation systems are installed, a Braille Tactile Sign incorporating the international symbol of deafness will need to be provided.

NCC D3.6 identifies the requirement for Braille Tactile Signage to be implemented where a hearing augmentation system is installed.

(b) signage including the international symbol for deafness in accordance with AS1428.1 must be provided within a room containing a hearing augmentation system identifying –

(i) the type of hearing augmentation; and

(ii) the area covered within the room; and

(iii) if receivers are being used and where the receivers can be obtained

Refer to the 'Signage' section of this report for details of Braille Tactile Signage requirements.

3.18 Hearing augmentation *Detailed documentation will need to be provided as part of the further documentation to be prepared for this project.*

4. Disability (Access to Premises - Building) Standard 2010 – Compliance Summary

PART / CLAUSE	DISABILITY (ACCESS TO PREMISES) STANDARD 2010 CRITERIA TO BE SATISFIED	COMPLIANCE	ACTION / COMMENT
A4.1	Classifications NCC Building Class 9b	Note	
D1P1	Performance requirement Access must be provided, to the degree necessary, to enable: a) people to: i. approach the building from the road boundary and from any <i>accessible</i> carparking spaces associated with the building; and	Satisfied	
	ii. approach the building from any accessible associated building; and	Not Applicable	
	iii. access work and public spaces, accommodation and facilities for personal hygiene; and	Satisfied	
	b) Identification of accessways at appropriate locations which are easy to find.	Satisfied	
D1P4	Performance requirement <i>Exits</i> must be provided from a building to allow occupants to evacuate safely, with their number, location and dimensions being appropriate to: a) the travel distance; and b) the number, mobility and other characteristics of occupants; and c) the function or use of the building; and d) the height of the building; and e) Whether the <i>exit</i> is from above or below ground level.	Satisfied	
D1P6	Performance requirement So that occupants can safely evacuate the building, <i>accessways</i> to <i>exits</i> must have dimensions appropriate to: a) the number, mobility and other characteristics of occupants; and b) the function or use of the building.	Satisfied	

PART / CLAUSE	DISABILITY (ACCESS TO PREMISES) STANDARD 2010 CRITERIA TO BE SATISFIED	COMPLIANCE	ACTION / COMMENT
D1P8	Performance requirement Carparking spaces for use by people with a disability must be: - provided, to the degree necessary, to give equitable access for carparking; and - designated and easy to find.	Satisfied	
D1P9	Performance requirement An inbuilt communication system for entry, information, entertainment, or for the provision of a service, must be suitable for occupants who are deaf or hearing impaired.	Additional Information to be provided	
D4D2	General Building Access Requirements NCC Building Class 9b		
	(b) An assembly building, not being a school or early childhood centre — to and within — (i) wheelchair seating spaces provided in accordance with D4D10; and (ii) all other areas normally used by the occupants, except that access need not be provided to tiers or platforms of seating areas that do not contain wheelchair seating spaces.	Satisfied	
D4D3	Access to Buildings		
	(1) An accessway must be provided:	Satisfied	
	(a) to a building <i>required</i> to be <i>accessible</i> ;		
	(b) from the main points of a pedestrian entry at the allotment boundary; and	Satisfied	
	I. from another <i>accessible</i> building connected by a pedestrian link; and	Not Applicable	
	II. from any required accessible carparking space on the allotment.	Satisfied	

PART / CLAUSE	DISABILITY (ACCESS TO PREMISES) STANDARD 2010 CRITERIA TO BE SATISFIED	COMPLIANCE	ACTION / COMMENT
	(2) In a building <i>required</i> to be <i>accessible</i>, an <i>accessway</i> must be provided through the principal pedestrian entrance, and: a. through not less than 50% of all pedestrian entrances including the principal pedestrian entrance; and b. in a building with a total <i>floor area</i> more than 500sqm, a pedestrian entrance which is not <i>accessible</i> must not be located more than 50 m from an <i>accessible</i> pedestrian entrance; Except for pedestrian entrances serving only areas exempted by clause D3.4.	Satisfied	
D4D4	Parts of buildings to be accessible		
	In a building <i>required</i> to be <i>accessible</i> :		
	a) every ramp and stairway, except for ramps and stairways in areas exempted by clause D3.4, must comply with:		
	i. for a ramp, except a fire-isolated ramp, clause 10 of AS 1428.1; and	Additional Information to be provided	
	ii. for a stairway, except a fire-isolated stairway, clause 11 of AS 1428.1;	Additional Information to be provided	
	iii. for a fire-isolated stairway, clause 11.1(f) and (g) of AS 1428.1;	Not Applicable	
	b) every passenger lift must comply with clause E3.6;	Additional Information to be provided	
	c) <i>accessways</i> must have:	Satisfied	
	i. passing spaces complying with AS 1428.1 at maximum 20 m intervals on those parts of an <i>accessway</i> where a direct line of sight is not available; and ii. turning spaces complying with AS 1428.1: A. within 2m of the end of <i>accessways</i> where it is not possible to continue travelling along the <i>accessway</i>; and B. at maximum 20 m intervals along the <i>accessway</i>;		
	d) an intersection of <i>accessways</i> satisfies the spatial requirements for a passing and turning space;	Satisfied	
	e) a passing space may serve as a turning space;	Satisfied	

PART / CLAUSE	DISABILITY (ACCESS TO PREMISES) STANDARD 2010 CRITERIA TO BE SATISFIED	COMPLIANCE	ACTION / COMMENT
	f) a ramp complying with AS 1428.1 or a passenger lift need not be provided to serve a <i>storey</i> or level other than the entrance <i>storey</i> in a Class 5, 6, 7b or 8 building- (i) containing not more than 3 <i>storeys</i> ; and (ii) with a <i>floor area</i> for each <i>storey</i> , excluding the entrance <i>storey</i> , of not more than 200sqm.	Not Applicable	
D4D6	Carparking	Not Applicable	
D4D7	Signage	Additional Information to be provided	
D4D8	Hearing Augmentation	Additional Information to be provided	
D4D9	Tactile Indicators	Additional Information to be provided	
D4D10	Wheelchair seating	Not Applicable	
D4D11	Swimming pool	Not Applicable	
D4D12	Ramps (Connecting Ramps)	Not Applicable	
D4D13	Glazing on an accessway On an <i>accessway</i> , where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights and any glazing capable of being mistaken for a doorway or opening, must be clearly marked in accordance with Clause 6.6 of AS 1428.1.	Additional Information to be provided	If full-height glazing is provided, visual indicators are required.
Specification 15	Braille & Tactile Signs	Satisfied	The signage detailing will need to comply with the nominated signage provisions of NCC 2022 Clauses 16.3 and 17 of AS1428.2 which addresses the size of the pictogram as well as the height of lettering.
Part E3D7	Lift Installation	Additional Information to be provided	

PART / CLAUSE	DISABILITY (ACCESS TO PREMISES) STANDARD 2010 CRITERIA TO BE SATISFIED	COMPLIANCE	ACTION / COMMENT
Part F4D5	Sanitary and other facilities	Additional Information to be provided	

5. STATEMENT OF EXPERTISE



Name	Richard Seidman
Qualifications	• 2019 Diploma in Access (Access Institute) • 2018 Accredited Access Consultant • 2014 Accredited assessor Livable Housing Australia • 2011 Certificate IV Access Consulting (IATA) • 2008 Accredited Green Star Professional (GBCA) • 2007 Graduate Diploma in Building Surveying (Fire Engineering) University of Western Sydney • 2005 Masters in Property Development University of Technology (Graduating 1st in year) • 1999 Graduate Diploma in Architectural Design Science (Facilities Management) University of Sydney • 1983 Bachelor of Architecture (Hons) University of NSW
Memberships	• Royal Australian Institute of Architects (No. 4700) • NSW Architects Registration Board (No. 4829) • Association of Consultants in Access Australia (Accredited Access Consultant No 330) • Livable Housing Australia (10041)
Experience	Richard Seidman has practised for more than 35 years in the built environment and has developed extensive skills and expertise in the residential, commercial, industrial, health, retail, education and transport industries. Richard has extensive expertise in all aspects of AS1428, AS4299 and AS2890.6 which has been honed as part of the plan check role undertaken as part of the NBESP Social Housing Initiative undertaken for the Department of Human Services – Housing NSW and 10 years' experience with Westfield Design and Construction in the capacity of Project Design Manager. In 2010 Richard established iAccess Consultants a division of iAccess Group Pty Ltd. Since 2010 Richard has undertaken a wide range of consultancies