ABN 37 002 648 615

2/ 20 Balfour Road
Rose Bay NSW 2029
[p] 0408 627 908
[e] r.seidman@iaccess.net.au
[w] www.iaccess.net.au

Job No: IAR-0113

7 October 2021

**PPI LINDFIELD DEVELOPMENTS PTY LTD**
**LEVEL 2,**
**343 PACIFIC HIGHWAY**
**NORTH SYDNEY NSW 2060**

Reference: **COLES LINDFIELD**

Attention: Mr Russell Isaac-Cole
Email: russellic@rothelowman.com.au
Phone No: +61 4 098 358 77

Dear Mr Isaac-Cole

Thank you for inviting iAccess Consultants to undertake this access assessment of the Development Application documentation prepared for this mix use development project.

This access report has been structured in accordance with the provisions of the Disability (Access to Premises) Standard 2010 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**

M.PropDev, BArch (Hons),
ARB Reg No 4700,
ACAA (Accredited Access Consultant No 330),
Livable Housing Registered Assessor 10041

# ACCESS REPORT- DEVELOPMENT APPLICATION

## MIX USE DEVELOPMENT- COLES LINDFIELD
## 376-390 PACIFIC HIGHWAY, 1 BALFOUR STREET & BALFOUR LANE, LINDFIELD NSW 2070


Prepared by

**iAccess Residential**

A division of iAccess Group Pty Ltd

ABN 37 002 648 615

Revision **[A]**

7 October 2021

## Document Control

Project: Coles Lindfield- Mix Use development

376-390 Pacific Highway, 1 Balfour Street & Balfour Lane,

Lindfield NSW 2070

Document Type: Access Report

Report Number: IAR-0113

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



Revision History:

| Rev | Remarks | Issue Date |
|---|---|---|
| - | Report prepared and issued to client | 1 October 2021 |
| A | Report revised and issued to client | 7 October 2021 |
| | | |

**RICHARD SEIDMAN**

**DIRECTOR**
**ACCESS CONSULTANT**

M.PropDev
BArch (Hons) ARB Reg No 4829
Diploma in Access ACAA (Accredited Access Consultant No 330)
NDIS SDA Accredited Assessor No 00052
Livable Housing Registered Assessor 10041

## Contents

## 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.

## Abbreviations

The following abbreviations are employed in this Checklist:

| | |
|---|---|
| ACAA | Association of Consultants in Access Australia |
| 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:

Compliant

Not Compliant

Information to be provided

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 for this mix use development project named as Coles Lindfield that is located at 376-390 Pacific Highway 1 Balfour Street and Balfour Lane, Lindfield NSW.

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 are mainly in relation to the requirements of the NCC Section D, NCC Part F2.4 and the provisions of AS1428.1:2009 Design for access and mobility and AS2890.6:2009.

There is generally a high level of compliance throughout the project, however there are several items that require more information to be provided as part of the detailed construction 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 design.

## 1.2. Scope of Works

The scope of this project relates to the construction of a mix use development comprising retail on Upper Ground floor and 58 dwellings on Level 1-4.

Parking is provided on Lower Ground 1, Lower Ground 2 and Level 1. Access to the parking floors have been provided via a passenger lift. 16 accessible parking spaces have been provided across these three levels. The sizing of the accessible parking space to be provided in accordance with Clause 3.7.2 of AS4299: Adaptable Housing.

Access has been provided to all levels via a passenger lift.

## 1.3. Building Classification

The NCC classification for this Development is:

- *Class 2 - Residential Apartment*
- *Class 6 - Retail*
- *Class 7a - Carpark*

## 1.4. Performance Based Design Solutions

The proposed design does not rely upon any performance-based design solutions.

## 1.5. Equitable Egress Strategy - NCC Clauses DP4 & DP6

An NCC Deemed to Satisfy solution addressing egress from a building satisfies the provisions of DP4 and DP6.

## 1.6. NCC Clause D3.4 Concession

The NCC Clause **D3.4** 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 several rooms of which the NCC **D3.4** concession applies:

- Dump rooms
- Plant rooms
- Storerooms
- Pump rooms
- Fan rooms
- Refrigerator Condenser rooms
- Loading dock and services
- Utility areas
- Cool room
- Garbage Compressor & Garbage Store

## 1.7. Architecture Documentation

This Access Report references the following architectural documentation.

| Dwg No | Title | Revision |
|---|---|---|
| DA-00-1 | Cover Sheet | - |
| DA-01-1 | Basement | - |
| DA-01-2 | Lower Ground 2 | - |
| DA-01-3 | Lower Ground 1 | - |
| DA-01-4 | Upper Ground | - |
| DA-01-5 | Level 1 | - |
| DA-01-6 | Level 2 | - |
| DA-01-7 | Level 3 | - |
| DA-01-8 | Level 4 | - |

## 1.8. Documents to be Relied Upon

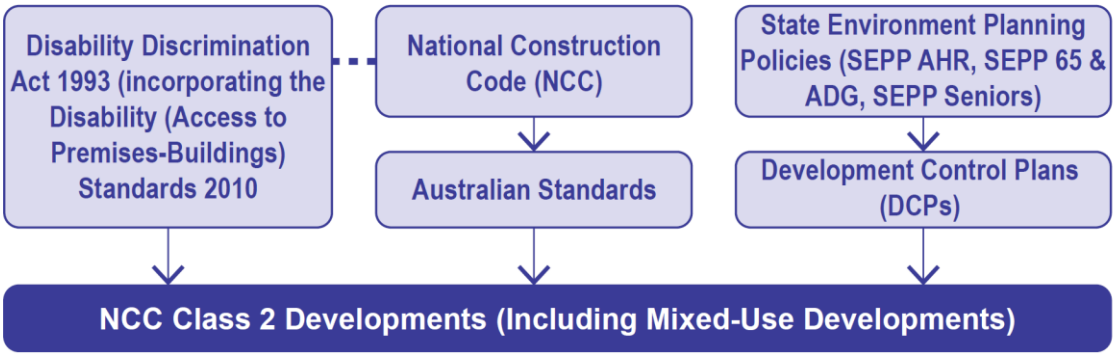
At the completion of the delivery of this project the Access Design Statement required for the issue of the Occupation Certificate will be reliant on the following documents:

- Lift certification provided by relevant lift company indicating compliance with the provisions of AS1735.12
- Slip resistance certification issued by the respective floor finishes manufacturers indicating compliance with NCC Table D2.14 and Australian Standard HB198.

- Documentation provided by the sign supplier indicating Braille Tactile signage is compliant with the provisions of NCC Specification D3.6
- Confirmation of compliant lighting levels and TMV details in sanitary facilities
- Evidence of wall strengthening for the installation of grab rails associated with the accessible WC and shower facilities.

## 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

- Disability Discrimination Act 1992
- Disability (Access to Premises - Buildings) Standards 2010 (DDA 1992)
- National Construction Code (BCA 2019 Volume 1 Amendment 1)
- 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
- AS1735.12:2020 Lifts, escalators and moving walks - Facilities for persons with disabilities
- AS2890.6:2009 Parking facilities - Off-street parking for people with disabilities
- AS4299:1995 Adaptable Dwellings
- 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 Building Code of Australia and the provisions of Australian Standards AS1428

Australian Standards provide certainty and direction to address accessibility compliance.

## 3.2. Continuous Accessible Paths of Travel

| | |
|---|---|
| NCC Reference: | D3.2 Access to buildings |
| | D3.3 Parts of buildings to be accessible |
| Australian Standard Reference: | Clause 6 (Continuous Accessible Paths of Travel) of AS1428.1 2009 |
| | AS 1428.4.1 2009 Design for access and mobility - Means to assist the orientation of people with vision impairment |

### 3.2.1. Preamble

This section discusses Continuous Accessible Paths of Travel (CAPT) throughout the external and internal areas of the development.

The requirements for Continuous Accessible Paths of Travel is noted in the National Construction Code at Clauses DP1 and D3.2:

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 ***DP1*** of the National Construction Code 2019.

Accessible access is provided to the common areas as per the provisions of NCC Table D3.1.

| | |
|---|---|
| ***Compliance:*** | The documentation provided indicates that compliance is capable of being achieved to the COLES tenancy. |

| | |
|---|---|
| ***Compliance:*** | The documentation provided indicates that compliance is capable of being achieved to the residential entrance. |

### 3.2.2. 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.

| | |
|---|---|
| ***3.2.2. 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. |

### 3.2.3. 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.*

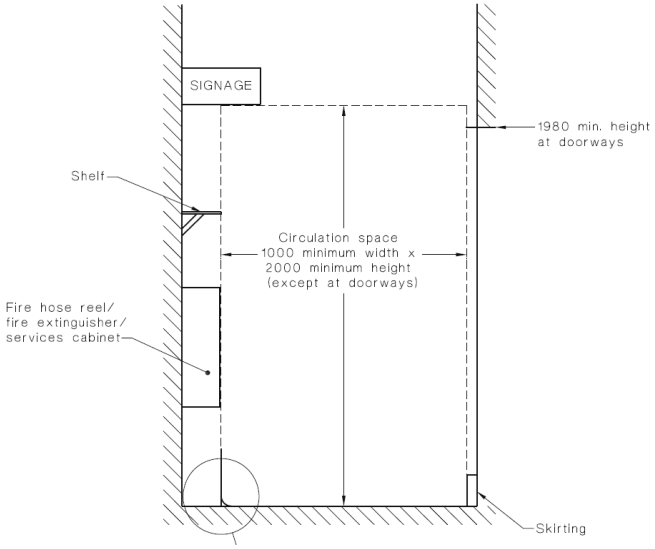



Figure 1 – Fig. 2 of Section 6, AS1428.1:2009

| | |
|---|---|
| ***Compliance:*** | The documentation provided indicates that compliance is capable of being achieved within the COLES tenancy. |

| | |
|---|---|
| ***Compliance:*** | The documentation provided indicates that compliance is capable of being achieved within the residential component of this development. |

### 3.2.4. Circulation Zones

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

| | |
|---|---|
| ***Compliance:*** | The documentation provided indicates that compliance is capable of being achieved. |

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.

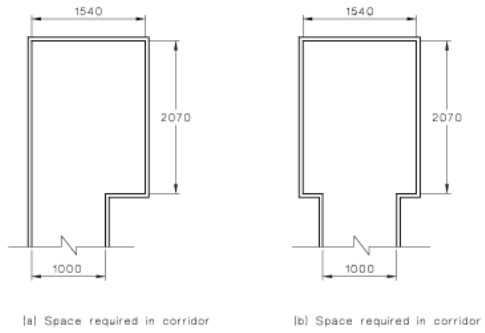



Figure 2 – Fig.3 Section 6 AS1428.1 2009

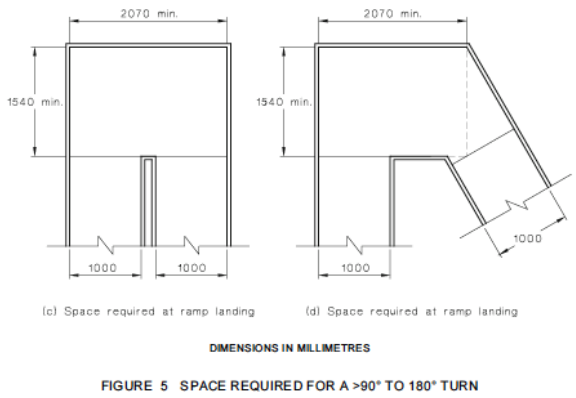



Figure 3 – Fig.5 Section 6 AS1428.1 2009

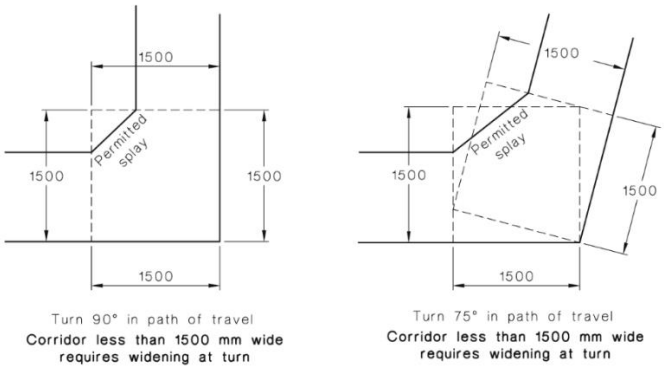



Figure 4 – Fig.4 Section 6 AS1428.1 2009

***Compliance:*** The documentation provided indicates that compliance is capable of being achieved.

### 3.2.5. Set-down Areas

There is a set down area at each parking level associated with the travelator lobbies

If a kerb is provided, separating the drop-off area from the pavement, a compliant kerb ramp will need to be provided. The detailing of the parallel set-down zone will need to satisfy the provisions of AS2890.6:2009.

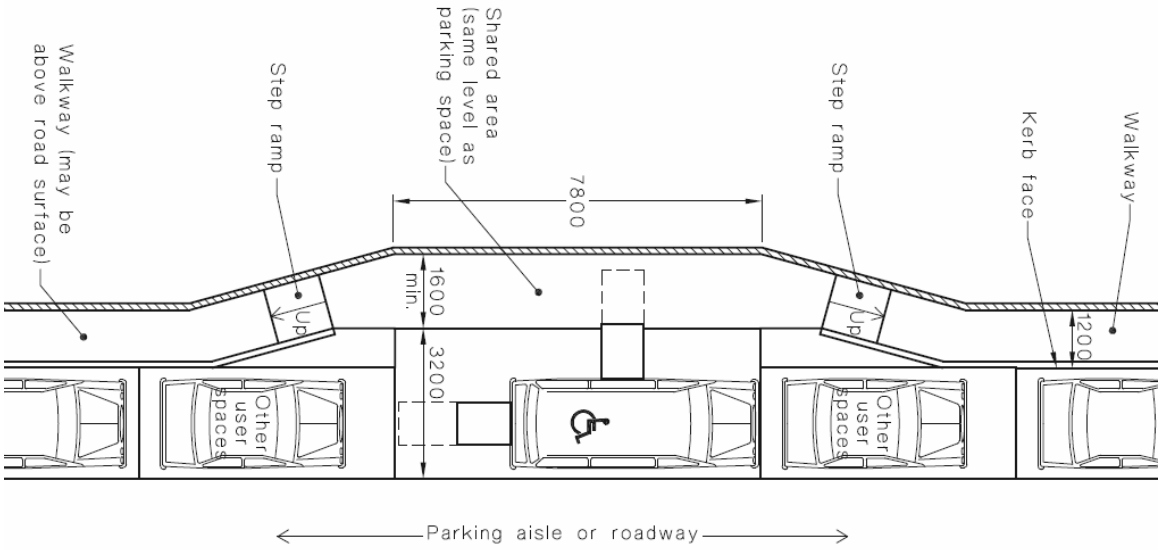



Figure 5 – Extract from AS2890.6 outlining accessible requirements for parallel parking.

If the set down is flush with the pavement, tactile indicators and bollards are required as per Figure 2.5B of AS1428.4.1:2009:

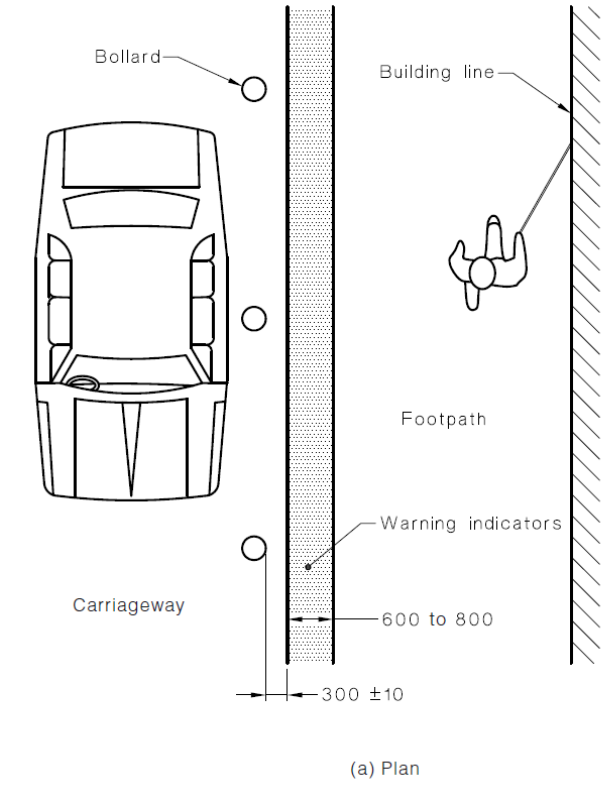



Figure 6 – Extract from AS1428.4.1:2009 – Figure 2.5B

For details on kerb ramp requirements refer to section Walkways, Ramps & Landings in this report.

| | |
|---|---|
| ***3.2.5.*** | ***Set-down Areas*** The detailed construction documentation yet to be prepared for this project will need to be detail the carpark setdown areas associated with the travelator lobbies. If the walkway is flush with the driveway Bollards and TGSIs will need to be detailed. If a kerb is provided, then 1:8 kerb ramps will need to be provided to provide accessible access. |

### 3.2.6. Pavement Luminance Contrast

Where there is alignment between the pavement and driveway, as a minimum, the luminance contrast between the finishes will need to be 30%.

| | |
|---|---|
| ***3.2.6.*** | ***Pavement Luminance Contrast*** The selection of pavement finishes will be undertaken as part of the detailed construction documentation to be prepared for this project. If the walkway is flush with the driveway, it will be necessary to ensure that there is a 30% luminance contrast differentiation between the walkway and the driveway. |

## 3.3. Visual Indicators on Glazing

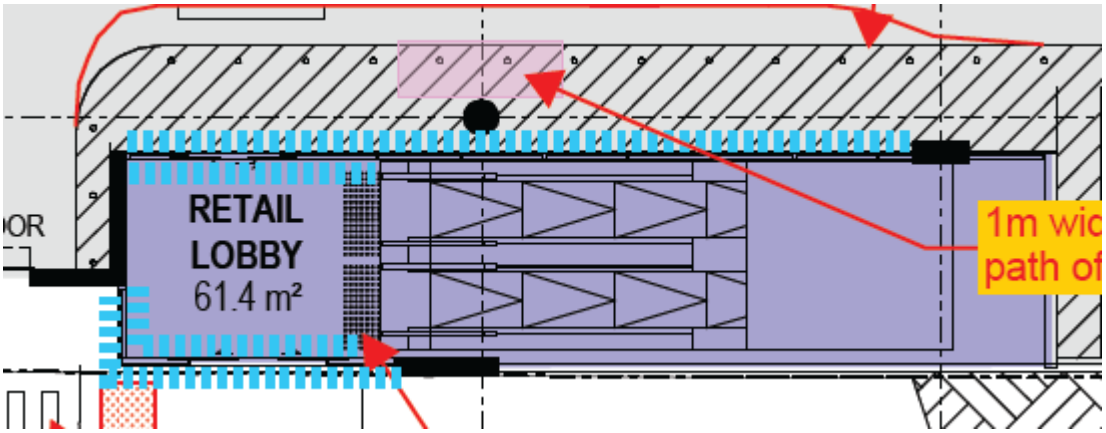
| | |
|---|---|
| NCC Reference: | D3.2 Access to buildings |
| | D3.3 Parts of buildings to be accessible |
| Australian Standard Reference: | Clause 6.6 (Visual Indicators on Glazing) of AS1428.1 2009 |

### 3.3.1. Visual Indicators

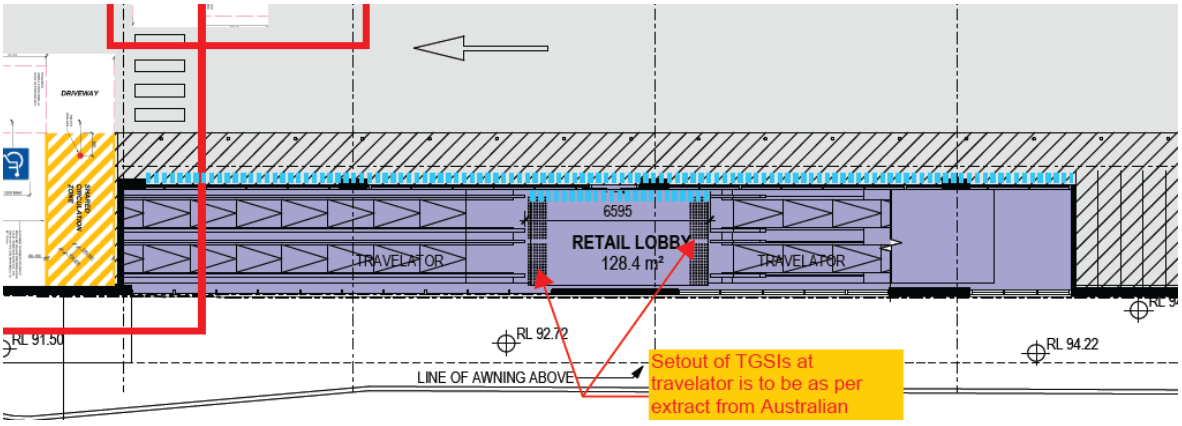
The design proposes full heigh glazing associated with the accessible path of travel within this development.

The detailed documentation yet to be undertaken will detail the glazing framing systems.

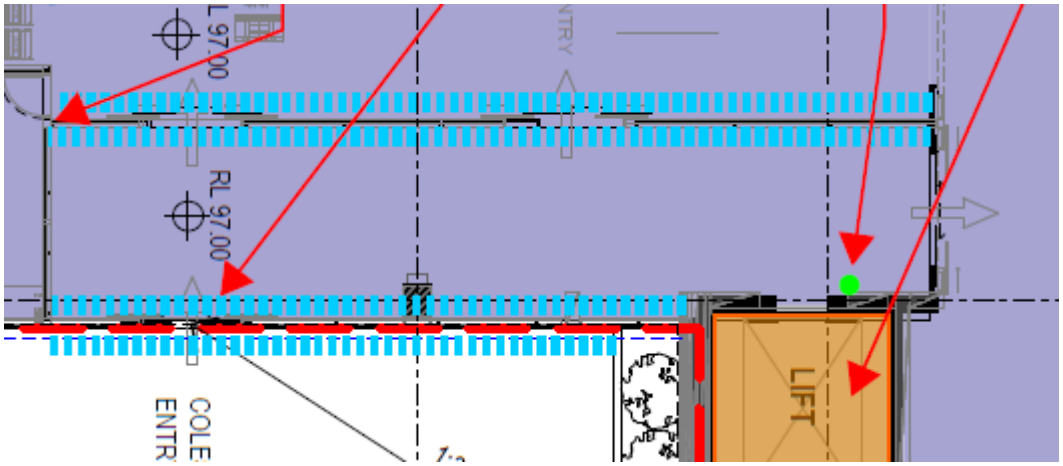
The following extracts from the plans indicate the locations where visual indicators will need to be applied to full heigh glazing. In addition to these locations the lobby doors provided within the residential component of the development will need to be reviewed.



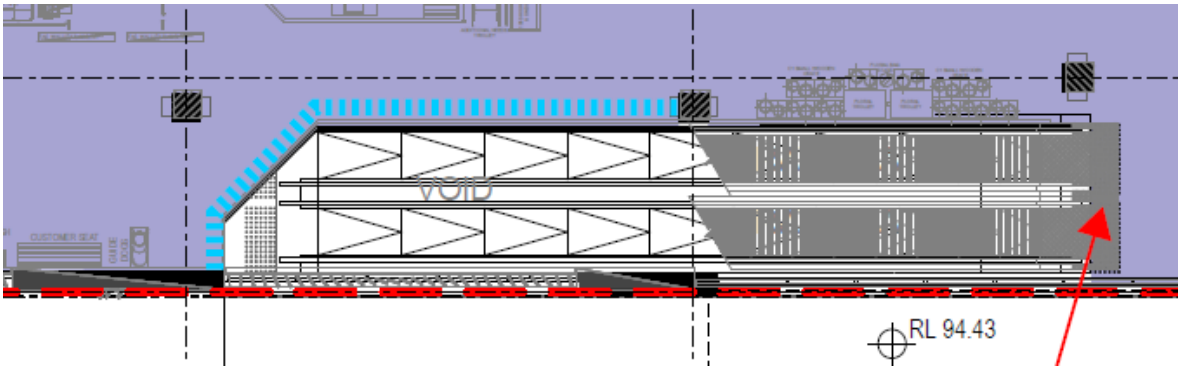

*Travelator lobby Lower Ground 2*



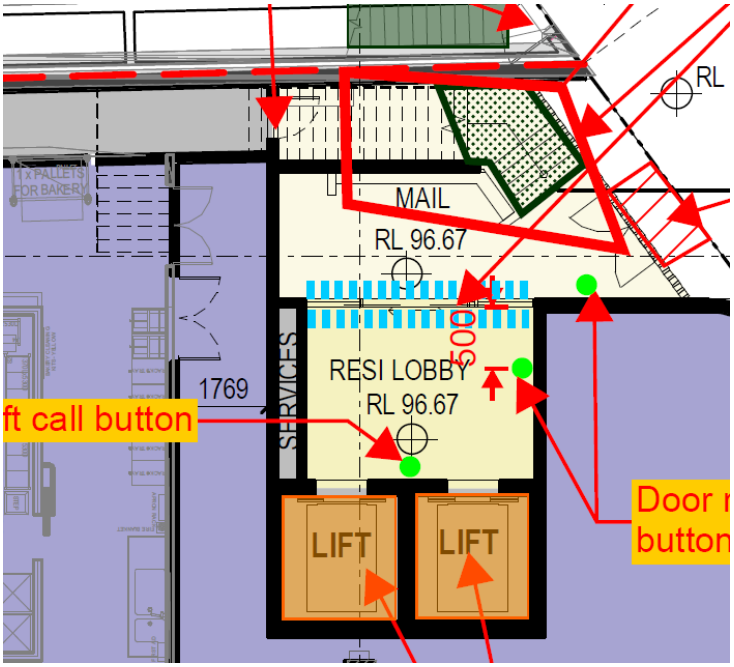

*Travelator lobby Lower Ground 1*



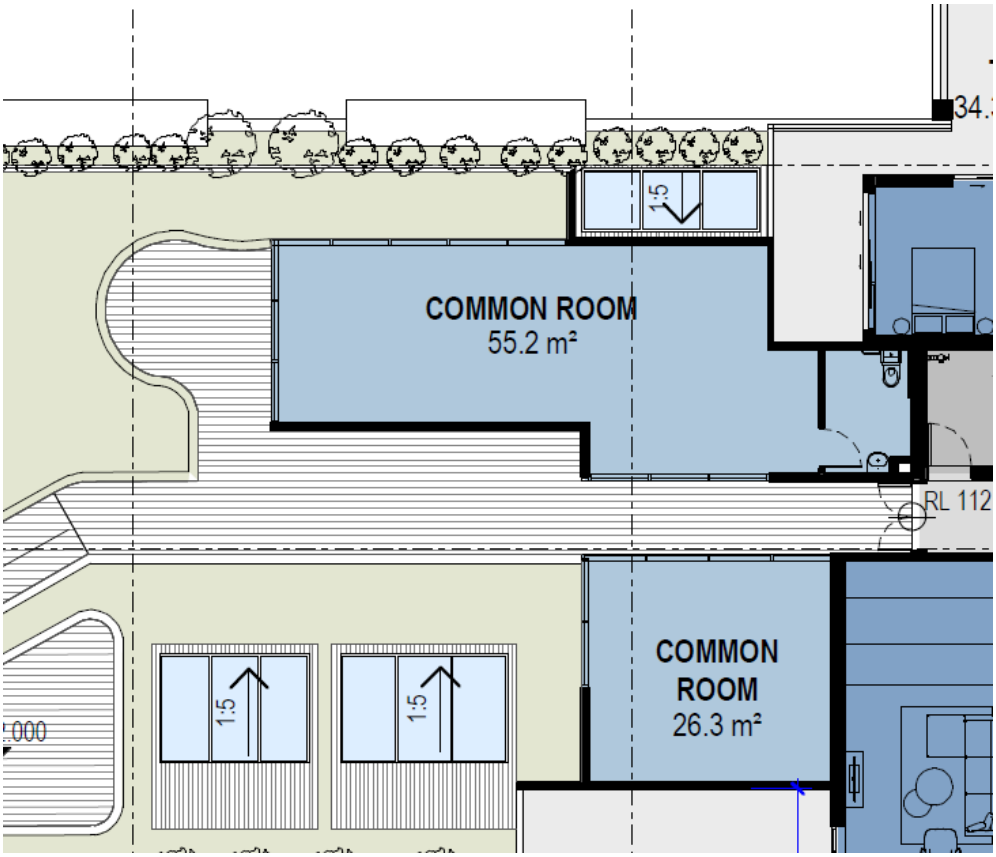

*COLES Entry Ground level*




*Travelator lobby Ground Level*




*Residential Lobby Ground Level*




*Common Rooms Level 4*

| | |
|---|---|
| ***3.3.1.*** | ***Visual Indicators*** The detailed construction documentation yet to be prepared for this project will need to be provided, detailing the application of visual Indicators where full-height glazing is proposed to any glazed wall or door associated with the accessible path of travel within this development. |

### 3.3.2. 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.*

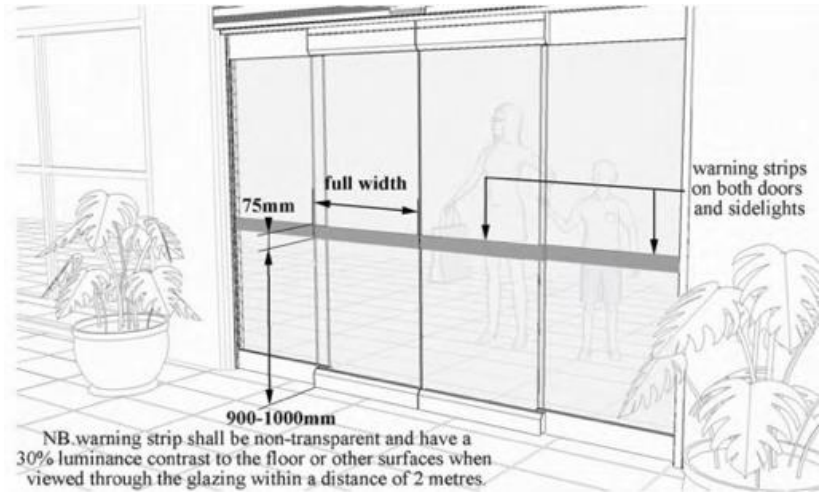
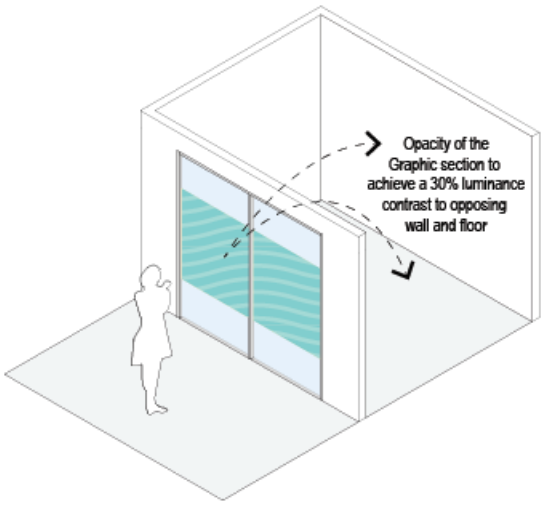
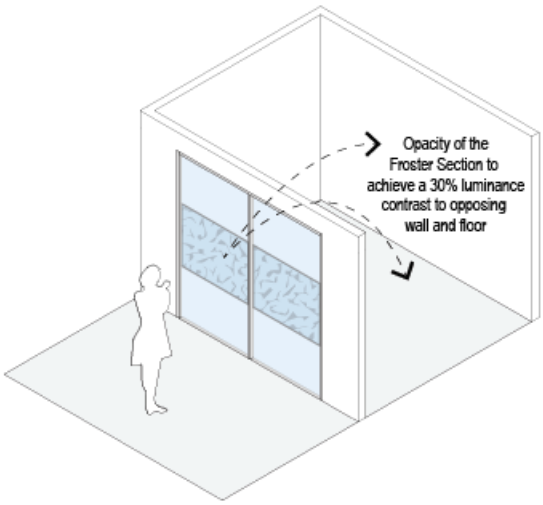



*Figure 7 – Diag.4 DE-IG02 2013*




*Full-height glazing with Graphic Visual Indicators* ***Not Required***




*Full-height glazing with Frosted Section Visual Indicators* ***Not Required***

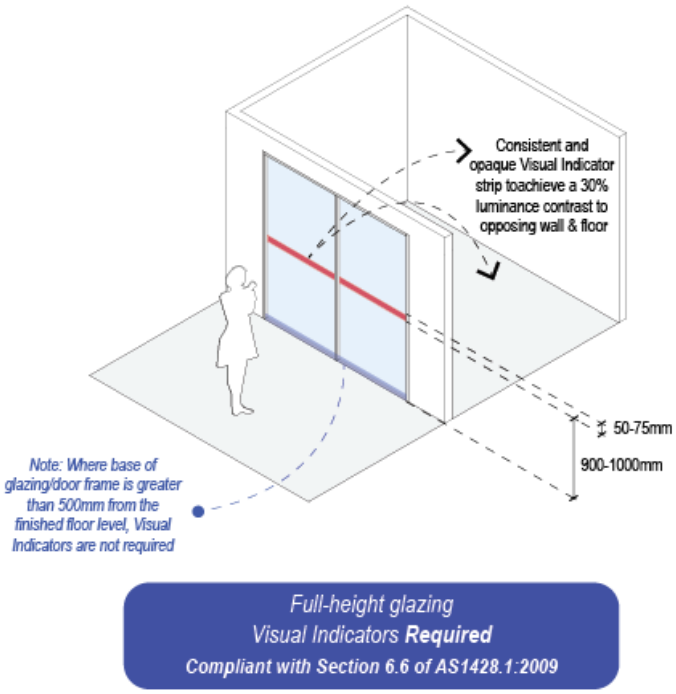
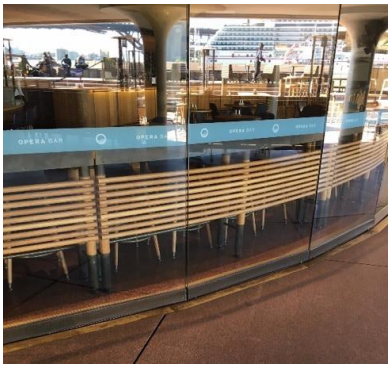


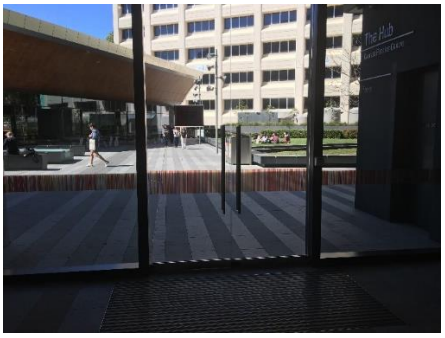

*Figure 8 – Visual Indicators Summary Sketch - iAccess Consultants*

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.

| | | |
|---|---|---|
|  *Luminance contrast is not achieved due to glare and shadow cast.* |  *Luminance contrast is not achieved due to floor finish colour.* |  *Luminance contrast is not achieved due to shadow cast.* |

## 3.4. Floor or Ground Surfaces

NCC Reference: NCC Table D2.14

Australian Standard Reference: Clause 7 of AS1428.1:2009

HB198:2014 (slip resistance)

### 3.4.1. Slip Resistance

The slip resistance of the floor finishes will need to satisfy the minimum requirements of NCC Table 2.14 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 D2.14 | 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 | Additional Information to be provided |
| Wet area / sanitary facilities | | P3/R10 | Additional Information to be provided |

***3.4.1. Slip Resistance:*** Future construction documentation will need to be provided, detailing the various floor finishes and the respective slip-resistance ratings.

### 3.4.2. 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 D3.3 (g) & (h) and
- AS1428.1:2009 Clause 7.4

Clause 7.4.1 of AS1428.1:2009 states:

> *Where carpets or any soft flexible materials are used on the ground or floor surface—*
>
> *(a) the pile height or pile thickness shall not exceed 6 mm and the carpet backing thickness shall not exceed 4 mm;*
>
> *(b) exposed edges of floor covering shall be fastened to the floor surface and shall have a trim along the entire length of any exposed edge; and*
>
> *(c) at the leading edges, carpet trims and any soft flexible materials shall have a vertical face no higher than 3 mm or a rounded bevelled edge no higher than 5 mm or above that height a gradient of 1 in 8 up to a total maximum height of 10 mm*

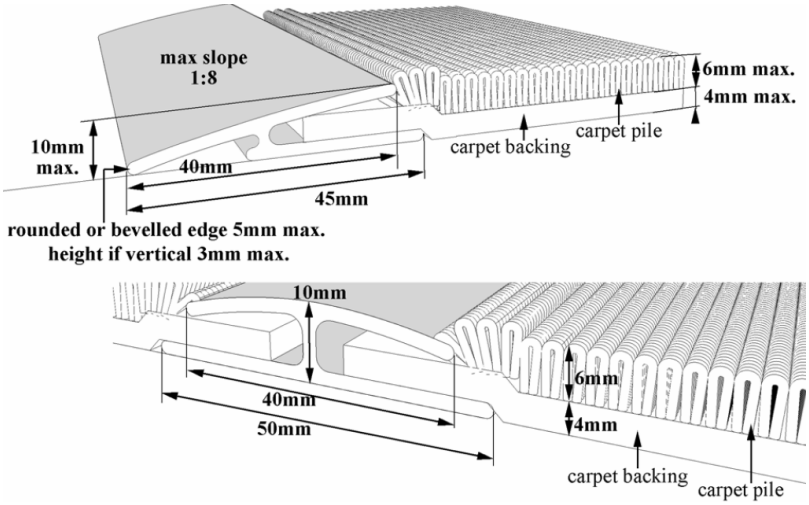



*Figure 9 – Examples of carpet joints on an accessible path of travel*

| | |
|---|---|
| ***3.4.2.*** | ***Carpet*** Future construction documentation will need to be provided nominating the pile heights and the detailing of the junctions between carpet and adjacent floor finishes. |

### 3.4.3. Floor transitions

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

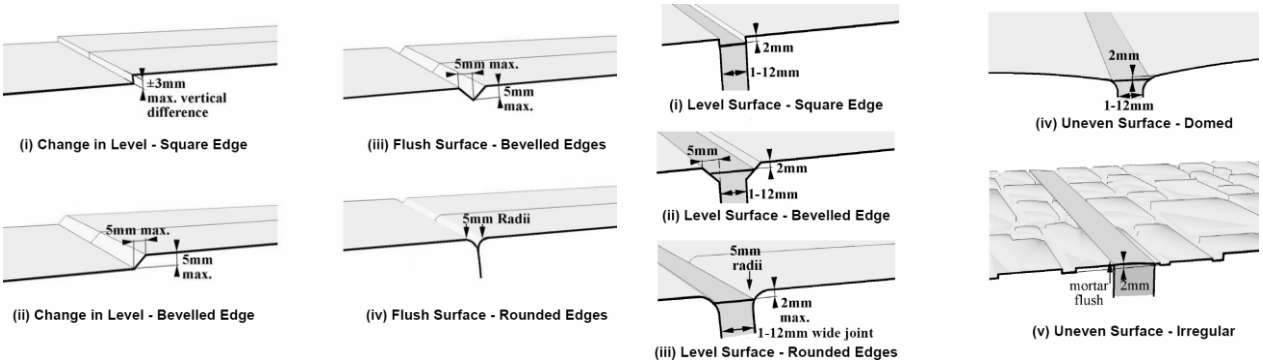



Figure 10 – diagrams indicating the acceptable tolerances between pavement finishes

***3.4.3. Floor transitions -*** Future construction documentation will need to be provided, detailing the various floor finishes and their respective transitions. Compliance with these requirements is achievable.

### 3.4.4. Recessed Matting

The design may propose the installation of recessed matting.

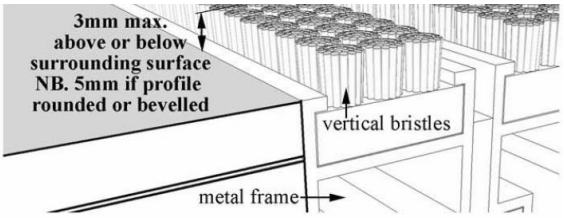
The installation will need to satisfy the following requirements from Clause 7.4.2 of AS1428.1:2009

*Matting recessed within a continuous accessible path of travel—*

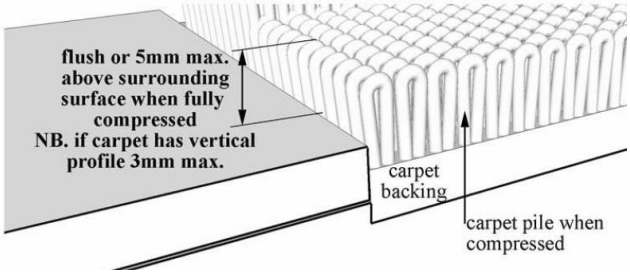
*(a) where of metal and bristle type construction or similar, its surface shall be no more 3 mm if vertical or 5 mm if rounded or bevelled, above or below the surrounding surface; and*

*(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.*

**Recessed Metal and Bristle Matting**




**Recessed Carpet Matting**




***3.4.4. Recessed Matting*** Future construction documentation will need to be provided nominating the specification for the mat and the detailing of the junctions between the mat and adjacent floor finishes.

### 3.4.5. Grated Drains

Any grated drains located on any paths of travel will need to be fitted with compliant heel guard grates (Clause 7.5).

> ***7.5 Grates***
>
> *Grates shall comply with the following:*
>
> *(a) Circular openings shall be not greater than 13 mm in diameter.*
>
> *(b) Slotted openings shall be not greater than 13 mm wide and be oriented so that the long dimension is transverse to the dominant direction of travel.*

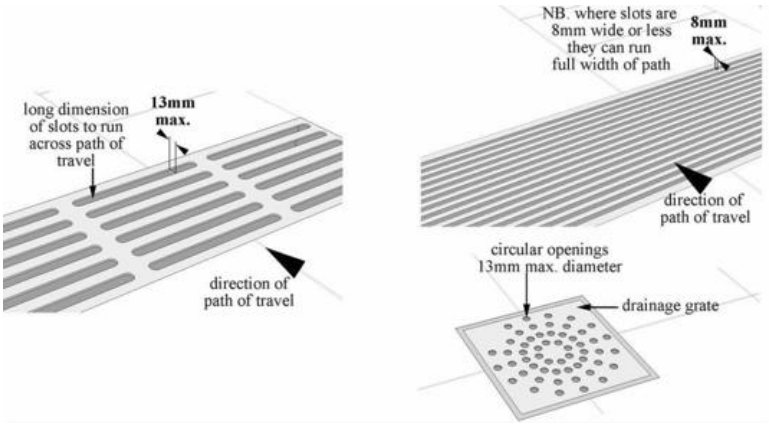



*Figure 11 –Diag.7 DE-IG02 2013 – example of heel guard grates*

***3.4.5. Grated drains -*** Future construction documentation will need to be provided, specifying the heel guard grate to be installed.

## 3.5. Statutory Braille Tactile Signage

The requirements are referenced in the following legislation:

| | |
|---|---|
| NCC Reference: | D3.6 Signage |
| | Specification D3.6 |
| Australian Standard Reference: | Clause 8 – Signage, AS1428.4.1 2009 Design for access and mobility - Means to assist the orientation of people with vision impairment. |
| | Clause 16 – Symbols, AS1428.4.2 1992 Design for access and mobility - Enhanced and additional requirements - Buildings and facilities |
| | Clause 17 – Signs, AS1428.4.2 1992 Design for access and mobility - Enhanced and additional requirements - Buildings and facilities |

### 3.5.1. Statutory Braille Tactile Signage

The statutory requirements for Braille tactile signage apply to entrances, toilets, hearing augmentation and exits.

| | |
|---|---|
| ***3.5.1.*** | ***Statutory Braille Tactile Signage*** Details of Braille tactile signage will need to be provided as part of the detailed construction documentation to be prepared for this project |

### 3.5.2. Statutory Signage Requirements

The applicable clauses to the topic of entrances of the NCC Section **D3.6 Signage** states:

*In a building required to be accessible—*

*(a) braille and tactile signage complying with **Specification D3.6** 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.*

### 3.5.3. Exit Signage (Coles tenancy, Parking levels and Residential levels)

Braille tactile 'Exit' signage will need to be provided at each level of the building associated with the fire egress doors.

Examples of Braille Tactile Signage include:


(***Figure 12 – Examples of Braille Tactile Signage from www.brailletactilesigns.com.au)***

signs to be installed on the lift door jambs.

| | |
|---|---|
| ***3.5.3*** | ***Braille Tactile Exit Signage -*** Details of the braille tactile '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. |

### 3.5.4. WC Signage (Coles Tenancy and Level 4 Common room)

Braille tactile WC signage will need to be provided at each sanitary facility entrance located within the Coles tenancy. Presently the design does not include for the provisions of any WC amenities associated with the common rooms located at level 4 of this development.

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.*

| | |
|---|---|
| ***3.5.4*** | ***Braille Tactile WC Signage -*** Details of the braille tactile 'WC' 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. |

### 3.5.5. Lift Signage

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

| | |
|---|---|
| ***3.5.5*** | ***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. |

### 3.5.6. 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%.

| | |
|---|---|
| ***3.5.6*** | ***Luminance & Colour Contrast –*** The specification of the signs will need to be provided for review as part of the detailed construction documentation to be prepared for this project. The specification will need to indicate compliance with the 30% luminance contrast requirements for Braille tactile signs. |

## 3.6. Tactile Indicators (TGSIs)

| | |
|---|---|
| NCC Reference: | D3.8 Tactile Indicators |
| Australian Standard Reference: | Clause 9 (Tactile Ground Surface Indicators (TGSIs) of AS1428.1 2009<br>AS 1428.4.1 2009 Design for access and mobility - Means to assist the orientation of people with vision impairment |

### 3.6.1. TGSIs – Overview

TGSIs will need to be provided to the external circulation stairs and travelator landings in accordance with the requirements of AS1428.4.1:2009.

| | |
|---|---|
| ***Compliance:*** | The documentation provided indicates the placement of TGSIs associated with stairs and kerb ramps in the public domain. The design as proposed is capable of compliance. |

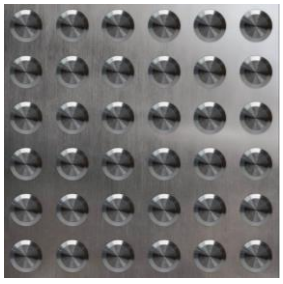
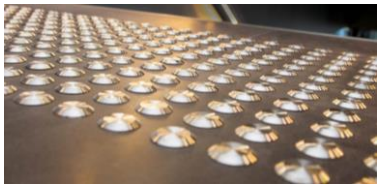
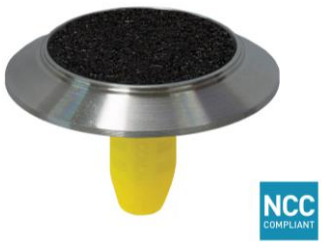
### 3.6.2. TGSIs – Luminance Contrast

Clause 2.2 of AS1428.4.1:2009 requires that luminance contrast be provided between the TGSI 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%.*

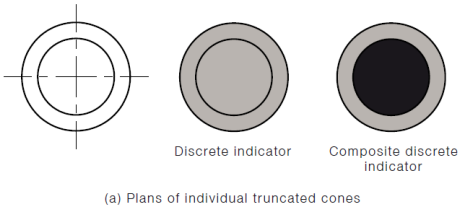
*(iii) Where discrete TGSIs are constructed using two colours or materials, the raised surface shall have a section that has 60% luminance contrast for a diameter of 25 ±1 mm.*

| | | |
|---|---|---|
|  |  |  |
| The above integrated TGSI format requires 30% luminous contrast to adjacent floor finish | The above discrete TGSI format requires 45% luminous contrast to adjacent floor finish | The above two colour/material discrete TGSI format requires 60% luminous contrast to adjacent floor finish |

### 3.6.3. 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.



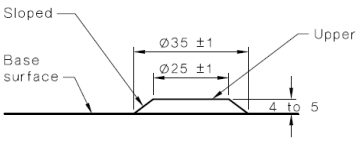




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FIGURE 2.1 DESIGN AND ARRANGEMENT OF WARNING TGSIs

Figure 13 – Fig. 2.1 of AS1428.4.1:2009.

Warning indicators shall be installed as follows:

*(a) For the full width of the path of travel.*

*(b) Perpendicular to the direction of travel when approaching the hazard.*

*(c) Set back 300 +/- 10 mm from the edge of the hazard*

*(d) 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].*

*(e) 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.*

*(f) 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.*

*(g) 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.*

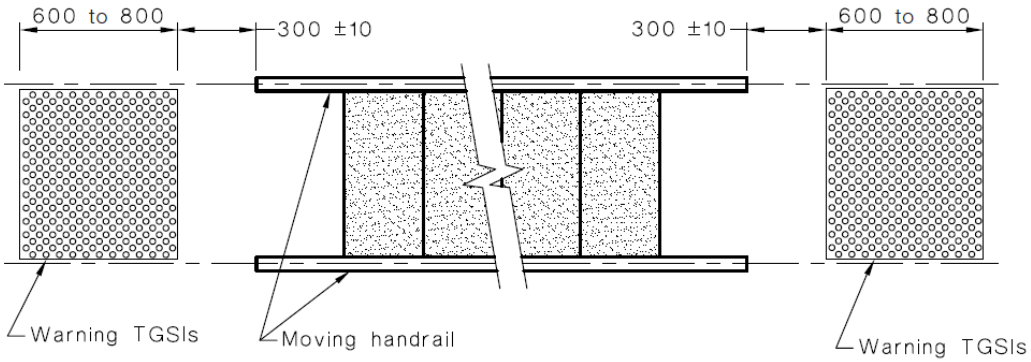
Refer to AS1428.4.1:2009 for detailed information as to the specific placement of TGSIs for varying stairway and ramp configurations.

***3.6.3. TGSIs – Luminance Contrast –*** The selection of the type of TGSI will nominate the luminance contrast level to be achieved. Once the TGSIs have been selected it may be necessary to have testing undertaken to determine compliance. Certification of compliance will need to be provided for the issue of the Occupation Certificate for this project.

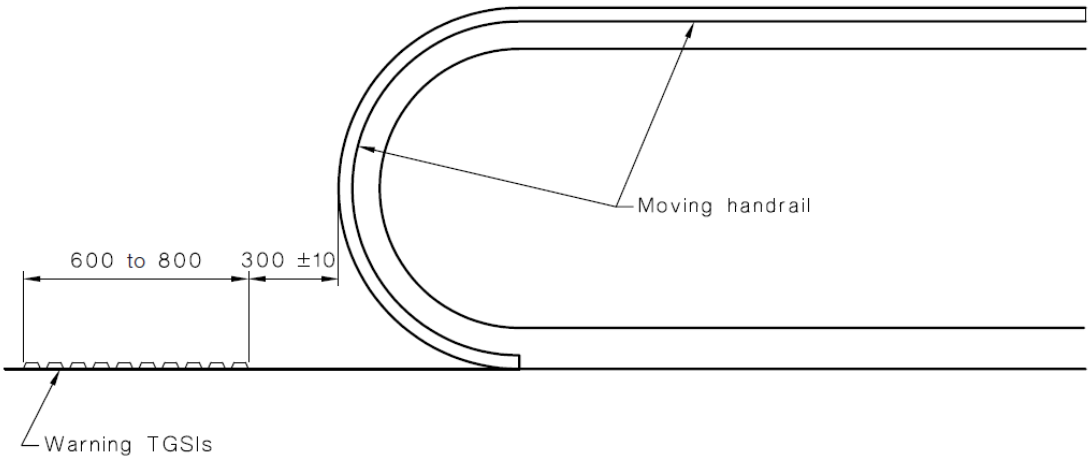
### 3.6.4. Setout of TGSIs associated with travelators (Coles tenancy)

TGSIs to warn people of hazards shall comply with AS/NZS 1428.4.1. TGSIs are to be provided at the top and bottom of travelators. The parking levels of this development are connected to the Coles tenancy via travelators.

The following extracts from AS1428.4.1:2009 indicate the TGSI setout requirements associated with Travelators.




(a) Plan




***3.6.4. Setout of TGSIs associated with Travelators–*** 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 moving handrail and the nominated depth of TGSIs depending on the landing length. The fixing details into the machine covers will need to be provided to ensure that the TGSIs do not vibrate free.

### 3.6.5. 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 requires 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.

***3.6.5.*** ***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.

### 3.6.6. Setout of TGSIs associated with1:14 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 walkways at grade with driveways

TGSIs to warn people of hazards shall comply with AS/NZS 1428.4.1. The setdown areas within the carpark associated with travelator lobbies located with the carpark may be at the same grade. If this is the case TGSIs and bollards will need to be provided. Please refer to Section 3.2.5 of this report for TGSI and Bollard setout information.

## 3.7. Walkways, Ramps and Landings

NCC Reference: NCC Clause D3.3(a)(i)

Australian Standard Reference: Clause 10 of AS 1428.1:2009

---

### 3.7.1. Preamble

This section will reference the statutory different ramp provisions applicable to the scope of works.

### 3.7.2. 1:8 Kerb Ramp (if provided)

The NCC Clause D3.3(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*

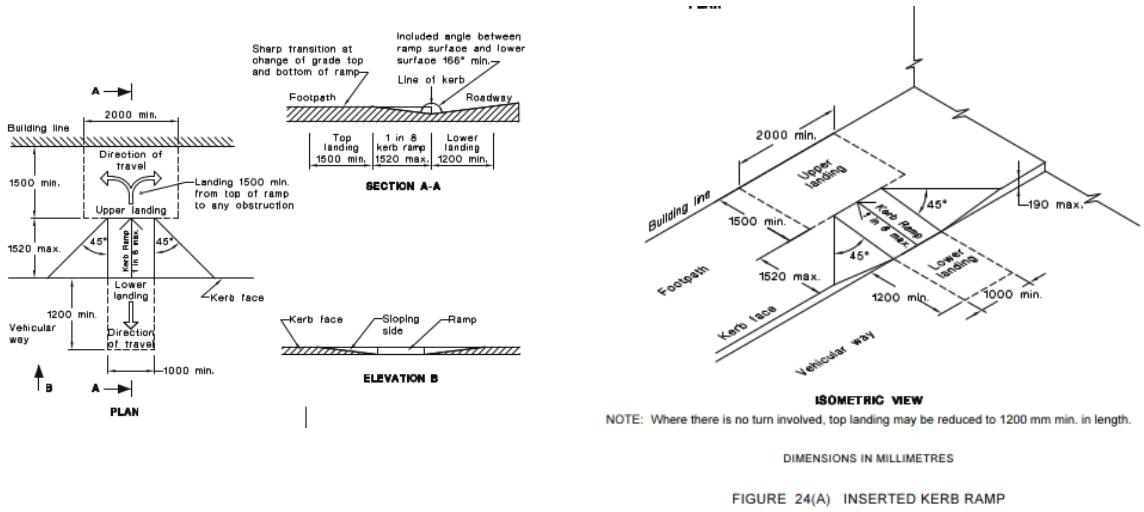



*Figure 13 – Figure 24(A) of AS1428.1:2009*

NOTES:

1 Centre-line of kerb ramps and pedestrian refuges shall align across the road or vehicular driveway within the building/property allotment.
2 Top and bottom of kerb ramps shall be aligned at 90° to path of travel.
3 Top and bottom of kerb ramps shall have a sharp gradient transition.
4 For requirements for tactile ground surface indicators see AS 1428.4.1.
5 For requirements for pedestrian lights and push-button assemblies see AS 1742.14.

(a) 90° road intersection

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FIGURE 23 (in part) ALIGNMENT OF KERB RAMPS

*Figure 14 – Figure 23(A) of AS1428.1:2009*

***3.7.2. 1:8 Kerb Ramp (if provided)*** Details of Kerb Ramps will need to be provided as part of the detailed construction documentation to be prepared for this project.

## 3.8. Stairways

| | |
|---|---|
| NCC Reference: | DP2 |
| | Table D2.14 Slip Resistance Classification |
| | D3.3 Parts of buildings to be accessible |
| | (a)(ii) for a stairway |
| Australian Standard Reference: | Clause 11 Stairways AS1428.1:2009 |

### 3.8.1. Stairs

There are multiple fire and circulation stairs provided within this development.

### 3.8.2. Fire Stairs (Requirements to be satisfied)

The detailing of fire stairs will need to satisfy the requirements of Clauses 11.1 (f) & (g) of AS1428.1:2009.

Specific attention is directed to the following:

*f) At the nosing, each tread shall have a strip not less than 50 mm and not more than 75 mm deep across the full width of the path of travel. The strip may be set back a maximum of 15 mm from the front of the nosing. The strip shall have a minimum luminance contrast of 30% to the background. Where the luminous contrasting strip is affixed to the surface of the tread, any change in level shall comply with Clause 7.2 and Clause 7.3.*

*g) Where the luminance contrasting strip is not set back from the front of the nosing then any area of luminance contrast shall not extend down the riser more than 10 mm*

The detailing of the handrail provided within the fire stairs will need to satisfy the provisions of Clause 11.2(c) which requires that there be no vertical sections in the handrail design and that the handrail follow the angle of the stairway nosing.

The details of the handrail design will need to be provided as part of the Construction Certificate documentation.

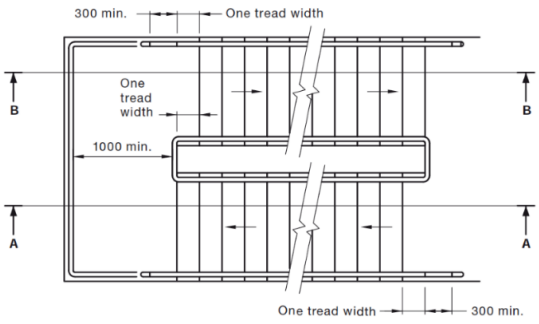



*Figure 14 – Fig. 28 of AS1428.1:2009*

Appropriate exit Braille Tactile Signage is required. Refer to the ‘Signage’ section of this report.

### 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:

a) Compliant handrail designs

b) Compliant handrail extensions to the top and bottom of each flight

c) Non-slip finish to going (Refer to NCC Table D2.14)

d) Non-slip 50-75 nosing fixed to each going

e) Opaque risers

f) 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.)

g) Minimum lighting level of 150 lx to be achieved

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

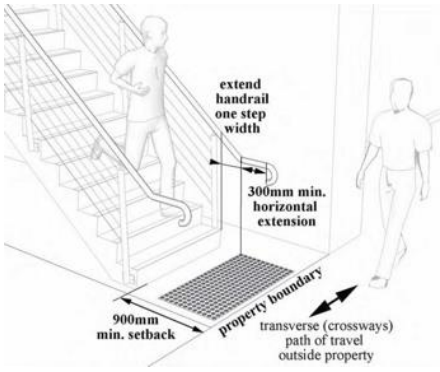



*Figure 15 – Diag.25A DE-IG02 2013*

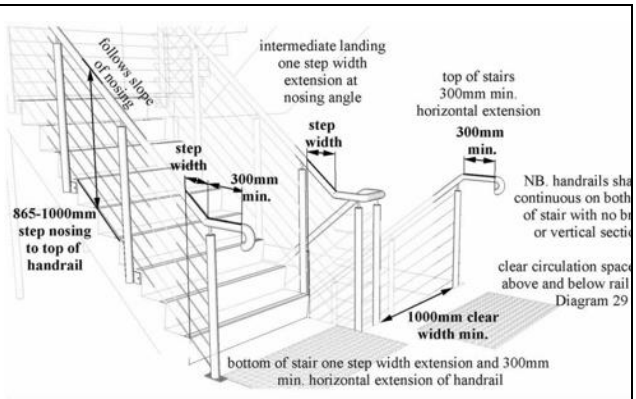



*Figure 16 – Diag.25C DE-IG02 2013*

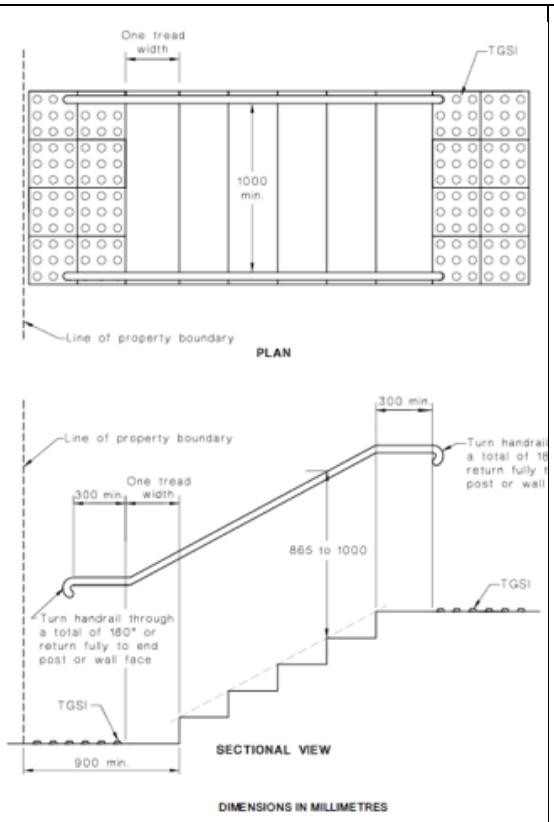



FIGURE 26(A) STAIRWAY LOCATION AND HANDRAIL EXTENSIONS AT BOUNDARY

*Figure 17 – Fig.26A Section 11 AS1428.1 2009*

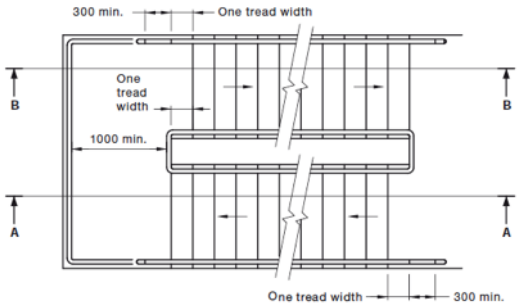



FIGURE 28 (in part) HANDRAILS TO STAIRS WITH INTERMEDIATE LANDINGS

*Figure 18 – Fig.28 Section 11 AS1428.1 2009*

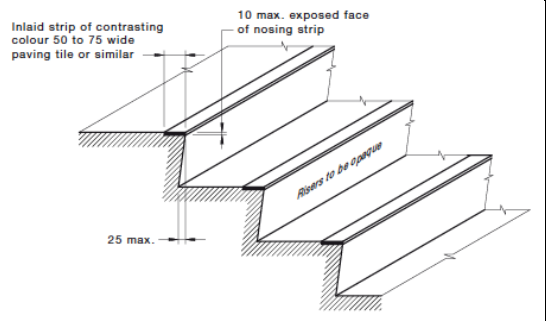



FIGURE 27(B) A TYPICAL STAIR NOSING PROFILE WITH EXPOSED NOSING STRIP

*Figure 19 – Fig.27B Section 11 AS1428.1 2009*

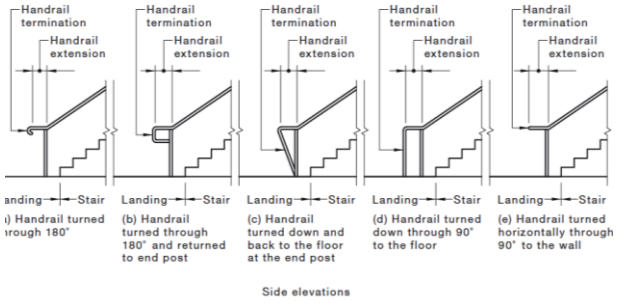



*Figure 20 – Fig.26C Section 11 AS1428.1 2009*

***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.

## 3.9. Handrails

| | |
|---|---|
| NCC Reference: | D3.3 Parts of buildings to be accessible |
| Australian Standard 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, as shown in Figures 26(C) and 26(D).*

*(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, as shown in Figures 29(a) and 29(b).*

*(j) The inside handrail at landings shall always be continuous, as shown in Figure 28(a).*

| | |
|---|---|
| ***3.9.*** | ***Handrails -*** Handrail drawings will need to be provided as part of the detailed construction documentation to be prepared for this project |

## 3.10. Doorways

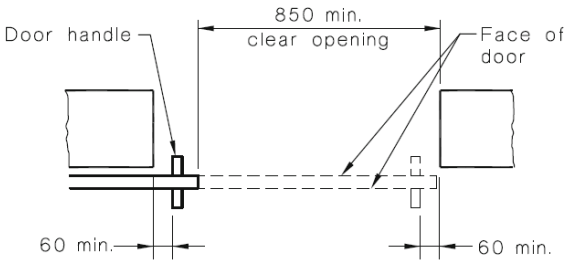
| | |
|---|---|
| NCC Reference: | D3.2 Access to buildings |
| | D3.3 Parts of buildings to be accessible |
| Australian Standard Reference: | Clause 13 (Doorways, Doors and Circulation Spaces at Doorways) of AS1428.1 2009 |

### 3.10.1. Clear Door Width

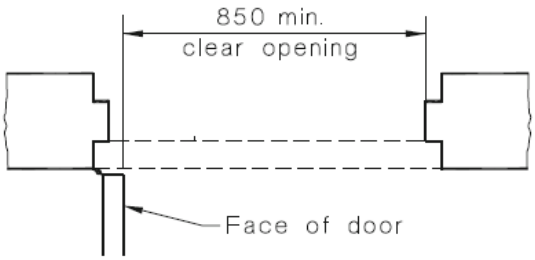
The minimum clear width of all doorways (including swing and sliding doorways) to rooms required to be accessible is to be not less than 850mm clear.

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

Provide confirmation of all door clear open widths.




(c) Surface-mounted sliding door




(a) Swing door

| | |
|---|---|
| ***Compliance:*** | The clear doorway widths have not been assessed. Door schedule will be provided as a part of the detailed construction documentation for assessment at a later stage. |

### 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.

***3.10.2. 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.

### 3.10.3. Access to Garbage chutes and Bin stores within the building

The detailed design of the doorways to the garbage chutes and the recycling bin stores at each level of the building will need to be detailed to incorporate the following minimum requirements:

- The minimum clear width of a single doorway leading to a garbage chute or bin store is to be 850mm clear
- The minimum clear width of the active leaf in a double doorway installation leading to a garbage chute or bin store is to be 850mm clear
- The Circulation at doorways provisions of Clause 13.3 of AS1428.1:2009 apply to these doorways.
- The force to operate the door(s) if fitted with a door closer is to be not more than 20N force
- The luminance contrast at doorways provisions of Clause 13.1 of AS1428.1:2009 apply to these doorways.

***3.10.3. Access to Garbage chutes and Bin stores:*** The detailed documentation to be prepared for this project will need to demonstrate compliance with these provisions.

### 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.

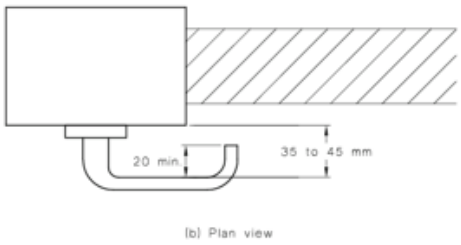



FIGURE 35(A) EXAMPLE OF ACCEPTABLE DOOR HARDWARE FOR HINGED DOORS

*Figure 21 – Fig. 35 Section 13 AS1428.1:2009*

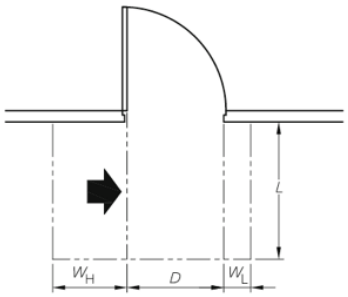
| | |
|---|---|
|  <br>*Lockwood Lever 80* |  <br>*Lockwood Lever 70* |
|  <br>*Lockwood Lever 96* |  <br>*Lockwood Lever 77* |
|  <br>*The above image indicates a privacy latch set provided to accessible WC facilities as viewed from within the facility* |  <br>*The above image indicates a privacy latch set provided to accessible WC facilities as viewed from the outside* |
| *Figure 22 – The above images are examples of compliant hardware* | |

***3.10.4.*** ***Door Controls*** The doorway controls have not been assessed. Schedule will be provided as a part of the detailed construction documentation for assessment.

### 3.10.5. Circulation at Doorways

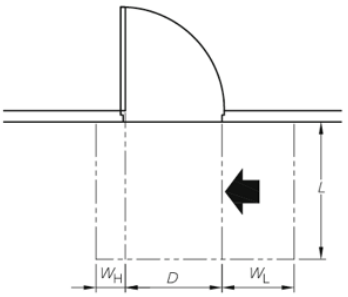
Clause 13.3 of AS1428.1:2009 provides direction as to the required circulation space to approach and enter rooms required to be accessible. Doorways to rooms that are not required to be accessible do not need to comply with the requirements for circulation at doorways.

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



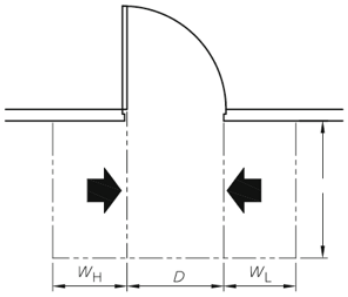

| Dimension $D$ | Dimension $L$ | Dimension $W_H$ | Dimension $W_L$ |
|---|---|---|---|
| 850 | 1220 | 560 | 340 |
| 900 | 1185 | 510 | 340 |
| 950 | 1160 | 460 | 340 |
| 1000 | 1140 | 410 | 340 |

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



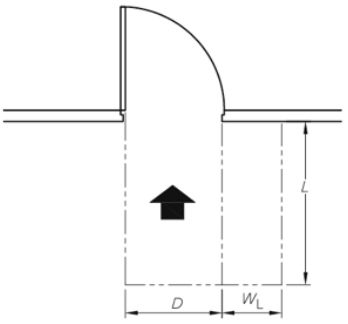

| Dimension $D$ | Dimension $L$ | Dimension $W_H$ | Dimension $W_L$ |
|---|---|---|---|
| 850 | 1240 | 240 | 660 |
| 900 | 1210 | 190 | 660 |
| 950 | 1175 | 140 | 660 |
| 1000 | 1155 | 90 | 660 |

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



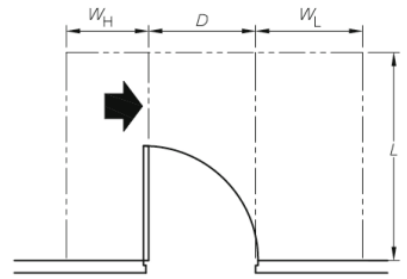

| Dimension $D$ | Dimension $L$ | Dimension $W_H$ | Dimension $W_L$ |
|---|---|---|---|
| 850 | 1240 | 560 | 660 |
| 900 | 1210 | 510 | 660 |
| 950 | 1175 | 460 | 660 |
| 1000 | 1155 | 410 | 660 |

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



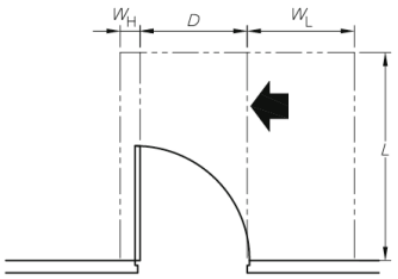

| Dimension $D$ | Dimension $L$ | Dimension $W_H$ | Dimension $W_L$ |
|---|---|---|---|
| 850 | 1450 | 0 | 510 |
| 900 | 1450 | 0 | 510 |
| 950 | 1450 | 0 | 510 |
| 1000 | 1450 | 0 | 510 |

(d) Front approach, door opens away from user



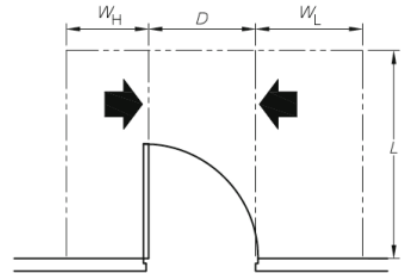

| Dimension D | Dimension L | Dimension $W_H$ | Dimension $W_L$ |
|---|---|---|---|
| 850 | 1670 | 660 | 900 |
| 900 | 1670 | 610 | 900 |
| 950 | 1670 | 560 | 900 |
| 1000 | 1670 | 510 | 900 |

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



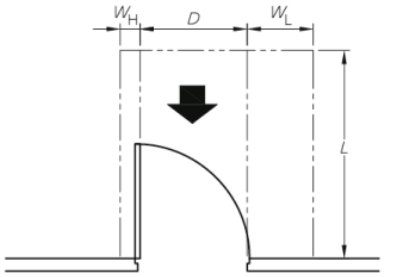

| Dimension D | Dimension L | Dimension $W_H$ | Dimension $W_L$ |
|---|---|---|---|
| 850 | 1670 | 110 | 900 |
| 900 | 1670 | 110 | 900 |
| 950 | 1670 | 110 | 900 |
| 1000 | 1670 | 110 | 900 |

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




| 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 |

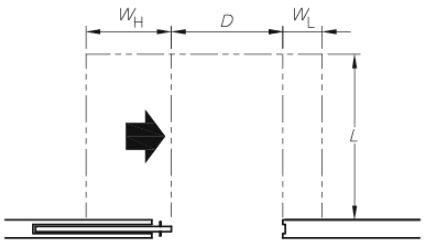
(g) Either side approach, door opens towards user




| Dimension D | Dimension L | Dimension $W_H$ | Dimension $W_L$ |
|---|---|---|---|
| 850 | 1450 | 110 | 530 |
| 900 | 1450 | 110 | 530 |
| 950 | 1450 | 110 | 530 |
| 1000 | 1450 | 110 | 530 |

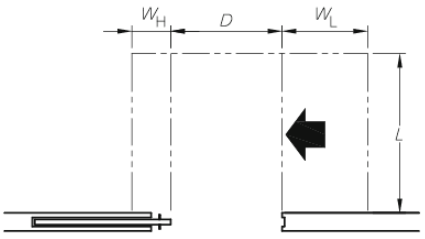
(h) Front approach, door opens towards user

*Figure 23 – Figure 31 of AS1428.1:2009*



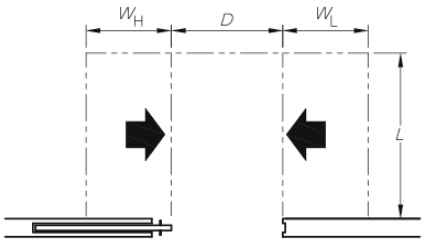

| Dimension D | Dimension L | Dimension $W_H$ | Dimension $W_L$ |
|---|---|---|---|
| 850 | 1280 | 660 | 395 |
| 900 | 1280 | 610 | 395 |
| 950 | 1280 | 560 | 395 |
| 1000 | 1280 | 510 | 395 |

(a) Slide-side approach



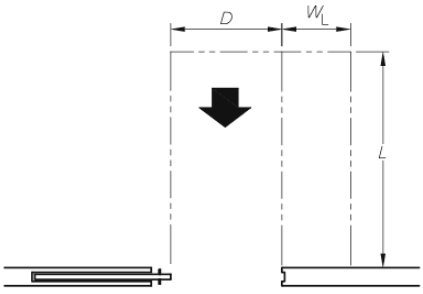

| Dimension D | Dimension L | Dimension $W_H$ | Dimension $W_L$ |
|---|---|---|---|
| 850 | 1230 | 185 | 660 |
| 900 | 1230 | 180 | 660 |
| 950 | 1230 | 180 | 660 |
| 1000 | 1230 | 180 | 660 |

(b) Latch-side approach




| Dimension D | Dimension L | Dimension $W_H$ | Dimension $W_L$ |
|---|---|---|---|
| 850 | 1280 | 660 | 660 |
| 900 | 1280 | 610 | 660 |
| 950 | 1280 | 560 | 660 |
| 1000 | 1280 | 510 | 660 |

(c) Either side approach




| Dimension D | Dimension L | Dimension $W_H$ | Dimension $W_L$ |
|---|---|---|---|
| 850 | 1450 | 0 | 530 |
| 900 | 1450 | 0 | 530 |
| 950 | 1450 | 0 | 530 |
| 1000 | 1450 | 0 | 530 |

(d) Front approach

*Figure 24 – Figure 32 of AS1428.1:2009*

***3.10.5. Circulation at doorways –*** The detailed construction certificate will need to detail the circulation at doorways within the accessible areas of the Coles tenancy, the carpark, the common areas on level 4 and the approach to the front door of every SOU provided within this development.

## 3.10.6. Door Closers

Where door closers are fitted to doors, other than fire doors associated with the fire stairs, and the entry doors to SOUs, 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 –***Certification of compliance 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. The following photograph is an example of a level threshold transition.

*Figure 25 – Photograph of door threshold*

***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

| | |
|---|---|
| Australian Standard Reference: | Clause 14 (Switches and General Purpose Outlets) of AS1428.1 2009 |
| Requirement to be Satisfied: | 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. |

### 3.11.1. General

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

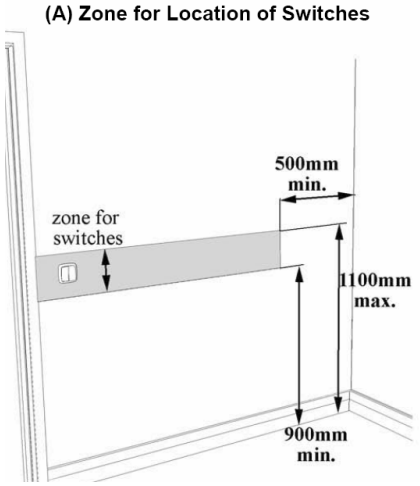
### 3.11.2. Video Intercoms

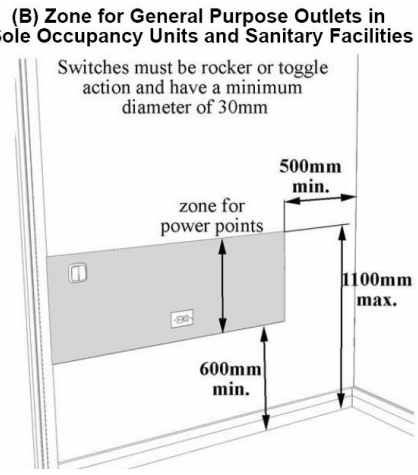
Any video intercom units will need to be installed in accordance with the manufacturer's instructions. The video intercom unit will need to be installed not closer than 500mm to an internal corner.

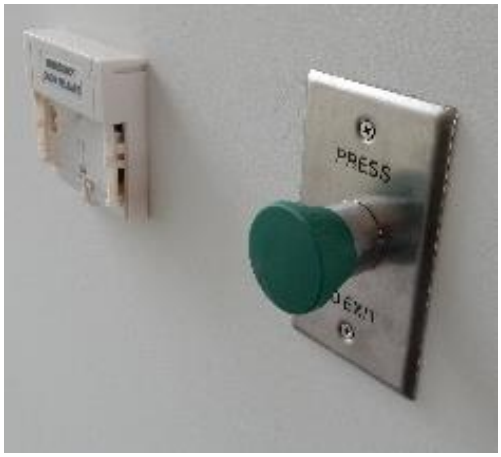
### 3.11.3. Access Control

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.




***3.11. Switches*** The detailing of switches will need to be provided as part of the detailed construction documentation to be prepared for this project.

## 3.12. Vertical transport

| | |
|---|---|
| NCC Reference: | EP3.4 Lift access for people with a disability |
| | E3.6 Passenger Lifts |
| Australian Standard Reference: | AS1735.12 2020 Lifts, Escalators and Moving Walks |

### 3.12.1. Lifts - Overview

The development includes multiple passenger lift connecting the levels of this building.

The detailing of the lift cars will need to satisfy the requirements of NCC Clause E3.6, the provisions of AS1735.12.

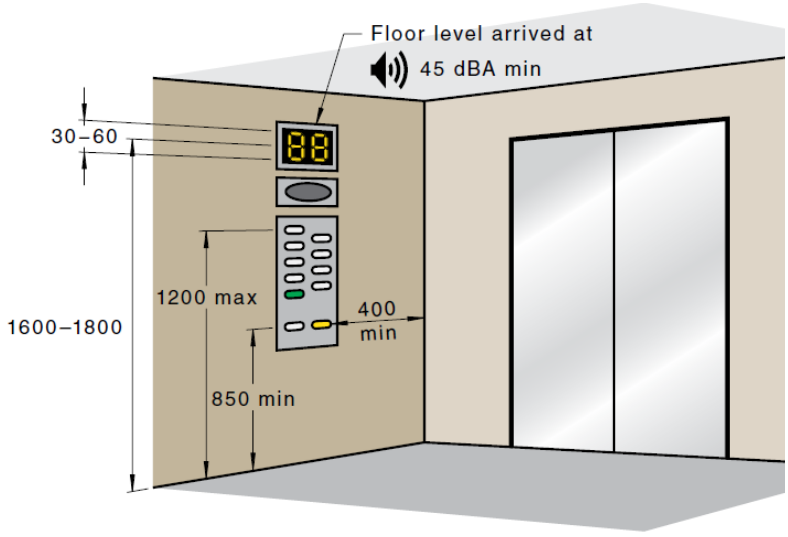
The provision of a lift service designed to the provisions of AS1735.12:2020 will address the Categories of Disability considered at Annex A of AS1735.12.

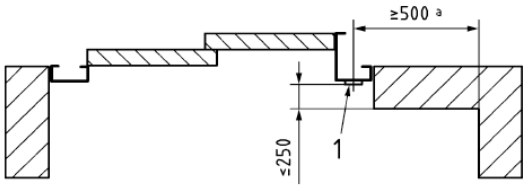
This service is not intended to be a Destination Control System.

### 3.12.2. 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.

<table>
<tr><th>Cl</th><th>Requirement</th><th>Status</th></tr>
<tr><td>5.1.2</td><td>Luminance Contrast (comply with Table 2)<br>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<br>(60 recommended)</td><td>45° above horizontal</td><td>30<br>(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<br>(60 recommended)</td><td>Perpendicular</td><td>-</td><td>-</td></tr>
</table></td><td>Additional Information to be provided</td></tr>
<tr><td>5.1.3</td><td>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.</td><td>Additional Information to be provided</td></tr>
<tr><td>5.2.1</td><td>The clear opening door width shall be at least 900mm for Type 2 cars</td><td>Additional Information to be provided</td></tr>
<tr><td>5.2.2</td><td>Minimum door dwell time – 6s</td><td>Additional Information to be provided</td></tr>
<tr><td>5.3.1</td><td>Table 3 Minimum car dimensions - Type 2 lift car - 1100 x 1400mm (630kg)<br>Car decorations that reduce the minimum car dimensions shall not exceed 15mm in thickness.<br>Any protruding decorations shall not extend below 800mm AFFL.</td><td>Additional Information to be provided</td></tr>
</table>

| Cl | Requirement | Status |
|---|---|---|
| 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)<br>  <br><br>**Figure ZA.1 — In car control station** | Additional Information to be provided |

| Cl | Requirement | Status |
|---|---|---|
| 5.4.2.2 | Landing control devices<br>The minimum setout of landing control devices is to be as follows:<br>  <br><br>**Key**<br>1 landing button<br>a preferably 700<br>**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.<br>  | Additional Information to be provided |
| ZA.6 | Lift identification sign content shall be in accordance with AS1428.4.2. | Additional Information to be provided |

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

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

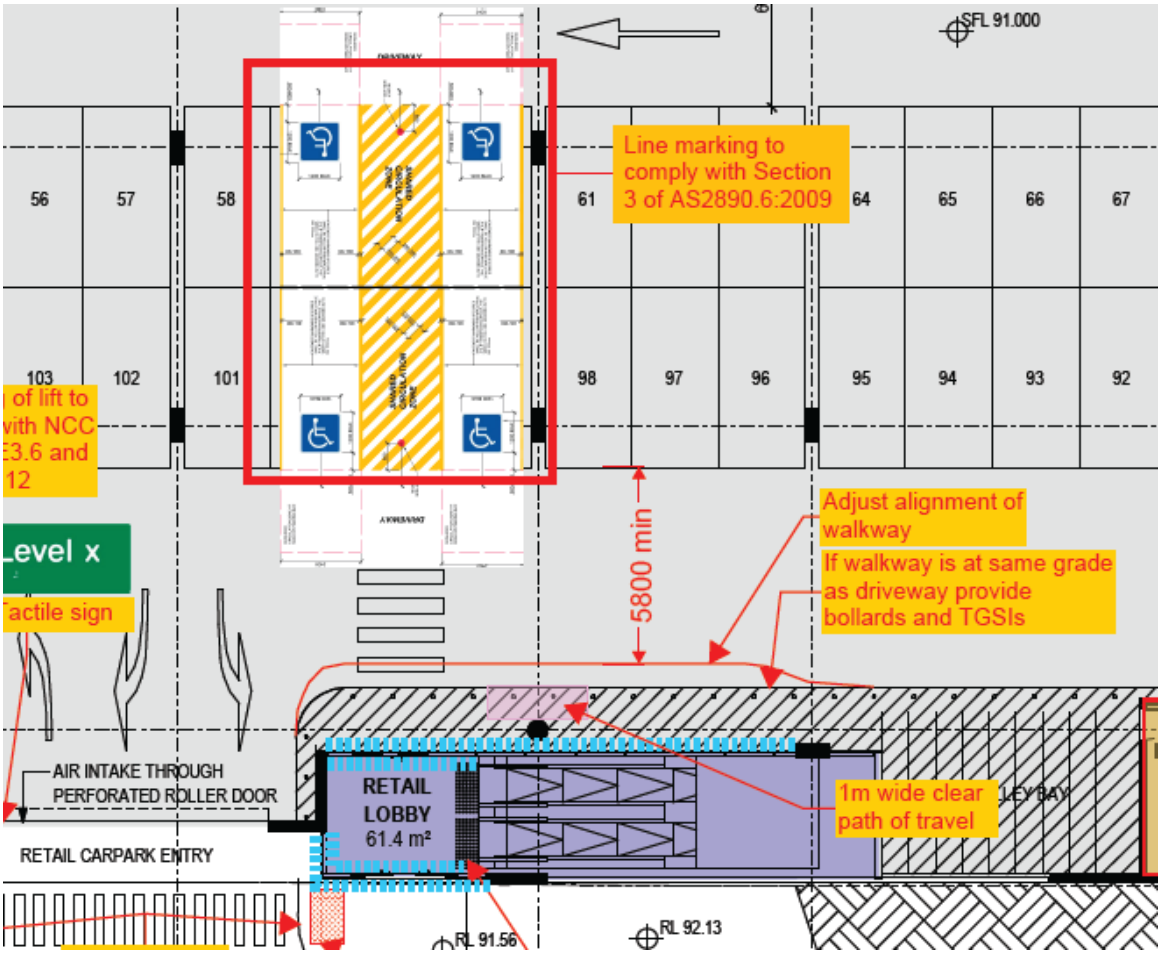
***3.12.2 Vertical transport -*** A lift installation certificate referencing the NCC performance requirement of EP4, NCC Clause E3.6 and AS1735.12:2020 will need to be provided for the issue of the OC Access Installation Certificate.

## 3.13. Carparking

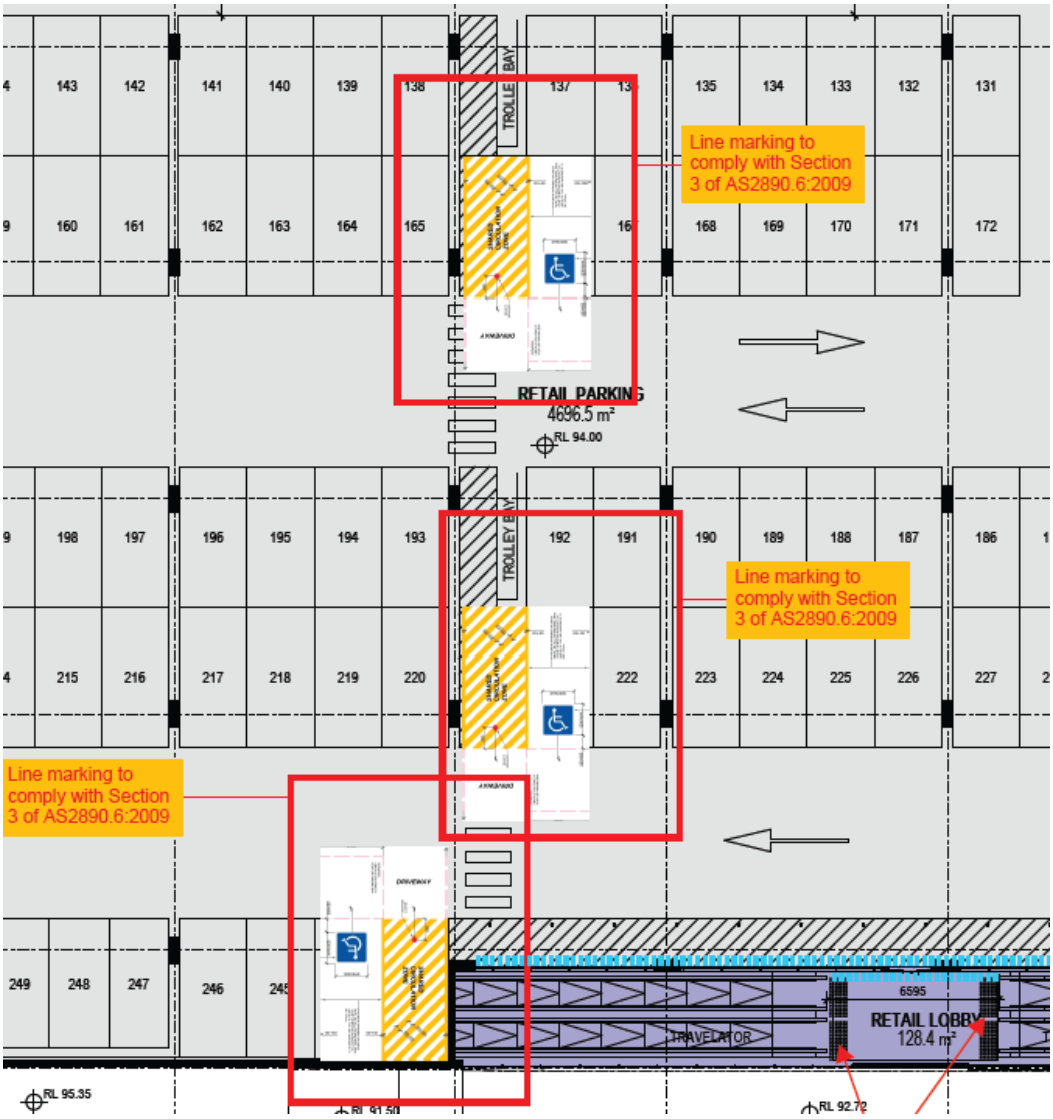
| | |
|---|---|
| NCC Reference: | DP1(a)(i) Access for people with a disability |
| | DP8(a) and (b) Carparking for people with a disability |
| | D3.5 Accessible Parking |
| Australian Standard Reference: | AS 2890.6:2009 Carparking |
| | AS4299:1995 Adaptable Housing |

### 3.13.1. Accessible Carparking – Retail

Accessible parking spaces in accordance with the provisions of NCC Table D3.5 have been provided. The sizing and detailing of the retail accessible parking spaces is in accordance with AS2890.6:2009.




Extract from Lower Ground Floor 2 Plan




Extract from Lower Ground Floor 2 Plan

***Compliance:*** Accessible carparking is capable of achieving compliance.

***3.13.1. Accessible Carparking – Retail -*** Further details will need to be provided as a part of construction documentation to be prepared for this project.

### 3.13.2. Accessible Carparking – Residential

Accessible parking spaces in accordance with the provisions of Clause 3.7.2 (3.8 x 5.4m) of ASA4299:1995 have been provided.

### 3.13.3. Carparking – Parking Bay size

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

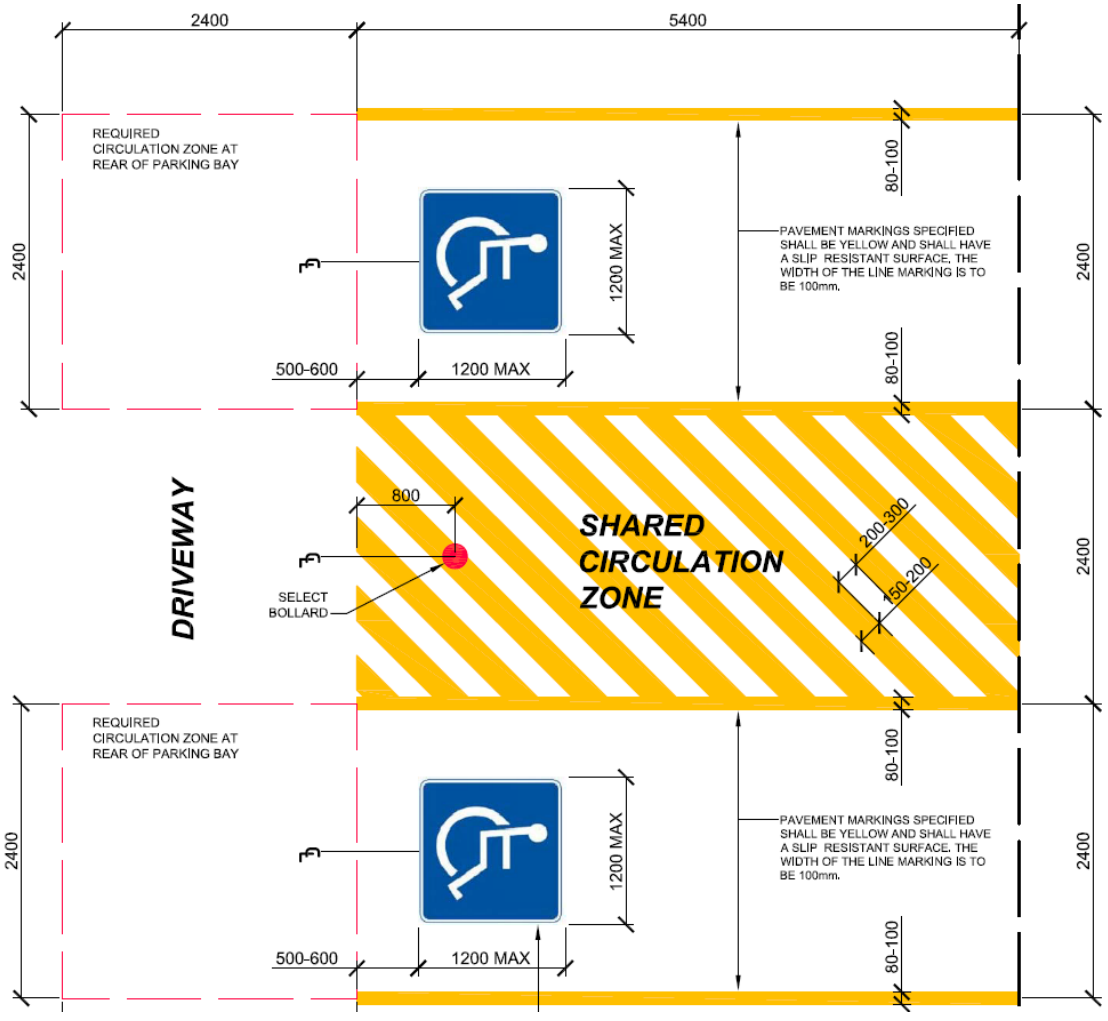
| | |
|---|---|
| ***3.13.2.*** | ***Carparking – Parking Bay size –*** The detailed construction Certificate Documentation will need to indicate compliance with this requirement. |

### 3.13.4. Carparking - Linemarking

The line marking associated with the accessible parking spaces 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.

| | |
|---|---|
| ***3.13.3.*** | ***Carparking – Linemarking –*** Linemarking details are to be provided as part of the detailed construction certificate documentation to be prepared for this project. |



### 3.13.5. Carparking – Clearance Aisleway

A 2200mm high clear path of travel is to be provided within the traffic aisle ways of the carpark.

***3.13.4 Carparking – Clearance Aisleway -*** The detailed construction documentation will need to demonstrate compliance with these requirements.

### 3.13.6. Carparking – Clearance parking bays

A clear zone of 2500mm will need to be provided above the accessible parking space, the adjacent shared zone and the shared zone located within the traffic aisle associated with the accessible parking space..

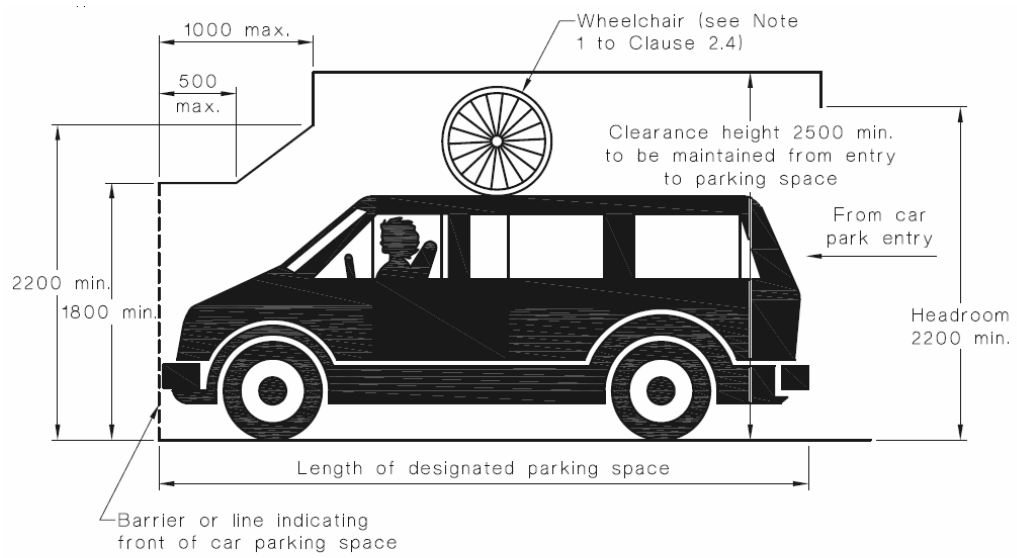



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FIGURE 2.7 HEADROOM REQUIRED ABOVE CAR SPACES FOR PEOPLE WITH DISABILITIES

Figure 26 – Fig. 2.7 of Section 2 AS2890.6 2009

***3.16.5 Carparking – Clearance parking bays -*** The detailed construction documentation will need to demonstrate compliance with these requirements.

## 3.14. Lighting

Australian Standard 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 additional 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 |
| Accessible parking spaces | - | 40lx |

| | | |
|---|---|---|
| **3.14.** | **Lighting** | Information to be provided as part of the documentation to be issued for the OC. |

## 3.15. Unit designs

### 3.15.1. DCP requirements

The development comprises 58 dwellings. Ku-Ring-Gai Council's DCP requires the following concerning the residential component of this development.

- 100% of the dwellings are to achieve a minimum of Silver LHA
- 15% of dwellings (9 dwellings) are to achieve a minimum of Platinum LHA
- 70% of dwellings (41 dwellings) are to be Visitable (AS4299:1995)

### 3.15.2. Silver LHA dwellings

All dwellings within this development will need to satisfy the LHA Silver design requirements.

The table following identify the Silver LHA design guideline requirements to be achieved in this development.

| **1. DWELLING ACCESS** | |
|---|---|
| **SILVER CRITERIA** | **ASSESSMENT** |
| a. Provide a safe and continuous pathway from: | |
| i. the front boundary of the allotment; or | Satisfied |
| ii. a car parking space, where provided, which may include the driveway on the allotment, to an entrance that is level (step- free) as specified in Element 2. | N/A |
| b. The path of travel as referred to in (a) should have a minimum clear width of 1000mm and – | Satisfied |
| i. an even, firm, slip resistant surface; | Satisfied |
| ii. a crossfall of not more than 1:40; | Satisfied |
| iii. a maximum pathway slope of 1:14, with landings provided at no greater than 9m for a 1:14 ramp and no greater than 15m for ramps steeper than 1:20. Landings should be no less than 1200mm in length; and | Satisfied |
| iv. be step-free | Satisfied |
| c. A step ramp may be incorporated at an entrance doorway where there is a change in height of 190mm or less. The step ramp should provide: | N/A |
| i. a maximum gradient of 1:10 | N/A |
| ii. a minimum clear width of 1000mm (please note: width should reflect the pathway width) | N/A |
| iii. a maximum length of 1900mm | N/A |
| Level landings no less than 1200mm in length, exclusive of the swing of the door or gate than opens onto them, must be provided at the head and foot of the ramp | N/A |

| **2. DWELLING ENTRANCE** | |
|---|---|
| **SILVER CRITERIA** | **ASSESSMENT** |
| a. The dwelling should provide an entrance door with - | |
| i. a minimum clear opening width of 820mm; | Satisfied |

| 2. DWELLING ENTRANCE | |
|---|---|
| **SILVER CRITERIA** | **ASSESSMENT** |
| ii. a level (step-free) transition and threshold (maximum vertical tolerance of 5mm between abutting surfaces is allowable provided the lip is rounded or bevelled); and | Satisfied |
| iii. reasonable shelter from the weather. | Satisfied |
| b. A level landing area of at least 1200mm x 1200mm should be provided at the level (step free) entrance door | Satisfied |
| c. Where the threshold at the entrance exceeds 5mm and is less than 56mm, a ramped threshold may be provided (see Figure 1(b)) | N/A |
| d. The level (step-free) entrance should be connected to the safe and continuous pathway as specified in Element 1 | Satisfied |
| The entrance must incorporate waterproofing and termite management requirements as specified in the NCC. | Satisfied |

| 3. INTERNAL DOORS & CORRIDORS | |
|---|---|
| **SILVER CRITERIA** | **ASSESSMENT** |
| a. Doorways to rooms on the entry level used for living, dining, bedroom, bathroom, kitchen, laundry and sanitary compartment purposes should provide | |
| i. a minimum clear opening width of 820mm and | Information to be provided |
| ii. a level transition and threshold (maximum vertical tolerance of 5mm between abutting surfaces is allowable provided the lip is rounded or bevelled). | Satisfied |
| b. Internal corridors/passageways to the doorways referred to in (a) should provide a minimum clear width of 1000mm | Information to be provided with CC |

| 4. TOILET | |
|---|---|
| **SILVER CRITERIA** | **ASSESSEMNT** |
| a. Dwellings should have a toilet on the ground (or entry) level that provides: | |
| i. a minimum clear width of 900mm between the walls of the bathroom if located in a separate room; and | Satisfied |
| ii. a minimum 1200mm clear circulation space forward of the toilet pan exclusive of the swing of the door in accordance with Figure 3(a). | Satisfied |
| b. If the toilet is located within the ground (or entry) level bathroom, the toilet pan should be located in the corner of the room to enable the installation of grabrails | Information to be provided with CC |

| 5. SHOWER | |
|---|---|
| **SILVER CRITERIA** | **ASSESSMENT** |
| a. One bathroom should feature a slip resistant, hobless (step- free) shower recess. Shower screens are permitted provided they can be easily removed at a later date | Satisfied |
| b. The shower recess should be located in the corner of the room to enable the installation of grabrails at a future date | Satisfied |

| 6. REINFORCEMENT OF BATHROOM & TOILET WALLS | |
|---|---|
| **SILVER CRITERIA** | **ASSESSMENT** |
| a. Except for walls constructed of solid masonry or concrete, the walls around the shower, bath (if provided) and toilet should be reinforced to provide a fixing surface for the safe installation of grabrails. | Information to be provided with CC |
| b. The walls around the toilet are to be reinforced by installing:<br>i. noggings with a thickness of at least 25mm in accordance with Figure 6(a); or<br>ii. sheeting with a thickness of at least 12mm in accordance with Figure 6(b). | |
| c. The walls around the bath are to be reinforced by installing:<br>i. noggings with a thickness of at least 25mm in accordance with Figure 7(a); or<br>ii. sheeting with a thickness of at least 12mm in accordance with Figure 7(b). | |
| d. The walls around the hobless shower recess are to be reinforced by installing:<br>i. noggings with a thickness of at least 25mm in accordance with Figure 8(a); or<br>ii. sheeting with a thickness of at least 12mm in accordance with Figure 8(b). | |

| 7. INTERNAL STAIRWAYS | |
|---|---|
| **SILVER CRITERIA** | **ASSESSMENT** |
| a. Stairways in dwellings must feature:<br>i. a continuous handrail on one side of the stairway where there is a rise of more than 1m. | N/A |

### 3.15.3. Platinum LHA dwellings

15% of all dwellings (9 dwellings) within this development will need to satisfy the LHA Platinum design requirements.

## 1 Dwelling Access

| Number | Performance Criteria | Assessment |
|---|---|---|
| 1.1 | Is Access achieved from the site boundary or from a compliant car parking space? | Satisfied |
| 1.2 | If access is provided from the site boundary is this via walkway or ramp | N/A |
| 1.3 | Provide a safe, continuous step-free pathway from the front boundary of the property to an entry door to the dwelling. | Satisfied |

| Number | Performance Criteria | Assessment |
|---|---|---|
| 1.4 | Where the grade of the pathway is under 1:14<br>The path of travel should have a minimum clear width of 1200mm and have:<br>i. no steps;<br>ii. an even, firm, slip resistant surface;<br>iii. a crossfall of not more than 1:40;<br>iv. a maximum pathway slope of 1:14 | Satisfied |
| 1.5 | Where a step ramp is provided.<br>A step ramp may be incorporated at an entrance doorway where there is a change in height of 190mm or less. The step ramp should have a minimum clear width of 1200mm and provide:<br>i. a maximum gradient of 1:10<br>ii. a minimum clear width of 1000mm<br>iii. a maximum length of 1900mm | N/A |
| 1.6 | Where a ramp (any grade of 1:20 or more) is part of the pathway, level landings no less than 1200mm in length, exclusive of the swing of the door or gate than opens onto them, must be provided at the head and foot of the ramp. | N/A |
| 1.7 | The path of travel may be provided via an associated car parking space for the dwelling. Where a car parking space is relied upon as the safe and continuous pathway to the dwelling entrance, the space should incorporate:<br>i. minimum dimensions of at least 3800mm (width) x 6000mm (length);<br>ii. an even, firm and slip resistant surface; and<br>iii. a level surface (1:40 maximum gradient, 1:33 maximum gradient for bitumen). | N/A |
| 1.8 | Additionally, the following is required<br>iv. a vertical clearance over the parking space of at least 2500mm; and<br>v. a covered parking space to ensure protection from the weather. | Information to be provided with CC |

## 2 Dwelling entrance

| Number | Performance Criteria | Assessment |
|---|---|---|
| 2.1 | The dwelling should provide an entrance door with<br>i. a minimum clear opening width of 900mm (see Figure 2(c));<br>ii. a level (step-free) transition and threshold (maximum vertical tolerance of 5mm between abutting surfaces is allowable provided the lip is rounded or bevelled); and<br>iii. reasonable shelter from the weather. | Information to be provided with CC |

| Number | Performance Criteria | Assessment |
|---|---|---|
| 2.2 | A level landing area of at least 1500mm x 1500mm should be provided at the level (step free) entrance door. A level landing area at the entrance door should be provided on the arrival side of the door (i.e. the external side of the door) to allow a person to safely stand and then open the door. | Satisfied |
| 2.3 | Where the threshold at the entrance exceeds 5mm and is less than 56mm, a ramped threshold may be provided (see Figure 1(b)). | N/A |
| 2.4 | The level (step-free) entrance should be connected to the safe and continuous pathway as specified in Element 1. | Satisfied |

## 3 Internal doors and corridors

| Number | Performance Criteria | Assessment |
|---|---|---|
| 3.1 | Doorways to rooms on the entry level used for living, dining, bedroom, bathroom, kitchen, laundry and sanitary compartment purposes should provide:<br>i. a minimum clear opening width of 900mm (see Figure 2©); and<br>ii. a level transition and threshold (maximum vertical tolerance of 5mm between abutting surfaces is allowable provided the lip is rounded or bevelled). | Information to be provided with CC |
| 3.2 | Internal corridors/passageways to the doorways referred to in (a) should provide a minimum clear width of 1200mm.<br>Note: Corridor widths should be measured as described in Clause 6.3 of AS 1428.1 – 2009 | Information to be provided with CC |

## 4 Toilet

| Number | Performance Criteria | Assessment |
|---|---|---|
| 4.1 | Dwellings should have a toilet on the ground (or entry) level that provides:<br>i. a minimum clear width of 1200mm between the walls of the bathroom if located in a separate room; | Information to be provided with CC |
| 4.2 | ii. a minimum 1200mm clear circulation space forward of the toilet pan exclusive of the swing of the door in accordance with Figure 3(a). | Information to be provided with CC |
| 4.3 | iii. The toilet pan should be located in the corner of the room to enable installation of grabrails at a future date. Reinforcement guidelines for walls in bathrooms and toilets are found in element 6. | Information to be provided with CC |
| 4.4 | iv. the toilet seat positioned between 450mm – 460mm from the nearest wall as measured from the centre line of the toilet | Information to be provided with CC |

| Number | Performance Criteria | Assessment |
|---|---|---|
| 4.5 | v. 600mm minimum clearance forward of the cistern measured from the front of the cistern to the front of the toilet seat. 800mm (+/-10mm) clearance is required; and | Information to be provided with CC |
| 4.6 | vi. the height for the seat of between 460mm-480mm above the finished floor level. | Information to be provided with CC |

## 5 Shower

| Number | Performance Criteria | Assessment |
|---|---|---|
| 5.1 | One bathroom should feature a slip resistant, hobless shower recess. Shower screens are permitted provided they can be easily removed at a later date.<br>For hobless specification please see Australian Standard AS3740-3.6. Reinforcement guidelines for walls in bathrooms and toilets are found in element 6. | Information to be provided with CC |
| 5.2 | The shower recess should be located in the corner of the room to enable the installation of grabrails at a future date. | Satisfied |
| 5.3 | The hobless shower recess should be located in a bathroom on the ground (or entry) level; | Satisfied |
| 5.4 | The hobless shower recess described should provide minimum dimensions of 1160mm (width) x 1100mm (length). A level transition and threshold (maximum vertical tolerance of 5mm between abutting surfaces is allowable provided the lip is rounded or bevelled); and | Information to be provided with CC |
| 5.5 | The hobless shower recess described should provide a clear space of at least 1600mm(width) x1400mm (length) forward of the shower recess as detailed in Figure 5(b). | Information to be provided with CC |

## 6 Reinforcement of bathroom and toilet wall

| Number | Performance Criteria | Assessment |
|---|---|---|
| 6.1 | Except for walls constructed of solid masonry or concrete, the walls around the shower, bath (if provided) and toilet should be reinforced to provide a fixing surface for the safe installation of grabrails. | Information to be provided with CC |

| Number | Performance Criteria | Assessment |
|---|---|---|
| 6.2 | The walls around the toilet are to be reinforced by installing:<br>i. noggings with a thickness of at least 25mm in accordance with Figure 6(a); or<br>ii. sheeting with a thickness of at least 12mm in accordance with Figure 6(b). | Information to be provided with CC |
| 6.3 | The walls around the bath are to be reinforced by installing:<br>i. noggings with a thickness of at least 25mm in accordance with Figure 7(a); or<br>ii. sheeting with a thickness of at least 12mm in accordance with Figure 7(b). | Information to be provided with CC |
| 6.4 | The walls around the hobless shower recess are to be reinforced by installing:<br>i. noggings with a thickness of at least 25mm in accordance with Figure 8(a); or<br>ii. sheeting with a thickness of at least 12mm in accordance with Figure 8(b). | Information to be provided with CC |

## 7 Internal stairways

| Number | Performance Criteria | Assessment |
|---|---|---|
| 7.1 | Stairways in dwellings must feature a continuous handrail on both sides of the stairway. | N/A |
| 7.2 | Stairways in dwellings must feature a minimum clear width of 1000mm; | N/A |
| 7.3 | Stairways in dwellings must be straight in design; and | N/A |
| 7.4 | Stairways in dwellings must be positioned adjoining a load bearing wall. | N/A |
| 7.5 | Stairways in dwellings must have closed risers; | N/A |
| 7.6 | Stairways in dwellings must have minimum landing areas of 1200mm x 1200mm at the top and base of the stairway. | N/A |

## 8 Kitchen space

| Number | Performance Criteria | Assessment |
|---|---|---|
| 8.1 | The kitchen space should be designed to support ease of movement and adaptation with at least 1550mm clearance in front of fixed benches and appliances (excluding handles); and | Information to be provided with CC |
| 8.2 | Slip resistant flooring to be provided | Information to be provided with CC |

| Number | Performance Criteria | Assessment |
|---|---|---|
| 8.3 | Floor finishes should extend under kitchen cabinetry to enable cupboards to be removed without affecting the flooring. Where fixtures cannot be easily removed (e.g. ovens which are built in) the floor finishes should not be continued.<br>If relying on advice from a third party, Assessors are advised to provide a note in the comments section. | Information to be provided with CC |
| 8.3 | Task lighting must be installed above workspaces. | Information to be provided with CC |

## 9 Laundry space

| Number | Performance Criteria | Assessment |
|---|---|---|
| 9.1 | The laundry space should be designed to support ease of movement and adaptation with at least 1550mmm clear width provided in front of fixed benches and appliances (excluding handles). Where the appliances are not installed then the recessed area provision for an appliance shall be a minimum of 600mm in depth; and | Information to be provided with CC |
| 9.2 | Slip resistant flooring to be provided | Information to be provided with CC |
| 9.3 | Floor finishes should extend under Laundry cabinetry to enable cupboards to be removed without affecting the flooring. Where fixtures cannot be easily removed the floor finishes should not be continued. If relying on advice from a third party, Assessors are advised to provide a note in the comments section. | Information to be provided with CC |

## 10 Ground (or entry level) bedroom space

| Number | Performance Criteria | Assessment |
|---|---|---|
| 10.1 | The dwelling should feature a space (or room) on the ground (or entry) level that is of at least 10m2 clearance exclusive of wardrobes; skirtings and wall lining | Satisfied |
| 10.2 | Provides a space of at least 1540mm (width) x 2070mm (in the direction of travel) on the side on the bed that is closest to the door approach | Information to be provided with CC |
| 10.2 | Provides for a minimum path of travel of 1000mm on the remaining two sides of the bed. | Information to be provided with CC |
| 10.3 | Where no bed the design should assume a queen size | Information to be provided with CC |

## 11 Switches and powerpoints

| Number | Performance Criteria | Assessment |
|---|---|---|
| 11.1 | Light switches should be positioned in a consistent location:<br>i. between 900mm – 1100mm above the finished floor level; and<br>ii. horizontally aligned with the door handle at the entrance to a room. | Information to be provided with CC |
| 11.2 | Powerpoints should be installed not lower than 300mm above the finished floor level. | Information to be provided with CC |
| 11.3 | Light and powerpoint switches should be rocker action, toggle or push pad in design with a recommended width of 35mm. | Information to be provided with CC |

## 12 Door and door tap hardware

| Number | Performance Criteria | Assessment |
|---|---|---|
| 12.1 | Doorways should feature door hardware installed at between 900mm – 1100mm above the finished floor. | Information to be provided with CC |
| 12.2 | Doorways should feature lever or D-pull style door hardware.<br><br>The handle clearances for D-pull style door hardware should be the same as AS1428.1 2009. AS 1428.1-2009 is the most relevant set of specifications aimed at providing the greatest access to the greatest number of people and as such is an appropriate standard to reference for this Element. | Information to be provided with CC |
| 12.3 | Basins, sinks and tubs should feature lever or capstan style tap hardware with a central spout. | Information to be provided with CC |

## 13 Family / living room space

| Number | Performance Criteria | Assessment |
|---|---|---|
| 13.1 | The family/living room should accommodate a free space, minimum 2250mm in diameter, to enable ease of movement clear of furniture. | Satisfied |

## 14 Window sills

| Number | Performance Criteria | Assessment |
|---|---|---|
| 14.1 | Window sills on the ground (or entry) level in living areas and bedroom spaces should be positioned no higher than 1000mm above the finished floor level to enable enjoyment of the outlook.<br>Note: A concession is reasonable in kitchen, bathroom and utility spaces. | Information to be provided with CC |
| 14.2 | Window controls should be able to be easy to operate with one hand and located within easy reach from either a seated or standing position. | Information to be provided with CC |

## 15 Flooring

| Number | Performance Criteria | Assessment |
|---|---|---|
| 15.1 | All floor coverings should be firm, even and slip resistant; and | Information to be provided with CC |
| 15.2 | All flooring should feature a level transition between abutting surfaces (a maximum vertical tolerance of 5mm between abutting surfaces is allowable provided the lip is rounded or bevelled). | Information to be provided with CC |

### 3.15.4. Visitable dwellings (AS4299:1995 Adaptable Housing)

70% of all dwellings within this development will need to satisfy the AS4299 visitable requirements. These requirements are:

1.4.11 Visitable Housing Unit – housing unit which has at least 1 accessible entry with a path of travel to the living area and to a toilet that is either accessible or visitable.

1.4.12 Visitable Toilet – a toilet which has a space of a minimum 1250mm in front of the toilet x 900mm wide clear of door swings and fixtures.

4.4.3 Toilet - Each housing unit shall be provided with either a visitable toilet or an accessible toilet.

2.2(a) Visitability – To be visitable by people who use wheelchairs, in that there must be one wheelchair accessible entry and path of travel to the living area and to a toilet that is either accessible or visitable.

***Compliance:*** The documentation provided indicates that compliance is capable of being achieved.

**3.15. Housing typologies** Detailed documentation is to be provided as part of the construction documentation to be prepared for this project.

## 3.16. Accessible Sanitary Facilities

| | |
|---|---|
| NCC Reference: | NCC Clause F2.4 Accessible Sanitary Facilities |
| | NCC Clause D3.6 |
| | NCC Specification D3.6 |
| Australian Standard Reference: | Clauses 15 of AS1428.1:2009 |

There are two unisex accessible sanitary facilities (USATs) located in the building associated with the Coles tenancy and the Level 4 common room.

The table following summarises the NCC requirements to be satisfied.

| **Accessible WC requirements as nominated at NCC Clause F2.4** | **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 Table F2.4(a); and | Accessible WC facilities are to be provided<br>(a) 1 on every storey containing sanitary compartments; and<br>(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 Table F2.4(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 | | Satisfied |

| Accessible WC requirements as nominated at NCC Clause F2.4 | 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 Table F2.4(a) and Table F2.4(b) must comply with the requirements of AS 1428.1; and | | Satisfied |
| (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 | | Not Applicable |
| (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 | | Not Applicable |
| (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 D3.3(f) to be provided with a passenger lift or ramp complying with AS 1428.1. | | Not applicable |

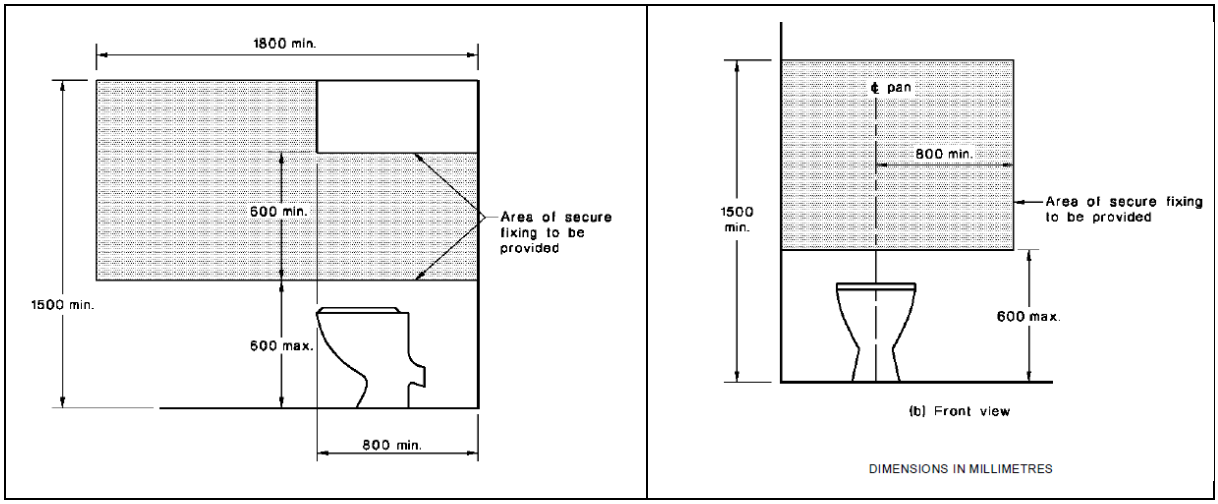
Details of the non-slip floor finish to the bathrooms will need to be provided.

Position of TMVs are to be provided as part of the Construction Certificate documentation.

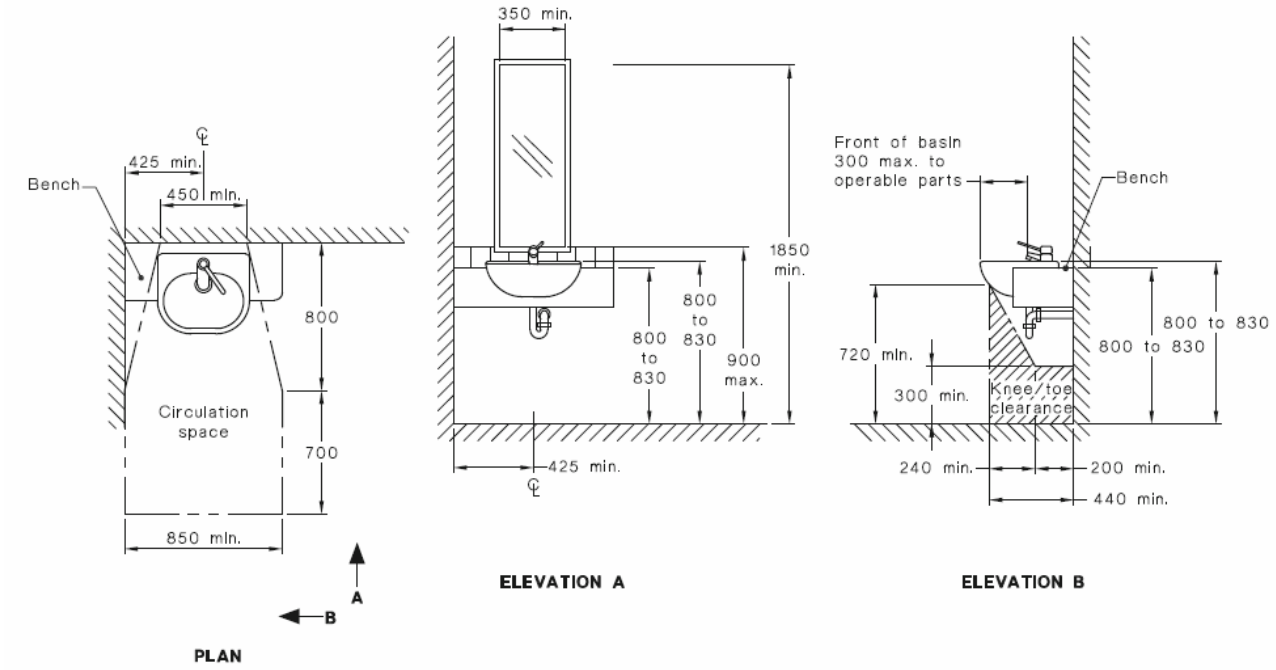
Tap sets will need to be specified with lever or capstan handles.

### 3.16.1. Wall Reinforcement

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




## 3.16.2. 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.

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FIGURE 44(A) SEMI-RECESSED WASHBASIN INSTALLATION —OTHER THAN FOR SOLE-0CCUPANCY UNIT

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

## 3.16.3. Toilet Roll Dispensers

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

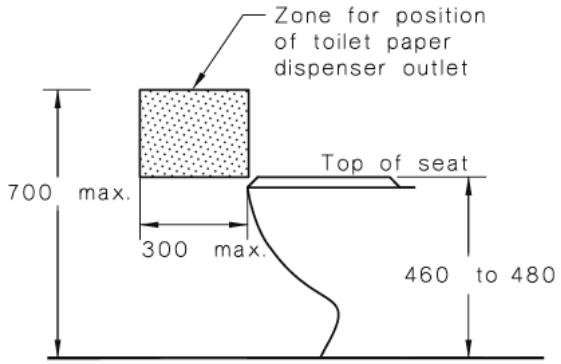



*Figure 27 – Fig.41 AS1428.1 2009*

### 3.16.4. 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.

### 3.16.5. 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 finish floor level and the top of the mirror is to be a minimum of 1850 mm above the finish floor level |
| • Hand basin tap | It is recommended that a lever hand basin tap be installed in lieu of the capstan type |
| • Toilet roll holder | The position of the toilet roll holder is to be in accordance with code requirements |
| • Coat hooks | Coat hooks 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. |
| • Baby change facility | The plan does not indicate if there is a baby change facility located within this USAT. If a baby change table is installed within this facility, then the unit will need to be installed outside of the WC circulation zone |
| • 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.<br>Details of Braille tactile signage are highlighted in the above Signage section of this report. |

## 3.17. Ambulant Sanitary Facilities

| | |
|---|---|
| NCC Reference: | NCC FP2.1 Personal hygiene facilities |
| | NCC Clause F2.4 Accessible Sanitary Facilities |
| | NCC Clause D3.6 Signage |
| | NCC Specification D3.6 Braille Tactile signs |
| Australian Standard Reference: | Clause 16 of AS1428.1:2009 |

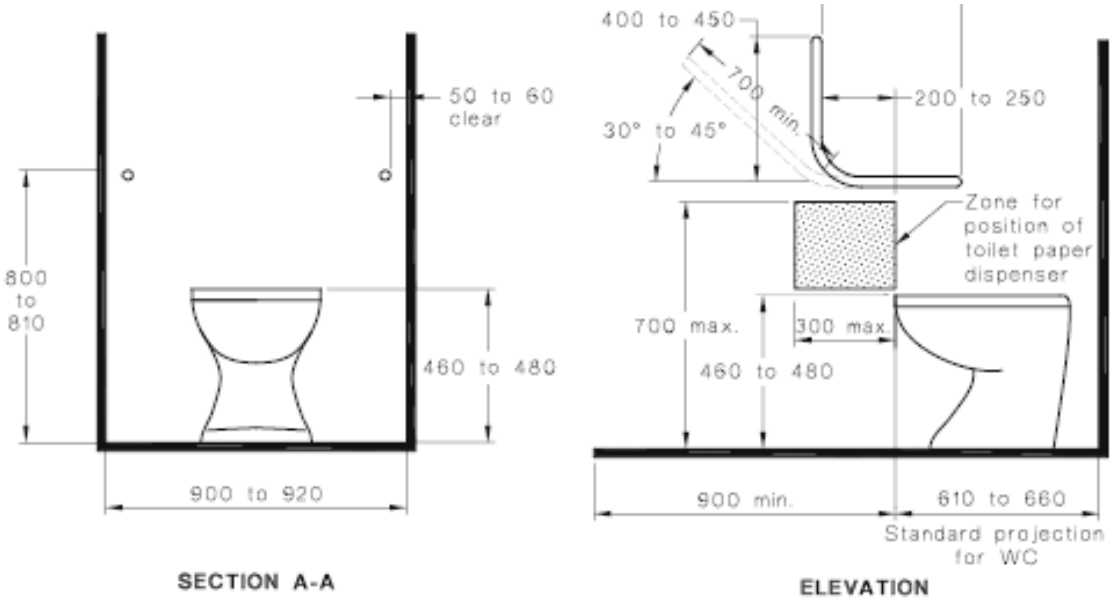
### 3.17.1. Requirements to be satisfied

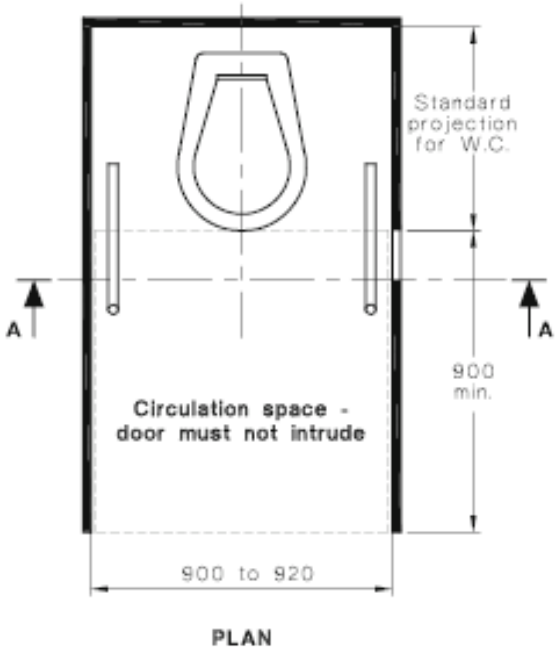
The NCC Clause F2.4(c) nominates *at each bank of toilets where there are one or more toilets in addition to an accessible unisex sanitary compartment at that bank of toilets, a sanitary compartment suitable for a person with an ambulant disability in accordance with AS 1428.1 must be provided for use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

***Compliance*** The plans as proposed nominate the provision of ambulant WC cubicles

### 3.17.2. Features of ambulant WC Cubicles

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






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

### 3.17.3. Ambulant WC Cubicles - Circulation

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

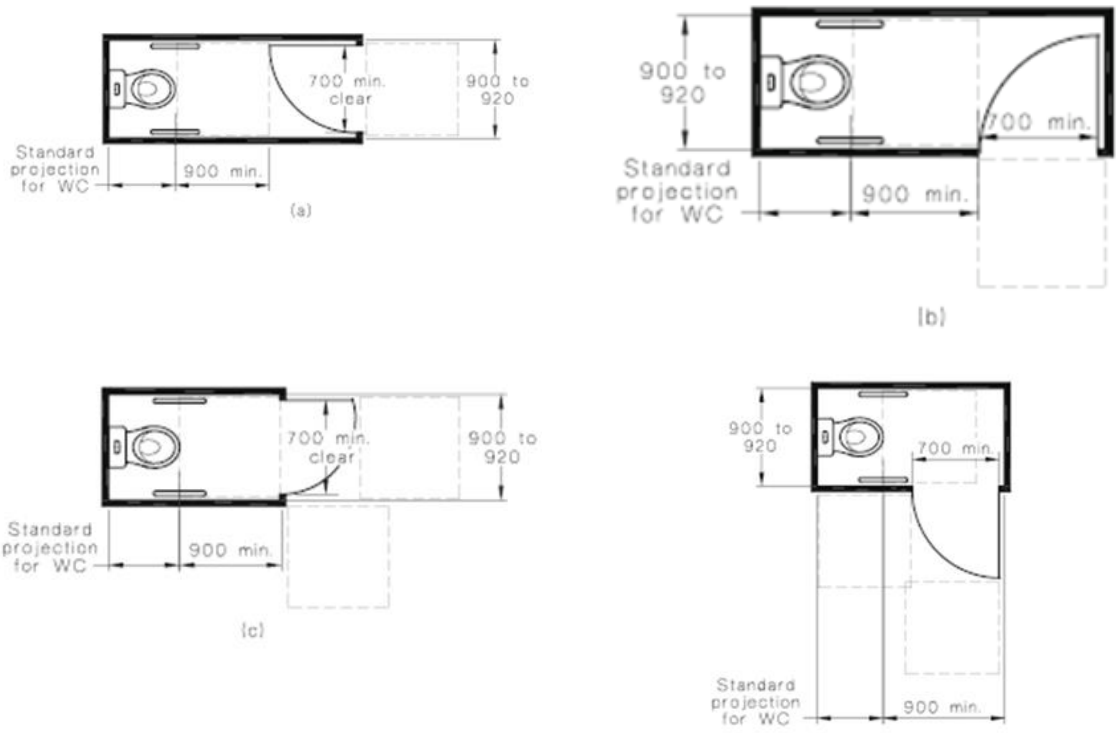
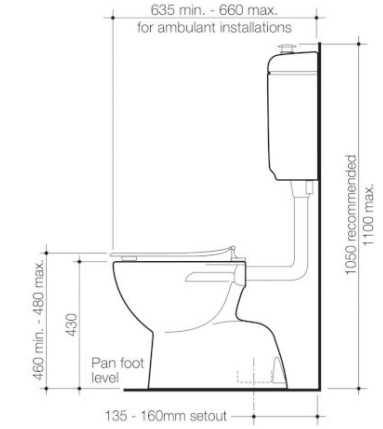
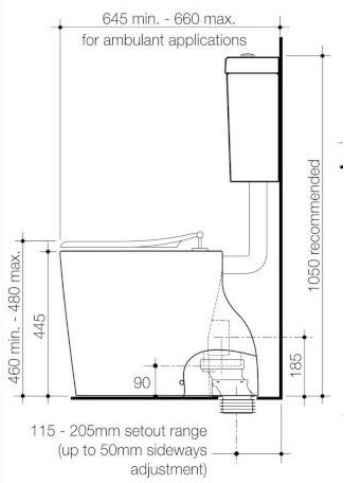
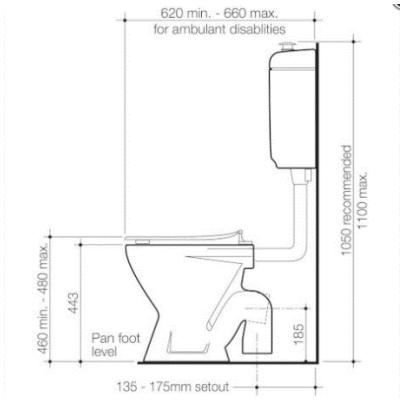
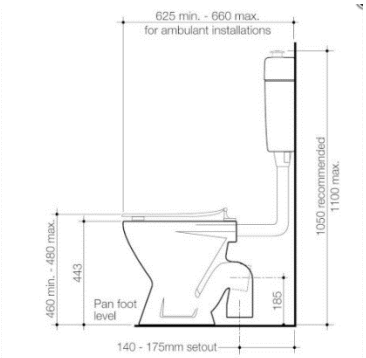


*Figure 28 – Fig.53 AS1428.1 2009*

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

### 3.17.4. Ambulant WC Pans (Examples)

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

| | | |
|---|---|---|
|  <br>CARE 400 CONNECTOR SUITE |  <br>CARE 660 AMBULANT CLEANFLUSH EASY HEIGHT SUITE, and<br>LIANO CLEANFLUSH® EASY HEIGHT WALL FACED TOILET SUITE |  <br>CARE 610 CLEANFLUSH CONNECTOR SUITE and<br>CARE 200 V2 CONNECTOR SUITE |
|  <br>CARE 300 CONNECTOR SUITE |  <br>URBANE WALL FACED TOILET SUITE |  <br>CARE 100 V2 CONNECTOR SUITE |

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

### 3.17.5. Ambulant WC Hardware (Examples)

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


*Hook to be located between 1350-1500mm AFFL*

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

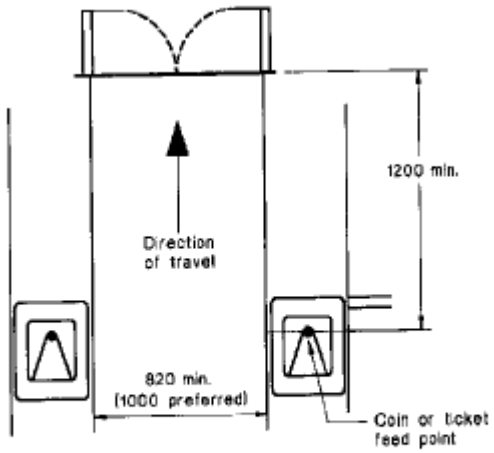
## 3.18. Furniture and Fitments

| | |
|---|---|
| NCC Reference: | D3.3 Parts of buildings to be accessible |
| Australian Standard Reference: | 24 (Furniture and Fitments) of AS1428.2 1992 |

### 3.18.1. Gateways and Checkouts

The international symbol for access should be designated where access is available.

At least one barrier shall have an opening that is not less than 820mm wide.




DIMENSIONS IN MILLIMETRES

FIGURE 34 BARRIERS WITH TICKET OR COIN FEED POINTS

*Figure 29 – Fig. 34 of AS1428.2:1992*

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

| PART / CLAUSE | DISABILITY (ACCESS TO PREMISES) STANDARD 2010 CRITERIA TO BE SATISFIED | COMPLIANCE | ACTION / COMMENT |
|---|---|---|---|
| A4.1 | **Classifications**<br>**Class 2** — a building containing 2 or more sole-occupancy units each being a separate dwelling.<br>Class 6 – Shop<br>Class 7a - Parking | Note | |
| DP1 | **Performance requirement**<br>Access must be provided, to the degree necessary, to enable:<br>a) people to:<br>i . approach the building from the road boundary and from any *accessible* 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 | |
| DP4 | **Performance requirement**<br>*Exits* must be provided from a building to allow occupants to evacuate safely, with their number, location and dimensions being appropriate to:<br>a) the travel distance; and<br>b) the number, mobility and other characteristics of occupants; and<br>c) the function or use of the building; and<br>d) the height of the building; and<br>e) Whether the *exit* is from above or below ground level. | Satisfied | |
| DP6 | **Performance requirement**<br>So that occupants can safely evacuate the building, *accessways* to *exits* must have dimensions appropriate to:<br>a) the number, mobility and other characteristics of occupants; and<br>b) the function or use of the building. | Satisfied | |

| PART / CLAUSE | DISABILITY (ACCESS TO PREMISES) STANDARD 2010 CRITERIA TO BE SATISFIED | COMPLIANCE | ACTION / COMMENT |
|---|---|---|---|
| DP8 | **Performance requirement**<br>Carparking spaces for use by people with a disability must be:<br>1. provided, to the degree necessary, to give equitable access for carparking; and<br>2. designated and easy to find. | Satisfied | |
| DP9 | **Performance requirement**<br>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. | Not Applicable | |
| **D3.1** | **General Building Access Requirements Class 2 — a building containing 2 or more sole-occupancy units each being a separate dwelling.,** | | |
| Table D3.1 | From a pedestrian entrance required to be accessible to at least 1 floor containing sole-occupancy units and to the entrance doorway of each sole-occupancy unit located on that level.<br>To and within not less than 1 of each type of room or space for use in common by the residents, including a cooking facility, sauna, gymnasium, swimming pool, common laundry, games room, individual shop, eating area, or the like.<br>Where a ramp complying with AS 1428.1 or a passenger lift is installed—<br>(a) to the entrance doorway of each sole-occupancy unit; and<br>(b) to and within rooms or spaces for use in common by the residents, located on the levels served by the lift or ramp. | Satisfied | |
| **D3.1** | **General Building Access Requirements Class 6 — a shop,** | | |
| Table D3.1 | To and within all areas normally used by the occupants | Satisfied | |
| **D3.1** | **General Building Access Requirements Class 7a — parking** | | |
| Table D3.1 | To and within all areas normally used by the occupants | Satisfied | |
| **D3.2** | **Access to Buildings** | | |
| | (1) An *accessway* must be provided:<br>(a) to a building *required* to be *accessible*; | Satisfied | |
| | (b) from the main points of a pedestrian entry at the allotment boundary; and | Satisfied | |
| | I. from another *accessible* 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 *required* to be *accessible,* an *accessway* must be provided through the principal pedestrian entrance, and:<br>a. through not less than 50% of all pedestrian entrances including the principal pedestrian entrance; and<br>b. in a building with a total *floor area* more than 500sqm, a pedestrian entrance which is not *accessible* must not be located more than 50 m from an *accessible* pedestrian entrance;<br>Except for pedestrian entrances serving only areas exempted by clause D3.4. | Satisfied | |
| **D3.3** | **Parts of buildings to be accessible** | | |
| | In a building *required* to be *accessible*:<br>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 | Shop drawings of the stair and handrails will need to be provided for review |
| | iii. for a fire-isolated stairway, clause 11.1(f) and (g) of AS 1428.1; | Additional Information to be provided | Shop drawings of the stair and handrails will need to be provided for review |
| | b) every passenger lift must comply with clause E3.6; | Additional Information to be provided | Shop drawings will need to be provided indicating compliance with the provisions of NCC Clause E3.6 and AS1735.12:2020. |
| | c) *accessways* must have:<br>i. passing spaces complying with AS 1428.1 at maximum 20 m intervals on those parts of an accessway where a direct line of sight is not available; and<br>ii. turning spaces complying with AS 1428.1:<br>A. within 2m of the end of *accessways where* it is not possible to continue travelling along the *accessway*; and<br>B. at maximum 20 m intervals along the *accessway*; | Not Applicable | |
| | d) an intersection of *accessways* 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 *storey* or level other than the entrance *storey* in a Class 5, 6, 7b or 8 building-<br>(i) containing not more than 3 *storeys*; and<br>(ii) with a *floor area* for each *storey*, excluding the entrance *storey*, of not more than 200sqm. | Not Applicable | |
| **D3.5** | **Carparking** | Satisfied | |
| **D3.6** | **Signage** | Additional Information to be provided | |
| **D3.7** | **Hearing Augmentation** | Not Applicable | |
| **D3.8** | **Tactile Indicators** | Additional Information to be provided | |
| **D3.9** | **Wheelchair seating** | Not Applicable | |
| **D3.10** | **Swimming pool** | Not Applicable | |
| **D3.11** | **Ramps (Connecting Ramps)** | Not Applicable | |
| **D3.12** | **Glazing on an accessway**<br>On an *accessway*, 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. |
| **Part D4** | **Braille & Tactile Signs** | Additional Information to be provided | The signage detailing will need to comply with the provisions of Clause D3.6 and Specification D3.6 of the BCA as well as Clauses 16.3 and 17 of AS1428.2 which addresses the size of the pictogram as well as the height of lettering. |
| **Part E3** | **Lift Installation** | Additional Information to be provided | Shop drawings will need to be provided indicating compliance with the provisions of NCC Clause E3.6 and AS1735.12:2020. |
| **Part F2** | **Sanitary and other facilities** | Additional Information to be provided | |