DESIGN CONFIDENCE

Boston Global

Access Design Assessment Report

28-32 Somerset Street
Kingswood NSW 2747

ACCESSIBILITY | BUILDING REGULATIONS | FIRE ENGINEERING | MANAGEMENT SERVICES

Project:	28-32 Somerset Street, Kingswood NSW 2747
Document Type:	Access Design Assessment Report
Our Reference:	P220_430-3 (ACCESS) FMR

The following report register documents the development and issue of this and each subsequent report(s) undertaken by Design Confidence (Sydney) Pty Ltd.

The technical and intellectual content contained herein remain the property of Design Confidence (Sydney) Pty Ltd and have been prepared and may only be used for the development / buildings being the subject of this report.

Revision History—

OUR REFERENCE	REMARKS	ISSUE DATE
P220_430-1 (ACCESS) FMR	Report issued in DRAFT for review and comment	11 November 2020
P220_430-2 (ACCESS) FMR	Report issued as final to accompany DA submission	13 November 2020
P220_430-3 (ACCESS) FMR	Report updated to suit architectural design changes in response to Council feedback Report reissued as final	30 July 2021

CONTENTS

EXECUTIVE SUMMARY

This Access Design Assessment Report has been prepared by Design Confidence at the request of Boston Global and relates to the proposed multi storey hotel development located at 28-32 Somerset Street, Kingswood NSW 2747.

The recommendations in this report are to be developed with the ongoing design development and should be confirmed prior to construction certificate stage. As the design progresses, further review of documentation shall be undertaken to ensure that compliance with the accessibility provisions of the BCA is achieved.

Based upon our assessment to date we are of the opinion that the subject development is capable of achieving compliance with the accessibility provisions of the BCA, either by complying with the prescriptive requirements or via a performance-based approach.

With respect to the assessment undertaken, the following items shall be reviewed further as the project develops—

ITEM	DESCRIPTION	RESPONSIBILITY
1	Further detail relating to surface levels extending from the allotment boundary to the pedestrian entrance are to be provided to determine compliance with requirements of AS1428.1-2009.	Project Architect / Landscape Architect
2	Shortfalls in doorway circulation spaces are to be reviewed to ensure the clear opening widths and circulation spaces are in accordance with Clause 13 of AS1428.1-2009.	Project Architect
3	Provision of an accessible entry door in the form of a swing door or sliding door is to be considered adjacent to the revolving door serving as the main entry to the building.	Project Architect
4	Provision of an offset tread at the mid and intermediate landings of the required stairways is to be reviewed to ensure a consistent inner handrail height is provided throughout flights and landings.	Project Architect
5	Balance of right- and left-handed accessible sanitary facilities wihtin the accessible sole occupancy units.	Project Architect
9	As design progresses, further details shall be provided to ensure compliance with the requirements of the BCA and relevant accessibility technical standards is achieved, such as: ▪ Stairway details; ▪ Wet area (sanitary facilities) details, including wall elevations; ▪ Signage details; ▪ Door and door hardware schedule; ▪ Window schedule, including visual indicators details; ▪ Inbuilt amplification systems and hearing augmentation (if provided).	Project Architect

In addition to undertaking a detailed assessment of the design against the perspective requirements of the BCA a preliminary performance-based assessment has also been undertaken.

The implementation of a performance-based approach in lieu of compliance with the deemed-to-satisfy (DtS) provisions of the BCA shall be disclosed to the relevant stakeholders and is subject to the approval of the certifying authority.

The table below lists scenarios where we believe the adoption of a performance design may add value to development in-lieu of complying with the prescriptive (DtS) provisions—

ITEM	PROPOSED PERFORMANCE SOLUTION	BCA DtS CLAUSE	PERFORMANCE REQUIREMENT
1	Provision of a single handrail and omission of tactile indicators at each level landing of the northern required non-fire isolated stairway serving the basement carpark levels.	D3.3 & D3.8	DP1 & DP2
2	Non provison of an accessible sanitary facility for staff at the bank of toilets accessed via the Employee Break Room.	F2.4	FP2.1

1.0 INTRODUCTION

1.1 General

This report has been prepared at the request of Boston Global and relates to the proposed multi-storey hotel development located at 28-32 Somerset Street, Kingswood NSW 2747.

The proposed development will comprise (but not limited to) the following features –

- 140 sole occupancy units over 6 storeys
- 2 levels of basement carpark accommodating up to 48 car spaces
- Roof top bar and dining space
- Ground floor bar and lounge area
- Gymnasium and other amenities for use by hotel staff & guests

In the context of this report and the BCA the building use can be described as follows—

CLASSIFICATION	DESCRIPTION
Class 3	Hotel
Class 6	Bar & Dining
Class 7a	Car parking

STOREYS CONTAINED (INCLUDING BASEMENT LEVELS)
Ten (10)

1.2 Purpose of Report

The purpose of this report is to identify the extent to which the architectural design documentation complies with the *accessibility provisions* of the National Construction Code – Building Code of Australia Volume 1, Edition 2019 Amendment 1 (hereinafter referred to as the BCA), as are principally contained within Parts D3, E3.6, F2.4 and F2.9 and relevant Australian Standards.

1.3 Documentation Provided for Assessment

This assessment is based upon the architectural documentation prepared by Rothelowman and listed within **Appendix 1**.

1.4 Limitations

This report is based upon, and limited to, the information depicted in the documentation provided for assessment and does not make any assumptions regarding design intention or the like.

This assessment does not contain comments regarding detailed design issues such as (but not limited to): luminance contrast, slip resistance, handrail design, door schedule and door hardware specification, hearing augmentation systems, location of fittings within sanitary compartments and lift specification.

1.5 Report Exclusions

It is conveyed that this report should not be construed to infer that an assessment for compliance with the following has been undertaken—

(i) Work Health & Safety Act and Regulations; and

(ii) Work Cover Authority requirements; and

(iii) Structural and Services Design Documentation; and

(iv) The Disability Discrimination Act (DDA) 1992; and

(v) Any parts of the BCA or any standards other than those directly referenced in this report.

1.6 BCA Assessment – Interpretation Notes

To provide the reader with additional context the following information regarding assessment methodology used in this assessment is provided below—

(i) The following rooms / areas and associated accessways have been afforded the concession under D3.4 and access for people with disabilities need not be provided to these areas—

- Plant and equipment rooms;
- Services meters;
- Loading area;
- Waste Room;
- Luggage Store;
- Laundry & Linen Collection Room;
- Housekeeping Store & Office;
- Back of House Areas (BOH) of the Bar, Lounge & Dining BOH (Ground Floor and Rooftop).

(ii) Movable furniture is the ongoing responsibility of the occupants who should maintain appropriate circulation spaces between and around furnishings;

(iii) The nurses rooms within the residential level have been assessed as first aid rooms used for storage of first aid materials and equipment.

2.0 BCA ACCESS DESIGN ASSESSMENT SUMMARY

2.1 Interpretation

The following tables summarise the compliance status of the architectural design in terms of each *applicable* prescriptive provision of the BCA and indicates a ***capability for compliance*** ('COMPLIES') with the accessibility provisions of the BCA.

A detailed analysis and commentary are provided in **Section 3.0** of this report in the instance that prescriptive non-compliance occurs ('DOES NOT COMPLY') or further 'DESIGN DETAIL' is required. Such instances should not necessarily be considered BCA deficiencies, but rather matters which need to be considered by the design team, the certifying authority and all other relevant stakeholders as design progresses.

2.2 Part D3 – Access for People with a Disability

	BCA CLAUSE	COMPLIES	DOES NOT COMPLY	DESIGN DETAIL
D3.1	General building access requirements		✓	
D3.2	Access to buildings			✓
D3.3	Parts of buildings to be accessible		✓	
D3.5	Accessible carparking			✓
D3.6	Signage			✓
D3.7	Hearing augmentation			✓
D3.8	Tactile indicators			✓
D3.9	Wheelchair seating spaces		N/A	
D3.10	Swimming pools		N/A	
D3.11	Ramps		N/A	
D3.12	Glazing on an accessway			✓

2.3 Part E3.6 – Passenger Lifts

	BCA CLAUSE	COMPLIES	DOES NOT COMPLY	DESIGN DETAIL
E3.6	Passenger lifts			✓

2.4 Part F2.4 – Accessible Sanitary Facilities

	BCA CLAUSE	COMPLIES	DOES NOT COMPLY	DESIGN DETAIL
F2.4	Accessible unisex sanitary compartments		✓	
F2.4	Sanitary facilities for people with ambulant disabilities		✓	

2.5 Part F2.9 – Accessible Adult Change Facilities

	BCA CLAUSE	COMPLIES	DOES NOT COMPLY	DESIGN DETAIL
F2.9	Accessible adult change facilities		N/A	

3.0 BCA DETAILED ASSESSMENT

3.1 General

With reference to the BCA Access Design Assessment Summary contained in **Section 2.0** above, the following analysis and commentary is provided.

In all instances, reference is also made to **Appendix 2**, which contains design guidance and other items which shall be coordinated by the relevant stakeholders as design progresses to ensure compliance with the deemed-to-satisfy (DtS) accessibility provisions of the BCA is achieved.

Furthermore, the analysis below contains preliminary advice regarding opportunities for the implementation of a performance-based approach in lieu of complying with the prescriptive (DtS) provisions of the BCA.

3.2 Part D3 – Access for People with a Disability

3.2.1 Clause D3.1 – General building access requirements

BUILDING CLASS	ACCESSIBILITY REQUIREMENTS
Class 3	Access is required to be provided— (i) From a pedestrian entrance required to be accessible to at least one (1) floor containing sole-occupancy units and to the entrance doorway of each sole-occupancy unit located on that level; and (ii) To and within not less than one (1) of each type of room/space for use in common by the residents; and (iii) To the entrance doorway of each sole-occupancy unit located on the levels served by the lift; (iv) To and within rooms/spaces for use in common by the residents located on the levels served by the lift. Based on a total of 140 sole-occupancy units (SOUs) proposed, access is required to be provided to and within at least eleven (10) SOUs in accordance with the requirements of this clause. It is noted that eleven (11) units have been identified as accessible sole-occupancy units. Refer to **Figures 1 - 4** below for the location of the proposed accessible SOUs. Not more than 2 required accessible sole-occupancy units may be located adjacent to each other. Where more than 2 accessible sole-occupancy units are required, they must be representative of the range of rooms available.
Class 6	Access is required to and within all areas normally used by the occupants.
Class 7a	Access is required to and within any levels containing accessible car parking spaces.

BUILDING CLASS	ACCESSIBILITY REQUIREMENTS
All buildings	Access is not required to be provided to the areas afforded the concession under Clause D3.4 and identified in **Section 1.6** above.

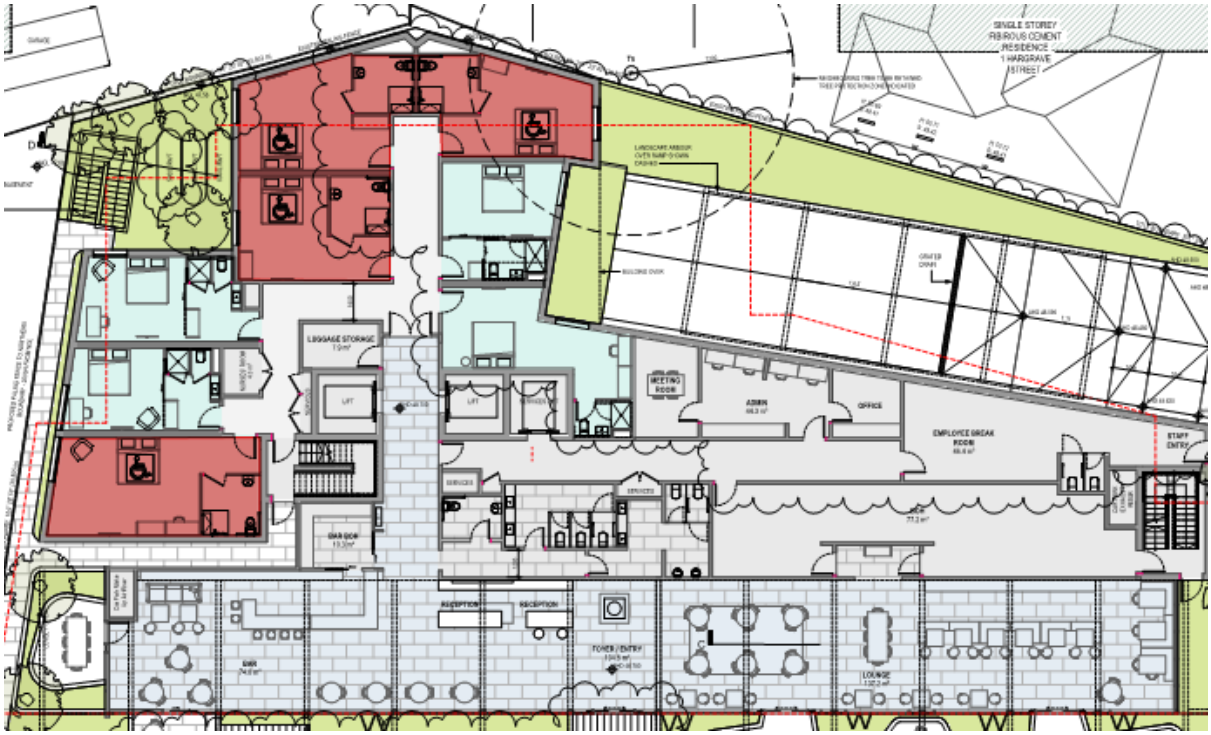


Figure 1 – Accessible SOUs (Ground Floor)

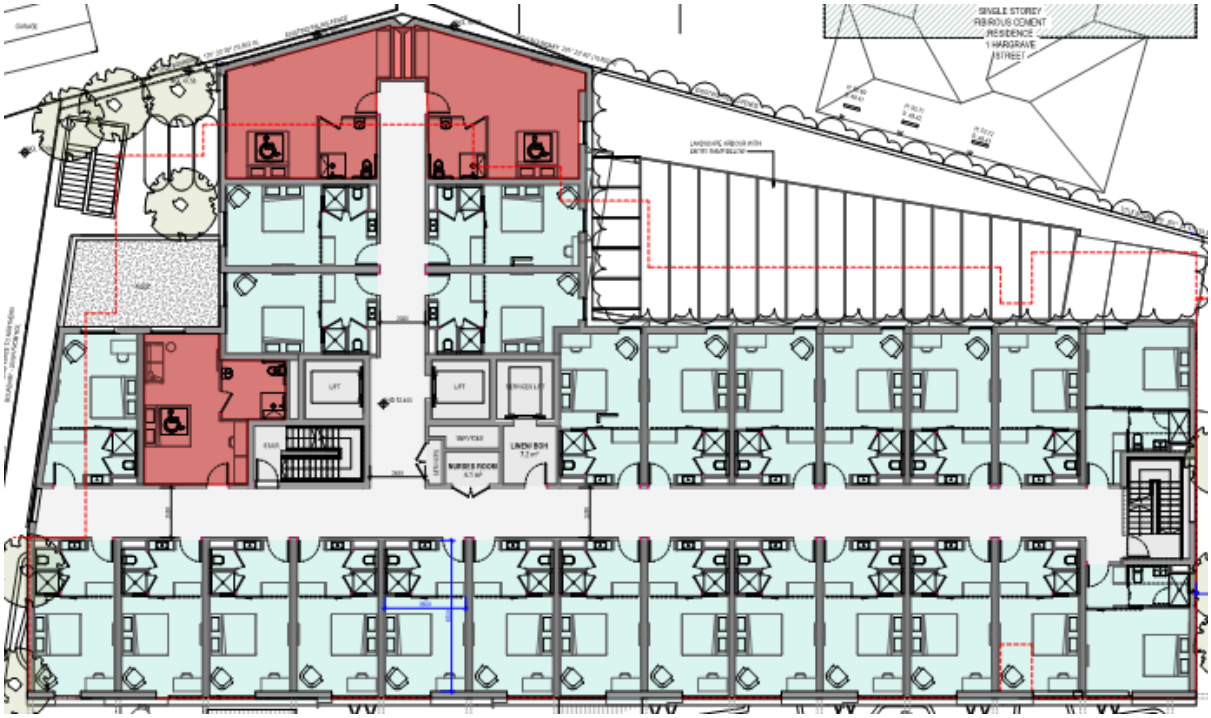


Figure 2 – Accessible SOUs (Level 1)

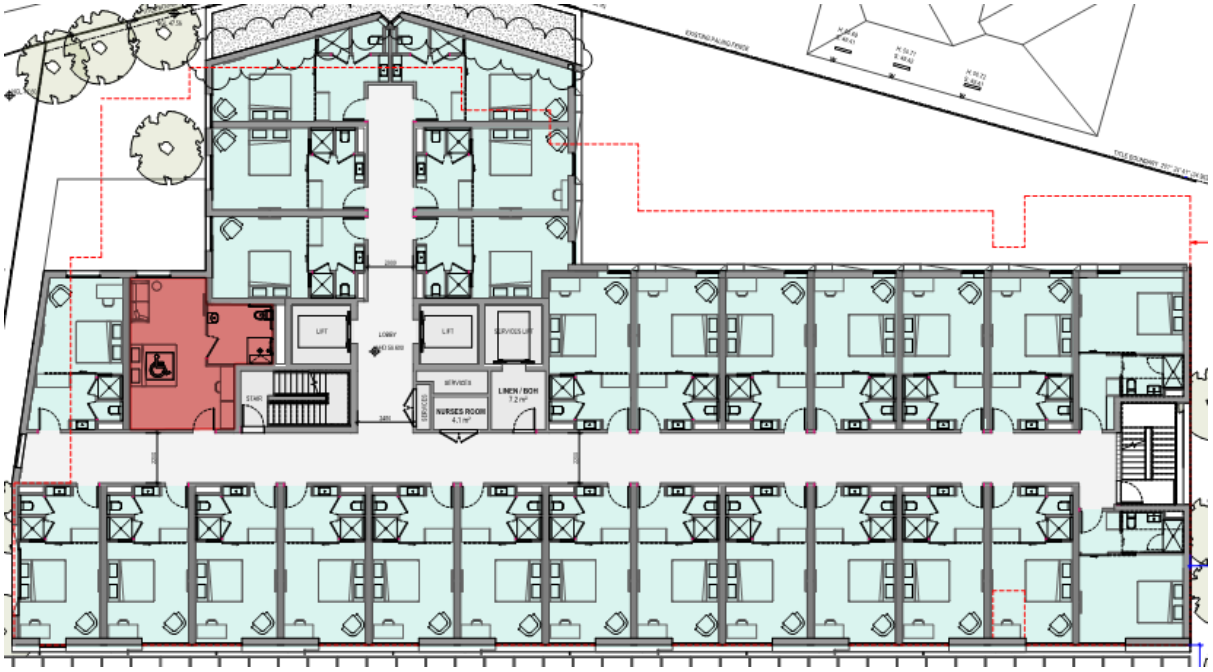


Figure 3 – Accessible SOUs (Level 2-3)

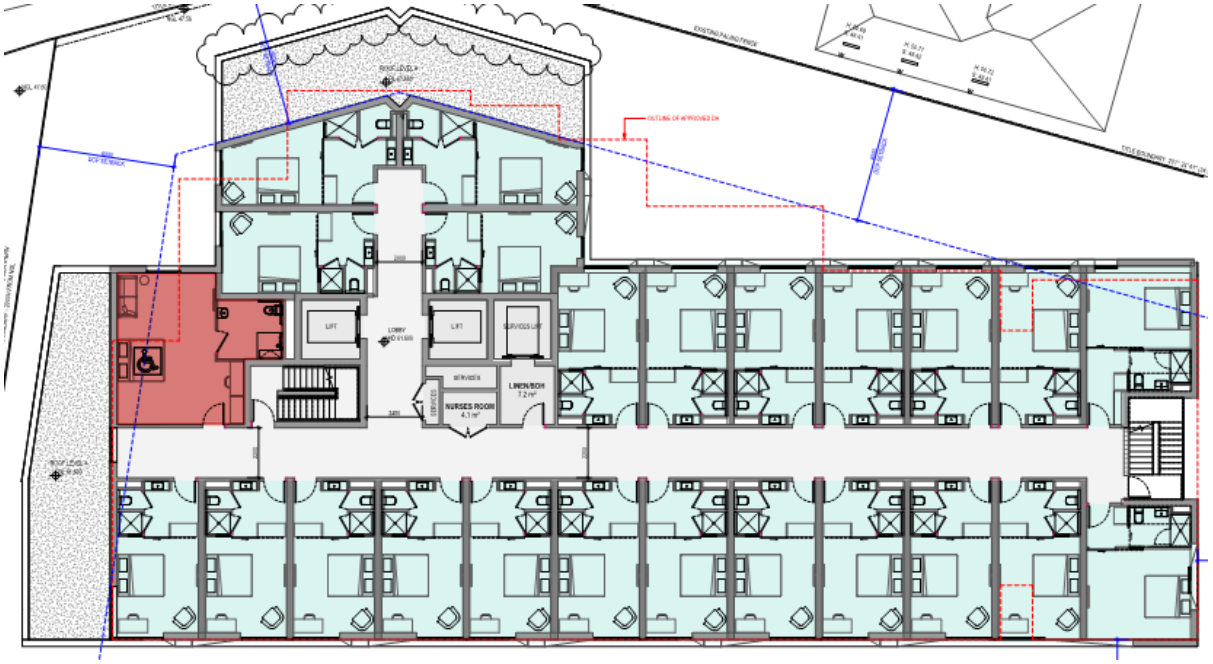


Figure 4 – Accessible SOUs (Level 4-5)

The following comments are provided in regards the requirements of Clause D3.1 of the BCA—

DESCRIPTION	ISSUE	COMMENT/S
Doors - clear opening widths	Generally, several doors are identified as having reduced clear opening width.	Doors along the accessible path of travel are required to achieve a minimum 850mm clear opening width. Generally, a 920mm door leaf is required to achieve 850mm clear opening. Where double doors are used, at least the active leaf is required to achieve a minimum 850mm clear opening. Compliance readily achievable at the Construction Certificate documentation phase.
Doors - circulation space	Generally, several doors are proposed with reduced circulation spaces.	Doors along the accessible path of travel are required to be provided with circulation spaces in accordance with Clause 13.3 of AS1428.1-2009. Compliance readily achievable at the Construction Certificate documentation phase.
Location of accessible SOUs	It is noted that more than 2 sole occupancy units are located adjacent to each other on the ground floor, being 3, and are not representative of the range of rooms available.	It is noted that of the rooms available are similar in layout and feature and hence it is recommended that not more than 2 accessible sole occupancy units be located adjacent to one another. Alternatively, the proposed layout comprising 3 accessible SOUs located adjacent to one another may be justified via a performance-based solution.

Refer **Appendix 2** for design guidance in satisfying the requirements of this clause.

3.2.2 Clause D3.2 – Access to buildings

A pedestrian entry from Somerset Street is proposed, being the entry to the main Foyer (highlighted **blue** below). Additionally, a staff entry is proposed from Hargrave Street (highlighted **red** below).

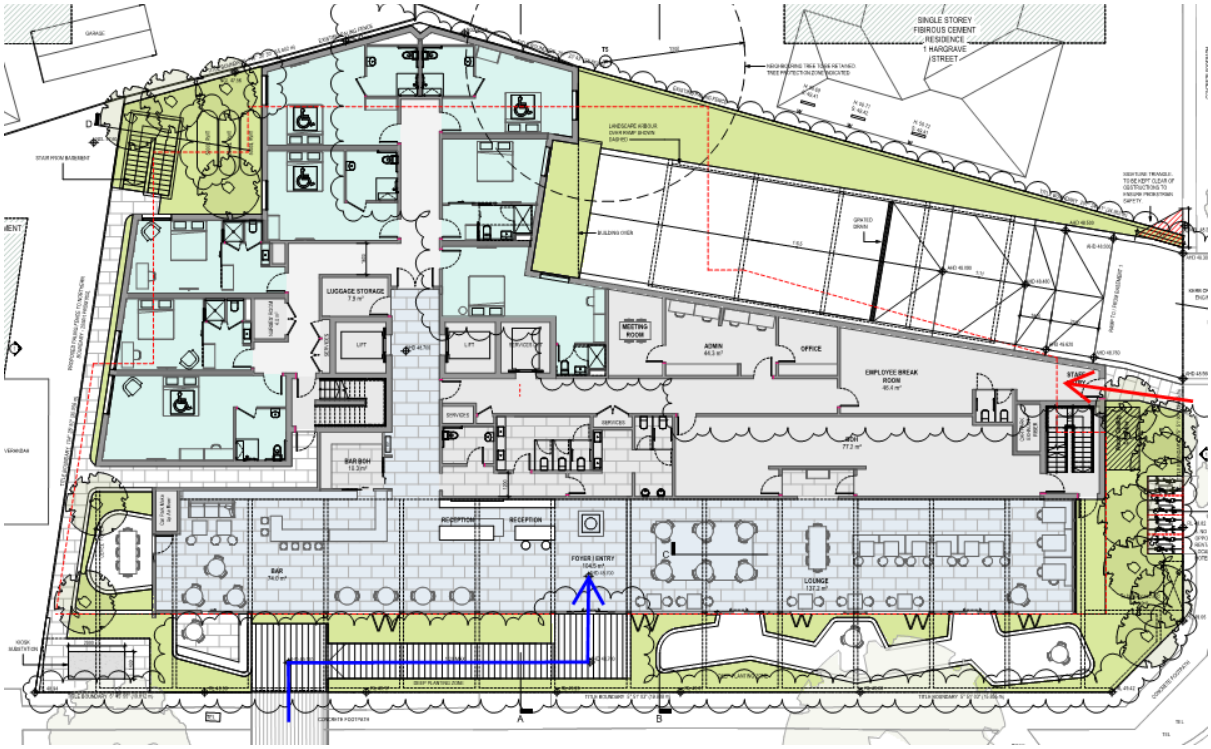


Figure 4 – Pedestrian Entries

The following comments are provided in regards the requirements of Clause D3.2 of the BCA—

DESCRIPTION	COMMENT/S
Accessway from the site boundary	The proposed levels at the allotment boundary to the building entrances are noted as being adequate to facilitate access to the bulding. Ensure an accessway is provided from the site boundary to the entry doors. As design progresses, provide further details for assessment.

Refer **Appendix 2** for design guidance in satisfying the requirements of this clause.

3.2.3 Clause D3.3 – Parts of the building to be accessible

The following comments are provided in regards the requirements of Clause D3.3 of the BCA—

DESCRIPTION	ISSUE	COMMENTS
Stairs – Offset tread	An offset tread has not been provided within the required stairways at mid & intermediate landings to enable consistent handrail heights along stair flights and landings.	An offset tread is required to be provided at the mid & intermediate stairway landings so as to ensure a consistent height to the top of the handrail is achieved, particularly for the inner handrail. Refer to Figure 28(a) of AS1428.1-2009 for clarification.

Refer **Appendix 2** for design guidance in satisfying the requirements of this clause.

3.2.4 Clause D3.4 – Exemptions

Refer to **Section 1.6** above for areas afforded the concession under D3.4.

3.2.5 Clause D3.5 – Accessible carparking

The following comments are provided in regards the requirements of Clause D3.5 of the BCA—

DESCRIPTION	COMMENTS
Number of spaces	A total of sixty-three (63) car parking spaces are proposed within the basement levels, with six (6) car spaces proposed as accessible. The car spaces are noted as not being to the class 3 part and hence the proposed number of accessible car spaces is deemed to meet the minimum required by Table D3.5 of the BCA.
Headroom clearance	Ensure a minimum 2200mm clearance is achieved from the carpark entry/exit and a minimum 2500mm clearance is achieved above the accessible parking space and associated shared areas.
Southern Accessible Car Spaces	It is identified that the southern accessible car spaces in the basement carpark levels are located away from the passenger lifts for each level. It is recommended that re-configuration of car spaces occur to ensure the accessible car spaces are located as near as possible to the passenger lifts, at each level, with compliance is readily achievable at the Construciton Certificate documentation phase.

Refer **Appendix 2** for design guidance in satisfying the requirements of this clause.

3.2.6 Clause D3.6 – Signage

The following comments are provided in regards the requirements of Clause D3.6 of the BCA—

DESCRIPTION	COMMENTS
General	Signage has not yet been detailed within the design documentation. As design progresses, detailed drawings or signage schedules are to be provided for review and comment. Compliance readily achievable at the Construction Certificate documentation phase.

Refer **Appendix 2** for design guidance in satisfying the requirements of this clause.

3.2.7 Clause D3.7 – Hearing augmentation

The following comments are provided in regards the requirements of Clause D3.7 of the BCA—

DESCRIPTION	COMMENTS
General	A hearing augmentation system complying with this clause must be provided where an inbuilt amplification system, other than one use only for emergency purposes is installed within the meeting room, or reception area or the like. Compliance readily achievable at the Construction Certificate documentation phase.

3.2.8 Clause D3.8 – Tactile indicators

The following comments are provided in regards the requirements of Clause D3.8 of the BCA—

DESCRIPTION	COMMENTS
General	Tactile indicators at stairways and ramps (where proposed) have not yet been detailed within the design documentation. As design progresses, detailed drawings are to be provided for review and comment. Compliance readily achievable at the Construction Certificate documentation phase.

Refer **Appendix 2** for design guidance in satisfying the requirements of this clause.

3.2.9 Clause D3.9 – Wheelchair seating spaces in Class 9b assembly buildings

Not applicable – no fixed seating proposed.

3.2.10 Clause D3.10 – Swimming pools

Not applicable.

3.2.11 Clause D3.11 – Ramps

Not applicable – no ramps and/or step ramps have been identified in the design documentation.

3.2.12 Clause D3.12 – Glazing on an accessway

The following comments are provided in regards the requirements of Clause D3.12 of the BCA—

DESCRIPTION	COMMENTS
General	Visual indicators have not yet been detailed within the design documentation. As design progresses, detailed drawings and/or door schedules are to be provided for review and comment. Compliance readily achievable at the Construction Certificate documentation phase.

Refer **Appendix 2** for design guidance in satisfying the requirements of this clause.

3.3 Part E3.6 – Passenger Lifts

The following comments are provided in regards the requirements of Clause E3.6 of the BCA—

DESCRIPTION	COMMENTS
General	A total of three (3) passenger lifts are proposed within the subject development, being two (2) for general circulation (lobby areas) and one (1) serving the BOH areas for staff. Every passenger lift proposed must comply BCA Clause E3.6 and AS1735.12-1999 as applicable to the subject lift type.

Refer **Appendix 2** for design guidance in satisfying the requirements of this clause.

3.4 Part F2.4 – Accessible Sanitary Facilities

3.4.1 Accessible unisex sanitary facilities

The following comments are provided in regards the requirements of Clause F2.4 of the BCA relating to accessible sanitary facilities—

DESCRIPTION	ISSUE	COMMENTS
Distribution of Accessible Sanitary Facilities	The proposed accessible sanitary compartments are distributed as follows – ▪ Basement 2 – staff change (right-hand transfer - RH); ▪ Ground Floor – communal area (left-hand transfer - LH); ▪ Rooftop – communal area (RH); ▪ Accessible SOUs – 1 per SOU, being 5x RH + 2x LH. From the above, an even number of RH and LH transfer facilities for the accessible WCs within the accessible SOUs has not been provided.	A balance of RH and LH transfer facilities is required to be provided For 10 x accessible WCs serving the accessible SOUs, there shall be 5 – RH and 5 – LH facilities (or vice versa). This is readily achievable by switching the position of the toilet pan and shower within the sanitary compartment. Compliance readily achievable at the Construction Certificate documentation phase.
Employee Break Room – Ground Floor	An accessible WC is not proposed at the Employee Break Room where 2 x sanitary compartments are proposed.	An accessible WC for use by staff is to be provided at the bank of toilets within the Employee Break Room. Note - The accessible WC shall be suitable for LH transfer to achieve a balance of transfer side. Alternatively, the non-provision of an accessible WC at the subject location may be justified via a performance-based solution.

Refer **Appendix 2** for design guidance in satisfying the requirements of this clause.

3.4.2 Sanitary compartment for people with ambulant disabilities

The following comments are provided in regards the requirements of Clause F2.4 of the BCA relating to sanitary facilities for people with ambulant disabilities—

DESCRIPTION	ISSUE	COMMENTS
Widths	The ambulant WCs are proposed with a width ranging between 1000-1185mm width.	The ambulant WCs shall be 900-920mm wide. Compliance readily achievable at the Construction Certificate documentation phase.
Employee Break Room	The ambulant WC at the Employee Break Room is understood to be self-contained sanitary compartment; however, the provision of a basin is not shown.	The basin will be required to be clear of the required circulation space required, being 900x900mm clear forward of the toilet and 900x900mm clear at the door. This will likely require an increase in the size of the ambulant WC. Compliance readily achievable at the Construction Certificate documentation phase.

Refer **Appendix 2** for design guidance in satisfying the requirements of this clause.

3.5 Part F2.9 – Accessible Adult Change Facilities

Not applicable.

4.0 CONCLUSION

4.1 General

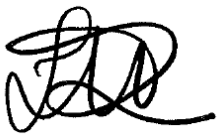
Our strategy for ensuring compliance has been refined and documented during the design process in conjunction with the continual development of the architectural documentation, as required.

Based upon our assessment to date we are of the opinion that the subject development is capable of achieving compliance with the relevant accessibility provisions of the National Construction Code – Building Code of Australia Volume 1, Edition 2019 Amendment 1, subject to the comments provided in **Section 3.0** and the design detail contained in **Appendix 2**.

Compliance can be achieved either by meeting the deemed-to-satisfy requirements of the BCA, as are principally contained within Parts D3, E3.6, F2.4 and F2.9, or via a performance-based approach.

We trust that the above information is sufficient for the consent authority in assessing the merit of the architectural design from a planning perspective.

Report By



Fatima Mendes Raposo
Consultant | Accessibility
For Design Confidence (Sydney) Pty Ltd

Verified By

Nicolas Hurtado
Senior Associate
For Design Confidence (Sydney) Pty Ltd

APPENDIX 1 – Documentation Provided for Assessment

This accessibility assessment was based upon the architectural documentation prepared by Rothelowman, namely—

DRAWING NO.	TITLE	DATE	REVISION
TP01.00	Basement 3	09.07.21	-
TP01.01	Basement 2	09.07.21	A
TP01.02	Basement 1	09.07.21	A
TP01.03	Ground	22.07.21	P1
TP01.04	Level 1	09.07.21	A
TP01.05	Level 2-3	09.07.21	A
TP01.06	Level 4-5	09.07.21	A
TP01.07	Rooftop	09.07.21	A
TP01.08	Roof Services Plan	09.07.21	A
TP02.01	North Elevation	09.07.21	A
TP02.02	East Elevation	09.07.21	A
TP02.03	South Elevation	09.07.21	A
TP02.04	West Elevation	09.07.21	A
TP03.01	Section A - A	09.07.21	A
TP03.02	Section B – B & C - C	09.07.21	A
TP03.03	Section D – Carpark Entry Ramp	09.07.21	A

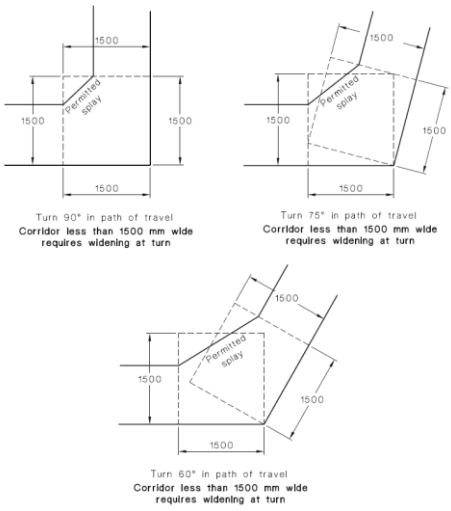
APPENDIX 2 – Design Checklist – Prescriptive Requirements

The following design guidance checklist is provided for implementation and coordination during construction in order to achieve compliance with the prescriptive requirements of the BCA, AS1428.1-2009, AS/NZS1428.4.1:2009, AS1735.12-1999 and AS/NZS2890.6:2009 as applicable.

1.	ACCESS TO BUILDINGS
1.1.	Provide an accessible path of travel compliant with AS1428.1-2009 from all main pedestrian entry points at the site boundary to the principal pedestrian entrance/s of the building.
1.2.	Where a building is afforded with multiple pedestrian entries, an accessway shall be provided through and through: (i) The principal pedestrian entrance (PPE); and (ii) Not less than 50% of pedestrian entrances, including the PPE. Where the building area is greater than 500m^2: (i) A non-accessible pedestrian entrance shall not be located more than 50m from an accessible pedestrian entrance.
1.3.	Provide an accessible path of travel compliant with AS1428.1-2009 from another building connected by a pedestrian link (not being the public footpath) within the allotment.
1.4.	Provide an accessible path of travel compliant with AS1428.1-2009 from accessible car parking spaces on the site.
1.5.	An accessible path of travel/accessway shall be in accordance with AS1428.1-2009 as applicable. *Note: this includes requirements relating to floor finishes, stairway, ramps, doorways etc. Refer to the relevant section below for further detail.*

2.	PATHS OF TRAVEL
2.1.	A continuous accessible path of travel shall not include a step, stairway, turnstile, revolving door, escalator, moving walk or the like.
2.2.	Provide 1000mm minimum clear width of path of travel compliant with AS1428.1-2009. *Note: the width of the path of travel shall be taken clear of any obstructions, such as handrails, kerb rails, skirting, fire hose reels, fire extinguishers or the like.*
2.3.	The minimum unobstructed height of a continuous path of travel shall be 2000mm or 1980mm at doorways.
2.4.	An accessway shall be provided with turning spaces in accordance with the BCA and AS1428.1-2009 where required.
2.5.	A turning space not less than 1500 x 1500mm is required to allow for a 60-90° turn on the accessway. A splay across the internal corner is permitted in accordance with Figure 4 of AS1428.1-2009.

2. PATHS OF TRAVEL

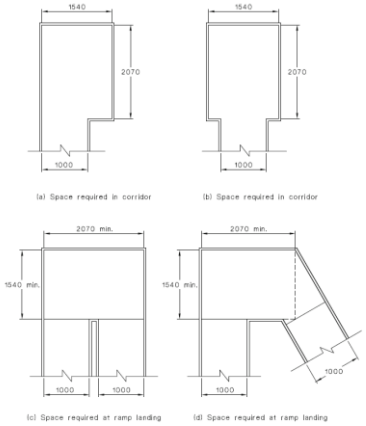


2.6. A turning space not less than 1540mm W x 2070mm L in accordance with Figure 5 of AS1428.1-2009 shall be provided:

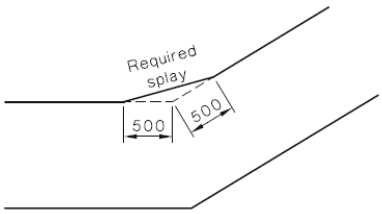
(i) to allow for a 180° turn on the accessway;

(ii) along pathways at maximum 20m intervals;

(iii) at corridor ends, within 2m of the corridor end.

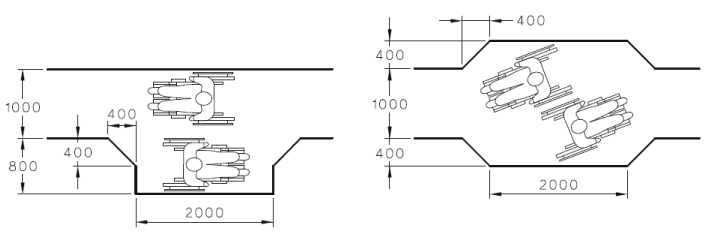


2.7. Where the width of the path of travel is less than 1200mm, a minimum 500x500mm splay is required to allow for a 30 to <60° turn on the accessway in accordance with Figure 4 of AS1428.1-2009.



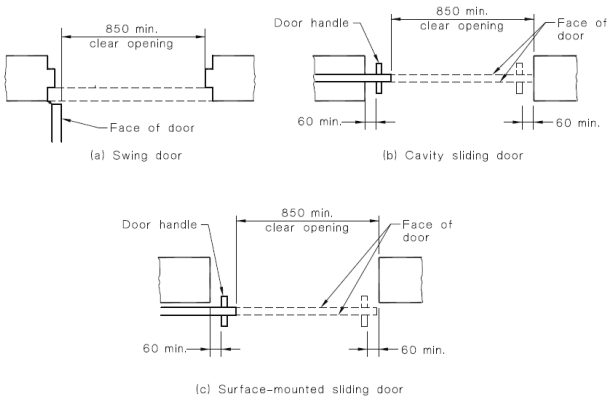
Turn 30° to <60° in path of travel
less than 1200 mm wide

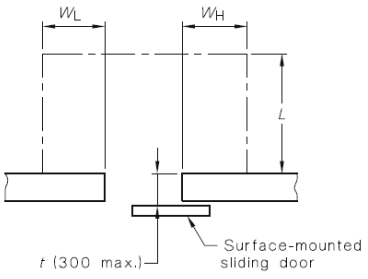
2.8. A passing space not less than 1800mm W x 2000mm L is required along pathways at maximum 20m intervals where a direct line of sight is not available.



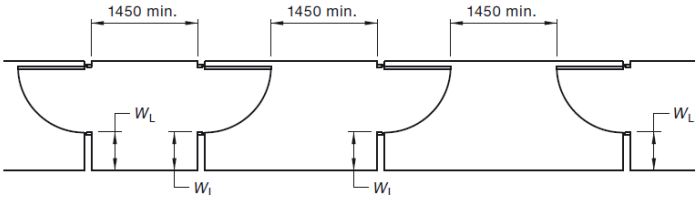
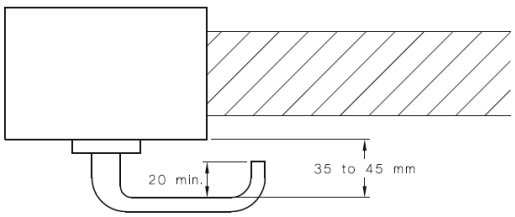
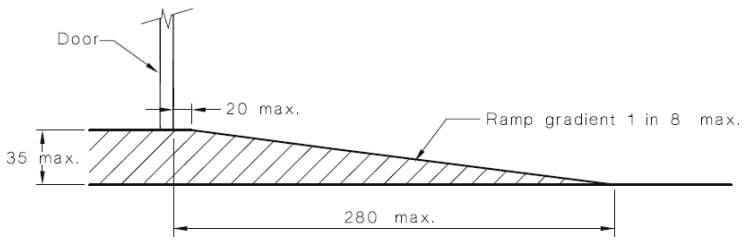
2.	PATHS OF TRAVEL
2.9.	Floor finishes and abutment of surfaces shall be in accordance with Clause 7 of AS1428.1-2009. *Note: Reference is made to BCA Clause D2.14 in regards slip resistance requirements.*
2.10.	Where carpet or similar soft flexible flooring surface is proposed, the pile height shall be no more than 11mm with 4mm max backing surface.
2.11.	Ensure drainage grates on accessible path of travel have openings no more than 13mm wide (or 13mm diameter). Slotted openings shall be oriented such that the long dimension is transverse to the direction of travel.
2.12.	Where recessed matting is proposed, it shall be in accordance with Clause 7.4.2 of AS1428.1-2009.

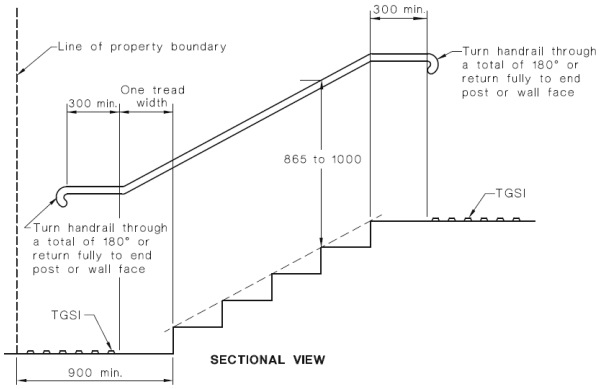
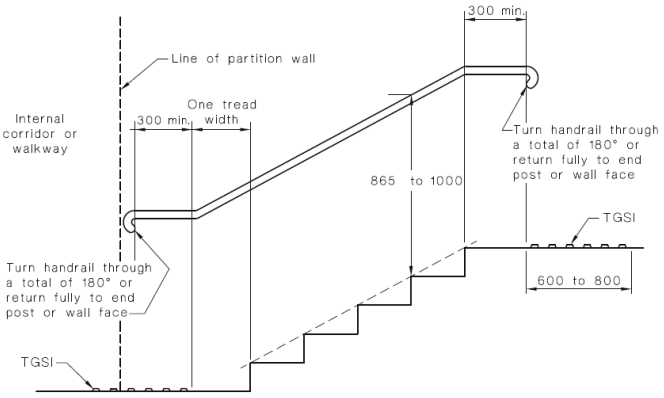
3.	DOORS
3.1.	Every door and/or gate on the accessway shall be in accordance with Clause 13 of AS1428.1-2009.
3.2.	Minimum 850mm clear opening width (generally required 920mm door leaf), measured from the face of the door to the door stop. *Note: where double doors are proposed, at least the active/operable leaf shall achieve the minimum 850mm clear opening width.*
3.3.	A minimum 30% luminance contrast shall be provided at doorways for ease of visual identification for people with vision impairment. The contrasting area (e.g. wall, architrave etc.) must have minimum 50mm width.
3.4.	Every door and/or gate on the accessway shall be provided with circulation space on both sides to allow for operation of the door.
3.5.	Circulation spaces shall be not steeper than 1:40. Refer to Figure 31 (hinged doors) and Figure 32 (sliding doors) of AS1428.1-2009 for the minimum required depth, latch-side and hinge-side circulation spaces as applicable.
3.6.	Where surface-mounted sliding doors are proposed, the circulation spaces shall be increased by a factor of ***t*** as shown in Figure 33 of AS1428.1-2009. *Note: The factor **t** is the wall thickness to the face of the door.*

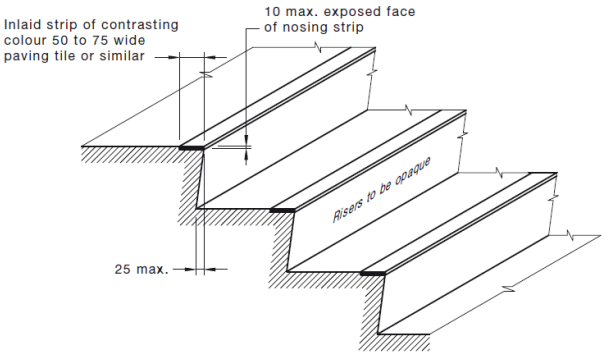
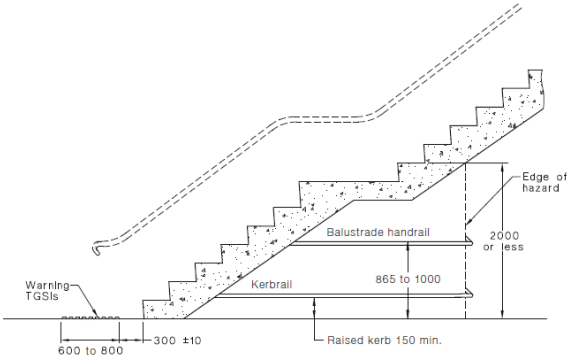




Door approach	Increase from Figure 32
Figure 32(d)	Add dimensions t to dimensions W_L and W_H
Figure 32(a), 32(b), 32(c)	Add dimensions t to dimensions L, W_L and W_H

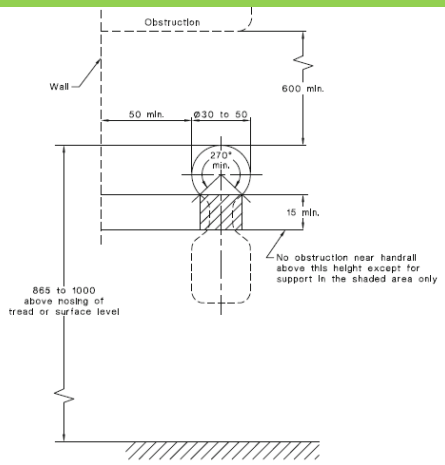
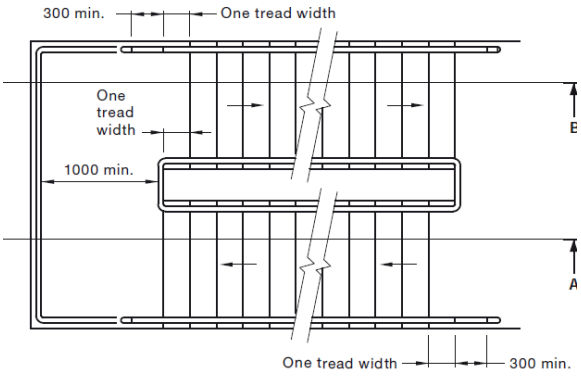
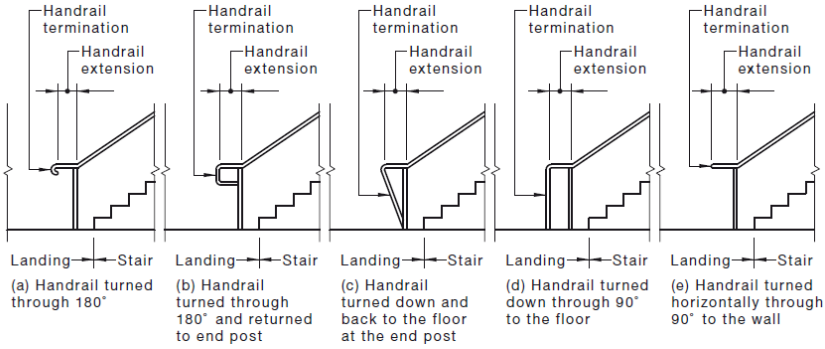
3.	DOORS
3.7.	Provide minimum 1450mm length between successive door swings in airlocks/vestibules or other similarly enclosed spaces on accessible path of travel. 
3.8.	All fully glazed doors and surrounding glazing (including glazed walls with no transom or similar) shall be clearly marked with 75mm min. wide, solid, non-transparent, contrasting line across their full width. The lower edge of line must be between 900-1000mm FFL and have 30% luminance contrast when viewed against floor or background surface within 2m of glazing.
3.9.	Door hardware shall: (i) be a type that allows the doors to be operated with one hand; (ii) allow for adequate grip for people with hand impairments; (iii) have a clearance between the handle and the backplate or door face of 35-45mm; (iv) where snibs are installed, have a lever handle with minimum 45mm length form the centre of the spindle. 
3.10.	Door controls shall be located: (i) Door handles: 900-1100mm above FFL; (ii) Panic bars on egress routes: 900-1200mm above FFL; (iii) Intercoms, push buttons and the like: 900-1250mm above FFL and minimum 500mm from an internal corner; (iv) Handles on sliding doors shall be not less than 60mm from the door jamb or doorstop in the open or closed position; (v) Manual controls to power-operated doors (push buttons) shall be 1-2m from the door leaf (hinged or cavity-sliding doors) or clear of a surface-mounted sliding door in the open position. *Note 1: this is not applicable in early childhood centres, swimming pools and the like.* *Note 2: Per BCA 2019 Clause D2.21, push buttons for emergency release power operated doors shall comply with item (iv) above. Braille and tactile signage in accordance with Clause 3 and 6 of Spec. D3.6 of the BCA is also required.*
3.11.	Door operational forces shall be not more than 20 N. *Note: If this cannot be achieved, the subject door shall be automated, or power operated.*
3.12.	A threshold ramp may be employed to address a maximum 35mm rise / FFL difference. Threshold ramp shall be in accordance with Clause 10.5 of AS1428.1-2009.  *Note: Where ramp edges are not enclosed by walls/other side barrier, ensure ramp edges are splayed at 45 degrees.*

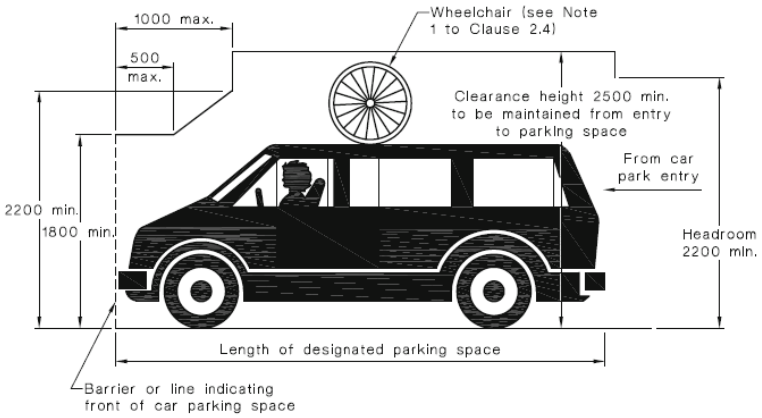
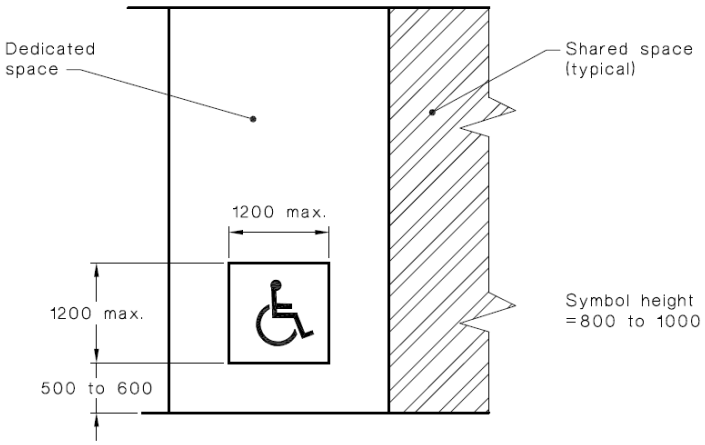
4.	STAIRWAYS
4.1.	The requirements of this section shall apply to all stairways for general circulation and to external (non-fire isolated) egress stairways.
4.2.	Stairs located at site boundary shall be recessed (900mm min. from boundary) to allow required handrail extensions and TGSI's to not protrude into transverse path of travel. 
4.3.	Stairs adjacent to internal corridors shall be recessed to allow required handrail extensions & termination to not protrude into transverse path of travel. The set-back shall be: (i) 1 tread width plus handrail extension/turn down (approx. 650mm) at the bottom of a flight of stairs; (ii) Handrail extension/turn down (approx. 400mm) at the top of a flight of stairs. 
4.4.	Minimum 1m clearance required between handrails.
4.5.	Stairways shall have closed risers.
4.6.	Stair nosings shall not project beyond the face of the riser. Risers shall be vertical or splay backwards a max. 25mm.
4.7.	In order to achieve consistent height of the handrail along stairways, an offset tread is required at the bottom of the flight, as shown in Figure 28 of AS1428.1-2009.
4.8.	Handrails compliant with Clause 12 of AS1428.1-2009 shall be provided to both sides of stairs. Refer to handrail section below for handrail requirements.
4.9.	Handrail extensions are required at landings in accordance with the above: (i) At the top of a flight of stairs: min. 300mm horizontal extension past the nosing; (ii) At the bottom of a flight of stairs: one tread depth parallel to the line of nosings + min. 300mm horizontal extension; (iii) Where the inner handrail is continuous at landings, the 300mm horizontal handrail extension is not required.
4.10.	Provide warning tactile ground surface indicators (TGSI's) stairs landings in accordance with AS/NZS1428.4.1:2009. Refer to TGSIs section below for TGSI's requirements.
4.11.	Provide contrasting step nosing strips on all stair treads compliant with AS1428.1 as follows:

4.	STAIRWAYS
	(i) Step nosing strips to be across full width of stair, between 50-75mm wide, in a continuous colour solid strip with 30% luminance contrast to background surface. (ii) Step nosing strips to be located on edge of tread (15mm max. setback if applied) and not extend onto risers more than 10mm. (if exposed). 
4.12.	Where people can traverse under open stairs, a suitable barrier to the underside of the stairs shall be provided such that people do not traverse where the headroom is less than 2 meters. An example of a suitable barrier is illustrated in Figure 2.6(A) of AS/NZS1428.4.1:2009. 

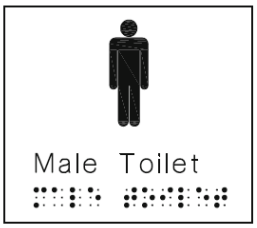
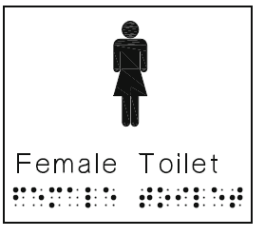
5.	FIRE-ISOLATED STAIRWAYS
5.1.	Provide contrasting step nosing strips on all stair treads compliant with AS1428.1 as follows: (i) Step nosing strips to be across full width of stair, between 50-75mm wide, in a continuous colour solid strip with 30% luminance contrast to background surface. (ii) Step nosing strips to be located on edge of tread (15mm max. setback if applied) and not extend onto risers more than 10mm. (if exposed).
5.2.	Handrails compliant with Clause 12 of AS1428.1-2009 shall be provided to at least one side of stairs. Refer to handrail section below for handrail requirements.
5.3.	In order to achieve consistent height of the handrail along stairways, an offset tread is required at the bottom of the flight, as shown in Figure 28 of AS1428.1-2009.
5.4.	Minimum 1m clearance required between handrail and opposite wall. *Note: subject to BCA D1.6 relating to minimum requirements for exits.*

6.	HANDRAILS
6.1.	All stairs and ramps shall be provided in accordance with Clause 12 of AS1428.1-2009, including fire-isolated stairways and ramps. *Note: for stairs/ramps in areas afforded the concession under D3.4, handrails are only required to comply with Clause D2.17 of the BCA.*
6.2.	The cross section of handrail shall be circular/elliptical handrails have 30mm - 50mm diameter, with 270-degree clear arc around top of handrail (extending for 600mm min. height) compliant with Figure 29 of AS1428.1-2009.

6.	HANDRAILS
	
6.3.	Handrails shall be installed at a consistent height between 865mm - 1000mm height above step nosing or FFL ramp surface. *NB. The specified height should allow for construction tolerance as outside of this range will be non-compliant.*
6.4.	Where a balustrade for fall protection is required at a height above 1m, both the balustrade and the handrails shall be provided.
6.5.	Handrails shall have no vertical sections.
6.6.	In order to achieve consistent height of the handrail along stairways, an offset tread is required at the bottom of the flight, as shown in Figure 28 of AS1428.1-2009. 
6.7.	Handrails shall be installed no less than 50mm away from an adjacent side wall/ obstruction (finger clearance).
6.8.	Refer to Stairs and Ramps sections for the requirements relating to handrail extensions.
6.9.	Handrail ends shall be turned through a total of 180° OR to the ground OR returned fully to the end post/wall face. Suitable handrail ends are shown in Figure 26 (C) of AS1428.1-2009.  *Note: fire-isolated stairs and ramps are not required to be provided with handrail extensions at landings, however handrail ends shall be in accordance with Figure 26 (C) of AS1428.1-2009 as shown above.*
6.10.	The inner handrail shall always be continuous at landings.

7.	ACCESSIBLE PARKING
7.1.	Minimum required dimensions: (i) Dedicated parking space shall be 2400mm W x 5400mm L (minimum); (ii) A shared area shall be provided to one side of the dedicated parking space, being 2400mm W x 5400mm L (minimum); (iii) A shared area shall be provided at one end of the parking space, being 2400mm W x 2400mm L.
7.2.	The ground surface shall be firm, plane, slip resistant and traversable by people with disabilities (hence surfaces such as loose gravel and grass are not acceptable).
7.3.	Accessible parking spaces and shared areas shall at the same grade and the ground surface shall be not steeper than 1:40 (1:33 for external bitumen surfaces is acceptable).
7.4.	Vertical clearance leading to the accessible parking spaces shall be not less than 2200mm.
7.5.	Vertical clearance at the accessible parking spaces and associated shared areas shall be not less than 2500mm. *Note: reduced headroom may be permitted in accordance with Figure 2.7 of AS/NZS2890.6:2009.* 
7.6.	An accessible parking space shall be provided with pavement markings for identification, being the white symbol of access inside a blue rectangle with dimensions in accordance with Figure 3.1 of AS/NZS2890.6:2009.  (i) Line markings shall be yellow, have a slip resistance surface and shall not be raised; (ii) The parking spaces and shared areas shall be outlined on all sides with an unbroken line 80-100mm wide, except where delineated by a kerb, barrier or wall; (iii) The shared areas shall be marked with diagonal stripes at an angle 45±10° to the side of the space. The diagonal stripes shall be 150-200mm wide and spaced 200-300mm; (iv) No shared area markings shall be placed in trafficked areas (this is generally applicable to the 2400x2400mm shared area). *Note: the requirement for space identification is not applicable where:* *a. A total of not more than 5 parking spaces is provided;*

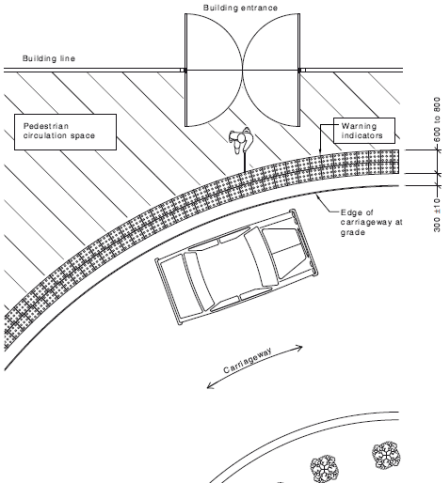
7.	ACCESSIBLE PARKING
	b. An accessible parking space is privately owned parking space for people with disabilities associated with a single residence and intended primarily for use by the occupants of that residence (i.e. adaptable units).
7.7.	A bollard shall be provided within the shared area located in accordance with Figure 2.3 of AS/NZS2890.6:2009.
7.8.	Residential accessible parking spaces are subject to the requirements of AS4299-1995. *Note: a parking space 3800mm W x 5400mm L is generally suitable for adaptable units.*

8.	SIGNAGE
8.1.	Braille and tactile signage will be required to: (i) Identify each sanitary facility, including an accessible sanitary facility and a sanitary compartment suitable for people with ambulant disabilities; (ii) Identify each space provided with hearing augmentation; (iii) Within each space provided with hearing augmentation; (iv) Identify each door required by BCA Clause E4.5 to be provided with an exit sign; (v) Identify a sanitary compartment suitable for people with ambulant disabilities; (vi) At entry doors to airlocks containing either accessible and/or ambulant WCs, identifying each facility provided within.
8.2.	Braille and tactile directional signage will be required at: (i) A non-accessible pedestrian entrance to direct a person to the nearest accessible entrance; (ii) A sanitary bank which is not provided with an accessible sanitary facility to direct a person to the nearest accessible sanitary facility.
8.3.	Signage required to comply with Clause D3.6 of the BCA shall be in accordance with BCA Spec. D3.6 and Clause 8 of AS1428.1-2009.
8.4.	Per BCA 2019, signage complying with Clause 3 and 6 of Specification D3.6 shall be provided to identify the latch-operation device (manual controls for power-operated doors).
8.5.	At standard sanitary facilities, the signage shall include: (i) Minimum required message: "Male Toilet" or "Female Toilet", as applicable; (ii) Raised & visual versions of the male and female symbols; (iii) Braille that fully describes the information displayed by symbols and text.  
8.6.	At an accessible sanitary facility, the signage shall include: (i) Minimum required message: "Unisex Toilet RH" or "Unisex Toilet LH" (as applicable) (ii) Information if the toilet pan is suitable for RH or LH transfer; (iii) Raised & visual versions of the international symbol of access; (iv) Raised & visual versions of the male and female symbols; (v) Braille that fully describes the information displayed by symbols and text.

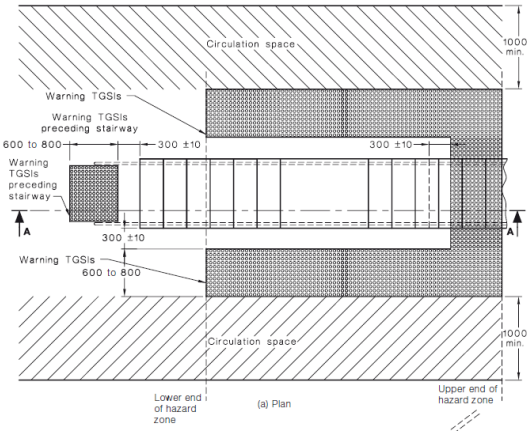
8.	SIGNAGE
	
8.7.	At an ambulant sanitary compartment, the signage shall include: (i) Minimum required message: "Ambulant Male Toilet" or "Ambulant Female Toilet", as applicable; (ii) Raised & visual versions of the male and female ambulant symbols; (iii) Braille that fully describes the information displayed by symbols and text. 
8.8.	At exits, the signage shall include: (i) The word "Exit"; and (ii) The word "Level" and the floor level number OR a floor level descriptor OR a combination of both the number and the descriptor; (iii) Braille that fully describes the information display by text.
8.9.	At the door to rooms/spaces provided with hearing augmentation, the signage shall include raised & visual versions of the international symbol of deafness.
8.10.	Within the room/spaces provided with hearing augmentation, the signage shall include: (i) The type of hearing augmentation; (ii) The area covered within the room; (iii) If receivers are being used & where they can be obtained.
8.11.	Directional signage shall include: (i) A wayfinding arrow that indicates the location of the subject accessible facility (being an accessible toilet or accessible entry); (ii) Raised & visual versions of the international symbol of access; (iii) Raised text that describes the subject accessible facility; (iv) If the accessible path of travel to the subject accessible facility is on a different level, include a symbol to denote travel via lift (if applicable). 
8.12.	Location of signage:

8.	SIGNAGE
	(i) Braille and tactile components shall be at a height of 1200-1600mm above FFL; and (ii) On the wall on the latch-side of the door, leading edge of the sign 50-300mm from the architrave, except at ambulant sanitary facilities; (iii) Where b. is not possible, signage shall be on the door itself; and (iv) At ambulant sanitary facilities, the signage shall be placed on the door.
8.13.	Minimum 30% luminance contrast between the wall/door to the backplate of the sign and between the backplate and the symbols, tactile and braille contained in the sign.

9.	HEARING AUGMENTATION
9.1.	Provide hearing augmentation in the following areas if an inbuilt amplification system is installed (except one used for emergency warning systems only): (i) Rooms in Class 9 buildings; (ii) Auditoriums, conference and meeting rooms, judicatory, and; (iii) Service counters screened to the public (e.g. reception, ticket/teller booths).
9.2.	Hearing loops are required to at least 80% of floor area with inbuilt amplification system.
9.3.	For Class 9b buildings, any screen or scoreboard that can display public announcements, to be capable of supplementing the public address system (excluding emergency warning only).

10.	TACTILE GROUND SURFACE INDICATORS (TGSIs)
10.1.	Ensure that TGSI's are slip-resistant and achieve minimum luminance contrast against background surface in accordance with the following: (i) Integrated TGSI's (i.e. tiles) require 30% min. luminance contrast. (ii) Discrete TGSI's (i.e. buttons) require 45% min. luminance contrast. (iii) Composite TGSI's with 2 materials/colours requires 60% min. luminance contrast.
10.2.	Ensure that warning TGSI's extend across the full width of the path of travel and commence 300mm from the edge of stairs, ramps etc. *Note 1: tactile indicators are **not** required where the gradient is not steeper than 1:20 (walkways) or at step ramps and kerb ramps.* *Note 2: tactile indicators are **not** required at fire-isolated stairs and ramps.* *Note 3: tactile indicators **are** required at external (non-fire-isolated) egress stairs and ramps.*
10.3.	Ensure that warning TGSI's have between 600mm - 800mm depth at open areas, or at landings >3m length and/or when handrail is discontinuous.
10.4.	Ensure that warning TGSI's have between 300mm - 400mm depth at enclosed landings (<3m) when external handrail is discontinuous.
10.5.	Where a pedestrian pathway and vehicular way are at the same level (i.e. no kerb provided), warning tactile indicators shall be provided. 
10.6.	TGSI's may be provided in lieu of a barrier to the underside of stairs where the headroom is less than 2 meters.

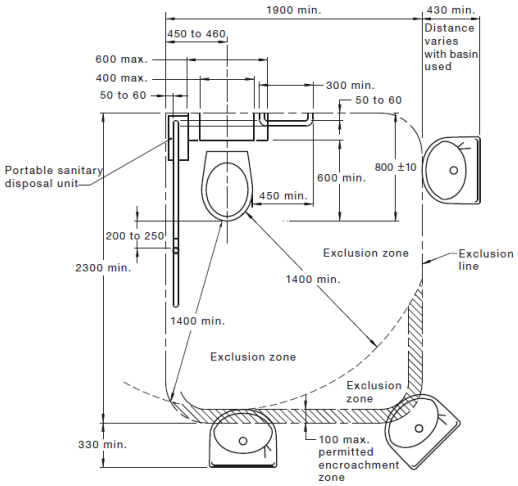
10. TACTILE GROUND SURFACE INDICATORS (TGSIs)



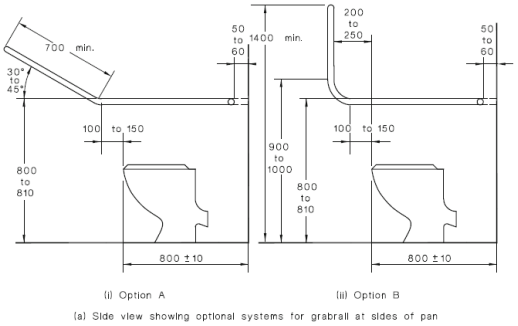
11. PASSENGER LIFTS

11.1.	All passenger lifts are required to be of a type in accordance with BCA Table E3.6a, have accessible features in accordance with BCA Table E3.6b and shall not rely on a constant pressure device for operation if the lift car is fully enclosed.
11.2.	Passenger lifts travelling more than 12m require 1400mm W x 1600mm L min. dimensions. *Note: a concession is available for existing lifts in existing building, subject to the requirements of the Disability (Access to Premises – Buildings) Standards 2010.*
11.3.	Passenger lifts travelling less than 12m (except stair platform lifts) require 1100mm W x 1400mm L min. dimensions.
11.4.	Stairway platform lifts (previous AS1735.7) require 810mm W x 1200mm L min. dimensions, compliant with BCA Part E3.6. Note: the use of stairway platform lifts is subject to a case-by-case assessment.
11.5.	Low-rise platform lifts (previous AS1735.14), require 1100mm W x 1400mm L min. dimensions compliant with BCA Part E3.6 and must not travel more than 1000mm height variation.
11.6.	Low rise, low speed constant pressure lifts, unenclosed type (previous AS1735.15), require 1100mm W x 1400mm L min. dimensions compliant with BCA Part E3.6 and must not travel more than 2m. They cannot be used high traffic public areas.
11.7.	Low rise, low speed constant pressure lifts, enclosed type (previous AS1735.15), require 1100mm x 1400mm min. dimensions compliant with BCA Part E3.6 and must not travel more than 4m. They cannot be used high traffic public areas.
11.8.	Any low-rise lifts (previous part AS1735.14 or 15) that require constant pressure to be applied to the lift control buttons to either call and/or operate the lift (i.e. Press and Hold) are to include signage to explain operations of use.
11.9.	Small size low-speed automatic lifts (previous AS1735.16), require 1100mm W x 1400mm L min. dimensions and must not travel more than 12m.
11.10.	Ensure all passenger lifts (except stair platform lifts) have 900mm min. clear door opening, compliant with AS1735.12.
11.11.	Ensure all Low-rise platform and Low rise, low speed constant pressure lifts with manual door opening (previous AS1735.14, 15 and 16) have suitable door circulation areas compliant with AS1428.1.
11.12.	Ensure the centre line of standard lift call buttons in all lift lobbies are located at height of 900-1200mm and at least 500mm distance from an internal corner to be accessible to people using wheelchairs, compliant with AS1735.12.
11.13.	Ensure all passenger lifts (except stair platform and low-rise platform lifts) include an internal lift control panel with centre line of control buttons located at a height no less than 700mm and no greater than 1250mm above FFL. The components of the floor level buttons shall possess Braille, raised tactile symbols and numbers, visual and auditory indicators, compliant with AS1735.12. *Advisory note: horizontal lift control panels are preferred over vertical panels for ease of reach as they generally can be positioned with control buttons within 900-1100mm FFL which is the preferred range for most wheelchair users.*

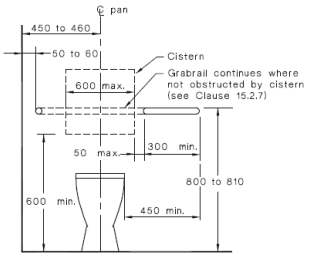
11.	PASSENGER LIFTS
11.14.	Ensure all passenger lifts (except stair platform and low-rise platform lifts) include 2 x lift control panels when the width/length dimension is less than 1400mm.
11.15.	Ensure all passenger lifts (except stair platform and low-rise platform lifts) include an internal handrail installed at a height 850-950mm. The handrail ends shall be no more than 500mm away from any operating device or button.
11.16.	Ensure all passenger lifts (except stair platform lifts) include emergency hands free communication, including a button to alert call centre of a problem and a signal light to confirm that call has been received.
11.17.	Ensure all lifts serving more than 2 levels provides automatic audible information within the lift car to identify each level the lift stops.
11.18.	Ensure all lifts serving more than 2 levels provides appropriate visual and audible arrival signals of the lift car in all lift lobbies.
11.19.	Ensure all lifts serving more than 2 levels provides appropriate audible range and frequency, (between 20-80dbA at maximum frequency of 1500 Hz).
11.20.	The lighting in all enclosed lift cars must be at least 100 lux.
11.21.	All visible information to provide 30% min. luminance contrast to background surface.

12.	ACCESSIBLE SANITARY FACILITIES
12.1.	Provide 1 unisex accessible toilet at each bank of male/female toilets on each storey compliant with BCA Table F2.4a. *NB. Where more than 1 toilet bank on each storey provide an accessible facility at 50% of banks.*
12.2.	Ensure a balance of left- and right-handed WC pans within the building.
12.3.	Circulation space associated with the toilet pan min. 1900mm W x 2300mm L. The washbasin is permitted to encroach a max. 100mm within the WC circulation space in accordance with Figure 43 of AS1428.1-2009. 
12.4.	The required circulation spaces associated with toilet pan, washbasin, shower and door are allowed to overlap.
12.5.	The washbasin is permitted to encroach into the doorway circulation space, however a min. 300mm is required between the door swing (for a hinged door) and the washbasin. Other fixtures such as toilet pan and shower seat are not allowed within the door circulation.
12.6.	The centreline of the accessible toilet pan shall be 450-460mm from side wall.
12.7.	Toilet projection from the back wall to the front of the toilet seat shall be 800mm ±10mm. *Note: This is a critical dimension.*
12.8.	The height to top of the toilet seat shall be 460-480mm above FFL.
12.9.	The toilet seat shall achieve 30% luminance contrast against background (e.g. pan, wall or floor surface).
12.10.	Provide grabrails on wall of toilet at a height of between 800-810mm (to top of grabrail) above FFL.

12. ACCESSIBLE SANITARY FACILITIES



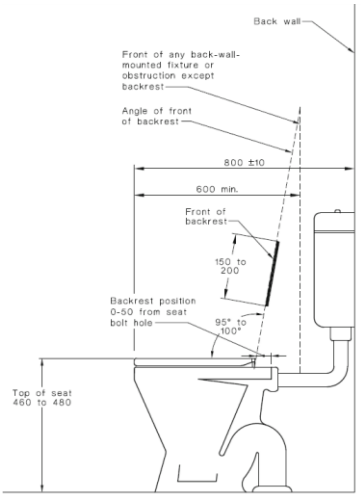
(a) Side view showing optional systems for grabrail at sides of pan



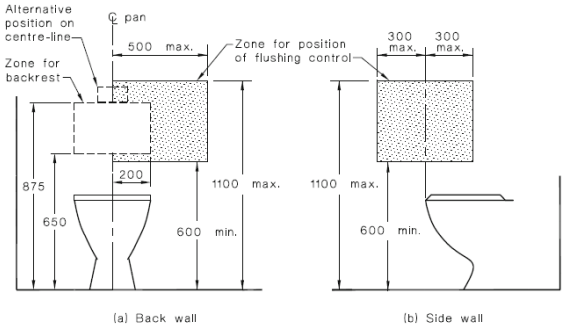
Note: If concealed cistern used, WC grab-rails are to be continuous across side and rear walls. If exposed cistern used, rear grabrail to commence 50mm max. from cistern edge.

12.11. Provide angled toilet backrest (350-400mm W x 150-200mm H) installed between 120-150mm height from top of pan seat and 50mm max. distance from seat bolt hole.

NB. No toilet lid to be provided as this impedes use of back rest.

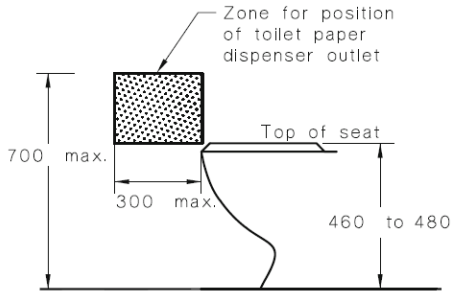


12.12. Flushing controls shall be located in accordance with Figure 40 of AS1428.1-2009.



12.13. Toilet roll holder to be installed on adjacent wall to toilet at 600mm centre-line height from FFL within 300mm max. length from front of pan and no closer than 50mm to grabrail.

12. ACCESSIBLE SANITARY FACILITIES

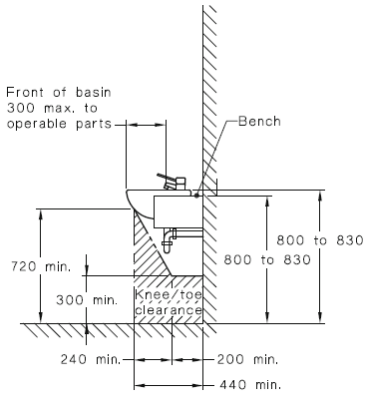


12.14. The centreline of the basin shall be min. 425mm from side wall.

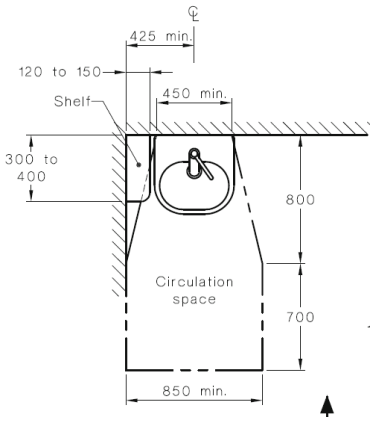
12.15. The height of the basin shall be 800-830mm from FFL with lever action taps and insulation of water pipes.

12.16. Provide basin with a 430mm min. depth projection (from back wall to front of the basin) and suitable wheelchair knee/toe height clearance, compliant with Figure 44 of AS1428.1-2009.

Knee/toe clearance shall be clear of water supply and/or sewage pipes.



12.17. Washbasin shall have min. 450mm width and circulation space in accordance with Figure 44 of AS1428.1-2009.



12.18. 300mm max. distance from the front of the basin to the operable part of taps.

Note: operable parts of taps shall be understood as the tap handle (for its full arc of operation) OR the position where a sensor is reliably activated AND the water spout.

12.19. Provide separate fixed shelf (120mm - 150mm W x 300mm - 400mm L) next to wash basin, installed at 900mm - 1100mm above FFL.

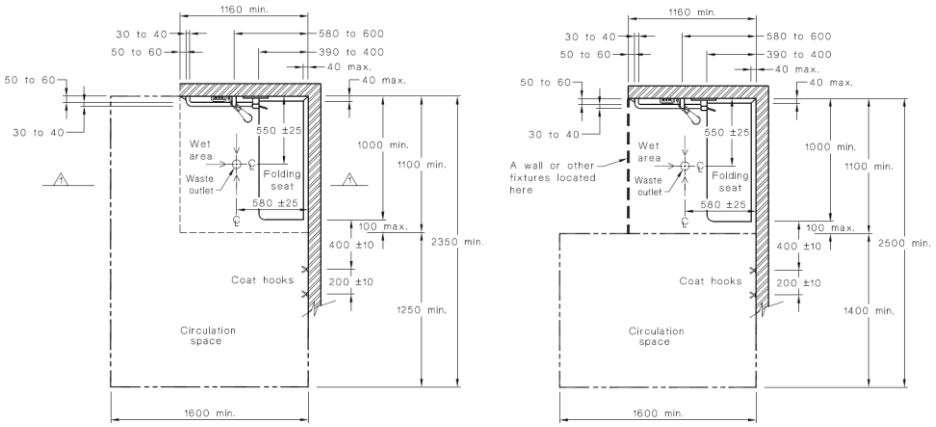
Shelf space may also be provided as a vanity top, min. 120mm W x 300mm L.

12.20. Provision of soap dispenser, hand drier or paper towel dispenser shall be installed at a height of 900-1100mm to the operative component.

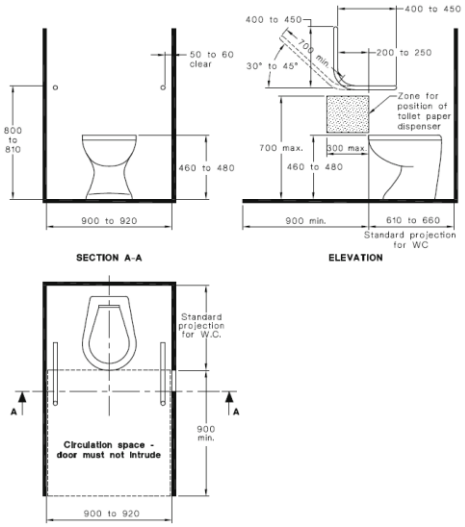
Note: it is recommended that soap dispenser and hand dryer/paper towel dispenser are within reach from the washbasin (for example, that would allow for a wheelchair user not to need to move away from washbasin to dry hands).

12.21. Provide mirror above washbasin, with base installed at 900mm max. above FFL and extending to a height not less than 1850mm. The width of the mirror shall be min. 350mm.

12.	ACCESSIBLE SANITARY FACILITIES
12.22.	1 x clothes hanging device to be installed between 1200-1350mm from FFL and at least 500mm from an internal corner.
12.23.	Door shall include an in-use indicator and a bolt/catch that can be opened from outside in an emergency. If snib turn is used, the handle shall be 45mm min from centre.
12.24.	A baby change table (if provided) cannot impede into required circulation spaces (when folded up). The top of table to be installed at 820mm height with 720mm min. under bench clearance above FFL.
12.25.	Light switches to be installed 900-1100mm above FFL and 500mm min. from internal corner.
12.26.	GPO's to be installed 600-1100mm above FFL and 500mm min. from internal corner.
12.27.	Rocker action/toggle type switches at least 30mm x 30mm dimensions are required to assist people with dexterity impairment.
12.28.	Accessible shower shall be hobless/step-free.
12.29.	Minimum dimensions of the shower recess 1100mm (side wall) x 1160mm (back wall).
12.30.	The circulation space associated with the shower shall be in accordance with Figure 47 of AS1428.1-2009.
12.31.	All accessible showers have shower rail/curtain installed. *Note: if shower screens are proposed, it shall be clear of the minimum circulation space (min. 1600 x 2350mm). Moreover, the shower door shall be in accordance with Clause 13 of AS1428.1-2009.*
12.32.	The height to the top of shower seat shall be 470-480mm above FFL.
12.33.	Provide a horizontal grab rail (660mm min), to be placed beneath the vertical shower support rail, between 390-400mm from side wall (leading edge of grabrail aligned with end of shower seat), installed 800-810mm height from FFL.
12.34.	Provide vertical shower support rail to start between 1000-1100mm from FFL. The top of the shower support rail to finish between 1880-1900mm FFL. The rail to be placed between 580-600mm from the side wall.
12.35.	Ensure the shower taps and soap holders to be placed between 900mm - 1100mm from FFL. The shower taps and soap holders shall be 300-800mm from side wall and there shall be 50mm clear from the vertical support grabrail.
12.36.	Hand-held shower head required, with flexible hose min. 1500mm in length.
12.37.	The height of the hose wall outlet to be 700±5mm height above FFL to ensure suitable hose length when showering. A suitable back-flow prevention device shall be provided.
12.38.	Provide 2 x clothes hanging devices required outside the shower recess. First hook shall be 400mm from the edge of the toilet seat and the second hook shall be 600mm from the edge of the seat, installed between 1200-1350mm from FFL.



13.	AMBULANT SANITARY FACILITIES
13.1.	Ambulant facilities for males and females shall be provided at each bank of toilets where there are one or more toilets in addition to an accessible WC.

13.	AMBULANT SANITARY FACILITIES
13.2.	Minimum 900mm x 900mm circulation area shall be provided between successive door swings in airlocks/vestibules on path of travel leading to ambulant toilets.
13.3.	Minimum 900mm x 900mm circulation area shall be provided outside the ambulant cubicles.
13.4.	The cubicle shall be between 900mm - 920mm clear width with WC pan centred (i.e. 450-460mm set out).
13.5.	The cubicle door shall have a min. 700mm clear opening width.
13.6.	900mm x 900mm clear area shall be provided in front of WC pan and clear of door swing.
13.7.	Projection of WC (distance from back wall to the front of the seat) shall be 610-660mm.
13.8.	Height to top of pan seat shall be 460-480mm above FFL.
13.9.	Ambulant cubicle door shall be provided with in-use indicator and bolt/catch that is able to be opened from outside (in emergency). If snib catch used, the handle shall be 45mm min. length from centre.
13.10.	Grabrails provided on both sides of cubicle at 800mm - 810mm height (to top of grabrail) from FFL. Refer to Figure 53 (A) of AS1428.1-2009 for further guidance. 
13.11.	Toilet roll holder to be placed at 700mm max. height from FFL and 300mm max. distance from front of pan on adjacent wall, no closer than 50mm to grabrails.
13.12.	Clothes hook to be installed between 1350mm - 1500mm from FFL.

14.	GRABRAILS
14.1.	Grabrails shall have 30-40mm outside diameter.
14.2.	Grabrails shall be installed 800-810mm height to the top of grabrail.
14.3.	Grabrails shall be able to withstand a force of 1100N applied at any position and in any direction.
14.4.	The clearance between the face of the grabrail and the wall shall be 50-60mm (finger/knuckle clearance).
14.5.	270-degree clear arc around top of handrail required (extending for 600mm min. height above the grabrails).

Design Confidence Pty Limited
Shop 2, 35 Buckingham Street, Surry Hills NSW 2010
ABN: 72 896 582 485

T: (02) 8399 3707
E: sydney@designconfidence.com
W: www.designconfidence.com