Disability Access Report

Project: **Randwick Racecourse - WINX Stand**

Address: **Royal Randwick's Leger Lawn**

Stage: State Significant Development (SSD) application

Ref: J000341

Date: 30 October 2019

For: Australian Turf Club and Racing NSW

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DOCUMENT CONTROL

Filename	Revision	Date
191028_Che Acc_AT RNSW_WINX_SSDA_0341_Draft	1	28 October 2019
191028_Che Acc_AT RNSW_WINX_SSDA_0341_rev Draft	2	28 October 2019
191030_Che Acc_AT RNSW_WINX_SSDA_0341_final	3	30 October 2019

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1. Introduction

1.1 Report Background

Cheung Access Pty Ltd has been commissioned by Australian Turf Club to provide professional Access consulting services for the proposed construction of the Winx Stand which will be built on Royal Randwick's Leger Lawn and cater for approximately 5000 spectators on major race days (Class 9b Sporting Venue).

It will also be used by the Australian Turf Club year-round for non-race-day events such as conferences, trade shows, exhibitions and university examinations.

Entry to the site is accessible via Alison Road and it is proposed accessible paths of travel will be provided from the car parking areas and public transport drop off and pick up areas.

Our engagement involved a detailed desktop assessment of the architectural design documentation against the provisions of the intent and objects of the Disability (Access to Premises- Buildings) Standards (2010), Part D3, E3.6 and F2.4 of the National Construction Code Series (Volume 1) Building Code of Australia 2019 (BCA).

1.2 Report Purpose

The key objectives of the report are as follows:

- ❏ Undertake an assessment of the proposed development against:
  - ❏ Part D3, E3.6 and F2.4 Deemed to satisfy provisions of the National Construction Code Series – Volume 1- Building Code of Australia.
  - ❏ City of Sydney Development Control Plan (2004)
- ❏ Identify any compliance departures that require resolution/attention for the proposed development by way of design change or Performance Solutions prior to the submission of the Construction Certificate application.
- ❏ Verify that the referenced documentation has been reviewed by an appropriately qualified Accredited Access Consultant and demonstrate that compliance with the BCA / Access to Premises – Building Standard 2010 is readily achievable.
- ❏ Enable the certifying authority to satisfy its statutory obligations under Clause 145 of the Environmental Planning and Assessment Regulation, 2000 and its statutory obligations under the Building Professionals Regulation 2007.
- ❏ Accompany the submission of the State Significant Development (SSD) application to the Consent Authority to enable them to be satisfied that the building design is capable of complying with the NCC/BCA and that subsequent compliance with the access requirements of the BCA, will not give rise to design changes to the proposed development, which may necessitate the submission of additional Section 4.55 applications under the Environmental Planning and Assessment Act, 1979.

Cheung Access has reviewed drawings for the Winx Stand (Class 9b) to assess for consistency with the following disability design criteria contained within:

1. The intent and objects of the Disability (Access to Premises- Buildings) Standards (2010).
2. Part D3 and F2.4 of the Building Code of Australia (BCA) 2019
3. Relevant Australian Standards listed in the BCA 2019, as follows:
    a. AS1428.1 Design for Access and Mobility: General requirements for Access – New Building Work (2009)
    b. AS1428.4.1 Design for Access and Mobility: Means to assist the orientation of people with vision impairment – Tactile ground surface indicators (2009)
    c. AS2890 (Part 6) (2009) – Parking Facilities – Off-street parking for people with disabilities
    d. AS4586 (2013) Slip resistance classification of new pedestrian surface materials
    a. AS1735.12 Lifts, escalators and moving walks – Facilities for persons with disabilities, Amendment 1 (1999).

In the preparation of this report, documentation relied upon for the State Significant Development Application (SSDA) stage review is referenced in Appendix A.

1.3 Report Limitations and Exclusions

The limitations and exclusions of this report are as follows:

- ❏ This report is based on a review of the referenced documentation in the Appendix A.
- ❏ This Report does not address issues in relation to the design, maintenance or operation electrical, mechanical, hydraulic or fire protection services, Utility Services Provider Requirements (Water, Gas, Telecommunications and Electricity supply authorities), Local Government Act and Regulations, Occupational Health and Safety Act and Regulations or the like.
- ❏ This assessment does not incorporate the detailed requirements of the BCA Referenced Australian Standards and it's the responsibility of design and installation contractors to demonstrate and achieve compliance for all new works.
- ❏ The commentary within this Access Assessment Report does not relieve the Principal Designer, Principal Building Contractor or the Certifying Authority from their statutory obligations under the EP&A Act, Work Health Safety Act, BPB Act and the like and they are to be satisfied that the proposal meets their requirements prior to approval.

- ❏ It is important to note that without the written permission from Cheung Access Pty Ltd, no part of this report may be reproduced in any form or by any means. This report is based solely on client instructions and therefore should not be relied upon or used by any third party without prior knowledge and instructions from Cheung Access Pty Ltd.
- ❏ All reasonable attempts have been made to identify key compliance matters pursuant to the BCA and additional issues which have been deemed an impediment to access provision and may increase Client risk of attracting a complaint under the DDA.
- ❏ Cheung Access accepts no responsibility for any loss suffered as a result of any reliance upon such assessment or report other than providing guidance to alleviate access barriers in the built environment and reduce Client risk of attracting a complaint under the DDA.

Exclusions to the access Report:

- ❏ Cheung Access has not reviewed the external pathways outside of the proposed new works. This is the responsibility of the Client to address.

1.4 Disability Discrimination Act 1992 (DDA)

The Federal Disability Discrimination Act 1992 (DDA) provides protection for everyone in Australia against discrimination based on disability. Section 32 of the DDA focuses on the provision of equitable and dignified access to services and facilities for people with mobility, sensory and cognitive disabilities.

Disability discrimination happens when people with a disability and their relatives, friends, carers, co-workers or associates are treated less fairly than people without a disability. Compliance with Access to Premises Standards give certainty to building certifiers, building developers and building managers that, if access to (new parts) of buildings is provided in accordance with these Standards, the provision of that access, to the extent covered by these Standards, will not be unlawful under the DDA. This however applies only to the new building or new parts of an existing building and its affected part. All areas outside the scope of these areas are still subject to the DDA. We cannot guarantee or certify for DDA compliance because DDA compliance can only be assessed by the Courts. Scope of DDA extends beyond the building fabric and also includes furniture and fittings.

From 1 May 2011, the Commonwealth's Disability (Access to Premises - Buildings) Standards made under the Disability Discrimination Act 1992 (DDA) applies to all new

building work. The Premises Standards, established requirements for access to buildings, that are incorporated into the BCA 2019.

The Premises Standards contain an Access Code of construction that is mirrored in the disability access provisions of the BCA 2019. New building work must comply with the Access Code in the same manner as complying with the BCA 2019 by meeting deemed-to-satisfy provisions or by adopting a performance solution that achieves the relevant performance requirements.

This means if access is provided in accordance with the Premises Standards then it is not unlawful under the DDA. It also ensures that Object 1.3 (a) of the Premises Standards is met which is to:
'Ensure that dignified, equitable, cost-effective and reasonably achievable access to buildings and facilities and services within buildings is provided for people with a disability.'

1.5 Proposed Development

Description of proposed development

The proposed development involves the construction of a multi-use hall facility available for race days and non-race-day events such as conferences, trade shows, exhibitions and university activities.

BCA Classification:

Class	Level	Description
9b	Ground Level 01	Function Hall areas and associated amenities

Areas Required to be Accessible:

Level	Area	Description
External Ground	Entry points	Accessible entrances are provided to the following areas: ● Entry Terrace ● Lawn level for race viewing ● The Laneway
Ground	Hall	To and within all areas normally used by

Floor	Sanitary facilities Changing Places facility *Food and Beverage Facilities* *Kitchen/ Bar/ Back of House -* *Not required to be accessible*	the occupants.
Mezzanine	*Plant Area* *Storage*	*Not required to be accessible*
Level 01	Hall 1 Terrace Sanitary facilities Bridge link to QEII building *Food and Beverage Facilities* *Kitchen/ Bar/ Back of House -* *Not required to be accessible*	To and within all areas normally used by the occupants.

1.6 Report Structure

Section of Report	Design Criteria
3.1	**Overview of Accessible building features**
3.2	**BCA Part D3 – Access For People with Disabilities**

It is also the responsibility of all design consultants to ensure compliance with relevant BCA access requirements, DCP controls, Australian Standards and Manufacturers Specifications.

This report does not in any way relieve design consultants from their obligations in designing to achieve compliance with the BCA. Furthermore, this report does not relieve the PCA from their statutory obligations required to assess the drawings in detail prior to the issue of a Construction Certificate.

2. Summary of Key Compliance Departures

It is noted that this assessment is based on preliminary architectural drawings and are not yet sufficiently detailed for a Construction Certificate approval.

The following comprises a summary of the key compliance issues identified under the Disability Access Assessment in Section 3 and is to be read in conjunction with the aforementioned Sections and the Building Code of Australia Volume 1.

The following matters are to be considered & addressed to the satisfaction of the Principal Certifying Authority in the next design and construction phase.

#	Relevant BCA Clause	Element	Issue	Non-compliance / lack of detail
1	D3.1	External paths of travel	Ongoing design detail	All external accessible paths of travel to comply with AS1428.1 (2009) for: ● minimum widths, ● gradient, ● crossfall, ● hand and kerb rails as required on ramps, ● turning spaces; and ● slip resistance rating as per Table 3B, HB198:2014 - Wet pendulum test or Oil-wet inclining platform classifications for applications where NCC does not require slip resistance Ensure that 1:20 gradients are maintained along the lawn from the terrace level to the track level.
2	D3.1	Internal paths of travel	Ongoing design detail	All internal accessible paths of travel, including to and within common area facilities, to comply with AS1428.1 (2009) for: ● minimum widths, ● gradient, ● crossfall ● turning spaces and ● slip resistance rating as per Table 3B, HB198:2014 - Wet pendulum test or Oil-wet inclining platform

				classifications for applications where NCC does not require slip resistance
3	D3.2	Doors	Ongoing design detail	All common doors to have compliance with AS1428.1 (2009) with respect to: ● 850mm clear openings ● Door latch side circulation space ● 30% luminance contrast on doorways ● Door operation and hardware ● Door force is 20N where a door closer is fitted.
4	D3.3	All internal stairs and external stairs on northern / western elevation	Ongoing design detail	All non-fire-isolated stairs to comply with AS1428.1 Cl 11 Stairs (2009) with regards to ● Minimum width of 1000mm ● Handrails on both sides ● Handrail heights to be 865mm to 1000mm above step nosing ● Handrail extensions at top and base ● Tactile indicators on top and bottom landing of steps ● Contrast strips to edge of stair nosings 50 - 75mm deep (30% contrast)
5	D3.6	Accessible signage	Ongoing design detail	Accessible signage to be provided in accordance with BCA2019 and AS1428.1-2009 for: ● Required exit doors stating ‘Exit’ and ‘Level’ followed by floor number. ● Accessible toilets ● Ambulant cubicles
6	D3.7	Hearing	Not specified	Determine whether hearing

		Augmentation		augmentation is required where there is a built in Audio-Visual system including any TV. Confirm where there will be an inbuilt amplification system.
7	D3.12	Glazing	Visual Banding	Confirm detail at time of Construction Certificate
8	F2.4	Accessible and ambulant sanitary facilities	Fittings and fixtures	Confirm detail at time of Construction Certificate
9	F2.9	Accessible Adult Change Facility	Fittings and fixtures	Confirm detail at time of Construction Certificate

3. Disability Access Assessment

3.1 Overview of Accessible building features

3.1.1 Compliance with BCA Part D3 for new buildings

The proposed development, will satisfy the prescriptive deemed to satisfy provisions of Part D3, E3.6 and F2.4 of the BCA 2019, as follows:

1. Accessible pathways from associated building to the principal pedestrian entrances.
2. Access to and within all areas normally used by the occupants.
3. Provision of an accessible toilet on each level
4. Provision of ambulant cubicles within each male and female bank of toilets
5. An Accessible Adult Change Facility

3.2. BCA Part D3 – Access For People with Disabilities

The following is a clause-by-clause assessment of the architectural drawings against BCA Part D3 – Access For People with a Disability. For more detail on each requirement, please refer to *Appendix B: BCA Part D3 – Access For People with a Disability.*

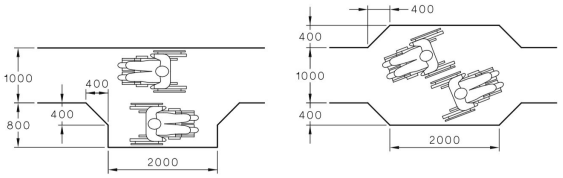
Deemed to Satisfy Provision	Complies	Comments
D3.1 General building access requirements Class 9b	✓	<u>Hall Spaces</u> The main entry to the ground floor hall is via the entry

		terrace at the north of the site. There are 12 double leaf outward opening entry doors to the hall area. All doors The Hall on level 1 will have access via lifts and stairs and escalators. There are 4 double leaf outward opening entry doors to this space. The Hall on Level 1 leads to the terrace area which provides tiered seating viewing areas. Circulation pathways around the ground floor hall and level 1 hall will provide accessible paths of travel to associated amenities such as the: 1. Changing Places facility 2. Male and Female sanitary facilities 3. Bar servery areas <u>Level 1 Link Bridge</u> This is a bridge connecting the Winx Stand to the QEII stand on level 1. The drawings do not show the gradient of the link bridge. It is assumed that it is level with a maximum gradient of 1:40 with 1:40 crossfall. *Overall* The drawings demonstrate access will be provided to the maximum extent possible to all areas on all levels of the development. Circulation spaces and passing spaces have also been provided at the end of corridors, common doorways and every 20 metres to comply with AS1428.1 (2009). <u>Recommended Action</u> At Construction Certificate Stage: ● Ensure external and internal pathways comply with AS1428.1 (2009). ● Provide all common area doors which have compliance with AS1428.1 (2009) with respect to 850mm clear openings, circulation space and luminance contrast on doorways, door force is 20N where a door closer is fitted.

		● Provide slip resistance certification for common stairs, walkways and ramp, to show testing under wet surface conditions in accordance with AS4586 – 2013. ● Operational Management Strategies for: ○ Access between carparking ○ Access to existing buildings
D3.2 Access to buildings	**X**	The gradient of all the accessible pathways from the allotment boundary and connections to each entry to the building has the capacity to comply with AS1428.1 (2009). There is insufficient detail on the plan drawings to assess this for compliance for access to the race track level. <u>Recommended Action</u> 1. Ensure external walkways to comply with AS1428.1 (2009) including: a. 1:20 gradients walkways to have: i. Max distance between landings no greater than 15 metres ii. The floor or ground surface abutting the sides of the walkway shall provide a firm and level surface of a different material to that of the walkway at the same level of the walkway, follow the grade of the walkway and extend horizontally for a minimum of 600 mm unless one of the following is provided: (i) Kerb in accordance with Figure 18. (ii) Kerb rail and handrail in accordance with Figure 19. (iii) A wall not less than 450

		mm in height. 2. At Construction certificate stage, ensure doors have compliance with AS1428.1 (2009) with respect to clear openings, circulation space and luminance contrast on doorways. 3. Ensure the door thresholds of principal entrance doors are level 4. At Occupation Certificate provide slip resistance certification for external and internal areas. To show testing under wet surface conditions as a pendulum classification (AS4586 – 2013)
D3.3 Parts of building to be accessible	**X**	**External Accessible walkways** There is a 1:20 walkway proposed from the north of the site to the entry doorways of the hall on the ground level. <u>Recommended Action</u> Ensure construction of external walkways are in accordance with AS1428.1 ● For Walkways, a maximum 1:20 gradient with Level abutment or suitable barrier beside walkways ● Minimum Width ● Crossfall of 1:40 ● Kerbrail or barrier aligned with ramp edge on both sides of ramps **Stairs** There are 5 circulation stairs which connect the ground level to level 1. On the ground level there are 4 sets of tiered seating areas which have stairways shown. <u>Recommended Action</u> ● All public stairs to comply with AS1428.1 Cl 11 Stairs (2009) with regards to handrails on both sides and tactile indicators on top and bottom landing of steps. ● All stairs to have contrast strips to edge on stair nosings 50 - 75mm deep (30% contrast)

		to comply with AS1428.1 (f) and (g). ● Step nosings to have vertical rise no longer greater than 3mm or 5mm if rounded on rear face, where not recessed. **Fire Isolated Stairways** Stairs providing egress are shown on the plans. <u>Recommended Action</u> Fire isolated stairs to have ● Single solid contrast strip to edge on stair nosings 50-75mm deep (30% contrast) to comply with AS1428.1 ● handrail at 865mm to 1000mm above step nosing on at least one side of the stairs to comply with AS1428.1 (2009) ● Handrail extensions at landings where the handrail is not continuous ● Handrails to have no vertical sections **Lifts** There are 2 lifts shown on the drawings. There are also 2 escalators shown from ground hall level to the Hall on level 1. <u>Recommended Action</u> At time of Construction Certificate, ensure compliance with accessible features of AS1735.12 as required by Table E3.6b BCA. **Turning spaces** At the end of corridors within 2m of the end of an accessway, there are turning spaces of at least 1540mm x 2070mm to comply with AS1428.1 (2009). Corridors accessways must have passing spaces in accordance with AS1428.1–2009 at maximum 20m intervals where a direct line of sight is not available of at least 1800mm with by 2000mm length.



DIMENSIONS IN MILLIMETRES

FIGURE 3 EXAMPLES FOR PASSING SPACE FOR WHEELCHAIRS

Flooring

Flooring has yet been specified at this stage of design.

Recommended Action

At time of Construction Certificate, ensure:

1. All carpeted flooring meets the Access to Premises Standard and the BCA Part D3.3 (g) and (h) for pile height and backing thickness.
2. Provide slip resistance certification for external and internal areas. To show testing under wet surface conditions as a pendulum classification (AS4586 – 2013)
3. Threshold levels - flooring joints or abutments to have vertical rise no longer greater than 3mm or 5mm if rounded

Fittings

Recommended Action

At time of Construction Certificate, ensure that fittings required to be accessible are installed in accordance with AS1428.1-2009 and that they are at the correct:

- Height above the finished floor level
- Distance from an internal corner

Internal Doors

All common area doors to have minimum clear opening widths of 850mm or greater

Recommended Action

Doors to areas required to be accessible to have compliance with AS1428.1 (2009) with respect to

		● clear openings ● circulation space ● luminance contrast of doors ● level thresholds ● door force is 20N including where a door closer is fitted
D3.4 Exemptions	✓	The following is a list of areas within the building which are not required to be accessible: (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). Exempt areas from access: 1. Ground Floor Plating Kitchen 3 2. Ground Floor Plating Kitchen 4 3. Ground Floor Bar 4. Ground Floor Back of House 5. Plant Level
D3.5 Car parking spaces for people with a disability	**X**	There are accessible car spaces in the existing Multi Deck Car Park which will be provided for patrons of the Winx stand. However bicycle parking facilities is recommended to be provided. At least one accessible bike parking is proposed. This has not yet been assessed as landscape plans have not yet been developed. <u>Recommended action:</u> It is recommended that at least one accessible car space to comply with AS2890.6 is provided in close proximity to the Winx Stand, within the reserved spaces. An accessible bicycle space will need to

		accommodate a Recumbent bicycle/ tricycle Length 2000mm Width 750-1000mm Height 1300mm
D3.6 Signage	**X**	At this stage of the design, signage has not yet been developed. <u>Recommended Action</u> Further assessment at Construction Certificate stage is required. 1. Ensure Braille and tactile signage for required exit doors stating 'Exit' and 'Level' followed by floor number. 2. Accessible toilet signage 3. Ambulant cubicle signage 4. Areas with hearing augmentation
D3.7 Hearing augmentation	✓	Hearing augmentation is required for the following spaces: ● Within the hall auditorium on the ground level and Level , where TVs are provided <u>Recommended Action</u> Further assessment at Construction Certificate stage is required.
D3.8 Tactile indicators	**X**	Plans currently developed indicate the need to have tactile indicators on the stairs and escalators. <u>Recommended Action</u> Where required, Tactile indicators to be installed to comply with AS1428.4.1. Ensure TGSIs are a robust style with durable fixings to minimise shearing off if discrete or individual tactile units are installed.
D3.12 Glazing on an accessway	**X**	<u>Recommended Action</u> On a glazed door, provide a solid contrast line 75mm width at 900 - 1000mm and 30% luminance contrast when viewed against the floor surface or surfaces within 2m of the glazing on the opposite side

E3.6 Passenger lifts	✓	**New Lifts** Two new lifts are proposed to link the ground level areas to the upper areas. There are two escalators connecting the ground and level 1. <u>Recommended Action</u> The lifts require accessible features to be in accordance with E3.6b BCA 2019. To be assessed at Construction Certificate.
F2.4 Accessible sanitary facilities	✓	**Accessible Toilets** A unisex accessible toilet is provided in the following locations: 1. Adjacent to the Female bank of toilets (Ground level) 2. (Level 1) The layout of the accessible toilets have not been provided to check whether sufficient circulation space of 1900mm by 2300mm around the toilet pan and fixtures and fittings to comply with Fig 43, AS1428.1 (2009). **Ambulant cubicles** Within each bank of female and male toilets a cubicle suitable for people with ambulatory disabilities is required.. <u>Recommended Action</u> Show detail of ambulant cubicles within the following areas by CC stage: ● Ground Level ● Level 1 At Construction certificate stage circulation areas, fixtures and fittings within the accessible toilets and ambulant cubicles to comply with AS1428.1 (2009) (See Appendix C) 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. Provide one left hand transfer and one right hand transfer accessible toilet. If a baby change table is provided, ensure baby change table does not intrude into required pan circulation when in folded up position.
F2.9 Accessible adult change facilities	✓	An accessible adult change facility is proposed on the ground level adjacent to the Accessible toilet with no details on layout of fixtures and fittings. <u>Recommended Action</u> Ensure by CC stage, the Accessible Adult Change Facility (AACF) meets the circulation spaces and fittings specifications of BCA Specification F2.9 including: ● Automated sliding entrance doors to have a minimum clear opening of 950mm ● Circulation areas to be in accordance with Figure 2 ● All required fittings, equipment and fixtures to be in accordance with Clauses 3 to 11 (See Appendix D for comprehensive list of compliances for the AACF)

4. Conclusion

We note some further assessment prior to Construction Certificate stage is required to ensure compliance with Part D3 BCA (2019), as highlighted in the table below.

Item	Recommended Action
1	Accessible pathways (External and Internal) to comply with AS1428.1 (2009) ● Clause 6 - pathway width and turning areas ● Clause 7 - construction tolerance and abutment ● Clause 10 - gradient, crossfall and provision of suitable barriers **Provide Slip resistance certificates for external paved surfaces and internal floor surfaces which are part of an accessible path of travel -** As per Table 3B, HB198:2014 - Wet pendulum test or Oil-wet inclining platform classifications for applications where NCC does not require slip resistance, as detailed below: **a. External footpaths and walkways under 1:14** Wet Pendulum P4 or Oil-wet platform test R11 **b. Entries and Transitional areas** Wet Pendulum P2 or Oil-wet platform test R9 **c. Entries and access areas for dry areas:** Wet Pendulum P1 or Oil-wet platform test R9 **d. Toilet facilities** Wet Pendulum P3 or Oil-wet platform test R10 **e. Kitchen areas** Wet Pendulum P3 or Oil-wet platform test R10 **f. TGSIs** In situ testing of slip resistance rating of TGSI's as per BCA Table D2.14 Slip Resistance Classification Wet Pendulum P4 or Oil-wet platform test R11.
2	All common public stairs to comply with AS1428.1 Cl 11 Stairs (2009) with regards to ● Minimum width of 1000mm ● Handrails on both sides ● Complying diameter ● Handrail heights to be 865mm to 1000mm above step nosing ● Handrail extensions at top and base ● Tactile indicators on top and bottom landing of steps

	● Step nosing ● Under stair barrier where required
3	Fire stairs to be installed with a contrast strip to edge on stair nosings 50-75mm deep (30% contrast) to comply with AS1428.1 (f) and (g) with a handrail on at least one side of the stairs to comply with AS1428.1 (2009)
4	Doors to areas required to be accessible to have compliance with AS1428.1 (2009) with respect to ● clear openings ● circulation space ● luminance contrast on doors ● level thresholds ● door force is 20N including where a door closer is fitted
5	Visual indicators on glazing to comply with AS1428.1-2009 including ● be 50 - 75mm wide on all glazed windows and doors ● solid ● luminance contrast of minimum 30% from when viewed against the floor surface ● at a height 900-1000mm.
6	Determine whether hearing augmentation is required in the hall Confirm if there is an inbuilt amplification system in any other areas and provide hearing augmentation as required.
7	Fixtures, fittings and layout of all accessible toilets to comply with AS1428.1 (2009). And 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
8	Fixtures, fittings and layout of ambulant cubicles to comply with AS1428.1 (2009) Provide an ambulant cubicles in the following locations: ● Ground Floor bank of male and female toilets ● Level 1bank of male and female toilets
9	Tactile indicators installed on the top and bottom of non-fire isolated stairs and escalators to comply with AS1428.4.1.
10	Luminance contrast between TGSIs and the background surface on which they are installed to be in accordance with AS1428.4.1-2009 and be confirmed by on-site testing prior to issuing of OC

11	Accessible signage to be provided in accordance with BCA2019 and AS1428.1-2009
12	Carpeted flooring meets the Access to Premises Standard and the BCA Part D3.3 (g) and (h) for pile height.
13	Threshold levels for varying flooring joints or abutments to have vertical rise no longer greater than 3mm or 5mm if rounded
14	All Lifts to compliance with Table E3.6
15	Accessible Adult Change Facility to comply with Specification F2.9

On the basis of our assessment, we confirm that the State Significant Development (SSD) application drawings for Randwick Racecourse - WINX Stand, have the capacity to meet:

1. Performance Requirements of the Disability (Access to Premises-Buildings) Standards 2010 and Part D3, E3.6 and F2.4 of the Building Code of Australia (BCA) (2019) through the deemed-to-satisfy provisions.

Statement of Qualifications

I certify that I am an appropriately qualified and competent person practising in the relevant area of work. I have recognised relevant experience in the area of work assessing disability access compliance and hold appropriately current insurance policies. (My qualifications and accreditations are listed below)

Full Name	Christine Cheung
Company	Cheung Access Pty Ltd
Address	Suite 14.03, Level 14, 1 York Street, Sydney NSW 2000
Qualifications and Accreditations	1. B. App Sc (Occupational Therapy), Masters of Environmental Studies 2. Accredited with the Association of Consultants in Access, Australia Member No. 158, Since 2003 3. Registered Occupational Therapist (Occupational Therapy Board/ AHPRA) 2017 –OCC0001901643
Signature	

Date	30 October 2019

Appendix A: Report Documentation Relied Upon

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

- ❏ National Construction Code Series – Volume 1 of the Building Code of Australia 2019 (BCA)
- ❏ National Construction Code Series – Guide to the Building Code of Australia 2019
- ❏ Access to Premises - Building Standards 2010

DRAWING LIST - SSDA		
SHEET No.	SHEET NAME	Current Revision
SSDA-001	COVER PAGE	1
SSDA-100	LOCATION PLAN	1
SSDA-101	BOUNDARIES & SCOPE OF WORKS	1
SSDA-102	SITE PLAN	1
SSDA-103	SITE ANALYSIS	1
SSDA-140	DEMOLITION PLAN	1
SSDA-201	GROUND FLOOR PLAN	1
SSDA-202	MEZZANINE FLOOR PLAN	1
SSDA-203	LEVEL 1 FLOOR PLAN	1
SSDA-204	PLANT LEVEL FLOOR PLAN	1
SSDA-205	ROOF PLAN	1
SSDA-301	ELEVATIONS	1
SSDA-302	ELEVATIONS	1
SSDA-401	SECTIONS	1
SSDA-701	SOLAR STUDIES - 21 MARCH 9AM	1
SSDA-702	SOLAR STUDIES - 21 MARCH 12PM	1
SSDA-703	SOLAR STUDIES - 21 MARCH 3PM	1
SSDA-711	SOLAR STUDIES - 21 JUNE 9AM	1
SSDA-712	SOLAR STUDIES - 21 JUNE 12PM	1
SSDA-713	SOLAR STUDIES - 21 JUNE 3PM	1
SSDA-721	SOLAR STUDIES - 22 DEC 9AM	1
SSDA-722	SOLAR STUDIES - 22 DEC 12PM	1
SSDA-723	SOLAR STUDIES - 22 DEC 3PM	1
SSDA-801	SCHEDULE OF FINISHES	1
SSDA-811	GFA	1
SSDA-850	SIGNAGE	1
SSDA-900	PHOTOMONTAGE	1
SSDA-901	PHOTOMONTAGE	1
SSDA-902	PHOTOMONTAGE	1
SSDA-903	PHOTOMONTAGE	1

Landscape Architecture Drawings by Sturt Noble Associates
DA-1918-02 Ground Floor Master Plan - Issue C

Appendix B: BCA Part D3 - Access for People with a Disability

Below is a list of Building Code of Australia (BCA) Part D3 requirements relating to access requirements for people with a disability in Class 9b Buildings.

Clause	Requirements
D3.1 General building access requirements Class 9b	To and within all areas normally used by the occupants.
D3.2 Access to buildings	(a) An accessway must be provided to a building required to be accessible— (i) from the main points of a pedestrian entry at the allotment boundary; and (ii) from another accessible building connected by a pedestrian link; and (iii) from any required accessible carparking space on the allotment. (b) In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance, and— (i) through not less than 50% of all pedestrian entrances including the principal pedestrian entrance; and (ii) in a building with a total floor area more than 500 m2 , a pedestrian entrance which is not accessible must not be located more than 50 m from an accessible pedestrian entrance, except for pedestrian entrances serving only areas exempted by D3.4. (c) Where a pedestrian entrance required to be accessible has multiple doorways— (i) if the pedestrian entrance consists of not more than 3 doorways — not less than 1 of those doorways must be accessible; and (ii) if a pedestrian entrance consists of more than 3 doorways — not less than 50% of those doorways must be accessible. (d) For the purposes of (c)— (i) an accessible pedestrian entrance with multiple doorways is considered to be one pedestrian entrance where— (A) all doorways serve the same part or parts of the

	building; and (B) the distance between each doorway is not more than the width of the widest doorway at that pedestrian entrance (see Figure D3.2); and (ii) a doorway is considered to be the clear, unobstructed opening created by the opening of one or more door leaves (see Figure D3.2). (e) Where a doorway on an accessway has multiple leaves, (except an automatic opening door) one of those leaves must have a clear opening width of not less than 850 mm in accordance with AS 1428.1.
D3.3 Parts of building to be accessible	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; and (ii) for a stairway, except a fire-isolated stairway, clause 11 of AS 1428.1; and (iii) for a fire-isolated stairway, clause 11.1(f) and (g) of AS 1428.1; and (b) every passenger lift must comply with E3.6; and (c) accessways must have— (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 (ii) turning spaces complying with AS 1428.1— (A) within 2 m of the end of accessways where it is not possible to continue travelling along the accessway; and (B) at maximum 20 m intervals along the accessway; and (d) an intersection of accessways satisfies the spatial requirements for a passing and turning space; and (e) a passing space may serve as a turning space; and (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— (i) containing not more than 3 storeys; and (ii) with a floor area for each storey, excluding the entrance storey, of not more than 200 m2 ; and (g) clause 7.4.1(a) of AS 1428.1 does not apply and is

	replaced with 'the pile height or pile thickness shall not exceed 11 mm and the carpet backing thickness shall not exceed 4 mm'; and (h) the carpet pile height or pile thickness dimension, carpet backing thickness dimension and their combined dimension shown in Figure 8 of AS 1428.1 do not apply and are replaced with 11 mm, 4 mm and 15 mm respectively.
D3.4 Exemptions	The following areas are not required to be accessible: (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).
D3.5 Car parking spaces for people with a disability	Accessible carparking spaces— (a) subject to (b), must be provided in accordance with Table D3.5 in— (i) a Class 7a building required to be accessible; and (ii) a carparking area on the same allotment as a building required to be accessible; and (b) need not be provided in a Class 7a building or a carparking area where a parking service is provided and direct access to any of the carparking spaces is not available to the public; and (c) subject to (d), must comply with AS/NZS 2890.6; and (d) need not be designated where there is a total of not more than 5 carparking spaces, so as to restrict the use of the carparking space only for people with a disability.
D3.6 Signage	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.
D3.7 Hearing augmentation	(a) A hearing augmentation system must be provided where an inbuilt amplification system, other than one used only for emergency warning, is installed— (i) in a room in a Class 9b building; or (ii) in an auditorium, conference room, meeting room or room for judicatory purposes; or (iii) at any ticket office, teller's booth, reception area or the like, where the public is screened from the service provider.

	(b) If a hearing augmentation system required by (a) is— (i) an induction loop, it must be provided to not less than 80% of the floor area of the room or space served by the inbuilt amplification system; or (ii) a system requiring the use of receivers or the like, it must be available to not less than 95% of the floor area of the room or space served by the inbuilt amplification system, and the number of receivers provided must not be less than— (A) if the room or space accommodates up to 500 persons, 1 receiver for every 25 persons or part thereof, or 2 receivers, whichever is the greater; and (B) if the room or space accommodates more than 500 persons but not more than 1000 persons, 20 receivers plus 1 receiver for every 33 persons or part thereof in excess of 500 persons; and (C) if the room or space accommodates more than 1000 persons but not more than 2000 persons, 35 receivers plus 1 receiver for every 50 persons or part thereof in excess of 1000 persons; and (D) if the room or space accommodates more than 2000 persons, 55 receivers plus 1 receiver for every 100 persons or part thereof in excess of 2000 persons. (c) The number of persons accommodated in the room or space served by an inbuilt amplification system must be calculated according to D1.13. (d) Any screen or scoreboard associated with a Class 9b building and capable of displaying public announcements must be capable of supplementing any public address system, other than a public address system used for emergency warning purposes only.
D3.8 Tactile indicators	(a) For a building required to be accessible, tactile ground surface indicators must be provided to warn people who are blind or have a vision impairment that they are approaching— (i) a stairway, other than a fire-isolated stairway; and (ii) an escalator; and (iii) a passenger conveyor or moving walk; and (iv) a ramp other than a fire-isolated ramp, step ramp, kerb ramp or swimming pool ramp; and (v) in the absence of a suitable barrier—

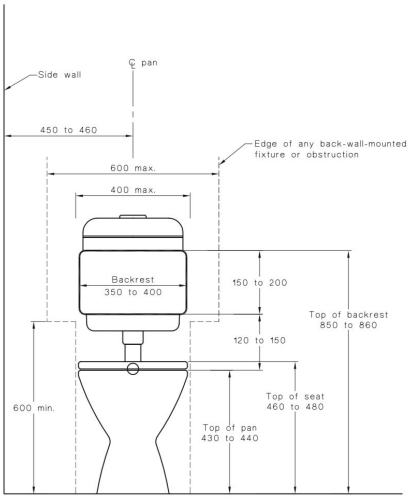
	(A) an overhead obstruction less than 2 m above floor level, other than a doorway; and (B) an accessway meeting a vehicular way adjacent to any pedestrian entrance to a building, excluding a pedestrian entrance serving an area referred to in D3.4, if there is no kerb or kerb ramp at that point, except for areas exempted by D3.4. (b) Tactile ground surface indicators required by (a) must comply with sections 1 and 2 of AS/NZS 1428.4.1. (c) A hostel for the aged, nursing home for the aged, a residential aged care building Class 3 accommodation for the aged, Class 9a health-care building or a Class 9c building need not comply with (a)(i) and (iv) if handrails incorporating a raised dome button in accordance with the requirements for stairway handrails in AS 1428.1 are provided to warn people who are blind or have a vision impairment that they are approaching a stairway or ramp.
D3.10 Swimming Pools	(a) Not less than 1 means of accessible water entry/exit in accordance with Specification D3.10 must be provided for each swimming pool required by Table D3.1 to be accessible. (b) An accessible entry/exit must be by means of— (i) a fixed or movable ramp and an aquatic wheelchair; or (ii) a zero depth entry at a maximum gradient of 1:14 and an aquatic wheelchair; or (iii) a platform swimming pool lift and an aquatic wheelchair; or (iv) a sling-style swimming pool lift. (c) Where a swimming pool has a perimeter of more than 70 m in length, at least one accessible water entry/exit must be provided by a means specified in (b)(i), (ii) or (iii). (d) Latching devices on gates and doors forming part of a *swimming pool* safety barrier need not comply with AS 1428.1
D3.12 Glazing on an accessway	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 AS1428.1.
E3.6 Passenger lifts	In an accessible building, every passenger lift must—

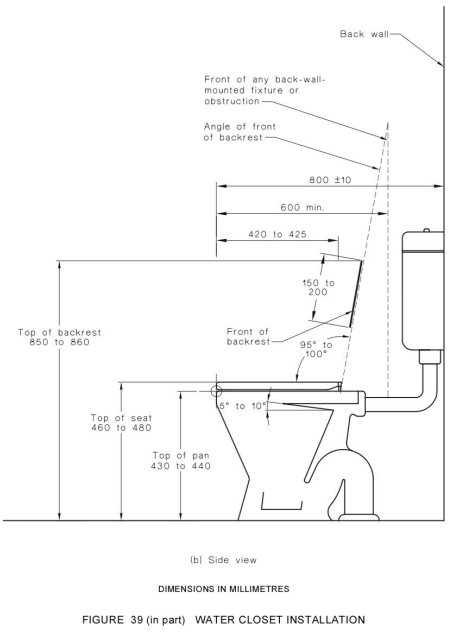
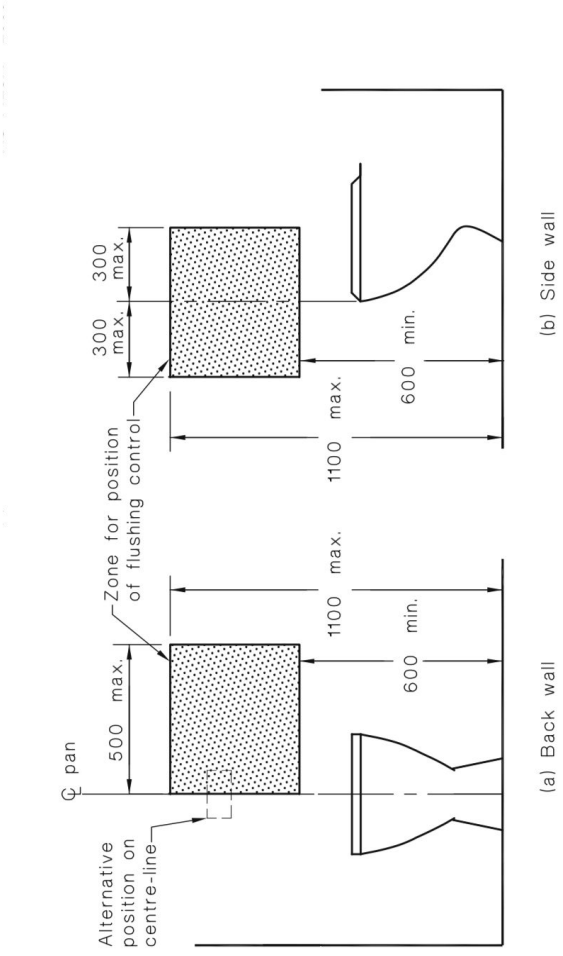
	(a) be one of the types identified in Table E3.6a, subject to the limitations on use specified in the Table; and (b) have accessible features in accordance with Table E3.6b; and (c) not rely on a constant pressure device for its operation if the lift car is fully enclosed.
F2.4 Accessible sanitary facilities	In a building required to be accessible— *SA F2.4(a)* (a) accessible unisex sanitary compartments must be provided in accessible parts of the building in accordance with Table F2.4(a); and *SA F2.4(b)* (b) accessible unisex showers must be provided in accordance with Table F2.4(b); and (c) at each bank of toilets where there is 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 (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 (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 (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 (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 (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 (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

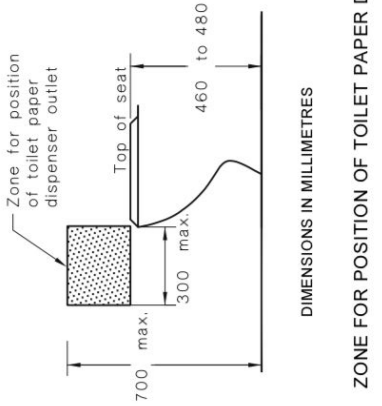
	1428.1.
F2.9 Accessible adult change facilities	(a) Accessible adult change facilities required by (b)— (i) must be constructed in accordance with Specification F2.9; and (ii) cannot be combined with another sanitary compartment. (b) One unisex accessible adult change facility must be provided in an accessible part of a— (i) Class 6 building that is a shopping centre having a design occupancy of not less than 3,500 people, calculated on the basis of the floor area and containing a minimum of 2 sole-occupancy units; and (ii) Class 9b sports venue or the like that— (A) has a design occupancy of not less than 35,000 spectators; or

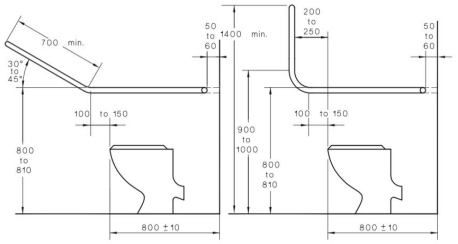
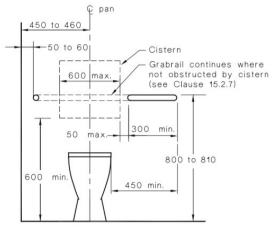
Appendix C: Accessible and ambulant sanitary facility compliance Checklists

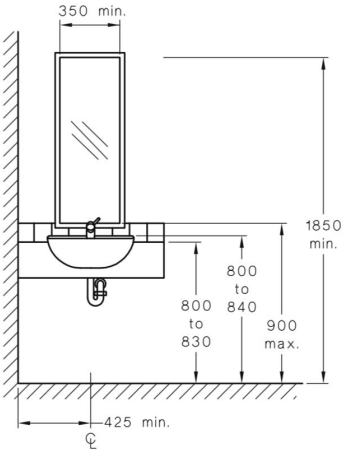
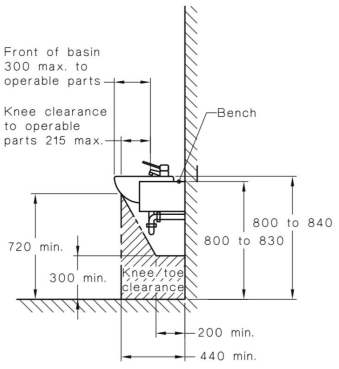
Accessible Sanitary Facilities Fittings guidelines

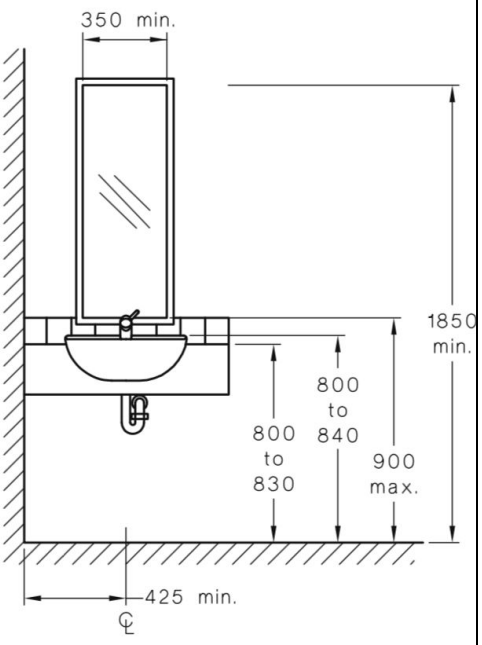
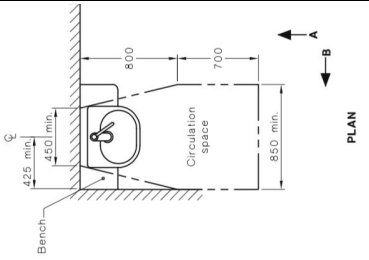
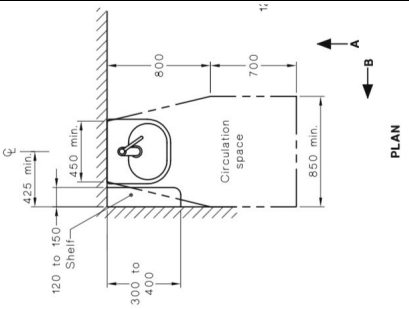
Elements	Compliance details	Comments	Diagram
Water taps (AS1428.1-2009 Clause 15.2.1)			
	Lever handle		
	Lever handle clearance not less than 50mm between adjacent surfaces		
	Taps controls and water outlet to be 300mm maximum from front of basin		
Toilet pan – accessible (AS1428.1-2009 Clause 15.2.2)	Top of seat to be 460mm to 480mm AFFL		 (a) Front view DIMENSIONS IN MILLIMETRES FIGURE 39 (in part) WATER CLOSET INSTALLATION
	Centre line of pan to adjacent wall to be 450mm to 460mm		
	Front of pan to be 800mm +/- 10mm from finished wall behind toilet		

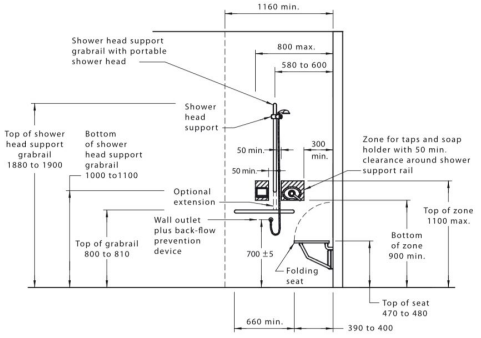
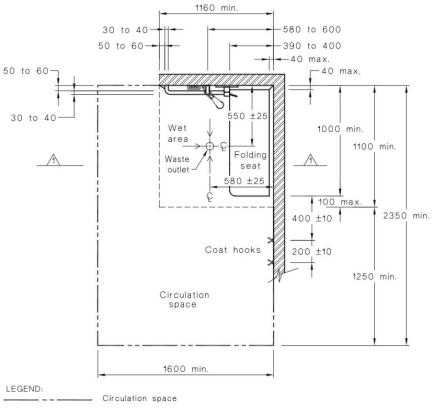
Toilet seat (AS1428.1-2009; Clause 15.2.3)	Provide minimum 30 % luminance contrast with its setting		 FIGURE 39 (in part) WATER CLOSET INSTALLATION
Toilet backrest (AS1428.1-2009; Clause 15.2.4)			
Toilet flush controls (AS1428.1-2009; Clause 15.2.5)	Hand operated or automatic		 FIGURE 40 ZONE FOR POSITION OF FLUSHING CONTROL
	Flushing controls to be clear of grabrails		
	Flushing control to be proud of surface		
	Flushing control to activate before button becomes level with surrounding surface		
	Push buttons to be located ● Centred on centre line of toilet OR On wall behind pan ● Within 500mm of centre line of pan ● Minimum 600mm above FFL		

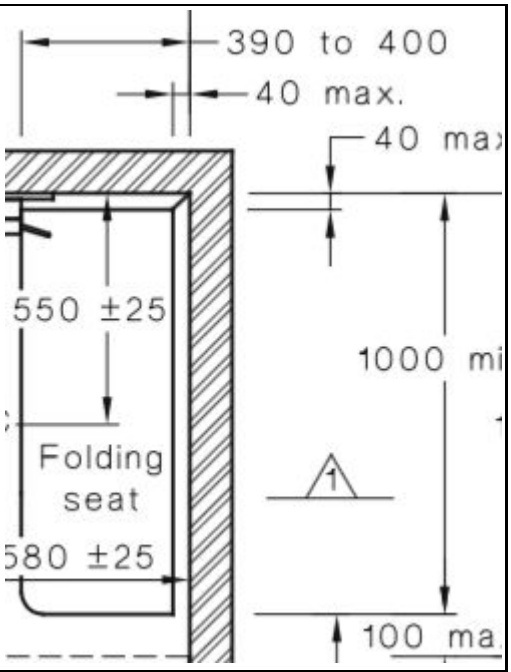
	• Maximum 1100mm above FFL OR On wall beside pan • 300mm in front of front edge of pan • 300mm behind of front edge of pan • Minimum 600mm above FFL • Maximum 1100mm above FFL		
Toilet paper dispenser (AS1428.1-2009; Clause 15.2.6)	Outlet (AS1428.1:2009 Figure 41)	• Dispenser not to intrude into required toilet pan circulation • To be installed so that it does not block access to grabrail or create an impingement risk (50mm minimum clearance to wall and/or other fittings)	 FIGURE 41 ZONE FOR POSITION OF TOILET PAPER DISPENSER
	• 300mm maximum from front of pan		
	• no higher than 700mm above finished floor level		

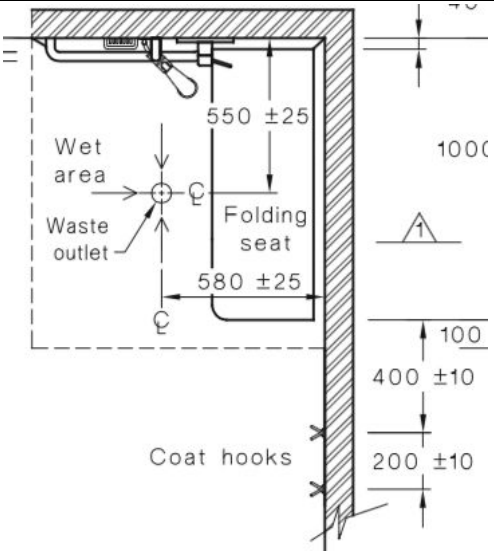
Toilet Grabrails (AS1428.1-2009; Clause 15.2.7 and figure 42)	Ensure toilet grabrails are installed in accordance with Clause 15.2.7 and Figure 42		 (i) Option A (ii) Option B (a) Side view showing optional systems for grabrail at sides of pan  (b) Grabrail at back of pan and sectional view of grabrail at side of pan DIMENSIONS IN MILLIMETRES FIGURE 42 POSITIONS OF GRABRAILS IN WATER CLOSETS
Baby change tables AS1428.1-2009, Clause 15.2.8.2)	Ensure baby change table when in the folded position does not protrude into any other bathroom fitting circulation space		
	Maximum operable height of top of table is 820mm		
	Minimum under table clearance is 720mm		
	Does not block installation of other bathroom fittings such as coat hooks		

Washbasin (AS1428.1-2009, Clause 15.3)	425mm from centre line from adjacent wall	Clearance from wall to centre line of bottle trap - minimum 425mm	 ELEVATION A
Note variations for sole occupancy units	Width of basin at wall 450mm minimum		
	Top of vanity or basin 800mm to 830mm AFFL	Ensure correct height of installation	
	Under basin clearance at basin forward edge 720mm	Ensure correct height of installation	 ELEVATION B
	Above floor minimum clearances 300mm vertical x 440mm from rear wall x 850mm width		
	300mm maximum to operable parts from front of basin		

Mirror (AS1428.1-2009, Clause 15.4.2)	Vertical mirror to be installed above basin measuring:		 ELEVATION A
	350mm wide		
	Base of mirror to be located no more than 900mm AFFL		
	Upper edge of mirror to be no less than 1850mm AFFL		
Washbasin shelf (AS1428.1-2009, Clause 15.4.2)	As a part of a vanity top Minimum width 120mm x depth 300mm to 400mm		
	Separate fixture 120mm to 150mm wide x 300mm to 400mm when installed within basin circulation area		
Soap dispenser, paper towel dispenser and hand dryer for washbasin (AS1428.1-	to be operable by one hand,		
	outlet to be 900 to 1100mm AFFL;		
	to be located 500mm minimum		

2009; Clause 15.4.3)	from any internal corner		
Shower head (AS1428.1-2009; Clause 15.5.6)	Adjustable height shower head on vertical rail;		 DIMENSIONS IN MILLIMETRES FIGURE 48 SHOWER RECESS FITTINGS—ELEVATION
	top of vertical shower head support grabrail to be 1880 to 1900mm AFFL;		
	bottom of vertical shower head grab rail to be 800 to 810mm AFFL		
	useable in a seated position		 (a) Shower recess with two walls DIMENSIONS IN MILLIMETRES FIGURE 47 (in part) SHOWER RECESS AND CIRCULATION SPACE—PLAN
	capable of withstanding 1100N (AS1428.1-2009 Clause 17)	Check fasteners required at time of fitting	
	wall outlet for shower to be installed 700mm +/- 5mm AFFL;		
Shower Tap		Ensure tap controls have 50mm clearance, particularly to shower grabrail	
Soap holder for shower (AS1428.1-2009; Clause 15.5.7)		Ensure 50mm clearance, particularly to shower grabrail, taps and other shower fittings	

Shower seat (AS1428.1-2009; Clause 15.5.9)	to be self-draining; Width - 390 to 400mm Length - minimum 1000mm		
	slip resistant;		
	withstand 1100 N force in any position and any direction	Consider using a shower seat that has a front leg for weight distribution through floor and not solely on wall Check wall strengthening required at time of construction Add extra noggins OR use 17mm sheeting behind shower walls Check fasteners required at time of fitting	

Clothes hanging devices (AS1428.1-2009; Clause 15.5.10)	two to be provided for shower;		
	installed 1200 to 1350 mm AFFL;		
	hook 1 - 400 +/- 10mm from edge of shower seat short edge; Hook 2 - 200mm +/- 10mm from hook 1		
Shower curtain			

Recommendations

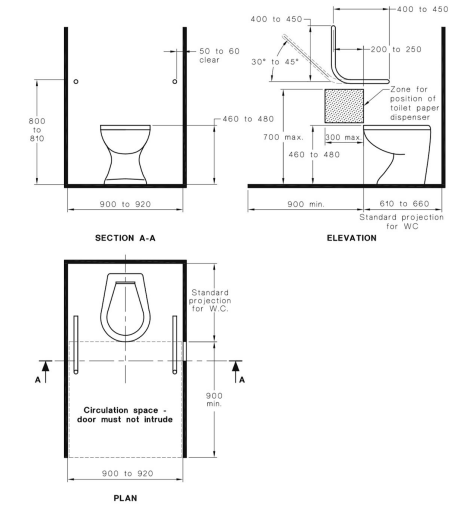
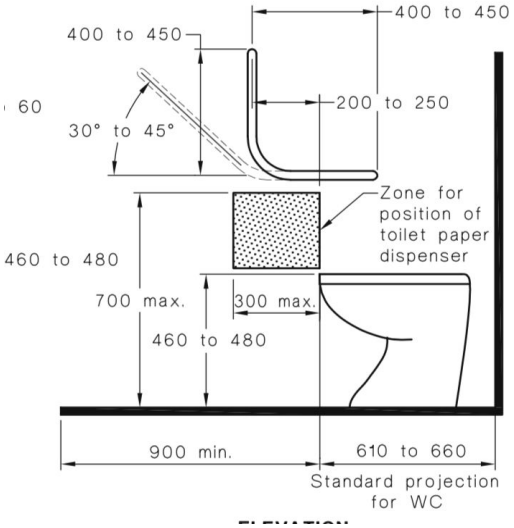
- Ensure during ongoing design and construction that
  - Combined accessible shower and WC sanitary facilities meet the circulation spaces of AS1428.1-2009
- Provision of required fittings for accessible sanitary facilities in accordance with requirements of AS1428.1-2009 including:
  - i) *Door hardware (AS1428.1-2009; Clause 13.5)*
    - (1) Door privacy snib with 45mm “handle” measured from centre of spindle
    - (2) Door handles to be
      - (a) preferred D-type if lever style handle provided on hinged doors
      - (b) 35 to 45 mm clearance between handle and door surface
      - (c) 20mm return on handle to enable operation by one hand
      - (d) installed at 1000mm +/- 10mm above finished floor level (AFFL)
    - (3) Door operating forces not to exceed 20 N
  - ii) *Toilet pan (AS1428.1-2009 Clause 15.2.2)*
    - (1) Top of seat to be 460mm to 480mm AFFL
    - (2) Centre line of pan to adjacent wall to be 450mm to 460mm
    - (3) Front of pan to be 800mm +/- 10mm from finished wall behind toilet
  - iii) *Toilet seat (AS1428.1-2009; Clause 15.2.3)*
    - (1) Provide minimum 30 % luminance contrast with its setting

iv) *Toilet backrest (AS1428.1-2009; Clause 15.2.4)*
v) *Toilet paper dispenser (AS1428.1-2009; Clause 15.2.6)*
   (1) To be installed so that it does not block access to grabrail or create an impingement risk
   (2) Outlet to be 300mm maximum from front of pan and no higher than 700mm above finished floor level (AS1428.1:2009 Figure 41)
   (3) Dispenser not to intrude into required toilet pan circulation
vi) *Grabrails (AS1428.1-2009; Clause 15.2.7 and figure 42)*
   (1) Ensure toilet grabrails are installed in accordance with Clause 15.2.7 and Figure 42
   (2) Ensure grabrails for shower are installed in accordance with AS1428.1:2009 Clause 15.5.4 and figures 47 and 48 including vertical shower head support grabrail
vii) *Baby change tables AS1428.1-2009, Clause 15.2.8.2)*
   (1) Ensure baby change table when in the folded position does not protrude into any other bathroom fitting circulation space
   (2) Maximum operable height of top of table is 820mm
   (3) Minimum under table clearance is 720mm
   (4) Does not block installation of other bathroom fittings such as coat hooks
viii) *Mirror (AS1428.1-2009, Clause 15.4.2)*
   (1) Vertical mirror to be installed above basin measuring
      (a) 350mm wide
      (b) Base of mirror to be located no more than 900mm AFFL
      (c) Upper edge of mirror to be no less than 1850mm AFFL
ix) *Washbasin shelf (AS1428.1-2009, Clause 15.4.2)*
   (1) As a part of a vanity unit – 120mm wide by 300mm minimum in depth without intruding into required circulation area for basin
   (2) As a separate shelf
      (a) Not to intrude into required washbasin circulation
      (b) Height to be 900mm to 100mm
      (c) Width 120mm minimum
      (d) Length 300 to 400mm
      (e) Recommend shelf be installed on wall beside existing basin
x) *Soap dispenser, paper towel dispenser and hand dryer for washbasin (AS1428.1-2009; Clause 15.4.3)*
   (1) to be operable by one hand,
   (2) outlet to be 900 to 1100mm AFFL;
   (3) to be located 500mm minimum from any internal corner
   (4) Note handrail is where provided
xi) *Shower head (AS1428.1-2009; Clause 15.5.6)*
   (1) Adjustable height shower head on vertical rail;
   (2) wall outlet for shower to be installed 700mm +/- 5mm AFFL;
   (3) top of vertical shower head support grabrail to be 1880 to 1900mm AFFL;
   (4) bottom of vertical shower head grab rail to be 800 to 810mm AFFL
   (5) useable in a seated position
   (6) capable of withstanding 1100N (AS1428.1-2009 Clause 17)
xii) *Soap holder for shower (AS1428.1-2009; Clause 15.5.7)*
xiii) *Shower seat (AS1428.1-2009; Clause 15.5.9)*
   (1) to be self-draining;
   (2) slip resistant;
   (3) withstand 1100 N force in any position and any direction

xiv) *Clothes hanging devices (AS1428.1-2009; Clause 15.5.10)*
   (1) two to be provided for shower;
   (2) installed 1200 to 1350 mm AFFL;
   (3) hook 1 - 400 +/- 10mm from edge of shower seat short edge;
   (4) hook 2 - 600 +/- 10 from edge of shower seat short edge;

- Sanitary facility walls may need to be strengthened for installation of grab rails so as to meet the required force ratings of 1100 N

Ambulant sanitary facilities - Fittings guidelines

Ambulant cubicles – Male and Female Fittings review		
Toilet pan – ambulant (AS1428.1-2009 Clause 15.2.2)	Top of seat to be 460mm to 480mm AFFL Centre line of pan to adjacent wall to be 450mm to 460mm Front of pan to be 610mm to 660mm from finished wall behind toilet	 FIGURE 53(A) SANITARY COMPARTMENT FOR PEOPLE WITH AMBULANT DISABILITIES—PLAN AND ELEVATION 
Grab rails Clause 16.2	• Required both sides • Top of grab rails to be 800 to 810mm AFFL	As shown above
Door Clause 16.3	700mm clear opening width	
Signage Clause 16.4 and Clause 8	Cubicle to be identified with Raised tactile and Braille sign with appropriate image for male or female	Signage to be installed in compliance with BCA Specification D3.6
Coat Hook Clause 16.5	One hook installed 1350mm to 1500mm AFFL	

Recommendations

Ensure during ongoing design and construction that ambulant toilet cubicles comply with AS1428.1 requirements including

a) Pathway to ambulant cubicle (900mm between successive door leafs)
b) Toilet pan provides a seat height 460 to 480mm above finished floor level
c) Appropriate grab rails are installed on both sides of all ambulant toilet cubicles
d) Cubicle partitions
    a. Distance apart 900mm to 920mm
    b. can meet 1100 N force requirements of AS1428.1-2009 Clause 17
e) Cubicle door to be self-closing – AS1428.1:2009 Clause 15.2.9
f) Coat hook installed between 1350mm and 1500mm AFFL
g) Toilet paper dispenser is in required zone
h) Cubicle has required accessible (Braille and raised tactile) signage

Appendix D: Accessible Adult Change Facility compliance requirements - detail

The following content is provided for the design and construction of Accessible Adult Change Facilities.

- BCA Specification F2.9 content is in black text; BCA Figures do not have borders
- Illustrations sourced from the *Changing Places Information Guide and Technical Standard 2017* are guidance and have red borders
- Non-BCA content is provided for guidance and is headed **Note** or **Notes**

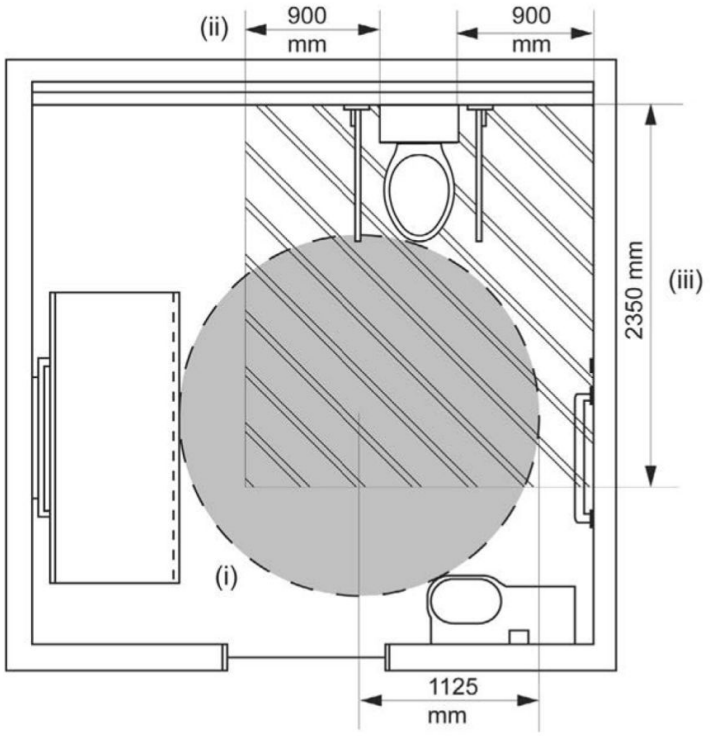
Recommendations

Circulation

- Ensure during ongoing design and construction that the Accessible Adult Change Facility (AACF) meets the circulation spaces of BCA Specification F2.9 (2)(b)(x) and Figure 2

Figure 2 Required circulation spaces

Diagram a. Turning space, each side of the pan and in front of the pan



Notes to Figure 2 diagram a - toilet pan

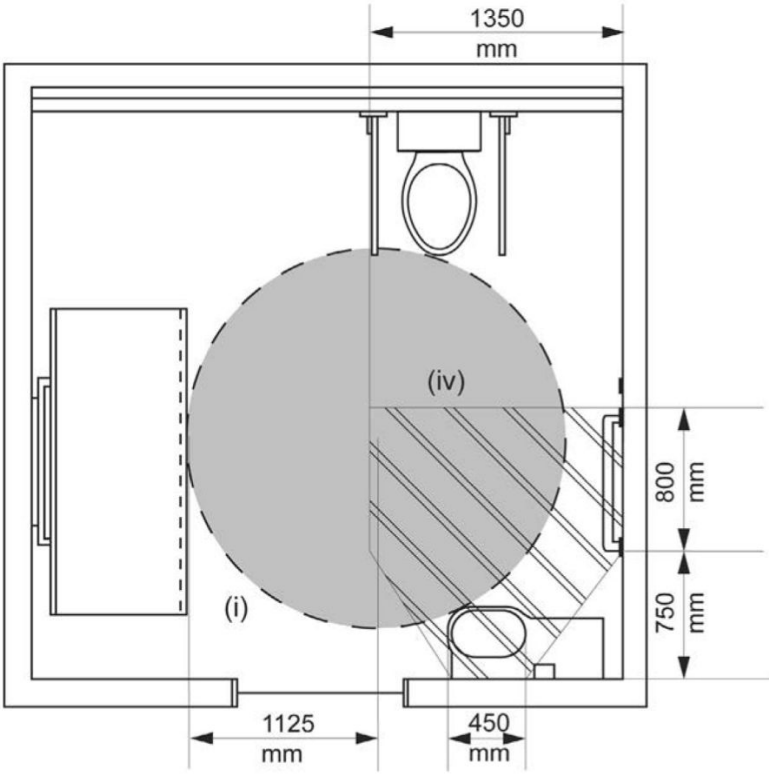
(a) The Roman numerals shown in Figure 2 indicate the following required circulation spaces:

(i) Turning space: a full circle of 1125 mm radius.

(ii) Each side of the pan: 900 mm (measured from each edge of the pan).
(iii) In front of the pan: 2350 mm (measured from the wall behind the pan, and therefore includes the pan itself).

(b) All required circulation spaces must extend for a minimum height of 2000 mm above finished floor level.
(c) Required circulation spaces may be overlapped.

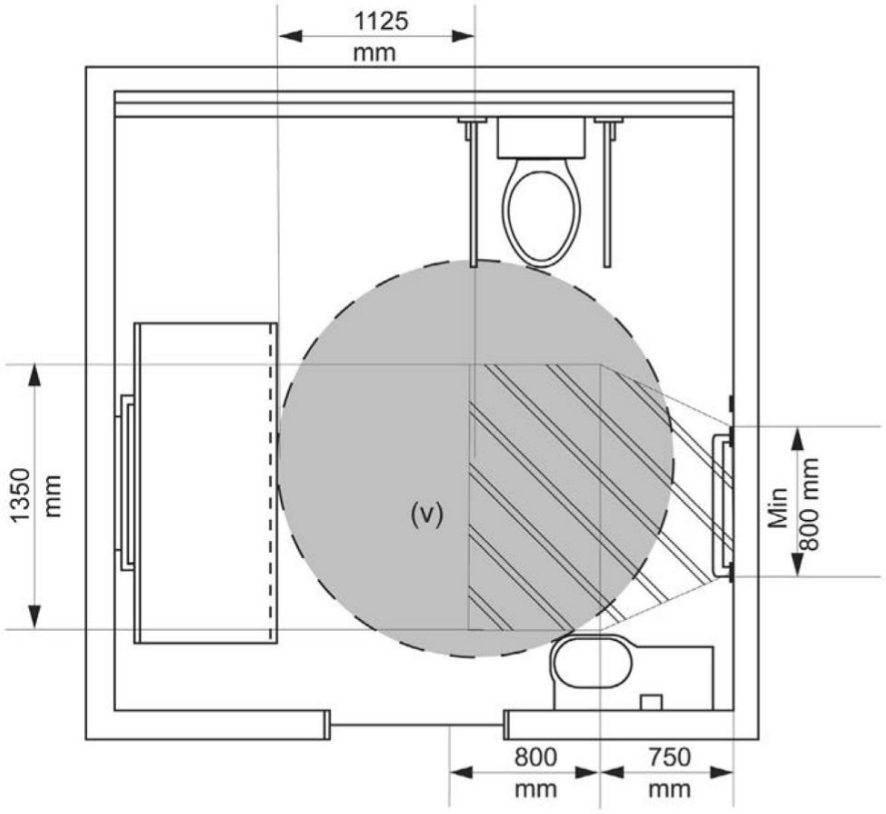
Diagram b. Turning space and circulation space for a washbasin



Notes on Figure 2 diagram b - washbasin

(a) The Roman numerals shown in Figure 2 diagram b (washbasin) indicate the following required circulation spaces:
(i) Turning space: a full circle of 1125 mm radius.
(iv) For a washbasin: the width of the basin (450 mm) increasing to a width of 1350 mm measured at a distance of 750 mm out from the wall against which the washbasin is mounted then continuing at that width for a further 800 mm (to a total of 1550 mm out from the wall).
(b) All required circulation spaces must extend for a minimum height of 2000 mm above finished floor level.
(c) Required circulation spaces may be overlapped.

Diagram c. Turning space and circulation space for changing rails



Notes to Figure 2 diagram c - changing rails

(a) The Roman numerals shown in Figure 2 indicate the following required circulation spaces:

(i) Turning space: a full circle of 1125 mm radius.

(v) For changing rails: the width of the rails increasing to a width of 1350 mm at a distance of 750 mm out from the wall to which the rails are fixed then continuing at that width for a further 800 mm (to a total of 1550 mm out from the wall).

(b) All required circulation spaces must extend for a minimum height of 2000 mm above finished floor level.

(c) Required circulation spaces may be overlapped.

- Provision of required fittings for accessible adult change facilities in accordance with the requirements of BCA Specification F2.9(2)(b)(i) to (ix) including:

Automated sliding entrance door

(BCA SpecF2.9 - Clause 9)

(a) The threshold must incorporate a smooth transition without a step or lip.
(b) The minimum clear opening width must be—
  (i) 1100 mm in locations where beach wheelchairs are likely to be used; or
  (ii) 950 mm in all other locations.
(c) The doorway must achieve a luminance contrast of at least 30% between—
  (i) Door leaf and door jamb; or
  (ii) Door leaf and adjacent wall; or
  (iii) Architraves (where used) and adjacent wall; or
  (iv) Door leaf and architrave (where used); or
  (v) Door jamb and adjacent wall.
(d) The operation of the door must be calibrated such that—
  (i) it has a gentle opening and closing movement; and
  (ii) there is sufficient dwell time for a user to safely travel through the doorway.
(e) The door must be fitted with a fail-safe opening mechanism that opens the door if an obstruction is detected during its closing movement.
(f) Door controls must be located internally and externally—
  (i) between 900 mm and 1200 mm above finished floor level; and
  (ii) not less than 500 mm from any internal corner.
(g) Door control buttons must—
  (i) have a minimum diameter of 25 mm; and
  (ii) be proud of the surrounding surface; and
  (iii) activate the door operation before the button becomes level with the surrounding surface; and
  (iv) be of a contrasting colour to the surrounding plate.
(h) The surrounding plates of both internal and external door controls must include the words “Push to Open”.
(i) The following indicator lights must be provided:
  (i) “Occupied” and “Vacant” on the external plate.
  (ii) “Locked” and “Unlocked” on the internal plate.
(j) Braille and tactile signage complying with Specification D3.6 must identify the door controls.

Hoist

(BCA SpecF2.9 - Clause 3)

(a) provide a constant charge in-line room coverage hoist system (also known as an “XY” system or gantry) including 2 parallel fixed rails and a moving traverse rail; and
(b) provide coverage over the entire room; and
(c) have a maximum safe working load of not less than 180 kg; and

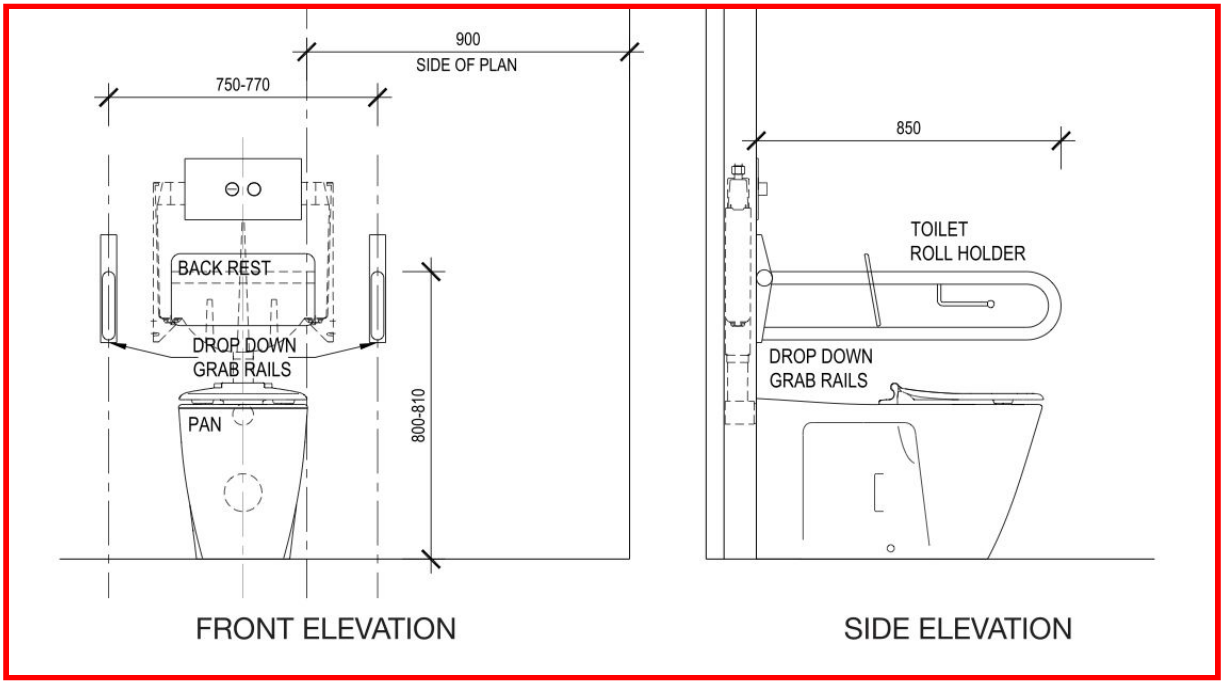
(d) be capable of sustaining a static load of not less than 1.5 times the rated load; and
(e) have a minimum lifting height of 2100 mm.

NOTE - Room requires a minimum ceiling height of 2400mm above FFL to accommodate hoist lifting range; Changing Places prefers 2700mm

Toilet pan, seat, backrest and grabrails

(BCA SpecF2.9 - Clause 4)

(a) The toilet pan must be of the centrally located ("peninsula-type") design.
(b) The toilet pan must be installed so that—
(i) the front edge of the pan is 800 mm (±10 mm) from the rear wall; and
(ii) the top of the seat is between 460 mm and 480 mm above finished floor level; and
(iii) there is a minimum clearance of 900 mm, measured horizontally, between each side of the pan and any adjacent wall or privacy screen.



(c) The toilet seat must—
(i) be of the full-round type (not open-fronted) with minimal contours to the top surface; and
(ii) be securely fixed in position when in use; and
(iii) have seat fixings that provide lateral stability to the seat when the seat is in use; and
(iv) be load-rated to 150 kg; and
(v) have a minimum luminance contrast of 30% against the pan, wall and floor; and
(vi) remain in the fully upright position when raised.

(d) Hand-operated flushing controls must—
(i) be located on the centreline of the toilet, at a height of—

(A) not less than 600 mm; and
(B) not more than 1100 mm,
above finished floor level; and

(ii) not be located within the area required for any grabrails or backrest; and
(iii) have the button mounted so that it is proud of the wall surface, and activates the flushing operation before the button becomes level with the surrounding surface.

(e) An automatically activated flushing system need not comply with the requirements of (d).

(f) The backrest must—
(i) be capable of withstanding a force, in any direction, of not less than 1100 N; and
(ii) have a minimum height, between the lower edge of the backrest and the top of the seat, of between 120 mm and 150 mm; and
(iii) have a vertical height, between the upper and lower edges of the backrest, of between 150 mm and 200 mm; and
(iv) have a width of between 350 mm and 400 mm; and
(v) be positioned such that the face of the backrest achieves an angle of between 95°and 100° back from the seat, when the seat is in use.

(g) Grabrails must be installed adjacent to each side of the pan and must be—
(i) of the drop-down type; and
(ii) located such that—
(A) the top of each rail is between 800 mm and 810 mm above finished floor level; and
(B) the rails are between 750 mm and 770 mm apart, measured centre-to-centre, and equidistant to the centreline of the pan; and
(iii) at least 850 mm long; and
(iv) with a diameter of between 30 mm and 40 mm; and
(v) securely fixed to withstand a force, in any direction, of not less than 1100 N; and
(vi) provided with a toilet paper dispenser on one side; and
(vii) capable of being lifted up or swung away when not in use, so as to allow unimpeded access to the toilet pan.

Washbasin and tap

(BCA SpecF2.9 - Clause 5)

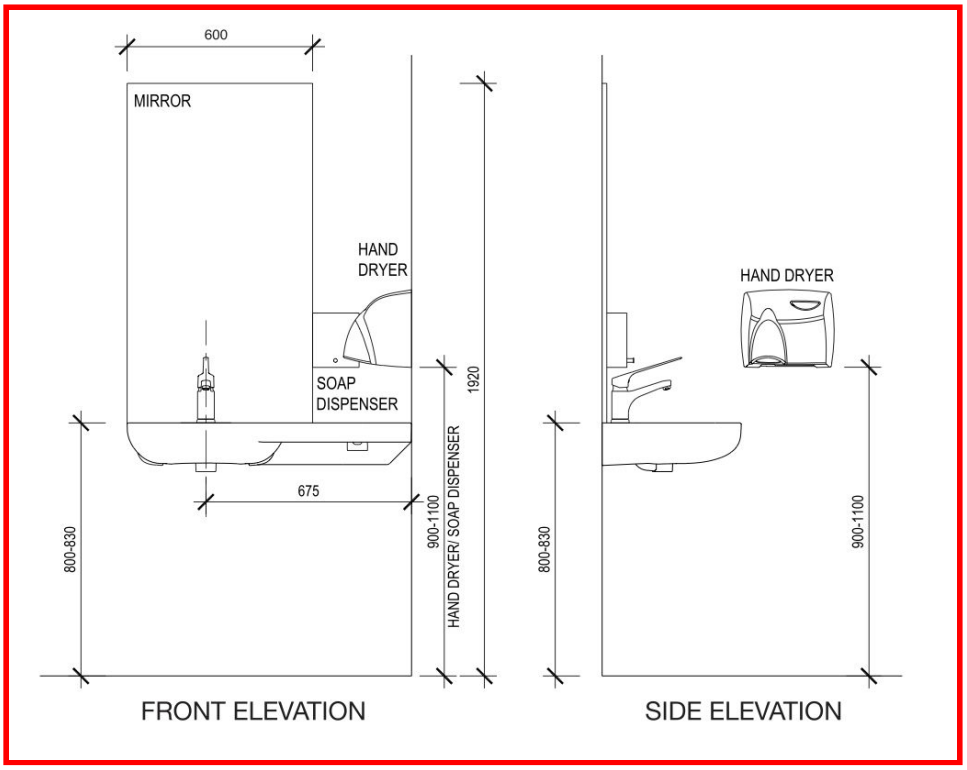
(a) The washbasin must be installed so that the rim of the basin is between 800 mm and 830 mm above finished floor level.
(b) Exposed heated water supply pipes must be insulated or located so as not to pose a hazard.
(c) Water supply or sanitary drainage pipes must not encroach on the space under the basin.
(d) The washbasin must have an integrated shelf not less than 300 mm long.

(NOTE: This means the centre line of the washbasin, not including the integrated shelf, is usually located a minimum 675mm from side wall - see figure below from Changing Places Technical Standard)

(e) Water taps must have a single lever flick-mixer handle or a sensor plate or the like.

(f) Where lever handles are provided, they must be installed with a clear space of not less than 50 mm between the tap and any adjacent surface.

(g) Heated water must be provided and temperature controlled in accordance with Part B2 of NCC Volume Three.



Fixtures and fittings

(BCA SpecF2.9 - Clause 6)

(a) **Mirror:**

(i) A vertical mirror must be provided at the washbasin, with a reflective surface that—

(A) is not less than 600 mm wide; and

(B) has its bottom edge not more than 900 mm above finished floor level; and

(C) has its top edge not less than 1850 mm above finished floor level.

(ii) If a second vertical mirror is provided in the facility, it must have a reflective surface that—

(A) is not less than 600 mm wide; and

(B) has its bottom edge not less than 600 mm above finished floor level; and

(C) has its top edge not less than 1850 mm above finished floor level.

Note
See figure above for mirror sizing and positioning

(b) **Towel dispensers, hand dryers and the like:**
Towel dispensers, hand dryers, ~~soap dispensers~~ and the like must be operable using one hand, and must be installed with their output or operative components—
(i) between 900 mm and 1100 mm above finished floor level; and
(ii) not less than 500 mm from any internal corner.

Note
Discrepancy between requirements for BCA Specification F2.9 6(b) and 6(c); therefore recommend that soap dispenser be deleted from this clause for positioning from an internal corner

(c) **Soap dispenser:**
A soap dispenser must be installed above the integrated shelf required by Clause 5(d).

Notes
- **There is a conflict between requirements for 6(b) and 6(c)**
- **Soap dispenser to be installed in accordance with 6(c) for position**
- **Height of soap dispenser outlet and operative components to be 900mm to 1100mm above FFL (in accordance with 6(b))**

(d) **Clothing hook:**
A clothing hook must be installed so that it is located—
(i) at a height of between 1200 mm and 1350 mm above finished floor level; and
(ii) adjacent to the washbasin; and
(iii) not less than 500 mm from any internal corner.

(e) **Sling hook:**
A sling hook with a minimum projection of 50 mm from the wall must be installed beside the change table at a height of 1500 mm above finished floor level.

Notes
- **Sling hooks are provided to store hoist slings when not in use**
- **Changing Places Technical Standard requires sling hooks to accommodate 4 x 30mm wide sling straps**

(f) **Disposal bins:**
(i) A sanitary disposal bin must be provided in the corner adjacent to the toilet pan.
(ii) An incontinence pad disposal bin must be provided in the corner adjacent to the change table.

Change table

(BCA SpecF2.9 - Clause 7)

(a) The change table must be—
  (i) permanently installed, with one of the long edges up against a wall and with a retractable safety rail on the opposite side; and
  (ii) motorised for the purposes of height adjustment; and
  (iii) height adjustable between 450 mm and 900 mm above finished floor level; and
  (iv) not less than 700 mm wide; and
  (v) not less than 1800 mm long.

(b) The change table must have a maximum safe working load of not less than 180 kg, including when raising or lowering the table.

(c) The change table must not encroach on any required circulation space.

(d) A dispenser for sanitary wipes must be provided.

(e) A shelf not less than 400 mm long and 150 mm wide must be provided.

Changing rails

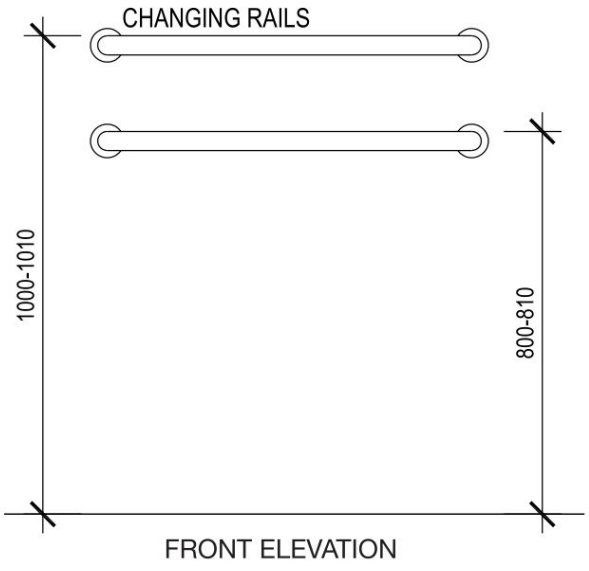
(BCA SpecF2.9 - Clause 8)

Changing rails must be installed as two horizontal and parallel rails fixed to a wall, not less than 800 mm long, each with a diameter between 30 and 40 mm, and—

(a) the lower rail must be installed between 800 mm and 810 mm above finished floor level; and

(b) the upper rail must be installed between 1000 mm and 1010 mm above finished floor level; and

(c) the rails must be able to withstand a force of not less than 1100 N in any direction.



Provide two 32mm diameter, 800mm long changing rails installed horizontally at 800-810mm and 1000-1010mm above the plane of the floor level that allow users to hold onto whilst standing to have clothes adjusted.

Signage

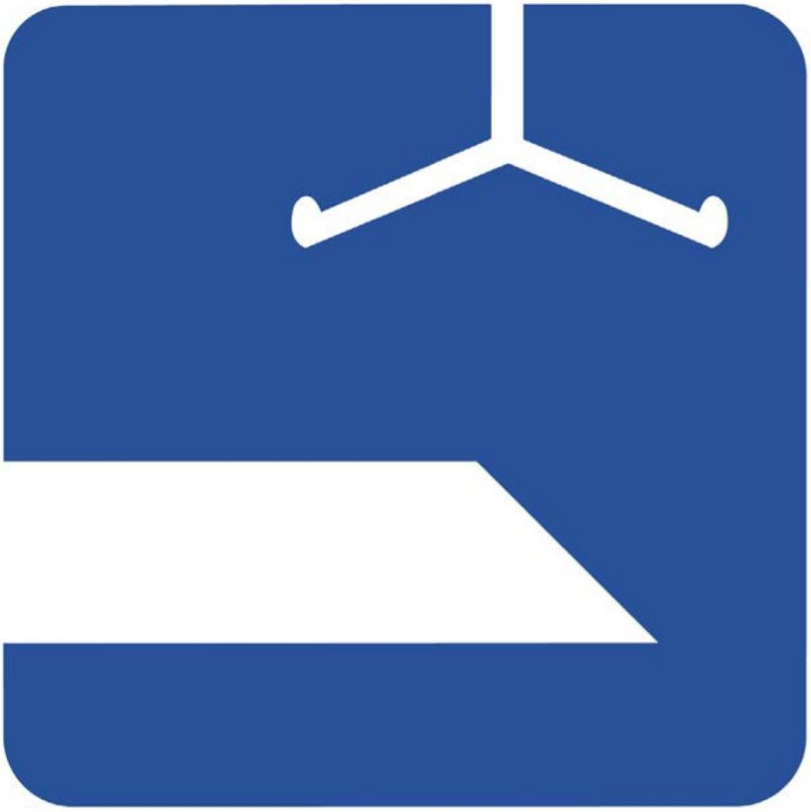
(BCA SpecF2.9 - Clause 10)

(a) External signage must incorporate—
  (i) the symbol shown in Figure 10; and
  (ii) the words “Accessible Adult Change Facility”.

(b) The symbol required by (a)(i) must have a blue (B21, ultramarine) background with the hoist and table elements shown in white.

(c) Signage must be braille and tactile signage complying with Specification D3.6.

Figure 10 Symbol



Operating instructions

(BCA SpecF2.9 - Clause 11)
Signage provided within the facility must include the following information for the hoist and change table:
(a) Operating instructions.
(b) Safe working load limits.

Note
Changing Places Information Guide and Technical Standard recommends sourcing the content for Operating Instructions from the Equipment Supplier

SHOWER - Accessible Adult Change Facility

NCC 2019 BCA Part F2.9 and Specification F2.9 do not contain any information about the provision of showers within Accessible Adult Change Facilities.

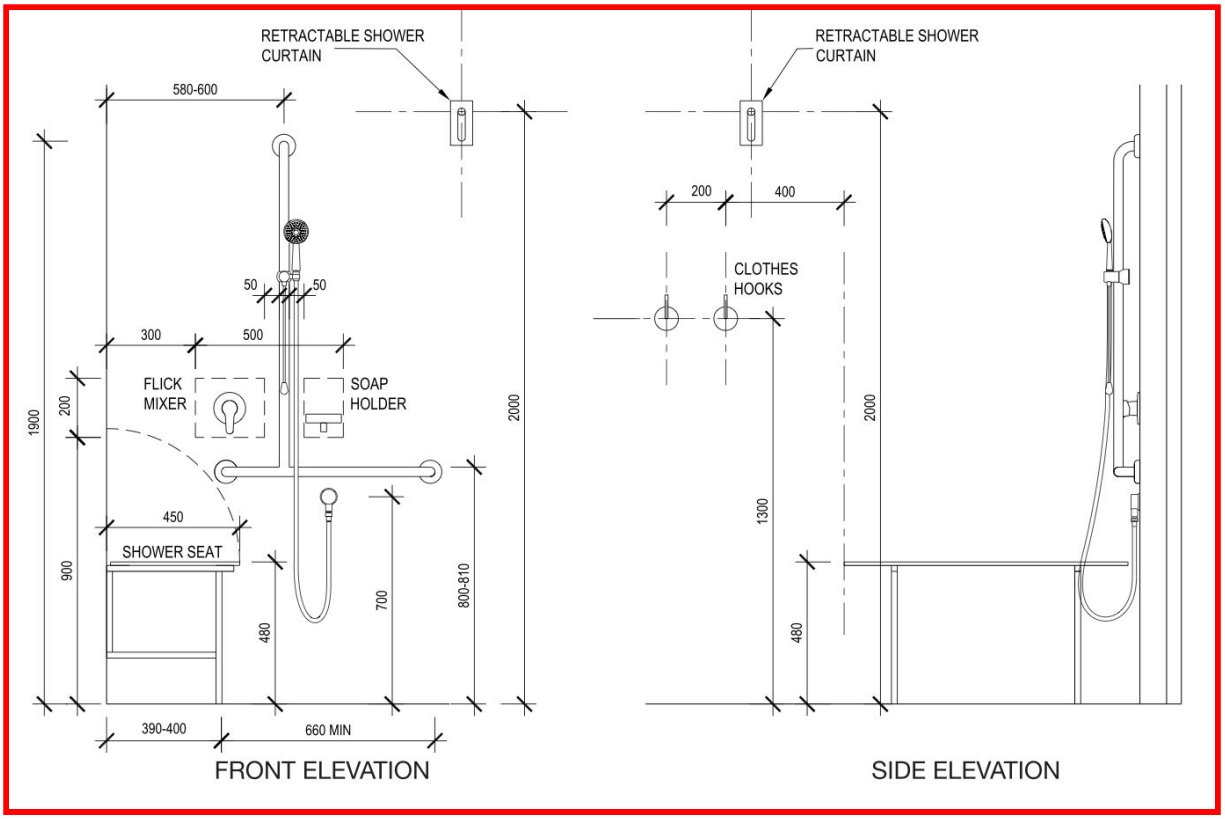
The NCC 2019 BCA Guide for Specification F2.9 contains the following content:

> *Specification F2.9 is based on the Changing Places Information Guide and Technical Standard (June 2017 edition), copies of which can be obtained from the Changing Places website at: https://changingplaces.org.au/.*
>
> *(Note: Changing Places is not in any way affiliated with, or endorsed by, the ABCB.)*

The following content is from the Changing Places Information Guide and Technical Standards 2017, Layout Type 2

Shower

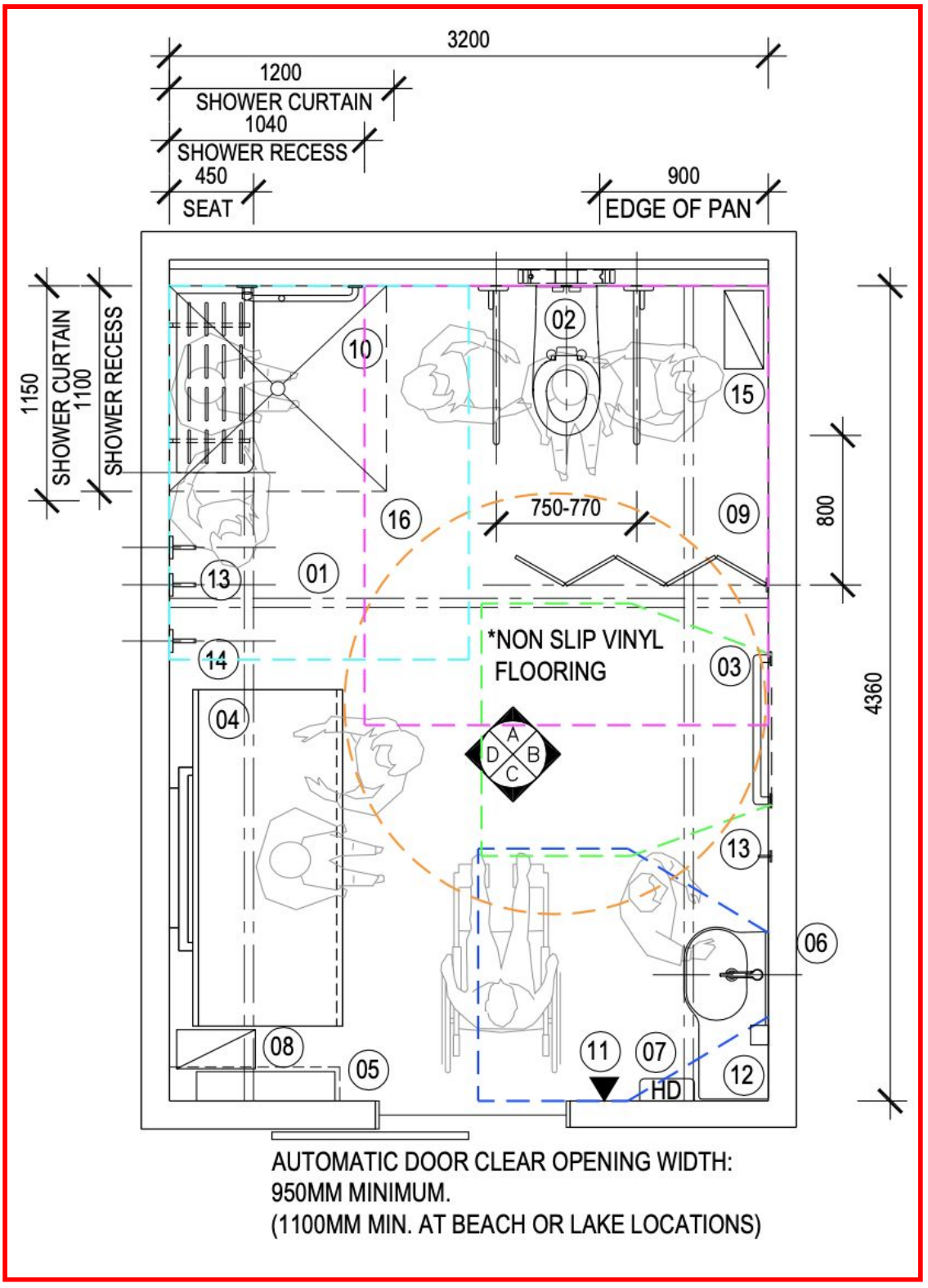
Where included, shower installations shall comply with the following requirements.



Floor and waste outlet

The requirements for the floor and waste outlet are to be as follows:

1. the floor of the shower recess and associated circulation space shall be self draining and without a step-down, raised step kerb or hob at the entry to the recess
2. the waste outlet for the shower shall be provided in accordance with the floor plans
3. the slope of the floor of the shower recess shall have a gradient between 1 in 60 and 1 in 80
4. the slope of the floor of the remainder of the sanitary facility shall have a gradient between 1 in 80 and 1 in 100.


3200
1200
SHOWER CURTAIN
1040
SHOWER RECESS
450
SEAT
900
EDGE OF PAN
1150
SHOWER CURTAIN
1100
SHOWER RECESS
750-770
800
4360
*NON SLIP VINYL
FLOORING
A
B
C
D
HD
01
02
03
04
05
06
07
08
09
10
11
12
13
14
15
16
AUTOMATIC DOOR CLEAR OPENING WIDTH:
950MM MINIMUM.
(1100MM MIN. AT BEACH OR LAKE LOCATIONS)

01	ROOM COVERAGE HOIST
02	ACCESSIBLE WC INCL BACKREST AND DROP DOWN CHANING RAILS
03	TWO 800MM LONG HORIZONTAL CHANGING RAILS AT 800MM AND 1000MM ABOVE FLOOR LEVEL
04	ADJUSTABLE HEIGHT CHANGE TABLE, 1800MM LONG WITH SIDE SAFETY RAIL
05	DISPOSABLE CHANGE TABLE COVER DISPENSER WITH SHELF OVER (OPTION AVAILABLE, REFER SPECIFICATION)
06	HAND WASH BASIN WITH INTEGRATED SHELF
07	HAND DRYER
08	INCONTINENCE PAD DISPOSAL BIN
09	RETRACTABLE PRIVACY SCREEN 1500MM LONG
10	ACCESSIBLE SHOWER
11	AUTOMATIC DOOR CONTROL
12	SOAP DISPENSER
13	CLOTHES HOOKS
14	LARGE SLING HOOK
15	SANITARY NAPKIN DISPOSAL BIN
16	TELESCOPIC SHOWER CURTAINS
▼	AUTOMATIC DOOR CONTROL

Grabrails

Provide 32mm diameter grabrail/s which shall be fixed on the walls in the positions shown as detailed including top of the horizontal rail to be 800-810mm above the plane of the floor level.

Shower head support grabrail

A shower head support grabrail shall be fixed on the wall in the position as detailed including the top of the vertical rail to be at 1880-1900mm above the floor level. Where the horizontal and shower head support rails are not provided as a single unit, the lower edge of the shower head support rail shall be located 1000-1100mm above the floor level.

Shower head

A hand-held shower head shall be provided that meets the following requirements, including:

1. A flexible hose with a minimum length of 1500mm
2. An adjustable shower head holder shall be provided to support the shower head and shall:
    a. Be installed on the shower head holder support grabrail as shown
    b. Allow the graspable portion of the shower head to be positioned at various angles and heights
    c. Allow the graspable portion of the shower head to be located at heights between 1000mm and 1800mm above the plane of the finished floor
    d. Allow access and adjustment from a seated position.

Water outlet
The water outlet shall be located at 700mm +- 5mm as detailed and be provided with a back-flow prevention device if required by plumbing standards.

Soap holder
The soap holder shall be located within the zone as detailed.

Taps
Flick mixer tap shall be located within the zone as detailed

Folding seat
A 960mm long, 450mm deep foldable seat shall be provided inside the shower recess, as detailed and shall:

1. Be slip-resistant
2. Have front corners that are rounded to a radius of 10 to 15mm
3. Have top edges that are rounded with a minimum radius of 2 to 3mm
4. Shall fold in an upwards direction clear of the grab rail
5. Shall not be slatted.

Where drainage is provided by holes or slots in single unit seats, the diameter of the holes, the width of the slots shall be between 4 to 6mm.

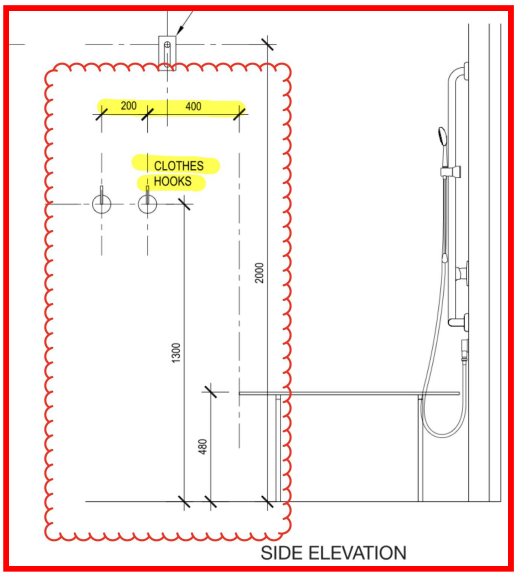
The fastenings, materials and construction of the seat shall be able to withstand a force of 1100 N applied at any position and in any direction without failing or loosening of fastenings.

Notes

- **Changing Places shower seat is wider than shower seat required by AS1428.1-2009**
- **Shower seat with a front leg usually spreads the weight through wall and floor which may decrease the risk of shower seat wall fixings failing**

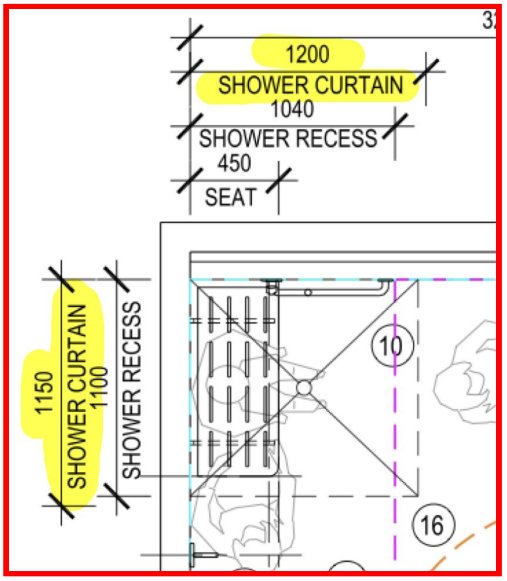
Clothes hooks for shower
Provide no less than two clothes-hanging devices, installed 1200mm to 1350mm above the plane of the finished floor and shall be fitted outside the shower recess.

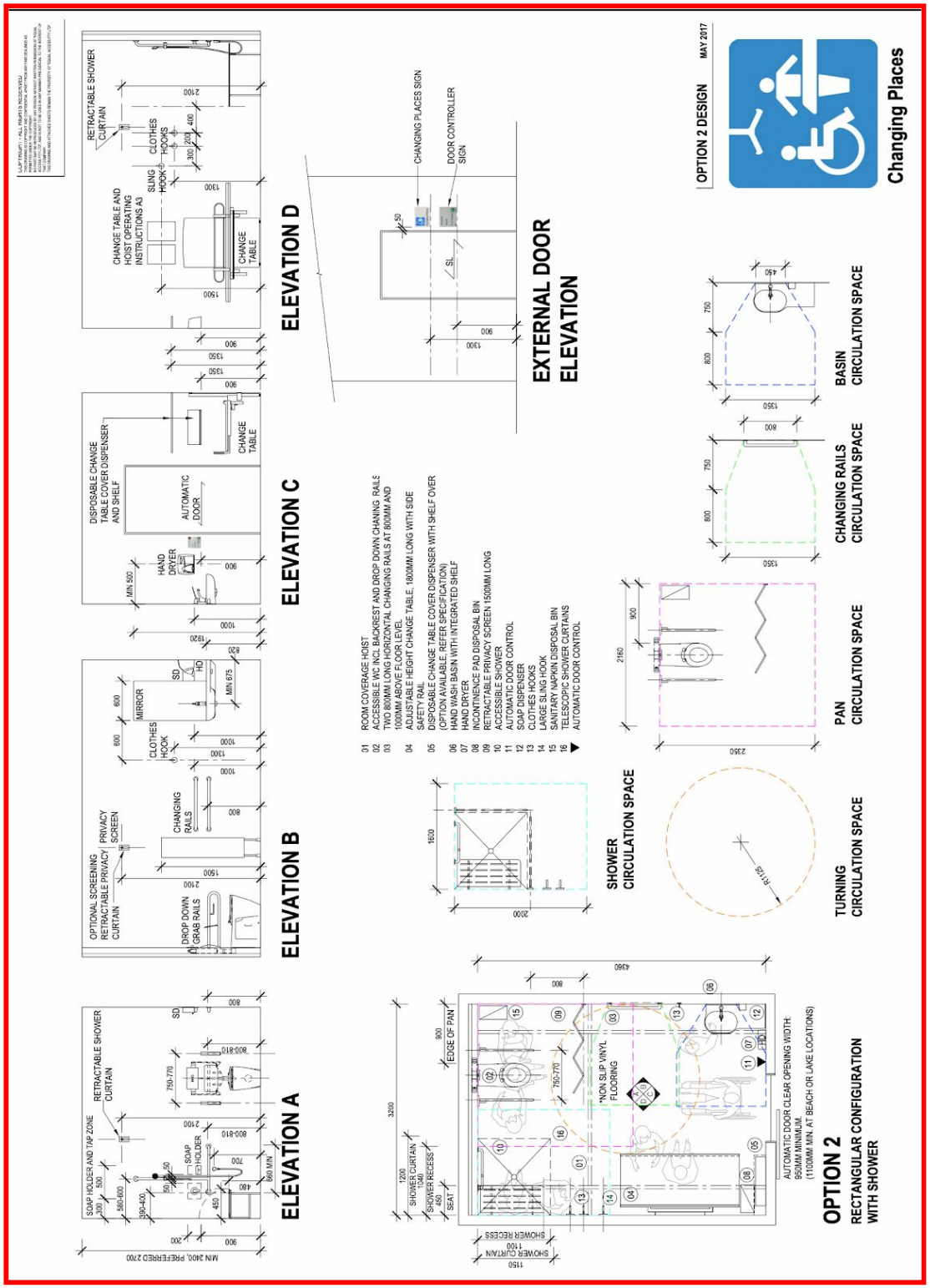
One such device shall be located within 400mm+-10mm and the other within 600mm+-10mm of the folding seat.



Shower curtain

Two telescopic shower curtains shall be provided in the locations indicated in the drawings




Changing Places
OPTION 2 DESIGN
MAY 2017
ELEVATION A
ELEVATION B
ELEVATION C
ELEVATION D
EXTERNAL DOOR ELEVATION
OPTION 2
RECTANGULAR CONFIGURATION WITH SHOWER
TURNING CIRCULATION SPACE
PAN CIRCULATION SPACE
SHOWER CIRCULATION SPACE
CHANGING RAILS CIRCULATION SPACE
BASIN CIRCULATION SPACE
01 ROOM COVERAGE HOIST
02 ACCESSIBLE WC INCL BACKREST AND DROP DOWN CHANING RAILS
03 TWO 800MM LONG HORIZONTAL CHANGING RAILS AT 800MM AND 1000MM ABOVE FLOOR LEVEL
04 ADJUSTABLE HEIGHT CHANGE TABLE, 1800MM LONG WITH SIDE SAFETY RAIL
05 DISPOSABLE CHANGE TABLE COVER DISPENSER WITH SHELF OVER (OPTION AVAILABLE, REFER SPECIFICATION)
06 HAND WASH BASIN WITH INTEGRATED SHELF
07 HAND DRYER
08 INCONTINENCE PAD DISPOSAL BIN
09 RETRACTABLE PRIVACY SCREEN 1500MM LONG
10 ACCESSIBLE SHOWER
11 AUTOMATIC DOOR CONTROL
12 SOAP DISPENSER
13 CLOTHES HOOKS
14 LARGE SLING HOOK
15 SANITARY NAPKIN DISPOSAL BIN
16 TELESCOPIC SHOWER CURTAINS
17 AUTOMATIC DOOR CONTROL
RETRACTABLE SHOWER CURTAIN
CLOTHES HOOKS
SLING HOOK
CHANGE TABLE AND HOIST OPERATING INSTRUCTIONS A3
CHANGE TABLE
DISPOSABLE CHANGE TABLE COVER DISPENSER AND SHELF
AUTOMATIC DOOR
HAND DRYER
MIN 500
MIRROR
CLOTHES HOOK
CHANGING RAILS
OPTIONAL SCREENING RETRACTABLE PRIVACY CURTAIN
PRIVACY SCREEN
DROP DOWN GRAB RAILS
SOAP HOLDER AND TAP ZONE
SOAP DISPENSER
MIN 2400, PREFERRED 2700
CHANGING PLACES SIGN
DOOR CONTROLLER SIGN
SHOWER CURTAIN
SHOWER RECESS
SEAT
EDGE OF PAN
NON SLIP VINYL FLOORING
AUTOMATIC DOOR CLEAR OPENING WIDTH: 950MM MINIMUM (1100MM MIN. AT BEACH OR LAKE LOCATIONS)