



Disability Access Report

Project: Sydney Swans HQ & Community Centre

**Proposed adaptive reuse of the Royal Hall of Industries
for a high-performance sport and community facility.**

Address: 1 Driver Avenue, Moore Park NSW
Lot 3, DP861843 and Lot 52 of DP1041134

Stage: State Significant Development (SSD) application

Ref: J000318

Date: 10 May 2019

For: URBIS

COMPANY INFORMATION

Company:	Cheung Access Pty Ltd
ABN:	99 614 845 733
Address:	GPO Box 1380 Sydney NSW 2001
Email:	info@cheungaccess.com.au
Phone:	0423 126 726

DOCUMENT CONTROL

Filename	Revision	Date
190219_Draft Access Report_Royal of Industries_J000318	1	19 February 2019
190412_Che Acc_ Royal Hall of Industries_SSDA_0318_Rev Draft	2	12 April 2019
190508_Che Acc_ Royal Hall of Industries_SSDA_0318_Final	3	8 May 2019
190510_Che Acc_ Royal Hall of Industries_SSDA_0318_Final	4	10 May 2019

Prepared by:


Christine Cheung

Director | Access Consultant

Accredited ACAA Member No. 158

Copyright Statement

Cheung Access is the owner of the copyright in this report. Other than as permitted by the

Copyright Act and as outlined in the Contract Terms and Conditions, no part of this report may be reprinted or reproduced or used in any form, copied or transmitted, by any electronic, mechanical, or by other means, now known or hereafter invented, without the prior written permission of Cheung Access. Legal action will be taken against any breach of its copyright. This document may only be used for the purposes for which it was commissioned. Unauthorised use of this document in any form whatsoever is prohibited. Cheung Access assumes no responsibility where the document is used for purposes other than those for which it was commissioned.

CONTENTS

[1. Introduction](#)

[1.1 Report Background](#)

[1.2 Report Purpose](#)

[1.3 Report Limitations and Exclusions](#)

[1.4 Disability Discrimination Act 1992 \(DDA\)](#)

[1.5 Proposed Development](#)

[1.6 Report Structure](#)

[2. Summary of Key Compliance Departures](#)

[3. Disability Access Assessment](#)

[3.1 Overview of Accessible building features](#)

[3.2. BCA Part D3 – Access For People with Disabilities](#)

[3.3. Accessible Accommodation Rooms](#)

[4. Conclusion](#)

[Appendix A: Report Documentation Relied Upon](#)

[Appendix B: BCA Part D3 - Access for People with a Disability](#)

[Appendix C: Accessible and ambulant sanitary facility compliance Checklists](#)

1. Introduction

1.1 Report Background

Cheung Access Pty Ltd has been commissioned by Urbis to provide professional Access consulting services for the proposed construction of proposed adaptive reuse of the Royal Hall of Industries for a high-performance sport and community facility (Class 5, 6 and 9b).

The facility will enable a range of land uses, including a new home for the Sydney Swans and NSW Swifts. It will accommodate a multi-purpose facility available for community uses, sporting, medical and rehabilitation areas, administration and office spaces and associated plant and store rooms.

Entry to the site is accessible via Errol Flynn Boulevard within the Moore Park Showground Precinct 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 96 applications under the Environmental Planning and Assessment Act, 1979.

Cheung Access has reviewed drawings for the Royal Hall of Industries for a high-performance sport and community facility (Class 5, 6 and 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

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

NB: From May 1, 2019 BCA 2019 will be the source of the Deemed-to-Satisfy or DTS requirements for design and construction. All new buildings or new building works requiring building construction certificate or other construction consent will be assessed against BCA 2019. The preview version of the National Construction Code (NCC) 2019 including the Building Code of Australia or BCA was released on February 1 2019.

Assessment for access compliance by Cheung Access for projects at Construction Certificate or other construction related stages will be assessed using the Deemed-to-Satisfy or DTS requirements of the preview version of the National Construction Code (NCC) 2019 which includes the Building Code of Australia (BCA) as released on February 1 2019 until its adoption on May 1, 2019.

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-purpose facility available for community uses, sporting, medical and rehabilitation areas, administration and office spaces and associated plant and store rooms.

The development will maintain the structural integrity and façade of the Royal Hall of Industries (RHI) whilst re-purposing the interior of the building to support a number of compatible uses and utilise the space effectively.

The proposed development also involves the extension of the building into the southern courtyard area with the construction of a two-storey training and administration centre, to be utilised by the NSW Swifts.

The facility will include:

- ☐ Home of the Sydney Swans;
- ☐ Home of the NSW Swifts;
- ☐ Multi-purpose indoor facility available for community use and public events such as junior club nights, school graduations, functions
- ☐ An indoor netball court for the NSW Swifts Netball Team and netball community
- ☐ Facilities for a Swans team in the AFL National women's competition
- ☐ Player change areas, lockers and wet areas;
- ☐ Wet recovery – pool and hot/cold hydrotherapy;
- ☐ Go Foundation and Clontarf Foundation for indigenous education;
- ☐ Australian Red Cross Blood Service Donation Centre;
- ☐ Medical, rehabilitation and sport science areas;
- ☐ Gymnasium, museum, media centre and auditorium
- ☐ Back of house offices and café/canteen;
- ☐ Entry foyer and retail/shop units;
- ☐ Plant and store rooms; and
- ☐ Sydney Swans Academy.

BCA Classification:

Class	Level	Description
9b	Ground Level 01	Sports facilities and associated amenities
6	Ground	Cafe
5	Ground Level 01	Learning Centre Offices Child minding facility
10b	Ground	Swimming pool

Areas Required to be Accessible:

Level	Area	Description
External Ground	Entry points	<p>Accessible entrances are provided to the following areas:</p> <ul style="list-style-type: none"> • Netball Court • Academy Entry • Multipurpose Field of Play • Main Entry • Players Entry • Courtyard Entry • Clontarf Entry • Blood Bank Entry
Basement	<i>Plant Area and Store room</i>	<i>Not required to be accessible</i>
Ground Floor	<p>Swifts Building - Netball Court</p> <p>Academy Entry</p> <p>Gym</p> <p>Multipurpose Field of Play</p> <p>Wet Recovery Rehab Sports Science and Alternative Therapy Locker rooms Sanitary facilities</p> <p>Cafe</p> <p>Clontarf foundation</p>	To and within all areas normally used by the occupants.
Mezzanine	<i>Plant Area</i>	<i>Not required to be accessible</i>
Level 01	<p>Workplace offices/ Players lounge</p> <p>Admin offices Child minding facility</p> <p>Dining</p> <p>Media Offices</p>	To and within all areas normally used by the occupants.

	Learning Centre	
	Medical Tenancy	

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	Ongoing	All external accessible paths of

		travel	design detail	<p>travel to comply with AS1428.1 (2009) for:</p> <ul style="list-style-type: none"> • 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
2	D3.1	Internal paths of travel	Ongoing design detail	<p>All internal accessible paths of travel, including to and within common area facilities, to comply with AS1428.1 (2009) for:</p> <ul style="list-style-type: none"> • 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	<p>All common doors and accessible accommodation room to have compliance with AS1428.1 (2009) with respect to:</p> <ul style="list-style-type: none"> • 850mm clear openings • Door latch side circulation space • 30% luminance contrast on doorways • Door operation and

				<p>hardware</p> <ul style="list-style-type: none"> Door force is 20N where a door closer is fitted.
4	D3.3	All internal stairs and external stairs on northern elevation	Ongoing design detail	<p>All non-fire-isolated stairs to comply with AS1428.1 CI 11 Stairs (2009) with regards to</p> <ul style="list-style-type: none"> 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	<p>Accessible signage to be provided in accordance with BCA2019 and AS1428.1-2009 for:</p> <ul style="list-style-type: none"> Required exit doors stating 'Exit' and 'Level' followed by floor number. Accessible toilets Ambulant cubicles
6	D3.7	Hearing Augmentation	Not specified	<p>Determine whether hearing augmentation is required where there is a built in Audio-Visual system including any TV.</p> <p>Confirm where there will be an inbuilt amplification system.</p>
7	D3.10	Accessible pool entry / exit	Ongoing design detail	Confirm detail of sling lift
8	D3.12	Glazing	Visual Banding	Confirm detail
9	F2.4	Accessible and ambulant sanitary facilities	Fittings and fixtures	Confirm detail

10		Entry points to the building	Affected Part Upgrade	Confirm detail of the access upgrades to the main entrance and new works.
----	--	------------------------------	-----------------------	---

Risk of attracting a complaint under the DDA

The BCA 2019 does not require an Accessible Adult Change Facility (AACF) for a sporting venue of less than 20,000 capacity. However to mitigate the risk of a DDA complaint, it is recommended that an Accessible Adult Change Facility or fully conforming changing places / Lift and change room, be provided in addition to the accessible shower/ toilets.

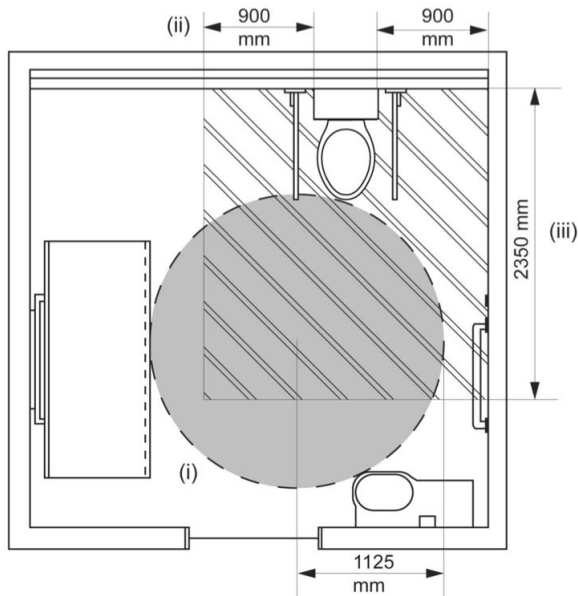
IMPORTANT NOTE Changing Places toilets are to be provided in addition to and separate from standard accessible toilets.

The benefits of providing an Accessible Change Facility will deliver a variety of long term benefits for a person with a short term/ temporary injury or disability and their carers. This simple act of increasing social and community participation, will improve their quality of life and improve psychological health.

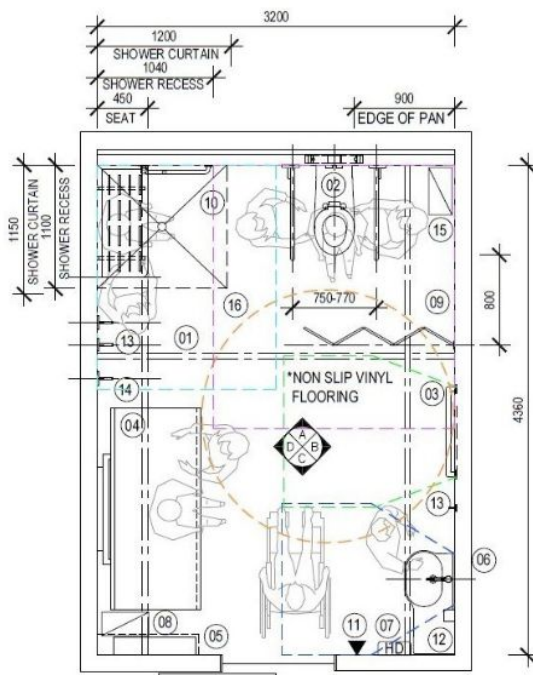
It is recommended that one Accessible Change Places Facility be provided near the academy entry for a visitor.

Each Changing Places facility is required to provide:

- A height adjustable adult sized changing bench
- A constant charging ceiling track hoist system
- A centrally located peninsula toilet
- Circulation spaces as defined in the design specifications
- Automatic door with a clear opening of 950mm at a minimum
- Other fixtures and fittings as detailed in the design specifications.



Minimum specification - Accessible Adult Change Facility



Fully conforming Changing Places Facility

Requirements of the 'changing places' Information Guide and Technical standard (June 2017)

<https://changingplaces.org.au/wp-content/uploads/2014/08/CHANGING-PLACES-TECH-STANDARD-MAY-2017.pdf>

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 accessible car parking spaces and drop off areas to the principal pedestrian entrances.
2. Access to and within all areas normally used by the occupants.

3.1.2 Compliance with Affected Part

From the information provided, it is intended that the principle entrance and the affected part pathways to the new works will comply with AS1428.1 (2009).

This will be confirmed in the next design phase.

3.2. BCA Part D3 – Access For People with Disabilities

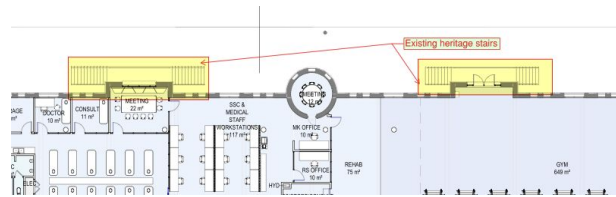
The following is a clause-by-clause assessment of the architectural drawings against BCA Part D3 – Access For People with a Disability. For more detail on each requirement, please refer to *Appendix B: BCA Part D3 – Access For People with a Disability*.

Deemed to Satisfy Provision	Complies	Comments
D3.1 General building access requirements Class 9b	✓	<p><u>Multipurpose Field of Play</u></p> <p>The main entry to the Field of Play is via the main entry foyer at the north of the site.</p> <p>Circulation pathways around the field of play will provide accessible paths of travel to the field and associated amenities such as the:</p> <ol style="list-style-type: none"> 1. Lockers / Change areas 2. Learning centres 3. Coach offices 4. Rehab spaces 5. Gym 6. Academy

		<p><u>Swifts Tenancy</u></p> <p>This is a separate stand alone new facility. However there is a connection via the players locker room through to the pool. This will enable players to access the pool without the need to walk through the main building in their swim gear.</p> <p>From the lobby entrance there is access to the change toilets and shower as well as rehab areas and the netball court.</p> <p><u>Level 1 Child Care Facility</u></p> <p>There is a child minding facility located on level 1 in the south east corner which will include an accessible toilet and shower with an office.</p> <p>The drawings demonstrate access will be provided to the maximum extent possible to all areas on all levels of the development.</p> <p>Circulation spaces and passing spaces have been provided at the end of corridors, common doorways and ever 20 metres to comply with AS1428.1 (2009).</p> <p><u>Recommended Action</u></p> <p>At Construction Certificate Stage:</p> <ul style="list-style-type: none"> • Ensure external and internal pathways comply with AS1428.1 (2009). • Provide door which have compliance with AS1428.1 (2009) with respect to 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: <ul style="list-style-type: none"> ○ access between carparking ○ Access to existing buildings
D3.1 General building access requirements Class 5	✓	<p><u>Office areas</u></p> <p>There are office spaces in the following areas:</p>

		<ul style="list-style-type: none"> <input type="checkbox"/> Ground floor Blood bank <input type="checkbox"/> Ground Floor Clontarf Foundation <input type="checkbox"/> Ground Floor Academy <input type="checkbox"/> Level 1 offices for HR, Dining area, players lounge, media, roof terrace, AFLW & Football department expansion, Multipurpose exercise. <input type="checkbox"/> Separate medical tenancy on Level 1 with entrance via the lift. <input type="checkbox"/> Within the swifts tenancy meeting rooms, offices and roof garden on level 1. <p><u>Recommended Action</u></p> <p>At Construction Certificate Stage:</p> <ul style="list-style-type: none"> • Ensure external and internal pathways comply with AS1428.1 (2009). • Provide door which have compliance with AS1428.1 (2009) with respect to clear openings, circulation space and luminance contrast on doorways, door force is 20N where a door closer is fitted.
D3.1 General building access requirements Class 6	✓	<p>A retail space is shown adjacent to the entry foyer.</p> <p>There is a cafe on the ground level with one unisex accessible toilet shown. Another toilet is proposed adjacent to the accessible toilet, it is recommended that this is an ambulant cubicle.</p>
D3.2 Access to buildings	X	<p>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).</p> <p>There is insufficient detail on the plan drawings to assess this for compliance.</p> <p><u>Recommended Action</u></p> <ol style="list-style-type: none"> 1. Ensure external pathways to comply with AS1428.1 (2009) including: <ol style="list-style-type: none"> a. 1:14 gradients ramps to have: <ol style="list-style-type: none"> i. Max distance between landings no greater than 9 metres (Max ramp section of 9

		<p>metres)</p> <ul style="list-style-type: none"> ii. handrails on both sides iii. handrail extensions that return appropriately iv. tactile ground surface indicators <ol style="list-style-type: none"> 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	<p>External Accessible walkways</p> <p>No information provided yet</p> <p><u>Recommended Action</u></p> <p>Ensure construction of external walkways / ramps are in accordance with AS1428.1</p> <ul style="list-style-type: none"> • 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 • TGSIs at top and bottom of stairs and ramps for gradients between 1:14 and 1:19 • Handrail extensions at top and bottom of ramps <p>Stairs</p> <p>There are 6 new circulation stairs located within the building.</p> <p>There are two sets of heritage stairs on the western aspect of the building, which need to be upgraded to achieve accessible features in accordance with AS1428.1 (2009).</p>



Recommended Action

All public stairs to comply with AS1428.1 CI 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

Recommended Action

At time of Occupation certificate if there are any 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)

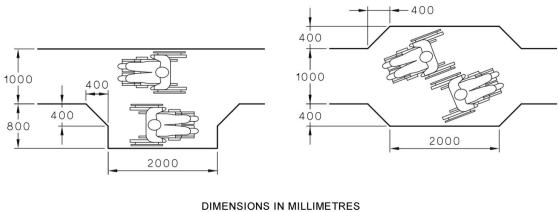
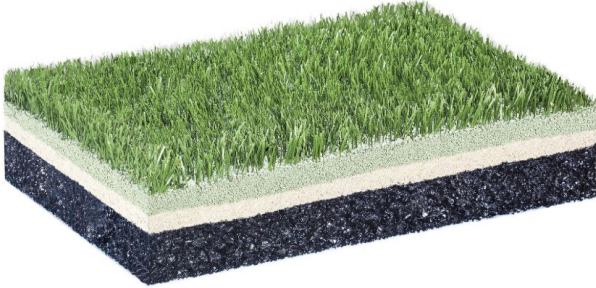
Step nosings to have vertical rise no longer greater than 3mm or 5mm if rounded

Lifts

There are 3 lifts shown on the drawings for the main field of play building.

There will be a lift to the Level 01 medical tenancy.

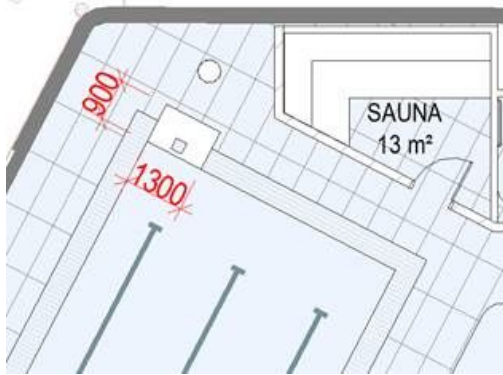
Another lift is shown in the Swifts tenancy between

	<p>the ground and level 01.</p> <p>Turning spaces</p> <p>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).</p> <p>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.</p> <div><div>11</div><div>AS 1428.1—2009</div><p>DIMENSIONS IN MILLIMETRES</p><p>FIGURE 3 EXAMPLES FOR PASSING SPACE FOR WHEELCHAIRS</p></div> <p>Flooring</p> <p>Flooring has yet been specified at this stage of design.</p> <p>Standard surfaces will comply, however wheelchair access to the multi-purpose indoor field will need to be a managed solution as this is lined with a 4G synthetic turf and is not a stable floor surface and not suitable for wheeled mobility device.</p>  <p>As pictured, 4G turf is a build up of sand and rubber to replicate an outdoor playing surface.</p> <p><u>Recommended Action</u></p>
--	---

		<p>At time of Construction Certificate, ensure:</p> <ol style="list-style-type: none"> 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 <p>Fittings</p> <p><u>Recommended Action</u></p> <p>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:</p> <ul style="list-style-type: none"> • Height above the finished floor level • Distance from an internal corner <p>Internal Doors</p> <p>All common area doors to have minimum clear opening widths of 850mm or greater</p> <p><u>Recommended Action</u></p> <p>Doors to areas required to be accessible to have compliance with AS1428.1 (2009) with respect to</p> <ul style="list-style-type: none"> • clear openings • circulation space • luminance contrast of doors • level thresholds • door force is 20N including where a door closer is fitted
D3.4 Exemptions	✓	<p>The following is a list of areas within the building which are not required to be accessible:</p> <p>(a) An area where access would be inappropriate because of the particular purpose for which the area is used.</p> <p>(b) An area that would pose a health or safety risk for people with a disability.</p> <p>(c) Any path of travel providing access only to an area</p>

		<p>exempted by (a) or (b).</p> <p>Exempt areas from access:</p> <ol style="list-style-type: none"> 1. Ground Floor Cafe Kitchen 2. Ground Floor - Laundry 3. LEVEL 01 - IT workshop 4. LEVEL 01 - boardroom Servery 5. LEVEL 01 Comms & IT cupboards 6. Access stair to Level 01 Mezzanine 7. Basement services tunnels <p>Basement - any pool plant and services rooms</p>
D3.5 Car parking spaces for people with a disability	X	<p>There are currently no accessible car parking spaces proposed for the development.</p> <p>However bicycle parking facilities will be provided. At least one accessible bike parking is proposed. This has not yet been assessed as landscape plans have not yet been developed.</p> <p><u>Recommended action:</u></p> <p>It is recommended that at least one accessible car space to comply with AS2890.6 is provided in close proximity to the facility, within the reserved spaces.</p> <p>An accessible bicycle space will need to accommodate a Recumbent bicycle/ tricycle</p> <p>Length 2000mm Width 750-1000mm Height 1300mm</p>
D3.6 Signage	X	<p>At this stage of the design, signage has not yet been developed.</p> <p><u>Recommended Action</u></p> <p>Further assessment at Construction Certificate stage is required.</p> <ol style="list-style-type: none"> 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	✓	<p>Hearing augmentation is required for the following spaces:</p> <ul style="list-style-type: none"> • Within the auditorium on the ground level within the academy. • Where TVs are provided in conference rooms and auditorium rooms and the level 1 learning centre. <p><u>Recommended Action</u> Further assessment at Construction Certificate stage is required.</p>
D3.8 Tactile indicators	X	<p>Plans currently developed indicate the need to have tactile indicators on the stairs.</p> <p><u>Recommended Action</u> Where required, Tactile indicators to be installed to comply with AS1428.4.1.</p> <p>Ensure TGSIs are a robust style with durable fixings to minimise shearing off if discrete or individual tactile units are installed.</p>
D3.9 Wheelchair seating spaces in Class 9b assembly buildings	✓	<p>For the Academy Auditorium with 80 seats - This requires 3 wheelchair accessible spaces as follows:</p> <ol style="list-style-type: none"> 1. 1 space 2. 2 space grouped <p><u>Recommended Action</u> Show on drawings.</p>
D3.10 Swimming Pools	✓	<p>A Wet recovery – pool and hot/cold hydrotherapy is provided on the ground level.</p> <p>The pool perimeter is less than 70 metres and requires at least one accessible water entry/ exit via a sling-style swimming pool lift.</p>

		 <p>Recommended Action Confirmation of type of sling style pool lift as the accessible entry/exit means into the pool by CC Stage.</p>
D3.12 Glazing on an accessway	X	<p>Recommended Action 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</p>
E3.6 Passenger lifts	✓	<p>New Lifts Four new lifts are proposed to link the ground level areas to the upper areas and basement areas.</p> <p>Recommended Action The lifts require accessible features to be in accordance with E3.6b BCA 2019. To be assessed at Construction Certificate.</p>
F2.4 Accessible sanitary facilities	✓	<p>Accessible Shower and Toilets Accessible toilet and shower are located as follows:</p> <ol style="list-style-type: none"> 1. Swifts Netball Court (Ground level) 2. Wet Recovery (Ground level) 3. Academy (Ground level) 4. Child minding facility (Level 1) <p>There is sufficient circulation space of 1900mm by 2300mm around the toilet pan and fixtures and fittings to comply with Fig 43, AS1428.1 (2009).</p> <p>Accessible Toilets</p>

		<p>A unisex accessible toilet is provided in the following locations:</p> <ol style="list-style-type: none"> 1. Multipurpose Field of Play (Ground level) 2. Cafe #1(Ground level) 3. Swift Tenancy (Level 1) 4. Customer and Community (Level 1) 5. Admin Foyer (Level 1) <p>Ambulant cubicles</p> <p>Within each bank of female and male toilets in the there is a cubicle suitable for people with ambulatory disabilities.</p> <p><u>Recommended Action</u></p> <p>Show detail of ambulant cubicles within the following areas by CC stage:</p> <ul style="list-style-type: none"> • Swifts tenancy Ground Level next to accessible toilet • Swifts tenancy on level 1 Workplace area • Cafe Ground level next to accessible toilet <p>At Construction certificate stage circulation areas, fixtures and fittings within the accessible toilets/ shower and ambulant cubicles to comply with AS1428.1 (2009) (See Appendix C)</p> <p>If a baby change table is provided, ensure baby change table does not intrude into required pan circulation when in folded up position.</p>
--	--	---

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	<p>Accessible pathways (External and Internal) to comply with AS1428.1 (2009)</p> <ul style="list-style-type: none"> • Clause 6 - pathway width and turning areas • Clause 7 - construction tolerance and abutment • Clause 10 - gradient, crossfall and provision of suitable barriers

	<p>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:</p> <p>a. External footpaths and walkways under 1:14 Wet Pendulum P4 or Oil-wet platform test R11</p> <p>b. Entries and Transitional areas Wet Pendulum P2 or Oil-wet platform test R9</p> <p>c. Entries and access areas for dry areas: Wet Pendulum P1 or Oil-wet platform test R9</p> <p>d. Toilet facilities Wet Pendulum P3 or Oil-wet platform test R10</p> <p>e. Kitchen areas Wet Pendulum P3 or Oil-wet platform test R10</p> <p>f. TGSIs In situ testing of slip resistance rating of TGSIs as per BCA Table D2.14 Slip Resistance Classification Wet Pendulum P4 or Oil-wet platform test R11.</p>
2	<p>All common public stairs to comply with AS1428.1 CI 11 Stairs (2009) with regards to</p> <ul style="list-style-type: none"> • 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	<p>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)</p>
4	<p>Doors to areas required to be accessible to have compliance with AS1428.1 (2009) with respect to</p> <ul style="list-style-type: none"> • clear openings • circulation space • luminance contrast on doors

	<ul style="list-style-type: none"> level thresholds door force is 20N including where a door closer is fitted
5	<p>Visual indicators on glazing to comply with AS1428.1-2009 including</p> <ul style="list-style-type: none"> 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	<p>Determine whether hearing augmentation is required in the auditorium.</p> <p>Confirm if there is an inbuilt amplification system in any other areas and provide hearing augmentation as required.</p>
7	<p>Fixtures, fittings and layout of all accessible toilets / showers to comply with AS1428.1 (2009)</p>
8	<p>Fixtures, fittings and layout of ambulant cubicles to comply with AS1428.1 (2009)</p> <p>Provide an ambulant cubicles in the following locations:</p> <ul style="list-style-type: none"> Swifts tenancy Ground Level next to accessible toilet Swifts tenancy on level 1 Workplace area Cafe Ground level next to accessible toilet
9	<p>Tactile indicators installed on the top and bottom of non-fire isolated stairs and ramp to comply with AS1428.4.1.</p>
10	<p>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</p>
11	<p>Accessible signage to be provided in accordance with BCA2019 and AS1428.1-2009</p>
12	<p>Carpeted flooring meets the Access to Premises Standard and the BCA Part D3.3 (g) and (h) for pile height.</p>
13	<p>Threshold levels for varying flooring joints or abutments to have vertical rise no longer greater than 3mm or 5mm if rounded</p>
14	<p>All Lifts to compliance with Table E3.6</p>
15	<p>Swimming pool lift to comply with the BCA</p>


16	Affected Part Upgrade - Confirm design detail of the access upgrades to the main entrances and new works.
----	---

On the basis of our assessment, we confirm that the State Significant Development (SSD) application drawings for Royal Hall of Industries for a high-performance sport and community facility, 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.
2. City of Sydney Access Development Control Plan (2004)

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	<ol style="list-style-type: none"> 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	10 May 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 No.	Title	Issue
SK.01.0001	Proposed Site Plan	B
SK.02.0B10	Floor Plan Basement Level	C
SK.02.0010	Floor Plan Ground Level	Q
SK.02.0110	Floor Plan Level 1	O
SK.02.0210	Floor Plan Level 1 Mezzanine	A
SK.05.0001	GFA Diagrams Ground & Level 01	A
SK.03.0010	Building Sections East-West	A
SK.03.0011	Building Sections North - South	A
SK.03.0012	Swifts Building Sections	A
SK.03.0013	RHI & Swifts Building Elevations East - West	A
SK.03.0014	RHI & Swifts Building Elevations North - South	A

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, 5, 6 Buildings.

Clause	Requirements
D3.1 General building access requirements Class 9b	To and within all areas normally used by the occupants.
D3.1 General building access requirements Class 5/ 6	To and within all areas normally used by the occupants
D3.1 General building access requirements Class 7a	To and within any level containing accessible carparking spaces.
D3.2 Access to buildings	<p>(a) An accessway must be provided to a building required to be accessible—</p> <ul style="list-style-type: none"> (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. <p>(b) In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance, and—</p> <ul style="list-style-type: none"> (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. <p>(c) Where a pedestrian entrance required to be accessible has multiple doorways—</p> <ul style="list-style-type: none"> (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. <p>(d) For the purposes of (c)—</p> <ul style="list-style-type: none"> (i) an accessible pedestrian entrance with multiple doorways is considered to be one pedestrian

	<p>entrance where—</p> <p>(A) all doorways serve the same part or parts of the building; and</p> <p>(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</p> <p>(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).</p> <p>(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.</p>
D3.3 Parts of building to be accessible	<p>In a building required to be accessible—</p> <p>(a) every ramp and stairway, except for ramps and stairways in areas exempted by D3.4, must comply with—</p> <p>(i) for a ramp, except a fire-isolated ramp, clause 10 of AS 1428.1; and</p> <p>(ii) for a stairway, except a fire-isolated stairway, clause 11 of AS 1428.1; and</p> <p>(iii) for a fire-isolated stairway, clause 11.1(f) and (g) of AS 1428.1; and</p> <p>(b) every passenger lift must comply with E3.6; and</p> <p>(c) accessways must have—</p> <p>(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</p> <p>(ii) turning spaces complying with AS 1428.1—</p> <p>(A) within 2 m of the end of accessways where it is not possible to continue travelling along the accessway; and</p> <p>(B) at maximum 20 m intervals along the accessway; and</p> <p>(d) an intersection of accessways satisfies the spatial requirements for a passing and turning space; and</p> <p>(e) a passing space may serve as a turning space; and</p> <p>(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—</p> <p>(i) containing not more than 3 storeys; and</p> <p>(ii) with a floor area for each storey, excluding the</p>

	<p>entrance storey, of not more than 200 m² ; and</p> <p>(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</p> <p>(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.</p>
D3.4 Exemptions	<p>The following areas are not required to be accessible:</p> <p>(a) An area where access would be inappropriate because of the particular purpose for which the area is used.</p> <p>(b) An area that would pose a health or safety risk for people with a disability.</p> <p>(c) Any path of travel providing access only to an area exempted by (a) or (b).</p>
D3.5 Car parking spaces for people with a disability	<p>Accessible carparking spaces—</p> <p>(a) subject to (b), must be provided in accordance with Table D3.5 in—</p> <p>(i) a Class 7a building required to be accessible; and</p> <p>(ii) a carparking area on the same allotment as a building required to be accessible; and</p> <p>(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</p> <p>(c) subject to (d), must comply with AS/NZS 2890.6; and</p> <p>(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.</p>
D3.6 Signage	<p>In a building required to be accessible—</p> <p>(a) braille and tactile signage complying with Specification D3.6 must—</p> <p>(i) incorporate the international symbol of access or deafness, as appropriate, in accordance with AS 1428.1 and identify each—</p> <p>(A) sanitary facility, except a sanitary facility within a sole-occupancy unit in a Class 1b or Class 3</p>

	<p>building; and</p> <p>(B) space with a hearing augmentation system; and</p> <p>(ii) identify each door required by E4.5 to be provided with an exit sign and state—</p> <p>(A) "Exit"; and</p> <p>(B) "Level" ; and either</p> <p>(aa) the floor level number; or</p> <p>(bb) a floor level descriptor; or</p> <p>(cc) a combination of (aa) and (bb); and</p> <p>(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—</p> <p>(i) the type of hearing augmentation; and</p> <p>(ii) the area covered within the room; and</p> <p>(iii) if receivers are being used and where the receivers can be obtained; and</p> <p>(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</p> <p>(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</p> <p>(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</p> <p>(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.</p>
D3.7 Hearing augmentation	<p>(a) A hearing augmentation system must be provided where an inbuilt amplification system, other than one used only for emergency warning, is installed—</p> <p>(i) in a room in a Class 9b building; or</p> <p>(ii) in an auditorium, conference room, meeting room or room for judicatory purposes; or</p> <p>(iii) at any ticket office, teller's booth, reception area or</p>

	<p>the like, where the public is screened from the service provider.</p> <p>(b) If a hearing augmentation system required by (a) is—</p> <ul style="list-style-type: none"> (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— <ul style="list-style-type: none"> (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. <p>(c) The number of persons accommodated in the room or space served by an inbuilt amplification system must be calculated according to D1.13.</p> <p>(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.</p>
D3.8 Tactile indicators	<p>(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—</p> <ul style="list-style-type: none"> (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,

	<p>kerb ramp or swimming pool ramp; and</p> <p>(v) in the absence of a suitable barrier—</p> <p>(A) an overhead obstruction less than 2 m above floor level, other than a doorway; and</p> <p>(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.</p> <p>(b) Tactile ground surface indicators required by (a) must comply with sections 1 and 2 of AS/NZS 1428.4.1.</p> <p>(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.</p>
D3.10 Swimming Pools	<p>(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.</p> <p>(b) An accessible entry/exit must be by means of—</p> <p>(i) a fixed or movable ramp and an aquatic wheelchair; or</p> <p>(ii) a zero depth entry at a maximum gradient of 1:14 and an aquatic wheelchair; or</p> <p>(iii) a platform swimming pool lift and an aquatic wheelchair; or</p> <p>(iv) a sling-style swimming pool lift.</p> <p>(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).</p> <p>(d) Latching devices on gates and doors forming part of a <i>swimming pool</i> safety barrier need not comply with AS 1428.1</p>
D3.12 Glazing on an accessway	<p>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.</p>

E3.6 Passenger lifts	<p>In an accessible building, every passenger lift must—</p> <ul style="list-style-type: none"> (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	<p>In a building required to be accessible—</p> <p><i>SA F2.4(a)</i></p> <ul style="list-style-type: none"> (a) accessible unisex sanitary compartments must be provided in accessible parts of the building in accordance with Table F2.4(a); and <p><i>SA F2.4(b)</i></p> <ul style="list-style-type: none"> (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.
--	--

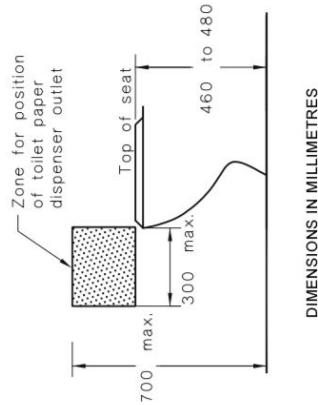
Appendix C: Accessible and ambulant sanitary facility compliance Checklists

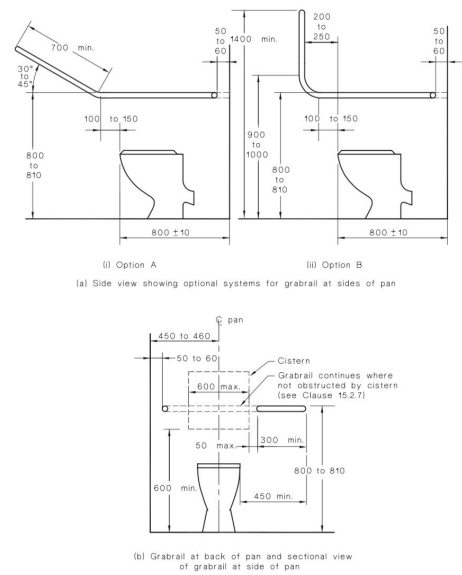
Accessible Sanitary Facilities Fittings guidelines

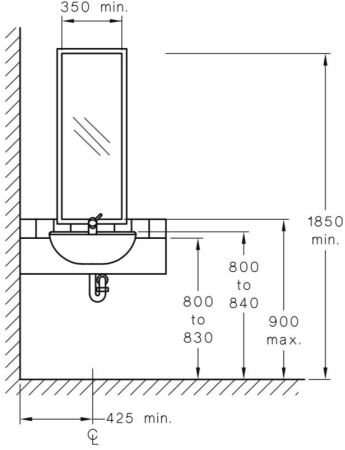
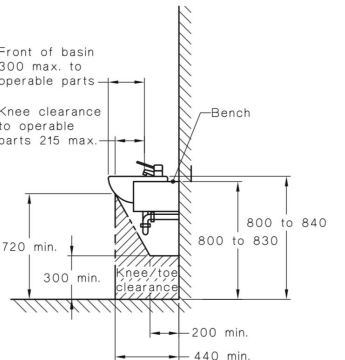
Elements	Compliance details	Comments	Diagram
Water taps (AS1428.1-2009 Clause 15.2.1)			
	Lever handle		
	Lever handle clearance not less than 50mm between adjacent surfaces		
	Taps controls and water outlet to be 300mm maximum from front of basin		
Toilet pan – accessible (AS1428.1-2009 Clause 15.2.2)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

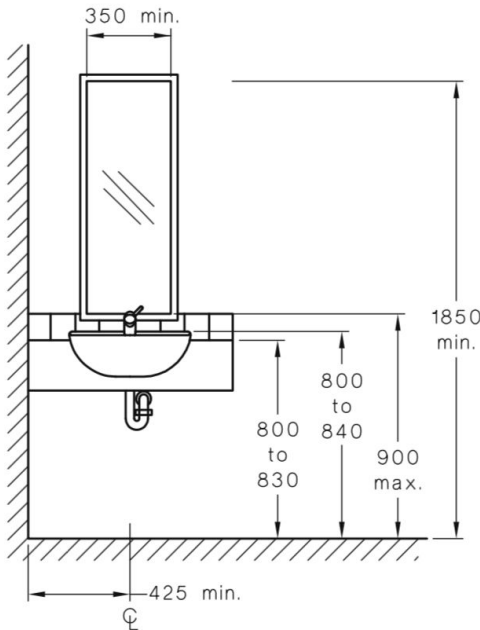
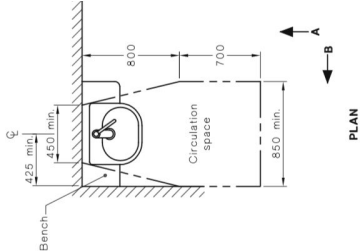
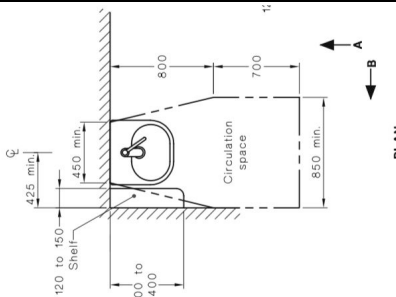
Toilet seat (AS1428.1-2009; Clause 15.2.3)	Provide minimum 30 % luminance contrast with its setting		<p>(b) Side view</p> <p>DIMENSIONS IN MILLIMETRES</p> <p>FIGURE 39 (in part) WATER CLOSET INSTALLATION</p>
Toilet backrest (AS1428.1-2009; Clause 15.2.4)			

Toilet flush controls (AS1428.1-2009; Clause 15.2.5)	Hand operated or automatic	<p>DIMENSIONS IN MILLIMETRES</p> <p>FIGURE 40 ZONE FOR POSITION OF FLUSHING CONTROL</p>
	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 <ul style="list-style-type: none"> Centred on centre line of toilet OR On wall behind pan <ul style="list-style-type: none"> Within 500mm of centre line of pan Minimum 600mm above FFL 	

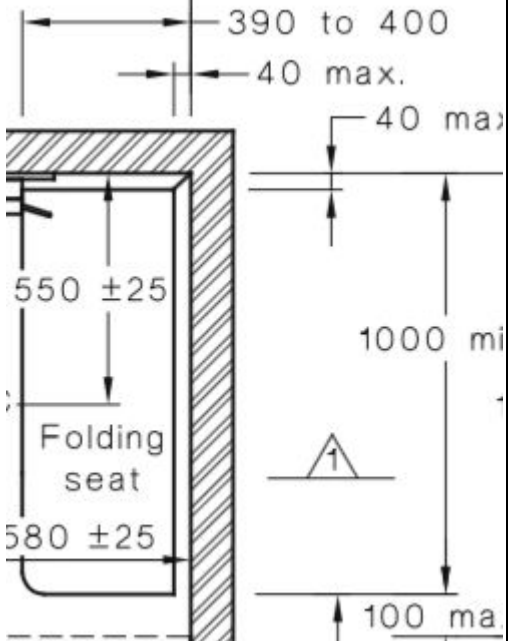
	<ul style="list-style-type: none"> Maximum 1100mm above FFL OR On wall beside pan <ul style="list-style-type: none"> 300mm in front of front edge of pan 300mm behind of front edge of pan Minimum 600mm above FFL Maximum 1100mm above FFL 		
Toilet paper dispenser (AS1428.1-2009; Clause 15.2.6)	Outlet (AS1428.1:2009 Figure 41)	<ul style="list-style-type: none"> 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) 	 <p style="text-align: center;">DIMENSIONS IN MILLIMETRES</p> <p style="text-align: center;">FIGURE 41 ZONE FOR POSITION OF TOILET PAPER DISPENSER</p>
	<ul style="list-style-type: none"> 300mm maximum from front of pan 		
	<ul style="list-style-type: none"> no higher than 700mm above finished floor level 		

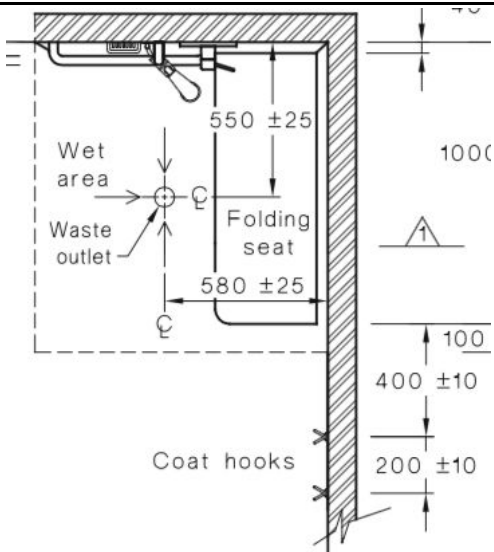
<p>Toilet Grabrails (AS1428.1-2009; Clause 15.2.7 and figure 42)</p>	<p>Ensure toilet grabrails are installed in accordance with Clause 15.2.7 and Figure 42</p>		 <p>(i) Option A</p> <p>(ii) Option B</p> <p>(a) Side view showing optional systems for grabrail at sides of pan</p> <p>(b) Grabrail at back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

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	 <p>ELEVATION A</p>
Note variations for sole occupancy units	Width of basin at wall 450mm minimum Top of vanity or basin 800mm to 830mm AFL	Ensure correct height of installation	
	Under basin clearance at basin forward edge 720mm	Ensure correct height of installation	 <p>ELEVATION B</p>
	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:		 <p>ELEVATION A</p>
	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		 <p>PLAN</p>
	Separate fixture 120mm to 150mm wide x 300mm to 400mm when installed within basin circulation area		 <p>PLAN</p>
Soap dispenser, paper towel dispenser and hand dryer for washbasin (AS1428.1-2009:	to be operable by one hand,		
	outlet to be 900 to 1100mm AFFL;		
	to be located 500mm minimum		

Clause 15.4.3)	from any internal corner		
Shower head (AS1428.1-2009; Clause 15.5.6)	Adjustable height shower head on vertical rail;		<p>DIMENSIONS IN MILLIMETRES</p> <p>FIGURE 48 SHOWER RECESS FITTINGS—ELEVATION</p>
	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		<p>DIMENSIONS IN MILLIMETRES</p> <p>FIGURE 47 (in part) SHOWER RECESS AND CIRCULATION SPACE—PLAN</p>
	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	

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

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

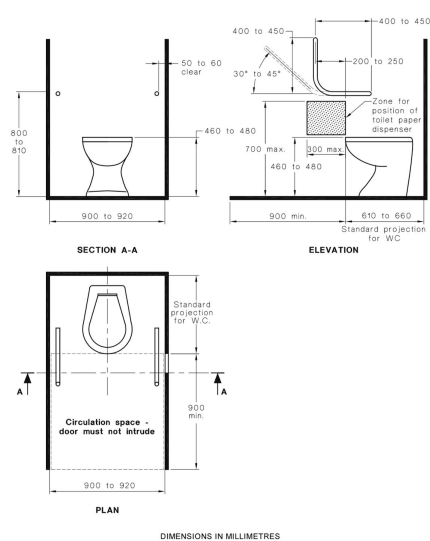
- Ensure during ongoing design and construction that
 - Combined accessible shower and WC sanitary facilities meet the circulation spaces of AS1428.1-2009
- Provision of required fittings for accessible sanitary facilities in accordance with requirements of AS1428.1-2009 including:
 - i) *Door hardware (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	 <p style="text-align: center;">DIMENSIONS IN MILLIMETRES</p> <p style="text-align: center;">FIGURE 53(A) SANITARY COMPARTMENT FOR PEOPLE WITH AMBULANT DISABILITIES—PLAN AND ELEVATION</p>
	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	
Grab rails Clause 16.2	<ul style="list-style-type: none"> 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