

Changing Places design specifications 2020





Foreword

Changing Places have come a long way since the first facility opened in Ringwood, Victoria in 2014.

There are now over 130 Changing Places across six states: New South Wales, Queensland, South Australia, Tasmania, Victoria and Western Australia. All accredited facilities are listed on the Changing Places Australia website. The National Public Toilet Map also lists many Changing Places facilities.

Australia has become the first country in the world to regulate for adult change facilities in its building code. From 1 May 2019, the National Construction Code (NCC 2019) requires a new type of public toilet called 'Accessible Adult Change Facilities' – based on the Changing Places design – to be included in certain classes of public buildings such as:

- shopping centres
- sports stadiums and swimming pools
- theatres and museums
- domestic and international airports.

Toilets built according to the Changing Places design specifications will generally meet the Deemed-to-Satisfy Provisions of the National Construction Code.

The *Changing Places design specifications 2020* provide the technical design specifications and the estimated costs to build a Changing Places facility, with four design options. The design specifications also serve as an advocacy tool for organisations and individuals seeking to gain more information about Changing Places and for those seeking to campaign for more Changing Places to be constructed.

The refreshed *Changing Places design specifications 2020* replace the *Changing Places Information Guide and Technical Standard June 2017* and includes updated designs and new features, which are based on feedback from the facilities currently in operation. A fourth design option has been introduced: 'Design 1C: Without shower alternative door location', providing the plans and specifications for a Changing Places facility with a side entrance door and a repositioned privacy screen.

It is a basic human right to be able to access a clean, safe and private place to go to the toilet.

Changing Places enable many people with high support needs to enjoy the day-to-day activities that many of us take for granted, such as going to work, school or university, playing in the park, or attending cultural, sporting or social and family events. The four case studies presented in the *Changing Places design specifications 2020* illustrate how Changing Places can make a real difference to the lives of the people who need them, their families, friends and carers.

With the introduction of the NDIS – more people now have the support they need to be able to fully participate in social, recreational and economic activities. Changing Places continue to play a vital role in enabling this connection and interaction.

Changing Places in Australia

Changing Places established in the United Kingdom.

2006

Maroondah City Council approached the UK-based Changing Places Consortium, seeking approval to use the Changing Places logo. The development of design specifications for use in Australia commenced.

The Association for Children with a Disability takes leadership of the Changing Places initiative.

First Changing Places in Australia opens at Ringwood Lake.

Victorian Government announces \$750,000 to build six Changing Places including three selected as a result of a web survey of people with a disability about where they would like Changing Places to be built. This includes funding the Association for Children with a Disability to support the implementation of Changing Places.

Changing Places Conference at Federation Square, Melbourne.

Changing Places Information Kit August 2014 released.

2011

2014

2012

Changing Places Victoria consortium established by the Maroondah City Council.

2013

Changing Places website launched by the Association for Children with a Disability.

First Marveloo built by the Maroondah City Council.

Changing Places Transforming Lives Information Kit November 2013 released.

Maroondah City Council lead a Changing Places focussed response to the Australian Government's review of the *Premises Standards (2010)* – the first step to include Accessible Adult Change Facilities in the Building Code of Australia.

Maroondah City Council wins the National Award for Excellence in Local Government for its Changing Places-Changing Lives project.

First shopping-centre Changing Places opens at the Eastland Shopping Centre, Ringwood.

Western Australia Disability Services Commission and the Western Australian Local Government Association invite local governments to apply for funding for 18 Changing Places facilities.

Twenty-eight Changing Places opened across Australia (25 in Victoria, 3 in WA).

Building Ministers Forum released the following communique: *Ministers noted the initiatives being implemented by jurisdictions in providing accessible adult sanitary facilities in public buildings and noted that the Review of the Disability (Access to Premises – Buildings) Standards 2010 received a large number of submissions in respect of this initiative.*

2016

The Government of South Australia announces \$1.7 million funding for Changing Places.

Australian Building Codes Board starts the consultation process for the inclusion of Accessible Adult Change Facilities in the National Construction Code.

Association for Children with a Disability withdraws from managing Changing Places initiative.

2018

2017

The Australian Government supported the recommendation: *Consider whether and how accessible adult changing facilities should be included in the Disability Standards as part of the larger body of work regarding accessible adult changing facilities.*

Changing Places forum held at the MCG.

Changing Places Information Guide and Technical Standard June 2017 released.

The Association for Children with a Disability develops two Changing Places videos: Melbourne Zoo and the MCG.

Victorian Government funds 26 Changing Places.

The first airport Changing Places opens at Brisbane Airport.

2019

The first Changing Places opens in South Australia.

The Australian Building Codes Board releases the National Construction Code 2019, requiring Accessible Adult Change Facilities to be included in certain classes of public buildings.

The first Changing Places opens in Tasmania.

The one hundredth Changing Places opens at Bicentennial Park, Chelsea.

2020

Changing Places design specifications 2020 released.

Contents

1. Changing Places	1	3. Design features	25
1.1 Introduction	2	3.1 Automated door	26
1.2 Changing Places Australia website	3	3.2 Ceiling hoist	31
1.3 New design requirements	3	3.3 Accessible toilet and fittings	34
1.4 National Construction Code	4	3.4 Privacy screen	36
1.5 Referenced Australian legislation and standards	4	3.5 Washbasin	37
1.6 Accreditation	5	3.6 Change table	40
1.7 Use of the Changing Places name and logo	6	3.7 Changing rails	42
1.8 Master Locksmiths Access Key – a key for Changing Places	7	3.8 Clothes and towel hooks	43
1.9 National Public Toilet Map	8	3.9 Sling hook	43
1.10 Portable Changing Places	9	3.10 Disposal bins	44
1.11 Universal design	10	3.11 Flooring	44
1.12 Internal finishes	10	3.12 Signage	45
Michael's story	11	3.13 Shower	49
2. Design options	12	3.14 Temperature control	51
2.1 Introduction	13	Rebecca and Sarah's story	52
2.2 Changing Places Design 1A: Without shower rectangular	14	4. Costings	53
2.3 Changing Places Design 1B: Without shower square	15	4.1 Introduction	54
2.4 Changing Places Design 1C: Without shower alternative door location	16	4.2 Assumptions and inclusions	54
2.5 Changing Places Design 2: With shower rectangular	17	4.3 Total project cost	55
2.6 Detailed plans and elevations	18	4.4 Exclusions	55
2.7 Alternative layouts	22	4.5 Design 1A: Without shower rectangular	56
2.8 Variations to the Requirements	23	4.6 Design 1B: Without shower square	59
Mollie's story	24	4.7 Design 1C: Without shower alternative door location	62
		4.8 Design 2: With shower rectangular	65
		Liz's story	68
		Appendix 1 A summary of the new design requirements for the Changing Places design specifications 2020	69
		Appendix 2 Changing Places and the National Construction Code	71
		Appendix 3 Changing Places Technical Advisory Team	74
		Appendix 4 Glossary	76
		Acknowledgements	79

1. Changing Places



1.1 Introduction

Changing Places provide suitable facilities for people who cannot use standard accessible toilets. A Changing Places facility allows people with high support needs to fully participate in the community. This may include people with an acquired brain injury, spinal cord injury, cerebral palsy, multiple sclerosis, spina bifida, and motor neurone disease, as well as many other people with a disability.

Changing Places facilities provide:

- a height-adjustable adult-sized change table
- a constant-charging ceiling track hoist system
- a centrally-located peninsula toilet
- circulation spaces as defined in the design specifications
- an automatic door with a clear opening of 950 mm at a minimum (1100 mm for beach and lake locations)
- a privacy screen.

In addition to satisfying the requirements of the National Construction Code, providing a Changing Places facility is a great step towards meeting the intent of the *Disability Discrimination Act 1992* (Cth) by creating an inclusive built environment for all people with disability.

Organisations and building owners who provide a Changing Places can proudly promote their awareness of community needs and commitment to social responsibility.



1.2 Changing Places Australia website

The Changing Places Australia website provides a range of up-to-date information and resources relating to Changing Places. The website contains:

- a list of all accredited Changing Places facilities
- the *Changing Places design specifications 2020*
- AutoCAD files for the Changing Places designs
- a list of Changing Places Assessors
- the registration and accreditation processes
- contact information
- regular news items about developments in Changing Places, feature articles and videos.

Visit the Changing Places website:
<www.changingplaces.org.au>.

1.3 New design requirements

A number of requirements have been added to the Changing Places design options 2020, which are based on key learnings from the Changing Places currently in operation. These changes will apply from 1 April 2020. This change will not affect facilities which are accredited (as Changing Places) or have obtained building approval prior to 1 April 2020.

Key Changing Places design requirements featured in the latest designs include:

- An additional layout 'Design 1C: Without shower alternative door location', which shows a side entrance door and repositioning of the privacy screen.
- Room sizes are now provided as nominal dimensions, to assist in the preliminary phase of design. These sizes are not binding, allowing designers to prepare layouts for any room shape or size – as long as the required minimum circulation spaces are achieved.

See Appendix 1 for a complete list of the new design requirements and further information about the design specifications supplied.



1.4 National Construction Code

The Australian Building Codes Board updated the National Construction Code in 2019 (BCA Volume One, Clause F2.9) to include a new type of toilet called 'Accessible Adult Change Facilities'. This new type of toilet – based on the Changing Places design – must be included in certain classes of public buildings.

From 1 May 2019, one unisex Accessible Adult Change Facility must be provided in:

- Class 6 buildings: shopping centres – with a design occupancy of not less than 3,500 people.
- Class 9b sports venues – with a design occupancy of not less than 35,000 spectators or contains a swimming pool that has a perimeter of not less than 70 m.
- Museum and art gallery (or similar) buildings – with a design occupancy of not less than 1,500 patrons.
- Theatre and entertainment venues – having a design occupancy of not less than 1,500 patrons.
- Domestic and international passenger airports.

The National Construction Code does not require that Accessible Adult Change Facilities be accredited as Changing Places toilets. However, toilets built according to the Changing Places design standards will generally meet the Deemed-to-Satisfy Provisions of the National Construction Code.

Australia is the first country in the world to regulate for public toilets based on the Changing Places design.

See Appendix 2: Changing Places and the National Construction Code for further information.

1.5 Referenced Australian legislation and standards

The *Changing Places design specifications 2020* references legislation and standards from the current National Construction Code, introduced 1 May 2019. The National Construction Code (NCC) is Australia's performance-based building and plumbing code. It sets the minimum technical requirements for the construction of new buildings (and new building work in existing buildings).

It is a requirement for all building and plumbing work associated with the installation of Changing Places facilities to be in accordance with the current National Construction Code.

Australian Standards (AS) are published documents setting out specifications and procedures designed to ensure products, services and systems are safe, reliable and consistently perform the way they are intended to. They establish a minimum set of requirements, which define quality and safety criteria.

For further information on the National Construction Code see *Understanding the NCC: How to comply with the NCC and Guide to Volume One: NCC 2019* on the NCC website <www.abcb.gov.au>. For further information on Australian Standards see the Standards Australia website <www.standards.org.au>.

1.6 Accreditation

All Changing Places must be approved by a Changing Places Assessor. The accreditation process ensures that Changing Places are built to standard so that users can be confident that the design is fit for purpose.

Accreditation provides facility managers with peace of mind, knowing that if they build to the Changing Places design, they will be compliant with the recently introduced National Construction Code requirements for Accessible Adult Change Facilities (F2.9 and Specification F2.9), if applicable.

Only accredited Changing Places facilities are permitted to use the Changing Places branding (name and logo) and signage and be listed on the Changing Places Australia website.

The Changing Places design, branding and signage is used internationally, making it easier for people travelling interstate or for tourists visiting Australia to locate Changing Places facilities.

1.6.1 Changing Places Assessor

Facility managers wishing to have their facility accredited as a Changing Places facility must engage a Changing Places Assessor.

It is strongly recommended that facility managers engage a Changing Places Assessor prior to the construction of a Changing Places facility to assess project documentation at the following three stages:

- Stage 1: Schematic design review
- Stage 2: Construction documentation review
- Stage 3: As-built final review.

This three-stage process identifies issues or concerns at the early stages of the building process to ensure that Changing Places facilities are built to the correct design specifications.

Assessors can be found on the Changing Places Australia website <www.changingplaces.org.au>.

1.6.2 Statement of Compliance

Once a Changing Places Assessor has assessed a facility and is satisfied it meets the requirements of the Changing Places design specification, they issue the facility manager with a Statement of Compliance.

The facility manager then submits an online registration form via the Changing Places Australia website, requesting that their facility be listed on the Changing Places website and uploads their Statement of Compliance. It is the facility manager's responsibility to forward their Statement of Compliance to Changing Places Australia.

Retrospective accreditation

Retrospective accreditation can be achieved for facilities that have already been constructed. This process requires the facility manager to engage a Changing Places Assessor to undertake 'Stage 3: As-built final review' only. Once a Changing Places Assessor has assessed a facility and is satisfied it meets the requirements of the Changing Places design specification, the Changing Places Assessor issues the organisation with a Statement of Compliance and a link to the Changing Places website, so they can have the Changing Places facility added to the list of accredited Changing Places (as described above).

Alternative layout designs

Alternative layout designs are permitted, provided they achieve the minimum requirements of the Changing Places design, especially in regard to:

- circulation space
- equipment
- fittings and fixtures.

Where a facility is also required to comply with the National Construction Code, the alternative layout design may need to be assessed as a Performance Solution under the NCC.

1.7 Use of the Changing Places name and logo

In Australia, the Changing Places trademark (name and logo) is owned by the State of Victoria through the Department of Health and Human Services.

The department has developed a set of guidelines for the use of the logo and branding by accredited facilities and Changing Places Assessors.

Only accredited Changing Places facilities can use the Changing Places trademark and branding.



1.8 Master Locksmiths Access Key – a key for Changing Places

Many Changing Places require a Master Locksmiths Access Key (MLAK) in order to use the facility. MLAKs have been fitted to many Changing Places across Australia, including:

- council municipalities
- sports and entertainment venues
- national parks
- playground equipment – such as Liberty Swings.

The MLAK gives people with disabilities and their carers access to a network of facilities, seven days a week; including many Changing Places.

1.8.1 Do all Changing Places require an MLAK?

It is up to each venue to determine how to manage their Changing Places facility. However, experience shows that it is better to have the facility locked to deter vandalism and misuse. A key-operated system using the MLAK ensures that Changing Places facilities are only used by the people who require them. Changing Places that use the MLAK are more likely to be kept clean and provide a safe environment for the people who use them.

Note: The National Construction Code does not require the use of an MLAK.

1.8.2 How to get an MLAK

An MLAK can be ordered from the Master Locksmiths Association of Australasia Ltd by completing the MLAK Order Form. The key can be purchased by people with disabilities, their carers, assistants and support workers, and Changing Places facility owners.

It is recommended that facility managers arrange to have an MLAK available in a location near the Changing Places facility at all times the venue is open to the public. For example, the MLAK may be

kept at a reception desk or at a nearby business such as a local café. There should be clear signage at the Changing Places facility to indicate the location of the MLAK. The availability of an MLAK supports users who do not have a key with them.

To access the MLAK Order Form visit
<www.masterlocksmiths.com.au/mlak/>.



1.9 National Public Toilet Map



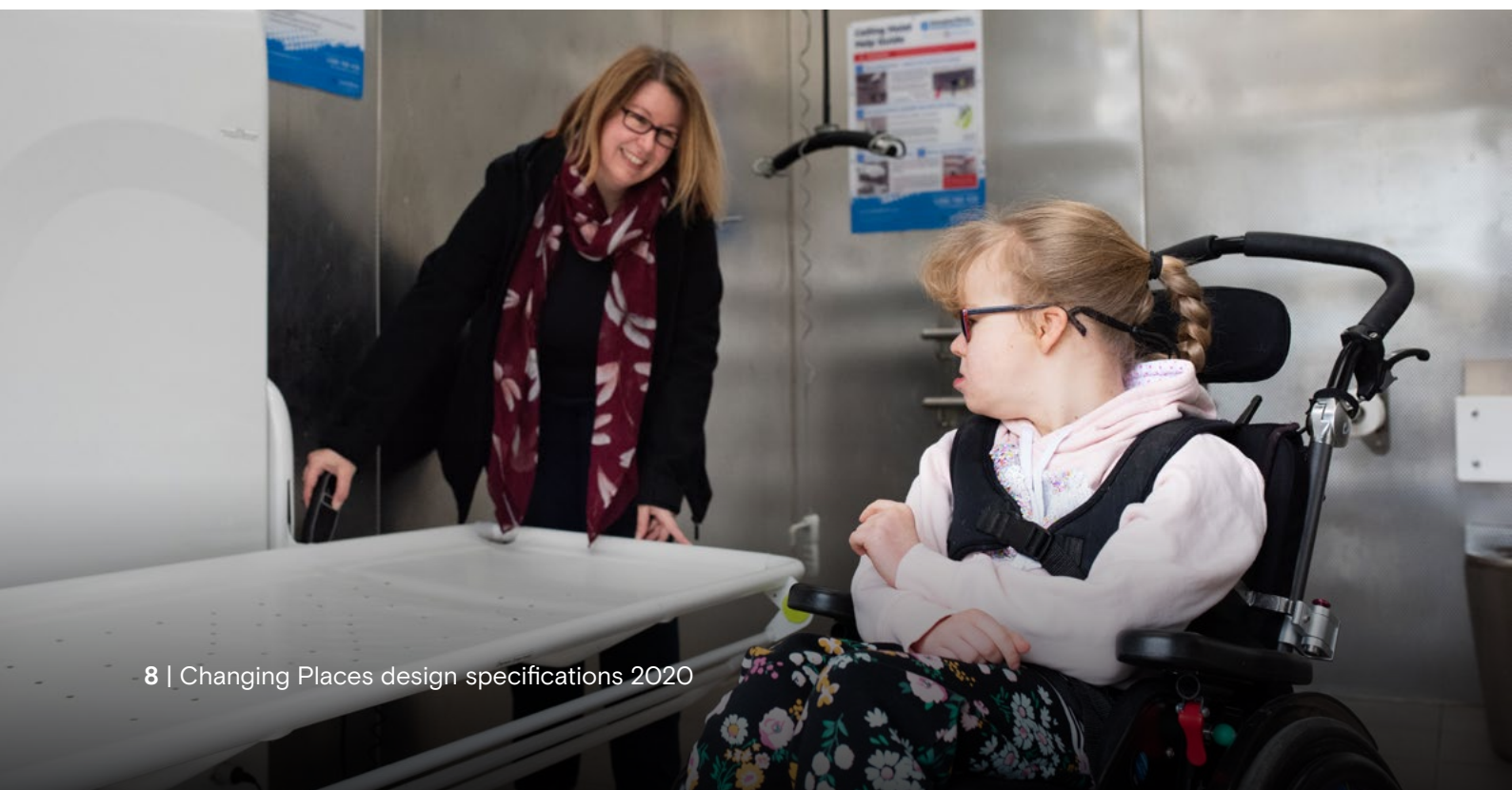
As part of the National Continence Program, the National Public Toilet Map provides information on over 19,000 publicly available toilets across Australia. Facility information includes:

- accessibility features
- opening hours
- type of toilets
- showers
- MLAK use
- accessible toilets
- accredited Changing Places.

Facility managers will be given the option to have their accredited Changing Places facility listed on the National Public Toilet Map.

The National Public Toilet Map contacts facility managers on an annual basis to check that details are up to date.

To access the National Public Toilet Map visit: www.toiletmap.gov.au or download the National Public Toilet Map App, (see website for details). The App is also available from the Apple Store and Google Play Store. Both the website and the App allow users to set preferences to search for Changing Places facilities.



1.10 Portable Changing Places

Portable Changing Places and Accessible Adult Change Facilities can be moved to various locations as needed. The Marveloo and the Placeable are examples of portable Changing Places facilities available for hire (from local councils) for events and festivals. These designs incorporate many of the features of a Changing Places facility including a tracking ceiling hoist, height adjustable adult sized change table, additional circulation space and an accessible toilet.

‘Marveloos can bring accessibility to places, that otherwise wouldn’t. They can go anywhere and provide that service.’



1.11 Universal design

‘Universal design’ is a design philosophy that ensures that products, buildings, environments and experiences are innately accessible to as many people as possible, regardless of their age, level of ability, cultural background, or any other differentiating factors that contribute to the diversity of our communities.

It is recommended that consideration be given to universal design principles during the planning stage for the construction of a Changing Places facility.

This includes overall site design that incorporates clear continuous access to the Changing Places facility, with accessible parking located in close proximity.

1.12 Internal finishes

There are no mandatory requirements for internal finishes within the room, but the following items should be considered when designing a new Changing Places facility:

- Warm, inviting colours and patterns or murals are recommended to avoid the Changing Places having a cold or sterile look.
- Bold or busy patterns with bright colours are not recommended as some people may be over-stimulated by these.
- Consider increasing the luminance contrast of all fixtures and fittings to the wall surface.
- Baby and child-like decorations are not considered appropriate.



Michael's story

Michael is an engaging twenty-one-year-old who loves to watch rugby, football and the complete spectacle that is World Wrestling Entertainment (WWE)!

In 2018, Melbourne was host to one of the biggest live WWE events, the WWE Super Show-Down – attended by over 70,000 fans. Fortunately for Michael and his family, it is possible for him to experience the thrill of seeing the WWE superstars live in action as many large entertainment venues – such as the MCG – now have a Changing Places facility.

It can be difficult for Michael and his family to attend such an event, as a great deal of planning is required: transport, accessibility, dealing with crowds and packing everything that's needed. But knowing that there is a suitable toilet available makes a huge difference. And just knowing that such an outing is possible – can really make a difference in someone's life.

The inclusion of a Changing Places facility gives many families the opportunity to participate in a family outing, rather than unfortunately being excluded.

Michael completed school four years ago and now enjoys going to Windarring (disability services and support provider) Monday–Friday. Every day there is a different activity; he particularly likes catching the train and going tenpin bowling. Michael is a keen observer and loves to watch what's going on in the world. In his spare time, he has developed the fine art of watching two television screens at once, so as not to miss any sporting or YouTube action!

For the time being, Michael is content to watch the WWE superstars from afar, but with more WWE extravaganzas scheduled for Rod Laver Arena in the future, he may have an opportunity to witness the WWE crazy antics live!



2. Design options



2.1 Introduction

The Changing Places Technical Advisory Team has developed four typical design options:

- Design 1A: Without shower rectangular
- Design 1B: Without shower square
- Design 1C: Without shower alternative door location
- Design 2: With shower rectangular.

The following pages provide the exact measurements for the fittings and fixtures within each design option.

The AutoCAD files for each design can be found on www.changingplaces.org.au.

‘Changing Places provide the security of knowing we can access a place, where we can take care of her physical and sanitary needs, with privacy and dignity.’



2.2 Changing Places Design 1A: Without shower rectangular

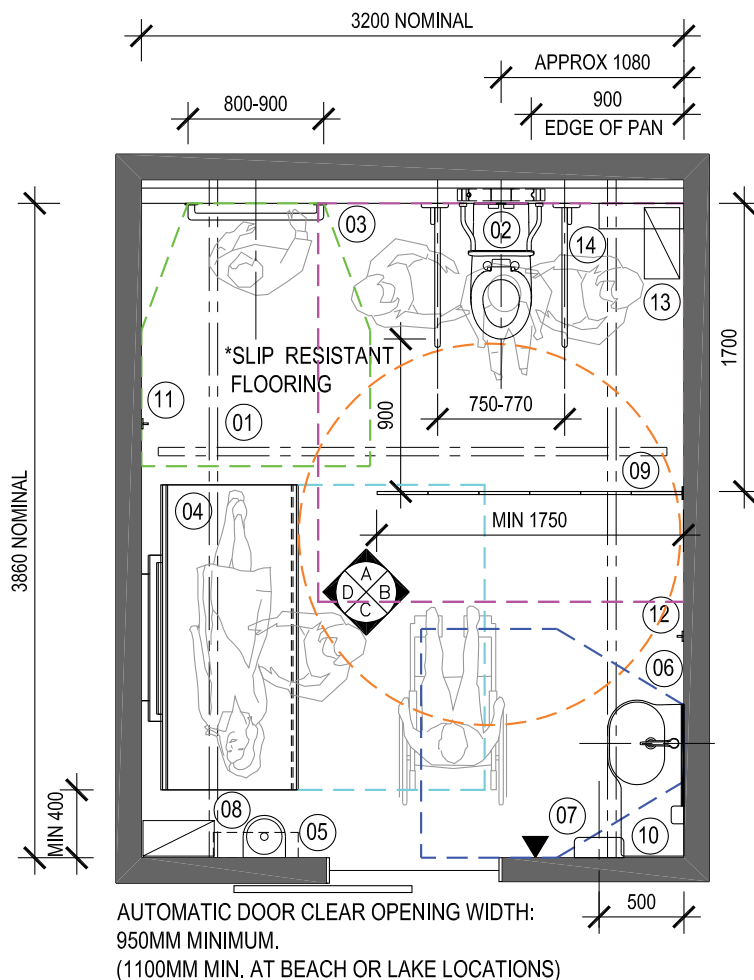
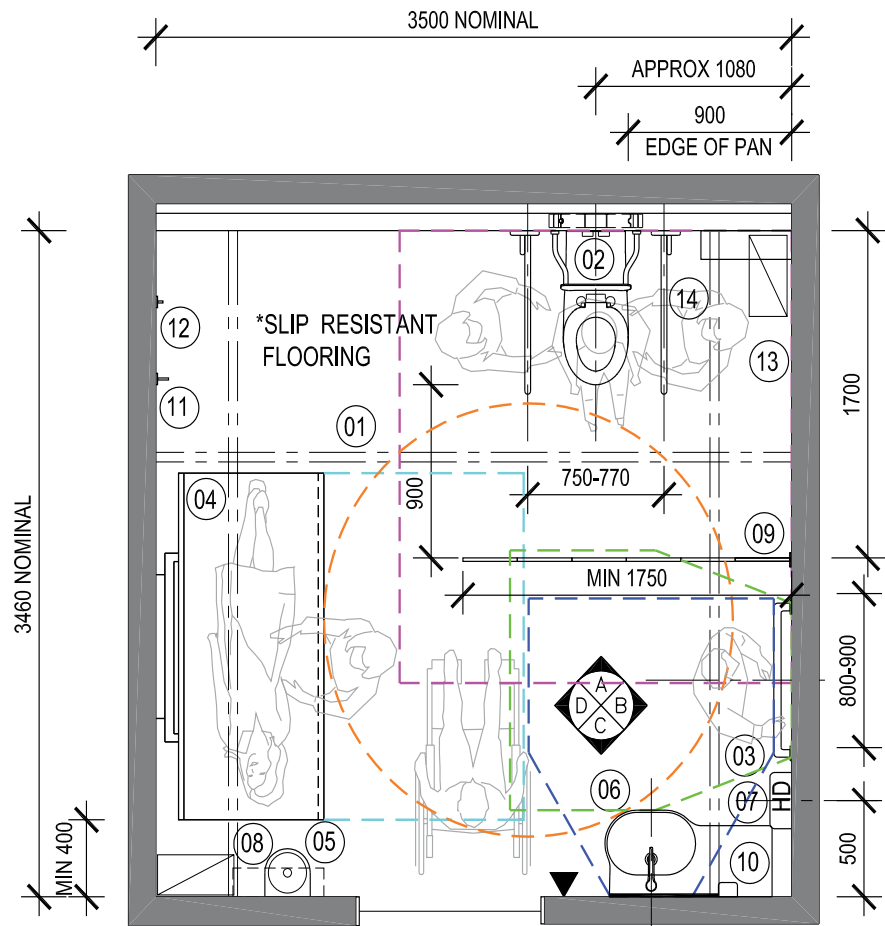


Figure 1: Changing Places Design 1A:
Without shower rectangular

01	Constant-charge room coverage hoist	08	Incontinence pad disposal bin
02	Accessible peninsula-style toilet including backrest and two drop-down grabrails and toilet paper holders	09	Wall-mounted retractable privacy screen
03	Wall-mounted changing rails	10	Soap dispenser
04	Wall-mounted, motorised height-adjustable change table with side safety rail	11	Large sling hook
05	Shelf and sanitising wipe dispenser	12	Clothes hook
06	Washbasin with integrated shelf	13	Sanitary product disposal bin
07	Hand dryer or paper towel dispenser	14	Shelf beside the toilet pan
		▼	Automatic door control

2.3 Changing Places Design 1B: Without shower square

Figure 2: Changing Places
Design 1B: Without
shower square



AUTOMATIC DOOR CLEAR OPENING WIDTH:
950MM MINIMUM.
(1100MM MIN. AT BEACH OR LAKE LOCATIONS)

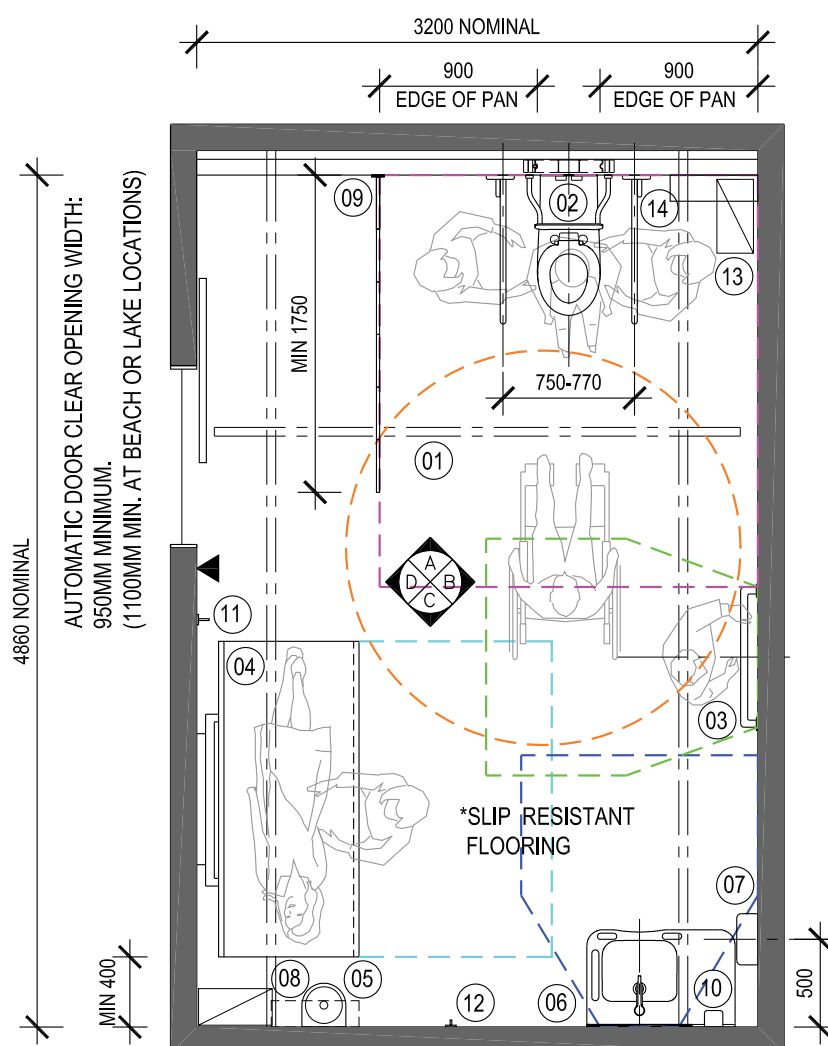
01	Constant-charge room coverage hoist	08	Incontinence pad disposal bin
02	Accessible peninsula-style toilet including backrest and two drop-down grabrails and toilet paper holders	09	Wall-mounted retractable privacy screen
03	Wall-mounted changing rails	10	Soap dispenser
04	Wall-mounted, motorised height-adjustable change table with side safety rail	11	Large sling hook
05	Shelf and sanitising wipe dispenser	12	Clothes hook
06	Washbasin with integrated shelf	13	Sanitary product disposal bin
07	Hand dryer or paper towel dispenser	14	Shelf beside the toilet pan
		▼	Automatic door control

2.4 Changing Places Design 1C: Without shower alternative door location

01	Constant-charge room coverage hoist
02	Accessible peninsula-style toilet including backrest and two drop-down grabrails
03	Wall-mounted changing rails
04	Wall-mounted, motorised height-adjustable change table with side safety rail
05	Shelf and sanitising wipe dispenser
06	Washbasin with integrated shelf
07	Hand dryer or paper towel dispenser

08	Incontinence pad disposal bin
09	Wall-mounted retractable privacy screen
10	Soap dispenser
11	Large sling hook
12	Clothes hook
13	Sanitary product disposal bin
14	Shelf beside the toilet pan
▼	Automatic door control

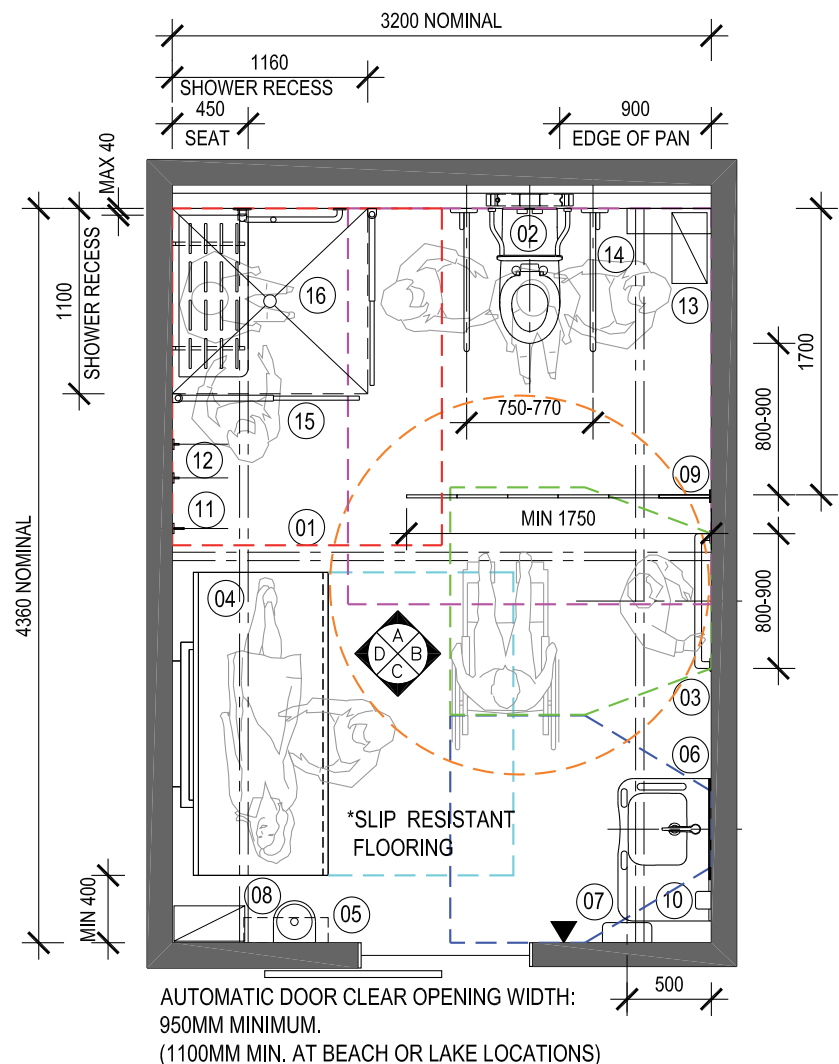
Figure 3: Changing Places Design
1C: Without shower alternative
door location



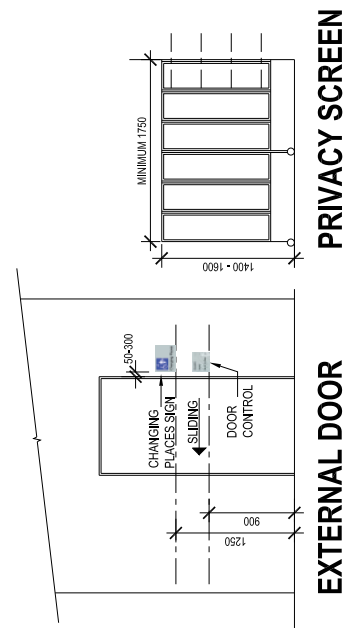
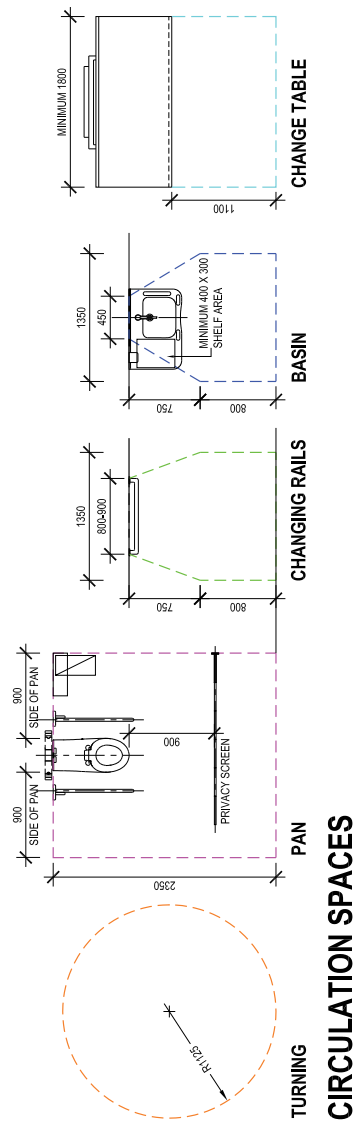
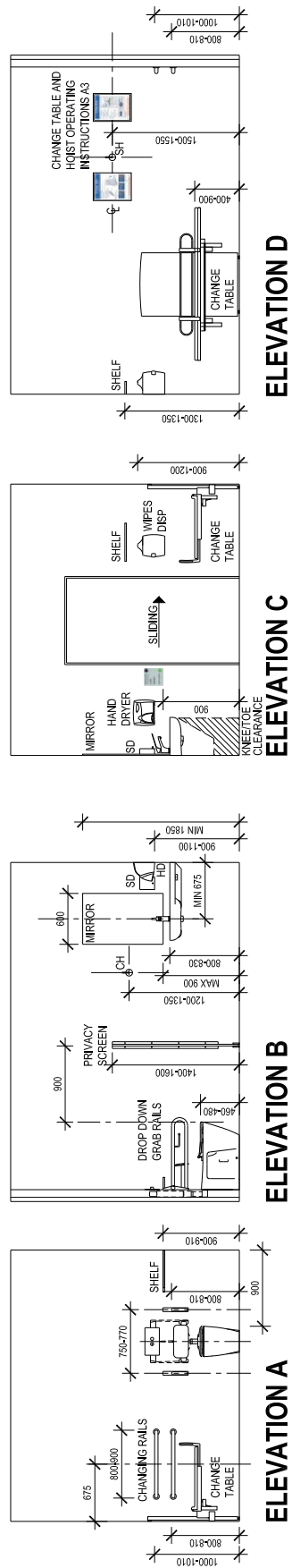
2.5 Changing Places Design 2: With shower rectangular

01	Constant-charge room coverage hoist	09	Wall-mounted retractable privacy screen
02	Accessible peninsula-style toilet including backrest and two drop-down grabrails	10	Soap dispenser
03	Wall-mounted changing rails	11	Large sling hook
04	Wall-mounted, motorised height adjustable change table with side safety rail	12	Clothes hook
05	Shelf and sanitising wipe dispenser	13	Sanitary product disposal bin
06	Washbasin with integrated shelf	14	Shelf beside the toilet pan
07	Hand dryer or paper towel dispenser	15	Telescopic shower curtains
08	Incontinence pad disposal bin	16	Accessible shower with shower seat
		▼	Automatic door control

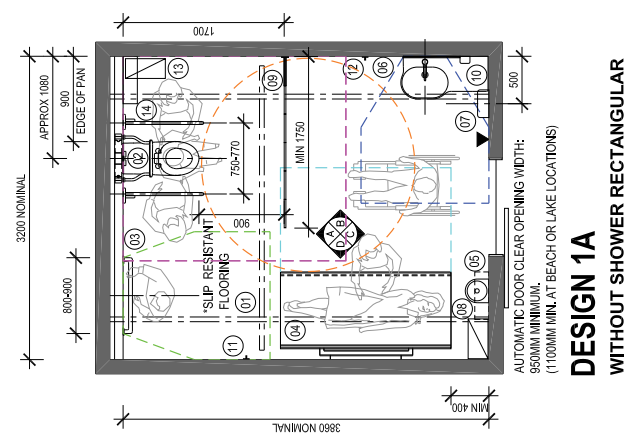
Figure 4: Changing Places Design 2: With shower rectangular



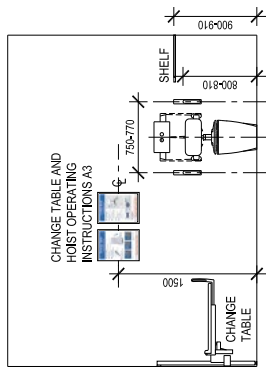
2.6 Detailed plans and elevations



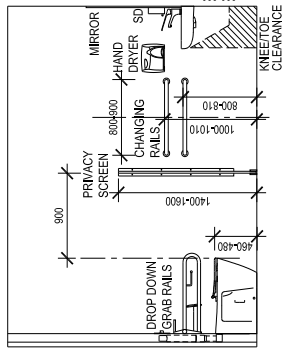
- 01 ROOM COVERAGE HOIST
 - 02 ACCESSIBLE WC INCL BACKREST AND DROP DOWN GRABRAILS
 - 03 TWO 800-900MM LONG HORIZONTAL CHANGING RAILS AT 800MM AND 1000MM ABOVE FLOOR LEVEL
 - 04 ADJUSTABLE HEIGHT CHANGE TABLE, 1800MM LONG WITH SIDE SAFETY RAIL
 - 05 CHANGE TABLE WIPE DISPENSER WITH 450 x 150MM SHELF OVER
 - 06 HAND BASIN WITH INTEGRATED SHELF
 - 07 HAND DRYER
 - 08 INCONTINENCE PAD DISPOSAL BIN
 - 09 RETRACTABLE PRIVACY SCREEN 1900MM LONG
 - 10 SOAP DISPENSER
 - 11 LARGE SLING HOOK
 - 12 CLOTHES HOOK
 - 13 SANITARY PRODUCT DISPOSAL BIN
 - 14 450 X 150MM SHELF
- ▶ AUTOMATIC DOOR CONTROL



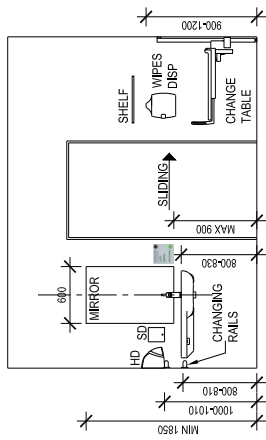
COPYRIGHT - ALL RIGHTS RESERVED
 1. This document is the property of the City of Vancouver and is to be used for the purpose of providing information only. It is not to be used for any other purpose without the written consent of the City of Vancouver.
 2. The City of Vancouver does not warrant the accuracy or completeness of the information contained in this document. The City of Vancouver is not responsible for any errors or omissions in this document.
 3. The City of Vancouver is not responsible for any damages, including but not limited to, direct, indirect, or consequential damages, arising from the use of this document.



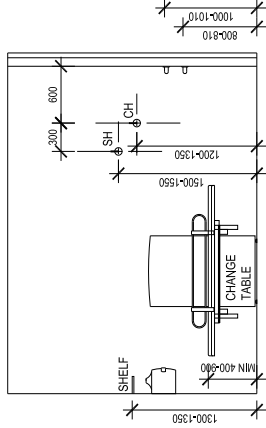
ELEVATION A



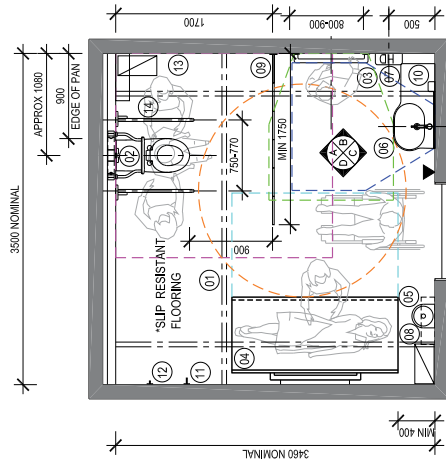
ELEVATION B



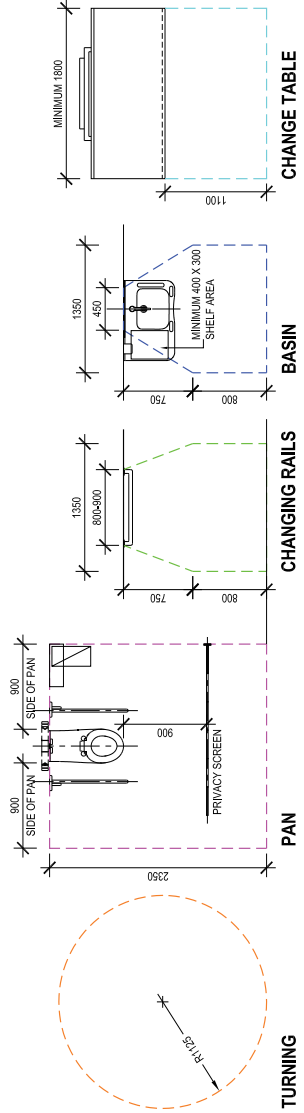
ELEVATION C



ELEVATION D

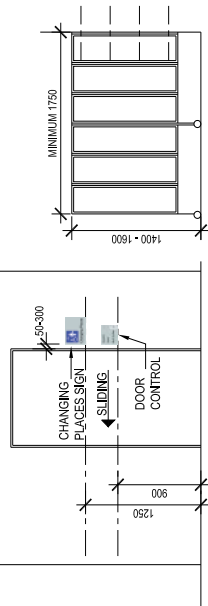


DESIGN 1B
 WITHOUT SHOWER SQUARE



CIRCULATION SPACES

- 01 ROOM COVERAGE HOIST
- 02 ACCESSIBLE WC INCL BACKREST AND DROP DOWN GRABRAILS
- 03 TWO 800-900MM LONG HORIZONTAL CHANGING RAILS AT 800MM AND 1000MM ABOVE FLOOR LEVEL
- 04 ADJUSTABLE HEIGHT CHANGE TABLE, 1800MM LONG WITH SIDE SAFETY RAIL
- 05 CHANGE TABLE WIPES DISPENSER WITH 450 X 150MM SHELF OVER
- 06 HAND BASIN WITH INTEGRATED SHELF
- 07 HAND DRYER
- 08 INCONTINENCE PAD DISPOSAL BIN
- 09 RETRACTABLE PRIVACY SCREEN 1900MM LONG
- 10 SOAP DISPENSER
- 11 LARGE SLING HOOK
- 12 CLOTHES HOOK
- 13 SANITARY PRODUCT DISPOSAL BIN
- 14 450 X 150MM SHELF

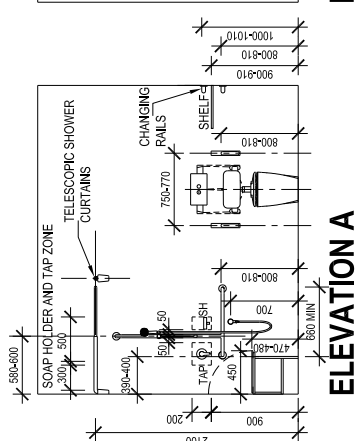


EXTERNAL DOOR

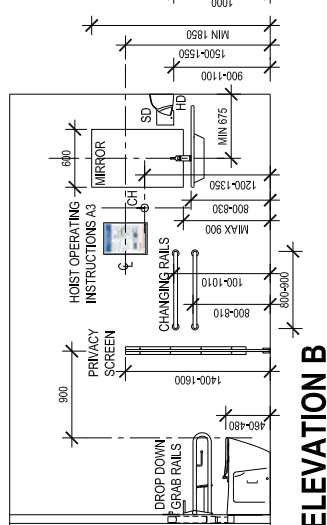


PRIVACY SCREEN

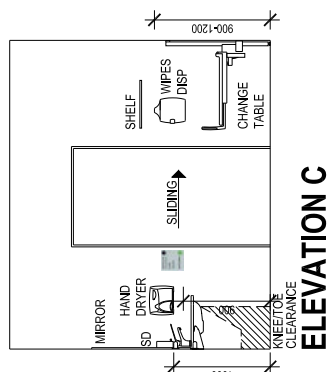




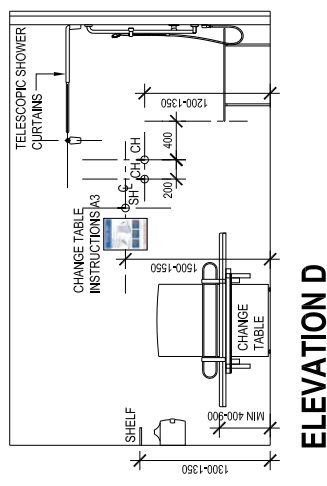
ELEVATION A



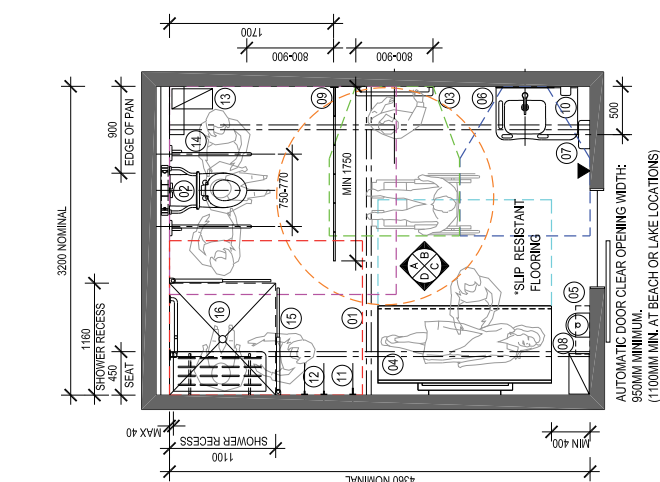
ELEVATION B



ELEVATION C

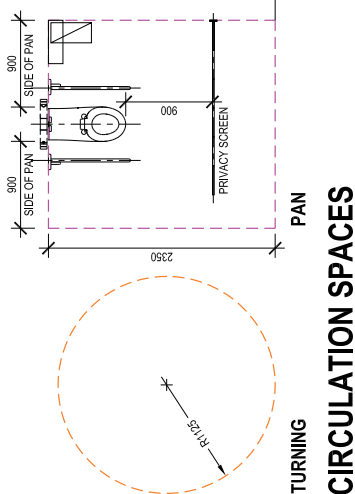


ELEVATION D

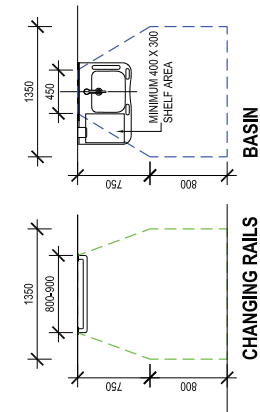


DESIGN 2

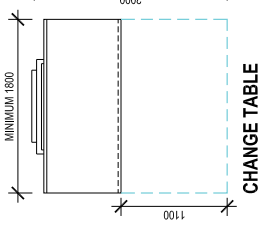
WITH SHOWER RECTANGULAR



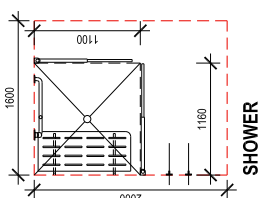
TURNING PAN
CIRCULATION SPACES



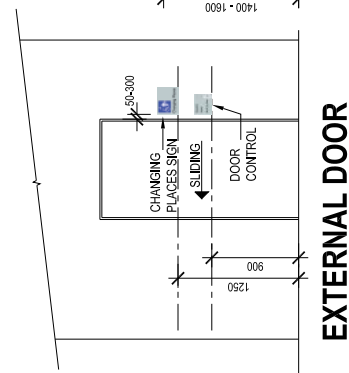
CHANGING RAILS



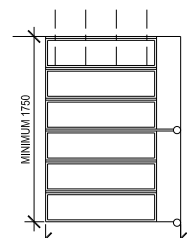
CHANGE TABLE



SHOWER



EXTERNAL DOOR



PRIVACY SCREEN

- | | |
|----|---|
| 01 | ROOM COVERAGE HOIST |
| 02 | ACCESSIBLE WC INCL. BACKREST AND DROP DOWN GRABRAILS |
| 03 | TWO 900-800MM LONG HORIZONTAL CHANGING RAILS AT 800MM AND |
| 04 | 1000MM ABOVE FLOOR LEVEL |
| 05 | ADJUSTABLE HEIGHT CHANGING TABLE, 1800MM LONG WITH SIDE |
| 06 | SUPPORT RAIL |
| 07 | CHARGE TABLE WIPE DISPENSER WITH 450 x 150MM SHELF OVER |
| 08 | HAND BASIN WITH INTEGRATED SHELF |
| 09 | HAND DRYER |
| 10 | INCONTINENCE PAD DISPOSAL BIN |
| 11 | RETRACTABLE PRIVACY SCREEN 1900MM LONG |
| 12 | SOAP DISPENSER |
| 13 | LARGE SLING HOOK |
| 14 | CLOTHES HOOKS |
| 15 | SANITARY PRODUCT DISPOSAL BIN |
| 16 | 450 x 150MM SHELF |
| 17 | TELESCOPIC SHOWER CURTAINS |
| 18 | ACCESSIBLE SHOWER |
| 19 | AUTOMATIC DOOR CONTROL |

2.7 Alternative layouts

Alternative layouts provide different design options to the standard layouts. They still meet the requirements of the Changing Places design specifications by achieving the required circulation spaces and hoist coverage for each component. A Changing Places Assessor can approve an alternative layout. An alternative layout may also need to be assessed as a Performance Solution under the National Construction Code, if applicable.

Layouts are required to achieve the circulation spaces defined in Figure 5 around each fitting and fixture in the *Changing Places design specifications 2020*.

Circulation spaces may be overlapped. All circulation spaces are to be provided with the change table in the open (down) position.

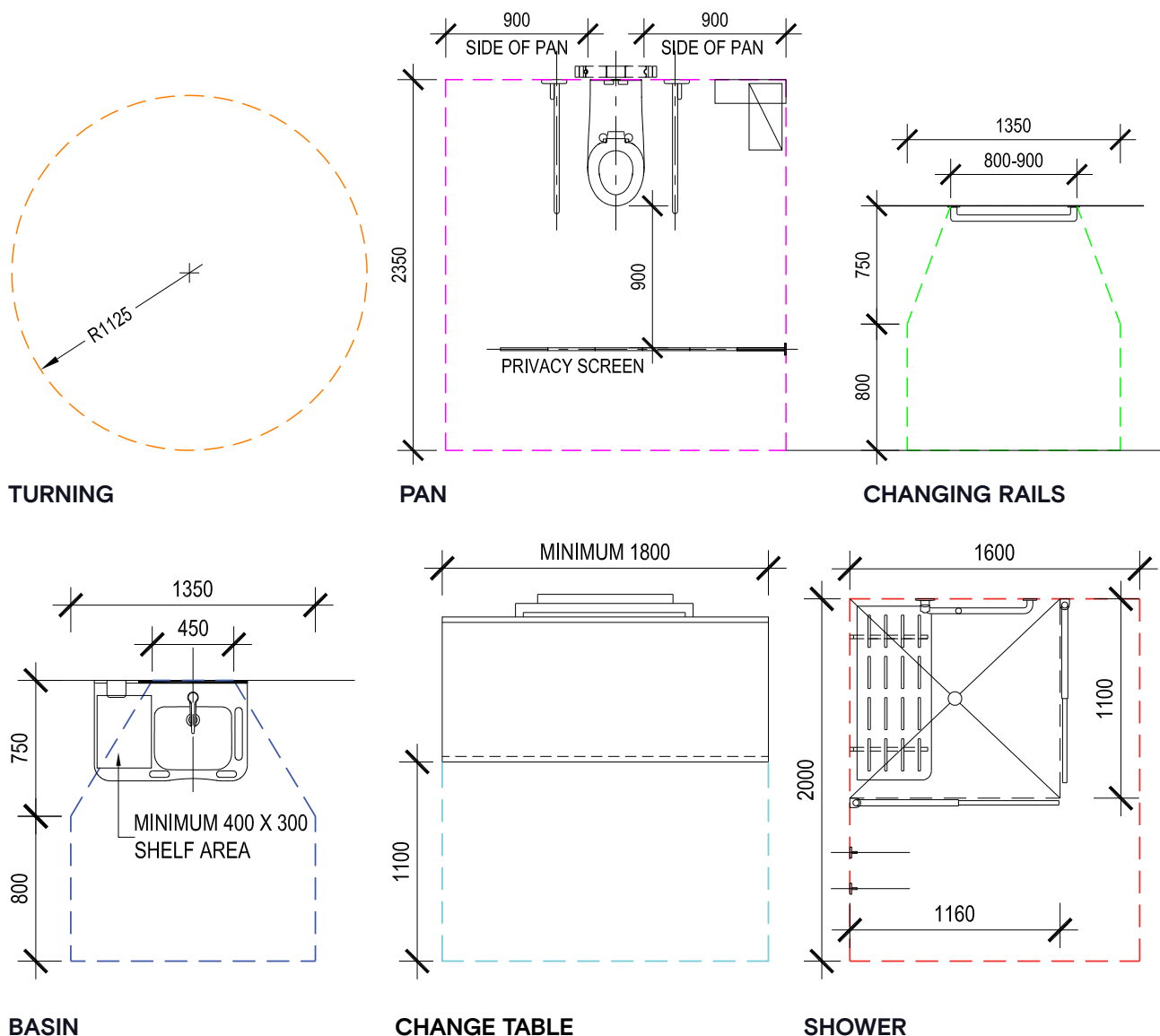


Figure 5: Required circulation spaces

2.8 Variations to the Requirements

The turning area circulation space must be included in all layouts and be clear of the change table in the open (down) position, with the exception noted below.

Unobstructed circulation spaces are to be provided from finished floor level to a height of not less than 2000 mm, except for the following fittings, which are allowed to intrude into the circulation spaces:

- dropdown grabrails
- changing rails
- wall-mounted privacy screen, which is located no less than 900 mm from the toilet pan
- other wall-mounted fittings, such as shelves, which have a 900 mm minimum height clearance from finished floor level and a maximum projection of 150 mm from the finished wall surface
- the change table in the open (folded down) position and the basin may intrude into the turning area circulation by a maximum of 100 mm
- sanitary and incontinence aid bins
- shower seat.

For further details and to contact a Changing Places Assessor visit the Changing Places Australia website <www.changingplaces.org.au>.

Where a design varies from the requirements detailed in the *Changing Places design specifications 2020*, accreditation of the facility may still be possible if the facility can still be considered to meet the performance intent of a Changing Places facility. For example, existing buildings may have structural limitations that prevent full hoist coverage of the room.

A Changing Places Assessor cannot approve a Variation to the Requirements: this must be reviewed and approved by the Changing Places Technical Advisory Team. This assessment will consider if the facility meets the intent and purpose of Changing Places in providing a suitable sanitary facility for people with high support needs. Where this is achieved, it can be registered as an accredited Changing Places facility.

Even if the Changing Places Technical Advisory Team approves the variation to the design, the building surveyor/certifier may still require a Performance Solution, if the NCC is applicable (i.e. a building listed in F2.9), and the design does not comply with NCC Specification F2.9.



Mollie's story

Mollie is an impressive young woman with a steely determination to succeed and carve out a career for herself. At twenty-two, like many others her age, she also enjoys going out and about, meeting friends and fellow students in Melbourne.

As a painter herself, Mollie has always enjoyed art and wanted to pursue a career in the creative field, combining this with the practical skills that would give her a good job. Interior design seemed the perfect fit. Mollie relocated from country Victoria to Melbourne in order to study Interior Design and Decoration at RMIT. Following the completion of this course, she recently started an internship.

Mollie was prepared for the challenges of moving to Melbourne and starting a university course 'I knew that you overcome hurdles when they present themselves, and I didn't really think about it too much'. It was a step-by-step process, which took some time.

When Mollie first started studying at RMIT, during breaks she had to regularly travel four blocks to the Royal Dental Hospital Melbourne's Changing Places facility in order to use the toilet. This became really annoying (especially in winter!). In a one-hour lunch break, she drove her wheelchair up and back – as it was often quicker than catching a tram.

This difficult arrangement meant that she often missed out on interactions with other students and teaching staff, and sometimes critical class time also. But things were about to change.

A chance discussion with Mollie's course coordinator led to the eventual installation of a Changing Places facility next to the library, in Building 94 (RMIT currently have five Changing Places across various campuses). After asking Mollie about her specialised needs, the course coordinator then spoke to the Dean and proceeded to instigate the project, which followed the Changing Places standards.

The new Changing Places facility meant that Mollie could now fully participate in student life – attending classes and meeting friends – without having to worry about travelling to a suitable toilet outside the university building each time she needed to use the toilet. Mollie was very happy about this development 'It just made life a lot easier... all my classes were on Level 5 of that building, it was really good.'



3. Design features



3.1 Automated door

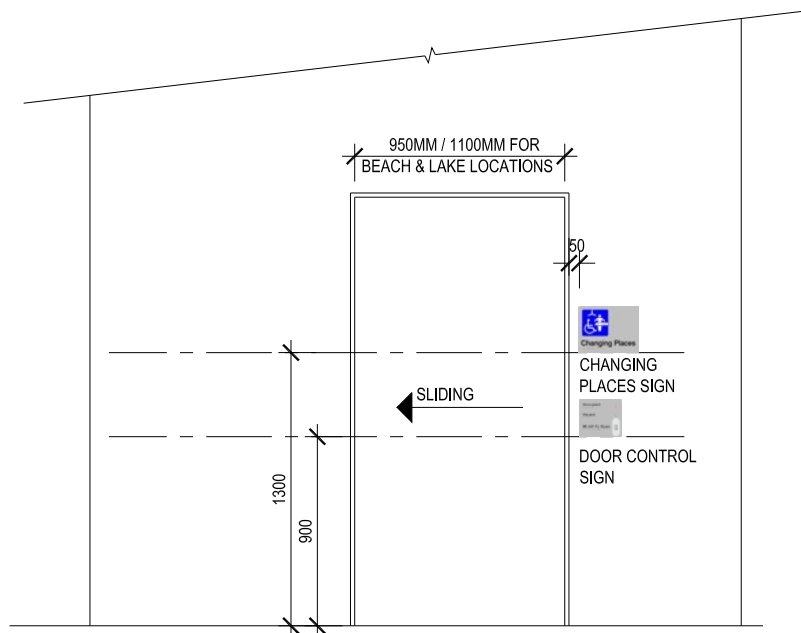


Figure 6: External door elevation

3.1.1 Door opening

- The door shall have a minimum clear opening of 950 mm.
- At beach or lake locations, provide a minimum clear opening of 1100 mm to accommodate beach wheelchairs.
- Doors can be located either externally, internally or within a cavity.

3.1.2 Door operation

- The door shall be automated.
- Automatic sliding doors shall be provided wherever possible.

3.1.3 Contrast of doorway

The door shall achieve a minimum luminance contrast of at least 30 per cent between the following components:

- door leaf and door jamb; or
- door leaf and adjacent wall; or

- architraves (where used) and adjacent wall; or
- door leaf and architrave; or
- door jamb and adjacent wall.

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

3.1.4 Door control safety features

The automatic door shall have the following safety features:

- The automated door must be calibrated to have sufficient 'dwell' time of 9 seconds to allow people to safely travel through the doorway with a gentle opening and closing operation to reduce the risk of impact to users of the facility.
- The automated door must be fitted with a fail-safe opening mechanism that opens the door if an object is detected during its operation.

3.1.5 Door control locations

The automatic door controls shall be:

- Installed between 900 mm and 1200 mm above finished floor level.
- Located at least 500 mm from any internal corner or internally, located a minimum 300 mm from the basin as shown in the drawings.
- Located no more than 50 mm from the door frame, where controls are adjacent to the change table.
- Located externally between 50 mm and 300 mm from the door frame.
- Provided in a location that is clear of a surface mounted sliding door in any position.

3.1.6 Door control Braille and tactile text signage

The automatic door control signage shall include Braille and raised tactile text characters in compliance with Specification D3.6 of the National Construction Code Volume One.



3.1.7 Door control operational requirements

The automatic door control plate signage shall achieve compliance with the following operational requirements as a minimum:

- The 'Push to Open' and 'Push to Lock' buttons:
 - o shall have a minimum diameter of 25 mm
 - o be proud of the surrounding surface
 - o shall activate the door before the button becomes level with the surrounding surface.
- All buttons shall be of a contrasting colour to the plate background.
- The external 'Push to Open' button may be replaced with a Master Locksmiths Access Key (MLAK) where there is a risk of damage or vandalism to equipment. The MLAK is a locking system that enables people with disabilities to gain access to a network of public facilities. See Section 1.8 'Master Locksmiths Access Key – a key for Changing Places' for details.
- The external door control plate must indicate the method of opening the door (i.e. by way of a 'Push to Open' button as shown in Figures 7, 8 and 9, or by the use of an MLAK).
- 'Occupied' and 'Vacant' indicator lights are required on the external plate.
- 'Locked' and 'Unlocked' indicator lights are required on the internal plate.
- The external door control panel at standalone Changing Places facilities shall be recessed into the wall structure to reduce the risk of vandalism, unless the facility is located within a secured compound.

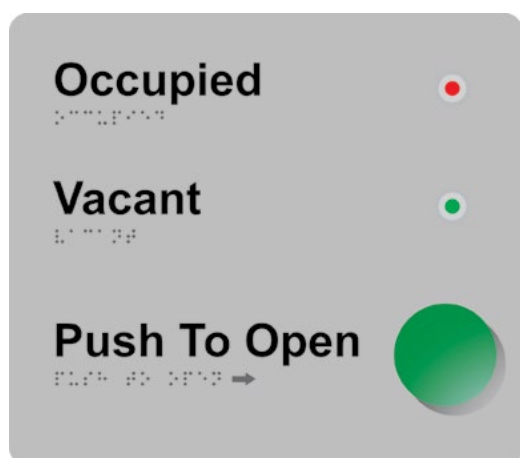


Figure 7: Automatic door entry plate – push button operation

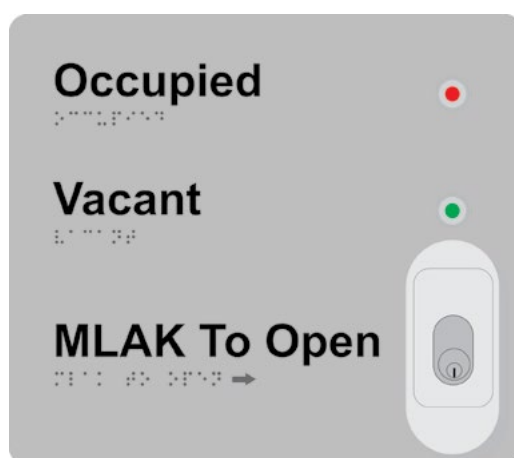


Figure 8: Automatic door entry plate – MLAK key operation

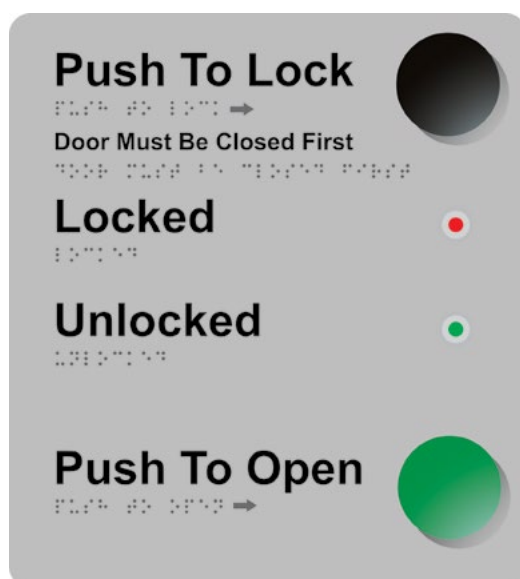


Figure 9: Automatic door exit plate – push button operation



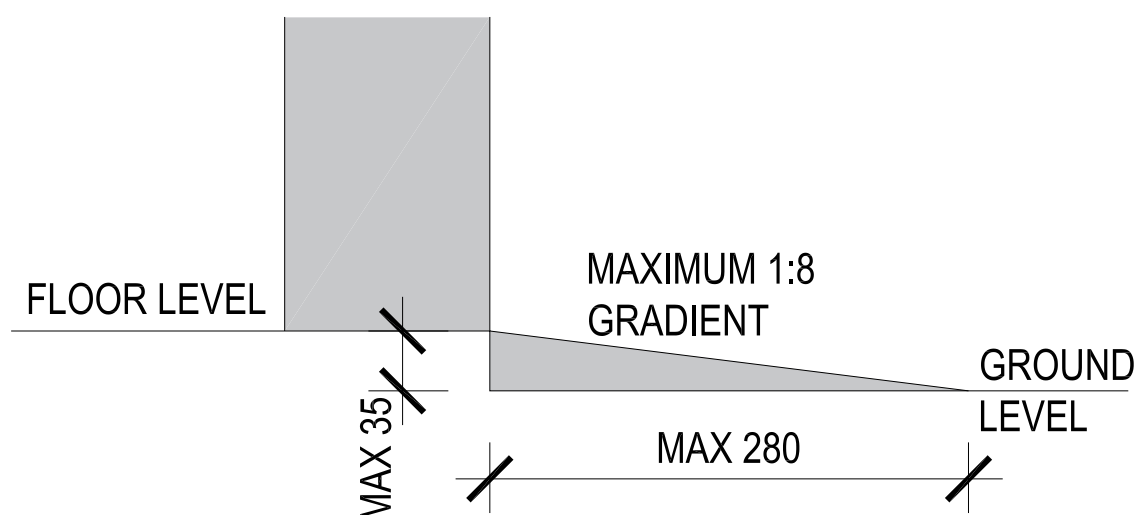


Figure 10: Threshold ramp detail

3.1.8 Door threshold

- The threshold at the entry door shall incorporate a smooth transition without a step or lip.
- Where required, a threshold ramp with a maximum rise of 35 mm, length of 280 mm and a gradient of 1:8 may be used to transition from external ground levels to the internal floor level.
- The slip resistance of the threshold ramp shall comply with the requirements of the current NCC.

3.1.9 Automated door types

Automatic sliding doors shall be provided wherever possible, but automatic swing doors may be installed in locations where sliding doors cannot be installed due to:

- insufficient space to slide the door
- seaside locations
- in locations where vandalism may be problematic, an outward swinging door may be used to achieve greater security.

The location of outward swinging doors is to be designed so that the door does not open into a transverse continuous accessible path of travel, which will cause a hazard for a person outside the facility (see Figure 11).

Automated swing doors that swing out of the room shall be provided with signage on the door stating 'Automatic door swings outwards'.

3.2 Ceiling hoist

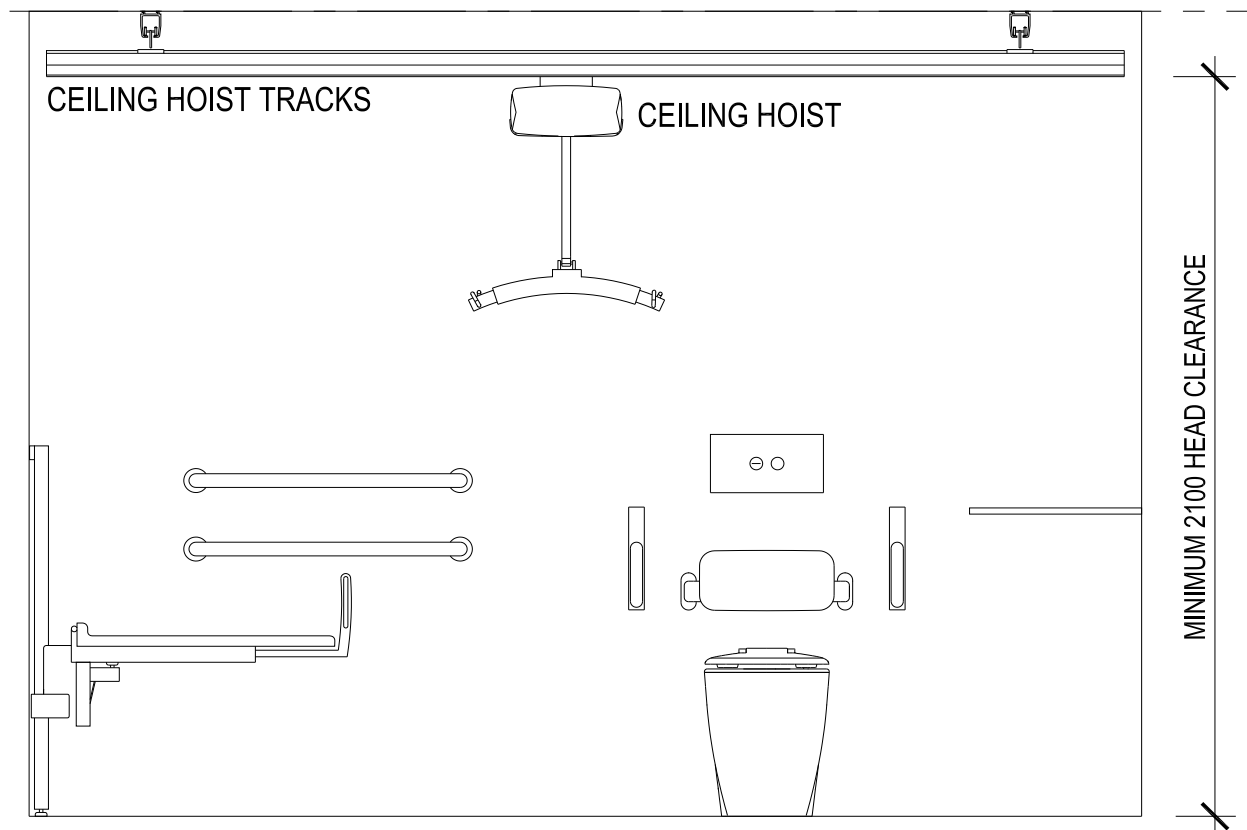


Figure 12: Ceiling hoist clearances

A constant-charge in-line room coverage hoist system shall be provided, (also called XY system, gantry or H system), including two parallel fixed rails and a moving transverse rail. This provides coverage over the entire room for the greatest flexibility when using the facility.

Changing Places hoists shall be required to meet current Australian Standard AS ISO 10535-2002 'Hoists for the transfer of disabled persons – Requirements and test methods'.

Hoist coverage of the following fixtures and the related circulation spaces shall be provided:

- turning area
- toilet
- change table
- shower and shower seat (where installed).

Rooms that are not rectangular – which use an alternative layout – may not be able to achieve hoist coverage of the entire room. The following areas are the minimum requirements: over the turning space, toilet, change table, and shower.

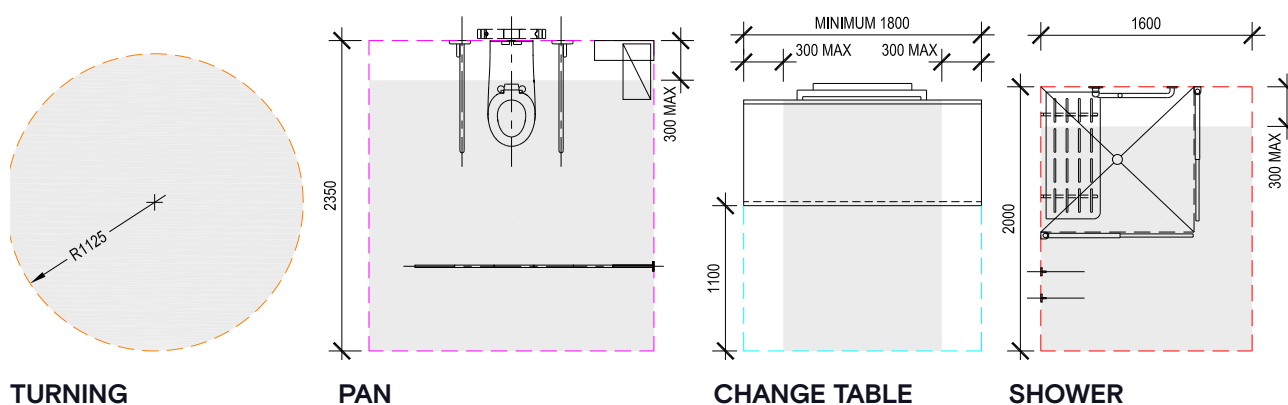


Figure 13: Ceiling hoist coverage

3.2.1 Performance criteria

Hoist and track system equivalent to:

- Clear unobstructed vertical height from finished floor level to the underside of the transverse rail of 2100 mm.
- Two fixed parallel rails and one moving transverse rail.
- Fixed hoist.
- Safe working load (SWL) equal to or greater than 180 kg. The safe working load of the hoist is to be equal to the safe working load of the change table. There shall be no variation between the safe working loads of the two pieces of equipment.
- Be capable of sustaining a static load of not less than 1.5 times the rated load.
- Constant in-line charging.
- Hoist spreader bar is to be capable of extending from the hoist down to no more than 300 mm from the floor level to facilitate a person being lifted from ground level if required in an emergency.

Ensure lights, fans, sprinklers and other fixtures are located after the position of the hoist tracks has been determined.

Ceiling fittings such as lights, fans and sprinklers shall be recessed or the hoist tracks are to provide sufficient clearance under the fittings to allow the free movement of the hoist track.

Note: The clear unobstructed vertical height to the underside of the rail has been determined in consultation with hoist installers and can be achieved within a ceiling height of 2400 mm in most room layouts. However, a minimum ceiling height of 2700 mm and clearance to the underside of the transverse rail of 2400 mm is preferred to provide greater clearance for lifting people from a wheelchair to the change table.

Hoists utilise a battery during their operation. The continuous in-line charging ensures the hoist is fully charged and operational when a person uses the facility. The battery allows the hoist to operate multiple times in the event of a power failure. Hoists have an emergency lowering cord that can be used should the hoist stop working for any reason.

3.2.2 Slings for use in Changing Places

It is expected that all users of a Changing Places facility will provide their own sling for use with the overhead ceiling hoist to ensure the sling is suitable for the individual and to minimise cross contamination.

Only users, carers, assistants and support workers accustomed to hoisting should use the hoist.



Photo: HLS Healthcare



3.3 Accessible toilet and fittings

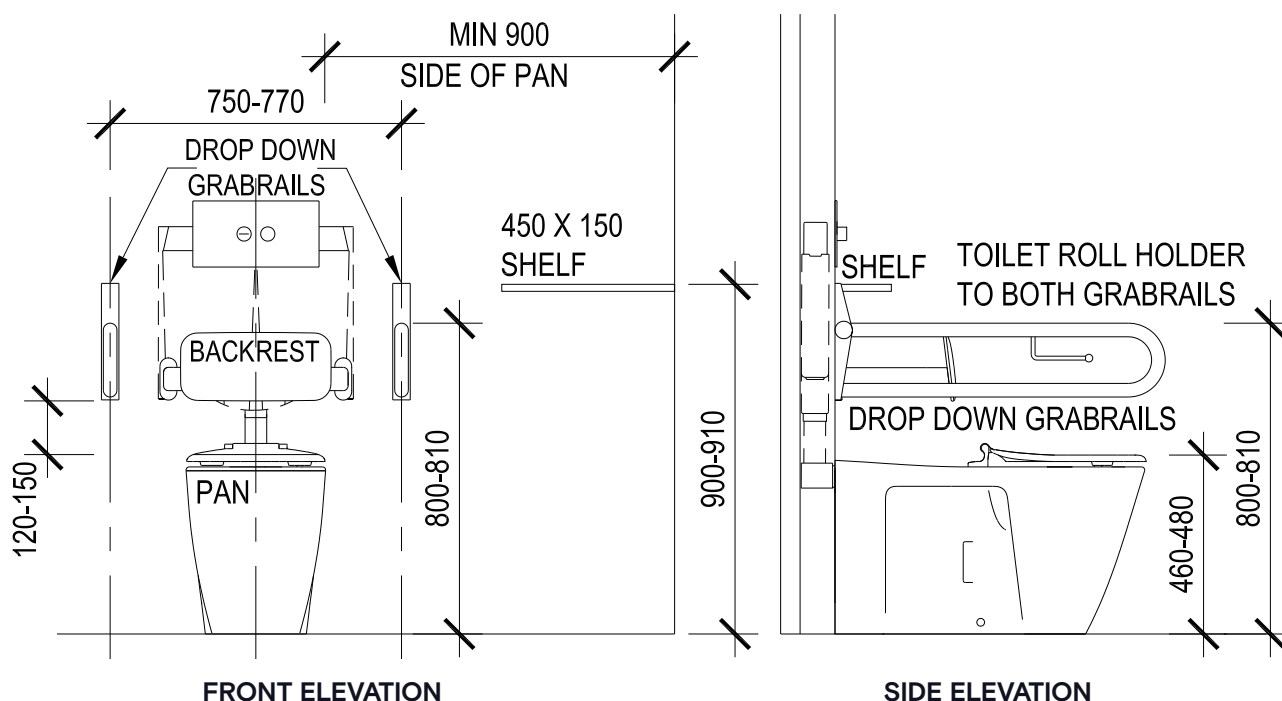


Figure 14: Changing Places toilet layout

3.3.1 Pan

A toilet pan with a wall-mounted or concealed cistern shall be installed so that:

- the front edge of the pan is 800 mm +/- 10 mm from the rear wall
- the top of the seat is between 460 mm and 480 mm above finished floor level
- a minimum 900 mm wide circulation space is provided between the side of the pan and the adjacent wall or fixture.

Note: A centrally located peninsula toilet is a key feature of the Changing Places design to allow two carers to assist with the transfer. It may not meet the needs of individuals who can independently transfer.

3.3.2 Seat

A toilet seat shall be provided that meets the following requirements:

- Be of the full-round type, (i.e. not open fronted) and with minimal contours to the top surface.
- Be securely fixed in position when in use.
- Have seat fixings that create lateral stability for the seat when in use.
- Be load-rated to a minimum of 180 kg.
- Have a minimum luminance contrast of 30 per cent with the pan.
- Remain in the upright position when the seat is lifted to a vertical position.

3.3.3 Flushing controls

Flushing controls shall meet the following requirements:

- Where hand-operated flushing controls are used, they shall be located on the centreline of the toilet (minimum height 600 mm, maximum height 1100 mm), as indicated in the relevant drawings. The position of the flushing control within this zone shall not be within the area required for any grabrails or backrest.
- The flushing control shall be proud of the surface and shall activate the flush before the button becomes level with the surrounding surface. This is not required where an automatic flush is provided.

3.3.4 Backrest

A backrest shall be provided that meets the following requirements:

- Be capable of withstanding a force in any direction of 1100 N.
- Have a height of 120 – 150 mm from the lower edge of the backrest to the top of the toilet seat.
- Have a vertical height of 150 – 200 mm and a width of 350 – 400 mm.
- The front edge of the centre of the backrest is positioned to achieve an angle of between 95° to 100° back from the seat hinge.

3.3.5 Toilet grabrails

Dropdown grabrails shall be provided that meet the following requirements:

- Located at a height of between 800 mm and 810 mm to the top of the rail above finished floor level.
- Consistent in height along the length of the rails.
- Centreline of the grabrails to be located 750 – 770 mm apart and located equidistant from the centreline of the toilet pan.
- At least 850 mm long.
- 30 – 40 mm diameter or be elliptical in shape with a diameter of the ellipse not exceeding 55 mm across the horizontal axis.
- Be securely fixed to withstand a force, in any direction, of not less than 1100 N.
- Both grabrails shall include toilet paper holders.
- Capable of being lifted up or swung away to allow unimpeded access to the toilet pan.
- The rails shall either remain locked in the upright position when raised or counterbalanced to prevent the rail dropping unexpectedly.

3.3.6 Toilet shelf

A stainless steel shelf shall be provided that meets the following requirements:

- Minimum size of 450 x 150 mm. All edges shall be rounded and not sharp.
- Located at a height of between 900 mm and 910 mm to the top of the shelf above finished floor level.
- The closest edge of the shelf shall be located 400 – 500 mm from the side of the toilet pan.
- Located as indicated in Figure 14 within the corner of the room, where the layout permits.

3.4 Privacy screen

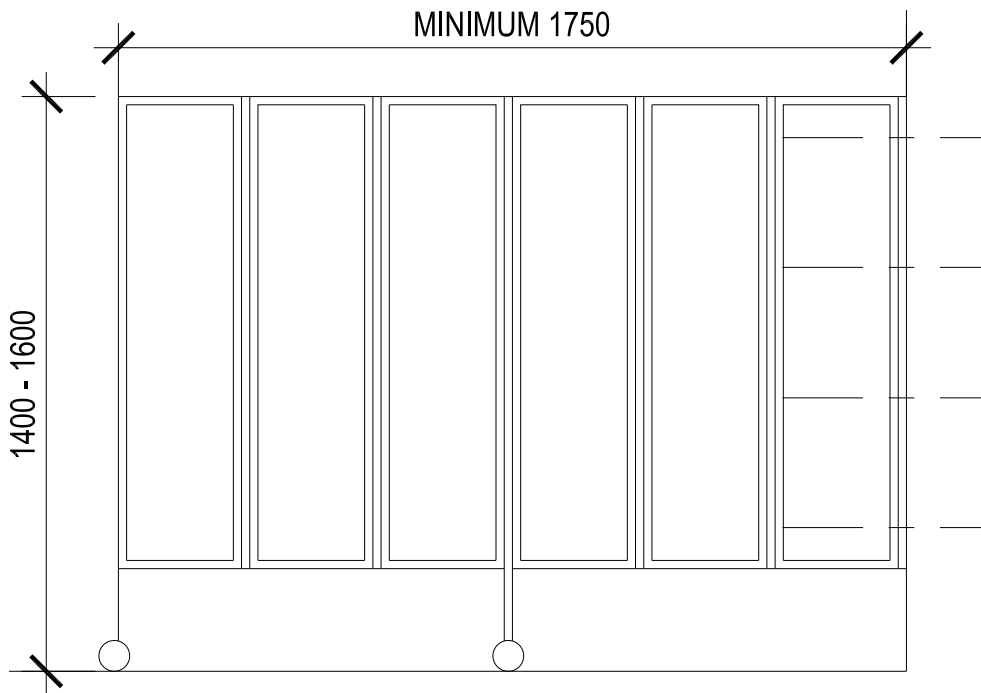


Figure 15: Privacy screen

A privacy screen shall be provided that meets the following requirements:

- 1400 – 1600 mm high.
- Minimum 1750 mm long, or as needed to provide sufficient screening for a person seated on the toilet pan from view of the doorway.
- Located no less than 900 mm from the front or edge of the toilet pan.
- Fixed to the wall.

Note: A pull-out curtain is not to be provided as it is difficult to clean and not as robust as a pull-out screen.



3.5 Washbasin

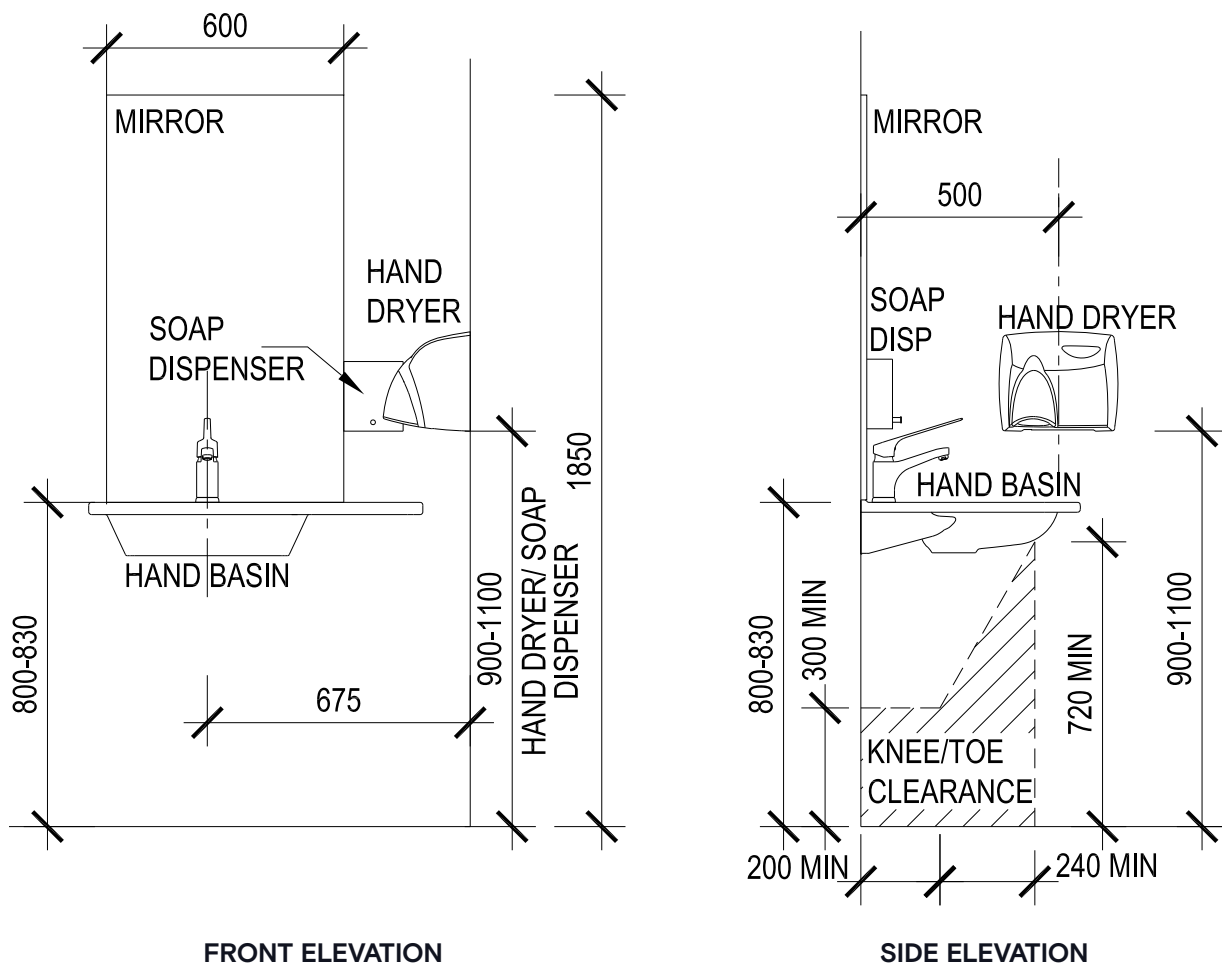


Figure 16: Changing Places washbasin layout

3.5.1 Washbasin

A washbasin shall be provided that meets the following requirements:

- The washbasin shall be installed so that the front rim of the basin is between 800 mm and 830 mm above finished floor level.
- The centreline of the tap shall be not less than 675 mm from a side wall.
- The circulation space at the basin shall be centred on the tap and be provided as indicated in Figure 5.
- Knee-toe clearance under the basin shall be provided in accordance with AS 1428.1 as indicated in Figure 16.
- Exposed hot water supply pipes shall be insulated or located so as not to present a hazard.
- Water supply pipes and waste outlet pipes shall not encroach on the required clear space under the washbasin.
- The washbasin is to have an integrated shelf with a minimum area of 300 x 400 mm as indicated in Figure 17.

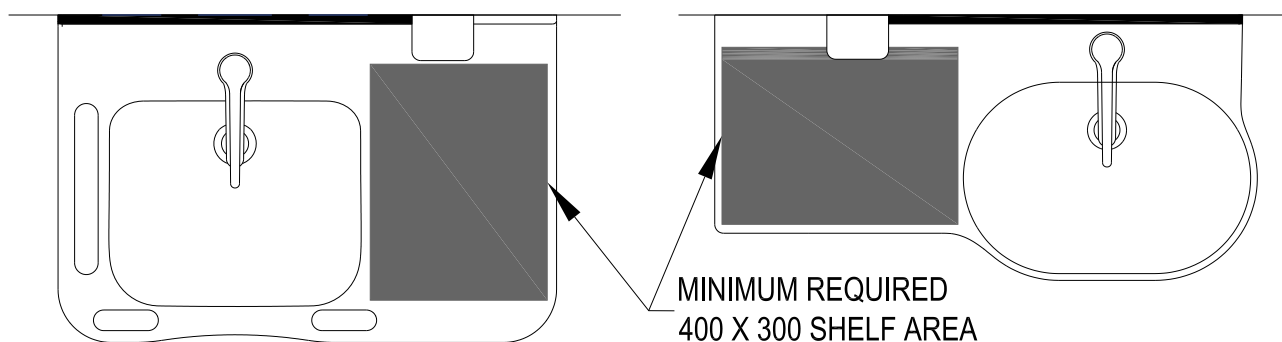


Figure 17: Washbasin detail showing the minimum shelf area required

3.5.2 Height adjustable basins (optional)

Height adjustable basins are not required but may be provided if the following requirements are met:

- The height adjustment controls are to be integrated with the basin and located at the front of the basin unit. Separate hand-held controls on flexible cords are not to be provided as the controls may fall and be out of reach for a person.
- The plumbing fixtures shall be fully enclosed.
- The mirror shall be at a compliant height irrespective of the height of the basin.
- The soap dispenser is to be provided either:
 - On the basin unit in a location that is equivalent to a dispenser located on the wall above the basin shelf.
 - On the wall in the locations required. The basin shall not clash with the soap dispenser at any height. A minimum of 150 mm is to be maintained between any operable part of the dispenser and the basin.
- Knee-toe clearance under the basin shall be provided in accordance with AS 1428.1 when the basin is located between 800 mm and 830 mm above finished floor level.

3.5.3 Tap

A water tap shall be provided that meets the following requirements:

- A mixer tap shall have a single lever handle, sensor plate, or other similar controls.
- The lever handle shall be no more than 300 mm from the front of the basin throughout the arc of its movement.
- The lever handle shall have not less than 50 mm clearance from any adjacent surface throughout the arc of its movement.
- Hot water is to be provided. The water shall be delivered through a mixing spout, and temperature controlled with a thermostatic mixing valve.
- The outlet of the mixing spout is to be no more than 300 mm from the front of the basin.

3.5.4 Soap dispenser

A soap dispenser shall be provided that meets the following requirements:

- Located adjacent to the mirror and above the basin shelf.
- Is within easy reach of a person at the basin.
- Operable by one hand.
- Installed with the height of the operative component or outlet between 900 mm and 1100 mm above finished floor level.

3.5.5 Mirror

A mirror shall be provided that meets the following requirements:

- A vertical mirror shall be provided above the basin with a reflective surface not less than 600 mm wide. The reflective surface of the mirror shall extend from a height of not more than 900 mm to a height of not less than 1850 mm above finished floor level.
- Where a second vertical mirror is provided, it shall extend from a height of not less than 600 mm to a height of not less than 1850 mm above finished floor level.

3.5.6 Paper towel dispensers, hand dryers and similar fittings

A paper towel dispenser and/or hand dryer shall be provided for a person to dry their hands. Towel dispensers, hand dryers and similar fittings shall meet the following requirements:

- Each fitting shall be operable by one hand.
- Installed with the height of their operative component or outlet not less than 900 mm and not more than 1100 mm above finished floor level.
- Installed no less than 500 mm from an internal corner.

Note: Hand dryers should be quiet in operation with a maximum sound level of <70Db.



3.6 Change table

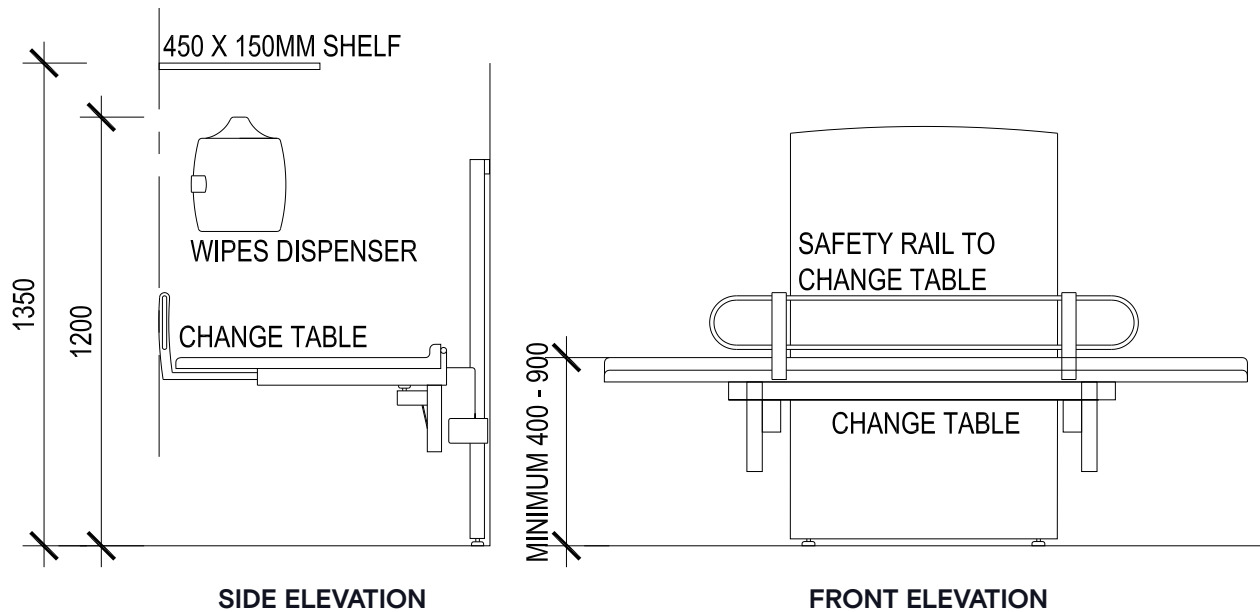


Figure 18: Changing Places change table layout



A wall-mounted, motorised height adjustable change table shall be provided that meets the following requirements:

- Height adjustable, and as a minimum needs to be adjustable between the heights of 400 mm and 900 mm when measured to the top of the table from the fixed floor level.
- Minimum table length of 1800 mm.
- Minimum table width of 700 mm.
- Side safety rail that can be folded up or down easily.
- Weight loading capacity to be a minimum of 180 kg. The safe working load of the change table shall be equal to the safe working load of the hoist. There shall be no variation between the safe working loads of the two pieces of equipment.

3.6.1 Shelf beside change table with a fixed sanitising wipe dispenser

- A stainless steel shelf for storage of supplies by users of the room shall be provided adjacent to the change table. The shelf is to be a minimum 450 mm long x 150 mm wide and provided at between 1300 mm and 1350 mm above finished floor level as indicated in Figure 18.
- Sanitary wipes for cleaning of the table shall be provided adjacent to the change table. The outlet for the dispenser is to be located at between 900 mm and 1200 mm above finished floor level as indicated in Figure 18.



3.6.2 Lighting

The lighting needs for a carer, assistant or support worker and a person lying on the change table are very different.

Lighting that is provided via bright downlights must not be installed within 600 mm of the ends of the change table within the areas where a person lying on the table will be looking directly towards the ceiling as indicated in Figure 19.

Sufficient light shall be provided near the centre of the table for a carer, assistant or support worker.

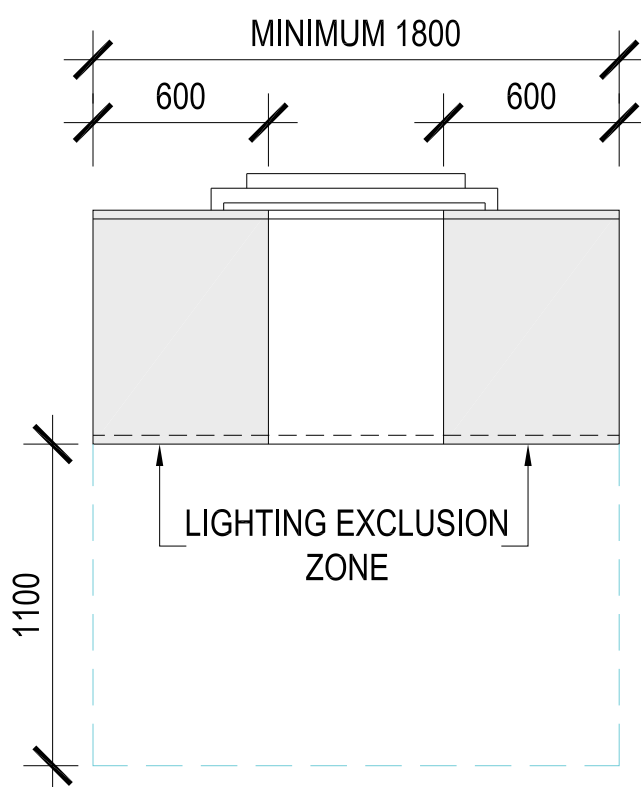


Figure 19: Change table lighting exclusion zone

3.7 Changing rails

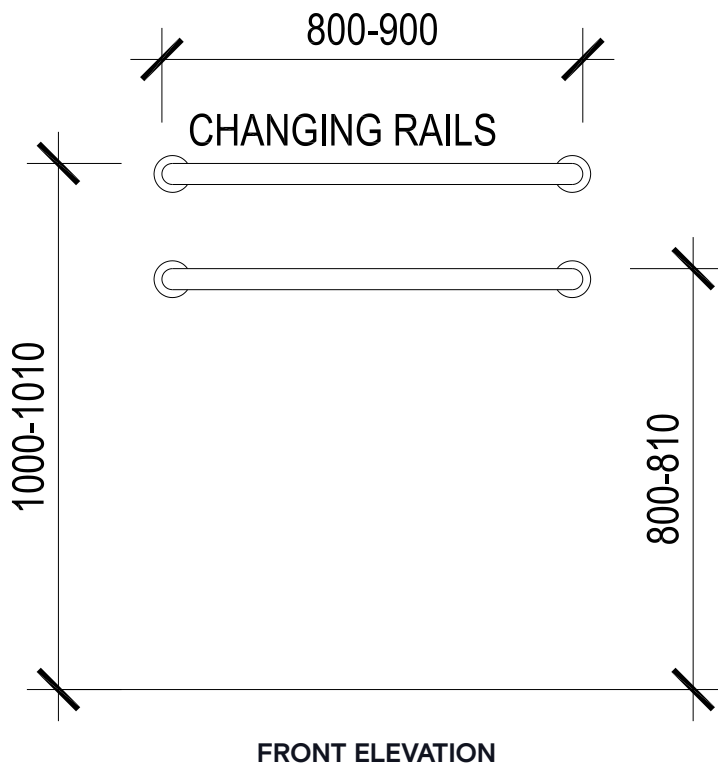


Figure 20: Changing Places changing rails

Changing rails shall be provided that meet the following requirements:

- Provide two 32 mm diameter, 800 – 900 mm long changing rails installed horizontally at 800 – 810 mm and 1000 – 1010 mm above finished floor level. These rails give users something to hold onto whilst standing to have clothes adjusted.
- The rails are to be securely fixed to withstand a force in any direction of not less than 1100 N.



3.8 Clothes and towel hooks

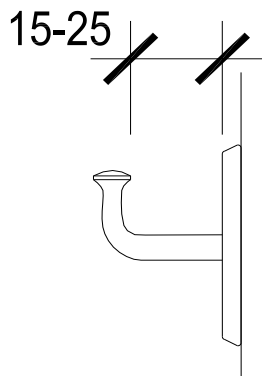


Figure 21: Clothes and towel hooks

Clothes and towel hooks shall be provided that meet the following requirements:

- Clothes and towel hooks are to extend 15 – 25 mm as indicated in Figure 21.
- All edges and ends are to be rounded and not sharp.
- One clothes hook shall be installed between 1200 mm and 1350 mm above finished floor level, located near the washbasin. This must be located no closer than 500 mm from an internal corner.
- For showers, two clothes hooks shall be installed within reach of the shower seat, located between 1200 mm and 1350 mm above finished floor level, as detailed in Figure 27.

3.9 Sling hook

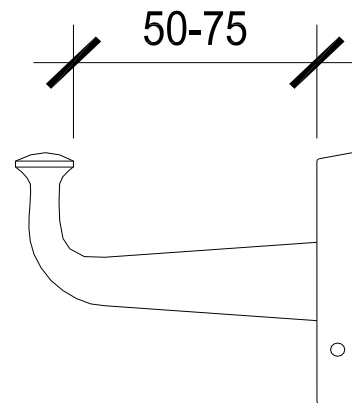


Figure 22: Sling hook

Sling hooks shall be provided that meet the following requirements:

- One large sling hook shall be installed beside the changing table at between 1500 mm and 1550 mm above finished floor level.
- Sling hooks are to extend 50 – 75 mm from the plate of the hook as indicated in Figure 22.
- The hook shall be located within 500 mm from the end of the change table.

‘Family outings are planned around the location of Changing Places – more facilities provide more access and opportunities for people with disabilities who rely on Changing Places.’

3.10 Disposal bins

Two disposal units shall be provided and located as follows:

- Sanitary disposal unit in the corner beside the toilet pan.
- Incontinence pad disposal bin in the corner next to the change table.

The bins are to be provided with lids in order to control odours.

3.11 Flooring

- The flooring within the room shall have a minimum R10 or P3 slip resistance rating when tested in accordance with AS 4586.
- Where a shower is installed, the flooring within the graded area of the shower shall have a minimum R11 or P4 slip resistance rating when tested in accordance with AS 4586.



3.12 Signage

3.12.1 External facility signage

Once a facility has passed Changing Places accreditation, a Changing Places sign in raised tactile and Braille format shall be installed outside the facility doorway as detailed below:

- Located on the wall on the latch side of the door between 50 mm and 300 mm from the architrave in accordance with NCC Specification D3.6 Clause 2.
- Located at 1300 mm above finished floor level to the underside of the sign in accordance with NCC Specification D3.6 Clause 2.

The sign elements shall comply with NCC Specification D3.6.

The Changing Places logo is trademarked in Australia and signage can only be displayed on accredited Changing Places facilities.

3.12.2 Directional signage to be located at other toilet banks

The NCC 2019 Clause D3.6 'Access for people with a disability' specifies when access for people with a disability must be provided to buildings and parts of buildings. Directional signage is an important part of this access 'to assist people with a disability to easily identify the facilities, services, exits and features provided in a building' (D3.6 Signage).

Directional signage shall be provided at each standard toilet facility, to direct a person to the location of the nearest Accessible Adult Change Facility within that building. Figure 24 provides an example of the signage.



Figure 23: Changing Places sign

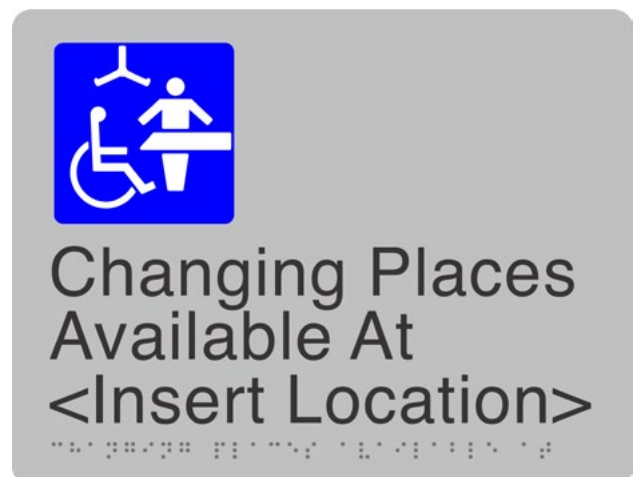


Figure 24: Changing Places sign to direct a person to the location of the nearest Changing Places

3.12.3 Internal signage – change table and ceiling hoist operating instructions

The Changing Places facility shall provide signage detailing operating instructions for the safe use of the change table and ceiling hoist.

The signage is to be located where it can be clearly seen and free from any obstruction. The centre of the sign shall be located between 1400 mm and 1500 mm above finished floor level.

The operating instructions shall be minimum A3 paper size and securely fixed to the wall. They shall be either laminated or mounted behind an acrylic sheet.

The text shall be provided in a sans serif font with a minimum font size of 24.

The signage shall include both written and photographic/pictorial instructions.

Change table instructions

The change table instructions shall include the following information as a minimum:

- The safe working limit must be prominently displayed.
- Instruction to include 'Never leave a person on the change table unattended'.
- Details of safety checks to be completed prior to use.
- How to raise and lower the table with the use of the control.
- How to raise and lower the safety side.
- Instructions for cleaning the table.
- Contact details of the operator of the Changing Places facility to request assistance or to notify cleaning requirements. These contact details are to be clearly distinguished from any manufacturers' information.

Ceiling hoist instructions

The ceiling hoist instructions shall include the following information as a minimum:

- The safe working limit must be prominently displayed.
- Advise that hoists should only be used by people and carers who are accustomed to hoisting and have their own sling.
- Details of safety checks to be completed prior to use.
- How to attach a sling to the hoist.
- How to raise and lower the hoist with the use of the control.
- Use of the emergency stop/lowering cord.
- How to reset the hoist including how to use the spreader bar to reach the reset button if it is out of reach.
- Contact details of the operator of the Changing Places facility to request assistance or to alert them to cleaning requirements. These contact details are to be clearly distinguished from any manufacturers' information.

Figures 25 and 26 provide examples of instructional signage.



Change Table

Instructions For Use

1 Product description:

This changing table is intended for showering and changing children and adults weighing up to 200kg, the table must not be used for any other purpose.

2 Pre use checks:

Check for obstructions or items that may become trapped when the changing table is operated. Check the changing table will raise and lower properly using the handset.

3 Lowering the bed:

To fold down the bed to the usable position, simply hold the bed and lower as indicated by the arrow in Fig 2. To stow bed, lift and fold bed upwards until parallel with cover.



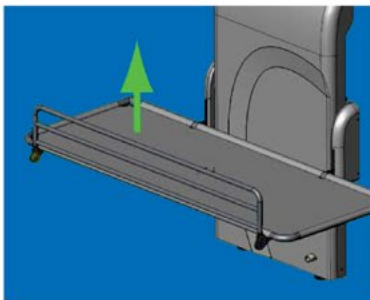
Fig 1



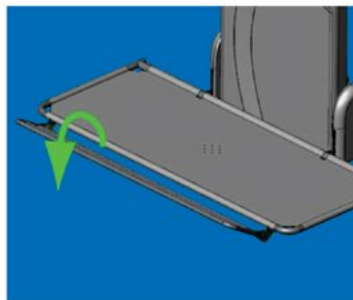
Fig 2

4 Instruction for use:

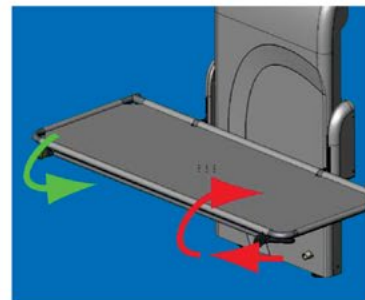
Operation of the change bed is via the two button hand control. Position the bed at a comfortable height. See Fig 1



Operating the guard (where fitted). Folding the guard. Lift the guard upwards.



Then rotate it towards you and then fold under the bed.



It will then lock under the bed. To replace the guard lift it slightly towards you, it will then release, rotate upright and drop into position.

Maximum Weight Capacity 180KG

Figure 25: Change table instructions

This is an example only, we recommend you contact your equipment supplier to obtain brand-specific operating instructions. Credit: CHS Healthcare

Ceiling Hoist

Instructions For Use

1 Product description:

This ceiling hoist is intended for lifting children and adults up to 200kg. This equipment must not be used for any other purpose.

2 Pre use checks:

Hold and pull the carry bar, moving the hoist to an area free of obstructions. Take care to familiarise yourself with the functions and controls (see fig 1).

3 Instructions for use

The hoist is controlled via the hand control (see fig 2). Do not pull the hand control with force. When the hand control is not in use, clip over the carry bar. Keep all obstructions clear during lifting.

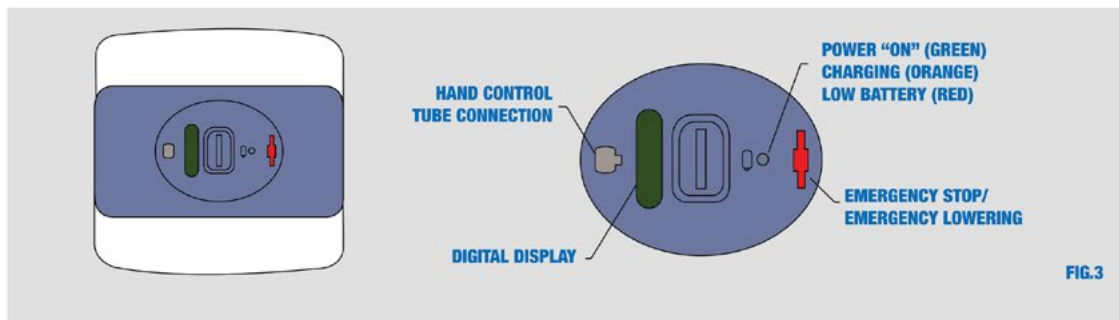
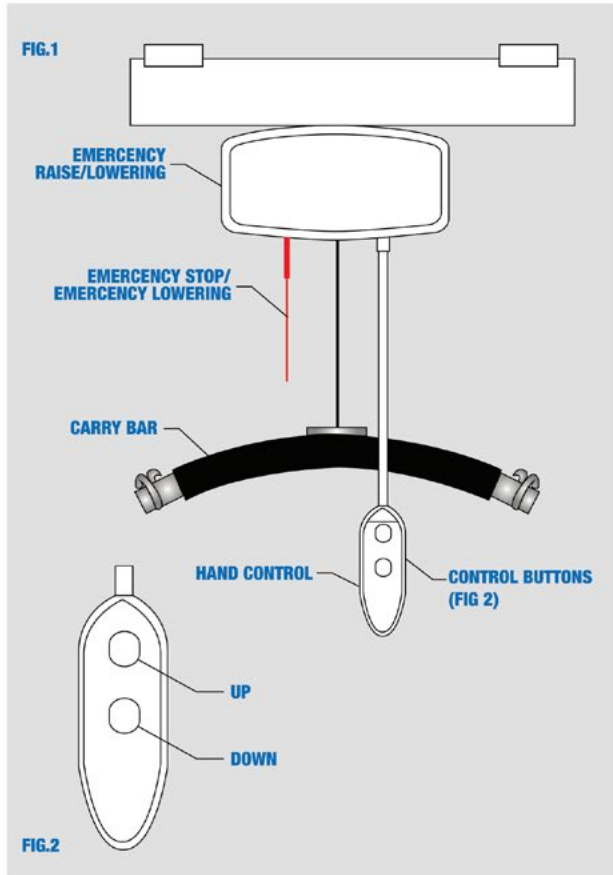
4 Slings

This hoist is designed for use with loop style slings only. If unsure do not use your sling.

5 Trouble shoot

If the hoist is not working check to see if the emergency stop cord has been pulled into the down position, disabling the hoist (see fig 3).

To re-enable push white clip, attached to the top of the red cord, up toward the hoist. If unable to reach use the carry bar.



6 Emergency lowering

If the hoist becomes stuck or won't lower, pull the red cord and press the down button on the hand control

Maximum Weight Capacity 180KG

Figure 26: Hoist instructions

This is an example only, we recommend you contact your equipment supplier to obtain brand-specific operating instructions. Credit: CHS Healthcare

3.13 Shower

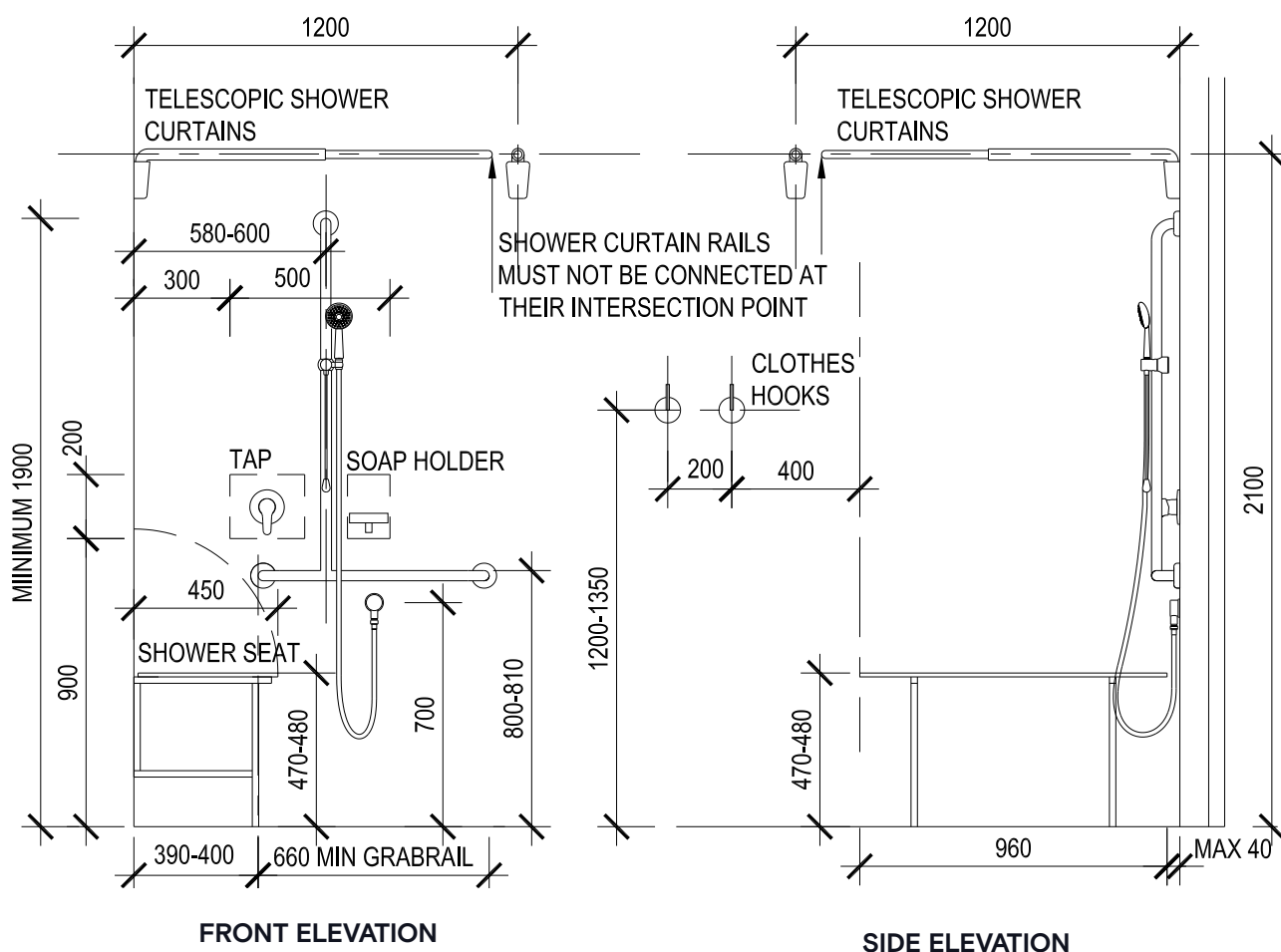


Figure 27: Changing Places shower layout

Shower installations (where included) shall comply with the following requirements.

3.13.1 Floor and waste outlet

The floor and waste outlet shall comply with the following requirements:

- 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.

- The waste outlet for the shower shall be provided in accordance with the floor plans and as required for compliance with the current version of AS 1428.1.
- The slope of the floor of the shower recess shall have a gradient between 1 in 60 and 1 in 80.
- The slope of the floor for the remainder of the room shall have a gradient between 1 in 80 and 1 in 100.

3.13.2 Shower grabrails

Shower grabrails shall be provided that meet the following requirements:

- Shower installations require 32 mm diameter grabrails, which shall be fixed on the walls in the positions shown in Figure 27. The top of the horizontal rail shall be between 800 mm and 810 mm above finished floor level.
- The horizontal rail is to be no less than 660 mm long and shall not interfere with the operation of the shower seat.
- The shower grabrail shall be securely fixed to withstand a force in any direction of 1100 N.

3.13.3 Showerhead support grabrail

A showerhead support grabrail shall be provided that meets the following requirements:

- A vertical showerhead support grabrail shall be fixed on the wall in the position outlined in Figure 27.
- The top of the rail shall be between 1880 mm and 1900 mm above finished floor level. Where the horizontal and vertical showerhead support grabrail is not provided as a single unit, the lower edge of the vertical showerhead support grabrail shall be located between 1000 mm and 1100 mm above finished floor level.

3.13.4 Showerhead

A hand-held showerhead shall be provided that meets the following requirements:

- A flexible hose with a minimum length of 1500 mm.
- An adjustable showerhead holder shall be provided to support the showerhead and shall:
 - Be installed on the showerhead holder support grabrail as shown in Figure 27.
 - Allow the graspable portion of the showerhead to be positioned at various angles and heights.
 - Allow the graspable portion of the showerhead to be located at heights between 1000 mm and 1800 mm above finished floor level.

- Allow access and adjustment from a seated position.

3.13.5 Water outlet

- The water outlet for the shower hose shall be located at 700 mm \pm 5 mm above finished floor level as shown in Figure 27 and be provided with a backflow prevention device where required by plumbing standards.

3.13.6 Soap holder

A soap holder shall be provided that meets the following requirements:

- The soap holder shall be located within the zone as detailed between 900 mm and 1100 mm above finished floor level and no less than 300 mm or no more than 800 mm from the corner.
- A distance of no less than 50 mm is to be provided between the soap holder and the vertical grabrail.

3.13.7 Taps

Taps shall be provided that meet the following requirements:

- A mixer tap shall be located within the zone as detailed between 900 mm and 1100 mm above finished floor level and no less than 300 mm or no more than 800 mm from the corner.
- The lever of the tap is to be no more than 150 mm in length.
- A distance of no less than 50 mm is to be provided between the tap lever handle in any position and the vertical grabrail.

3.13.8 Folding seat

A foldable shower seat shall be provided inside the shower recess as detailed in Figure 27, that meets the following requirements:

- The dimensions of the seat shall be 960 mm long measured on the top surface of the seat and 450 mm deep measured from the rear wall to the front of the seat.

3.14 Temperature control

- The seat shall:
 - o be load rated to 180 kg
 - o be slip-resistant
 - o have front corners that are rounded to a radius of 10 – 15 mm
 - o have top edges that are rounded with a minimum radius of 2 – 3 mm
 - o fold in an upwards direction clear of the grabrail
 - o have support legs at the front of the unit
 - o not be slatted.
- 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.

3.13.9 Clothes hooks for shower

Clothes hooks for the shower shall be provided that meet the following requirements:

- Provide no less than two clothes-hanging devices, installed between 1200 mm and 1350 mm above finished floor level, fitted outside the shower recess. One such device shall be located 400 mm +/- 10 mm and the other 600 mm +/- 10 mm from the folding seat as detailed in Figure 27.

3.13.10 Shower curtain and rails

A shower curtain shall be provided that meets the following requirements:

- Shower curtain rails shall be wall-mounted.
- Two telescopic and swing-away shower curtain rails shall be provided at 2100 mm above finished floor level in the locations indicated in Figure 27.
- The ends of the telescopic rails must prevent the shower curtain from being pulled off the rail.

Note: The shower curtain rails cannot be ceiling mounted as this clashes with the operation of the ceiling hoist. Two separate curtain rails shall be provided. Units that have one articulated arm are not suitable, as they need to be attached and detached from a hook on the wall and are out of reach for many people.

3.14.1 Heating and cooling

Heating and cooling should be provided wherever possible.

3.14.2 Unsuitable heaters

Heat lamp type heating systems that produce intense light shall not be used due to the intense glare generated for people lying on the change table.



Rebecca and Sarah's story

Rebecca's thirteen-year-old daughter Sarah has a rare condition called Pallister-Killian syndrome. Sarah is fragile and has very high needs, she uses a wheelchair and needs support with eating and other aspects of her personal care.

Changing Places are essential for Sarah and her family to be able to participate in the community. As Rebecca stated 'Where do you change a nappy for someone in their teens?' Unless you have a child with a disability, you don't really think about these things.

Sarah is able to sit up by herself and can do a standing transfer. Changing Places have an adult-sized change table, which can be raised and lowered at the push of a button. The Changing Places change table goes down low enough, so Rebecca is able to transfer and change Sarah, without hurting her back.

Where there are no Changing Places available – the family has gone home when Sarah needed a change, just left and not come back again – thereby missing out on events and activities. This can be quite an isolating experience.

Rebecca currently works providing information and support to other parents of children with disabilities. She was instrumental in the creation of Livvi's Place, Victoria Park, Ballarat. The process of campaigning for a fully accessible playground resulted in a greater awareness about Changing Places and why they are needed.

Rebecca believes that it's important for people like Sarah to be seen and heard. It's good for the whole family, and good for the community. 'Changing Places provide the security of knowing we can access a place, where we can take care of her physical and sanitary needs, with privacy and dignity.'



4. Costings



4.1 Introduction

Sections 4.5 – 4.8 provide indicative costs for each Changing Places design option for budget-setting purposes. The information is designed to assist in the preparation/planning stages for the construction of Changing Places facilities in the course of a new building construction or retrofitted within an existing building.

The costings assume a suitable space is available within the building fabric and services are available to the perimeter wall. As every construction project is unique, budget setting should account for site-specific conditions.

The product and services costings are indicative only and subject to change. All costs are reported exclusive of goods and services tax.

Note:

- The costs do not include any allowance for Environmentally Sustainable Design-related items, which are over and above regular design standards.
- The estimated costs are current at September 2019. No allowance has been made for cost escalation beyond this date.
- The costs include allowances for consultants' fees and authority charges.

4.2 Assumptions and inclusions

Assumptions made within the costings include:

- Works are carried out during a new construction or retrofitted in a suitable location within an existing shell space.
- The builder has unencumbered access to the works site.
- Works are performed during normal working hours.
- Floor to underside of soffit height (or structure) over is 3.50 m.
- The base building floor is flat.
- A floor screed is required to allow falls to shower floor waste.
- A plasterboard finish to external face of perimeter walls.
- The ceilings are suspended plasterboard.
- Additional noggins provided in walls for support of fittings.
- Ceiling hung fittings are fixed to the underside of slab or structure.
- Works are located within Melbourne metropolitan area.



4.3 Total project cost

The total project cost for each design option is listed below.

Design 1A: Without shower rectangular	\$153,000
Design 1B: Without shower square	\$152,000
Design 1C: Without shower alternative door location	\$157,000
Design 2: With shower rectangular	\$171,000

4.4 Exclusions

The costs exclude (but not limited to):

- Work outside the area of the Changing Places room.
- Infrastructure services and central plant additions or upgrades.
- Fire sprinkler services.
- Demolition of existing building to create shell space.
- Scabbling of existing concrete slab for setdowns.
- Fire rating to perimeter walls.
- Swipe card locking system.
- Alarm speaker/sounder and visual alarm.
- Allowances for works outside Melbourne metropolitan area.
- Cost escalation beyond September 2019.
- Client overheads, management and direct costs.
- Environmentally Sustainable Design (ESD) allowances.
- Loose furniture and equipment.
- Information and communication technology.
- Hoist slings.
- Good and services tax.
- Rates and taxes.

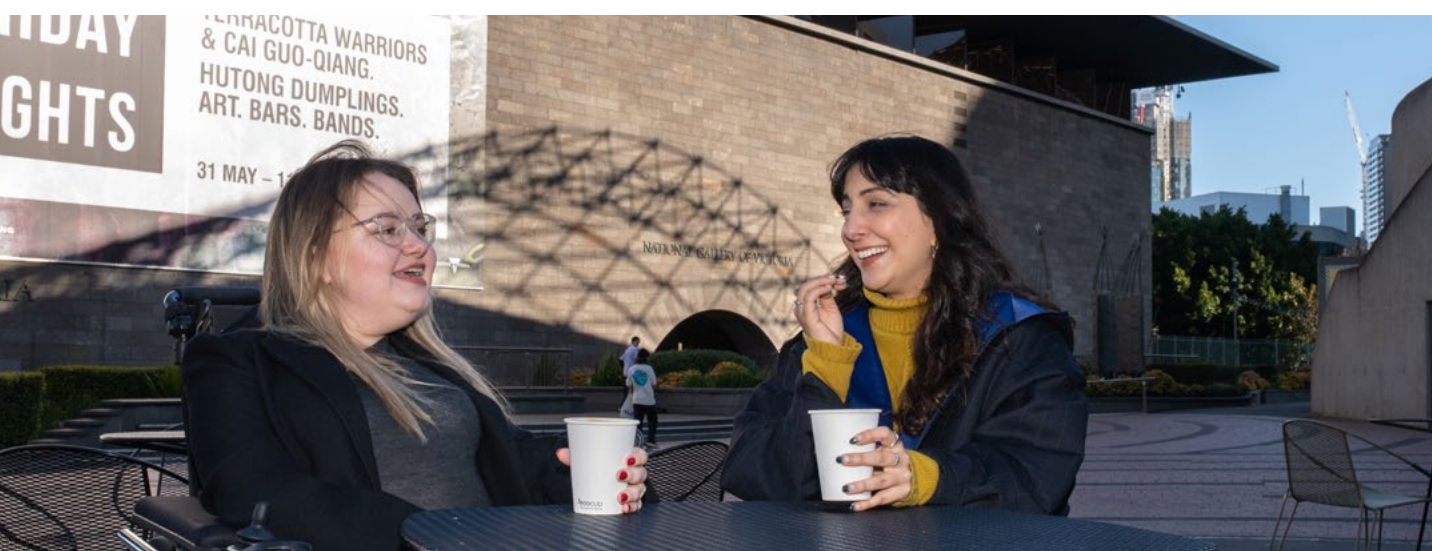
‘More Changing Places means widening the boundaries experienced by people with severe physical disabilities and giving them a greater choice of places to go.’

4.5 Design 1A: Without shower rectangular

Item description	Quantity	Unit	Rate	Amount \$
Area				
Base area	13	m2		
Construction				
Perimeter wall (finished both sides)				
Stud frame	43	m2	90	3,870
Insulation	43	m2	20	860
Plasterboard	86	m2	60	5,160
Paint	86	m2	15	1,290
Skirting	16	m	25	400
Modifications to ceiling outside of perimeter wall	13	m2	150	1,950
Subtotal: Perimeter wall				13,530
Fitout				
Automatic sliding door and release button	1	no	7,000	7,000
Support frame for change table	1	Item	600	600
Supports for ceiling hoist	1	Item	3,200	3,200
Non-slip vinyl flooring	13	m2	130	1,690
Coved skirting	13	m	30	390
Vinyl splashback to basin, WC and shower	10	m2	120	1,200
Prepare substrate	13	m2	100	1,300
Subtotal: Fitout				15,380
Equipment				
Room coverage hoist	1	no	10,700	10,700
Adjustable height change table, 1800 mm long with side safety rail	1	no	13,100	13,100
Change table wipe dispenser	1	no	235	235
Subtotal: Equipment				24,035
Sanitary fittings				
800 – 900 mm long horizontal changing rails	2	no	500	1,000
Hand dryer	1	no	500	500
Sanitary product disposal bin	1	no	200	200
Incontinence pad disposal bin	1	no	200	200
Soap dispenser	1	no	200	200
Mirror 600 x 950 mm	1	no	600	600
Retractable privacy screen 1900 mm long	1	no	2,300	2,300
Soap dish	1	no	80	80
Clothes hook	3	no	100	300

Item description	Quantity	Unit	Rate	Amount \$
Sanitary fittings (continued)				
Large sling hook	1	no	200	200
Shelf 500 x 200 mm	2	no	200	400
Allowance for miscellaneous works	1	Item	5,000	5,000
Subtotal: Sanitary fittings				10,980
Services				
Sanitary plumbing				
Accessible WC including backrest and drop-down rails	1	no	3,500	3,500
Hand basin with integrated shelf	1	no	1,000	1,000
Basin mixer	1	no	600	600
Floor waste grate	1	no	200	200
Floor preparation, core hole, screed and regrade	1	no	2,000	2,000
Soil waste, vents and connect to perimeter wall	1	no	2,700	2,700
Cold water reticulation	1	no	1,000	1,000
Hotwater unit and reticulation	1	no	1,800	1,800
Testing and commissioning	1	Item	700	700
Builder's work in connection	5	%	13,500	675
Electrical services				
Upgrade existing switchboard/EWIS panel	1	Item	1,200	1,200
Lighting	1	Item	3,000	3,000
Power	1	Item	1,700	1,700
Emergency lighting	1	Item	500	500
EWIS and fire detection	1	Item	1,000	1,000
Testing and commissioning	1	Item	500	500
Builder's work in connection	5	%	7,900	395
Mechanical services				
Exhaust ventilation to outlet outside wall	1	no	2,800	2,800
Minor alterations to existing AC system	1	Item	1,600	1,600
Testing and commissioning	1	Item	500	500
Builder's work in connection	5	%	4,900	245
Subtotal: Services				27,615

Item description	Quantity	Unit	Rate	Amount \$
Builder's preliminaries, supervision, insurances, overheads and profit				
Preliminaries, supervision, insurances, overheads and profit	1	Item	16,500	16,500
Subtotal: Building works				108,040
Contingency allowances				
Design contingency	5	%	108,040	5,402
Construction contingency	6	%	113,442	6,807
Subtotal: Contingency allowances				12,209
Subtotal: Total construction cost				120,249
Other project costs				
Consultants fees	13	%	120,249	15,632
Loose furniture		Note		Excluded
Information technology and communication		Note		Excluded
Signage	1	Item	1,000	1,000
Other fees, levies, etc.	1	Item	2,000	2,000
Project contingency sum	10	%	138,881	13,888
Subtotal: Other project costs				32,520
Total project cost (excluding GST)				153,000
Key exclusions				
Cost escalation after September 2019	Note			Excluded
Services infrastructure beyond perimeter wall	Note			Excluded



4.6 Design 1B: Without shower square

Item description	Quantity	Unit	Rate	Amount \$
Area				
Base area	12	m2		
Construction				
Perimeter wall (finished both sides)				
Stud frame	42	m2	90	3,780
Insulation	42	m2	20	840
Plasterboard	84	m2	60	5,040
Paint	84	m2	15	1,260
Skirting	15	m	25	375
Modifications to ceiling outside of perimeter wall	12	m2	150	1,800
Subtotal: Perimeter wall				13,095
Fitout				
Automatic sliding door and release button	1	no	7,000	7,000
Support frame for change table	1	Item	600	600
Supports for ceiling hoist	1	Item	3,200	3,200
Non-slip vinyl flooring	12	m2	130	1,560
Coved skirting	12	m	30	360
Vinyl splashback to basin, WC and shower	10	m2	120	1,200
Prepare substrate	12	m2	100	1,200
Subtotal: Fitout				15,120
Equipment				
Room coverage hoist	1	no	10,700	10,700
Adjustable height change table, 1800 mm long with side safety rail	1	no	13,100	13,100
Change table wipe dispenser	1	no	235	235
Subtotal: Equipment				24,035
Sanitary fittings				
800 – 900 mm long horizontal changing rails	2	no	500	1,000
Hand dryer	1	no	500	500
Sanitary product disposal bin	1	no	200	200
Incontinence pad disposal bin	1	no	200	200
Soap dispenser	1	no	200	200
Mirror 600 x 950 mm	1	no	600	600
Retractable privacy screen 1900 mm long	1	no	2,300	2,300
Soap dish	1	no	80	80

Item description	Quantity	Unit	Rate	Amount \$
Sanitary fittings (continued)				
Clothes hook	3	no	100	300
Large sling hook	1	no	200	200
Shelf 500 x 200 mm	2	no	200	400
Allowance for miscellaneous works	1	Item	5,000	5,000
Subtotal: Sanitary fittings				10,980
Services				
Sanitary plumbing				
Accessible WC including backrest and drop-down rails	1	no	3,500	3,500
Hand basin with integrated shelf	1	no	1,000	1,000
Basin mixer	1	no	600	600
Floor waste grate	1	no	200	200
Floor preparation, core hole, screed and regrade	1	no	2,000	2,000
Soil waste, vents and connect to perimeter wall	1	no	2,700	2,700
Cold water reticulation	1	no	1,000	1,000
Hotwater unit and reticulation	1	no	1,800	1,800
Testing and commissioning	1	Item	700	700
Builder's work in connection	5	%	13,500	675
Electrical services				
Upgrade existing switchboard/EWIS panel	1	Item	1,200	1,200
Lighting	1	Item	3,000	3,000
Power	1	Item	1,700	1,700
Emergency lighting	1	Item	500	500
EWIS and fire detection	1	Item	1,000	1,000
Testing and commissioning	1	Item	500	500
Builder's work in connection	5	%	7,900	395
Mechanical services				
Exhaust ventilation to outlet outside wall	1	no	2,800	2,800
Minor alterations to existing AC system	1	Item	1,600	1,600
Testing and commissioning	1	Item	500	500
Builder's work in connection	5	%	4,900	245
Subtotal: Services				27,615

Item description	Quantity	Unit	Rate	Amount \$
Builder's preliminaries, supervision, insurances, overheads and profit				
Preliminaries, supervision, insurances, overheads and profit	1	Item	16,400	16,400
Subtotal: Building works				107,245
Contingency allowances				
Design contingency	5	%	107,245	5,362
Construction contingency	6	%	112,607	6,756
Subtotal: Contingency allowances				12,119
Subtotal: Total construction cost				119,364
Other project costs				
Consultants fees	13	%	119,364	15,517
Loose furniture		Note		Excluded
Information technology and communication		Note		Excluded
Signage	1	Item	1,000	1,000
Other fees, levies, etc.	1	Item	2,000	2,000
Project contingency sum	10	%	137,881	13,788
Subtotal: Other project costs				32,305
Total project cost (excluding GST)				152,000
Key exclusions				
Cost escalation after September 2019	Note			Excluded
Services infrastructure beyond perimeter wall	Note			Excluded



4.7 Design 1C: Without shower alternative door location

Item description	Quantity	Unit	Rate	Amount \$
Area				
Base area	16	m2		
Construction				
Perimeter wall (finished both sides)				
Stud frame	48	m2	90	4,320
Insulation	48	m2	20	960
Plasterboard	96	m2	60	5,760
Paint	96	m2	15	1,440
Skirting	18	m	25	450
Modifications to ceiling outside of perimeter wall	16	m2	150	2,400
Subtotal: Perimeter wall				15,330
Fitout				
Automatic sliding door and release button	1	no	7,000	7,000
Support frame for change table	1	Item	600	600
Supports for ceiling hoist	1	Item	3,200	3,200
Non-slip vinyl flooring	16	m2	130	2,080
Coved skirting	16	m	30	480
Vinyl splashback to basin, WC and shower	10	m2	120	1,200
Prepare substrate	16	m2	100	1,600
Subtotal: Fitout				16,160
Equipment				
Room coverage hoist	1	no	10,700	10,700
Adjustable height change table, 1800 mm long with side safety rail	1	no	13,100	13,100
Change table wipe dispenser	1	no	235	235
Subtotal: Equipment				24,035
Sanitary fittings				
800 – 900 mm long horizontal changing rails	2	no	500	1,000
Hand dryer	1	no	500	500
Sanitary product disposal bin	1	no	200	200
Incontinence pad disposal bin	1	no	200	200
Soap dispenser	1	no	200	200
Mirror 600 x 950 mm	1	no	600	600

Item description	Quantity	Unit	Rate	Amount \$
Sanitary fittings (continued)				
Retractable privacy screen 1900 mm long	1	no	2,300	2,300
Soap dish	1	no	80	80
Clothes hook	3	no	100	300
Large sling hook	1	no	200	200
Shelf 500 x 200 mm	2	no	200	400
Allowance for miscellaneous works	1	Item	5,000	5,000
Subtotal: Sanitary fittings				10,980
Services				
Sanitary plumbing				
Accessible WC including backrest and drop-down rails	1	no	3,500	3,500
Hand basin with integrated shelf	1	no	1,000	1,000
Basin mixer	1	no	600	600
Floor waste grate	1	no	200	200
Floor preparation, core hole, screed and regrade	1	no	2,000	2,000
Soil waste, vents and connect to perimeter wall	1	no	2,700	2,700
Cold water reticulation	1	no	1,000	1,000
Hotwater unit and reticulation	1	no	1,800	1,800
Testing and commissioning	1	Item	700	700
Builder's work in connection	5	%	13,500	675
Electrical services				
Upgrade existing switchboard/EWIS panel	1	Item	1,200	1,200
Lighting	1	Item	3,000	3,000
Power	1	Item	1,700	1,700
Emergency lighting	1	Item	500	500
EWIS and fire detection	1	Item	1,000	1,000
Testing and commissioning	1	Item	500	500
Builder's work in connection	5	%	7,900	395
Mechanical services				
Exhaust ventilation to outlet outside wall	1	no	2,800	2,800
Minor alterations to existing AC system	1	Item	1,600	1,600
Testing and commissioning	1	Item	500	500
Builder's work in connection	5	%	4,900	245
Subtotal: Services				27,615

Item description	Quantity	Unit	Rate	Amount \$
Builder's preliminaries, supervision, insurances, overheads and profit				
Preliminaries, supervision, insurances, overheads and profit	1	Item	16,900	16,900
Subtotal: Building works				111,020
Contingency allowances				
Design contingency	5	%	111,020	5,551
Construction contingency	6	%	116,571	6,994
Subtotal: Contingency allowances				12,545
Subtotal: Total construction cost				123,565
Other project costs				
Consultants fees	13	%	123,565	16,063
Loose furniture		Note		Excluded
Information technology and communication		Note		Excluded
Signage	1	Item	1,000	1,000
Other fees, levies, etc.	1	Item	2,000	2,000
Project contingency sum	10	%	142,629	14,263
Subtotal: Other project costs				33,326
Total project cost (excluding GST)				157,000
Key exclusions				
Cost escalation after September 2019	Note			Excluded
Services infrastructure beyond perimeter wall	Note			Excluded



4.8 Design 2: With shower rectangular

Item description	Quantity	Unit	Rate	Amount \$
Area				
Base area	15	m2		
Construction				
Perimeter wall (finished both sides)				
Stud frame	45	m2	90	4,050
Insulation	45	m2	20	900
Plasterboard	90	m2	60	5,400
Paint	90	m2	15	1,350
Skirting	17	m	25	425
Modifications to ceiling outside of perimeter wall	15	m2	150	2,250
Subtotal: Perimeter wall				14,375
Fitout				
Automatic sliding door and release button	1	no	7,000	7,000
Support frame for change table	1	Item	600	600
Supports for ceiling hoist	1	Item	3,200	3,200
Non-slip vinyl flooring	15	m2	130	1,950
Coved skirting	15	m	30	450
Vinyl splashback to basin, WC and shower	10	m2	120	1,200
Prepare substrate	15	m2	100	1,500
Shower base waterproofing	2	m2	200	400
Subtotal: Fitout				16,300
Equipment				
Room coverage hoist	1	no	10,700	10,700
Adjustable height change table 1800 mm long with side safety rail	1	no	13,100	13,100
Change table wipe dispenser	1	no	235	235
Telescopic shower curtains	2	no	790	1,580
Subtotal: Equipment				25,615
Sanitary fittings				
660 mm grabrail to shower	1	no	300	300
800 – 900 mm long horizontal changing rails	2	no	500	1,000
Hand dryer	1	no	500	500
Sanitary product disposal bin	1	no	200	200
Incontinence pad disposal bin	1	no	200	200

Item description	Quantity	Unit	Rate	Amount \$
Sanitary fittings (continued)				
Soap dispenser	1	no	200	200
Mirror 600 x 950 mm	1	no	600	600
Retractable privacy screen 1900 mm long	1	no	2,300	2,300
Shower seat 960 x 450 mm	1	no	500	500
Soap dish	1	no	80	80
Clothes hook	3	no	100	300
Large sling hook	1	no	200	200
Shelf 500 x 200 mm	2	no	200	400
Allowance for miscellaneous works	1	Item	5,000	5,000
Subtotal: Sanitary fittings				11,780
Services				
Sanitary plumbing				
Accessible WC including backrest and drop-down rails	1	no	3,500	3,500
Accessible shower including shower rose and tapware	1	no	2,000	2,000
Hand basin with integrated shelf	1	no	1,000	1,000
Basin mixer	1	no	600	600
Floor waste grate	1	no	200	200
Floor preparation, core hole, screed and regrade	2	no	2,000	4,000
Soil waste, vents and connect to perimeter wall	2	no	2,700	5,400
Cold water reticulation	1	no	1,000	1,000
Hotwater unit and reticulation	1	no	1,800	1,800
Testing and commissioning	1	Item	700	700
Builder's work in connection	5	%	15,500	775
Electrical services				
Upgrade existing switchboard/EWIS panel	1	Item	1,200	1,200
Lighting	1	Item	3,000	3,000
Power	1	Item	1,700	1,700
Emergency lighting	1	Item	500	500
EWIS and fire detection	1	Item	1,000	1,000
Testing and commissioning	1	Item	500	500
Builder's work in connection	5	%	7,900	395

Item description	Quantity	Unit	Rate	Amount \$
Mechanical services				
Exhaust ventilation to outlet outside wall	1	no	2,800	2,800
Minor alterations to existing AC system	1	Item	1,600	1,600
Testing and commissioning	1	Item	500	500
Builder's work in connection	5	%	4,900	245
Subtotal: Services				34,415
Builder's preliminaries, supervision, insurances, overheads and profit				
Preliminaries, supervision, insurances, overheads and profit	1	Item	18,400	18,400
Subtotal: Building works				120,885
Contingency allowances				
Design contingency	5	%	120,885	6,044
Construction contingency	6	%	126,929	7,616
Subtotal: Contingency allowances				13,660
Subtotal: Total construction cost				134,545
Other project costs				
Consultants fees	13	%	134,545	17,491
Loose furniture		Note		Excluded
Information technology and communication		Note		Excluded
Signage	1	Item	1,000	1,000
Other fees, levies, etc.	1	Item	2,000	2,000
Project contingency sum	10	%	155,036	15,504
Subtotal: Other project costs				35,994
Total project cost (excluding GST)				171,000
Key exclusions				
Cost escalation after September 2019	Note			Excluded
Services infrastructure beyond perimeter wall	Note			Excluded

Liz's story

As a long-term advocate for Changing Places and disability rights, Liz was very pleased to hear about the change in the National Construction Code, which has been updated to include a new type of toilet: the Accessible Adult Change Facility. 'I think that's a fantastic step in the right direction.'

From 1 May 2019, certain classes of public building – such as major shopping centres, sports venues, pools, museums, theatres, art galleries and airport terminals – will need to include the new Accessible Adult Change Facility.

Liz is a trained social worker, who currently works as a customer experience officer in disability services. She enjoys an active social life, watching football at the MCG, movies, theatre and musicals.

Liz acknowledges that most people in the community are unlikely to understand how vital Changing Places are, 'Unless you have a high dependency issue and need the equipment (such as the hoist and adult change table), you're not going to understand what it's for.'

These days Liz finds that she can't look after herself as easily as she used to. Support workers are not allowed to lift her anymore, which means Changing Places are the only option. Having Changing Places available 'means I can be more comfortable, because I've got the option to go to the toilet... I can stay out longer, because I have the ability to change myself.'

Liz would like to see Changing Places at every airport in Australia, domestic and international, in arrivals and departures. Travelling and not being able to go to the toilet is pretty hard work.

The change to the National Construction Code will hopefully contribute to a greater awareness of the needs for people with a wide range of disabilities. 'More Changing Places means widening the boundaries experienced by people with severe physical disabilities and giving them a greater choice of places to go.'

Liz would like to see inclusion conversations with people with disabilities in the early stages of building development, to ensure a better understanding of what's required and why – to ultimately provide a better outcome for the whole community.



Appendix 1

A summary of the new design requirements for the Changing Places design specifications 2020

The list below provides a summary of the new requirements for the *Changing Places design specifications 2020*. These changes will apply from 1st April 2020. This change will not affect facilities which are accredited or have building approval.

New Changing Places design requirements include:

- An additional layout 'Design 1C: Without shower alternative door location' has been prepared, which shows a side entrance door and repositioning of the privacy screen.
- Room sizes are now provided as nominal dimensions, to assist in the preliminary phase of design. These sizes are not binding, allowing designers to prepare layouts for any room shape or size – as long as the required minimum circulation spaces are achieved.

Toilet

- A shelf has been added beside the toilet pan for personal products.
- Shower-type curtains shall not be used as a privacy screen.
- Privacy screen height shall be no less than 1400 mm in height and no less than 1750 mm in length.
- The distance between the front of the pan and the privacy screen has been changed to 900 mm.
- Toilet-roll holders are now required to be provided on both drop-down grabrails.
- Flat elliptical grabrails can be used.
- Drop-down grabrails must remain locked in the upright position when raised.

Washbasin

- Mirror heights have been amended.
- The dimension of 675 mm between the tap location and sidewall has been included.
- Basin minimum shelf size of 300 x 400 mm has been added.

Change table

- Operable heights of minimum 400 – 900 mm have been included.
- Paper change table cover and dispenser have been deleted and replaced with a sanitising wipes dispenser.
- A minimum change table length of 1800 mm has been included.
- A minimum circulation space of 1100 mm has been included in front of the change table.
- The shelf size to the change table has been nominated.
- The extent of lighting above the change table has been nominated.
- Performance details for change tables have been added.

Shower

- Shower seats to have front legs that extend to the floor.
- Shower curtains to be provided as two separate curtains with retractable or swing away curtain rods.

Ceiling hoist

- Clearance to ceiling hoist transverse rail has been added and minimum ceiling height has been deleted.
- Performance details for hoists have been added.

Circulation spaces

- Fixtures allowed to intrude into circulation spaces have been defined.

Doors

- Dwell time of 9 seconds for doors to remain open has been included.
- Door controls for standalone Changing Places facilities shall be recessed into walls to prevent vandalism.
- Door control signage has been updated.

Clothes and sling hooks

- Dimensions of clothes and sling hooks sizes have been included.

Lighting

- Exclusion zones for lighting over the change table have been identified.

Signage

- Requirements for operating instructions have been updated.
- A sign design has been prepared in accordance with NCC 2019 D3.6(g)(ii) that requires signage to be provided at accessible unisex sanitary facilities, other than one which incorporates an Accessible Adult Change Facility, to direct a person to the location of the nearest Accessible Adult Change Facility within that building.
- Typical change table operating instructions have been provided.
- Typical hoist operating instructions have been provided.

Explanatory notes

Notes have been provided as additional commentary to assist designers. Information within the notes is not mandatory.



Appendix 2

Changing Places and the National Construction Code

Specification F2.9 'Provisions for Accessible Adult Change Facilities' was inserted into Part F2 of Volume One of the National Construction Code (NCC) in 2019. The intent of Specification F2.9 is simply to provide a minimum technical standard that prescribes how an Accessible Adult Change Facility is to be designed and the equipment, fixtures and fittings that must be included in each facility.

Since the publication of National Construction Code in May 2019, practitioners have sought clarification from the Australian Building Codes Board on whether they can continue to use the Changing Places technical standards, and if so, which signage should be attached to the facility.

Relationship between the National Construction Code and the Changing Places design specifications 2020

Specification F2.9 is based on the Changing Places design, which provides guidance on how to construct a 'Changing Places' facility. A 'Changing Places' facility is one type of Accessible Adult Change Facility. Going beyond Specification F2.9 would still satisfy the requirements of the National Construction Code (NCC), provided all other applicable 'Deemed-to-Satisfy' (DtS) Provisions are complied with.

The Deemed-to-Satisfy Provisions are prescriptive – they include materials, components, design factors, and construction methods that, if used, are deemed to meet the Performance Requirements, hence the term 'Deemed-to-Satisfy'.

Specification F2.9 has been developed to provide an Accessible Adult Change Facility with the same intent and an equal level of functionality as would occur if the Changing Places technical standards were used. In this sense, compliance with the *Changing Places design specifications 2020* can be considered to be equivalent to Specification F2.9.

Although the wording and layout of the NCC Accessible Adult Change Facility is different to that of the *Changing Places design specifications 2020*, the outcome is the same. Therefore, a Performance Solution is generally not necessary if using the *Changing Places design specifications 2020*, except where it is proposed to use different signage (e.g. the Changing Places signage) in place of that shown in Specification F2.9.

Using alternative signage

Examples

Examples of where additional elements of the *Changing Places design specifications 2020* may be used, without undertaking a Performance Solution, are outlined below:

- A shower may be added, provided it complies with all other applicable Deemed-to-Satisfy Provisions, such as for waterproofing (refer to F1.7).
- An access control system may be installed to prevent misuse or vandalism of the facility. One type of access control is the Master Locksmiths Access Key (MLAK). This can be installed, provided it also complies with other applicable DtS Provisions, such as F2.5 to ensure the room can be accessed in an emergency (without a key).
- Installing a privacy screen, such as that shown in the *Changing Places design specifications 2020* layout diagrams.

This list is not intended to be complete or exhaustive. Rather, it simply reflects some additional features that have been the subject of practitioner enquiries. When considering additional features for an Accessible Adult Change Facility, it is important to check they are compatible with Specification F2.9, as well as all other applicable DtS Provisions.

Clause 10 of Specification F2.9 provides a generic design for use on signage to indicate the location of an Accessible Adult Change Facility. This differs from the signage design shown in the *Changing Places design specifications 2020*, and may also differ from that used on other third party-produced maps, websites, and smartphone Apps, such as the National Public Toilet Map.

In some cases, it may be desirable to use alternative signage to what is shown in Specification F2.9. It is important to also consider other applicable Deemed-to-Satisfy (DtS) Provisions, for example the braille and tactile signage requirements in Specification D3.6.

This is possible as a Performance Solution to meet Performance Requirement FP2.1 and DP1.

If the test of equivalence to the DtS Provisions (see A2.2(1)(b)) is used to support such a Performance Solution, **the following acceptance criteria should be applied:**

- The alternative signage should clearly convey the purpose of the facility.
- If the alternative signage is trademarked, you would need to obtain authorisation from the trademark owner to use their design, which may be subject to conditions of use.
- Any conditions attached to the use of the signage (e.g. a third-party accreditation or specifications of colour, size or placement) must be complied with.

Further information

Example using Changing Places signage

The Changing Places signage design is one alternative that could meet the criteria for a Performance Solution. This is because it is already widely used in Australia as well as the United Kingdom, which would support it being considered suitable to 'clearly convey the purpose of the facility'.

Use of the Changing Places signage is subject to trademark protection and as such can only be used with permission from Changing Places Australia, which is provided when the facility gains Changing Places accreditation from a Changing Places Assessor. Changing Places accreditation is not required by the NCC, but may be undertaken as a way to meet the Performance Solution criteria.

Further information about Specification F2.9 is provided in the *Guide to National Construction Code Volume One*, which can be viewed on the Australian Building Codes Board website: www.abcb.gov.au.

Further information about Changing Places is available from the Changing Places website: www.changingplaces.org.au.

The National Public Toilet Map can be accessed at: www.toiletmap.gov.au (Note: this website uses a different symbol to that shown in Specification F2.9). The National Public Toilet Map is provided and managed by the Commonwealth Department of Health.



Appendix 3

Changing Places Technical Advisory Team



From left: Bruce Bromley, Francesca Davenport and Helen Fearn-Wannan.

Bruce Bromley

Bruce has over 35 years' experience in disability access, architectural design, documentation and project management and is an accredited access consultant with the Association of Consultants in Access, Australia.

Bruce has provided disability access consulting services on a range of large and complex projects in the private and government sectors – residential, retail, commercial, educational, public, health, aged care, aviation, public transport and industrial.

Bruce is also passionate about emergency evacuation and specialises in procedures and policy for people with disability. He is on the Australian Standards Development Committee FP-017 that develops AS 3745 Emergency Management Procedures.

Bruce is at the forefront of accessibility in Australia and this technical expertise saw him, co-author, the technical standards for Specialist Disability Accommodation 2019 and the Changing Places information guide and technical standards that provide the industry with a set of guidelines to provide enhanced change and sanitary facilities for adults with a disability.

Helen Fearn-Wannan

Helen is an access consultant, accredited with the Association of Consultants in Access, Australia and a registered occupational therapist with nearly 20 years' experience in the area of building access, design and modification.

Helen previously worked with Scope Victoria where she had the opportunity to work closely with people with high support needs and the people who support them. It was here that Helen developed the specialist skills of understanding how people, space and technical equipment, including hoists and change tables, all need to work together to provide a change facility that meets everyone's needs with dignity and in safety.

Helen has been involved with Changing Places since its inception. The team developed the Changing Places design and technical reference for use in Australia and has been involved in the design and accreditation of over 30 Changing Places. Hearing the stories of how people's lives are being improved through the provision of Changing Places makes it all worthwhile.

Helen works for Architecture & Access and consults at all stages of documentation on a broad range of building projects including community, educational, commercial, health and government projects. She has championed the inclusion of Changing Places facilities in many settings and has recently seen their inclusion in university, community, aquatic, commercial and health projects.

Francesca Davenport

Francesca Davenport is an architect and an accredited member of the Association of Consultants in Access, Australia.

Francesca specialises in design for healthcare, aged care, rehabilitation and accessibility, incorporating universal design principles. Her personal experience with mobility impairment and close involvement with issues of deafness and blindness have given her an invaluable insight into the requirements for access provisions for all.

She is a member of the National Access Work Group of the Australian Institute of Architects and was its Convenor from 2004 to 2014. In 2016 she was elevated to Life Fellow for her contribution to the advancement of the profession through the promotion and development of accessible design and guidelines.

In 2015 Francesca joined the team at Architecture & Access after leading the Health Science Planning Consultants Disability Access Consultancy for over 11 years. She has been a member of the Changing Places Technical Advisory Team since its inception in 2013.

Appendix 4

Glossary

Accessible Adult Change Facility

Accessible Adult Change Facilities (AACF) is a definition under the National Construction Code (NCC) to describe sanitary facilities with additional features to assist people with more profound or complex disabilities who are unable to use standard accessible facilities independently. From 1 May 2019, the NCC (Specification F2.9) requires the construction of AACFs in the following public buildings:

- new or redeveloped shopping centres with a design occupancy greater than 3,500
- new museums, art galleries and theatres with a design occupancy greater than 1,500
- new stadiums with a design occupancy greater than 35,000
- new indoor aquatic facilities with a main pool area perimeter exceeding 70 m
- all new or redeveloped airports.

Accreditation

The primary reason for having an accreditation process is to ensure that Changing Places are built to Changing Places standards so that users can have confidence that the facility is fit for purpose.

Meeting the specifications for Changing Places facilities also ensures compliance with requirements for AACFs (Specification F2.9).

Only Accredited Changing Places facilities are permitted to use the Changing Places logo and signage and are listed on the Changing Places Australia website.

Adult Change Facility

The term Adult Change Facility (ACF) or Change Facility was used prior to 2019 when Accessible Adult Change Facilities were introduced under the 2019 National Construction Code. The term referred to facilities that were provided separate to and in addition to the accessible sanitary facilities and included some but not all of the design requirements of Changing Places such as an adult sized change table, ceiling track and hoist, peninsula pan and required circulation space. The National Public Toilet Map lists these toilets as Adult Change facilities.

Alternative layouts

Alternative layouts provide different design options to the standard layouts. They still meet the requirements of the *Changing Places design specifications 2020* by achieving the required circulation spaces and hoist coverage for each component.

Australian Building Codes Board

The Australian Building Codes Board (ABCB) addresses issues relating to safety, health, amenity and sustainability in the design and performance of buildings through the National Construction Code (NCC), and the development of effective regulatory systems and appropriate non-regulatory solutions, including product certification systems.

The Chair and Industry Board members are appointed by the Building Ministers' Forum, with the majority agreement of the State and Territory Ministers. The Government and Australian Local Government Association Board members are selected by the entities they represent.

Australian Standards

Australian Standards (AS) are published documents setting out specifications and procedures designed to ensure products, services and systems are safe, reliable and consistently perform the way they are intended to. They establish a minimum set of requirements, which define quality and safety criteria.

Under the Australian Standards, R10 and R11 refer to ramp ratings and P3 and P4 refer to pendulum/wet rating (level of slip resistance).

Building Code of Australia

The Building Code of Australia (BCA) is Volume One and Volume Two of the National Construction Code. (Volume One is relevant to Changing Places.)

Changing Places

Changing Places are larger than standard accessible toilets and have additional features such as more space to meet the needs of people with complex disabilities and their carers. Each facility has a height adjustable adult change table, a ceiling track hoist system, and room for two people either side of a peninsula toilet. Changing Places toilets are built to the design specification as outlined in the *Changing Places design specifications 2020*.

Only facilities that have been accredited can be listed as Changing Places facilities on the Changing Places Australia website, or any other list or map of Changing Places in Australia, including the National Public Toilet Map.

Changing Places Assessor

A Changing Places Assessor is a person suitably qualified to assess a Changing Places in order to approve the facility for accreditation. A list of Changing Places Assessors can be found on the Changing Places Australia website.

Changing Places Australia website

The Changing Places Australia website was originally developed and administered by the Association for Children with a Disability (ACD) and is currently administered by the Department of Health and Human Services. The website is the main information channel for the initiative in Australia and contains a list of all accredited Changing Places facilities, the *Changing Places design specifications 2020*, registration and accreditation processes, news and contact information.

Changing Places Technical Advisory Team

The group of people who have specific expertise in Changing Places. Where variations to the design specifications are identified, an assessment by the Technical Advisory Team will be undertaken to determine where variations will be accepted or where additional works or features are required.

Deemed-to-Satisfy

A Deemed-to-Satisfy (DtS) Solution is achieved by following all the relevant Deemed-to-Satisfy Provisions in the National Construction Code.

Marveloo

The Marveloo is one kind of portable Changing Places toilet, available for hire for events and festivals. The Marveloo design incorporates many of the features of a Changing Places facility including a ceiling track hoist system, height adjustable adult sized change table, additional circulation space and an accessible toilet.

Master Locksmiths Access Key

The Master Locksmiths Access Key (MLAK) system is a national initiative developed by the Master Locksmiths Association. People with a disability can purchase an MLAK key that will open toilets, playground equipment and other facilities fitted with a lock that uses the special MLAK cylinder. MLAK allows people with a disability access to dedicated public facilities including Changing Places facilities, Liberty Swings, and Accessible Toilets located in National Parks and Council municipalities, which are often locked.

National Construction Code

The National Construction Code (NCC) provides the minimum necessary requirements for safety and health, amenity and accessibility, and sustainability as part of the design, construction, performance and liveability of new buildings (and new building work in existing buildings) throughout Australia. It is a uniform set of technical provisions for public building work, plumbing and drainage installations throughout Australia whilst allowing for variations in climate and geological or geographic conditions.

National Disability Insurance Scheme

The National Disability Insurance Scheme (NDIS) provides funding to enable Australians aged under 65 with permanent and significant disability to access supports and services.

National Public Toilet Map

As part of the National Continence Program, the National Public Toilet Map (available via website or App) provides information on over 19,000 public toilets across Australia, including information about each toilet such as its accessibility features, opening hours and type of toilets. The map includes icons for both Changing Places facilities and Adult Change facilities.

NCC Performance Requirements

Prescribe the minimum necessary requirements for buildings, building elements, and plumbing and drainage systems. They must be met to demonstrate compliance with the NCC.

NCC Performance Solution

A tailored solution to meet the intended objective of the Performance Requirements.

Statement of Compliance

A Changing Places Assessor will issue the facility manager with a Statement of Compliance when the accreditation process is complete.

Universal design

Universal design is a design philosophy that ensures that products, buildings, environments and experiences are innately accessible to as many people as possible, regardless of their age, level of ability, cultural background, or any other differentiating factors that contribute to the diversity of our communities.

Variations to the Requirements

Where a design varies from the requirements detailed in the *Changing Places design specifications 2020*, accreditation of the facility may still be possible if the facility can still be considered to meet the performance intent of a Changing Places facility. For example, existing buildings may have structural limitations that prevent full hoist coverage of the room.

Acknowledgements

We would like to acknowledge the support of the many stakeholders involved in the Changing Places journey:

- those who have advocated for Changing Places in their local communities
- those who have advocated at higher levels for the inclusion of Changing Places in building codes
- state governments (especially in Victoria, Western Australia and South Australia) who have provided funding to build Changing Places
- the significant support of the private sector – many large shopping centres now have Changing Places and many more are planned.

The historical timeline outlines the key milestones for Changing Places in Australia.

We would also like to thank the many people who have contributed to the *Changing Places design specifications 2020*, including:

- the Changing Places Technical Advisory Team: Bruce Bromley, Helen Fearn-Wannan and Francesca Davenport, who updated the designs and technical specifications and provided valuable advice
- Australian Building Codes Board, Sharnie Markinson (QLD Government), Joe Manton (Access Institute), Lee Wilson (Subject Matter Expert for the Australian Building Codes Board) and Jack Mulholland (Maroondah City Council) for reviewing early drafts of the 2020 design specifications
- Maroondah City Council (led by Jack Mulholland), for their pioneering work in establishing Changing Places in Australia
- Don and Jessica, for permission to include the Marveloo photo featured on Page 9
- CHS Healthcare, for providing posters and hoist drawings
- the Victorian Government, for supporting this project.

Many thanks also to Liz, Mollie, Rebecca, Sarah, Debby and Michael, who generously shared their stories for the case studies in the *Changing Places design specifications 2020*.

To receive this publication in an accessible format [phone](tel:0386445971) <03 8644 5971>, using the National Relay Service 13 36 77 if required, or [email](mailto:changingplaces@dhhs.vic.gov.au) <changingplaces@dhhs.vic.gov.au>.

Authorised and published by the Victorian Government, 1 Treasury Place, Melbourne.

© State of Victoria, Victorian Health and Human Services Building Authority, February 2020.

ISBN 978-1-76069-200-1 (pdf/online/MS word)

ISBN 978-1-76069-199-8 (print)

Available at the Changing Places [website](http://www.changingplaces.org.au) <www.changingplaces.org.au>

Cover image: Hamer Hall



← 0 30m



