

Design Guide for Accessibility

For commercial bathrooms in
compliance with AS1428.1:2021



Contents

Helping you Specify Quality Stainless Steel Fixtures

3

Introduction

4

Toilets

7

Hand Basins and Tapware

9

Grabrails and Backrests

11

Washroom Accessories

13

Braille Signs

14

Showers and Seats

15

Get the fit out (PCD)

17

Get the fitout (PTSD)

19

Accessible Range

21

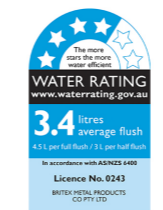
Helping you Specify Quality Stainless Steel Fixtures



AS1428 Compliant
Britex has a wide range of products that meet the strict design requirements set out in AS1428 – Design for Access and Mobility. Whilst imported products may be marketed in Australia as ‘barrier-free’ or ‘DDA compliant’, these products often don’t meet Australian standards set out in AS1428. Britex products are manufactured according to Australian disability standards and can be specified with confidence.



Watermark Certification
From an overall quality assurance perspective, WaterMark is the most important certification for stainless steel plumbing products. The criteria that must be met to obtain WaterMark certification is without question the most thorough and comprehensive standard stainless plumbing products can be measured against, and provides specifiers with the greatest assurance of product quality, compliance with Australian Standards and compatibility with other plumbing fixtures.



Water Efficient WELS
Required by Government Legislation for a wide range of plumbing products including urinals, toilets, flushing devices and tapware, WELS provides specifiers with a great insight into the water usage of plumbing fixtures. Britex is a market leader in achieving industry best water efficiency ratings, the culmination of our continuous R&D programs and commitment to environmental sustainability.



Britex Support
In choosing Britex as your preferred supplier of stainless products, you are supporting the Australian manufacturing industry and helping to provide jobs to Australian sheet metal workers. A family owned and operated business, Britex is one of Australia’s largest employers of stainless sheet metal workers and is committed to further developing local manufacturing expertise.

With you from the first site measure to direct delivery on site, Britex offers expert advice and support throughout your project with a dedicated project manager, shorter lead times through local manufacturing and after service and maintenance advice.

This document is an interpretation of the AS1428.1:2021 Design for Access and Mobility Guidelines and the suitability of the listed Britex products to adhere to these standards when correctly installed. This document does not take into account other Building Guidelines. This document should be used as a guide only.

‘Section 12’ (2021) in Design for access and mobility, part 1: General Requirements for Access - new building work. S.I.: STANDARDS AUSTRALIA.

Introduction


When designing and specifying fixtures for access areas, it is important to ensure product designs comply with the relevant standard. The **Australian Standard: Design for Access and Mobility - General Requirements for Access - New Building Work**, provides architects, designers and specifiers with minimum design requirements for new building projects that enable access for people with disabilities.

Britex accessible fixtures are manufactured to meet compliance with AS1428.1 and are resistant to vandalism, hygienic, robust yet stylish, making them perfect for use in shopping centres, clubs, schools, airports, and other public areas.


Browse our range of stainless steel toilets, flushing options, troughs, drinking fountains, hand basins, washroom accessories, tapware and more. These products conform to AS1428.1 where noted and can be installed in a variety of projects requiring access.

Accessible or Ambulant


There are several key differences between accessible and ambulant toilets that you need to be aware of. Some of the important differences include:



Accessible toilets are required to be **significantly bigger than ambulant toilets** due to the requirements to **provide sufficient space** for individuals who use **wheelchairs**.



Ambulant toilets do not require a significant amount of extra space that accessible toilets require. Ambulant toilets will also have **hand or grab rails**.



Accessible toilets provide features that are geared towards individuals who require **wheelchair use**, such as **mirrors and sinks** that are **positioned lower** for easier access, **rail supports or grabs**, **braille signage** and **contrasting toilet seat colours** to make them easier to locate for **visually impaired** individuals.

Step into our Virtual Accessible Bathroom



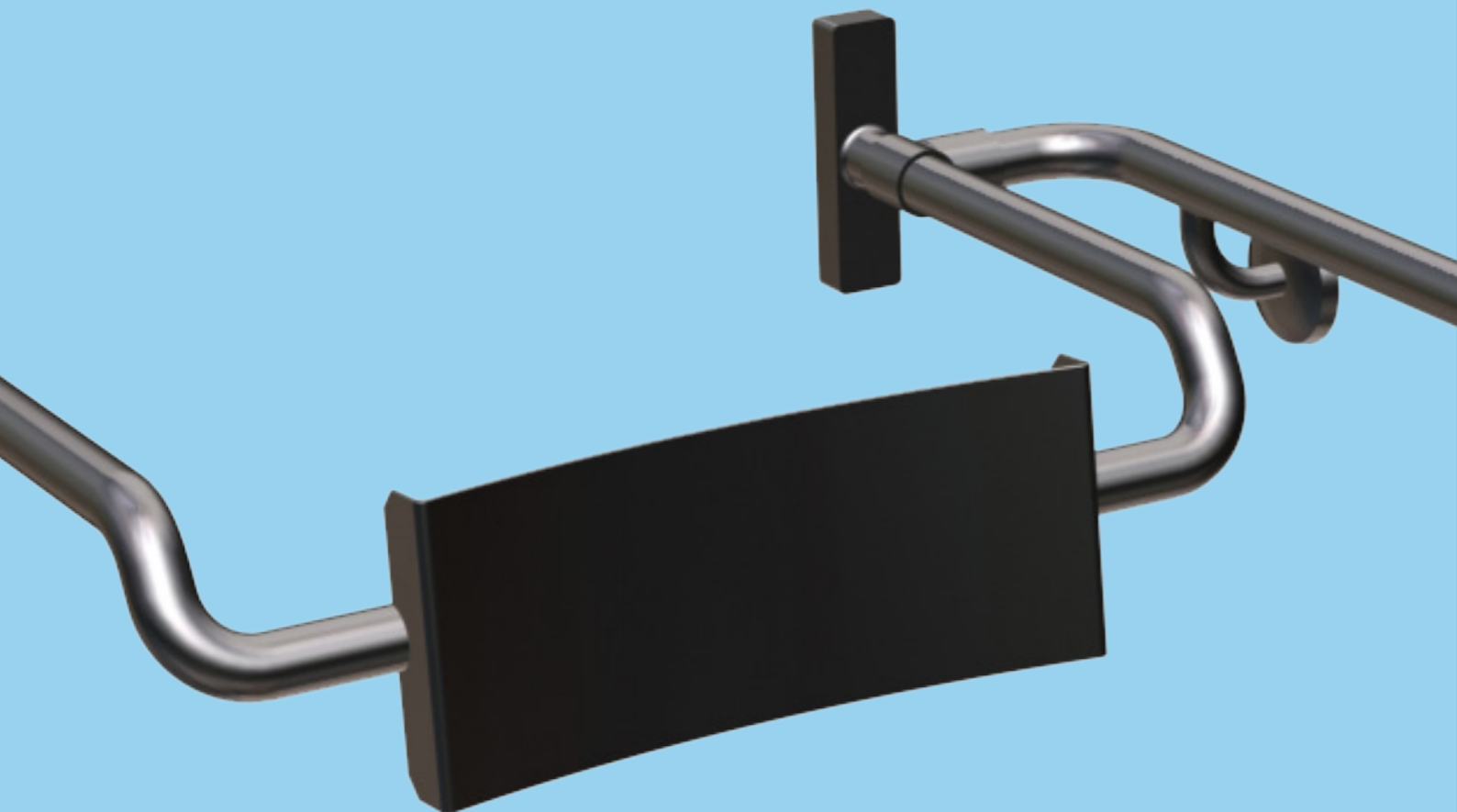
Designed in compliance to AS1428.1:2021

View on our website now!

britex.com.au



Accessible Bathrooms



Toilets & Seats

BRITEX Accessible Toilet Pans and Toilet Suites are manufactured to meet AS1428.1 standards.

Toilet pan height with seat:

The toilet bowl height with a seat should be between 460mm and 480mm measured from the floor to the top of the seat.

Seats:

Accessible toilets should come with a toilet seat that is securely fixed to the pan and completely round with a minimum weight limit of 150kg.

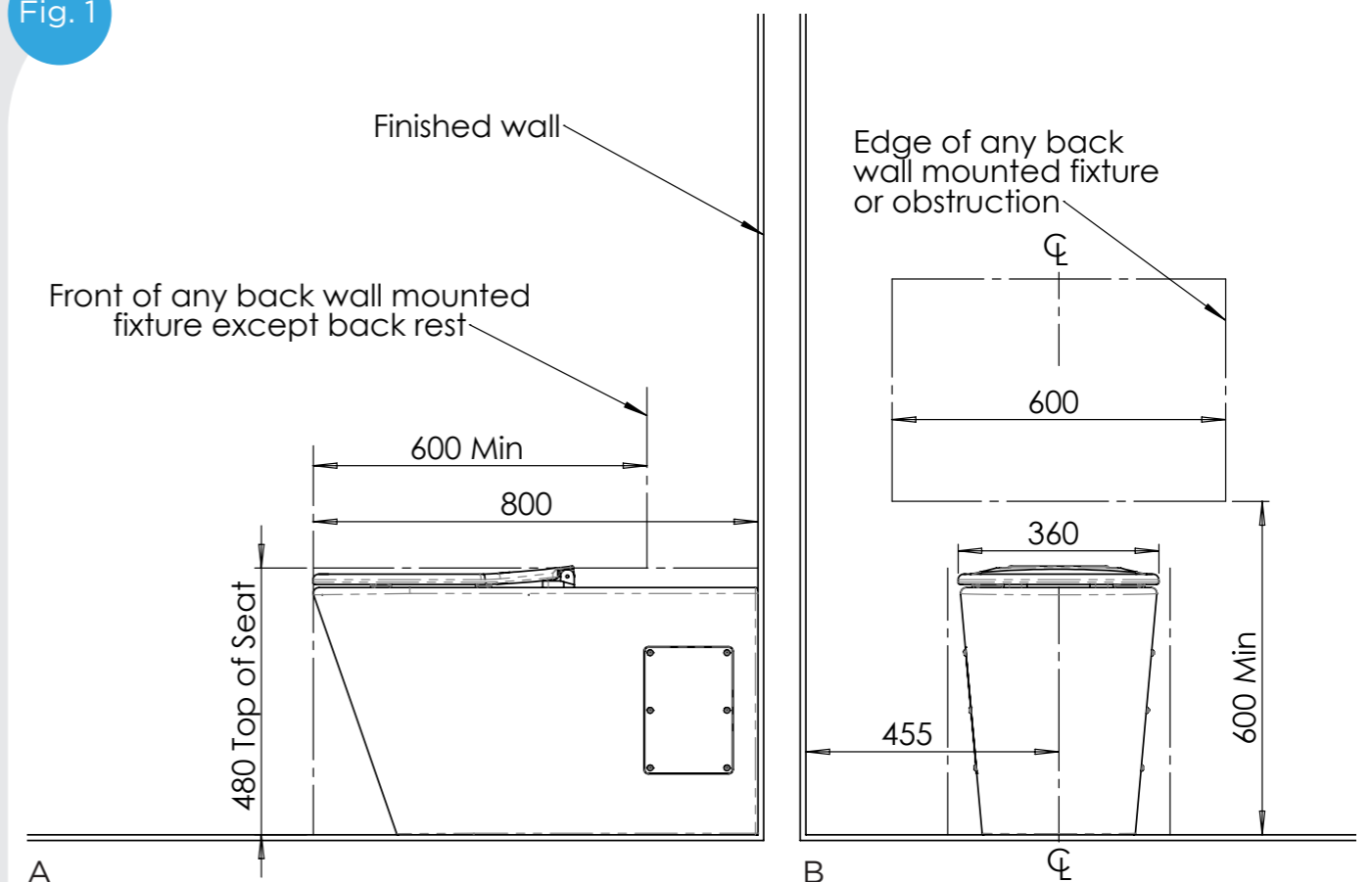
Toilet pan length to wall:

The dimension from the front of the toilet pan to the finished wall surface must be 800 ± 10 .

Some other key requirements include:

- **Clearance:** There should be a minimum clearance of 800mm in front of the toilet pan to allow a wheelchair user to transfer onto the toilet.
- **Grab rails:** Grab rails should be installed beside the toilet pan to provide support and assistance for people with mobility impairments.
- **Flushing:** The flushing mechanism should be easy to operate and located within reach of the user.
- **Visual contrast:** The toilet pan should have visual contrast with the surrounding walls and floor to make it easier for people with visual impairments to locate.

Fig. 1



Britex Products Featured in Drawing (Left to Right):
Britex PCD

Fig.1 created in reference to 'Figure 39 - Standards Australia Limited 2021, AS1428.1: 2021 Design for access and mobility, 6th Edition'

Luminance Contrast

What is Luminance Contrast?

The Luminance Contrast refers to the degree of light absorbed/reflected of different colours. To comply with AS1428 a minimum 30% luminance contrast is required between the toilet seat and the toilet.

Light Reflectance Value (LRV)

The Luminance Contrast refers to the degree of light absorbed/reflected of different colours. To comply with AS1428 a minimum 30% luminance contrast is required between the toilet seat and the toilet.

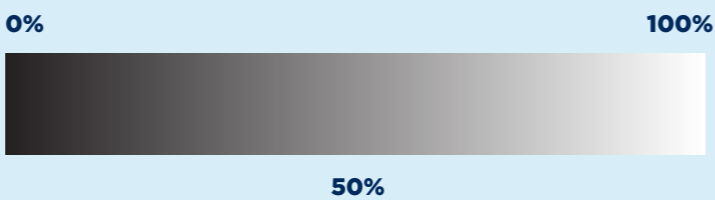



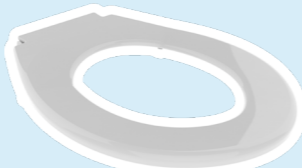


Fig.1: Light Reflectance Value (LRV) Chart

The values calculated above are averages based on other sources of independant testing of similar colours/materials. These are to be used as a guide only. Calculations were determined using Access Architect's The Luminance Contrast Calculator: <https://www.accessarchitects.com.au/luminance-contrast-calculator>

			
BRITEX SS Satin Finish	BRITEX Black Vandal Resistant Toilet Seat	BRITEX Navy Vandal Resistant Toilet Seat	BRITEX White Vandal Resistant Toilet Seat
LRV Value: 58%	LRV Value: 7%	LRV Value: 15%	LRV Value: 85%
	Luminance Contrast: 70.83% <small>*Calculated against BRITEX SS Pan</small>	Luminance Contrast: 54.85% <small>*Calculated against BRITEX SS Pan</small>	Luminance Contrast: 20.09% <small>*Calculated against BRITEX SS Pan</small>
When Seat is Paired with a BRITEX SS Accessible or Ambulant Pan:	Recommended for Accessible Use	Recommended for Accessible Use	Recommended for <u>Standard</u> Use Only

* Please note all values presented are approximates. The Luminance Colour Contrast Calculator used is to be design tool and should not replace independent testing from a third party to determine the luminance contrast of building materials. Sources used: <https://www.protactsystems.com.au/luminance-contrast/> & <https://www.accessarchitects.com.au/vista-access-architects-blog/luminance-contrast-where-is-it-required>

Hand Basins & Tapware

When it comes to the installation of hand basins and tapware according to AS1428.1:2021, the standard provides the following guidelines:

Height of the Hand Basin:

The height of the hand basin should be between 720mm to 780mm above the floor.

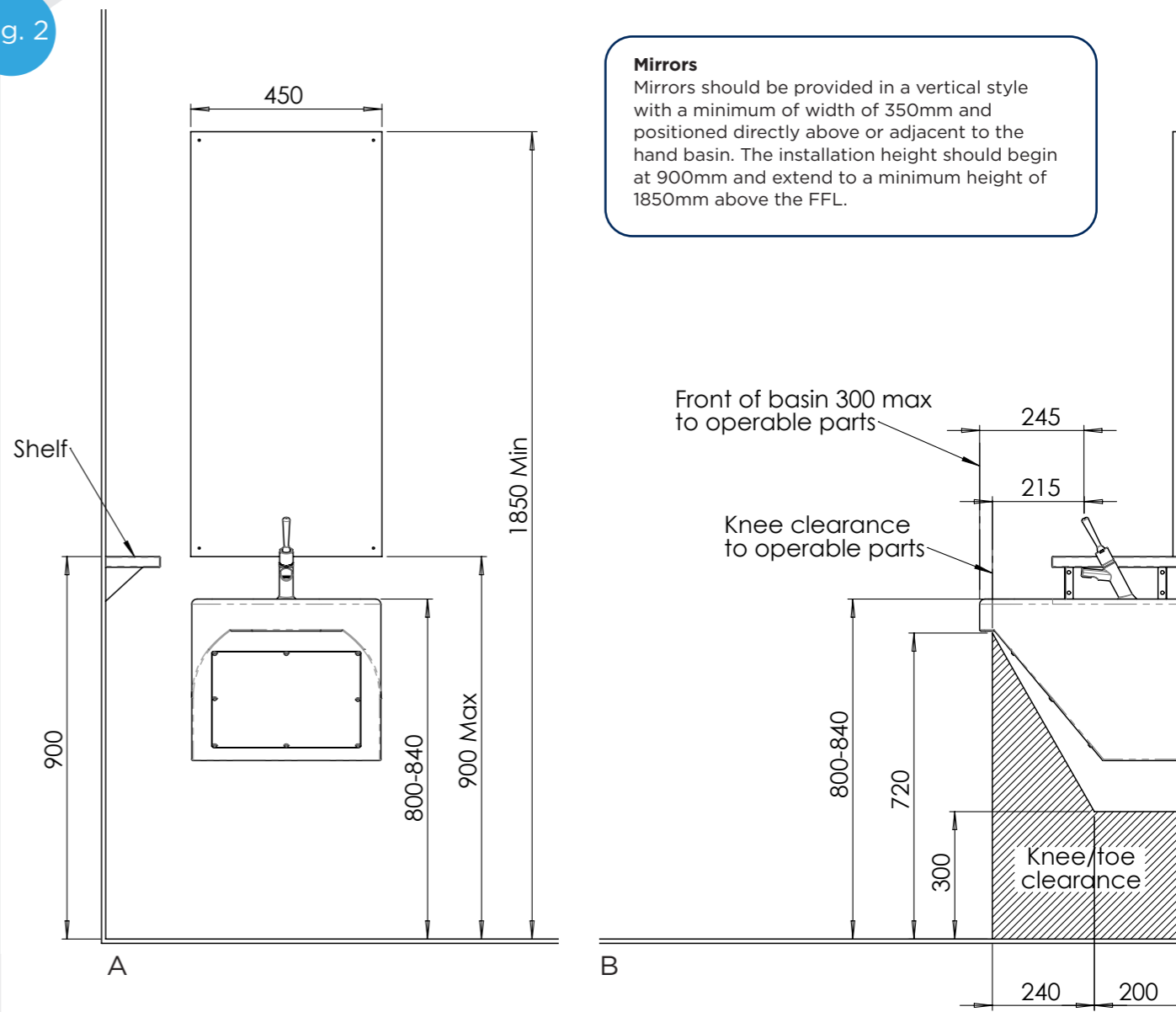
Positioning of the Tapware:

The tapware should be installed on the side of the hand basin, and should be positioned between 200mm to 300mm from the front edge of the basin.

Space Requirements:

There should be adequate space under the hand basin to allow for wheelchair access, with a clearance of at least 700mm in height and 800mm in width. Any pipes or fittings under the hand basin should be insulated or otherwise protected to prevent burns or injury.

Fig. 2



Britex Products Featured in Drawing (Left to Right):
Britex SMIR, Britex TW-9108, Britex HBDA, Britex Shelf BTX-10-010

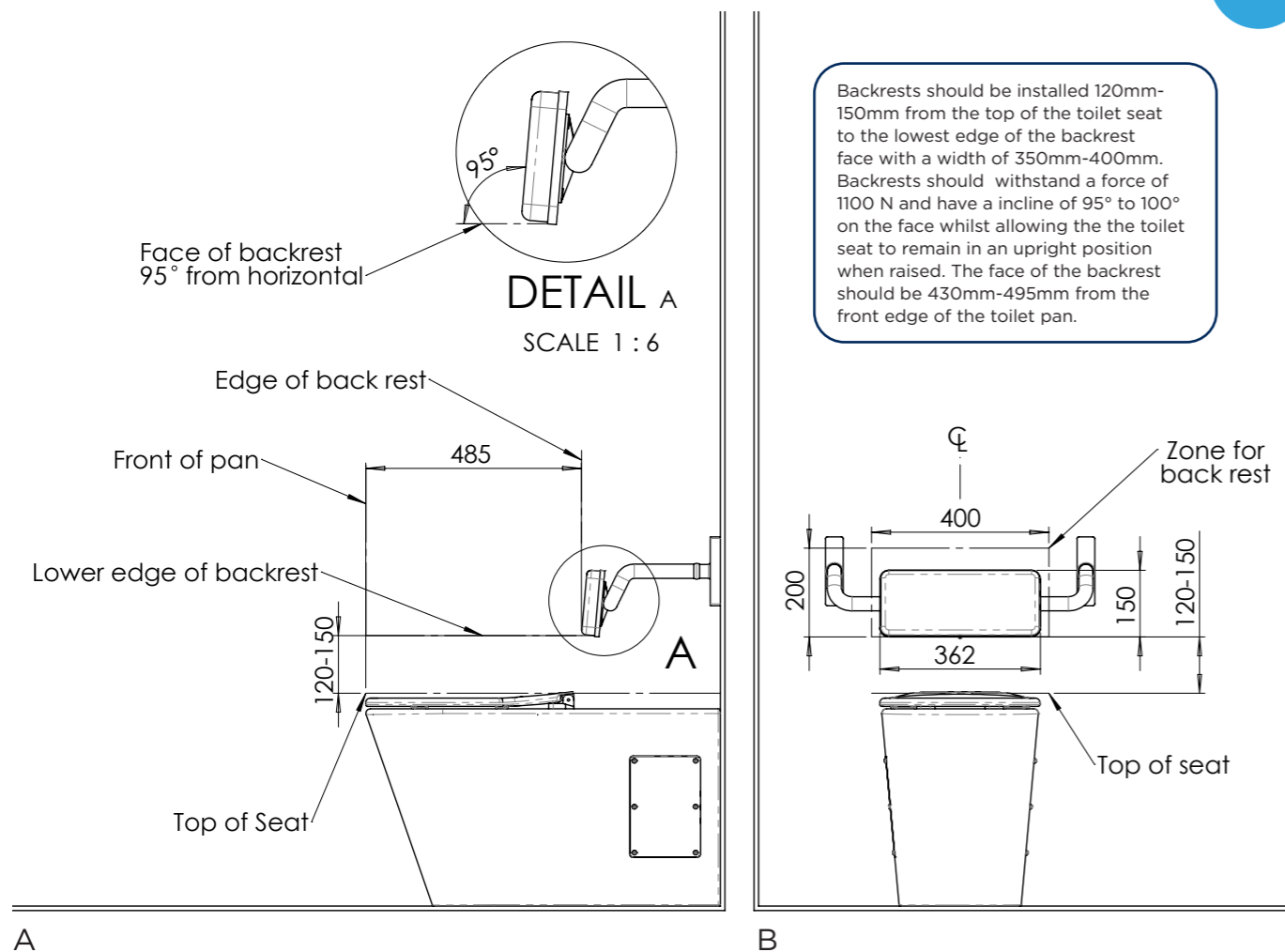
Fig.2 created in reference to 'Figure 44(A) - Standards Australia Limited 2021, AS1428.1: 2021 Design for access and mobility, 6th Edition'

Grab Rails & Backrests

When it comes to selecting a grab rail and backrest for an accessible toilet fit-out, the Vandal Resistant SS Backrest with 40° LHS Grab Rail Set shown below is required for a toilet suite with a **wall mounted cistern** only (such as the BRITEX PTSD) where as a toilet with an **in-wall cistern** requires a separate backrest (such as a BRITEX BTX-BR-D) and wrap around grab rail as shown in Fig.4 B.



Fig. 3

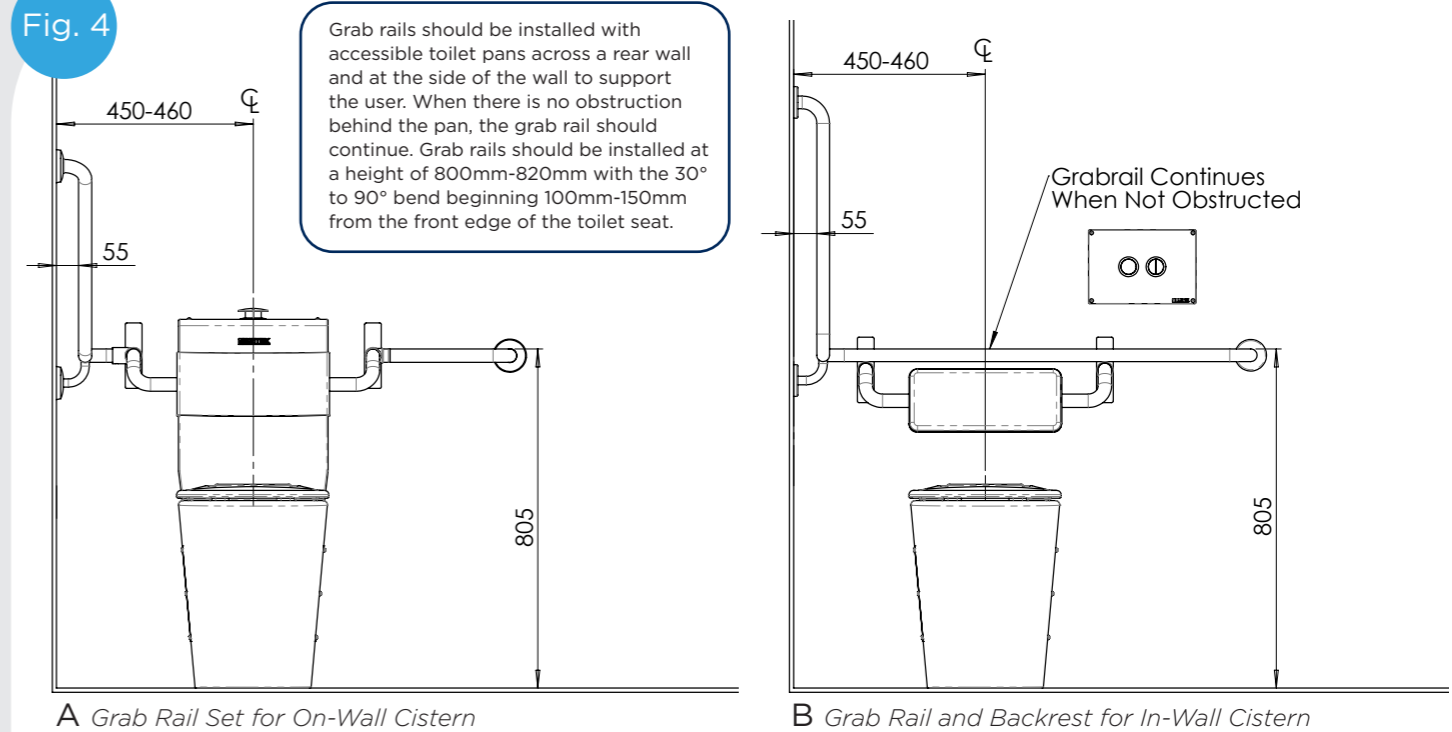


Britex Products Featured in Drawing (Left to Right):
Britex PCD, Britex BTX-BR-D

Fig.3 created in reference to 'Figure 39 - Standards Australia Limited 2021, AS1428.1: 2021 Design for access and mobility, 6th Edition'

Grab Rails

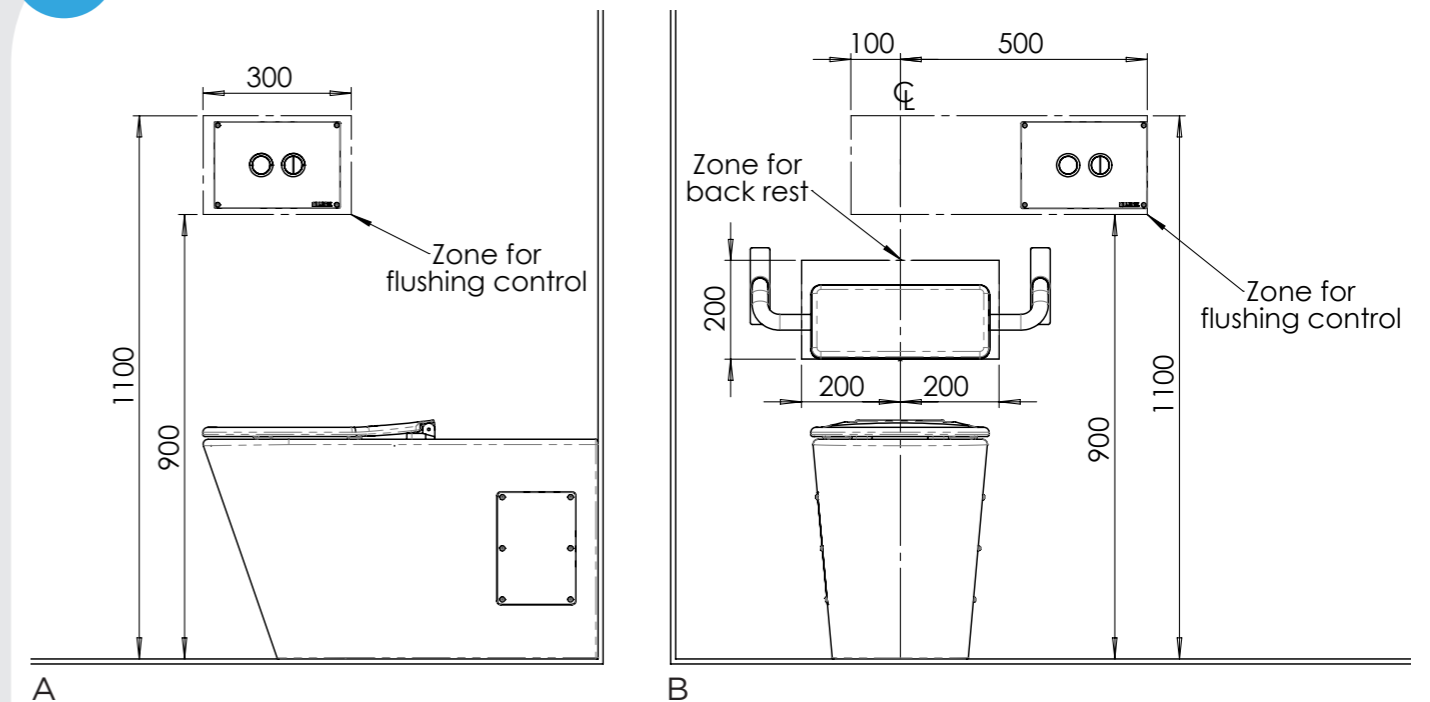
Fig. 4



Britex Products Featured in Drawing (Left to Right):
Britex PTSD, Britex BTX-BRC-R40-VR, Britex PCD, Britex BTR-01-036, Britex BTX-BR-D, Britex FIW-D453
Fig.4 created in reference to 'Figure 42 - Standards Australia Limited 2021, AS1428.1: 2021 Design for access and mobility, 6th Edition'

Flushing

Fig. 5



Britex Products Featured in Drawing (Left to Right):
Britex PCD, Britex BTX-BR-D, Britex FIW-D453

Fig.5 created in reference to 'Figure 40 - Standards Australia Limited 2021, AS1428.1: 2021 Design for access and mobility, 6th Edition'

Washroom Accessories

1. Operable By One Hand

2. Operative Component Installation Zone

Installation zone of the Operative Component must be:

- situated no lower than 900mm from FFL (Finished Floor Level)
- situated no higher than 1100mm from FFL
- situated no closer than 500mm from an internal corner

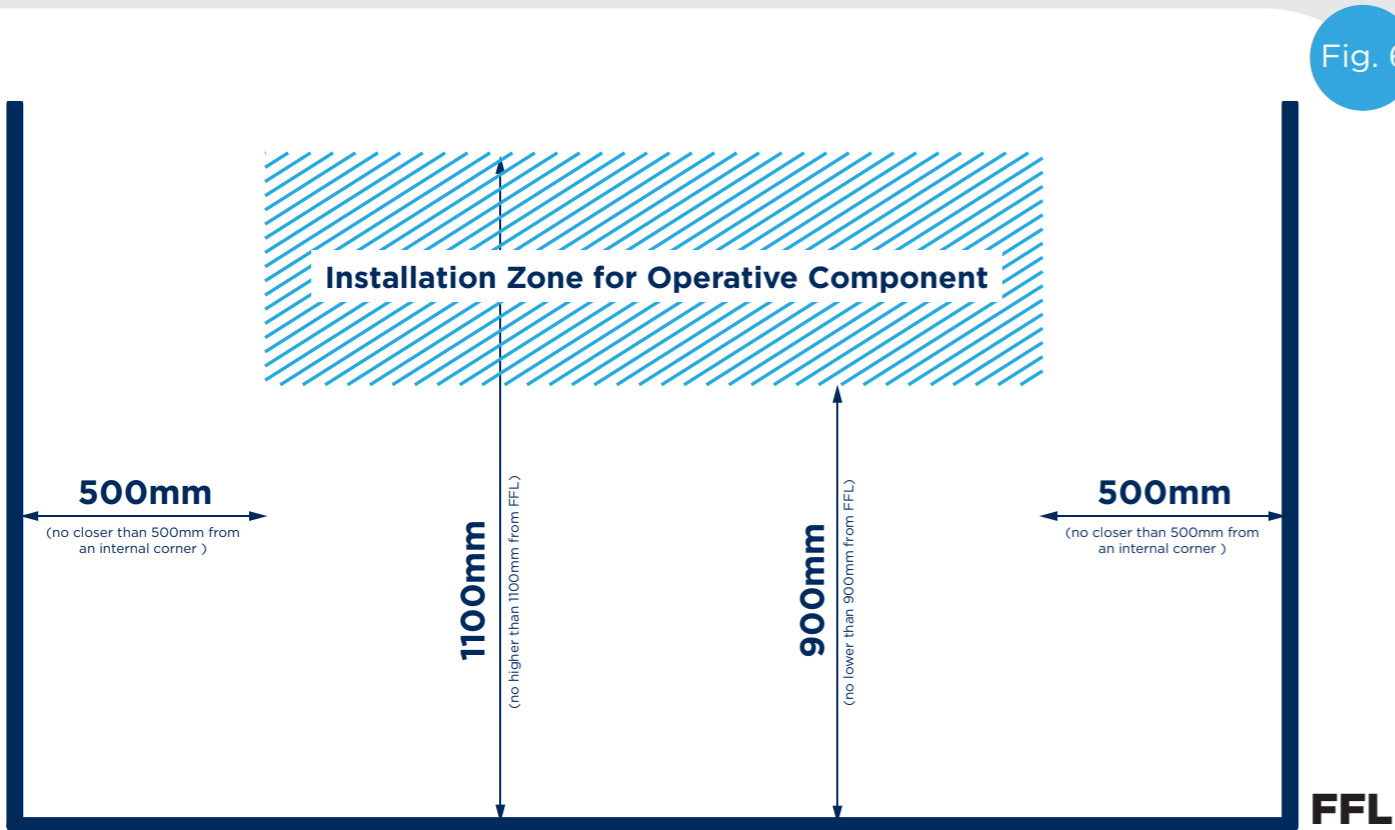
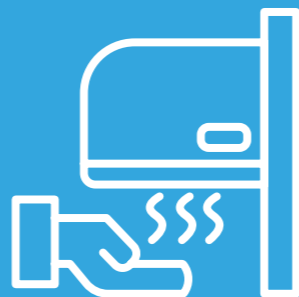


Fig. 6

What is an 'Operative Component'?

The operative component is where the hand is placed to activate or use the unit. For example the outlet of an automatic hand dryer or soap dispenser, the button of a push button hand dryer or soap dispenser, the opening of a paper towel dispenser or waste receptacle.



Soap/Paper Towel Dispenser

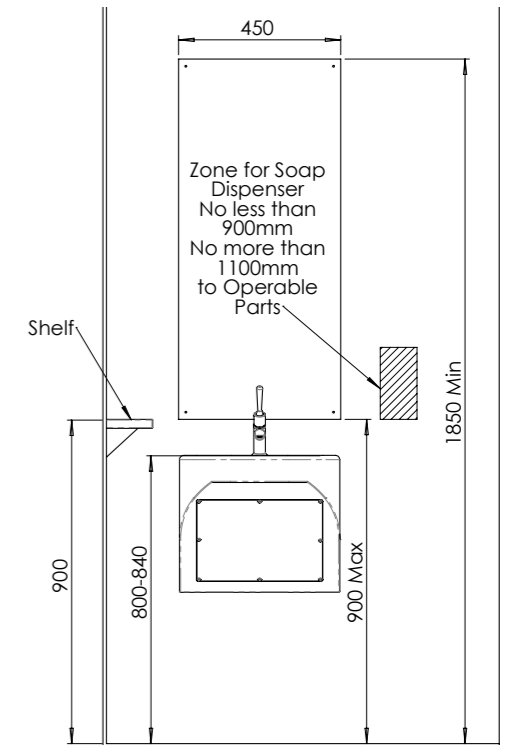
Fig. 7

1. Operable by one hand

2. Operative Component Installation Zone

Installation zone of the Operative Component must be:

- situated no lower than 900mm from FFL (Finished Floor Level)
- situated no higher than 1100mm from FFL
- situated no closer than 500mm from an internal corner



Britex Products Featured in Drawing (Left to Right):
Britex Shelf BTX-10-010, Britex SMIR, Britex HBDA, Britex TW-9108

Fig.7 created in reference to 'Section 12 - 12.4.3 - Standards Australia Limited 2021, AS1428.1: 2021 Design for access and mobility, 6th Edition'

Toilet Roll Holder

Fig. 8

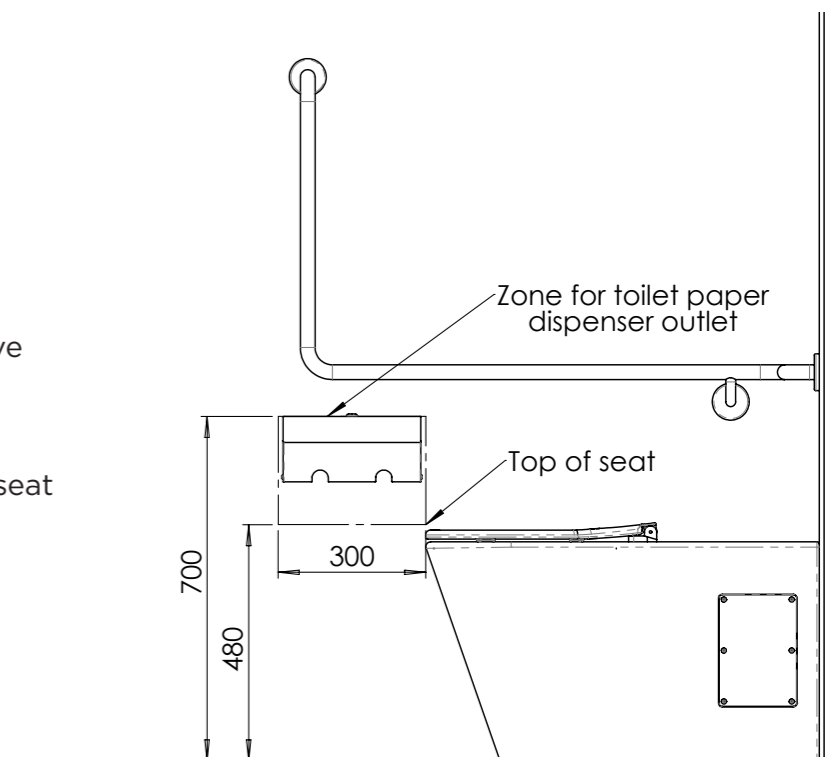
1. Be no longer than 300mm in width

2. Be positioned in the Zone shown below.

Installation zone of the Operative Component must be:

- 700mm max from FFL
- 300mm from edge of toilet seat
- be located at the top of seat

3. Not encroach upon the grab rail clearance space



Britex Products Featured in Drawing (Left to Right):
Britex BTX-06-060, Britex BTX-BR-01-012, Britex PCD

Fig.8 created in reference to 'Figure 41 - Standards Australia Limited 2021, AS1428.1: 2021 Design for access and mobility, 6th Edition'

Braille Signs



Choice of Acrylic Silver or Anodised Aluminium One Piece Continuous Surface Construction.

Vandal Resistant

Moulded from a single piece of Acrylic or Anodised Aluminium eliminates the risk of gns

Easy to Clean & Hygienic

Single piece unit means there are no areas between pieces to harbour bacteria. A continuous surface means it is also extremely easy to clean and maintain.

Made in Australia

Complies with:

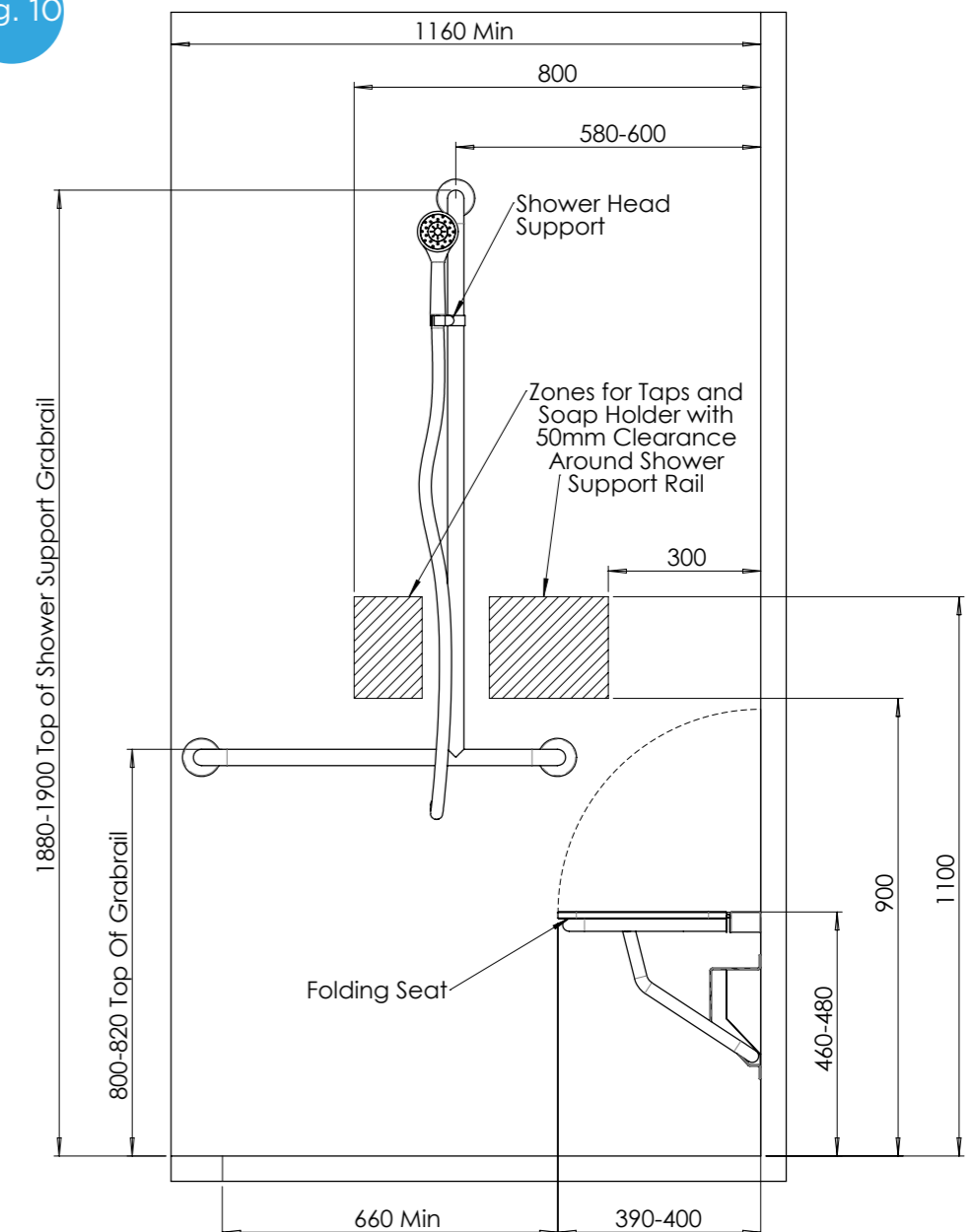
Building Code of Australia (Section D3.6)
Design for Access and Mobility (AS1428.1)

Showers and Seats

Find all the Britex fixtures required for an accessible shower facility application. Including shower heads, grabrails, soap holders and shower seats. When it comes to the installation of showers according to AS1428.1:2021, the standard provides the following guidelines:

- The shower should have a clear floor space of at least 900mm x 1200mm for a transfer shower, or 1480mm x 1480mm for a roll-in shower.
- Grab rails must be installed in the shower area, including a horizontal rail along the rear wall and a vertical rail adjacent to the shower seat.
- The shower seat must be located adjacent to the horizontal grab rail and be capable of supporting a minimum of 110kg.
- The shower controls must be located within reach of the shower seat and grab rails, and should be operable with one hand.
- The shower head should be mounted on a flexible hose and be capable of being lowered to a height of 600mm above the shower seat.

Fig. 10



LH or RH Transfer?

Accessible Braille Signs must be provided with the letters LH or RH to indicate a left hand or right hand side transfer on to the toilet. The figure below demonstrates the requirements for Accessible and Ambulant Toilets.

Fig. 9

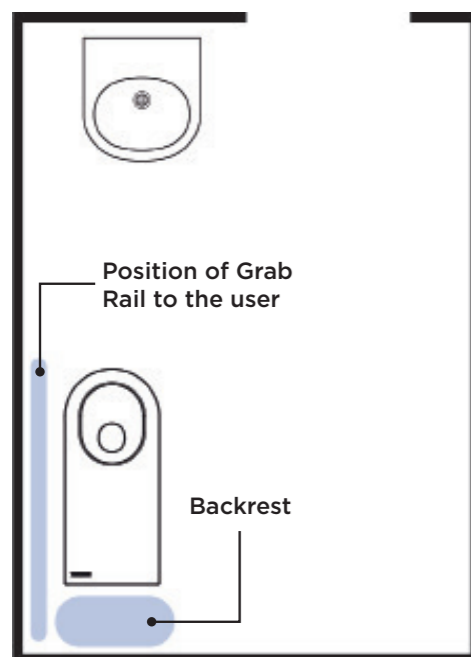


Fig.1: Example of a Left Hand Transfer Unisex Accessible Toilet. Sign requires an LH.

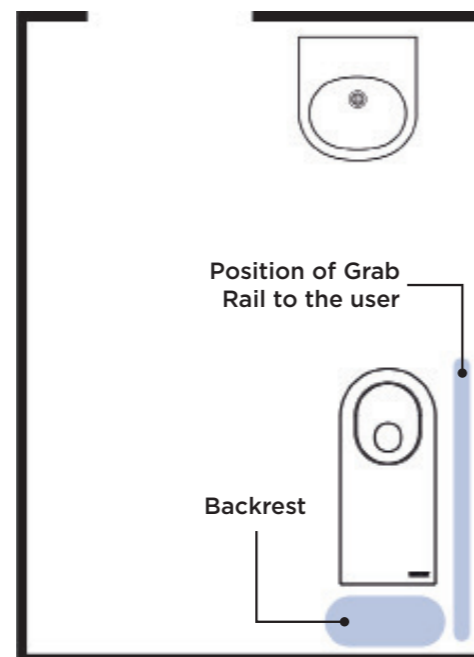


Fig.2: Example of a Right Hand Transfer Unisex Accessible Toilet. Sign requires an RH.

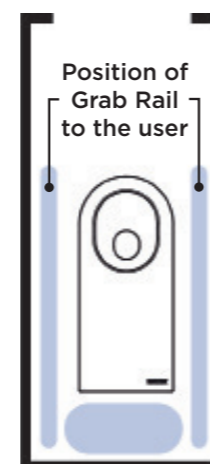


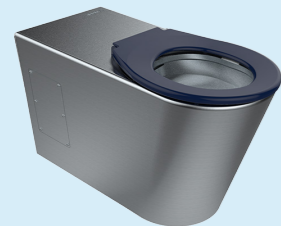
Fig.3: Example of an Ambulant Toilet.

Britex Products Featured in Drawing (Left to Right):
Britex BTR-01-063, Britex BTR-01-062, Britex BTX-11-021

Fig.10 created in reference to 'Figure 48 - Standards Australia Limited 2021, AS1428.1: 2021 Design for access and mobility, 6th Edition'



Get the fit out



PCD
Centurion Accessible Pan
with Navy Seat



BTX-BR-D-VR
Vandal Resistant SS Drop
Down Backrest Only



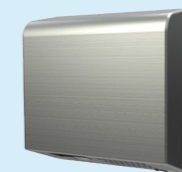
BTR-01-030
S.S. LHS 30° Flush Mount
Wrap Around Grab Rail



BTX-10-010
300mm Stainless
Steel Shelf



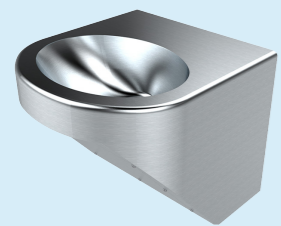
BTX-07-031
SS Channel Frame Mirror
w/o Shelf (Accessible
Compliant)



BTX-01-024
Stainless Steel Slimline
Automatic Hand Dryer



BTX-09-013
Recessed Stainless Steel
Baby Change Tables



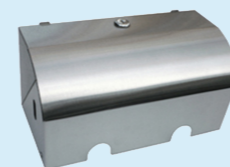
HBDA
Accessible Hand Basin



TW-9108
Timed Flow Wash Safe™
Pillar Lever Tap



FIW-D453
Pneumatic In Wall Cistern
Raised Buttons Standard
Plate 3/4.5L



BTX-06-060
S.S. Contour Double
Roll Toilet Paper
Dispenser



BTX-05-039
Square Liquid Soap
Dispenser - ABS Pump
Button



BTX-02-227
All Gender Accessible
LH Baby Change Acrylic
Silver Braille Sign



Get the fit out



PTSD
Accessible Toilet Suite

+



BTX-BRC-L90-VR
Vandal Resistant SS Backrest
with 90° LHS Grab Rail Set

+



SMIR
Security Stainless Steel
Mirror

+



BTX-01-024
Stainless Steel Slimline
Automatic Hand Dryer

+

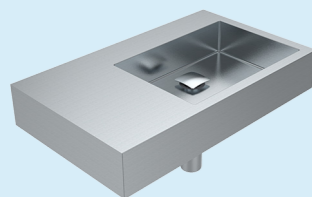


BTX-05-034
Automatic Stainless Steel
Soap Dispenser

+



BTX-09-012
Surface Mounted
Stainless Steel Baby
Change Table



HBBEL-DSL
Accessible Bellagio Basin
with Integrated Shelf

+



TW-9110
Basin Mounted Sensor
Tap

+



FIW-D453
Pneumatic In Wall Cistern
Raised Buttons Standard
Plate 3/4.5L

+



BTX-06-028
S.S. Surface Mount
Double Roll Toilet Paper
Dispenser - No Hood

+

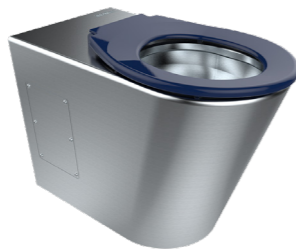


BTX-02-227
All Gender Accessible
LH Baby Change Acrylic
Silver Braille Sign

Toilets



PCD
Centurion Accessible Pan



PCAM
Centurion Ambulant Pan



BSW-ACP
Ceramic Accessible
Toilet Pan



PTSD
Accessible Toilet Suite



PTSAM
Ambulant Toilet Suite

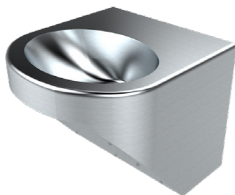


BSW-ACTS
Ceramic Accessible
Toilet Suite



STD
Security Accessible Toilet
Suite Integrated Backrest

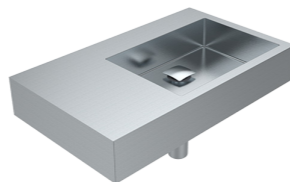
Hand Basins



HBDA
Accessible Hand Basin

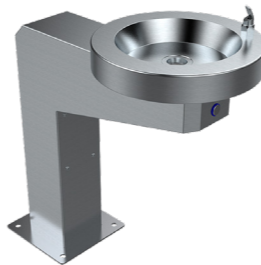


HBBEL-D
Accessible Bellagio Basin



HBBEL-DS
Accessible Bellagio Basin with
Integrated Side Shelf (L/R)

Drinking Fountains



DDIS
Accessible Drinking Fountain



DDR1-D
Dado Round Drinking
Fountain - Accessible



DDS1-D
Dado Square Drinking
Fountain - Accessible



DDR2
Dado Round Double
Drinking Fountain



DDS2
Dado Square Double
Drinking Fountain

Tapware



TW-9108
Timed Flow Wash Safe™ Pillar
Tap



TW-9103
Timed Flow Pillar Tap



TW-MIX-L
Hob Mounted Mixer Tap -
Lever Action

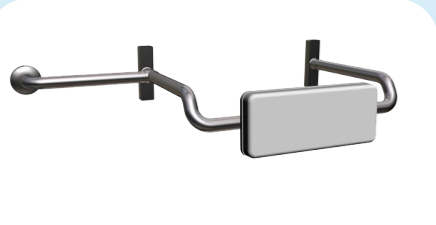


AESB
Basin Mounted Sensor Tap



TW-9110
Basin Mounted Sensor Tap

Backrests and Grab Rails



BTX-BRC-300-L/R
Polyurethane Backrest with Combination LHS/RHS Rear Rail



BTX-BR-D
Polyurethane Drop Down Backrest Only



BTX-BR-S
Polyurethane Straight Arm Backrest Only




BTX-BRC-300-L/R-VR
Vandal Resistant SS Backrest w/ Combination LHS/RHS Rear Rail



BTX-BR-D-VR
Vandal Resistant SS Drop Down Backrest Only



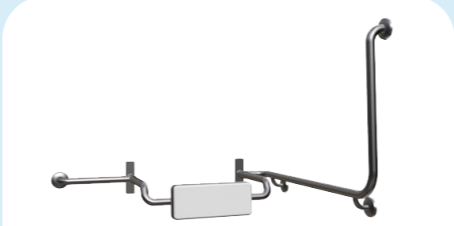
BTX-BR-S-VR
Vandal Resistant SS Straight Arm Backrest Only



BTX-BRC-L/R40
Polyurethane Backrest with 40° LHS/RHS Grab Rail Set



BTX-BRC-L/R40-VR
Vandal Resistant SS Backrest with 40° LHS/RHS Grab Rail Set



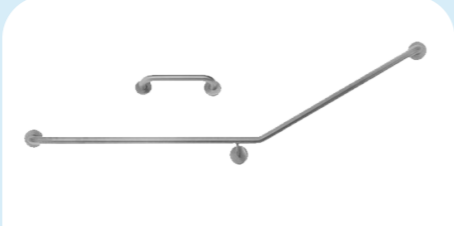
BTX-BRC-L/R90
Polyurethane Backrest with 90° LHS/RHS Grab Rail Set




BTX-BRC-L/R90-VR
Vandal Resistant SS Backrest with 90° LHS/RHS Grab Rail Set



BTR-01-OXX
SS Grab Rail Straight Concealed (300mm-1500mm)



BTR-01-010
S.S. LHS/RHS 30° Flush Mount Side Wall & Cistern Grab Rail Set



BTR-01-032
S.S. RHS/LHS 30° Flush Mount Wrap Around Grab Rail



BTR-01-034
S.S. LHS/RHS 90° Flush Mount Wrap Around Grab Rail



BTR-01-014
S.S. LHS/RHS 90° Flush Mount Side Wall & Cistern Grab Rail Set

Washroom Accessories



BTX-01-024
Stainless Steel Slimline Automatic Hand Dryer



BTX-10-034
S.S. Robe Hook



FIW-D453
Pneumatic In Wall Cistern Raised Buttons Standard Plate



BTX-06-028
S.S. Surface Mount Double Roll Toilet Paper Dispenser



BTX-06-038
Toilet Paper Holder for Two Rolls



BTX-06-050
S.S. Toilet Roll Holder



BTX-06-060
S.S. Contour Double Roll Toilet Paper Dispenser



BTX-05-034
Automatic Stainless Steel Soap Dispenser



BTX-05-041
Horizontal Liquid Soap Dispenser S.S - ABS Pump Button



BTX-07-032
Polished S.S. Mirror 450mm x 1000mm



BTX-10-011
Stainless Steel Shelf



BTRAP
Chrome Plated Bottle Trap



BTX-11-024
Accessible Folding Shower Seat



FFV-E45-PD
Accessible Double Electronic Flush Valve



SVRC
Toilet Seats

