



The 'tradies' and renovators guide to good access

Access for all made easy



This publication was produced as a collaborative project between the six Local Government Authorities (LGAs) in Gippsland, the Regional Communication Service (auspiced by Scope) and the Department of Human Services Community Building Programs of RuralAccess and DeafAccess. This publication is based on the Hobsons Bay City Council publication, 'The 'tradies' guide to good access' – November 2006

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Purpose

This booklet is for renovators, builders and developers. It provides practical information about how access improvements to the built environment can meet the varying access needs of people.

Design that incorporates good access provides an environment that is safer, easier to move around and live in. Everyone benefits from good access – parents of young children in prams, people with temporary injuries, older people and people with disabilities.

Over half of Gippsland's population is aged 55 or older and this figure will continue to increase into the future. Some older people may experience difficulties with mobility, sight and hearing but may not consider that they have a disability. It makes sense to think about the way we build and how we can provide accessible buildings that function now and into the future.

Information in this booklet is a guide with limited examples of how good access can be provided to meet the minimum design requirements for new building work to enable access for people with disabilities.

For the relevant design requirements for accessibility, refer to the Australian Standards as referenced in the back of this booklet or go to **www.standards.org.au** (Australian Standards can be purchased at **www.saiglobal.com**), the Australian Building Code Board at **www.abcb.gov.au** and Disability Access to Premises – Building Standards 2010, at **www.ag.gov.au/premisesstandards**.

In addition, your local planning officer, building surveyor or RuralAccess Worker at your local Council can provide information on planning issues, building law and local access specifications, as required.





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Tactile Ground Surface Indicators (TGSIs)

TGSIs are specific tiles or surfaces with raised texture treatment to assist people who are blind or vision impaired with orientation and way finding. There are two types of TGSIs:

- Warning Indicators – warn of a hazard and the need to stop, consider and investigate before proceeding, such as a road crossing.
- Directional Indicators – guide to a safe route and direction of travel, such as entry to a building.

Refer to Australian Standards (AS) 1428.1-2009, AS 1428.2-1992 and AS/NZ (New Zealand) S 1428.4.1-2009 for more information.

Ramps

Ramps of varying lengths have specific requirements in the Australian Standards relating to gradient and rise.

The key requirements for ramps less than 1900mm, such as step, threshold or kerb ramps are:

Step Ramp

- 1:10 maximum (max) gradient
- slip resistant surface
- max length of 1900mm
- maximum rise of 190mm
- width of 1000mm

Threshold Ramp

- 1:8 max gradient
- slip resistant surface
- max length 280mm
- max 35mm rise at door
- width of door frame to door frame without obstruction

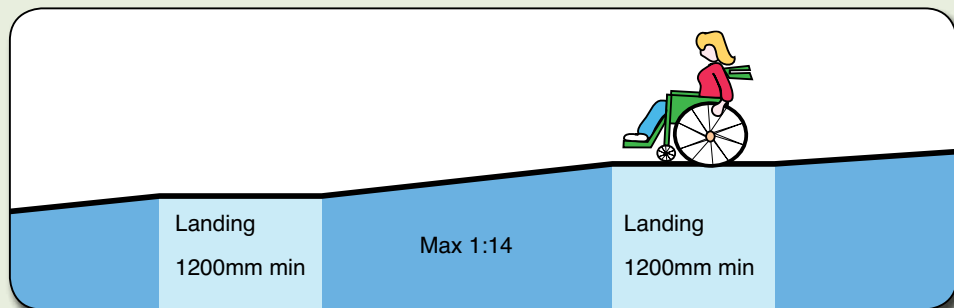
Kerb Ramp

- 1:8 max gradient
- slip resistant surface
- max length 1520mm
- max height 190mm
- max transition of 5mm
- width 1000mm
- TGSIs installed at the top and bottom
- level landing at the top and bottom
- in line with the path of travel

The key requirements for ramps exceeding 1900mm in length are:

- 1:14 max gradient
- slip resistant surface
- appropriate handrails on both sides (refer to Handrails) page 8
- 1000mm minimum (min) unobstructed width between the handrails
- 2000mm min overhead clearance
- TGSIs installed at the top and bottom
- over 9m long requires level landings of 1200mm min in length every 9m

To calculate 1:14, multiply the rise in meters (eg. 0.300m) by 14. In this case it would be: $0.300 \times 14 = \text{ramp } 4.200\text{m in length.}$



Ramp (Based upon Section 10.3 – AS 1428.1)

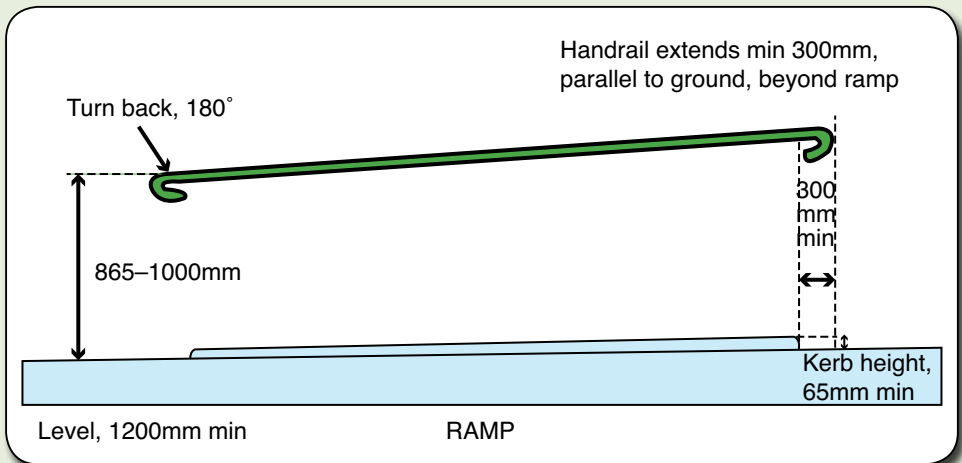
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Handrails

The key requirements for handrails are:

- fitted on both sides of ramps and stairs along the length of the ramp or stairs
- must extend 300mm min past each end of the ramp or at least one tread width plus 300mm min past the edge of the bottom and top steps
- return to a side post, wall or downwards allowing a 50mm min clearance between the handrail and a wall
- 600mm min clearance above the rail
- 2000mm clearance overhead

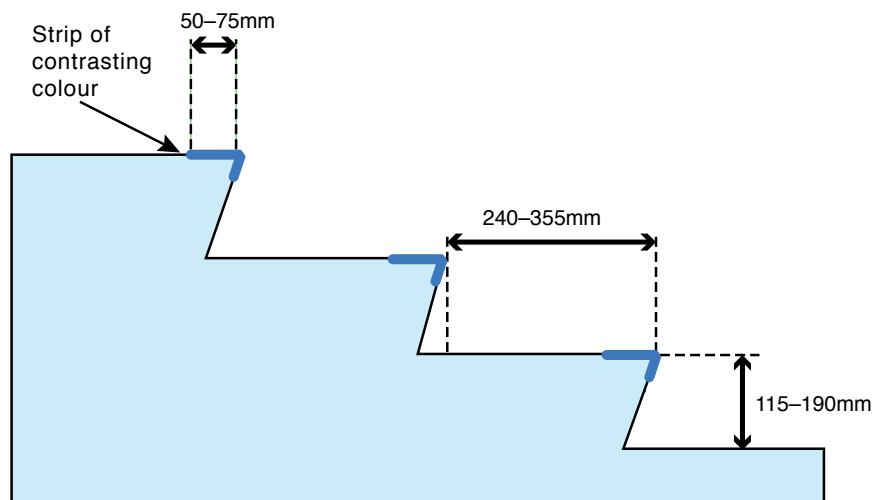


Walking ramps and landings (*Based upon Section 10, Figure 1 – AS 1428.1*)
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Steps

The key requirements for stairs include:

- appropriate handrails on both sides (refer to Handrails) page 8
- 1000mm min unobstructed width between the handrails
- contrasting nosing strip on each step
- slip resistant surface
- closed and opaque risers
- 2000mm min overhead clearance
- TGSIs installed at the top and bottom



Stairways (Based upon Section 11 Figure 27(A & B), AS 1428.1)

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Off-street Parking

An accessible parking bay should be located as close as possible to the main entrance, with a continuous path of travel from the parking bay to the entry.

A parking bay of appropriate dimensions is required to provide access for both the driver and passenger to load and unload mobility aids including walking frames, wheelchairs and scooters.

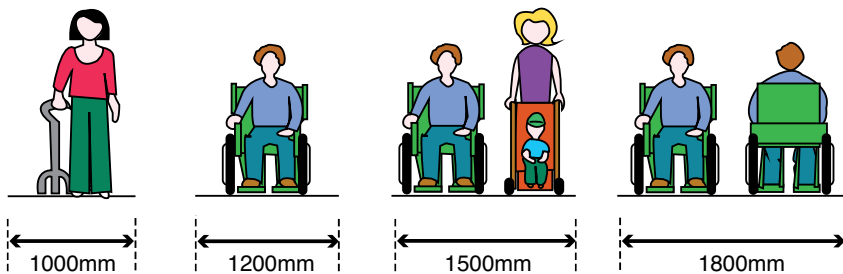
The key requirements for parking include:

- level, firm ground surface
- appropriate signage and line marking
- kerb ramps
- lighting
- overhead clearance of 2500mm min within bay
- TGSIs, as required

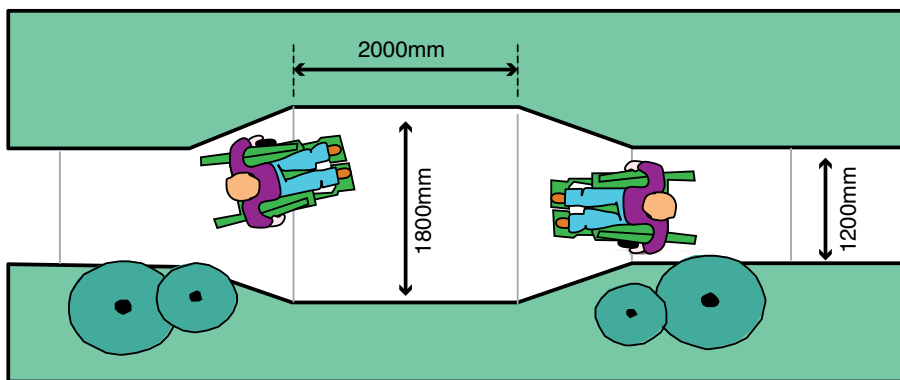
Pathways

The key requirements for pathways are:

- continuous accessible path of travel from car park or public transport stop
- 1000mm min width and 2000mm min overhead clearance
- level and slip resistant surface
- TGSIs installed as required for hazards and changes in direction
- objects along pathway must be setback 500mm such as seats and bins



Pathway Width (Based upon Section 6, AS 1428.2)

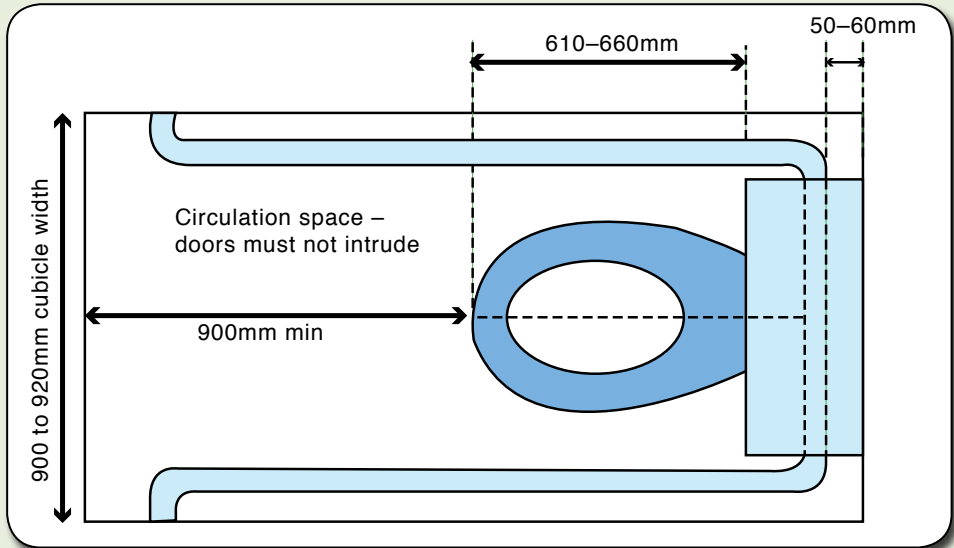


Pathway Width (Based upon Section 6, Figure 3, AS 1428.2)

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Toilets - Ambulant



Toilet for people with ambulant disabilities

(Based upon Section 16, Figure 53(a-d) AS 1428.1)

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For a toilet for people with ambulant disabilities (people that have difficulty walking) allow a cubicle width of 900mm and a door opening width of 700mm minimum.

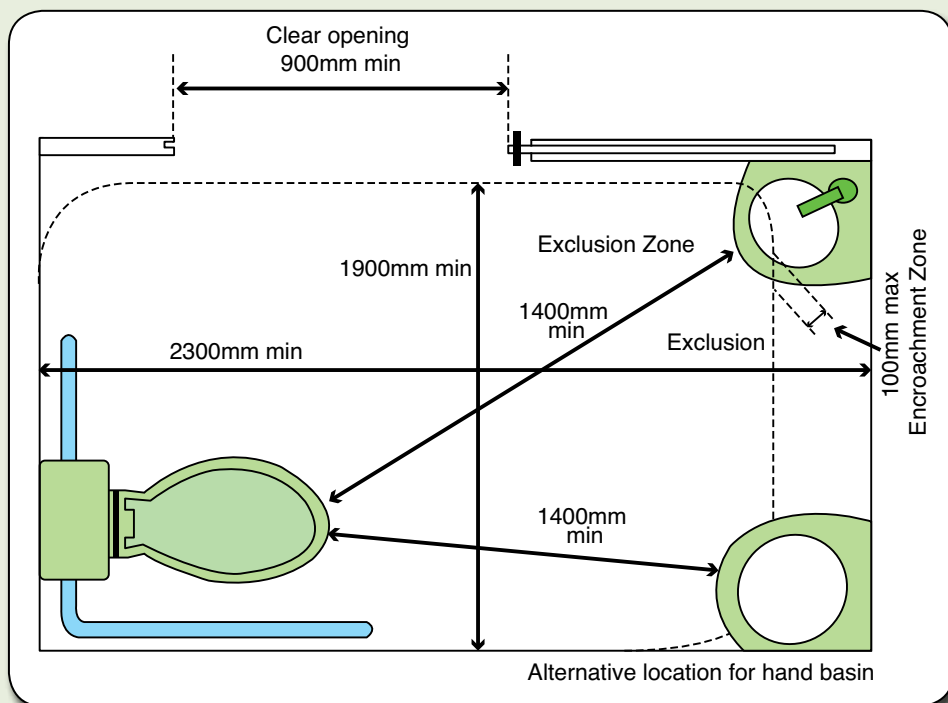
Refer to Figure 9(f), Section 8 of the AS 1428.1-2009, for sanitary compartment signage for people with ambulant disabilities.

Toilets - Accessible

The key requirements for accessible toilets that meet the access needs of people with disabilities are:

- unisex facility
- accessible toilet sign with the international symbol of access (white symbol on blue background)
- location of fittings to ensure a person can move around and easily use the toilet and hand basin

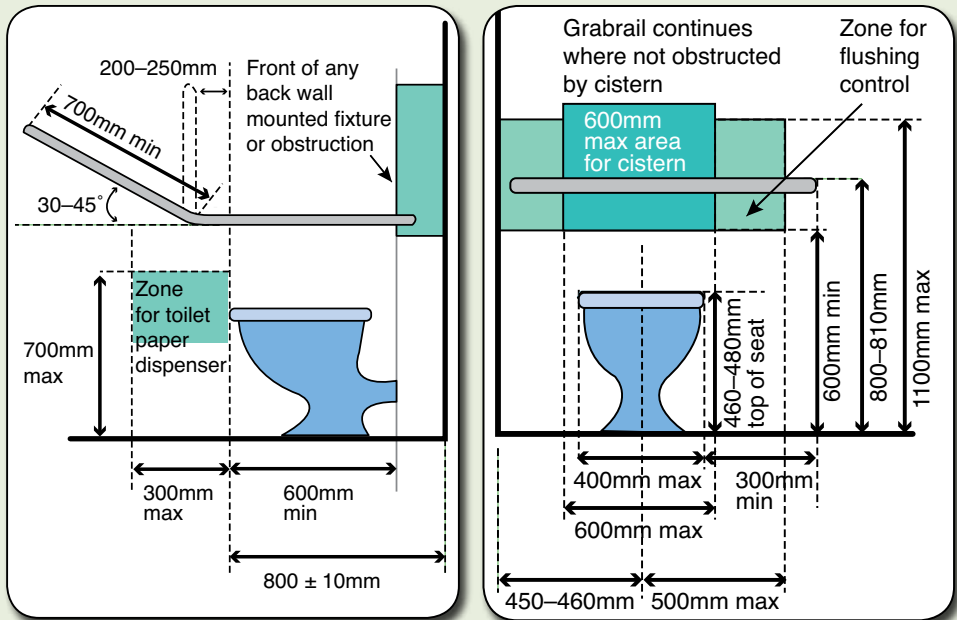
- 850mm min wide clear door opening
- D lever style handle on door
- grabrail at the back and side
- for toilets installed before 1 May 2011, circulation space of 1600mm x 2000mm to a height of 900mm
- for toilets installed from 1 May 2011, circulation space of 1900mm x 2300mm to a height of 2000mm
- toilet seat requires a minimum 30% contrast with the background
- flushing control proud of the wall surface



Sample plan of accessible toilet (Based upon Section 15, Figure 43, AS 1428.1)
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Toilets

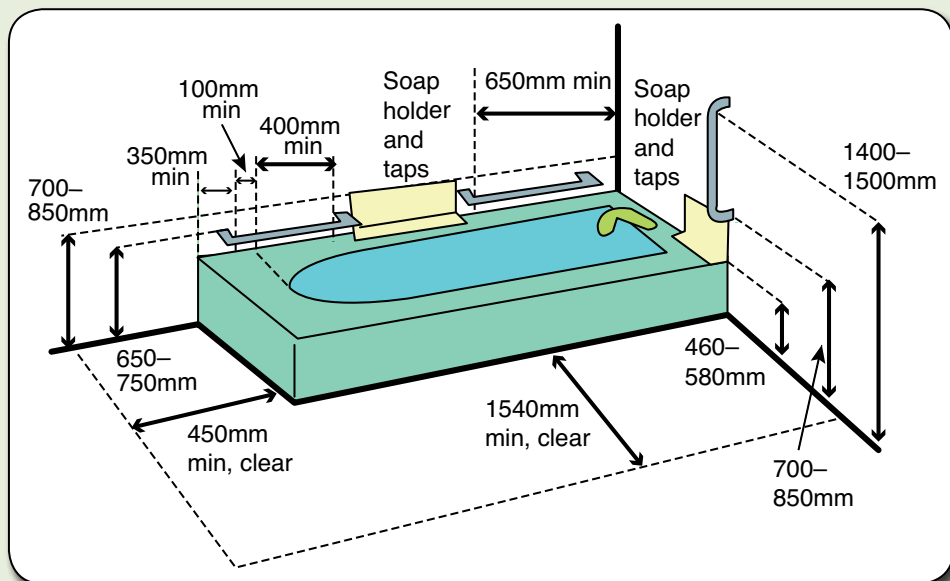


Accessible toilet – elevations (Based upon Section 15, figure 38-42 AS 1428.1)
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In your home consider:

- D lever style handles on doors
- location of grabrails – include extra noggins for easy installation of future grabrails, as required
- location of toilet roll holders and hand basin for easy access
- sufficient floor space to move around easily
- incorporating a toilet on the ground (or entry) level of your home to provide easier access for children, older people and people with mobility difficulties, living in or visiting your home

Bath



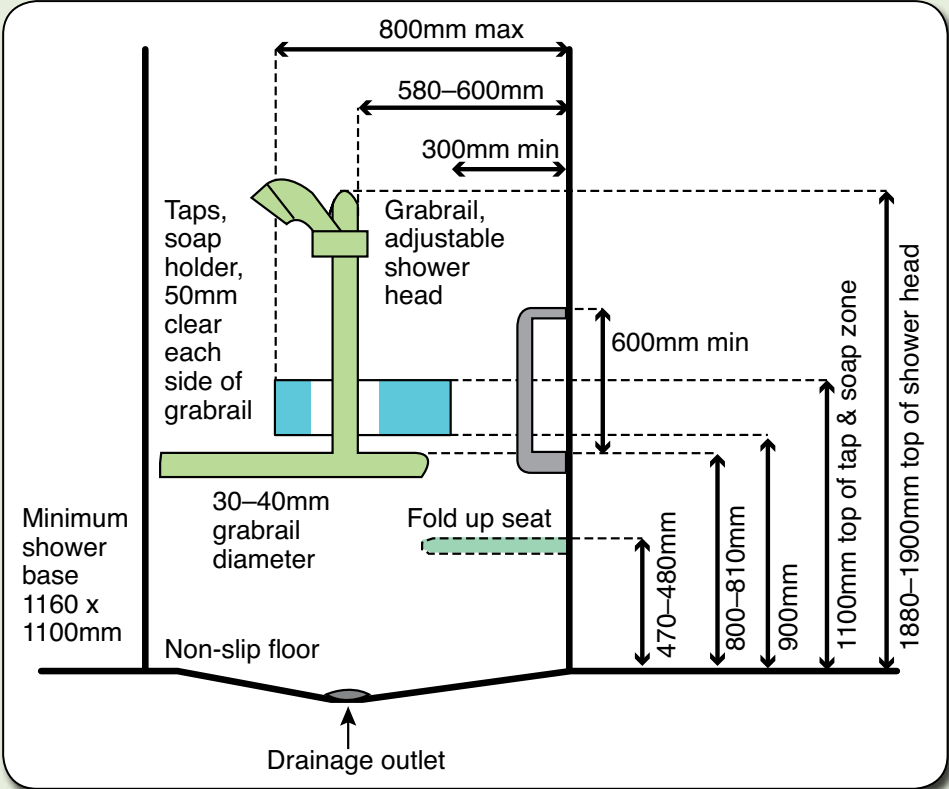
Sample bath fittings (Based upon Section 15, figure 17, AS 1428.2)
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If you have a bath in your household it is important to consider future needs such as:

- installation of grabrails, if required in the future
- slip resistant bottom of bath
- sufficient space to move around easily
- lever or capstan operated taps that are in reach of a single hand, either left or right



Shower



Sample shower recess fittings – elevation
(Based upon Section 15, figure 48, AS 1428.1)
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Shower

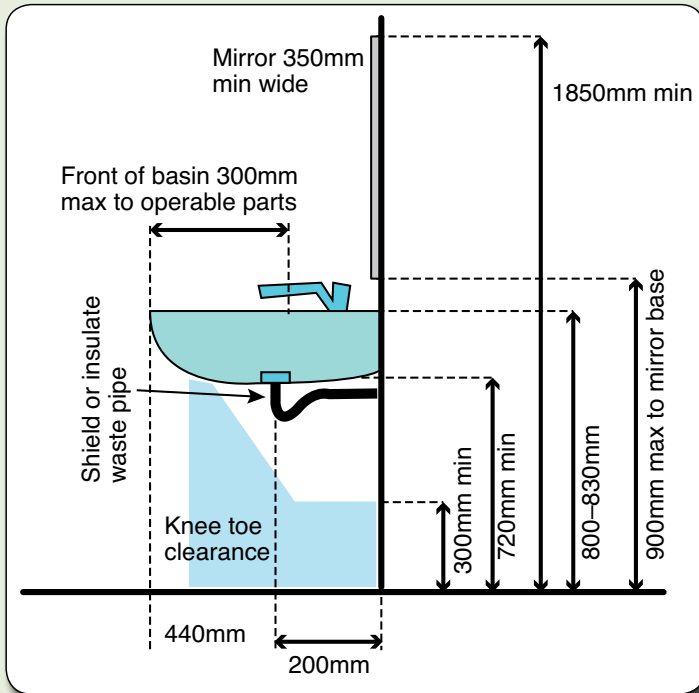
Step free, hobless shower recesses can be installed to help a person stay at home as long as possible. It reduces the risk of slips and falls as well as making access easier and safer for everyone at home.

The key requirements in showers are:

- 850mm min wide clear opening doorway and shower door
- level/step free, slip resistant floor area
- 900mm min high clear circulation space
- horizontal grabrails installed at a height of 800mm–810mm on the wall of the shower
- vertical grabrail installed at a height of 1000mm–1100mm (from the floor to the bottom of the grabrail) and 1880mm–1900mm (from the floor to the top of grabrail) with a hand held adjustable shower head fitted
- foldable, self-draining slip resistant shower seat
- two clothes hanging devices at a height of 1200mm–1350mm
- shower cubicle/circulation space of 1600mm x 2350mm for a two walled cubicle, or 1600mm x 2500mm for a three walled cubicle



Basin



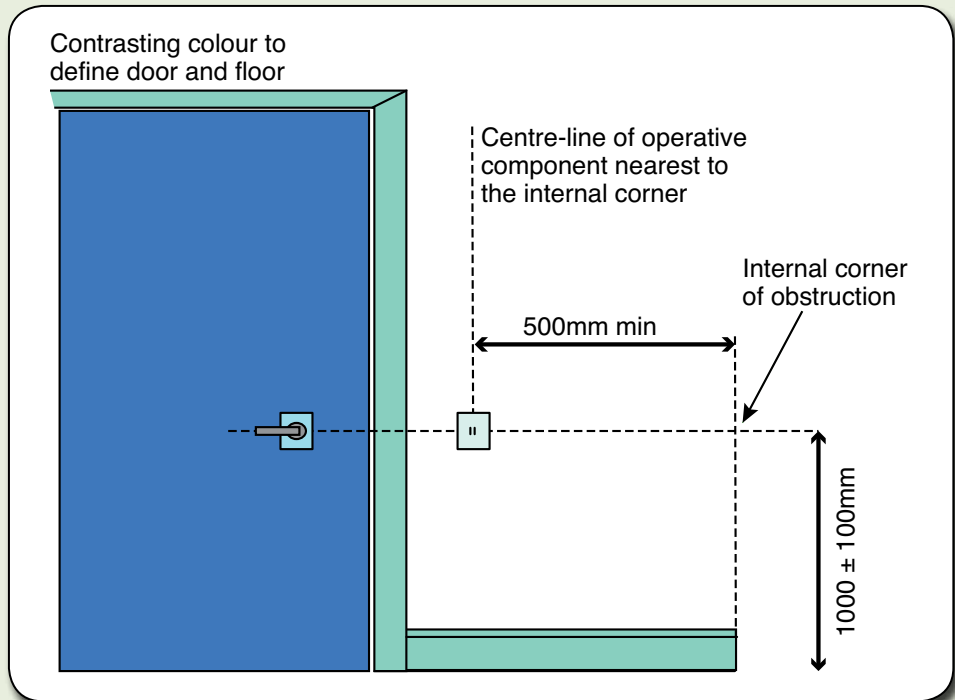
Semi-recessed washbasin installation – other than sole occupancy unit
(Based upon section 15, figure 44, AS 1428.1)

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Additional key requirements for the bathroom are:

- shelf adjacent to washbasin at a height of 800mm-830mm for vanity tops or 900mm-1000mm for a separate fixture
- soap dispenser outlet height of 900mm-1100mm
- mirror adjacent to or above basin at 350mm wide located to a height of not more than 900mm and to a height of not less than 1850mm
- lever or capstan operated taps that are in easy reach of a single hand, either left or right

Handles and Switches



Heights for switches and door handles

(Based upon Section 14, figure 37, AS 1428.1)

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Handles and Switches

The key requirements for handles and switches are:

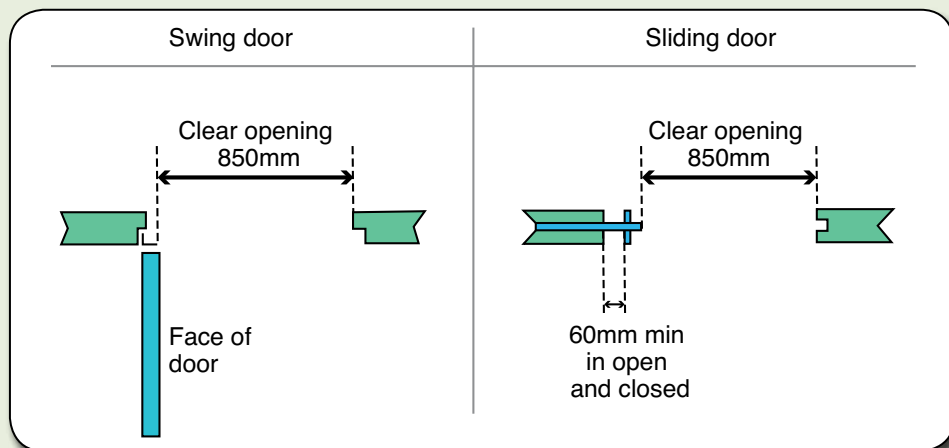
- for door controls that:
 - » need to be grasped or turned, such as handles or locks at a height of 900mm–1100mm
 - » only need to be touched at a height of 900mm–1250mm
 - » only need to be pushed at a height of 900mm–1200mm
- keypad height of 900mm–1200mm
- call buttons, such as door bells at entrances at a height of 900mm–1100mm
- switches and controls at a height of 900mm–1100mm
- general purpose (power point) outlets located at a height of 600mm – 1100mm and not less than 500mm from internal corners

Architraves and skirting boards should be painted in a contrasting colour to assist people with vision impairment.

Door handles and related hardware should be able to be locked and unlocked with one hand.

The space between the handle and the door face should be min 35mm and max 45mm.

Doors and Doorways



Clear opening of doorways (*Based upon Section 13, figure 30, AS 1428.1*)
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The key requirements for doors and doorways are:

- door opening width of 850mm min and a doorway overhead clearance of 1980mm
- a contrasting solid strip for glass doors across the glass door/sidelight 75mm wide at 900mm-1000mm from the bottom edge

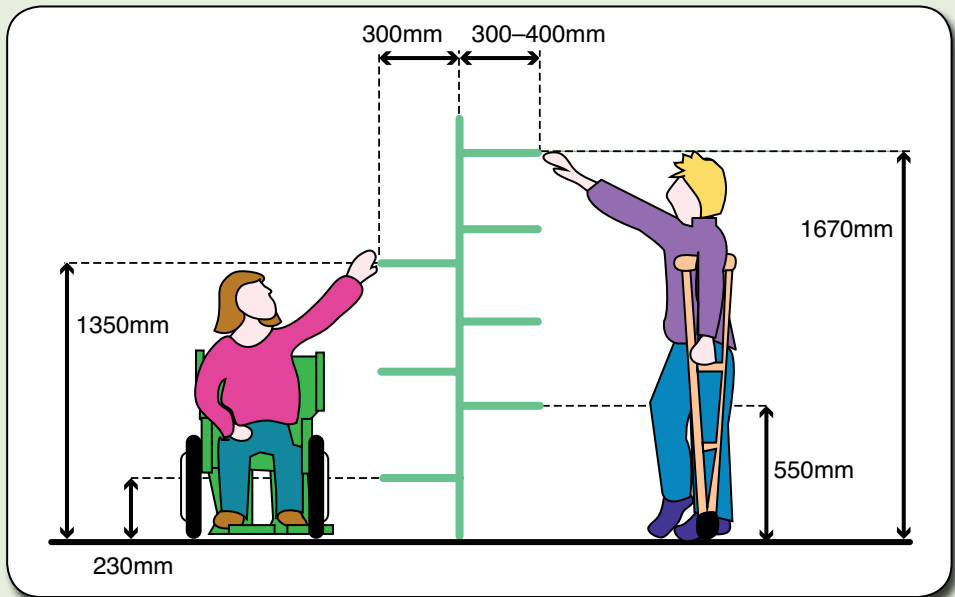
The area needed to move around comfortably in a house (circulation space) varies at doorways depending on:

- type of doorway installed
- which way the door swings
- whether it is hinged or latched
- if it is a sliding door, which way it slides

Refer to AS 1428.1-2009, figures 30-33 www.standards.org.au for more details.



Shelves



Some examples of side reach limits and reach of ambulant people with disabilities
(Based upon Section 22, figures 21 and 22, AS 1428.2)

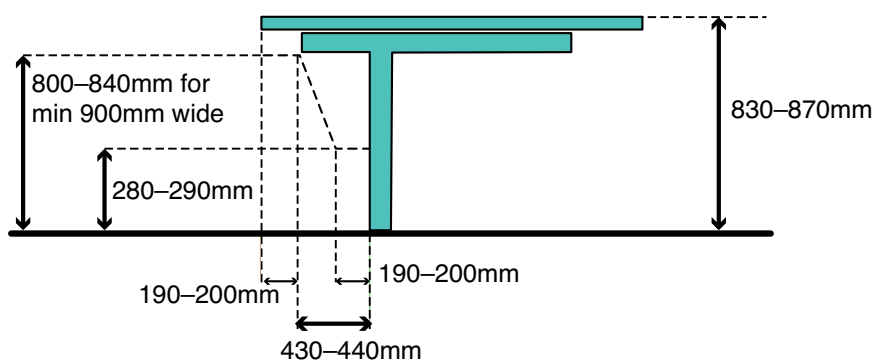
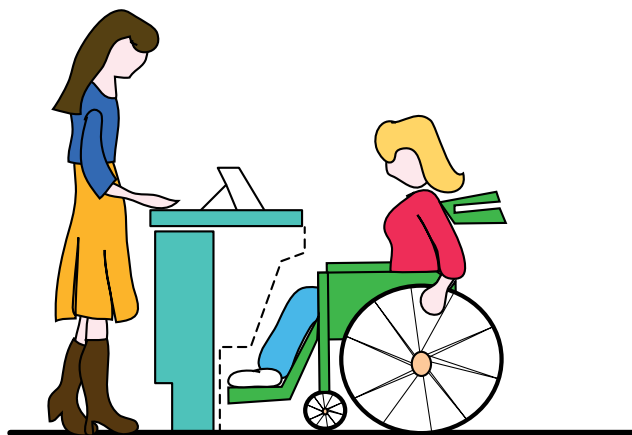
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Shelves, counters, tables and benches should be accessible for everyone.

Heights and dimensions will vary depending on where the approach is from, such as the front, side or whether you will need to reach over an obstruction like a desk or a bench.

Refer to Section 22, AS 1428.2-1992, for more information.

Tables, Counters and Benches



Knee and foot clearance beneath a table, bench or counter

(Based upon section 24, figure. 25, AS 1428.2)

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Seating

Seats with backs and armrests help all people, particularly people with physical disabilities to stand up and sit down.

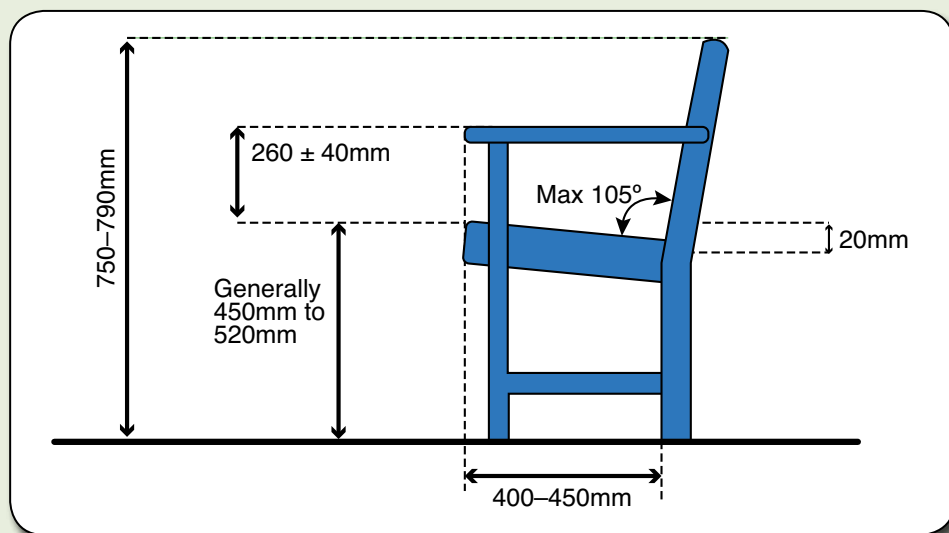
The dimensions for the park bench seating below, can be applied to your garden seating.

Consider both indoors and outdoors for easy, enjoyable access for everyone.

Seating height for adults is 450mm–520mm.

For children and adolescents, seating height requirements vary depending upon the age and disability type.

Refer to AS 1428.3-1992 for more information



Park bench seating (*Based upon section 27, figure 32 AS 1428.2*)

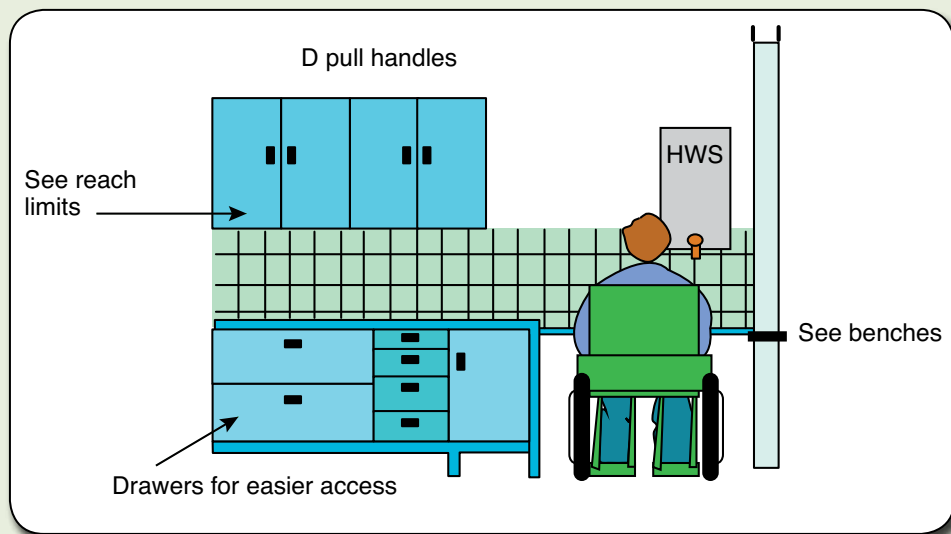
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Kitchens

Much of the information in this section can be used to create an accessible kitchen or kitchenette.

Consider the following:

- reachable cupboards and bench tops at a lower height for people using a wheelchair or standing
- power point placement
- step-free, slip-resistant flooring
- design for easy access between fixed benches and to allow for easy adaptation, if required



Kitchens and laundries *(Based upon Appendix A, figures A1-A5, AS 1428.2)*
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Kitchens

Key requirements for kitchens are:

- Food counter height of 830mm–870mm
- Food counter leg clearance (underneath) of 800mm–840mm high for a min of 900mm wide
- Sink height of 770mm–800mm
- Sink leg clearance underneath of 640mm-650mm high

Legislation and Standards

The Australian Standards are regularly revised and updated – always check that you are using the most current version of the relevant Standard.

Australian Standard (AS) 1428 Design for access and mobility
www.standards.org.au

Current as at December 2013:

AS 1428.1–2001 & 2009 Design for access and mobility
Part 1: General requirements for access–New building work

AS 1428.2–1992 Design for access and mobility
Part 2: Enhanced and additional requirements–Buildings and facilities

AS 1428.3:1992 Design for access and mobility
Part 3: Requirements for children and adolescents with physical disabilities

AS/NZS 1428.4.1:2009 Design for access and mobility
Part 4.1: Means to assist the orientation of people with vision impairment–Tactile ground service indicators

AS 1428.5–2010 Design for access and mobility
Part 5: Communication for people who are deaf or hearing impaired

A range of other Australian Standards should be referenced to ensure access for people with disabilities, for example parking facilities, interior and street lighting, slip resistance, fire detection, glass in buildings.

Australian Standards can be purchased online at **www.saiglobal.com**

Building Code of Australia (BCA) www.abcb.gov.au

Disability Access to Premises – Building Standards 2010
www.ag.gov.au/premisesstandards

Disability Discrimination Act 1992 (DDA)
www.humanrights.gov.au/disability-rights-homepage



Where to get more information

Your local planning officer, building surveyor or RuralAccess Worker at your local Council can provide information on planning issues, building law and local access requirements, as required.



Phone: **1300 BCOAST (226 278)**
National Relay Service: **13 36 77**
Email: ruralaccess@basscoast.vic.gov.au



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