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**UNIVERSAL  
DESIGN  
PRINCIPLES**  
FOR  
VETERANS  
CAPITAL  
WORKS  
PROJECTS





Universal Design is about ensuring venues are **accessible, appealing and usable** to everyone.

It will **maximise participation by all users** irrespective of age, size, physical or cognitive abilities, cultural background or other factors.

Incorporating good design ideas and focusing on the user experience, universal design creates more **welcoming and functional** venues for the **widest possible range of users**.



## WHY INCORPORATE UNIVERSAL DESIGN?

Incorporating universal design principles will:

- › Make venues more functional, user friendly and provide equal access for all, ensuring users dignity, rights and privacy.
- › Be inclusive and accessible to people of all abilities including those living with physical, sensory, mental health or other conditions.
- › Provide safer and easier to navigate facilities.
- › Ensure compliance with standards and legislation.
- › Enable a broader cross section of the facility resulting in improved usage and financial viability.

## HOW TO INCORPORATE UNIVERSAL DESIGN PRINCIPLES?

Ways to incorporate universal design principles include:

- › Identify who will use the facility and how it will be used (both current and future users).
- › Get an understanding of the physical and emotional needs of users. This can be done by discussions, workshops, observation, surveys etc.
- › Involve as many users as possible in the planning of the project, including users and potential users with reduced capabilities.
- › Seek advice from qualified people who understand the standards, accessibility laws and universal design principles.
- › Before proceeding, test the proposed developments with a range of users, including those with different abilities.

## UNIVERSAL AND ACCESSIBLE DESIGN

Universal design focusses on **user-centred design** from the **earliest stages of a project**, rather than just at the end stage.

The aim is to integrate features to ensure **everybody is afforded the same opportunities** to participate in all aspects of the facilities, programs and services in an equitable and dignified manner. It does not stigmatise or separates users.

It aims to make the **venue more functional**. For example:

- › the same level of access is provided to people using mobility aids, prams, wheelchairs as everyone else.
- › the venue design accommodates users who may have mental health or cognitive issues.

- › the inclusion of ramps instead of steps support people using mobility aides (e.g. wheelchairs and prams), and facilitates easier and safer deliveries and removals – making it a more functional and safer venue.

A range of minimum legal requirements exist in respect to access to venues include the Disability (Access to Premises – Buildings) Standards 2010, Building Code of Australia, Disability Discrimination Act 1992 (DDA), Planning regulations and various Australian Standards.

Regulatory requirements generally cater to the minimum requirements and will in some cases mean the venue remains inaccessible to many people.

Universal design is about providing access to as many people as possible and delivering functional and safe venues, rather than just complying with minimum standards.

For expert assistance & accredited access consultants. See [www.access.asn.au/accessibility-products-and-services/find-an-access-consultant](http://www.access.asn.au/accessibility-products-and-services/find-an-access-consultant)

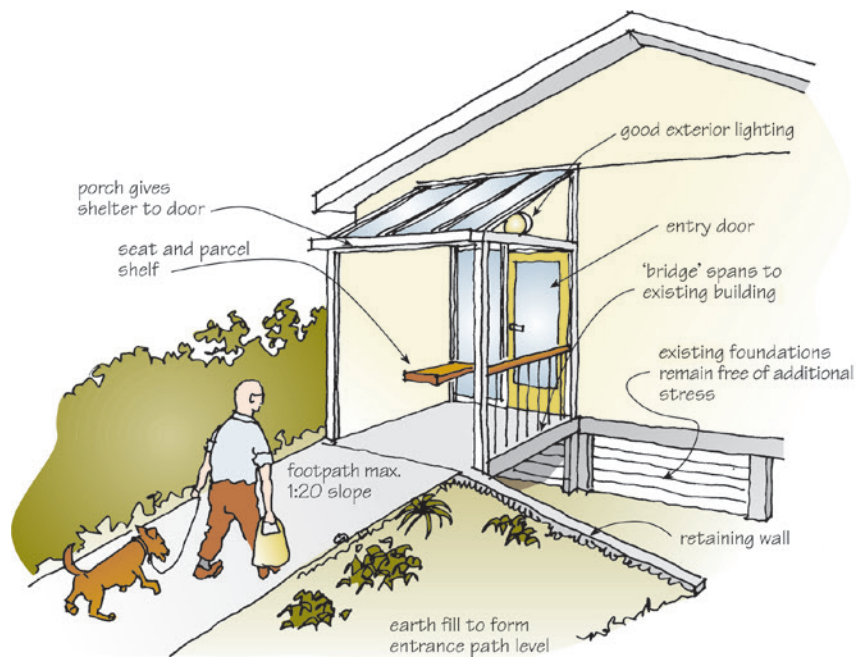
# Principles and Practical Examples of Universal Design

Below are universal design principles and examples of how they can be implemented into veteran facilities.

## 1 Equitable use

The building is usable by everyone.

It does not disadvantage, stigmatize or privilege any group of users.



### Practical Examples for Veteran's Venues

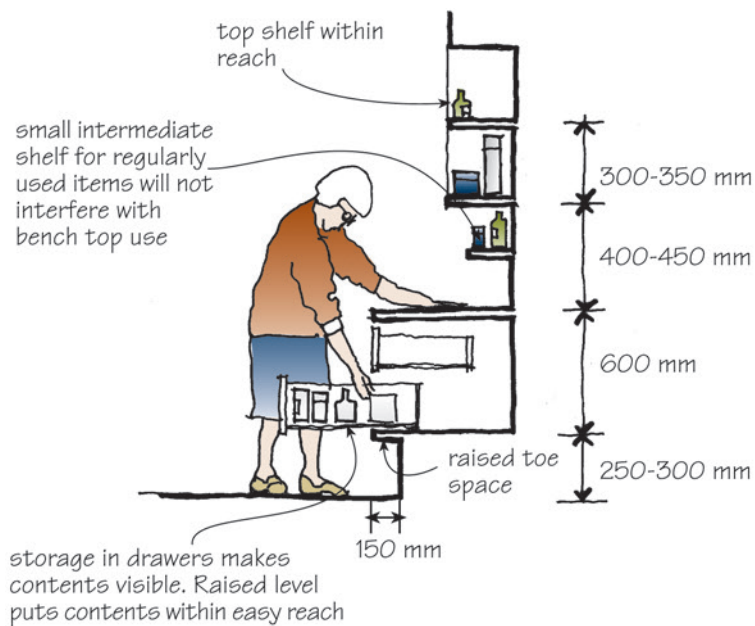
- › Access lifts, ramps and wide pathways are readily accessible to all users.
- › Access ramps and landings have the appropriate gradient, width, surface and handrails.<sup>1</sup>
- › Tracking hoist system or mobile hoist.
- › Wide entry and exit points.
- › Changing places toilets<sup>2</sup>, washbasins, soap dispensers, hand dryers and layout.

<sup>1</sup> **Ramps:** <http://sport.vic.gov.au/publications-and-resources/design-everyone-guide/planning-universal-design>  
(portable ramp case study)

<sup>2</sup> **Accessible toilets:** <https://changingplaces.org.au/>  
<http://sport.vic.gov.au/publications-and-resources/design-everyone-guide/planning-universal-design>  
(Toilets case study)

### Outcomes

- 1a Provides the same means of use for all users: identical whenever possible, equivalent when not.
- 1b Avoids segregating or stigmatizing any users.
- 1c Provides privacy, security and safety equally available to all users.
- 1d Makes the design appealing to all users.



- › Door widths, opening and closing mechanisms should be easy for all users.
- › Handrails in required locations.

### Outcomes

- 3a Eliminate unnecessary complexity.
- 3b Be consistent with user expectations and intuition.
- 3c Accommodate a wide range of literacy and language skills.
- 3d Arrange information consistent with its importance.
- 3e Provide effective prompting and feedback during and after task completion.

## 2 Flexibility in use

The design accommodates a wide range of individual preferences and abilities.

### Practical Examples for Veteran's Venues

- › Hand rails available for both left- and right-handed users.<sup>3</sup>
- › Door handles and switches are easy to use and at appropriate heights.
- › Access for all users to appropriate toilets including people with mobility challenges.

### Outcomes

- 2a Provide choice in methods of use.
- 2b Accommodate right- or left handed access and use.
- 2c Facilitate the user's accuracy and precision.
- 2d Provide adaptability to the user's pace.

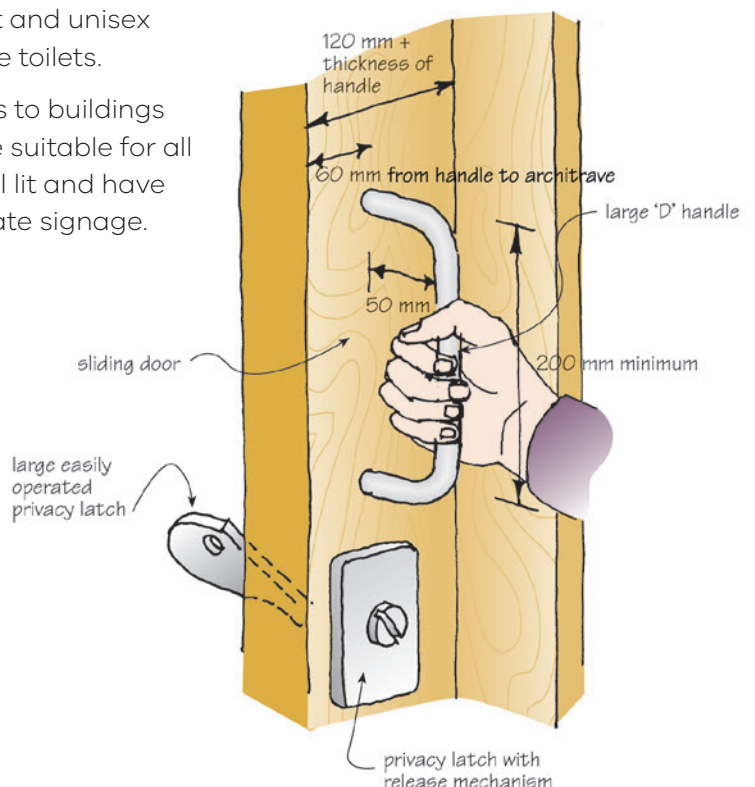
<sup>3</sup> Handrails: AS 1428.1: 2009 Design for access and mobility

## 3 Simple and intuitive use

Use of the building is easy to understand, regardless of the user's experience, knowledge, language skills, or concentration level.

### Practical Examples for Veteran's Venues

- › Ambulant and unisex accessible toilets.
- › Entrances to buildings should be suitable for all users, well lit and have appropriate signage.



## 4 Perceptible Information

The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.



### Practical Examples for Veteran's Venues

- › Signage<sup>4</sup> is provided to guide the effective use of the space and provide health and safety information.
- › Clear signage that is of a suitable size, type, style and location suitable for all users.
- › Consider tactile markers for vision impairments.<sup>5</sup>
- › Contrasting colours between floor and walls, and walls and signage.

4 **Signage:** AS 1428.1: 2009 Design for access and mobility

5 **Vision:** 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 surface indicators

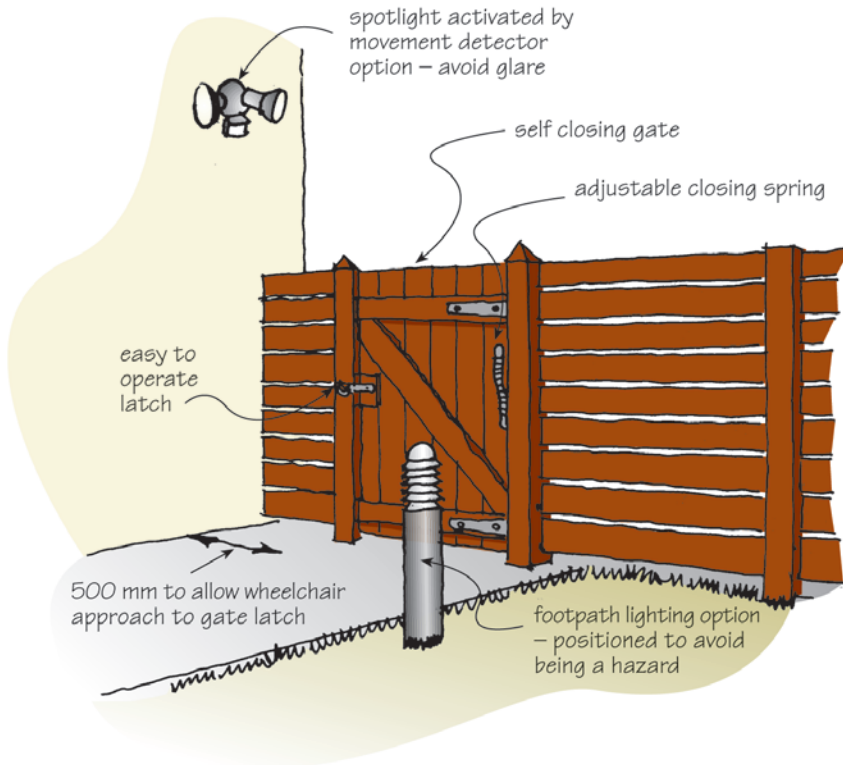
- › Suitable lighting in the right locations, minimising glare and avoiding shadows<sup>6</sup>. Lighting highlights hazards and obstacles.
- › Non slip flooring, avoid thick carpet piles, irregular, geometric or stripped patterns.
- › Glass doors should have a colour strip or other features.
- › Walls should be a contrasting colour from ceiling and floor. Changes in levels marked with a contrasting colour.
- › Consider people who are deaf or hard of hearing – e.g. hearing loops.<sup>7</sup>

6 **Lighting:** AS 1428.2:1992 – Design for access and mobility – Enhanced and additional requirements – Building and facilities

7 **Hearing:** AS 1428.5: 2010 Communication for people who are deaf or hearing impaired

### Outcomes

- 4a Use different modes (pictorial, verbal, tactile) for presentation of essential information.
- 4b Provide contrast between essential information and its surroundings.
- 4c Maximize “legibility” of essential information.
- 4d Differentiate elements in ways that can be described (i.e. make it easy to give instructions or directions).
- 4e Provide compatibility with a variety of techniques or devices used by people with sensory limitations.



## 5 Tolerance for error

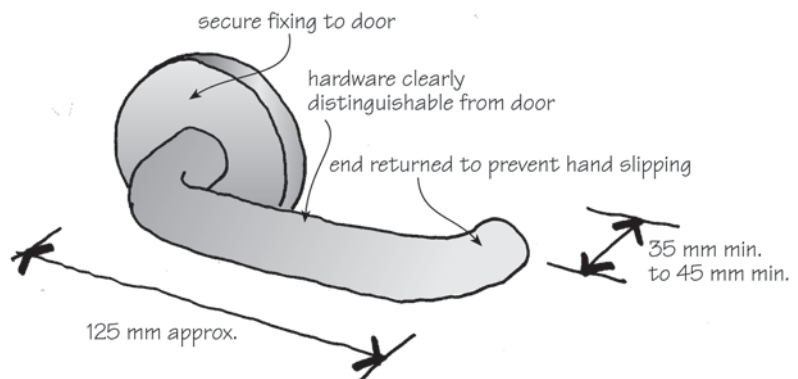
The design minimizes hazards and the adverse consequences of accidental or unintended actions.

### Practical Examples for Veterans Venues

- › Directional and emergency signage provided.
- › Surfaces are non slip.
- › Emergency evacuation routes and alarms available for all users.
- › Lifts:
  - › Minimum size.
  - › Mirror on rear wall to aid people in wheelchairs to see behind.
  - › Lift controls contrasted in colour and at suitable heights for all users.
- › Handrails.

### Outcomes

- 5a Arrange elements to minimize hazards and errors: most used elements are the most accessible; hazardous elements are eliminated, isolated, or shielded.
- 5b Provide warnings of hazards and errors.
- 5c Provide fail safe features.



## 6 Low physical effort

The design can be used efficiently and comfortably and with a minimum of fatigue. Adequate and accessible parking spaces<sup>8</sup> are near the entrance, safe and accessible.

### Practical Examples for Veterans Venues

- › The approach is clearly defined, firm, even, slip resistant surface, with minimum widths.
- › Kerbs should allow wheelchair access.
- › Automatic or semi-automatic doors.
- › Split levels avoided where possible.
- › Corridors are unobstructed and wide enough to allow easy access.
- › Steps avoided where possible, or ramped access or platform lift provided.
- › Floors are smooth, uniform and avoid changes in levels.

<sup>8</sup> **Parking/ Wayfinding:** AS/NZS 2890.6: 2009 Parking facilities Off-street parking for people with disabilities  
**Accessibility:**  
[www.disabilityaccessconsultants.com.au/accessible-disabled-car-parking-requirements/](http://www.disabilityaccessconsultants.com.au/accessible-disabled-car-parking-requirements/)

- › Heavy patterns, textures, highly reflective or slippery surfaces are avoided.
- › Lower level counters.
- › Natural, uniform lighting used where possible, avoiding glare.

### Outcomes

- 6a Allow user to maintain a neutral body position.
- 6b Use reasonable operating forces.
- 6c Minimize repetitive actions.
- 6d Minimize sustained physical effort.

## 7 Size and space for approach and use

Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility.

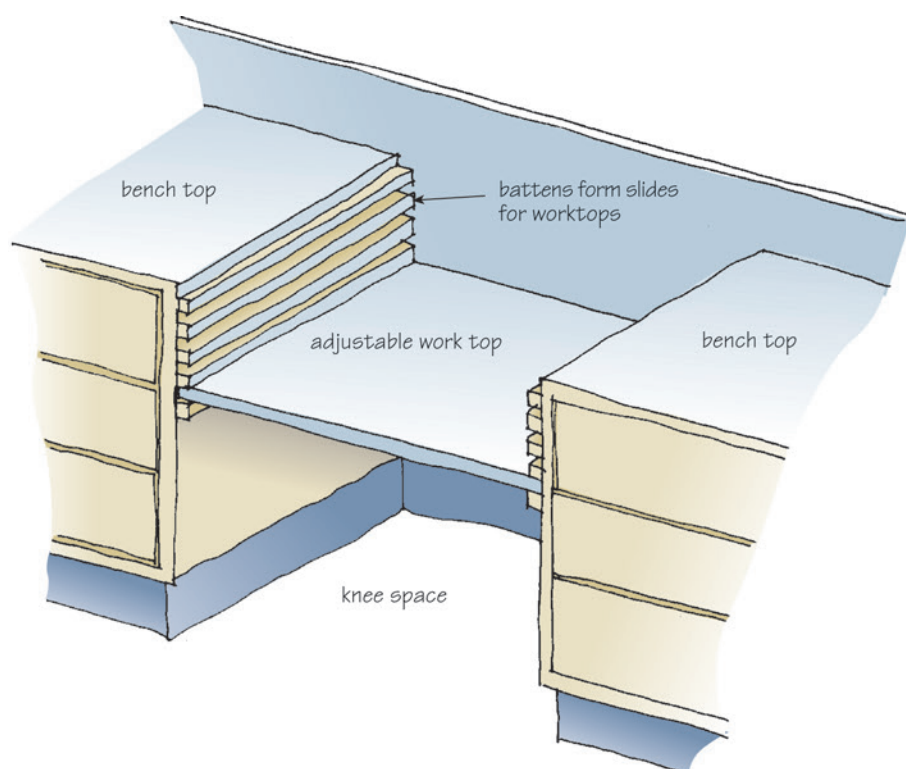
### Practical Examples for Veteran's Venues

- › Switches at a height that can be reached by adults who are standing or seated.
- › Adequate space for people in a wheelchair, with a walker or pram.
- › Approach to key areas easily identifiable and obstacle free.
- › Key areas suitable for both standing and seated guests.
- › Counters at a height suitable for people in wheelchairs.

### Outcomes

- 7a Provide a clear line of sight to important elements for any seated or standing user.
- 7b Make reach to all components comfortable for any seated or standing user.
- 7c Accommodate variations in hand and grip size.
- 7d Provide adequate space for the use of assistive devices or personal assistance.

Adapted from: <http://sport.vic.gov.au/our-work/participation/inclusive-sport-and-recreation/universal-design>





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## WHERE CAN I FIND FURTHER INFORMATION?

There are a range of resources available on Sport and Recreation Victoria's website:

[sport.vic.gov.au/our-work/participation/inclusive-sport-and-recreation/universal-design](http://sport.vic.gov.au/our-work/participation/inclusive-sport-and-recreation/universal-design)

For specific advice see:

### PATHWAYS, RAMPS AND STAIRS

[sport.vic.gov.au/publications-and-resources/design-everyone-guide/index-elements/tracks-pathways-ramps-and-stairs](http://sport.vic.gov.au/publications-and-resources/design-everyone-guide/index-elements/tracks-pathways-ramps-and-stairs)

### KITCHENS

[sport.vic.gov.au/publications-and-resources/design-everyone-guide/index-elements/kitchens](http://sport.vic.gov.au/publications-and-resources/design-everyone-guide/index-elements/kitchens)

### BUILDINGS

[sport.vic.gov.au/publications-and-resources/design-everyone-guide/index-elements/buildings](http://sport.vic.gov.au/publications-and-resources/design-everyone-guide/index-elements/buildings)

### TOILETS AND CHANGE ROOMS

[changingplaces.org.au](http://changingplaces.org.au)

[sport.vic.gov.au/publications-and-resources/design-everyone-guide/index-elements/toilets-and-change-rooms](http://sport.vic.gov.au/publications-and-resources/design-everyone-guide/index-elements/toilets-and-change-rooms)

[disabilityaccessconsultants.com.au/changing-places-toilets-new-information-kit/](http://disabilityaccessconsultants.com.au/changing-places-toilets-new-information-kit/)

### LANDSCAPING/MEMORIALS/OUTDOOR SPACES

[sport.vic.gov.au/publications-and-resources/design-everyone-guide/sport-and-recreation-settings/parks-and-gardens](http://sport.vic.gov.au/publications-and-resources/design-everyone-guide/sport-and-recreation-settings/parks-and-gardens)

[sport.vic.gov.au/publications-and-resources/design-everyone-guide/index-elements/landscape-design](http://sport.vic.gov.au/publications-and-resources/design-everyone-guide/index-elements/landscape-design)