

ITEM 2

POST EXHIBITION - WOLLONGONG DEVELOPMENT CONTROL PLAN 2009 CHAPTER E1: ACCESS FOR PEOPLE WITH DISABILITY

A review of Chapter E1 of the Wollongong Development Control Plan 2009 identified the need to update the chapter to reflect current legislation, best practice and Council's obligations under the adopted Disability Inclusion Action Plan (DIAP). The revised Chapter will provide greater clarity and guidance to planners, land developers and the community. On 15 February 2022, Council resolved to exhibit the revised draft Chapter E1 Access for People with Disability for public comment.

The draft document was exhibited from 5 March to 4 April 2022. Council received two submissions as a result of the exhibition process. This report summarises issues raised in those submissions.

It is recommended that Council adopt the amended Chapter E1 Access for People with Disability.

### RECOMMENDATION

Wollongong Development Control Plan 2009 Chapter E1 Access for People with Disability be adopted and a notice be placed on Council's website advising of its adoption.

### REPORT AUTHORISATIONS

Report of: Chris Stewart, Manager City Strategy

Authorised by: Corey Stoneham, Director Planning + Environment - Future City + Neighbourhoods (Acting)

### ATTACHMENTS

- 1 Chapter E1: Access for People with Disability

### BACKGROUND

On 15 December 2009, Council endorsed the Wollongong Development Control Plan (DCP) 2009. The DCP came into force on the 3 March 2010, following the commencement of the Wollongong Local Environmental Plan 2009. The DCP includes Chapter E1 Access for People with Disability. This Chapter outlines the specific requirements for accessibility when planning for development throughout the Wollongong local government area (LGA).

Chapter E1 has been reviewed in response to the introduction of legislation, building standards and updates to the National Construction Code, and Council's commitment to implement a Disability Inclusion Action Plan (DIAP), as directed under the *NSW Disability Inclusion Act 2014*.

Since the Chapter E1 came into force, the following changes have occurred, and initiative introduced –

- In 2014, the *NSW Disability Inclusion Act 2014* (DIA) commenced. The DIA required NSW Councils to implement a Disability Inclusion Action Plan (DIAP) by 1 July 2017.
- In 2016, Council endorsed the DIAP 2016-2020 following consultation with the community. The DIAP 2016-2020 seeks to make services, facilities, activities and information more inclusive and accessible.
- On 19 February 2019, Council adopted the Ageing Plan 2018–2022 which was developed in consultation with the community to identify key priorities for making the LGA a great place for older people. One of five focus areas was the creation of liveable communities, where people can move about easily to access services and facilities and participate in community life. Actions to achieve the priority included improved footpaths that link important places like town centres, parks, railway stations, and bus stops. The actions of the focus area assisted in informing the review of Chapter E1 and the desired built form outcomes.
- On 31 August 2020, Council adopted the DIAP 2020–2025. An action in the DIAP is the review of Council's planning documents including DCP Chapter E1: Access for People with a Disability.

On 15 March 2021, Council resolved to place the draft Chapter E1 on exhibition. The draft Chapter was exhibited from 27 March to 26 April 2021.

As a result of the submissions and feedback received during exhibition, a further revision of Chapter E1 was undertaken to ensure it meets the needs of the community and is consistent with Council policy. On 21 February 2022, the revised draft Chapter was reported to Council whereupon it was resolved to re-exhibit the document for public comment.

### PROPOSAL

The revised draft Chapter was exhibited from 5 March to the 4 April 2022. Council received two submissions.

The main themes raised in the submissions and the staff response to those matters is detailed in the Consultation and Communication section of this report.

The submissions received are generally in support of the revised draft Chapter. Given the extensive review undertaken and community feedback, it is recommended that Council adopt the revised DCP Chapter E1.

### CONSULTATION AND COMMUNICATION

Following Council’s resolution, notice was given in the Illawarra Mercury of the exhibition of the draft DCP chapter. The exhibition was made available through Council’s engagement website, [our.wollongong.nsw.gov.au](http://our.wollongong.nsw.gov.au), and hard copies at Council’s Libraries and Administration Building and was forwarded to the operating Neighbourhood Forums. Additionally, Council notified key stakeholder groups and people who had previously made a submission of the review process.

The exhibition webpage was viewed by 34 people, of which 20 downloaded a document. Through the engagement webpage Council received one submission. In addition to the submissions made through the engagement webpage; Neighbourhood Forum 5 made a submission. The table below is a summary of the submission received.

Community Submissions	
Comment	Action
On-line resident submission - General Support	Noted - No further action required
NF5 submission - Support content and the use of pictures to provide examples of compliant vs non-compliant access.	Noted - No further action required

In addition a staff member provided comment on the use of tactile markers.

Internal Staff Feedback	
Comment	Action
1 Control 5.6.2 (I) remove the use of tactile markers to indicate kerb ramps. Instead, 30% luminance contrast between ramps and paths should be utilised and directional grooves be used on ramps to assist in directing movement.	1 The control was reviewed and wording amended to remove reference to tactile markers being used in indicate kerb ramps. The Chapter now requires 30% luminance contrast be used between ramps and paths with directional grooves used on ramps. The City Centre Public Domain Technical Manual and Wollongong City Council Standard Drawings have been referenced for examples of material and construction.

Internal Staff Feedback	
Comment	Action
<p>2 Control 5.7.2.4 and 6, remove contrast edges on paths through the use of a header course of painted stripe.</p> <p>Contrast can be achieved by 30% luminance change between the footpath material and adjacent surfaces.</p>	<p>2 The control was reviewed and wording amended to remove the use of a contrasting header course/ painted stripe to indicate the edges of a pathways. The City Centre Public Domain Technical Manual and Wollongong City Council Standard Drawings have been referenced for examples of material and construction.</p>
<p>3 Directional tactile ground surface indicators (TGSIs) should be used when a path of travel will be interrupted by furniture.</p>	<p>3 The control was reviewed and the use of TGSIs to indicate interruptions in paths of travel have been included. The City Centre Public Domain Technical Manual and Wollongong City Council Standards Drawing have been referenced for examples of material and construction.</p>

### PLANNING AND POLICY IMPACT

This report contributes to the delivery of Our Wollongong 2028 goal. It specifically delivers on the following

Community Strategic Plan	Delivery Program 2018-2022	Operational Plan 2021-22
Strategy	4 Year Action	Operational Plan Actions
1.3.1 Manage land uses to strengthen urban areas and improve connectivity to train stations and key transport routes	1.3.1.1 Impacts from development on the environment are assessed, monitored and mitigated	Engage with other tiers of government, the development/building industry and the broader community to achieve improved development outcomes

### RISK MANAGEMENT

The revised draft DCP Chapter E1 will provide more clarity to Council and the development industry regarding the requirements for access provisions to buildings and public spaces.

### CONCLUSION

The draft Wollongong DCP Chapter E1 Access for People with Disability has been reviewed following changes to the National Construction Code, NSW planning legislation and Council's requirements under the adopted DIAP. The draft Chapter has formally been exhibited. Minor amendments have been made to the Chapter after exhibition as detailed in the report.

It is recommended that Wollongong DCP Chapter E1 Access for People with Disability be adopted, and a notice be placed on Council's website advising of the adoption.



## Contents

<b>1</b>	<b>INTRODUCTION</b>	<b>1</b>
<b>2</b>	<b>LAND TO WHICH THIS PART APPLIES</b>	<b>3</b>
<b>3</b>	<b>PURPOSE</b>	<b>3</b>
<b>4</b>	<b>STATUTORY FRAMEWORK</b>	<b>3</b>
4.1	Commonwealth Disability Discrimination Act 1992	4
4.2	The Disability (Access to Premises – Buildings) Standards 2010	5
4.3	Building Code of Australia and Australian Standard AS 1428	6
<b>5</b>	<b>CONTROLS FOR PROVIDING ACCESS</b>	<b>7</b>
5.2	Universal Design	8
5.3	Interfacing with the Public Domain	10
5.4	Public Spaces and Links to Private Properties	11
5.5	Continuous Accessible Path of Travel	12
5.6	Walkways, Ramps and Landings	13
5.7	Outdoor Areas – Including Parks	14
5.8	Adaptable Housing	15
5.9	Livable Housing (Silver level)	16
5.10	Access to Heritage Buildings	17
5.11	Access to Temporary Structures and During Temporary Events	18
5.12	Accessible Adult Change Facilities in Public Buildings	18
<b>6</b>	<b>FURTHER RESOURCES</b>	<b>19</b>
	<b>APPENDIX 1 - DESIGN EXAMPLES</b>	<b>20</b>



Part E – General Controls – Design Controls  
 Chapter E1: Access for People with Disability

**Document Control**

Document ID: Wollongong DCP 2009 – E1 Access for People with a Disability

Rev No	Adoption Date	In force date	Revision Details
1	15/12/2009	3/3/2010	Adopted
2	15/3/21		Draft for exhibition
3	17/2/2022		Revised Draft for exhibition – Substantial revision. Renamed Access for People with Disability

Part E – General Controls – Design Controls

Chapter E1: Access for People with Disability

## 1 INTRODUCTION

1. This Chapter of the Development Control Plan was developed in response to Council's commitment to make Wollongong a City that is inclusive of everyone and provides equal opportunity for people with disability to participate in all aspects of community life. This Chapter should be read in conjunction with the Chapter B1 - Residential Development, Chapter B3 Mixed Use Development, Chapter B4 - Development in Business Zones and Chapter B5 – Industrial Development the Wollongong Development Control Plan 2009 (WDCP 2009). Furthermore, other Chapters, of WDCP 2009, such as those relating to flooding, will require access provision to be considered and appropriately planned for.
2. In 2018, the Australian Bureau of Statistics (ABS) conducted a Survey of Disability, Ageing and Carers. The survey showed that just over one in six people in NSW have a disability that affects one or more daily activities such as self-care, mobility and communication. Furthermore, the rate of disability increased with age and this number is expected to grow as the population lives longer and people acquire disabilities as they age.
3. Disability is defined as any continuing condition that restricts everyday activities and can affect a person's capacity to communicate, interact with others, learn and move independently. Disability can be permanent or episodic and often categorised as:
  - (a) Sensory: impacting vision and/or hearing, autism spectrum disorder and sensory processing disorder.
  - (b) Neurological: impacting a person's ability to control their movements.
  - (c) Physical: affecting mobility and/or a person's ability to use their upper or lower body.
  - (d) Intellectual: affecting a person's judgement, ability to learn and communicate.
  - (e) Cognitive: affecting a person's thought processes, personality, memory.
  - (f) Mental Health: impacting upon a person's emotions, thought processes and behaviours.
4. It is important to understand and design for the different access challenges faced by people with disability. Common access challenges for people with disability include:
  - Physical barriers: lack of access to the built environment
  - Cognitive barriers: barriers to communication barriers and accessing information
  - Psychiatric illness: may cause people to be overwhelmed by crowded and noisy environments
  - Sensory disability: barriers to communication and accessing information and become overwhelmed by noisy environments
5. Wollongong City Council encourages developers to incorporate the principles of universal design when developing the built environment provide a built environment that can be enjoyed by all residents and visitors.

## 2 LAND TO WHICH THIS PART APPLIES

1. This Chapter of the WDCP 2009 applies to all land within the Wollongong Local Government Area (LGA).

## 3 PURPOSE

1. Wollongong City Council is committed to making Wollongong a city that is inclusive of everyone and provides equal opportunity for people with disability to participate in all aspects of life across our city. Council recognises improving access enhances quality of life for the whole community.
2. The purpose of this Chapter of the WDCP 2009 is to:
  - (a) provide equitable dignified access within all new development and ensure that substantial building work carried out on, or intensified use of existing buildings provides upgraded levels of access and facilities for all people.
  - (b) ensure the public domain in new development provides permeability, legibility, flexibility, consistency, integration, and clarity to allow for equitable and safe access for all people.
  - (c) provide a reasonable proportion in residential units in multi-unit developments which are designed to be easily modified to cater for occupants with existing or progressive disability.
  - (d) encourage consideration of access issues early in the development and design process.
  - (e) outline the current statutory framework concerning the provision of equitable access.
3. This Chapter of the DCP acknowledges legislation, codes and standards work together to set out when and how access is provided. However, these are the minimum standards and as such Council recommends developers design incorporate the principle of universal design when designing and developing the built form environment. This will ensure the built environment can be used by everyone to the greatest extent possible without the need for adaptation. The aim of universal design is to consider the needs of as many users as possible to deliver social, economic and health benefits for the community.

## 4 STATUTORY FRAMEWORK

1. In Australia, there is a range of federal and state legislation and policies in place governing the rights of people with disability. The key legislation, standards and codes utilised to enforce, control and guide access are detailed below:
  - (a) Disability Discrimination Act 1992 (Federal)
  - (c) The Disability (Access to Premises – building) Standards (2010)
  - (d) The Building Code of Australia under the National Construction Code
  - (e) Australian Standards called upon in the BCA

Part E – General Controls – Design Controls

Chapter E1: Access for People with Disability

## 4.1 Commonwealth Disability Discrimination Act 1992

### 4.1.1 General

1. The [Disability Discrimination Act 1992](#) (Commonwealth) (DDA) makes it unlawful to discriminate against a person with disability. The DDA prohibits unlawful discrimination in the provisions of access to any building or part of a building the public is entitled to enter or use. The *Disability Discrimination Act 1992* came into effect on 1 March 1993. The DDA does not specify design requirements to meet this non-discrimination requirement. In 2000 the Australian Government amended the DDA to allow for the development of 'disability standards' under Section 31 (1) of the Act. In 2010 the Disability (Access to Premises-Buildings) Standards were developed.
2. The DDA makes it unlawful to discriminate against people with disability in all areas of public life, including access to and use of buildings and places which include government administration buildings; public domain areas; educational establishments and libraries. The full list of buildings and establishments to which it is unlawful to discriminate against providing access to people with disability is contained within the DDA.
2. Section 23a of the DDA sets out the following for access to premises:
 

*It is unlawful for a person to discriminate against another person on the ground of the other person's disability:*

  - (a) *by refusing to allow the other person access to, or the use of, any premises that the public or a section of the public is entitled or allowed to enter or use (whether for payment or not); or*
  - (b) *in the terms or conditions on which the first-mentioned person is prepared to allow the other person access to, or the use of, any such premises; or*
  - (c) *in relation to the provision of means of access to such premises; or*
  - (d) *by refusing to allow the other person the use of any facilities in such premises that the public or a section of the public is entitled or allowed to use (whether for payment or not); or*
  - (e) *in the terms or conditions on which the first-mentioned person is prepared to allow the other person the use of any such facilities; or*
  - (f) *by requiring the other person to leave such premises or cease to use such facilities*
3. The DDA sets out to eliminate, where possible, discrimination against people on the grounds of disability. In addition to ensuring, where possible, that a person with disability has the same rights to equality before the law as the wider community; and, to promote recognition and acceptance that persons with disabilities have the same fundamental rights as the rest of the community. This is through making every area and facility open to the public, open and accessible to people with disability.
4. While the DDA makes it unlawful to discriminate against providing access to people with disability; the DDA also sets out provisions for when access cannot be provided in Section 29a of the Act. This Section of the Act specifically applies to buildings that have been previously designed or constructed as inaccessible to a person with disability and alterations would impose unjustifiable hardship to the access provider. 'Unjustifiable hardship' does not apply to new developments used by the public. New buildings must provide suitable access for all people, including people with disability.
5. A decision about what constitutes unjustifiable hardship can only be made by the Federal Court on a case-by-case basis in response to an actual complaint. Applicants should note that the granting of consent by the consent authority that is noncompliant with the BCA or these

provisions due to technical limits, topographical restriction or heritage significance does not protect the applicant against a complaint being made against them under the DDA.

## 4.2 The Disability (Access to Premises – Buildings) Standards 2010

1. The Disability (Access to Premises – Buildings) Standards (Premises Standards) commenced on the 1 May 2011. The purpose of the Premises Standards and corresponding Building Code of Australia is to:
  - (a) ensure equitable, dignified, access to and use of buildings, and facilities and services within buildings, is provided for people with disability; and
  - (b) give certainty to certifiers, developers and managers, that if the Standards are complied with, they cannot be subject to successful complaint under the DDA in relation to those matters covered by the Premises Standards.
2. The Premises Standards apply to buildings and structure governed by the Building Code of Australia that require a building approval, that is applications for:
  - (a) a construction certificate
  - (b) a complying development certificate
3. The Premises Standards apply to the building certifier, building developer and building manager.
4. Building work to which the Standards apply are to new buildings; new parts of an existing building and affected parts of an existing building
5. Affected part means:
  - (a) the principal pedestrian entrance of an existing building that contains a new part, and;
  - (b) any part of an existing building that contains a new part, that is necessary to provide.
  - (c) a continuous accessible path of travel from the entrance to the new part.
6. Affected part of the building does not apply to:
  - (a) existing parts of the building outside of the area of new work and the affected upgrade.
  - (b) an accessway from the allotment boundary, from any accessible car parking space on the allotment or between other building on the allotment.
7. Note: while the Premises Standards are not applicable at the development application stage, they are required as part of the construction certificate. To avoid unnecessary delays and reduce the need for any potential modification of an issued development consent, Council recommends the Premises Standards be considered early in the design process.
8. Copies of the Premises Standards, an explanatory statement and frequently asked questions can be viewed and downloaded from [www.ag.gov.au/premisesstandards](http://www.ag.gov.au/premisesstandards). Additionally, the Australian Human Rights Commission has produced Guidelines on the application of the Premises Standards. These guidelines are helpful in interpreting the standards and can be viewed and downloaded from [www.hreoc.gov.au/disability\\_rights/standards/PSguide.html](http://www.hreoc.gov.au/disability_rights/standards/PSguide.html)

Part E – General Controls – Design Controls

Chapter E1: Access for People with Disability

### 4.3 Building Code of Australia and Australian Standard AS 1428

#### 4.3.1 General

1. The Building Code of Australia (BCA) is contained with the National Construction Code and provides the minimum necessary requirements for safety, health, amenity, and sustainability. The BCA provides Performance Based and Deemed-to-Satisfy provisions and criteria.
  2. Amendments were made in 2011 to ensure that it was consistent with the Access Code of the Premises Standards. Although legally they are separate documents, compliance with the amended BCA and State building laws and regulations will also ensure compliance with the Premises Standards.
  3. New development must achieve the prescribed minimum standards and provide equitable access for people with disability. Where substantial alterations are proposed to an existing development, the consent authority has the discretion to enforce the provisions of the BCA.
  4. The BCA is performance based and therefore allows for a boarder range of solutions; making it easier to plan and design for specialised needs that apply to particular buildings. Where an alternative solution is proposed; the applicant must demonstrate to the consent authority how the alternative solution achieves the same outcome as a "deemed to satisfy" provision given in the BCA.
  5. The Deemed to Satisfy provisions of the Building Code of Australia, which concern to access, mobility and sanitary facilities for people with disability are primarily located in:
    - Part D3 Access and Egress for People with Disabilities;
    - Part E Lift Installations; and
    - Part F2 Sanitary Facilities and other facilities
- The Performance requirements of the BCA that are accessibility related are primarily located in:
- Performance Requirement DP1 and DP2
  - Performance Requirement EP3.4
  - Performance Requirement FP2.1
6. The BCA was amended in 2011 to ensure that applications for development formally include access related Australian Standards.
  7. The BCA makes reference to some of the Australian Standards applicable to design of equitable access. Designers and planners should refer to the most relevant and current provisions of both the referenced Australian Standards and non-referenced Australian Standards in respect to any development. The most recent Australian Standards will be referenced during the assessment of development applications occurring within the Wollongong LGA.
  8. The BCA references the Australian Standards that are technical in nature and details where they are mandatory. The following Australian Standards are referenced by the BCA as being mandatory.
    - (a) AS 1428.1 Design for access and mobility: General requirements for access – New building work
    - (b) AS1428.2 Enhanced and additional requirements for access – building and facilities
    - (c) AS 1428.4 Means to assist the orientation of people with vision impairment – Tactile ground surface indicators (TGSI)

Part E – General Controls – Design Controls  
Chapter E1: Access for People with Disability

- (d) AS 1428.5 Communication for people who are deaf or hard of hearing
- (e) AS 1735.12 Lifts, Escalators and Moving Walkways.
- (f) AS/NZS 2980.6 Off street parking for people with disabilities
- (g) AS 3769 Automatic Teller Machines
- (h) AS 4299 Adaptable Housing
- (i) AS 4586 Slip Resistance of Pedestrian Surfaces

The Australian Standards listed above are the minimum requirements to satisfy the requirements of the BCA. It should be noted that developers can seek alternative solutions to achieve the goals of the BCA. Council recommends developers to explore design solutions that exceed the minimum requirements, as many of the Australian Standards are based upon data collected prior to current technological advancements.

Australian Standards are subject to regular review and modification.

Copies of Australian Standards can be obtained from:  
Standards Australia  
Level 10, The Exchange Centre  
20 Bridge Street  
Sydney NSW 2000  
Ph: 1800 035 822

[www.standards.org.au](http://www.standards.org.au)

Additionally, the Australian Human Rights Commission has published “The Good, the Bad and the Ugly – Design and Construction for Access April 2008” document, which provides examples concerning access and mobility arrangements as well as sanitary facilities for people with disability. This document may be obtained via the Commission’s website at:

[www.humanrights.gov.au/disability\\_rights](http://www.humanrights.gov.au/disability_rights)

Selected examples from this document of good and poor access and mobility arrangements for people with disability are included in Appendix 1.

## 5 CONTROLS FOR PROVIDING ACCESS

### 5.1.1 Objective

- (a) Promote applications that provide equitable dignified access for people with disability in all types of development (excluding Class 1a buildings, being single detached dwelling houses) in Wollongong LGA.

### 5.1.2 Controls

1. Development is to comply with the BCA and Premises Standards.
2. Access provisions apply to applicable Development Applications and Construction Certificates for all new developments, subdivisions, and alterations and additions affecting more than 50% of the total floor space area over a combined 3 year period or that increase the floor space by 30% or more;
3. The submission of a Development Application to Council requires completion of the relevant DA checklist. In order to satisfy the requirements of these checklists, an access report prepared by an accredited access consultant is to form part of the DA documentation, where deemed necessary.

Part E – General Controls – Design Controls  
Chapter E1: Access for People with Disability

Note: Class 1a buildings generally have few legal requirements to provide access and facilities for people with disability. However, due to Australian's ageing population and likelihood of disability increasing with age, Council recommends developers of single dwellings, gain advise from an accredited access consultant wherever possible. Council recommends a silver level of housing be provided in accordance National Construction Code and the Livable Housing Australia Design Guidelines. Further information on Livable Housing Australia and silver level housing can be found at <https://livablehousingaustralia.org.au/downloads/>

## 5.2 Universal Design

### 5.2.1 Objectives

- (a) Incorporate principle of universal design to ensure development better meet the needs of as many users as possible.
- (b) Promote design that help everybody with support and assistance needs, which includes people with disability, older people, pregnant women, children and people with temporary illness or injury.
- (c) Enhance economic, education, health and social opportunities through development.

### 5.2.2 Controls

1. The seven principles of universal design should be demonstrated during the planning and design of development. Applications for development requiring an assessment by an accredited access consultant will require the principles of universal design to be addressed in the Statement of Environmental Effects.
  - (a) Equitable use:  
How the design is useful and marketable to persons with diverse abilities, through addressing how the design:
    - Provides the same means of use for all users: identical whenever possible; equivalent when not.
    - Avoids any users being segregated or stigmatised.
    - Provides all users with equal availability to privacy, security, and safety.
    - Is appealing to all users.
  - (b) Flexibility in use:  
How the design accommodates a wide range of individual preferences and abilities, through addressing how the design:
    - Provides choice in methods of use.
    - Accommodates right or left-handed access and use.
    - Facilitates the user's accuracy and precision.
    - Provides adaptability to the user's pace.
  - (c) Simple and intuitive use:  
How the design is easy to understand, regardless of the user's experience, knowledge, language skill or concentration level, through addressing how the design:
    - Eliminates unnecessary complexity.
    - Is consistent with user expectations and intuition.
    - Accommodates a wide range of literacy and language skills.

Part E – General Controls – Design Controls  
Chapter E1: Access for People with Disability

- Arranges information consistent with its importance.
  - Provides effective prompting and feedback during and after task completion
- (d) Perception information:  
How the design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities, through addressing how the design:
- Uses different modes (pictorial, verbal, tactile) for the presentation of essential information.
  - Provides adequate contrast between essential information and its surroundings.
  - Maximises "legibility" of essential information.
  - Differentiates elements in ways that can be described (i.e., make it easy to give instructions or directions).
  - Provides compatibility with a variety of techniques or devices used by people with sensory limitations.
- (e) Tolerance for error:  
How the design minimises hazards and the adverse consequences of accidental or unintended actions, through addressing how the design:
- Arrange elements to minimise hazards and errors: most used elements, most accessible; hazardous elements eliminated, isolated, or shielded.
  - Provide warnings of hazards and errors.
  - Provide fail safe features.
  - Discourage unconscious action in tasks that require vigilance.
- (f) Low physical effort:  
How the design that can be used efficiently and comfortably and with a minimum of fatigue, through addressing how the design:
- Allow user to maintain a neutral body position.
  - Use reasonable operating forces.
  - Minimise repetitive actions.
  - Minimise sustained physical effort.
- (g) Size and space for approach and use:  
How the design provides appropriate size and space – for approach, reach, manipulation and use, regardless of the user's body size, posture or mobility, through addressing how the design:
- Provides a clear line of sight essential elements for any seated or standing user.
  - Makes reach to all components comfortable for any seated or standing user.
  - Accommodates variations in hand and grip size.
  - Provides adequate space for the use of assistive devices or personal assistance.

Part E – General Controls – Design Controls  
Chapter E1: Access for People with Disability

### 5.3 Interfacing with the Public Domain

#### 5.3.1 Objectives

- (a) Provide a public domain that interfaces with development that promotes accessibility, without the need for steps or level changes
- (b) Ensure public spaces are not perceived to be alienated through encroachments into the public domain, which provides access to private development.

#### 5.3.2 Controls

- 1. Development should be constructed to meet the existing public domain without the need for steps or ramps. Where finished floor levels are required to be elevated from the public domain, the transition should occur within the internal footprint of the building.
- 2. Development should not include the use of raised walkways in the public domain that terminate in stairs.
- 3. Extended horizontal lengths of stairs, regardless of the number of risers, is not to occur in the public domain.
- 4. Access to and within developments that account for levels changes is to comply with the applicable legislation, construction codes and standards.

Figure 1 illustrates built form outcomes that challenge manoeuvrability and limit equitable access to public space. Figure 2 demonstrates a desirable interface between new development and the public domain featuring level transitions allowing for equal access.



1 Unnecessarily raised access to storefronts and residential apartments foyer enclosed by fencing located within the public realm, which requires the use of stairs to navigate transition changes.

Figure 1: Complicated interface with the public domain



2 Ground floor commercial and shared public entrances at street level, featuring thresholds that are unhindered by steps that promote accessibility.

**Figure 2: Level interface with the public domain**

2. In some exceptional cases, it may be appropriate to allow for development to encroach upon or alter the public domain so that equitable access can be provided to a building. In proposing that access be provided via a ramp or other mechanical device on the public domain or alteration of the public domain, the applicant must demonstrate the following:
  - (a) Access by other means will result in a substantial loss of original fabric of a heritage item, thereby impacting on the significance of the place, and that the provision of equitable access is highly desirable, with no alternative access options available.
  - (b) The proposal involves a significant public building where equitable access is highly desirable and there are no alternative access options available; and
  - (c) The safety, accessibility, legibility and consistency of public domain is not adversely affected.
3. Should an applicant propose the use of the public domain to provide equitable access to a building, Council's consent as owner of the land must be obtained prior to lodgement of a development application. To obtain Council's consent the applicant must fully document all access options that have been pursued.
4. To assist in the assessment of Development Applications where equitable access is required, Council recommends the provisions for access be prioritised during the design phase.

Note: Access can be discussed as part of a pre-lodgement meeting and is recommended by Council.

## 5.4 Public Spaces and Links to Private Properties

### 5.4.1 Objectives

- (a) Provide public spaces and links to private property, that through design, are safe, welcoming and allow equitable and dignified access.

### 5.4.2 Controls

1. Public spaces within private development are to connect to roads, transport, private spaces within buildings and to services and facilities.

Part E – General Controls – Design Controls

Chapter E1: Access for People with Disability

2. Where a Development Application is proposed on Council's land, access standards and principles of universal design are to be considered in relation to the entire site to supplement any specific requirements in this chapter.
  - (a) Public spaces, which include, features such as pathways, tables, seating, lighting, passing spaces, drinking fountains, rubbish bins and/or traversable play areas are to meet or exceed AS1428.2.
  - (b) Development on public and/or private properties must provide and maintain accessible links and continuous accessible paths of travel between BCA categorised Class 2 to Class 10 building and to adjacent public spaces or pedestrian networks.
  - (c) For Class 1 development containing 2 or more dwellings, barriers to access should be removed at private to public interfaces.
3. Footpaths should have a crossover slope no greater than 1 in 40. This includes locations where there is an existing or proposed driveway crossing.

## 5.5 Continuous Accessible Path of Travel

### 5.5.1 Objectives

- (a) Provide continuous accessible path of travel to all areas and facilities, which are generally open to the public.

### 5.5.2 Controls

1. All continuous paths of travel are to comply with the BCA and AS1428.1.
2. Accessible paths of travel should not incorporate any steps, humps, stairways, revolving doors/turnstiles, escalators or other impediments that prevent the path of travel being utilised by all people, including people with disability. It should make provision for adequate lighting for night-time use, and not include areas with the potential for entrapment. The provision of a continuous accessible path of travel is fundamental to creating a safe and accessible environment.
3. A continuous accessible path of travel must be provided:
  - (a) From accessible parking spaces and passenger drop off points to entrances of buildings.
  - (b) To connect buildings, facilities and spaces that are on the same block or part of the same, complex, where topographically possible.
  - (c) To connect accessible entrances of a building to all accessible spaces and facilities within the building.
  - (d) To minimise distances travelled between accessible elements of buildings and facilities.
  - (e) From public spaces to entrances of buildings.
  - (f) From the allotment boundary site at the main point of entry.
  - (g) Through the principle public entrance.

A continuous accessible path of travel is to:

Part E – General Controls – Design Controls  
Chapter E1: Access for People with Disability

- (a) Have a smooth non-slip surface with a cross camber of no greater than 1 in 40.
- (b) Have the shallowest possible gradient for the distance available.
- (c) Have a physical separation between pedestrians and vehicle traffic.
- (d) Be well lit and sheltered from the elements.
- (e) Incorporate, wherever possible, rest stations that are sheltered from the weather.
- (f) Preferably, have a pedestrian zone with a minimum clear width of 1.8 metres at the narrowest point and a minimum clear height of 2 metres with no encroachments into that envelope.
- (g) Include signage and tactile markers that directs people to accessible locations.
- (h) Constructed materials that a uniform in finish.
- (i) Restrict the use steps.

## 5.6 Walkways, Ramps and Landings

### 5.6.1 Objectives

- (a) Provide walkways, ramps and landings to transition between different floor levels that are designed for equitable dignified access to public places that in certain circumstances act as resting points and circulation spaces.

### 5.6.2 Controls

1. Walkways, paths, ramps and landing must be provided in accordance with AS1428.1
2. Where handrails are required, they are to be designed and install in accordance with AS1428.1 (refer to Appendix 1 for complaint handrail designs).
3. Walkways, paths and landings shall be filled in underneath, where applicable.
4. Private walkways are not to protrude into the public domain unless prior approval has been given by Wollongong City Council.
5. The gradient of walkways and ramps should be consistent between landings. Additionally, the angle of approach to landings should be at or near zero degrees.
6. Where the design will result in extended lengths or multiple ramps, other mechanical means, such as lifts, should be utilised. Note: design to meet the existing public domain will often provide a built form that promotes connectivity.
7. At the end of walkways, paths and ramps contrasting surfaces should be used and **tactile ground surface indicators (TGSIs)** used in accordance with AS 1428.4.
8. Where practicable, protective features should be installed to protect people with disability at intersection crossing points. Protective features are to be as close to invisible as possible.
9. Ramps are to be finished in slip resistant materials and/or surfaces.

Part E – General Controls – Design Controls

Chapter E1: Access for People with Disability

10. Kerb ramps are to be provided from the footpath to the road at all intersections and through traffic islands where practicable.
11. Kerb ramps are to be flush with the footpaths and roadways avoiding any threshold lip or ridges.
12. A 30% luminance contrast between the kerb ramp and pathway should be used to indicate a kerb ramp.
13. Kerb ramps should be designed in accordance with the Wollongong City Council Standard Drawings and the City Centre Public Domain Technical Manual. This includes positioning the face of the kerb ramp, and associated pair of directional grooves, in the intended direction of travel. Where necessary, dual kerb ramps are to be installed rather than a single offset ramp.

## 5.7 Outdoor Areas – Including Parks

### 5.7.1 Objectives

- (a) Provide outdoor spaces that are designed to be accessed and utilised by people of all abilities throughout the community.

### 5.7.2 Controls

1. In certain circumstances, where there is an elevation change across a large enough site, landform modification may be considered where site conditions permit, to offset the need to install dedicated ramps and landings. All gradients will need to be demonstrated on plan and are to comply with the National Construction Code and Australian Standards.
2. Public outdoor areas should include continuous accessible paths of travel. Continuous accessible paths of travel should connect designated accessible parking spaces to entrances and facilities within public spaces. Facilities include toilets, change rooms, barbecues, activity areas, playgrounds and tables and seats.
3. Should onsite parking be provided, designated accessible car parking should be provided as close as possible to the entry.
4. Continuous accessible pathways should have a minimum width of 1000mm and feature a 30% luminance contrast from adjoining surface materials.
5. Surfaces of continuous accessible pathways should be of a non-slip finish and designed in accordance with the Wollongong City Council Standard Drawings and the City Centre Public Domain Technical Manual
6. Where items are connected to an accessible pathway, contrasting edges colour should be used around facilities, equipment and furniture.
7. All signage is to be at the appropriate height and location. Additionally, TGSIs are to be used where necessary to warn of hazards.
8. All facilities are to be constructed to provide access to or enable their use by people with disability.
9. Street furniture should be positioned at least 500 mm from any accessible path of travel throughfare.
10. TGSIs are to be used in accordance with the Australian Standards should street furniture interrupt a continuous path of travel or be placed adjacent to the building line.

## 5.8 Adaptable Housing

### 5.8.1 Objectives

- (a) Provide housing that can be modified to suit the changing access needs of occupants and their visitors across their lifetime.
- (b) Provide visitable housing to maintain and connect the community, enabling friends and family to visit occupants within their home.

### 5.8.2 Controls

1. Adaptable housing is to comply with AS 4299 and is a dwellings unit designed in such a way that can later be modified to become accessible to occupants and visitors with disabilities or limitations through ageing.
2. Adaptable housing is to consider site access, building location, landscaping, security, carparking, and signage. This includes design considerations for floor levels, entrances, doorways, circulation spaces, kitchens, bathrooms, living areas, laundries, lighting and fixture and fittings.
3. Adaptable housing is to provide visitors with a continuous path of accessible travel from the property frontage or carparking area to the living area and toilet facility within the building.
4. Dwellings are to be visitable at a rate of 80% in developments requiring adaptable housing.
5. Adaptable housing units are to be constructed to meet the performance requirements and are to include the essential features as required by AS 4299. Council requires within mixed use and multi dwelling housing which incorporate 6 or more dwellings, 10% of all dwellings (or at least 1 dwelling) be designed as adaptable housing units.
6. Detailed plans should be submitted which describe and demonstrate pre-adaptation and post adaptation, to gain approval for adaptable housing units. Council requires development applications that include adaptable housing to be accompanied by certification from a suitably qualified and experience Access Consultant. The consultant is to confirm that the adaptable housing is capable of being modified, when required by the occupant, to comply with the Australian Adaptable Housing Standard (AS4299).
7. Adaptable housing to be equitably distributed throughout all types and sizes of dwelling units.
8. Access to adaptable housing is to comply with AS1428.1 and AS1428.2. This includes access to at least one type of each common facility or service provided within the development.
9. Adaptable housing is to be provided in convenient locations that are close to facilities such as public transport, common facilities and public services wherever possible. Within a development they should be located along the accessible path of travel and ideally, close to the main entrance of the building.
10. Bathrooms should be large enough to allow for wheelchair access and manoeuvring. A wheelchair accessible shower should be provided, and hand washing basins and shelving should be at a height that allows for people in a seating or standing position.
11. Laundries should be large enough to allow for wheelchair access and circulation around appliances. Washing machines and dryers should be front loading.
12. Kitchens should be of a flexible design so that modifications can occur as needed. Cupboards, pantries and shelf heights should be adjusted to allow for easy reach.

Part E – General Controls – Design Controls

Chapter E1: Access for People with Disability

13. Flooring should be timber rather than carpet. If carpet is used, it should be low in pile and with no underlay. Nonslip tiles should be used in bathrooms.
14. Walls along trafficable areas should be reinforced, this includes along travel paths, bathrooms and in bedrooms where the installation of grab rails is to occur.
15. Windows should be operable with one hand.
16. In mixed use development adaptable housing is to achieve the Silver Standards of the Livable Housing Design Guidelines (Livable Housing Australia 2015).

Note: Class 1a dwellings are not applicable to this part; however, Council encourages including adaptable housing design features to limit the cost of retro fitting existing dwellings at a later time.

## 5.9 Livable Housing (Silver level)

### 5.9.1 Objectives

- (a) Provide key structural and spatial elements that are critical to ensure future flexibility and adaptability of a home.
- (b) Provide housing that accommodates for a wide range of occupants.
- (c) Avoid later costs associated with retrofitting existing homes.

Note: the guidelines for silver, gold and platinum Livable Housing can be downloaded from the Livable Housing Australia website [https://livablehousingaustralia.org.au/wp-content/uploads/2021/02/SLLHA\\_GuidelinesJuly2017FINAL4.pdf](https://livablehousingaustralia.org.au/wp-content/uploads/2021/02/SLLHA_GuidelinesJuly2017FINAL4.pdf)

### 5.9.2 Controls

1. In a development that requires adaptable housing, 20% of the total proposed apartments are to incorporate the Livable Housing Design Guideline's silver level features (planned adaptable housing in a proposed development will contribute to the 20% liveable housing requirement).  
  
Note: Should the required rate and standard of liveable housing be amended under the National Construction Code, developers are to apply the rate whichever is highest.
2. A safe continuous accessible path of travel, that is step free, be provided from the street entrance and / or parking area to a dwelling entrance that is level.
3. As a minimum one, level (step free) entrance is provided to the dwelling.
4. Internal doors and corridors should facilitate comfortable and unimpeded movement between spaces.
5. A toilet is to be provided on the ground (or entry) level, which is easily accessible.
6. A bathroom that contains a hobless shower recess.
7. Walls around the toilet, shower and bath should be reinforced to support the safe installation of grabrails.
8. Stairways should be designed to reduce the likelihood of injury and enable future adaptation.

## 5.10 Access to Heritage buildings

### 5.10.1 Objectives

- (a) Provide access to heritage buildings while limiting the impacts upon the significant fabric of the item, noting, applicable works to heritage buildings are still subject to the Premises Standards and does not preclude complaints under the DDA.

### 5.10.2 Controls

1. Designs should respect the principle that access to heritage buildings should be provided but not diminish the heritage significance of the building, curtilage or environment.
2. A heritage impact statement is to be provided as part of any development applicant seeking to alter the significant fabric of a heritage item. The heritage impact statement should be prepared by a suitably experienced and qualified heritage practitioner and identify the following points as a minimum:
  - Assess the significance of the place.
  - Identify and rank the significant elements.
  - Determine the existing and required levels of accessibility (this will generally require the input of an access expert).
  - Identify the potential impacts (both positive and negative) of providing access to the item.
  - Identify and assess the possible design alternatives.
  - Assess the heritage impact of the preferred design solution.
2. Discussions should be held with Council staff to strike a balance between these issues. Thus, development proposals involving heritage items will be assessed on a merit basis. However, the proposal should follow these basic principles:
  - (a) The provision of access for people to and within heritage items should have minimal impact on the significant fabric of the item and, as far as possible, be reversible.
  - (b) Where such access is likely to have a major adverse impact on significant fabric, alternative solutions should be considered.
  - (c) Alternate design solutions should demonstrate, following discussion with Council staff, that a balance has been reached between the issues of providing access and retaining heritage significance.

Note: An alternate design solution will only be acceptable as a 'last resort', and that every effort should be made to ensure that equitable access is provided through the principal public entrance of the building.

Moreover, where new works are likely to remove or have an irreversible impact upon the significant fabric of a heritage item this may constitute an argument of unjustifiable hardship. However, in doing so, it must be clearly established that there are no other suitable alternative solutions to provide access to the buildings. Applicants should note that the granting of consent by the consent authority to a development that is non-compliant with the BCA or this DCP due to heritage significance does not protect the applicant against a complaint being made against them under the DDA.

Part E – General Controls – Design Controls  
Chapter E1: Access for People with Disability

## 5.11 Access to Temporary Structures and During Temporary Events

### 5.11.1 Objectives

- (a) Provide access provisions for people with disability when planning events and festivals and when designing temporary structures.

### 5.11.2 Controls

1. Where a temporary festival or event is proposed:
  - (a) Access shall be provided where a place is proposed for use as a place of public entertainment or assembly. Where the event is to be held in an existing building access shall be provided to the greatest extent possible.
  - (b) Accessible sanitary facilities must be made available.
  - (c) Where a fire egress is an issue, consideration should also be given to preparing an emergency evacuation plan for people with disability.
2. Where a temporary structure is proposed:
  - (a) The structure should not reduce the existing level of accessibility.
  - (b) Where a fire egress is an issue, consideration should also be given to preparing an emergency evacuation plan for people with disability.
  - (c) If applicable, a continuous accessible path of travel should be incorporated to and within the temporary structure.

Note: for further information on planning inclusive events, refer to Council's Organise and Event webpage. Council's offers an events tool kit that includes an Accessible Events Checklist.

## 5.12 Accessible Adult Change Facilities in Public Buildings

### 5.12.1 Objectives

- (a) Provide Accessible Adult Change Facilities (AACFs) and sanitary facilities with additional features that provide amenity and assist people with more profound and complex disability who are unable to use standards accessible facilities independently.
- (b) Provide AACFs in identified development types to provide a safe and clean environment for people who cannot use standard accessible toilets through the inclusion of specific features and equipment. Typical features within AACFs are adult-sized change table, hoist, larger circulation spaces including space for carers, peninsula-type toilet and moveable handrails.

### 5.12.2 Controls

1. Under the NCC the construction of AACFs will be required in the following public buildings:
  - (a) New or redeveloped shopping centres with a design occupancy greater than 3,500
  - (b) New museums, art galleries and theatres with a design occupancy greater than 1,500
  - (c) New strata with a design occupancy greater than 35,000

- (d) New aquatic facilities with a main pool area perimeter exceeding 70 m, and
  - (e) All new redeveloped airports.
2. AACFs must be constructed in accordance with Specification F2.9 of the NCC and the BCA.
  3. AACFs cannot be combined with another sanitary compartment

## 6 FURTHER RESOURCES

The following resources have been provided to further guide developers in how to provide access in a range of development types. It should be noted the list below is not exhaustive and that developers are recommended to explore other contemporary resources.

The Access Institute published an easy to understand guide that explains the rationale behind the mandatory Australian Standards for Access and Mobility, in the publication, "The 'Why's' of Access" (2019). The guide is a simple to understand resource that is intended to support people interpreting and applying the Australian Standards for Access. The 'Why's' of Access can be downloaded from: <https://accessinstitute.com.au/product/free-download-the-whys-of-access-handbook/>

Landcom has published a set of guidelines for stakeholders and industry which encourages a universal design approach and provides examples for new single and double storey housing. The universal housing design guidelines are available from:

<https://www.landcom.com.au/assets/Publications/Statement-of-Corporate-Intent/b999e51367/Universal-Housing-Design-Guidelines-July-2008.pdf>

Lendlease published the Design for Dignity Guidelines (2015) that was developed by Westpac Group in collaboration with The Australian Network on Disability. The guidelines provide principles for 'beyond compliance' accessibility in urban regeneration. The guidelines also provide more contemporary examples of how to provide access over the 2008, *The Good, the Bad and the Ugly – Design and Construction for Access* publication by the Australian Human Rights Commission. The Design for Dignity Guidelines is available from:

[https://designfordignity.com.au/wp-content/uploads/2016/08/Design\\_for\\_Dignity\\_Guidelines\\_Aug\\_2016.pdf](https://designfordignity.com.au/wp-content/uploads/2016/08/Design_for_Dignity_Guidelines_Aug_2016.pdf)

Livable Housing Australia have published the Livable Housing Design Guidelines. The guidelines provide advice and examples on how to achieve each level of liveable housing. The Livable Housing Design Guidelines are available from:

[https://livablehousingaustralia.org.au/wp-content/uploads/2021/02/SLLHA\\_GuidelinesJuly2017FINAL4.pdf](https://livablehousingaustralia.org.au/wp-content/uploads/2021/02/SLLHA_GuidelinesJuly2017FINAL4.pdf)

The National Disability Insurance Scheme (NDIS) Specialist Disability Accommodation Design Standard (2019) is a publication that sets out the detailed design requirements to be incorporated into newly built Specialist Disability Accommodation under NDIS. Note: this document will be use in the enrolment and certification of Specialist Disability Accommodation and is available from:

<https://www.ndis.gov.au/providers/housing-and-living-supports-and-services/specialist-disability-accommodation/sda-design-standard>

Part E – General Controls – Design Controls  
Chapter E1: Access for People with Disability

## APPENDIX 1 – DESIGN EXAMPLES

All of these examples have been taken from *The Good, the Bad and the Ugly – Design and Construction for Access* publication, produced by Australian Human Rights Commission (April 2008), to assist developers in providing accessibility solutions. It is recommended developers seek the services of an access consultant when designing publicly accessible spaces, as the examples hereafter may have been updated since publication.

### HANDRAILS

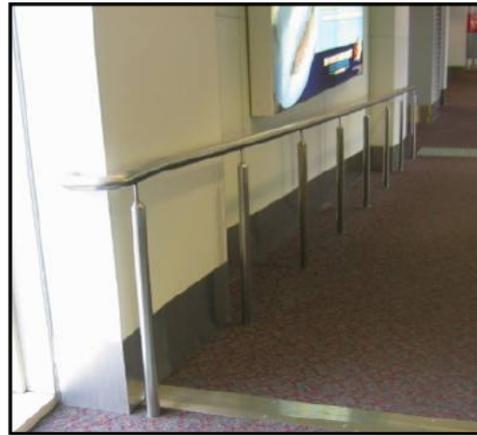


Figure 3: (Top left) Correct application of returning the handrail down and back onto itself to form 180° return onto a post. The handrails also provide clearances on the top 270° arc of the handrail and the 15mm directly under the handrail to allow for uninterrupted transition along the full length of the handrail for fingers and thumbs.

Figure 4: (Top right) Correct application of returning the handrail down and back onto itself to form 180° return onto a post. The handrails also provide clearances on the top 270° arc of the handrail and the 15mm directly under the handrail to allow for uninterrupted transition along the full length of the handrail for fingers and thumbs.

Part E – General Controls – Design Controls  
Chapter E1: Access for People with Disability



Figure 5: (Top left) Handrails which do not comply with the specifications of AS1428.1 for handrails on stairs suitable for people with disability since the handrails fail to return to a side wall or downwards and back on themselves at 180°.

Figure 6: (Top right) Handrails which do not comply with the specifications of AS1428.1 for handrails on stairs suitable for people with disability since the handrails fail to return to a side wall or downwards and back on themselves at 180°.



Figure 7: (Top left) Correct return of the handrail to a side wall and the required 270° top arc clearance.

Figure 8: (Top right) Correct return of a handrail downwards and back on itself at 180°.

Part E – General Controls – Design Controls  
Chapter E1: Access for People with Disability

### STAIRWAY NOSINGS



Figure 9: (Top left) The correct minimum luminance contrast and depth of treatment on the nosings of the treads / goings.



Figure 10: (Top right) The correct minimum luminance contrast and depth of treatment on the nosings of the treads / goings.

### OPEN RISERS AND OVERHANGING TREADS ON STAIRWAYS



Figure 11: (Top left) Open risers and light sources coming from behind the stairway impact upon contrast and present a space for mobility aids to become unintentionally lodged.



Figure 12: (Top right) An enclosed stairway but has protruding lips which may cause problems for people by restricting leg movements and may also cause trip hazards.

Part E – General Controls – Design Controls  
Chapter E1: Access for People with Disability



Figure 13: Correct enclosed opaque risers with no overhangs which meet the requirements of stairways suitable for people with disabilities, under AS1428.1.

**LUMINANCE CONTRAST**



Figure 14: (Top left) TGSIs which fail to comply with the specifications of AS 1428.4 since they fail to provide the required luminance contrast. Under AS1428.4, a minimum of 30% luminance contrast is required for TGSIs, compared to the surrounding floor/ground surface. These photographs also show other non-compliant features such as the handrails and the lack of colour contrasting nosings.

Figure 15: (Top right) TGSIs which fail to comply with the specifications of AS 1428.4 since they fail to provide the required luminance contrast. Under AS1428.4, a minimum of 30% luminance contrast is required for TGSIs, compared to the surrounding floor/ground surface. These photographs also show other non-compliant features such as the handrails and the lack of colour contrasting nosings.

Part E – General Controls – Design Controls  
Chapter E1: Access for People with Disability



Figure 16: (Top left) TGSIs which have a high luminance contrast, as required by AS 1428.4. The photographs also show the correct setback from the top nosings of 300 +/- 10mm and the minimum depth of 600mm.

Figure 17: (Top right) TGSIs which have a high luminance contrast, as required by AS 1428.4. The photographs also show the correct setback from the top nosings of 300 +/- 10mm and the minimum depth of 600mm.

### TACTILE GROUND SURFACE INDICATORS

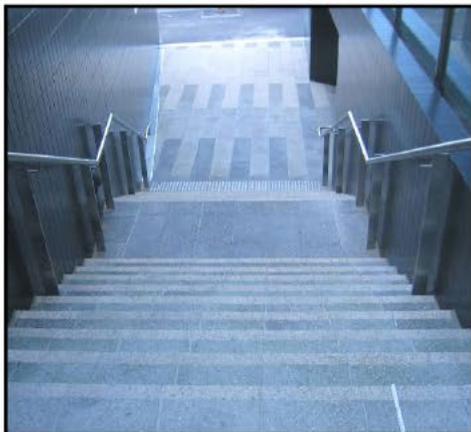


Figure 18: The correct interpretation of the requirements for TGSIs on an intermediate landing with no handrail break: there are no TGSIs on the landing.

## DOOR THRESHOLDS



Figure 19: A threshold ramp with an automatic door into a retail premises which complies with the BCA and AS1428.1 (without the need for a landing area).

## LIFTS



Figure 20: (Top left) Show call buttons which comply with the requirements of AS1735.12 in terms of their placement, luminance contrast application and raised tactile and Braille which are consistently placed adjacent to each button.



Figure 21: (Top right) Show call buttons which comply with the requirements of AS1735.12 in terms of their placement, luminance contrast application and raised tactile and Braille which are consistently placed adjacent to each button.

Part E – General Controls – Design Controls  
Chapter E1: Access for People with Disability

**FLOOR SURFACES**



Figure 22: (Top left) Very shiny and slippery floor surfaces which fail to meet the "R" rating, as required by AS4586 and HB197.



Figure 23: (Top right) Very shiny and slippery floor surfaces which fail to meet the "R" rating, as required by AS4586 and HB197.



Figure 24: (Top left) Show floor surfaces which meet the "R" rating under AS4586 and HB197.



Figure 25: (Top right) Show floor surfaces which meet the "R" rating under AS4586 and HB197.

## HEIGHT AND DESIGN OF RECEPTION DESKS AND COUNTERS



Figure 26: (Top left) Reception counters which allow for a frontal approach with an adequate toe plate and knee space for a person using a wheelchair.



Figure 27: (Top right) Reception counters which allow for a frontal approach with an adequate toe plate and knee space for a person using a wheelchair.

## ACCESSIBLE TOILET / WC FACILITIES



Figure 28: Correct placement of toilet and shower fittings as per the requirements of AS1428.1. Note: The toilet roll holders are placed below the grab rail, to ensure a person using a wheelchair is able to rise off the pan and transfer back onto their wheelchair unencumbered.

Part E – General Controls – Design Controls  
Chapter E1: Access for People with Disability



Figure 29: The correct installation of a washbasin and other fittings, including a shelf as required by Table F2.4 of the BCA.



Figure 30: The incorrect placement of the toilet paper holder too far forward of the WC pan, which forces patrons to lean excessively forward to get to the paper. This can result in patrons falling off the pan in attempting to reach the toilet holder.