Accessibility and Dignity

Design Standard

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TAFE NSW Nambucca Heads, Connected Learning Centre

TAFE NSW would like to pay our respect and acknowledge Aboriginal and Torres Strait Islander Peoples as the Traditional Custodians of the Land, Rivers and Sea. We acknowledge and pay our respect to the Elders; past, present and emerging of all Nations.

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This document is a design standard only. The project team retains responsibility for the coordination, design, procurement and delivery of any design project. This includes taking all reasonable steps to ensure that designs comply with all applicable Australian Standards required by the NCC, WHS Legislation, Statutory planning approval processes, TAFE NSW Procedures & Policies, and all other relevant statutory requirements.

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Introduction

1 Introduction

1.1 Overview

TAFE NSW is committed to creating a learning and working environment where dignity, trust, respect and the promotion of diversity and inclusion are valued.

TAFE NSW Disability Inclusion Action Plan 2020-2022

The TAFE NSW Accessibility and Dignity Design Standard is intended to improve the dignity and equity of all learners and staff across our campuses.

There are many pieces of legislation and standards that govern the requirements for accessible design in Australia. However, while these standards set minimum requirements, they do not consider how design can positively or negatively impact a person's experience.

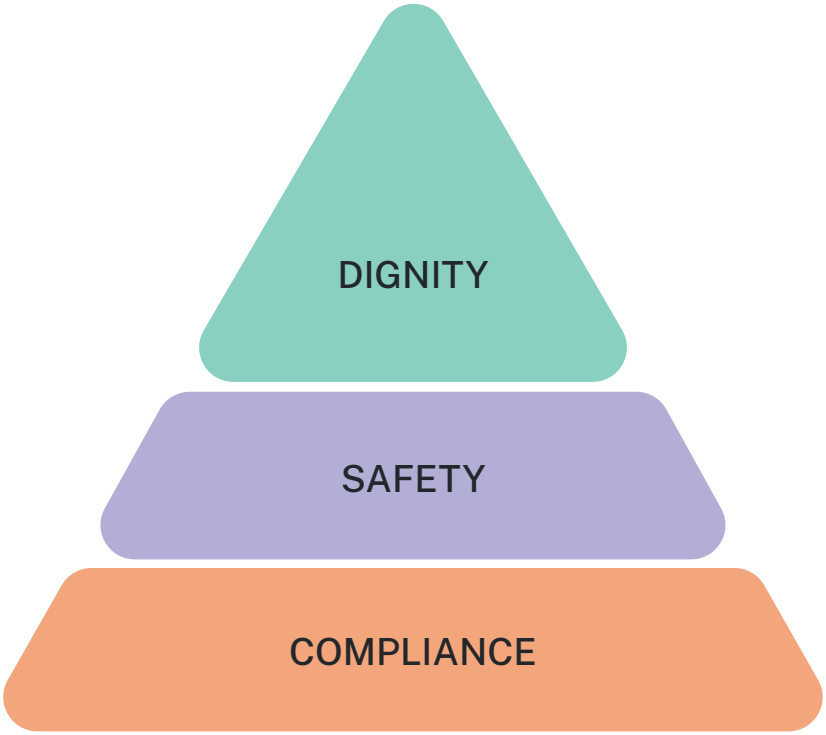


Diagram 1 - The respective importance of compliance, safety and dignity

Adapted from Oleary, S "If we want to shift to walking, We need to prioritise dignity"

This diagram demonstrates the respective importance and relationship between dignity, safety and compliance. TAFE NSW is committed to embedding dignity, trust and respect in our learning and working environments. Designing for dignity requires that the experience of people is incorporated into infrastructure design. This standard aims to provide design teams with practical guidance for common considerations that improve the dignity of people on our sites.

1 Introduction

1.2 What is Disability?

> *A disability is any condition that restricts a person's mental, sensory or mobility functions. It may be caused by accident, trauma, genetics or disease. A disability may be temporary or permanent, total or partial, lifelong or acquired, visible or invisible.*

Australian Network on Disability

https://and.org.au/resources/disability-statistics/

This design standard recognises the social model of disability, where 'disability' is the result of interactions between people and societal barriers which may include attitudes, environment, institutions or communication. Examples of how the social model defines disability in the context of the built environment are:

- Installing the control for an air-conditioner out of reach of a person with short stature
- Providing only stair access to a mezzanine level which prevents access for a person using a wheelchair

The first principal of the United Nations Convention on the Rights of Persons with Disabilities is "*Respect for inherent dignity, individual autonomy ... and independence of persons*". When spaces are accessible for people with disability, everyone can navigate the world more easily.

It is important for building designers and managers to recognise that types of disability are many and varied and may be different to what is expected. Simple design decisions can make big impacts to improve the accessibility of buildings and facilities. For example:

- Limiting the width of an entrance door mat to the width of the door opening provides tactile navigation for people who are blind or who have low vision
- Selecting rubbish bins with an opening rather than lift-up tops or flaps allows people who cannot grasp or lift a lid to put rubbish in a bin

1 Introduction

1.3 How to Use this Standard

This standard sets out TAFE NSWs commitment to inclusive design where it is above minimum standards. All projects must meet the minimum legislated requirements as set out in:

- Disability (Access to Premises – Buildings) Standard 2010
- The National Construction Code
- AS 1428.1 2021 Design for access and mobility, Part 1: General requirements for access – New building work
- Any other legislated standards

1.3.1 Legislated Requirements

All projects must allow to investigate and upgrade existing infrastructure to align with current legislated requirements. Under the Disability (Access to Premises – Buildings) Standard, Crown projects must meet the accessibility requirements stated in the Standard, **regardless of approval pathway**.

When writing business cases or project plannings, project budgets must include sufficient allowance to meet these requirements. The minimum requirements for any projects are:

A new building on an existing campus must upgrade the following to comply with the requirements of AS 1428.1:

- The path of travel from the **site boundary** to the new building(s)
- The path of travel from the **accessible carpark** to the new building(s)
- The path of travel between **all existing buildings** required to be accessible on site and the new building(s)

Refurbishment of an existing building must upgrade the following to comply with the requirements of AS1428.1:

- All elements within the scope of works. *For example: doors, door hardware and light switches*
- The path of travel from the works to the principal pedestrian entry. *For example: floor finishes, doors, internal stairs or ramps*
- The principal pedestrian entry. *For example: door hardware or controls, and any ramps, stairs and handrails to access the entry*

While there are no legislated requirements for **maintenance work**, any maintenance works should not reduce the accessibility or amenity of the site. Maintenance works should also select or design accessible options where there is no cost impact to doing so.

1.3.2 Design Standard Requirements

The remainder of the design standards sets out strategies for inclusive design that are not covered by any codes or regulations. The Inclusive Design Strategies section sets out both mandatory and recommended requirements for all projects.

- **Mandatory requirements** are either low cost or no cost and must be implemented where a project includes provision of new or refurbished items covered by the section. *For example, selecting joinery benchtops and frontals with suitable luminance contrast*
- **Additional recommendations** may have a cost depending on the specific project and are recommended to be implemented where possible. *For example, a project with underground or multistorey carparking already included can designate accessible carparks to be under shelter within the carpark.*

Inclusive Design Strategies

2 Inclusive Design Strategies

2.1 Parking and Vehicles

2.1.1 Experiences

If you've ever spent the entire day with wet underwear because you've been caught in a rain shower when getting out of the car... I wish I could never have had that experience

TAFE NSW Byron Bay Connected Learning Centre

Objectives

It is important to provide an accessible, safe and comfortable path of travel for people with disability from arrival to departure at all campuses.

Key considerations include:

- How will people arrive at the site? Is it by car, bus, bicycle, taxi, motorised scooter or other means?
- People with limited mobility may be able to drive cars and need to take their wheelchair or mobility device out of the car.

2 Inclusive Design Strategies

2.1 Parking and Vehicles

2.1.2 Car Parking

Mandatory Requirements

No.	Design Strategies
01	Where new car parks are provided, accessible parking spaces are located within 50m of building entrances

Additional Recommendations

The following recommendations should be considered where projects include construction of new carparks:

a) Construction of new buildings or major campus upgrades on existing sites should seek opportunities to review existing accessible parking spaces and upgrade to meet the requirements of AS 2890.6
b) Shade and protection from weather is provided over the accessible parking spaces including the associated shared space, with the required vertical clearance for accessible parking spaces
c) A dedicated pedestrian accessible path of travel, separate from the car park, is provided from the accessible parking space to the entrance of the building
d) Where a dedicated pedestrian path of travel is not possible, a line-marked pedestrian path along parking aisles may be provided
e) Car parks are well lit outside of daylight hours to suit operational hours. Lighting is even and consistent so as not to cast long shadows over pathways

2 Inclusive Design Strategies

2.1 Parking and Vehicles

2.1.3 Drop-Off Zones

It is desirable to provide a drop-off zone on TAFE NSW sites to allow people arriving by taxi, vans or other vehicles to alight safely. Drop-off zones should be located close to high traffic campus facilities such as the library, customer service or student support services.

Mandatory Requirements

There are no mandatory requirements for drop-off zones.

Additional Recommendations

The following recommendations should be considered where projects include drop-off zones:

a) Drop-off zones are a minimum size of 7800 x 3200mm, with an additional shared area of minimum 7800 x 1600mm. The shared area is provided on the pedestrian side, at the same level as the parking space. Provide a kerb ramp between the road and the footpath level
b) Maximum cross-fall of the drop-off zone to be 1:40 for concrete and 1:33 for bitumen
c) Seating is provided adjacent to the drop-off zone including a designated space for a person using a wheelchair, with a clear line of sight to approaching vehicles
d) Shelter for shade and from rain is provided for the seating area

2.1.4 Bicycle Parking and End-of-Trip Facilities

The number of bicycle parking spaces is to be provided in accordance with:

- Any Greenstar requirements for the project
- Local planning requirements to be met

The number of end-of-trip facilities are required to be provided in accordance with:

- TAFE NSW Sustainable Design Standard or any relevant Greenstar requirements for the project

Mandatory Requirements

No.	Design Strategies
01	Provide a variety of parking types with a range of heights and lengths, to cater for multiple styles of bicycle. Provide a mix of standard length horizontal and extra-long horizontal. Where vertical bicycle parking is proposed, vertical parks to make up not more than 30% of total parks

Additional Recommendations

The following recommendations should be considered where projects include end-of-trip facilities:

a) Consider a campus wide strategy for bicycle parking and end-of-trip facilities:
   - Bicycle parking and end-of-trip facilities are preferred to be located centrally on campus to avoid duplication of facilities
   - Where bicycle parking is provided locally to a building, locate within 30m of a building entrance
b) A minimum of one end-of-trip facility is accessible. This may be provided as an accessible bathroom with a shower in accordance with AS 1428.1
c) Where all-gender bathrooms are provided, provide an all-gender end-of-trip facility

2 Inclusive Design Strategies

2.1 Parking and Vehicles

2.1.5 Motorised Scooter Parking

Seek opportunities to provide internal motorised scooter parking adjacent circulation areas. Any new building or major refurbishment that includes works to building circulation areas may include scooter parking and charging.

Mandatory Requirements

There are no mandatory requirements for motorised scooter parking.

Additional Recommendations

The following recommendations should be considered where projects include motorised scooter parking:

a) Motorised scooter parking is recommended to be provided at a rate of 0.5% of building circulation area. Each motorised scooter parking requires 1.28m^2, and the total number of parks is to be determined as a percentage of the available circulation area rounded up to the nearest whole park.
b) Motorised scooter parking is located internally and includes:
   - A clear space of 1600 x 800mm
   - Marking or change in floor finish to identify the location of the parking space
   - A GPO between 600-1100mm AFFL
   - Signs to identify the parking space
c) The parking space must not impede the pedestrian path of travel

2.1.6 Ticket Machines and Parking Access Control

Ticket machines and parking access controls are rarely used on TAFE NSW sites. Where they are used, machines are to be selected and installed to meet the following requirements.

Mandatory Requirements

No.	Design Strategies
01	Operable parts of ticket machines and parking access control are between 900-1250mm AFGL
02	Provide ticket machines or parking access controls on a level paved surface, not exceeding 1:40 fall. Where ticket machines are set back from main paths of travel, provide connecting pathways
03	Access control systems at the entry to car parks: a) Push buttons and controls are to be placed 50mm +/-25mm behind the face of the kerb to allow easy reach for the driver b) Controls are suitable for people with limited dexterity or weakness c) Buttons are to sit proud of the surrounding surface and be minimum 25mm in size
04	Where intercoms are installed that control access to a carpark, ensure there is a system for deaf or hard of hearing drivers to use the intercom

2 Inclusive Design Strategies

2.2 External Environment

2.2.1 Experiences

The glare on the courtyard paving is so extreme that you don't want to sit out there... shade is something we need to consider especially here in Australia

TAFE NSW Nambucca Heads Connected Learning Centre

Objectives

Outdoor areas provided for work, study or relaxation should offer shelter, accessible seating options and ample, level circulation space for all users to enjoy.

- Long travel distances can be tiring for people with limited mobility, particularly in hot or wet weather
- People who are blind or have low vision may be sensitive to bright lights and glare
- People may move between buildings with a companion or assistance animal and they need adequate space to walk side-by-side

2 Inclusive Design Strategies

2.2 External Environment

2.2.2 External Paths of Travel

External paths of travel should consider who will be moving around campus. What are the main circulation paths and how do people travel between buildings? Consider, for example:

- the safety of people who use mobility aides
- how people who use long canes "shoreline", or use raised edges to navigate
- how people talking in Auslan can communicate while walking along a path together

Mandatory Requirements

No.	Design Strategies
01	Where covered walkways are provided over external paths of travel, locate columns outside of the path and in planters or lawn areas
02	The path of travel is clear of any obstructions including: a) Furniture such as rubbish bins, drinking fountains, and bicycle racks b) Building structures such as columns, air conditioning, plant or equipment
03	Where furniture items are located adjacent the path, they are: a) Set back from the path of travel such that a person using them does not impede the path of travel b) Installed to a paved surface c) Connected to the main path of travel with additional paving
04	Avoid designing paths of travel or ramps which are circular or a large segment of a circle as this is difficult for long cane users to navigate

Additional Recommendations

The following recommendations should be considered where projects include external paths of travel:

a) Provide path widths which are:
   - 1800mm for main pedestrian paths. This includes the central pedestrian spine through a campus
   - 1500mm for secondary pedestrian paths. This includes any path which connects the main pedestrian spine to a building
   - 1200mm for all other paths

b) Define paths of travel for people who are blind or low vision. This may include:
   - Different colour or textured paving materials for paths or borders
   - Raised garden edging or planter boxes where paths abut garden beds
   - Kerbs or unobstructed building walls
   - Ensure raised edges are not a trip hazard

c) For existing infrastructure where obstructions in paths are unavoidable:
   - Design path widths to be wide enough for circulation past the obstruction
   - Identify hazards with tactile means such as TGSIs

d) Where there is no kerb, garden edging, or walls; the ground abutting any main or secondary circulation path should follow the same grade as the path for an additional 600mm in width. The ground surface must be firm, level and of a different material. Firm grassed areas are acceptable

2 Inclusive Design Strategies

2.2 External Environment

2.2.3 Paving

Mandatory Requirements

No.	Design Strategies
01	Acceptable paving materials include: a) Broom brush concrete b) Exposed aggregate concrete c) Concrete pavers that are a minimum of 300x300mm (excluding a header course) d) Porous and permeable pavers where the water drains through the surface of the paver e) Bitumen
02	Unacceptable paving materials include: a) Pebblecrete or similar textured concrete b) Permeable pavers where the water drains through gaps in the pavers c) Cobbled paving or other small format paving d) Other irregular shape or organic form paving
03	Select paving materials and finishes to reduce glare
04	Slotted openings in drainage grates are no greater than 8mm wide where grates are located in paths of travel

Additional Recommendations

The following recommendations should be considered where projects include paving:

a) Consider a range of shading options for paved areas which may include structures or vegetation
b) Coloured concrete is recommended to large areas of exposed paving (e.g. gathering spaces) to reduce glare for users. Where coloured concrete is used it must be integral coloured concrete and not an applied paint finish
c) A different pavement colour or texture is recommended in areas where seats, bicycle racks, drinking fountains etc are located, to identify the area separately from the main paths of travel

2 Inclusive Design Strategies

2.2 External Environment

2.2.4 Timber decking

Timber or composite decking should only be used in limited applications at TAFE NSW. This may be required for pathways or platforms in tree protection zones, or around heritage buildings where ventilation is required. Careful selection of products and systems must be undertaken with the TAFE NSW project lead in consultation with TAFE NSW Facilities Management to understand any maintenance requirements.

Mandatory Requirements

No.	Design Strategies
01	Timber or composite boards are laid perpendicular to the path of travel
02	Design allowance for timber and composite decking and boardwalks are as follows: a) gaps between boards: 6mm, b) level difference between boards: 1-5mm, c) converse or convex cupping of a single board: maximum 2mm across the surface. d) The gap between boards can be increased to 10mm where the decking is located in high rainfall areas or where the boards exceed 150mm in width.

2.2.5 Street Furniture

Many TAFE NSW campuses are large with long paths of travel between buildings. Consider how people with limited mobility or who cannot travel long distances have opportunities to rest.

Mandatory Requirements

No.	Design Strategies
01	Street furniture is provided on a level base with a gradient not exceeding 1:40
02	Seating is set back a minimum of 500mm off the path to ensure enough legroom is provided for the person using the seat without reducing the width of the pathway
03	Provide an open space adjacent to 50% of all banks of seats to allow a person who uses a wheelchair to sit next to their companions. A space of minimum 800 x 2450mm is required. An additional manoeuvring space of 2070 x 1540mm is provided adjacent the seating. Refer to diagram 2 below
04	Select seats which drain free of water
05	Where tables with fixed seating are provided, 50% of tables are provided with a wheelchair accessible space
06	Open knee clearance under the table is provided for a minimum width of 900mm
07	Where seats of a fixed height are provided at the table, the top of the seat is 200 - 320mm beneath the height of the table

2 Inclusive Design Strategies

2.2 External Environment

2.2.5 Street Furniture (continued)

No.	Design Strategies
08	Select rubbish bins which have a fixed top over the opening or shaped openings for waste type (i.e. landfill, recycling etc). Bins without operable lids are preferred for accessibility and needs to be balanced with limiting access by wildlife. Openings are between 700-1200mm AFGL
09	Barbeques are electric with accessible knee and foot clearance. Provide an accessible path of travel to the barbeque

Additional Recommendations

The following recommendations should be considered where projects include street furniture:

a) Provide seating at maximum intervals of 50m along main and secondary circulation paths.
b) Provide a variety of seating options including:
   - With and without backs
   - With and without armrests
c) Street furniture which has a solid base at ground level is recommended to allow the detection by people who use long canes
d) Where there is an identified educational need for group gatherings, provide appropriate shade, shelter and a variety of suitable furniture
e) Where external tables are provided:
   - The first accessible height table is at 850mm AFGL, with minimum 820mm knee clearance
   - A second accessible height table is provided at 750mm AFGL, with minimum 720mm knee clearance
   - All dimensions are accepted with +/-20mm tolerance

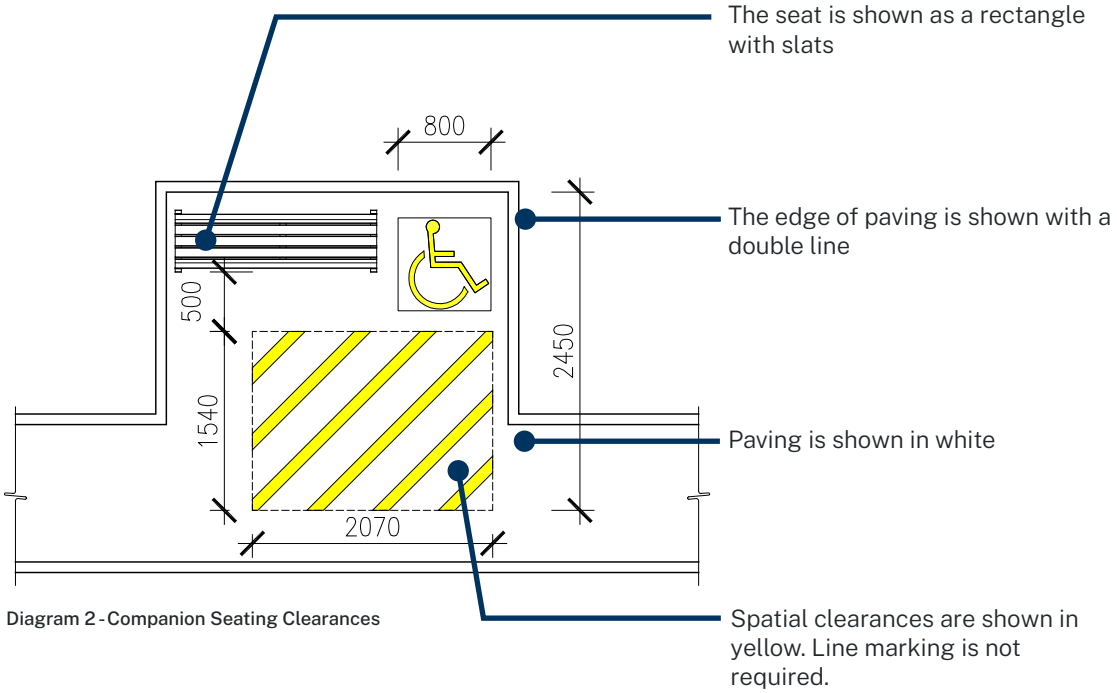


Diagram 2 - Companion Seating Clearances

2 Inclusive Design Strategies

2.2 External Environment

2.2.6 Drinking Fountains or Bottle Filling Stations

A range of options for learners and staff to fill drink bottles or cups are provided across sites. This may include:

- Internal bottle filling stations
- Staff or student kitchens with chilled water taps
- External drinking fountain or bottle filling stations

Mandatory Requirements

No.	Design Strategies
01	Provide fountains or filling stations on a level landing of 2070 x 1540mm where the gradient does not exceed 1:40 to allow a person using a wheeled mobility device to manoeuvre
02	Where chilled water taps are provided at staff or student kitchens, ensure operable parts of the tap are located within 300mm from the front of the counter
03	Drinking fountains are installed at 800-830mm AFGL with open knee clearance of 720mm under for a minimum depth of 500mm. Controls are located centrally on the unit, operable by one hand with a force not exceeding 20N
04	Where two units are provided, locate one fountain at 1000mm high and the other at 800mm high

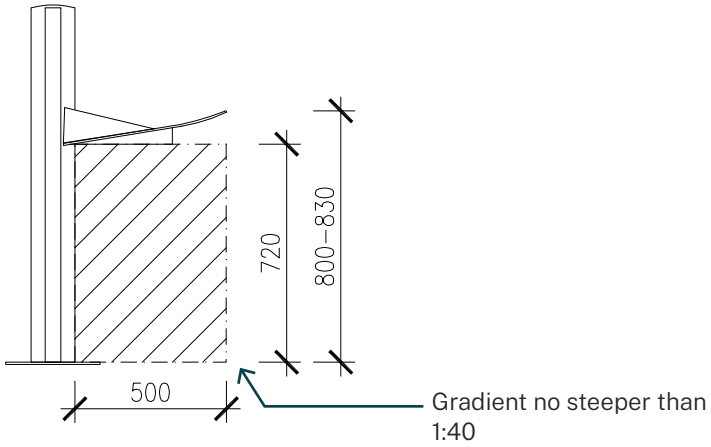


Diagram 3 - Drinking Fountain Elevation

2 Inclusive Design Strategies

2.3 Entrances

2.3.1 Experiences

Locating the door is really important. Open space around entry doors can make it difficult to find the door. There needs to be a clear indication of where the door is.

Canopy provides shelter from sun and rain and a visual cue to locate the door

An automated sliding double door with central approach is intuitive for visitors

Visual indicators and other glazing treatments can be installed to improve identification of the glazed doors and walls

Clear signs and landmarking structures assist identification of the entrance

Garden beds are well maintained with plants clear of the path

Wide, smooth, level path of approach with defined edges

TAFE NSW West Wyalong Connected Learning Centre

Objectives

Principal pedestrian entrances should be easy to identify, well lit, provide a wide and level path of approach, automated or easy to open doors, and offer protection from the weather.

- People who are blind or who have low vision rely on landmarks being in consistent locations to aid navigation to entries
- People who are deaf or hard of hearing may not be able to use audible intercoms or systems
- People with anxiety or PTSD may feel safer when they can easily locate an entrance or help from building occupants

2 Inclusive Design Strategies

2.3 Entrances

2.3.2 Approach and Identification

Entrances to buildings should be well defined and easily identifiable. Consider how people will identify the building entrance from a distance and travel safely to the building entry.

Mandatory Requirements

No.	Design Strategies
01	Use architectural elements to clearly define entries to buildings. Options for defining building entrances include: a) Providing contrast between doors and walls through material and/or colour selection b) Providing canopies over entrance doors c) Integrating other architectural elements into the design which act to draw attention to the entrance
02	Select materials for entry canopies which do not accentuate the sound of rain
03	Select materials for building facades to reduce glare and discomfort for people approaching the building. Where reflective materials are used, include diffusing materials to reduce glare, such as low reflectance film or external louvres
04	The path of travel to the entrance is clear of obstructions such as furniture, plant or equipment
05	Avoid positioning new plant, such as air conditioner condensers, adjacent entries or outdoor gathering areas

Additional Recommendations

The following recommendations should be considered where projects include new or modified entries to buildings:

a) The principal pedestrian entrance is an accessible entrance, as defined by NCC 2022 D4D3. The entrance is level or uses a ramp as the primary path of travel.

b) Provide entrance canopies for weather protection at all pedestrian entry points with a minimum depth of 1500mm

2 Inclusive Design Strategies

2.3 Entrances

2.3.3 Entrance Doors

The design of entrance doors should consider who is entering and exiting the building. Will people be carrying heavy loads or pushing trolleys with equipment between learning spaces? Will there be a high volume of people with limited mobility?

Mandatory Requirements

No.	Design Strategies
01	Automatic doors are designed as twin-leaf, bi-parting sliding (glazed) doors with minimum 1000mm clear width
02	For refurbishment of existing spaces, where twin-leaf sliding doors cannot be installed, other types of automatic doors are acceptable: a) Single sliding automatic doors can be provided where space is limited b) Automatic hinged doors should be avoided due to challenges with operation and maintenance. They are acceptable only where no other option is available for existing or heritage buildings where agreed with the TAFE NSW project lead
03	There is a continuous, lip-free (maximum 3mm height) and non-slip surface provided on both sides of entrance doors
04	For glazed entrance doors, each side of the door (outside/inside) is clearly marked with contrasting colour floor surfaces so that it is clear when one space ends and the next begins
05	Door mats are provided for external doors and must be: a) Only provided to the width of the operable leaf of the door b) Flush with adjacent surfaces c) Firmly fixed to the substrate
06	Door mats must not be a solid black colour

Additional Recommendations

The following recommendations should be considered where projects include entrance doors:

a) The principal pedestrian entrance to the building is an automatic door
b) Entry doors to high use / communal areas such as libraries, customer service, counselling, disability support, learner lounge or learner commons are automatic sliding doors
c) Automated sliding doors are motion sensor operated during operational hours. After hours, and in emergency situations, automatic doors are activated by push button operation. Operational requirements to be determined in conjunction with the TAFE NSW Security team

2 Inclusive Design Strategies

2.3 Entrances

2.3.4 Door Hardware and Controls

Mandatory Requirements

No.	Design Strategies
01	Push buttons, card readers, intercoms and all controls for doors are: a) On the latch side of the door to provide consistency and assist people who are blind or who have low vision locate the controls b) Have luminance contrast of a minimum 30% between the controls and the wall colour on which they are mounted c) A minimum of 500mm, (750mm preferred) from any internal corner d) Located between 900-1200mm AFFL e) Located on a level landing with a maximum gradient of 1:40 f) Buttons have a minimum diameter of 25mm g) Buttons sit proud of the adjacent surface and activate before they become level with the surrounding surface
02	Door handles are a colour that provides a luminance contrast with the colour of the adjacent wall or door on which they are mounted
03	Signage is provided to entry doors to indicate the direction of operation: a) Arrows are provided to sliding doors to indicate the direction of movement. Arrows are 150mm wide x 75mm high at a height of 1200-1600mm AFFL. The arrow is white on blue background b) On hinged doors, 'Push/Pull' signs or arrows on doors are provided to indicate the direction of opening

Additional Recommendations

a) Push buttons, security card reads or other door operational controls should be located as close as possible to the door they control. Key design considerations include:
   - How does a person locate the controls?
   - Can a person operate the controls (i.e. swipe card reader), then move to the door to operate the door before the door re-locks?
   - If the door is an automatic door, can the person operate the controls (i.e. push button), and either move out of the way of the door, or get through the door, prior to the door moving or closing?
   - It is recommended that any automatic door controls are no more than 2000mm from the handle / latch of the door (or location where the handle would be if an automatic door), as measured in a radius from this location

2 Inclusive Design Strategies

2.3 Entrances

2.3.5 Foyers and Reception Areas

Mandatory Requirements

No.	Design Strategies
01	Reception and service counters are located within sight of a person entering the building or area to assist with wayfinding
02	The design of reception areas includes finishes that minimise the reverberation of sound to assist people who are deaf or hard of hearing. Carpet, acoustic ceilings, and acoustic wall finishes are preferred
03	Provide a range of seating options that are set back from the main path of travel and do not impede circulation routes
04	Do not use flashing signs or highly active digital display signs
05	Where digital ticketing systems are proposed, ensure that information can be accessed in a variety of formats: a) Registration points to 'apply' for a ticket have tactile options and not be solely touch screens to be useable by people who are blind or who have low vision b) Call out systems must include audible and visual indicators to be useable by people who are deaf, hard of hearing or who have English as a second language

Additional Recommendations

The following recommendations should be considered where projects include foyers or reception areas:

a) In buildings that contain multiple service counters or reception areas, a consistent, recognisable design throughout the building is provided to assist wayfinding
b) Use colour to distinguish floor levels in the building
c) It is recommended to consult an acoustic specialist

2 Inclusive Design Strategies

2.3 Entrances

2.3.6 Counters

Counters include reception desk counters, library counters, service counters at information desks, kiosk and retail counters. Simulated counters in teaching areas should consider that learners and staff may have a disability. Counters in customer service and library areas are often used to provide a service and may require the customer and staff member to interact for a longer period of time.

Mandatory Requirements

No.	Design Strategies
01	Where a service counter is provided, an accessible height counter is also provided. Where more than one service counter is provided, a minimum of one accessible height counter per five counters is provided
02	An accessible height counter is located within the main counter area and not provided in a secondary location such that it is visible upon approach to the counter
03	Design counters to provide clear lines of sight between customers and staff. Consider whether customers and staff will be seated or standing and that people may use a wheelchair or be of short stature
04	Where one accessible height counter is provided, design at 850mm high. Where a second accessible height counter is provided, design at 750mm high
05	An accessible height counter has knee clearance space of minimum 720mm high x 1000mm wide x 550mm deep
06	Where a staff member is seated at the accessible counter for extended periods of time, additional toe clearance of 500-550mm is provided on the staff side. Ensure the counter width does not exceed 1100mm. See Diagrams 4 & 5 for options
07	Counters for people who are standing are designed at 1000-1100mm AFFL
08	Provide different colour finishes for horizontal and vertical surfaces with a minimum 30% luminance contrast including: a) Counter top to counter vertical surface b) Counter vertical surface to floor surface c) Counter vertical surface to background wall surface
09	A turning space of 1540 x 2070mm is provided on both the staff and customer side of the counter
10	Provide rounded counter top edges such as bullnose or pencil round edges
11	Provide a modesty panel below the counter top
12	Service buzzers are located within 300mm of the front of the counter at 900-1200mm AFFL and not within 500mm of an internal corner

2 Inclusive Design Strategies

2.3 Entrances

2.3.6 Counters (continued)

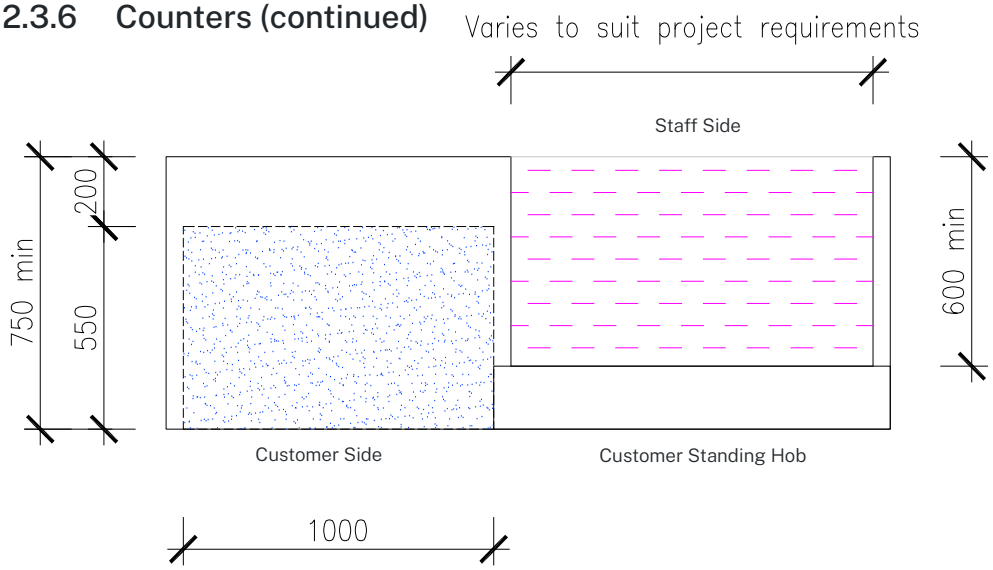


Diagram 4 - Plan View of Reception Counter - Option 1

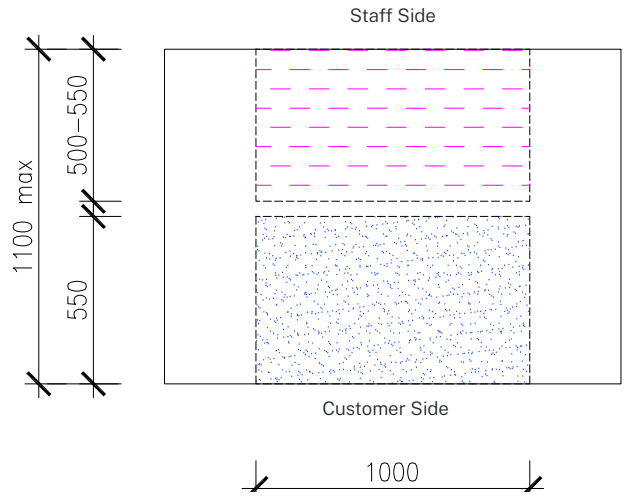


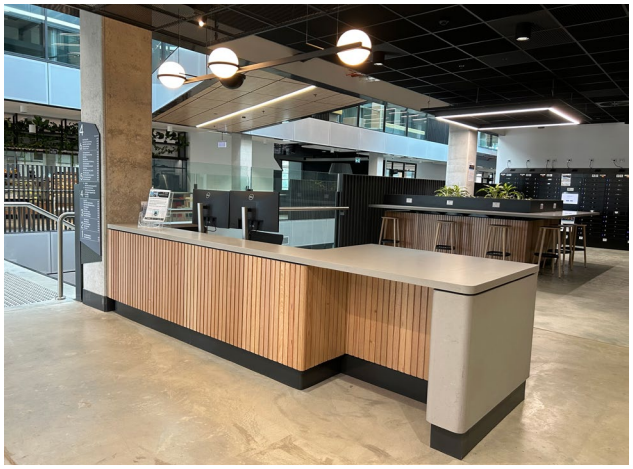
Diagram 5 - Plan View of Reception Counter - Option 2

Reception Counter Option 1

- Provide a customer standing hob at 1000mm-1100mm height
- Staff counter may be fixed or adjustable in height. The fixed height counter for seated staff is 720mm
- Do not place drawers or cupboards within the accessible bench side of the joinery to allow people to pass items between customers and staff

Reception Counter Option 2

- This option is suitable where customers and staff have a seated interaction for a long period of time



TAFE NSW Meadowbank Institute of Applied Technology Digital

- There are acoustic ceiling panels located over the counter. The accessibility could be improved by reviewing the amount of hard surfaces around the counter
- Wheelchair accessible bench space is located in an easily visible location. There is sufficient clearance
- There is colour contrast between the counter top and main vertical surface. Accessibility could be improved by increasing colour contrast between the counter top, side panel and the floor

2 Inclusive Design Strategies

2.4 Vertical Circulation

2.4.1 Experiences

It would be good to have enough space for people to walk together. For example, if you are chatting with a colleague in a wheelchair, you need to pause chatting if they go up a narrow ramp and you go up the steps

The stair is centrally located and easy to access from the main entry

Balustrades provide strong colour contrast with the stair to aid navigation

The guardrail and kerb-rail protect people from hitting their heads on the open underside of the stair. Accessibility could be improved by incorporating a solid element at the floor level.

This treatment creates a space that is difficult to clean and that may be mis-used for storage. Fully enclosing the area under the stair is preferred.

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Objectives

Vertical circulation includes any stair, ramp or lift.

- Stairs and ramps must provide safe and intuitive movement between levels
- Well designed and located vertical circulation assists building users in navigating between levels and understanding what floor they are on

2 Inclusive Design Strategies

2.4 Vertical Circulation

2.4.2 Stairs

Well designed stairs can assist people to navigate safely and effectively through buildings.

For multi-storey buildings, consider whether fire-isolated stairs can also be designed as communication stairs to minimise the number of stairs required in a building.

Mandatory Requirements

No.	Design Strategies
01	Provide stairs in a central location to encourage use by people who are able
02	Design stairs to enable users to easily locate them within a building. Options include selecting a contrasting colour and / or surface material to that of the floor and walls
03	Design stairs in straight runs and of a consistent width for the length of the stair. Stairs may be straight or turn through 90deg or 180deg at landings. Do not provide stairs that: a) Change direction at non-uniform angles b) Change width or direction partway through a stair c) Are circular d) Have curved risers e) Have tapered risers
04	Stair risers are both solid and opaque
05	Tactile indicators are provided as metal discreet style tactile indicators
06	Any open area under a stair is enclosed with solid elements where the clear height is less than 2000mm. The stair may be enclosed with solid walls or planters with a solid base. Providing hazard warning through tactile indicators or handrails is not accepted

Additional Recommendations

The following recommendations should be considered where projects include stairs:

a) Stairs have a minimum clear width of:
   - 1500mm where they are to be used as a central circulation stair
   - 1200mm where the stair is for limited use, such as staff only

b) Tread widths are between 275–300mm and riser heights are between 150–165mm

The following recommendations should be considered where projects include fire isolated stairs:

a) Handrails are provided on both sides of the fire isolated stairs
b) Handrail extensions, stair nosing and TGSIs are provided to all fire isolated stairs in accordance with AS1428.1

2 Inclusive Design Strategies

2.4 Vertical Circulation

2.4.3 Walkways and Ramps

Walkways and ramps provide inclusive paths of travel for all users and should be used wherever possible. Consider situations where people cannot see the top of the ramp and how passing of other users is achieved.

Mandatory Requirements

No.	Design Strategies
01	The design gradient of all access walkways is a maximum 1:21 to allow for construction tolerance
02	The design gradient of all ramps is a maximum 1:15 to allow for construction tolerance
03	The crossfalls on curved walkways and ramps is preferred to be towards the centre of the radius
04	Straight sections of ramp are preferred over curved ramps. Curved ramps should be used in limited situations where there are no other options available

Additional Recommendations

The following recommendations should be considered where projects include walkways and ramps:

a) Walkways and ramps are:
   - 1800mm wide clear between handrails where they are the main path to a building entry
   - 1200mm wide clear between handrails for all other locations

b) Provide 1800mm wide ramps where required for two-way passing, especially where there is a high volume of pedestrian traffic and/or there is no line of sight

2 Inclusive Design Strategies

2.4 Vertical Circulation

2.4.4 Handrails

Mandatory Requirements

No.	Design Strategies
01	Stairs are designed such that handrail extensions do not protrude into the path of travel
02	Handrail extensions are fully closed loops, or returned to the wall or floor to prevent bags catching on handrail ends. Acceptable designs are as per AS 1428.1 2021 Figure 26 (C) (a) - select from types (b), (c), (d) or (e)
03	Handrails are at a height of 900 – 950mm and measured as per AS 1428.1. Handrails are separate from any balustrades but may be mounted from the balustrade where required
04	Handrails have a minimum 30% luminance contrast with background surfaces
05	Design external handrails to mitigate environmental factors such as exposure to sunlight and heat. Either provide shade or select materials or finishes such as powdercoating or timber handrails

TAFE NSW Meadowbank Institute of Applied Technology Digital

- The balustrade extends past the end of the handrail to ensure the handrail does not protrude into the path of travel
- The handrail has luminance contrast to the background surface
- The handrail returns to the floor which eliminates bag catches
- Discrete tactile indicators are used with colour contrast to the floor finish

2 Inclusive Design Strategies

2.4 Vertical Circulation

2.4.5 Passenger Lifts

Technical and operational requirements for passenger lifts are located in the TAFE NSW Vertical Transport Design Standard.

Mandatory Requirements

No.	Design Strategies
01	The lift car floor has a slip-resistant finish with a rating of P3 in accordance with AS 4586. Lifts with external access have a slip-resistant floor finish of P4
02	Lift car doors have a 30% luminance contrast with adjacent wall finishes
03	Lift call buttons have a minimum luminance contrast of 30% against the surrounding wall colour
04	Lifts are provided with a mirror or mirrored finish to enable people using a wheelchair or who are deaf to see if there are people behind them

Additional Recommendations

The following recommendations should be considered where projects include passenger lifts:

a) Lifts that are accessed internally through buildings are preferred over lifts with external access
b) Provide a lift landing door circulation of minimum 1500 x 1500mm to allow a 90 degree turning space

2 Inclusive Design Strategies

2.4 Vertical Circulation

2.4.6 Tiered Seating

The need for tiered seating should be carefully considered. Tiered seating can create activated learner commons or manage level changes across sites, however, poorly designed tiered seating can create safety hazards. The following requirements must be adopted for any internal or external tiered seating.

Mandatory Requirements

No.	Design Strategies
01	Stairs to access tiered seating have colour contrast nosings and TGSIs
02	Tiered seats have contrast nosing so that people with low vision can distinguish the edge of the seating platforms
03	Stair access is provided to the tiered seating by one of the following: a) A stair on each side of the tiered seating with handrails placed along the side walls or outside edges (preferred) b) A stair located centrally within the tiered seating with a central handrail with 1000mm clear stair width on both sides of the handrail c) A stair on one side of the tiered seating with a handrail along the side wall
04	Where circulations stairs are located adjacent tiered seating for access between two levels of a building, the circulation stair is designed in accordance with the stairs section. This includes providing handrails on both sides of the stair. Extend the stair treads to access the tiered seating a minimum of 1000mm beyond the handrail. *Refer to the image below of Kingswood Institute of Applied Technology for example.*
05	Where access is provided at the top and bottom of the tiered seating, wheelchair access spaces are provided at both levels. Where access is only provided at one level, wheelchair access spaces are provided at that level
06	At the top of the tiered seating, provide an additional tier between 300-450mm AFFL to reduce the risk of falls

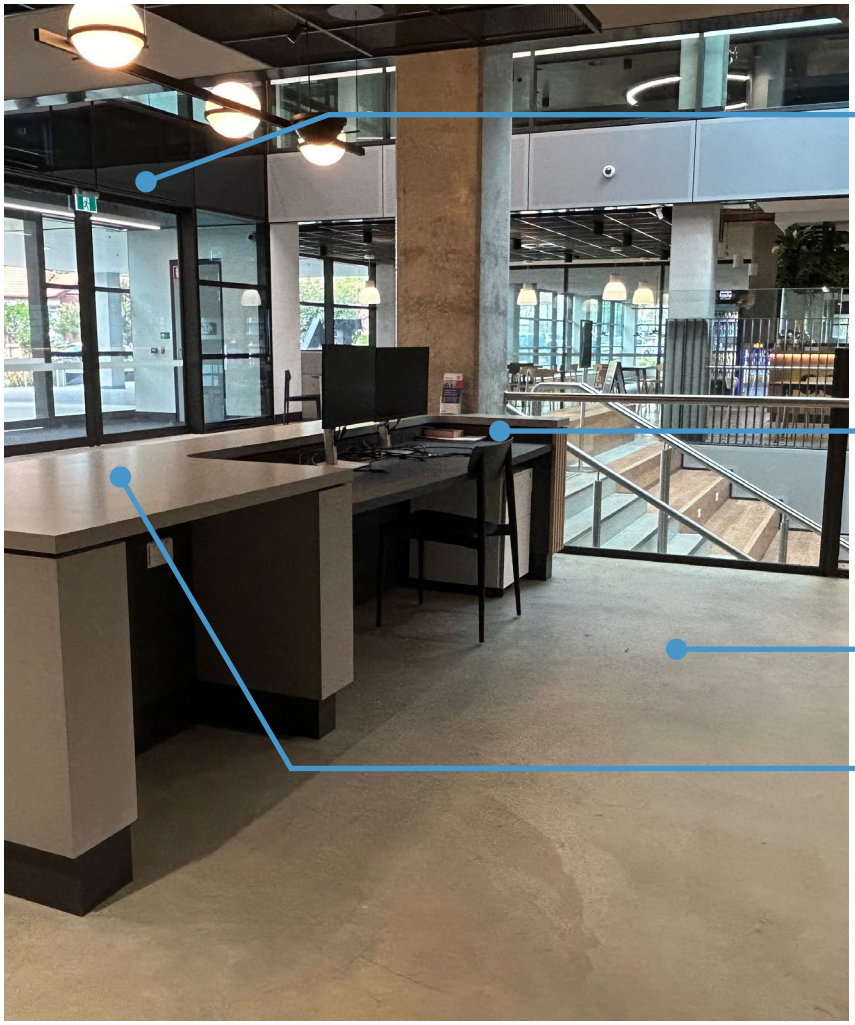
TAFE NSW Kingswood Institute of Applied Technology Construction

2 Inclusive Design Strategies

2.5 Internal Environment

2.5.1 Experiences

When there is too much noise surrounding reception it makes it difficult to understand - and blind people can't use graphics for context cues



Acoustic ceiling panels are located above the counter. Accessibility could be improved by considering other surfaces within the foyer and providing more sound absorbent surfaces

Two different height desks are provided to suit seated and wheelchair users. Accessibility could be improved by providing an adjustable height desk to the staff area

Ample circulation space is provided behind the desk for circulation

The counter height allows staff to see people waiting for service. The location of the counter allows staff to see who is entering the building. There is a wheelchair accessible space integrated in the main counter and not located to one side

TAFE NSW Meadowbank Institute of Applied Technology Digital

Objectives

Internal spaces should meet the needs of both visitors and staff. Reception desks should be easy to identify and provide a space that is conducive to clear two-way communication.

- People who use wheelchairs or who are of short stature may have difficulty getting assistance if counters are too high
- Harsh or soft light, loud or echoey acoustics can make it difficult to navigate and communicate

2 Inclusive Design Strategies

2.5 Internal Environment

2.5.2 Doors and Door Controls

Where a project involves refurbishment of an existing space and an existing door meets the minimum requirement of AS 1428.1, no modifications are required.

Where a new door is provided, or an existing door is required to be upgraded to meet AS 1428.1, it must be provided in accordance with AS 1428.1 and the following additional requirements.

Mandatory Requirements

No.	Design Strategies
01	Door clear open width achieves a minimum of 900mm clear. Provide a door leaf of minimum 970mm
02	The design of clear door circulation spaces in accordance with AS 1428.1 must include construction tolerance for wall linings and applied finishes
03	The design location of un-fixed furniture items must not be within door circulation spaces
04	Doors are framed suites. Frameless glass doors should not be provided
05	Design doors to be set back no more than 300mm from the adjacent wall face. Where this cannot be achieved due to existing or heritage buildings, the door is required to be automated
06	Avoid the use of door closers if there is no specific operational requirement. Where door closers are required, they shall have adjustable delayed action or hold-open function with the exception of fire and smoke doors

2 Inclusive Design Strategies

2.5 Internal Environment

2.5.3 Surfaces and Acoustic Treatment

Mandatory Requirements

No.	Design Strategies
01	The specified floor surface must achieve slip resistance as per HB 198: 2014 'Guide to the specification and testing of slip resistance of pedestrian surfaces' for different building areas. Specific teaching areas not covered by HB 198: 2014 may use Table 5 of HB 197: 1999 ' An introductory guide to the slip resistance of pedestrian surface materials' where appropriate.
02	Floor coverings and wall surfaces are not highly patterned. A luminance contrast between adjacent colours on a single surface is less than 20%.
03	Where large open spaces are proposed, design spaces to manage noise and prevent echo: a) Provide acoustic panels and treatments to walls, floors and ceilings b) Provide soft furnishings

Additional Recommendations

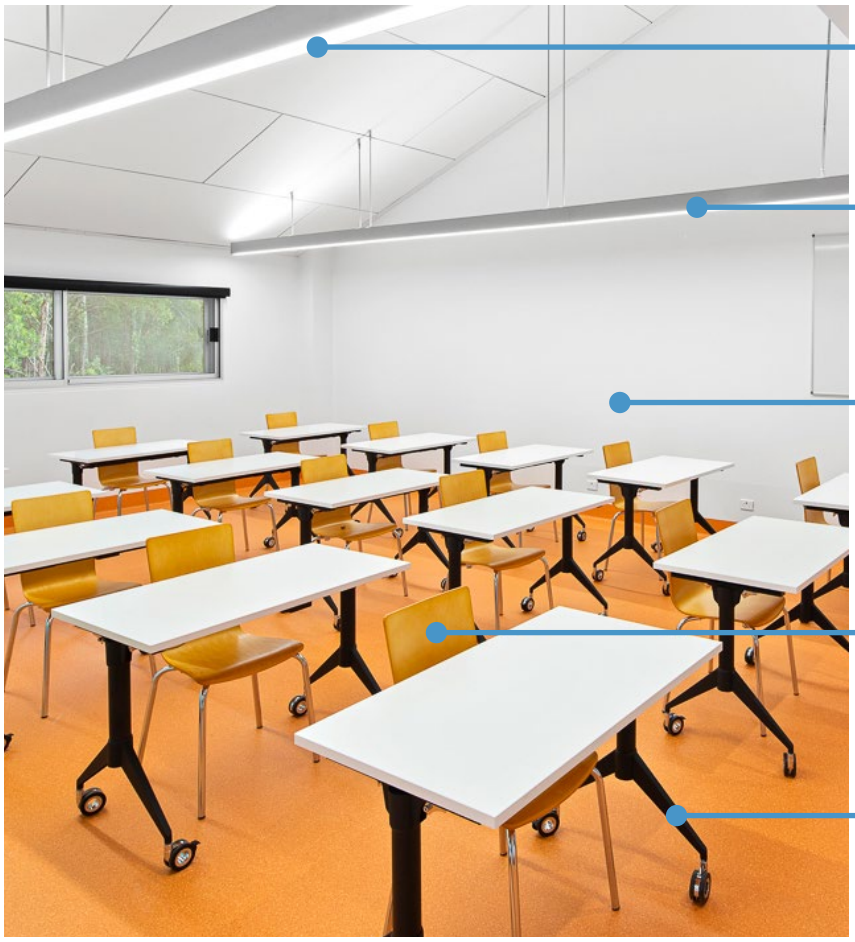
a) It is recommended to seek advice from an acoustic engineer for the design of internal spaces. Particularly where there complex acoustic environments such as noise transfer between spaces, or spaces that are critical for conversation and comprehension.

2 Inclusive Design Strategies

2.6 Learning and Workspaces

2.6.1 Experiences

In classrooms with neurodiverse students, sounds like a clicking fan, air conditioning, flapping blinds from a breeze can be a distracting thing for them. Anything to help students focus in class is better



TAFE NSW Coffs Harbour Education Campus Multi-Trades Hub

Dimmable lights can improve accessibility, particularly for neurodiverse people or people with sensory sensitivities

Bright, even lighting can assist people who are deaf or hard of hearing to lip read or see sign language interpreters

Providing acoustic treatments to walls to reduce excess noise can improve accessibility for people who are deaf, hard of hearing or sensitive to sound

Accessibility can be improved by providing colour contrast between the chair seat and the floor to assist people with low-vision

Lightweight chairs and mobile desks enable flexible setout arrangements. Accessibility could be improved by selecting a table design that has fewer opportunities for trip hazards

Objectives

Learning and work spaces should be designed with a diverse range of users in mind. The careful use of surface finishes, lighting and the type and arrangement of furniture can be used to support focus and productivity.

- People with sensory sensitivity may be distracted by noises or smells or bright lights
- People have many different needs and requirements. Providing a variety of space and furniture allows people to choose what suits their needs
- Allowing people the ability to control light and ventilation can support a variety of needs

2 Inclusive Design Strategies

2.6 Learning and Workspaces

2.6.2 Space Planning and Design

Mandatory Requirements

No.	Design Strategies
01	Incorporate strategies for natural light and visual comfort: a) Orient windows towards views of green spaces and natural elements b) Provide blinds or curtains to external windows to reduce the risk of glare and create privacy. Where blinds are not suitable to the function of the space, consider other methods to reduce glare c) Provide dimmable lighting that is adjustable by the occupants in accordance with TAFE NSW Lighting Services Design Standard
02	Incorporate strategies for natural ventilation and thermal comfort: a) Design windows to be operable in working and learning areas that can be operated by occupants where appropriate b) Provide temperature controls to individual rooms or zones in accordance with TAFE NSW Mechanical Services Design Standard
03	Design zones within large open areas such as libraries, learner commons and staff work areas such that: a) Quiet work areas or focus rooms are located away from collaboration zones or breakout areas b) Quiet work areas or focus rooms use absorbent finishes for acoustic control c) Meeting or group study rooms may be used to separate quiet and noisy functions, where they are appropriately acoustically treated d) Locate kitchens away from quiet focus areas
04	Incorporate colour, texture and materials to enhance comfort within spaces and create visual cues to aid navigation between spaces: a) In buildings with multiple functions, colour code different functions such as learning spaces, communal areas, libraries etc. b) Use soft natural colours rather than bold, contrasting colours c) Soft, natural materials and non-reflective surfaces are preferred over hard surfaces where functional requirements permit
05	Provide 30% luminance contrast between floor and other finishes to assist people with low vision: a) Floor and chair seat finishes b) Floor and tables
06	Locate power points to suit the furniture design. Avoid trip hazards with cables running across the floor
07	Design workspaces to support the safety of occupants including: a) Easily identified entry and exit points b) Understanding for how visitors will enter the building and seek assistance from staff c) Security and access controls

2 Inclusive Design Strategies

2.6 Learning and Workspaces

2.6.2 Space Planning and Design (continued)

No.	Design Strategies
08	Avoid designing joinery, counters or seating which are circular or a large segment of a circle as this is difficult for long cane users to navigate

Additional Recommendations

The following recommendations should be considered where projects include learning and workspaces:

a) Hearing augmentation is provided in rooms where amplification systems are used. Portable systems are acceptable. Design of the system must include:
   - Location for storage of portable components
   - A management plan so that all staff are aware of where the systems are stored and how to operate them
   - Signage indicating the availability of these systems, and link to online information
   - Online information including a map to where augmentation devices are available, and instructions for use

b) Seek opportunities to incorporate natural elements and greenery into working and learning spaces

TAFE NSW Tomaree Connected Learning Centre

- The entry counter is located immediately inside the entry doors
- A range of furniture is provided, including chairs with and without backs
- Circulation paths are clearly defined
- Furniture is located in a zone defined by carpet flooring which is a different colour and texture to the circulation zone

2 Inclusive Design Strategies

2.6 Learning and Workspaces

2.6.3 Furniture Selection and Placement

Furniture must be selected in accordance with the TAFE NSW Furniture Design Standard and TAFE NSW Furniture Catalogue.

Mandatory Requirements

No.	Design Strategies
01	Design spaces with a variety of furniture options to accommodate different needs and preferences. Examples include: a) Adjustable height desks b) Chairs with multiple options such as lumbar support, with and without arms, high and low backs c) Chairs which are adjustable
02	Where small furniture such as ottomans, coffee tables or laptop tables are provided, locate out of circulation zones and ensure furniture isn't moved into circulation zones. Design strategies may include: a) Fixing some furniture into position b) Providing heavy furniture c) Using different coloured or textured flooring to define circulation paths
03	Where seats of a fixed height are provided with the table, the top of the seat is between 200 - 320mm beneath the height of the tabletop

Additional Recommendations

The following recommendations should be considered where projects include furniture:

a) In busy communal areas such as libraries, learner commons, customer service or staff work areas, provide furniture that can increase privacy for individuals or pairs. Specifically designed furniture or joinery may be provided which:
   - Has high backs and sides
   - Is acoustically treated
   - Gives the feeling of being enclosed
   - When selecting furniture for pairs, allows users to sit opposite each other
   - Has accessible options for wheelchair users

2 Inclusive Design Strategies

2.6 Learning and Workspaces

2.6.4 Kitchens, Kitchenettes and Joinery

Mandatory Requirements

No.	Design Strategies
01	Knee and foot clearance is provided to the sink
02	Where a sink cannot be provided with knee and foot clearance, tapware and boiled / chilled water dispensers are located within 300mm from the front edge of the bench
03	A bench height of 900mm is acceptable where the sink depth is no greater than 180mm
04	Provide circulation space of 1540 x 2070mm so that someone using a wheelchair can enter and exit the kitchen. This space may overlap with other circulation spaces
05	Provide commonly used appliances and fixtures (microwaves, paper towel, etc.) within the common reach range (700-1200mm) and within 300mm of the front of the bench
06	Provide a GPO maximum 300mm from the front edge of the bench
07	D-shaped handles are provided on all joinery for ease of use. Do not use shark nose or recessed joinery handles. Provide clearance of minimum 20mm between the handle and the door face

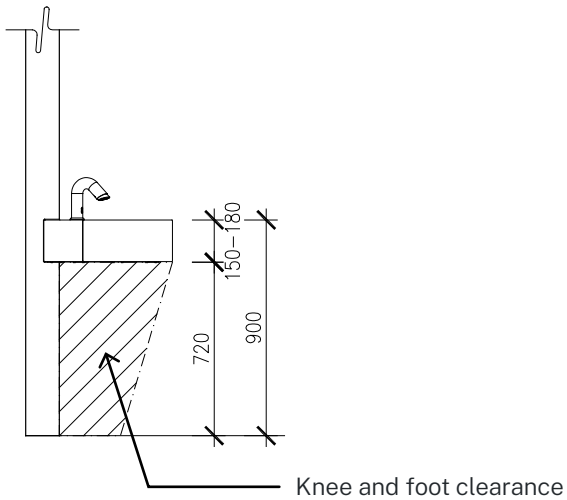


Diagram 6 - Accessible Sink Elevation

2 Inclusive Design Strategies

2.6 Learning and Workspaces

2.6.5 Libraries and Communal Areas

Mandatory Requirements

No.	Design Strategies
01	Provide a counter with open knee clearance adjacent to printers. This can be a table or countertop with a minimum 720mm high x 1000mm wide knee and foot clearance
02	Provide a clear space of 1540 x 2070mm in front of printers for movement and circulation
03	Book return chutes are provided at 900-1100mm AFFL and are capable of being operated by one hand

Additional Recommendations

The following recommendations should be considered:

a) For childcare centres located within TAFE NSW provide pram parking /storage close to the entrance of the building. Ensure that prams do not protrude onto paths of travel

b) If self-checkout facilities are provided a proportion of these must be accessible. Ensure the operational parts of scanners are located within the zone of common reach 700-1200mm AFFL

2 Inclusive Design Strategies

2.6 Learning and Workspaces

2.6.6 Additional Space Types

When constructing new campuses, new buildings or major campus upgrades, consider what communal facilities are available on campus. Some learners, staff or visitors may have space specific needs which can be accommodated in the following room types. Seek opportunities for providing these spaces or adaptable meeting spaces that suit multiple needs.

A campus wide approach should be taken to the provision of additional space types. Space types that should be considered include:

- Sensory space - refer to information below
- Spaces for prayer or meditation, refer to TAFE NSW Learning Support Spaces Design Standard
- Parenting rooms, refer to TAFE NSW Multi Trades Hub Design Standard

2.6.7 Sensory Spaces

Sensory spaces or rooms allow users to quickly isolate and feel calm. Where they are constructed, implement current best practices for safety and security within sensory spaces. Further information on the design of sensory spaces can be found at:

- PAS 6463:2022 Design for the mind - Neurodiversity and the built environment - Guide

Mandatory Requirements

No.	Design Strategies
01	Provide lighting options which include: a) Low level lighting b) User controls for lighting c) User control of lighting colour such as rainbow LED
02	Provide soft furnishings in the space that are sensory soothing and provide comfort for the user, such as couches, cushions and beanbags
03	Provide acoustic panels and other sound absorbent surfaces to ensure levels of noise remain consistently low and do not fluctuate unexpectedly

Additional Recommendations

The following recommendations should be considered for sensory spaces:

a) It is recommended to provide the following numbers of sensory rooms:
   - Small campuses: 1 nook or quiet zone within the library or learner commons
   - Medium campuses: 1 sensory room. Other sensory zones or nooks may be located throughout the campus
   - Large campuses: 1 sensory room each at the library, student support services and large staff offices. Other sensory zones or nooks may be located throughout the campus

2 Inclusive Design Strategies

2.7 Amenities

2.7.1 Experiences

If we're going to have sliding doors, we need a mechanism in place from a blind perspective to ensure that I feel safe, that I've been able to lock the door, that no one is going to walk in on me... that is a terrifying thought for me

TAFE NSW Ultimo, Accessible Bathroom

Correct symbols to identify this accessible sanitary facility. The sign provides Braille and tactile information

Accessibility could be improved by providing luminance contrast between the sign and the wall

Accessibility could be improved by providing braille or tactile letters on the occupied sign

Illuminated vacant/occupied signals assist users with low vision and people with intellectual disability

Push-button control for the automated door provides good access for users with limited mobility and low dexterity.

Objectives

Access to a toilet that meets the needs of users, and provides dignity and independence, is a fundamental right of all people.

2 Inclusive Design Strategies

2.7 Amenities

2.7.2 General Considerations

Mandatory Requirements

No.	Design Strategies
01	Sanitary facilities are accessed from circulation paths and not directly from work or study areas
02	Provide ambulant cubicles at all banks of toilets
03	Design room sizes with sufficient construction tolerance such that wall linings and wall finishes do not impede minimum clearance zones
04	Where the door swings towards a person in an ambulant cubicle, provide an additional D-pull handle to open the cubicle door in addition to the snib
05	Provide flush buttons to ambulant toilets which sit proud of the surrounding plate, as per accessible sanitary facilities
06	Do not use automated bathroom deodorisers
07	Provide fragrance-free liquid soap to all sanitary facilities

Additional Recommendations

The following recommendations should be considered where projects include sanitary facilities:

a) Provide sanitary facilities centrally within the building to reduce the travel distance to the facilities from any point in the building

2 Inclusive Design Strategies

2.7 Amenities

2.7.3 Accessible Sanitary Facilities

Mandatory Requirements

No.	Design Strategies
01	Toilets are selected which: a) Have a maximum seat width of 400mm b) Have a minimum 30% luminance contrast between the toilet seat and the toilet pan
02	The centreline of the basin is a minimum 600mm from the side wall to ensure adjacent fixtures such as hand dryers do not restrict a person using the basin
03	Provide soap dispensers which: a) Are automatic b) Do not protrude more than 150mm into the circulation space
04	Locate hand dryers or paper towel dispensers adjacent hand basins such that people who use wheelchairs do not have to wheel across the room with wet hands
05	Hand dryers are selected which operate at less than 70dB
06	Provide a sharps disposal container within accessible sanitary facilities
07	Locate sharps disposal containers with the opening no less than 1300-1350mm AFFL and no less than 500mm from an internal corner. This is to reduce the likelihood of harm to children whilst maintaining access with a side on approach for people who use wheelchairs

Additional Recommendations

The following recommendations should be considered where projects include accessible sanitary facilities:

a) Install a duress button within the facility that is linked to reception or security service

2 Inclusive Design Strategies

2.7 Amenities

2.7.4 Accessible Adult Change Facilities

Accessible adult change facilities are not required to be provided at TAFE NSW sites under the NCC. These facilities should be considered for new campuses. On existing sites they will be provided when required.

Where a need for an accessible adult change facility is identified, provide in accordance with the Changing Places Facilities Guidelines.

Mandatory Requirements

No.	Design Strategies
01	Provide a set out of 950mm between the toilet pan and side wall for construction tolerance

Additional Recommendations

The following recommendations should be considered where projects include accessible adult change facilities:

a) Include shower facilities in accessible adult change facilities

2.7.5 All-gender Sanitary Facilities

Any new buildings that include toilets, or major refurbishments of existing toilets should seek opportunities to include all-gender sanitary facilities.

Mandatory Requirements

No.	Design Strategies
01	All-gender sanitary facilities contain a WC pan, toilet paper dispenser, clothes hook, a sanitary disposal unit, a hand basin, paper towel dispenser and liquid soap dispenser
02	Install signs in accordance with the TAFE NSW Signage and Wayfinding Design Standard

Additional Recommendations

The following recommendations should be considered where projects include sanitary facilities:

a) Provide all-gender amenities at one bank of toilets per floor:
   - The total number of toilets is provided in accordance with the NCC
   - Remove one male and one female fixture from each bank of toilets and provide as a separate, enclosed, all-gender sanitary facility, accessed from a common circulation space

b) One all-gender facility per floor is provided with grabrails, as required for ambulant cubicles

2 Inclusive Design Strategies

2.7 Amenities

2.7.6 Assistance Animal Relief Rooms

Consider providing assistance animal relief rooms or areas at inner city or metropolitan campuses where there is limited garden areas. At all campuses consider selecting external drinking fountains with animal drinking bowls included.

Further guidance for the design of assistance animal relief rooms can be found in:

- EN1720-2021 Part 11.6 Facilities for assistance dogs (outdoor and indoor)
- ISO 21542:2021 Part 10.12 Facilities for guide and other assistance dogs

Mandatory Requirements

There are no mandatory requirements for assistance animal relief rooms.

Additional Recommendations

The following recommendations should be considered where projects include assistance animal relief rooms:

a) Assistance animal relief areas are enclosed by a fence or wall
   - The door or gate swings inwards to assist in controlling dogs who are off leash
   - The door or gate clear opening and hardware is provided in accordance with AS1428.1 requirements for doors

b) Assistance animal relief areas are provided with:
   - A water tap and drinking bowl for animals
   - A hand wash basin in accordance with AS 1428.1: 2021 clause 12.3
   - Rubbish bins and bags for disposal of waste

c) The ground surface to an assistance animal relief area is:
   - 50% of the area is a firm, traversable surface as required for an accessible path of travel
   - The remainder of the area may be grass or other permeable surface
   - Artificial grass must not be used where exposed to the sun as it gets too hot

2 Inclusive Design Strategies

2.8 Specific Use

2.8.1 Experiences

At [my campus], my emergency egress point is at the bottom of a hill. For me to get to that egress point, I have to go down a ramp then down a flight of stairs across a grass verge to the assembly area. Obviously that's not practical. I can't carry my mobility device down the stair – I need to get someone to assist me

Handrails are provided on both sides of the stair and include the required extensions. Accessibility could be improved with closed returns on the handrails to remove bag-catches

Seating is provided adjacent to the main footpath

Stair treads are wide with solid risers and tactile indicators are provided. Accessibility could be improved with stair nosings

Path is wide and smooth with clearly defined edges. The light posts are set back from the path

Emergency egress paths could be improved by providing a step-free path of travel to emergency assembly areas

TAFE NSW Meadowbank Campus

Objectives

Emergency systems and evacuation routes should consider people with a range of disability.

- People who are deaf or hard of hearing may not be alerted to evacuation sirens
- People with limited mobility may not be able to access emergency assembly points

2 Inclusive Design Strategies

2.8 Specific Use

2.8.2 Emergency Procedures

Mandatory Requirements

There are no mandatory requirements for emergency procedures.

Additional Recommendations

The following recommendations should be considered:

a) Provide an accessible compliant path of travel to external assembly points
b) Where a separate accessible assembly point is provided, this will be shown on the wall-mounted evacuation diagram
c) Provide seating options adjacent the emergency assembly points so that people can rest while waiting
d) Visual warning devices are provided in conjunction with the EWIS and/ or occupant warning system. The visual warning devices shall flash in a strobing pattern distinctly different from the evacuation pattern where visible signals are provided that do not require immediate evacuation. Visual warning devices are provided:
   - Where people may be alone
   - In toilets and in staff work areas
   - located adjacent to exit signs, and in a position that maximises the opportunity to be seen
e) Where installed, strobe lights should not exceed 2 Hz (i.e. 2 flashes/ second) and are recommended to flash at a rate of 0.5-1.0 Hz. [Epilepsy Action Australia / Epilepsy Foundation USA / AS7240.23:2014]

2.8.3 Accessible Egress

The design of multi-storey buildings should consider the emergency evacuation of people with disability. A fire engineer should be engaged to determine the most appropriate strategy.

Mandatory Requirements

There are no mandatory requirements for accessible egress.

Additional Recommendations

The following recommendations should be considered where new multi-storey buildings are proposed:

a) Consider how accessible egress is provided. Options for accessible egress include:
   - Safe refuges within building areas such as lobbies
   - Safe refuges within fire isolated stairs
   - A lift dedicated for emergency egress
   - External ramps
   - Horizontal egress into another building or fire compartment
b) Where safe refuges are provided, they must be provided where people can wait for assistance to evacuate the building, such as within a fire stair or lift lobby. The design of safe refuges must be undertaken in consultation with a fire engineer. General requirements include:
   - Minimum size of 1540 x 2070mm. Where high numbers of people with disabilities are expected within the building, this size should be increased
   - Braille and tactile signage indicating the location of the refuges. Locate the signs on the latch-side of the door
   - A means of two-way communication with emergency services from within the refuge
   - An accessible compliant path of travel to the safe refuge area

Technical Sections

3 Technical Sections

3.1 Common Accessibility and Dignity Concerns

3.1.1 General Requirements

The 'Common Accessibility and Dignity Concerns' table identifies common issues that have been raised by TAFE NSW staff. The concerns listed in the table have helped guide the content of the this Design Standard. Most control measures are contained within this Design Standard, and where other publications apply, these are listed in the table.

Any relevant safety concerns listed in the table must be included in project-specific Safety-in-Design Registers to ensure that project teams demonstrate how they have been addressed through all phases of any project.

Note the information in the table is:

- For guidance only,
- Not exhaustive and may not cover user or site-specific circumstances and should not be relied on in that way, and
- Does not alleviate the respective TAFE NSW team, designer, supplier or contractor from their own obligations and duties.

3.1.2 Common Accessibility and Dignity Concerns

Category	Accessibility or Dignity Concern Raised	Control Measure	Resource for Control Measure
General -Code compliance	Design meets Code compliance but still results in poor accessibility outcomes (i.e. a 90 degree corner of a ramp is compliant but may result in a blind corner)	Design for dignity of all users. Implement measures identified in this Standard	This standard
Parking and Vehicles	Lack of defined path from accessible parking bays to footpath requiring persons to cross into vehicular traffic, resulting in risk of injury	Provide accessible path of travel from the accessible carpark to the footpath that does not pass through the carpark	This standard TAFE NSW Multi Trades Hub Design Standard
External paths -Distance of travel	Distance of mobility aid parking / charging stations, and / or distance of parking bays is too lengthy, resulting in fatigue and tardiness	Provide external furniture for rest adjacent external paths Provide charging locations for mobility scooters and other mobility devices	This standard TAFE NSW Multi Trades Hub Design Standard
External paths	Paths between buildings - not accessible causing inability to access different buildings on campus	Provide accessible paths of travel	This standard Disability (Access to Premises) Standard, NCC
External paths - Slips, trips, falls	Surfaces are slippery and / or uneven when either dry or wet, resulting in injury	Provide slip resistant materials to all external paths	This standard National Construction Code, AS1428, and HB198.
External paths -Surfaces	External path surfaces create glare, resulting in visual discomfort and / or disability of vision	Consider paving finishes and provision of shade and shelter	This standard
Entrances	Entries are not well defined, resulting in confusion, inability to access a building, and complaints	Define entries through architectural language, colour, signage and path of travel	This standard TAFE NSW Signage and Wayfinding Design Standard

3 Technical Sections

3.1 Common Accessibility and Dignity Concerns

3.1.2 Common Accessibility and Dignity Concerns (continued)

Category	Accessibility or Dignity Concern Raised	Control Measure	Resource for Control Measure
Entrances	Auto hinge doors open 'out' onto an approaching person, resulting in injury	Automatic hinged doors may only be used where no other option is available	This standard
Entrances	Auto hinge doors opening or closing too quickly resulting in injury	Automatic hinged doors may only be used where no other option is available	AS 5007 2007 (Powered doors for pedestrian access and egress)
Entrances	Ramp access is not obvious at the entry resulting in difficulty finding and accessing the building entry	Provide easily visible and locatable accessible paths of travel.	This standard
Entrances	Lack of rain protection at entries and approaches to entries resulting in water-drenched clothing	Provide shelter at building entry points	This standard
Wayfinding	Lack of wayfinding across campuses and within buildings resulting in being unable to find services and locations	Provide wayfinding to enable people to navigate TAFE NSW sites	This standard TAFE NSW Signage and Wayfinding Design Standard
Vertical Circulation -Stairs	Collision with the underside of a stairs that is open underneath	Enclose underside of stairs to remove hazard	This standard
Vertical Circulation -Stairs	Handrails to a single side of a stair (whether a fire stair or general access stair) resulting in injury	Provide handrails to both sides of stair	This standard
Vertical Circulation -Stairs	Handrail termination, while compliant with Codes and Standards, creates a 'bag catch' resulting in injury	Provide closed handrail extensions	This standard
Accessible egress	Lack of egress for a person with limited mobility from upper levels during an emergency resulting in injury or death	Consider appropriate strategies for accessible egress as noted in this standard	This standard
Internal environment	Furniture and pot plants block passages making navigation through spaces difficult, and leading to injury	Ensure circulation paths are clearly identified and furniture located outside of circulation. Seek opportunities for fixed elements such as signs and planters	This standard
Internal environment -Furniture	Ergonomics of furniture is unsuitable to persons of varying abilities and mobility aids such as wheelchairs	Provide a variety of furniture to suit different abilities and needs	This standard
Amenities	Lack of accessible toilet on a floor prevents people reaching a toilet in time	Provide accessible toilets on every habitable floor	This standard, NCC

3 Technical Sections

3.2 Legislation

3.2.1 Legislation for accessibility

The following key legislation and standards document the minimum requirement for accessibility in the built environment.

- United Nations Convention on the Rights of Persons with Disabilities (UNCRPD)
- Disability Discrimination Act 1992
- The Disability (Access to Premises - Buildings) Standard (DAPS) 2010
- National Construction Code (NCC)
- AS 1428 Series - Design for Access and Mobility

3.2.2 Other Standards, Codes and Requirements

In addition to specific legislated requirements for accessibility, the following standards and documents should be read in conjunction with the Design Standard where relevant to the project.

This list is not exhaustive and other documents may apply.

Statutory Requirements

- State Environmental Planning and Assessment Legislation
- Safework NSW Authority Requirements
- Fire & Rescue NSW Requirements
- Work Health and Safety Act 2012
- Multicultural NSW Act 2000
- Disability Standards for Education 2005
- NSW Anti-Discrimination Act 1977
- Disability Inclusion Act 2014
- Sex Discrimination Act 1984
- Government Sector Employment Act 2013
- Any other authority having jurisdiction

Federal and NSW Government Policies and Strategies

- Australia's Disability Strategy 2021-2031
- NSW Department of Planning and Environment
  - Workplace Design Principles (2020)
- Department of Communities and Justice
  - NSW Disability Inclusion Plan 2021-2025
- Property and Development NSW
  - Accessible Office Design (2021)

TAFE NSW Overarching Policies

- Environmental Sustainability Policy
- Innovate Reconciliation Action Plan 2020-2022 (and any future updated version)
- Diversity and Inclusion Policy
- Work Health and Safety Policy
- Disability Inclusion Action Plan 2020-2022 (and any future updated version)
- Multicultural Plan 2020-2022 (and any future updated version)

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3 Technical Sections

3.2 Legislation

3.2.2 Other Standards, Codes and Requirements (continued)

TAFE NSW Design Standards

- Refer TAFE NSW website: https://www.tafensw.edu.au/corporate/design-standards

Additional Design Standards

- UNE-EN 17210-2021 Accessibility and usability of the built environment: Functional Requirements
- ISO 21542 2021 Building construction - Accessibility and usability of the built environment
- BS 8300-1: 2018 Design of an accessible and inclusive built environment – Part 1: External Environment – Code of Practice
- BS 8300-2: 2018 Design of an accessible and inclusive built environment – Part 2: Buildings – Code of Practice
- PAS 1899:2022 Electric Vehicles – Accessible Charging – Specification
- PAS 6463:2022 Design for the mind – Neurodiversity and the built environment - Guide
- Changing Places Design Specifications 2020

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3 Technical Sections

3.3 Definitions

Abbreviation/Term	Definition
Accessible	Describes all or part of a site, building or facility that can be used by people with disabilities. The site or building complies with the Disability Discrimination Act, the Disability Access to Premises - Buildings standard, National Construction Code and the Australian Standards referenced by it for disability access
Accessible Adult Change Facility	An accessible adult change facility is sometimes referred to as a 'Changing Places Facility.' Changing places has their own guide with additional requirements to the NCC. https://changingplaces.org.au/
Accessible Path of Travel	A passageway, walkway, ramp, landing or other space that can be used for circulation or movement by a person with disability
Action Plan	The policy which outlines the actions that an organisation is prepared to undertake to accommodate people with disabilities and respond to individual needs
Affected Path of Travel	Existing buildings undergoing building works are required to provide a compliant continuous accessible path of travel from the principal pedestrian entrance through the building to the new works. The areas of the existing building which must be upgraded are referred to as the "affected path of travel"
AFFL	Above Finish Floor Level
AFGL	Above Finish Ground Level
All-Gender	Facilities for use by all people regardless of gender identity
Persons with ambulant disabilities	Persons with a disability that impedes walking. Ambulant disabilities may include mobility, sensory, or joint limitations and may include persons that use a walking frame, cane or similar equipment to aid mobility
AS or AS/NZS	Australian Standard or Australian and New Zealand Standard
Auslan	Auslan is the sign language used by people in the deaf community in Australia
Australian Human Rights Commission	Australian Human Rights Commission is a Federal Government Department that seeks equality in Australia
AV	Audio Visual
BCA	Building Code of Australia (as part of the National Construction Code)
Blind or low vision	The partial or total loss of visual acuity and perception.
Continuous Accessible Path of Travel	The path of travel from the property boundary, car park into and through a building to all areas required to be accessible
DAPS	Disability (Access to Premises - Buildings) Standards
DDA	Disability Discrimination Act

3 Technical Sections

3.3 Definitions

Abbreviation/Term	Definition
d/Deaf or Hard of Hearing	The partial or total loss of hearing. Some people who are d/Deaf or hard of hearing may use hearing aids or a cochlear implant to assist their hearing and may use sign language to communicate
Discrimination	The practice of less than equitable actions by a person or organisation against any group of people
Emergency refuge area	An accessible area for people with disabilities to seek safe refuge in the case of an emergency whilst they wait for assistance to evacuate
EV	Electric Vehicle
Glare	Discomfort or disability of vision due to the presence of obtrusive light, artificial or natural daylight, and direct or reflected (PAS6463:2022)
Hearing augmentation	Systems used to assist people who are deaf or hard of hearing understand verbal announcements and information
Luminance contrast	The amount of light reflected from one surface or product compared with the light reflected from an adjacent surface or product
Mobility aids	Equipment used by people with disability, for example wheelchairs, crutches, walking frames or skateboards
Multisensory	Involving or using more than one of the senses (PAS6463:2022)
Neurodiversity	“Neurodiversity” is an umbrella term used to describe the range of differences in individual brain function and behavioural traits, regarded as part of normal variation in the human population, and used especially in the context of Autism Spectrum Disorder (ASD). Conditions such as ADHD, Anxiety, Dementia, OCD, PTSD and intellectual and developmental disability are also included within neurodiversity
NCC	National Construction Code
PEEP	Personal Emergency Evacuation Plan
Shorelining	The way a person who is blind or has low vision follows along the edge of a building or structure as a guide to navigating along a path
TGSI	Tactile Ground Surface Indicators
Visual indicators	Visual indicators, decals or stripes provided on glazing to alert people, so they do not mistake glazing as an opening
Wayfinding	The methods used by all people to approach and navigate through a building or open site

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