

Access for People with a Disability

**Access Strategy Review
December 2010**

Abercrombie Precinct Redevelopment

Document QA

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1.1 Introduction

This access strategy addresses the initially proposed access provisions for people with physical and sensory disabilities to potentially meet compliance with relevant Australian Standards (AS1428, AS2890.6; AS1735.12), the Building Code of Australia and the Disability Discrimination Act's obligations of equitable and dignified access.

Appropriate access for all persons is to be provided to the proposed redevelopment of the Abercrombie Precinct via continuous accessible paths of travel:

- from points of arrival including the footpaths, bus stops, accessible car parking spaces and links to the main campus facilities
- to and through the principal entrance and in addition to not less than 50% of all entrances
- to and throughout all teaching and academic areas within the buildings
- to and throughout student accommodation areas
- to all accessible toilet and shower facilities

All comments written in this access report have been made after review of the following preliminary drawings by Woods Bagot issued on 29 October, 10 and 16 November 2010. The Project Application plans include measures designed to meet compliance with relevant Australian Standards (AS1428, AS2890.6; AS1735.12), the Building Code of Australia and the Disability Discrimination Act's obligations of equitable and dignified access. This report provides recommendations for ongoing detailed design resolution.

Points for consideration in ongoing design are highlighted by a 'recommendation' throughout the report.

1.2 Drawings

Drawing	Issue	Title	Scale@A1	Date
A2201	P4	Ground Floor Plan	1:250	15.11 10
A2202	P3	Carparking Floor Plan	1:250	10.11 10
A2203	P3	Level 1 Plan	1:250	10.11 10
A2204	P3	Level 2 Plan	1:250	10.11 10
A2205	P3	Level 3 Plan	1:250	10.11 10
A2206	P3	Level 4 Plan	1:250	10.11 10
A2207	P2	Level 5 Plan	1:250	29.10 10
A2208	P2	Level 6 Plan	1:250	29.10 10
32607	03	Plan of Topographical Survey	1:250	17.09.10
02-Area-01		Abercrombie property Area	1:750@A3	20.06.10

1.3 References

Building Code of Australia BCA 2010/2011 - Parts D3, E3.6 & F2.4

AS1428.1 – 2009 Design for access and mobility Part 1: General requirements for access – New building work.

AS1428.2 – 1992 Design for access and mobility Part 2: Enhanced and additional requirements – buildings and facilities.

AS1428.4.1 – 2009 Design for access and mobility Part 4.1: Means to assist the orientation of people with vision impairment -tactile ground surface indicators

AS1735.12 – 1999 Lifts, escalators and moving walks Part 12: Facilities for persons with disabilities

AS2890.6 -2009 Parking Facilities - Off-street parking for people with disabilities

Disability Discrimination Act 1992 (DDA) DDA Advisory Notes on Access to Premises – HREOC, June 1997

Disability (Access to Premises - Buildings) Standards 2010 released by the Attorney General – 15 March 2010

City of Sydney Access development Control Plan 2004

Sydney Olympic Park Authority – Access Guidelines – Second Edition – 2008

1.4 Legislative background

In accordance with the principles of the Disability Discrimination Act 1992 (DDA) best practice is to be emphasised in the provision of access for people with a disability in the design of the proposed new Abercrombie Precinct facilities.

This initial access review prepared at the Project Application stage of the design addresses the requirements for access by people with a disability, to the proposed facilities as staff and visitors and reviews the key legislative requirements the Building Code of Australia (BCA) and City of Sydney access requirements.

DDA

The objectives of the Disability Discrimination Act 1992 (DDA) – section 23, focus on the provision of equitable, independent and dignified access to services and facilities for people with mobility, sensory and cognitive disabilities.

The DDA covers existing premises, including heritage buildings, those under construction and future premises. It extends beyond the building itself to include outdoor spaces and within, to address furniture, fittings and practices.

Draft Disability (Access to Premises - Buildings) Standard 2010 released by the Attorney General – 15 March 2010 is proposed as an update of the BCA (2011) access provisions for people with disabilities to more fully meet the intent of the DDA.

It is our understanding that if building works commence on Crown projects after 1 January 2011, the project must take the Premises Standard into account.

BCA

The draft BCA (2011) includes the following relevant parts to meet the deemed to satisfy provisions to satisfy the performance requirements DP1, DP4, DP6, DP8 and DP9:

D3 Access for People with Disabilities outlines the general building access requirements, it includes:

- Table D3.1 which outlines the parts of the building required to be accessible that must comply with AS1428.1(2009)
- D3.2 access to buildings which outlines requirements for accessways, doors and entrances
- D3.3 the parts of buildings required to be accessible and meet the requirements of AS1428.1 (2009)
- D3.4 exemptions
- D3.5 accessible car parking requirements
- D3.6 signage requirements for identification of accessible facilities, services and features
- D3.7 hearing augmentation requirements

- D3.8 tactile ground surface indicators
- D3.9 wheelchair spaces in Class 9b Buildings
- D3.10 swimming pools
- D3.11 ramps
- D3.12 glazing requirements on an accessway

Part D4 Braille and tactile Signs

Part D5 Accessible water entry/exit from swimming pool

E3.6 outlines the requirements for passenger lifts in accessible buildings.

F2.4 outlines the requirements for unisex accessible sanitary facilities, accessible showers and cubicles for people with ambulant disabilities designed to meet the requirements of AS1428.1 (2009).

AS1428.1 (2009)

AS1428.1 was revised and update in 2009 and while currently not referenced in the BCA it is our understanding it will be referenced in BCA 2011. The 2009 version of AS1428.1 adopts in principle the increased circulation space requirements of AS1428.2 (1992). Proposed updates of AS1428.2 will include fittings and fixtures only (currently not anticipated in the near future).

We note that the Australian Standards on access and mobility do not include a section for outdoor environments. We recommend that Sydney Olympic Park Access Guidelines (2008) section 6 Public Domain and Outdoor Access be used as guidelines in access provision in outdoor spaces.

AS2890.6 (2009)

AS2890.6, referenced in AS2890.1 (2004) was published in 2009 and while currently not referenced in the BCA (2010) it is our understanding it will be referenced in BCA 2011. To meet the requirements of people driving current models of accessible vehicles we are recommending designers provide the off street car space layouts as per AS2890.6, which include additional circulation space for the operation of vehicle mounted hoists. In our opinion AS2890.6 more fully meets the intent of the DDA.

1.5 Access strategy recommendations:

In principle a design based on AS1428.1 (2009) for this project, will in our opinion meet the following:

- The intent of the DDA
- BCA (2010) and proposed draft BCA 2011 and Disability (Access to Premises- Buildings) Standards 2010
- The intent of the City of Sydney Access Development Control Plan 2004

1.6 Management Strategies

In this university facility it is important to design paths of travel and circulation spaces within the proposed new building works to meet the intent of the Disability Discrimination Act.

In addition to be compliant, new building works including accessible paths of travel, accessible parking spaces, accessible student accommodation and accessible sanitary facilities, it will be necessary to develop an operational management strategy that includes the proposed intention to provide equipment and adapt areas within the facility to meet the requirements of specific individuals with a disability.

This strategy is to meet the specific requirements of staff, students and visitors with a disability whose individual requirements cannot be addressed within the base building design and existing building facilities.

An operational management strategy acknowledges the need to meet full accessibility compliance through the provision of policy strategies.

A design that has the potential to be modified as required to suit individuals with a disability is desirable.

Operational management strategies will be required for emergency egress.

2. Site and Building Description

The redevelopment of the Abercrombie Precinct of the University of Sydney, located on the southern side of the campus, is proposed to include the Faculty of Economics and Business Building and student accommodation. The site of approximately 1.92 hectares is bordered by Darlington Lane on the north; Codrington Street on the east, Abercrombie Street on the south and the Darlington Public School on the west.

The principal entrance is proposed via Codrington Street on the east with additional pedestrian entries and links proposed for the north and southern sides of the site. A vehicular driveway via Abercrombie Street provides a link to the car parking on the ground and basement levels.

Passenger lifts located adjacent to the entry on the eastern side; the western side and centrally within the building are proposed to link all levels building, including the landscaped areas proposed for the roof level. Stairs are indicated adjacent to the lifts and to provide additional links at entries and between levels.

The proposed new buildings to be located on the sloping site are linked and are proposed to include:

- 2 levels of car parking
- 3 levels of teaching space
- 3 levels of academic office space
- 4 levels of student accommodation
- 2 landscaped courtyards

3. Access Provisions

3.1 Car Parking

Requirements:

BCA (2011) clause D3.5 requires a class 9b building to provide 1 accessible parking space for every 50 car parking spaces or part thereof.

Accessible parking spaces are required to meet the requirements of AS2890.6 (2009).

Recommendation:

- (i) Ensure in ongoing design the accessible parking spaces are provided to meet the BCA D3.5 and DDA requirements and include dimensions and a layout to meet the requirements of AS2890.6 (2009) figure 2.3 (car space dimensions: W: non shared 2.4m + shared 2.4m (min 4.8m); L: non shared 5.4m + shared 2.4m; height 2.5m over the accessible space and share area and 2.2m on the path of travel to the space).

3.2 External paths of travel – links

Requirements:

BCA (2011) clause D3.2 - Access to buildings requires accessways to be provided to accessible buildings from the main points of a pedestrian entry at the allotment boundary and from any accessible car parking space or accessible associated buildings connected by a pedestrian link.

BCA (2011) clause D3.2 - Access to buildings requires the principal pedestrian entrance to be accessible in all cases and not less than 50% of all pedestrian entrances, including the principal pedestrian entrance to be accessible. In buildings with a total floor area of more than 500 square meters, an inaccessible entrance cannot be more than 50 meters from an accessible entrance. This ensures that situations where people have to travel an unreasonable distance between entrances are avoided

Recommendation:

- (i) Review on site of the existing external links to the proposed new building facilities from adjacent facilities including the bus stops.
- (ii) A pathways complying with the BCA clause D3.2 to meet the requirements of AS1428.1 clause 10 is required at all principal building entries and 50% of additional entries.

Walkways are required to meet the requirements of AS1428.1 clause 10.2 to include:

- The ground surface abutting the sides of the walkway shall provide a firm and level surface of a different material to that of the walkway at the same level of the walkway; follow the grade of the walkway and extend horizontally for a minimum of 600mm unless one of the following is provided:
 - o a kerb
 - o a kerb rail and handrail
 - o a wall not less than 450mm high
- Landings at the top and bottom not more than 15m apart
- A constant gradient between level landings
- A crossfall no steeper than 1:40; bitumen surfaces may include a camber or crossfall no steeper than 1:33

Ramps are required to meet AS1428.1 clause 10.3 to include:

- A maximum slope of 1:14 for ramps exceeding 1900mm in length
- A constant gradient between level landings
- An unobstructed/clear width minimum 1000mm
- Landings at intervals not greater than 9m and minimum landing length of 1200mm where there is no change in direction
- Handrails on both sides that include a 300mm horizontal extension at the top and bottom and set back by a minimum of 300mm so that the handrail does not protrude into the transverse path of travel as per AS1428.1 (2009) figure 17
- Tactile ground surface indicators (tgsi) in a band 600mm deep set back 300mm from the top and bottom of the ramp (1:14 gradient)
- A setback to accommodate the handrail and tgsi is to be maintained at the site boundary (900mm) and transverse paths of travel (600mm).

(iii) Ensure in ongoing design to meet AS1428.1 clause 11 **stairs** include:

- A setback to accommodate the handrail and tgsi is to be maintained at the site boundary (900mm)
- Nosing profiles which include 50-75mm wide solid slip resistant highlighting strips on the tread at the nosing that includes a minimum luminance contrast of 30% with the tread to comply with AS1428.1 figures 27a and b
- Tactile ground surface indicators (tgsi) in a band 600mm deep set back 300mm from the top and bottom tread
- Handrails on both sides that include a 300mm horizontal extension at the top and bottom set back by a minimum of 300mm so that the handrail does not protrude into the transverse path of travel as per AS1428.1 (2009) figure 26(A)

3.3 Internal paths of travel

Requirements:

To meet the requirements of BCA (2011) part D3.1 continuous accessible paths of travel meeting the requirements of AS1428.1 (2009) are required to and within all areas normally used by the occupants of the building.

In a Class 9B Building accessways are required to wheelchair seating spaces provided in accordance with clause D3.9.

BCA (2011) part D3.9 requires areas with fixed seating of 151 – 800 seats to provide 3 wheelchair spaces plus 1 additional space for each additional 50 seats; not less than 2 single spaces; not more than 2 groups of 2 spaces and not more than 5 spaces in any group of wheelchair seating spaces, which include a layout and circulation space to meet the requirements of AS1428.1.

BCA (2011) part D3.7 requires a hearing augmentation system to be provided where an inbuilt amplification system, other than one used for emergency warning is installed in an auditorium, conference room or meeting room in Class 9B Building. If required an induction loop must be provided to not less than 80% of the floor area of the room.

Recommendations:

- (i) Ensure in ongoing design all entry doors including a single leaf at double doors, include a minimum clear door opening of 850mm and circulation space to meet the requirements of AS1428.1 clause 13 and figure 31.
- (i) Ensure in ongoing design to meet the BCA part D3.12 (2011) that the unframed glazed doors and walls are provided with visual indicators to fully comply with AS1428.1 clause 6.6 (2009) and that doorways are provided with luminance contrast to meet the requirements of AS1428.1 (2009) clause 13.1.
- (ii) Ensure in ongoing design reception counters include an accessible counter which meets the height requirements of AS1428.2, for visitors on the external side and circulation space for staff internally to meet the requirements of AS1428.1 clause 6.5.
- (iii) Ensure in ongoing design all controls including intercoms and digital access readers are located on level landings and at a height of not less than 900mm and not more than 1250mm to comply with AS1428.1 clause 14.
- (iv) Ensure in ongoing design lecture theatres include wheelchair seating spaces to meet the requirements of the BCA D3.9 and AS1428.1 (2009) clause 18 to facilitate wheelchair access to the proposed fixed seating areas.

3.4 Sanitary facilities

Requirements:

To meet the requirements of the BCA (2011) part F2.4 and the DDA not less than one unisex accessible sanitary facility must be provided on every storey containing sanitary compartments. Where two or more accessible sanitary facilities are provided the number of left and right handed mirror image facilities must be provided as evenly as possible.

To meet the requirements of the BCA (2011) part F2.4 (b) one accessible unisex shower must be provided for every 10 showers or part thereof.

To meet the requirements of the BCA (2011) part F2.4 (c) at each bank of toilets in addition to an accessible sanitary compartment a sanitary compartment suitable for a person with an ambulant disability in accordance with AS1428.1 (2009) must be provided for use by males and females.

Recommendations:

- (i) Ensure that in ongoing design unisex accessible sanitary facilities include a layout, circulation space (door, WC pan, basin) and fittings to meet the requirements of AS1428.1 clause 15. Circulation space for the WC pan requires minimum dimensions W: 1900mm and L: 2300mm excluding the basin. Provision of left and right handed layouts over the levels is required. Any baby change facility is to be outside required circulation spaces.
- (ii) Ensure that in ongoing design that equitable provision of accessible showers is provided. Circulation space for the shower requires minimum dimensions W: 1600mm and L: 2350mm excluding the basin and WC pan fittings.
- (iii) Cubicles for people with ambulant disabilities are required to include features complying with AS1428.1 clauses 13.4 and 16 and figures 34 and 53 (signage, entry airlock and cubicle door circulation, WC pan, grabrails, toilet paper dispenser, clothes hook).

3.5. Vertical Access

3.5.1 Lift

Passenger lifts located adjacent to the entry on the eastern side; the western side and centrally within the building are proposed to link all building levels, including the landscaped areas proposed for the roof level.

Recommendations:

- (i) Ensure in ongoing design that the passenger lift includes features to fully comply with AS1735.12 and the BCA E3.6 to include: floor dimensions not less than 1400mm x 1600mm for lifts travelling more than 12m and 1100mm x 1400mm for lifts travelling less than 12m and accessible features including provision of a handrail and call & control buttons meeting the requirements for tactile and Braille and luminance contrast. The inclusion of auditory announcement in lift cars serving more than 2 levels is required.

3.5.2 Stairs

Recommendations:

- (i) Ensure in ongoing design to meet AS1428.1 clause 11 **stairs** in general use areas (non fire isolated egress stairs) include:
 - A setback to accommodate the handrail and tgsi is to be maintained at the site boundary (900mm)
 - nosing profiles which include 50-75mm wide solid slip resistant highlighting strips on the tread at the nosing that includes a minimum luminance contrast of 30% with the tread to comply with AS1428.1 figures 27a and b
 - tactile ground surface indicators (tgsi) in a band 600mm deep set back 300mm from the top and bottom tread
 - handrails on both sides that include a 300mm horizontal extension at the top and bottom set back by a minimum of 600mm so that the handrail does not protrude into the transverse path of travel as per AS1428.1 (2009) figure 26(A)

3.6. Emergency Egress

A safe means of evacuation to meet the performance requirements of BCA section D (2009)

To meet the objective of the DDA all users of the facility are to be provided with a means of egress from the premises to a place of safety. People with disabilities should be provided with the same level of protection as other premises users.

Individual evacuation plans for staff are recommended as part of the operational management strategy.

Recommendation:

- (i) It is recommended that places of refuge be provided, which are fire rated areas such as the areas adjacent the entry landings of fire stairs where people who are unable to negotiate stairs, can wait for assisted evacuation are considered a possible way of making an appropriate provision. Refuges are to be provided with a recommended space for a wheelchair user or a person with ambulant mobility equipment, and an accompanying person: 1300mm X 800mm outside of the egress route (BCA RD 97/01 Table D1.6) in the stair entry landing.
- (ii) It is recommended in DR07019 that suitable emergency evacuation devices be provided in an appropriate location for people to be carried down the stairwell, this should be considered in ongoing design.
- (iii) Both auditory and visual elements are required in emergency alarms to ensure those with vision or hearing impairments can detect a warning, particularly in areas where they are likely to be isolated from others (eg; accessible sanitary facilities and offices).

4. Accessible Student Accommodation

Requirements:

BCA (2011) part D3.1 requires 5 accessible sole-occupancy units for 81- 100 sole occupancy units. Accessible units are to include a layout and circulation space to meet the requirements of AS1428.1.

BCA (2011) part D3.1 requires a continuous accessible path of travel

- From a pedestrian entrance required to be accessible to at least one floor containing sole-occupancy units and to the entrance doorway of each sole-occupancy unit located on that level.
- To and within not less than one of each type of room or space for use in common by residents, including a cooking facility, common laundry, games room, individual shop, dining room, lounge area or the like.

Recommendation:

- (i) An accessible path of travel complying with AS1428.1 (2009) is required from the street to all building entries; all common use student/residential facilities: reception office; recreational multipurpose; community dining room; community living room; community laundry; unisex accessible sanitary facility; garbage disposal room and landscaped spaces.
- (ii) Accessible accommodation is to be distributed equitably and to be representative of the accommodation offered. Unit layouts are to include a mix of both left hand and right hand use facilities

4.1 Accessible room layout

Recommendation:

- (i) The room is to be indicated to include:
 - circulation space for the entry door, wardrobe, desk, kitchenette and bed to meet the requirements of AS1428.1 (2009) and AS1428.2 clause 24.3 and figure 29.
 - Circulation space for the bed requires minimum 1000mm either side of the bed and 1540mm at the foot of the bed and in front of the wardrobe, kitchenette and desk.
 - Controls for lights and any television, radio, telephone or air-conditioning are to be accessible from the bed.
- (ii) The ensuite bathroom is to be indicated to include a design to meet the circulation space (door, shower, WC pan and basin) requirements of AS1428.1 (2009) clause 15. Equitable provision of left and right hand use layout of WC facilities is to be indicated. Circulation space for the WC pan requires minimum dimensions W: 1900mm and L: 2300mm excluding the basin. Circulation space for the shower requires minimum dimensions W: 1600mm and L: 2350mm excluding the basin and WC pan fittings. Additional requirements for fittings (washbasins, shelf) for sole occupancy units are required to comply with AS1428.1 clause 15.3.2 and figures 45 and 46. Floor grades: Bathroom (1:80 - 1:100); Shower (1:60 - 1:80).

5. Additional Key Access Provisions for the ongoing design

5.1 Landscaping – external paths of travel

Continuous accessible paths of travel are to be provided to meet the BCA D 3 and to comply with AS1428.1 (2009) as follows:

- A minimum 1000mm unobstructed path width and 2m vertical clearance is required to comply with AS1428.1 (2009) clauses 6.2 and 6.3.
- Passing spaces for wheelchairs is required at 20m intervals where sight lines are obscured (minimum 1800mm width x 2000mm length to comply with AS1428.1 (2009) clause 6.2 and 6.3).
- Pathways are to include circulation space for a wheelchair to turn (90° minimum 1500mm width x 1500mm length; 180° minimum 1540mm width x 2070mm length) is required to comply with AS1428.1 (2009) clause 6.5 and figures 4 and 5.
- Walkway (maximum gradient 1:20 with landings at 15m intervals; gradient 1:33 with landings at 25m intervals) design is to comply with AS1428.1 (2009) clause 10.2. Where the ground abutting the sides does not follow the same grade for 600mm: one of the following is provided: (i) a kerb (see fig. 18); (ii) kerb and handrails (see fig. 19); (iii) a wall not less than 450mm high
- A ramp exceeding 1900mm in length is to have a maximum gradient of 1:14 to comply with AS1428.1 (2009) clause 10.3(a). The features including kerb/wall and handrail on both sides and tgsi at the top and bottom are to comply with AS1428.1 (2009) figures 13 - 19. Ramps at the intersections are to be set back by a minimum of 400mm so that the handrail does not protrude into the transverse path of travel as per AS1428.1 (2009) figure 17. To meet the intent of the DDA ramps longer than 60m are not recommended.
- Any external stairs proposed to provide an alternative pedestrian link within the site are to meet the requirements of AS1428.1 (2009) clause 11 and figure 26 to include opaque risers, complying dual height handrails on both sides, 50-75mm wide solid slip resistant highlighting strips on the tread at the nosing AS1428.1 (2009) figures 27a & b and tactile ground surface indicators (tgsi) at the top and the bottom landing. Stairs at pathway intersections are to be set back by a minimum of 400mm so that the handrail does not protrude into the transverse path of travel.
- In ongoing landscape design, surfaces are to be constructed and maintained with no lip at joints between abutting surfaces exceeding 3mm or 5mm at bevelled edges to comply with AS1428.1 (2009) clause 7.
- Drainage or tree grates on the path of travel are to have spaces not more than 13mm wide and not longer than 150mm with the elongated opening placed transverse to the dominant path of travel for compliance with AS1428.1 2009) clause 7.5.
- Landscaping and plant selection should consider maintenance free of vegetation debris and ease of circulation including slip-resistance.

- The selection of any proposed outdoor furniture is to be linked to an accessible path of travel and includes tables that are stable and seats that include a back and armrest and seat height to comply with AS1428.2 clause 27.2 and figure 32. All loose furniture is to be located outside accessible paths of travel to maintain a clear path of travel for people with vision impairment shorelining with a cane along the side the building.

5.2 Internal accessible paths of travel and facilities

To meet the intent of the DDA provision of an accessible path of travel complying with AS1428.1 (2009) is required to the proposed main entries to buildings; to function and meeting rooms; relevant staff offices; the lift and accessible sanitary facilities to comply with AS1428.1 (2009) and the requirements of the BCA: See 6.3 above.

- Clause 6.3: Minimum clear width 1000mm (fire hose reels, drinking fountains and the like are to be set back adjacent to the path of travel)
- Clause 6.2: Minimum unobstructed height of 2000mm or 1980mm at a doorway
- Clause 6.4: Passing space for wheelchairs: Minimum width 1800mm x 2000mm at 20m intervals (see figure 3)
- Clause 6.5: Circulation space for wheelchair turn – see figures 4 & 5

5.3 Doorways

To all proposed main entries to buildings; to reception; accessible common areas and accommodation; lifts and the accessible sanitary facility to comply with AS1428.1 (2009) as follows:

- All doors on required accessible paths of travel are to include clear door openings of 850mm including a single leaf clear door opening at double doors, to meet the requirements of AS1428.1 (2009) clause 13.2. Circulation space at doorways is to meet the requirements of AS1428.1 (2009) clause 13.3 and figures 31 - 34.
- Any ramped threshold is to be provided to comply with AS1428.1 (2009) clause 10.5 and figure 21 and include a maximum rise of 35mm; maximum length of 280mm; maximum gradient of 1:8 and located within 20mm of the door leaf which it serves.
- The force required to activate door closers, glazed or pivot action doors is to meet as close as possible the requirements of AS1428.1 (2009) clause 13.5.2(e).
- All door handles and related hardware shall allow the door to be unlocked and opened with one hand and be such that a hand of a person who cannot grip will not slip from the handle during the operation of the latch as per AS1428.1 (2009) clauses 13.5.1 - 3 and figures 35 – 37.
- Any power operated door controls are to be provided to comply with AS1428.1 (2009) clauses 13.5.3 - 4 and include a minimum 25mm push control located 900-1200 AFFL.

- A luminance contrast of 30% provided between at doorways is required to comply with AS1428.1 (2009) clause 13.1 and will assist in identification by people with low vision.
- All glazing which is unframed and which is capable of being mistaken for a doorway or opening is to be provided with highlighting to meet the requirements of AS1428.1 (2009) clause 6.6. A solid strip 75mm high is to be provided 900-1000mm AFFL with a minimum 30% luminance contrast with the floor surface when viewed from either side.

5.4 Joinery detailing

- An accessible section of each reception counter is to include: a minimum length of 800mm and height 850±20mm AFFL
- The circulation space between counters and desks is to meet the requirements of AS1428.2 to provide 1500mm clear space to facilitate wheelchair circulation.
- At counters for resident food preparation: benches should include a height of 850± 20mm AFFL and access to the sink and tap and GPO (300mm from the front of the bench) to facilitate wheelchair access.

5.5 Wayfinding and facilities to assist people with sensory, cognitive and mobility impairment

- Appropriate identification and directional signage where required must comply with BCA D3.6 and Specification D3.6 to include Braille and tactual information, use of contrast, international symbols and pictograms.
- To meet the requirements of BCA D3.8 hazard warning tactile ground surface indicators (tgsi) will be required at the top and bottom of new stairs and ramps with a gradient of 1:14.
- The provision of easily identifiable paths of travel, particularly to the lifts is recommended. The use of colour contrast and/or texture change in the floor finish will assist people with low vision.
- A luminance contrast of 30% provided between at doorways is required to comply with AS1428.1 92009) clause 13.1 and will assist in identification by people with low vision.
- All glazing which is unframed and which is capable of being mistaken for a doorway or opening is to be provided with highlighting to meet the requirements of AS1428.1 (2009) clause 6.6. A solid strip 75mm high is to be provided 900-1000mm AFFL with a minimum 30% luminance contrast with the floor surface when viewed from either side.
- Visual warning systems should be provided on emergency evacuation alarms in areas where individuals may be isolated from other building users, for example staff offices and sanitary facilities.



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