



lindsay perry access

Access Report

**Integrated Medical Offices &
Specialist Disability
Accommodation**

60, 62 & 64 Showground Road
GOSFORD NSW

For: CHP Fund
Ref: LP_22244



Document Control

This report has been prepared based on the documentation available and time allocated to conduct the review. All reasonable attempts have been made to identify key compliance matters.

Revision Summary:

prepared by: Lindsay Perry	Draft Revision 1	1 July 2022 6 July 2022

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Clarifications:

This report is limited to items within drawings listed in this report only.

Construction is to be in accordance with the recommendations made in this access report to ensure compliance.

Any dimensions quoted throughout this report and within Australian Standards are CLEAR dimensions, not structural. This needs to be considered during construction to account for wall linings and the like.

Definitions:

The following terminology has been used throughout this report:

Compliant | compliance with current accessibility legislation has been achieved

Compliant Configuration | circulation and spatial planning requirements are compliant

Capable of compliance | compliance is achievable through detailed design

Not Yet Compliant | circulation and spatial planning requirements have not yet been met

To be addressed during detailed design stage | details not available at DA stage

To be confirmed | inadequate information is provided to determine compliance



Executive Summary

Development application documentation for the proposed Integrated Medical Office Building and Specialist Disability Accommodation located at 60, 62 & 64 Showground Road Gosford, has been reviewed against current accessibility legislation.

The following table summarises our findings.

Item No.	Description	Compliance Status
The Disability (Access to Premises) Standards		
5.1	Access Code	Refer BCA commentary
5.2	New Work & The Affected Part	Not applicable
Access and Approach		
6.1	Allotment Boundary to Entrance	Compliant
6.2	Accessible Carparking to Entrance	Compliant
6.3	Accessible Carparking	Compliant configuration
6.4	Accessible Ramps	Not yet Compliant
6.5	Stairs	Not yet Compliant
6.6	Accessible Entrances	Compliant configuration
Interior		
7.1	Extent of Access Generally	Compliant
7.2	Circulation Areas	Compliant
7.3	Doorways	Capable of compliance
7.4	Doorways to Vestibules	Compliant
7.5	Exempt Areas	None specified
7.6	Floor Finishes	To be addressed during detailed design
7.7	Carpet	To be addressed during detailed design
7.8	Controls	To be addressed during detailed design
7.9	Visual Indication to Glazing	To be addressed during detailed design
7.10	Tactile Indicators	To be addressed during detailed design
7.11	Signage	To be addressed during detailed design
7.12	Slip Resistance (Ramps & Stairs)	To be addressed during detailed design
Sanitary Facilities		
8.1	Distribution	Compliant
8.2	Accessible Toilets & Shower	Capable of compliance
8.3	Ambulant Toilet Cubicles	Capable of compliance
Vertical Circulation		
9.1	Lifts	Capable of compliance
9.2	Fire Isolated Egress Stairs	Capable of compliance
SDA Fully Accessible Requirements		
10.1	General Requirements	Compliant
10.2	Pedestrian Entry	Capable of compliance
10.3	Carparking	Not applicable
10.4	Entrance and Doorways	Not yet compliant
10.5	Power and Cabling	To be addressed during detailed design
10.6	Corridors	Compliant



Item No.	Description	Compliance Status
4.7	Windows	To be addressed during detailed design
4.8	Sanitary Facilities	Compliant configuration
4.9	Kitchen	Capable of compliance
4.10	Laundry	To be confirmed
4.11	Bedroom	Capable of compliance
4.12	Living	Complaint
4.13	Storage	To be confirmed

We consider that the drawings presented for assessment, for the purposes of a development application, generally comply with current statutory requirements. Accessibility requirements are included in Appendix 1 of this report to guide the detailed design. Best Practice options are provided within Appendix 2 and we encourage their implementation into the design.

The recommendations throughout this report reflect the professional opinion and interpretation of Lindsay Perry Access Pty Ltd. This may differ from that of other consultants.

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1 Project Background

The project is an integrated medical hub with Specialist Disability Accommodation units. The building includes four (4) levels of basement carparking; Medical Services – pharmacy, GP & imaging – at the ground floor level; four (4) levels of commercial tenancies and seven (7) units for specialist disability accommodation at the fifth floor.



Figure 1 | Proposed Development

2 Reviewed Documentation

Documentation prepared by Elevation Architecture has been reviewed as follows:

dwg no.	drawing name	revision
00.01	Context & Locality Plans	B
01.01	Site Plan	C
01.02	Existing Survey	B
03.01	Floor Plan – Basement 4	F
03.02	Floor Plan – Basement 3	F
03.03	Floor Plan – Basement 2	F
03.04	Floor Plan – Basement 1	G
03.05	Floor Plan – Ground Floor	H
03.06	Floor Plan – First Floor	G
03.07	Floor Plan – Second Floor	F
03.08	Floor Plan – Third Floor	F
03.09	Floor Plan – Fourth Floor	F
03.10	Floor Plan – Fifth Floor	G
04.01	Roof Plan	D
09.01	Elevations – North	E
09.02	Elevations – East	E
09.03	Elevations – South	A
09.04	Elevations – West	A
10.01	Section A	E
10.02	Section B	E
10.03	Section C	E
12.01	North East Perspective	E
12.02	Showground Road Perspective	E



3 Council Requirements

The site lies within the Central Coast Council local government area. Gosford City Council DCP 2013 Part 4 - Centres is applicable to the development as the site is within the Gosford Centre.

Accessibility requirements of the DCP Part 4 are as follows:

4.1.4.2 Pedestrian Access and Mobility

Any new development must be designed to ensure that safe and equitable access is provided to all, including people with a mobility problems and disabilities. This is of particular concern in Gosford where a significant percentage of the population is 55 years or older and the topography can be difficult to negotiate on foot.

Objectives

- To provide safe and easy access to buildings to enable better use and enjoyment by people regardless of age and physical condition, whilst also contributing to the vitality and vibrancy of the public domain.
- To ensure buildings and places are accessible to people with a disability.
- To provide a safe and accessible public domain.

Controls

1. Main building entry points should be clearly visible from primary street frontages and enhanced as appropriate with awnings, building signage or high quality architectural features that improve clarity of building address and contribute to visitor and occupant amenity.
2. The design of facilities (including car parking requirements) for disabled persons must comply with the relevant Australian Standard (AS 1428 Pt 1 and 2, or as amended) and the Disability Discrimination Act 1992 (as amended).
3. Barrier free access is to be provided to not less than 20% of dwellings in each development and associated common areas.
4. The development must provide at least one main pedestrian entrance with convenient barrier free access in all developments to at least the ground floor.
5. The development must provide continuous access paths of travel from all public roads and spaces as well as unimpeded internal access.
6. Pedestrian access ways, entry paths and lobbies must use durable materials commensurate with the standard of the adjoining public domain (street) with appropriate slip resistant materials, tactile surfaces and contrasting colours.

The accessibility requirements of the DCP have been implemented within the proposed design as demonstrated throughout this access report.



4 Legislation

Access assessment has been made against Access Legislation including:

- The Commonwealth Disability Discrimination Act 1992 (DDA)
- Disability (Access to Premises (Buildings)) Standards 2010
- Access Code for Buildings 2010
- The National Construction Code Building Code of Australia Volume 1 2019, Amendment 1 (BCA)
 - Section D2.14 / D2.15 / D2.17 – landings, thresholds and slip resistance
 - Section D3 – Access for People with Disabilities
 - Section E3.6 – Passenger Lifts
 - Section F2.4 – Accessible Sanitary Facilities
- Australian Standard AS1428.1 (2009) Amendment 1 & 2, – Design for Access and Mobility
- Australian Standard AS1428.2(1992) – Design for Access and Mobility: Enhanced and additional requirements – Buildings and facilities
- Australian Standard AS1428.4.1 (2009) Amendment 1 – Design for Access and Mobility: Means to assist the orientation of people with vision impairment – Tactile ground surface indicators
- Australian Standard AS2890.6 (2009) – Parking Facilities – Off street carparking For People with Disabilities.
- Australian Standard AS1735.12 – Lifts, escalators and moving walks: Lifts for persons with a disability
- The NDIS Specialist Disability Accommodation Design Standard – Edition 1.1

A summary of the requirements of relevant legislation follows.

The Disability Discrimination Act 1992

The DDA requires independent, equitable, dignified access to all parts of the building for all building users regardless of disability. The DDA makes it unlawful to discriminate against a person on the grounds of disability.

The Disability (Access to Premises) Standards

The Disability (Access to Premises - buildings) Standards 2010 (the Premises Standards) commenced on 1 May 2011. Any application for a building approval for a new building or upgrade of an existing building on or after that date triggers the application of the Premises Standards.

The Premises Standards include an **Access Code** written in the same style as the Building Code of Australia. It has a number of Performance Requirements that are expressed in broad terms and references a number of technical Deemed-to-Satisfy Provisions.

The National Construction Code / Building Code of Australia (Volume 1)

The Building Code of Australia (BCA) is contained within the National Construction Code (NCC) and provides the minimum necessary requirements for safety, health, amenity and sustainability in the design and construction of new buildings (and new building work in existing buildings) throughout Australia.



The BCA is a performance-based code and compliance can be met through satisfying the deemed-to-satisfy provisions or by meeting the prescribed performance requirements.

The BCA for Class 3 (accommodation) buildings requires access for people with disabilities as follows:

- From a pedestrian entrance required to be accessible to at least 1 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 1 of each type of room or space for use in common by the residents, including a cooking facility, sauna, gymnasium, swimming pool, common laundry, games room, TV room, individual shop, dining room, public viewing area, ticket purchasing service, lunch room, lounge room, or the like.
- For a total of 6 units, access must be provided to and within **one (1)** sole occupancy unit.
- Where a ramp complying with AS 1428.1 or a passenger lift is installed—
 - a) to the entrance doorway of each sole-occupancy unit; and
 - b) to and within rooms or spaces for use in common by the residents, located on the levels served by the lift or ramp.

The BCA for Class 5 & Class 6 (commercial & retail) buildings requires access for people with disabilities to and within all areas normally used by the occupants.

The BCA for Class 7a (carparking) buildings requires access for people with disabilities to and within any level containing an accessible carparking space.

AS1428 – Design for Access and Mobility

The AS1428 Suite provides design requirements for accessibility generally, covering all types of disabilities. AS1428.1 and AS1428.4.1 are referenced by the NCC / BCA.

- Australian Standard AS1428.1 (2009) Amendment 1 & 2, – Design for Access and Mobility contains access requirements that are mandatory for the provision of access for persons with a disability and is referred by the BCA
- Australian Standard AS1428.2(1992) – Design for Access and Mobility: Enhanced and additional requirements – Buildings and facilities provides enhanced and best practice requirements that will minimize DDA risk
- Australian Standard AS1428.4.1 (2009) Amendment 1 – Design for Access and Mobility: Means to assist the orientation of people with vision impairment – Tactile ground surface indicators

AS2890.6 – Off-street Carparking for People with Disabilities

AS2890.6 (2009) applies to the carparking areas generally.



AS1735– Lifts, escalators and moving walks

AS1735.12 (1992) contains requirements for passenger lifts for persons with a disability.

The NDIS Specialist Disability Accommodation (SDA) Design Standard

SDA is one of the supports that may be funded under the NDIS for some participants who have an extreme functional impairment or very high support needs.

There are various design categories including Improved Livability, Robust, Fully Accessible and High Physical Support which caters to differing levels of accessibility.

5 The Disability (Access to Premises) Standards

Any application for a building approval for a new building or upgrade of an existing building triggers the application of the Premises Standards that includes an Access Code written in the same style as the Building Code of Australia. Additionally, it offers a number of concessions for existing buildings as outlined below.

5.1 Access Code

The Premises Standards include an Access Code written in the same style as the Building Code of Australia.

Compliance Summary:

Refer to BCA requirements throughout subsequent sections of this report.

5.2 New Work and The Affected Part

The Disability (Access to Premises – Buildings) Standards apply to **...a new part, and any affected part, of a building**, to the extent that the part of the building is...a Class 3, 5, 6, 7, 8, 9 or 10 building (Clause 2.1).

New work is defined as follows (Clause 2.1 (4)):

- An extension to the building or a modified part of the building.

An **affected part** is defined as follows (Clause 2.1 (5)):

- The principal pedestrian entrance of an existing building that contains a new part; and
- Any part of an existing building, that contains a new part, that is necessary to provide a continuous accessible path of travel from the entrance to the new part.

Compliance Summary:

Not applicable

Commentary:

The new work and affected part provisions are not applicable to new developments.

6 BCA | Access and Approach + External Areas Generally

The approach to the building needs to be considered when considering access for persons with a disability. The BCA has three requirements for the approach to the building for persons with a disability. An accessible path of travel is required to the building entrance from the allotment boundary at the main points of pedestrian entry, from accessible carparking areas and from any adjacent and associated accessible building.

In this instance, the approach to the building has been considered as follows:

- from the allotment boundary at the pedestrian entrance along Showground Road to the building entrance.
- from the accessible carparking area to the building entrance.

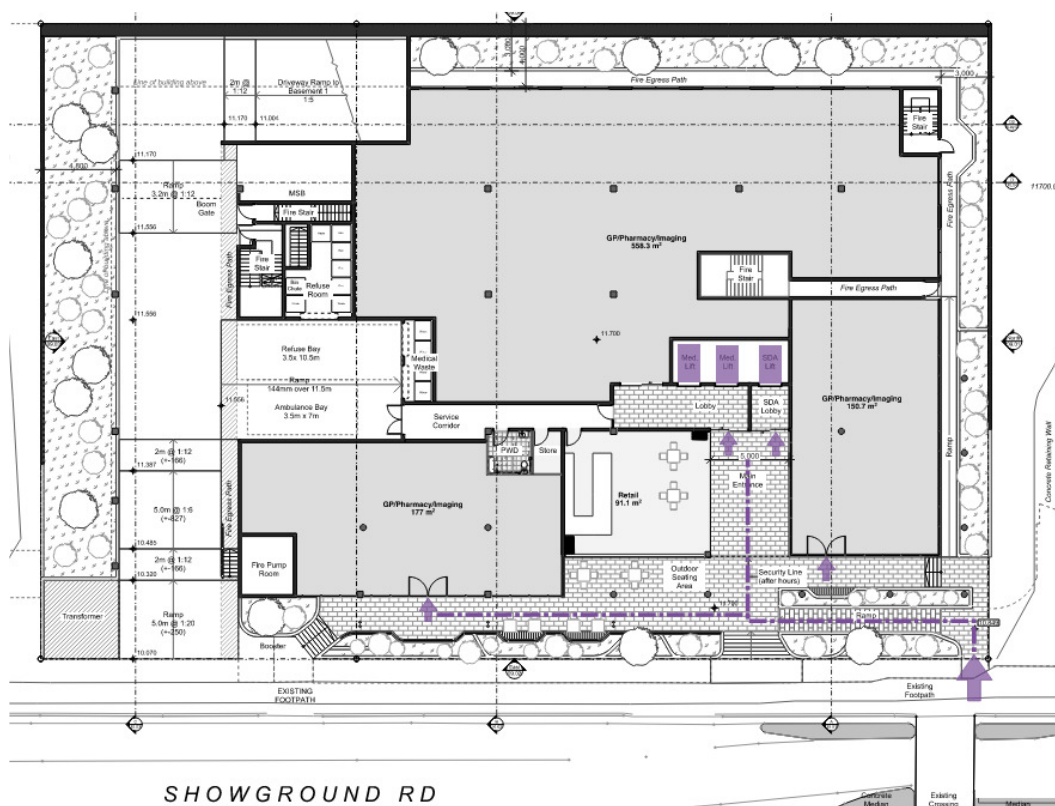


Figure 2 | Overall Site Plan

6.1 Approach from Allotment Boundary

The BCA requires that a continuous accessible path of travel be provided from the allotment boundary at the main points of pedestrian entry to the main entrance.

Compliance Summary:

Compliant

Commentary:

An accessible path of travel is provided to the building entrance from the allotment boundary along Showground Road – a ramp is provided.



6.2 Approach from Accessible Carparking

The BCA requires that a continuous accessible path of travel be provided from the accessible carparking areas to the main entrance.

Compliance Summary:

Compliant

Commentary:

An accessible path of travel is provided from accessible carparking spaces at the basement levels via the lifts.

6.3 Accessible Carparking

There is a requirement for the provision of accessible carparking within this development. For a commercial use, one (1) accessible space for every one hundred (100) carparking spaces or part thereof is required. For the commercial use, one (1) accessible space for every fifty (50) carparking spaces or part thereof is required.

There are specific requirements for the carparking associated with the SDA units – refer to subsequent sections of this report for details.

Compliance Summary:

Compliant configuration

Commentary:

Carparking is provided at the basement level of the building. A total of two-hundred and sixteen (216) carparking spaces are provided within the development including six (6) accessible spaces (two at each Basement Levels 2, 3 & 4). The number of accessible spaces provides BCA compliance.

The overall configuration of the accessible carparking achieves compliance with current legislation including chevron markings and provision of a bollard.

Sections indicate a 3m floor to floor height that will accommodate the required 2500mm clear height for accessible carparking.

6.4 Accessible Ramp

An accessible ramp forms a part of the accessible path of travel to the building from Showground Road

Compliance Summary:

Not yet compliant

Commentary:

It appears the ramp has a gradient of 1:12 (851mm rise over 10.3m. This does not meet AS1428.1 in terms of gradient (1:14 max) or length between landings (9m).



6.5 Stairs

AS1428.1 has access requirements for all public access stairs and is applicable in this instance.

Compliance Summary:

Not yet compliant

Commentary:

Stairs are provided as a part of the pedestrian access from Showground Road to the building.

The bottom riser is located at the property boundary. AS1428.1 requires 900mm set-back from the property boundary to enable the installation of handrail extensions and tactile indicators within the site.

Stairs will require handrails with extensions both sides, tactile indicators top and bottom and contrasting non-slip nosings to treads.

Each stair has a handrail to one side and due to the mirrored arrangement of the stairs, this is considered fit-for-purpose. Handrails are available for left and right-handed use.

Ensure the provision of extensions to the handrails; contrasting non-slip nosing strips to treads; and tactile indicators top and bottom of each stair.

6.6 Accessible Entrances

In a building required to be accessible, an accessway must be provided through the principal pedestrian entrance, and not less than 50% of all pedestrian entrances including the principal pedestrian entrance.

In a building with a total floor area more than 500 sqm a pedestrian entrance which is not accessible must not be located more than 50m from an accessible pedestrian entrance.

Compliance Summary:

Compliant configuration

Commentary:

An automatic sliding door is provided to the main entrances Lobbies. The use of this type of door is encouraged as it maximizes access for persons with a disability to the tenancy.

Double swinging doors are provided for entry to the individual tenancies from the forecourt area. Adequate circulation areas are provided, and a level threshold is achievable.



7 BCA | Interior

The commercial tenancies are provided over five (5) levels and a retail tenancy is provided at the ground floor level. Each tenancy is provided as a cold shell as part of the base building works only – the fit-out of individual tenancies do not form part of this development application. Sanitary facilities are provided for use in common at all levels.

7.1 Extent of Access Generally – BCA

For a commercial retail development, access for people with disabilities is required to and within all areas normally used by the occupants.

Compliance Summary:

Compliant

7.2 Circulation Areas

BCA (Clause D3.3) requires the provision of turning spaces and passing areas to corridors to enable wheelchair circulation throughout a building.

Turning spaces 1540mm wide by 2070mm long are required within 2m of the end of corridors to enable a wheelchair to turn through 90° and passing areas 1800mm wide by 2000mm long are required every 20m along a corridor unless there is a clear line of sight.

Within corridor areas, 1500x1500mm is required to facilitate a 90° turn by a wheelchair. This must be accommodated within accessible areas.

Compliance Summary:

Compliant

Commentary:

Corridors are 1800mm wide throughout.

7.3 Doorways Generally

AS1428.1 has requirements for doorways within the accessible path of travel to enable independent access for people using a wheelchair.

Compliance Summary:

Capable of compliance

Commentary:

Doorways within the accessible path of travel generally achieve the required circulation areas.

Ensure a level threshold is provided to the doorway to the Outdoor Terrace at the fourth-floor level.

7.4 Doorways within Vestibules and Air-locks



AS1428 has requirements for circulation areas between doorways within vestibules / airlocks to enable independent access for people using a wheelchair. Clause 13.4 requires a minimum dimension of 1450mm between doors. Where a doorway encroaches into the space, 1450mm plus the door leaf width is required.

Compliance Summary:

Compliant

7.5 Exempt Areas

BCA Clause D3.4 does not require access for people with disabilities to areas that would be inappropriate due to the particular use of the area or would pose a health and safety risk. This includes the path of travel to these areas.

Compliance Summary:

None specified

Commentary:

Service and plant areas are generally nominated as exempt areas – this includes refuse room, fire pump room, MSB, storage, Comms Rooms and the like.

7.6 Floor Finishes

All floor finishes are to be flush to provide an accessible path of travel throughout the different areas of the building. Maximum allowable construction tolerance is 3mm (5mm for beveled edges) as part of the accessible path of travel.

Compliance Summary:

To be addressed during detailed design stages

7.7 Carpet

BCA requires a maximum carpet pile height of 11mm and carpet backing thickness not exceeding 4 mm.

Compliance Summary:

To be addressed during detailed design stage.

7.8 Controls

Controls such as light switches, GPOs, alarm keypads, card swipes, etc are to be located within the accessible height range of 900-1100mm above the floor level and not within 500mm of an internal corner to comply with AS1428.1(2009), Clause 14.

Compliance Summary:

To be addressed during detailed design stage.



7.9 Visual Indication to Glazing

Provide decals to all full height glazing that can be mistaken for a doorway to assist persons with a vision impairment. Decals to be solid and have a minimum 30% luminance contrast to the background colour and be not less than 75mm high located within the height range of 900-1100mm above the finished floor level.

Compliance Summary:

To be addressed during detailed design stage.

7.10 Tactile Indicators

For a building that is required to be accessible, tactile ground surface indicators must be provided to warn people who are blind or have a vision impairment that they are approaching a stairway (other than a fire isolated stair); an escalator; a moving walkway; a ramp (other than a fire isolated ramp, step ramp, kerb ramp or swimming pool ramp); and in the absence of a suitable barrier, an overhead obstruction less than 2m above the floor level or an accessway, meeting a vehicular way if there is no kerb or kerb ramp (BCA D3.8).

Tactile indicators to be detectable, durable, non-slip and have a minimum 30% luminance contrast to the background color (45% for discrete tactile indicators and 60% for discrete two-tone tactile indicators).

Compliance Summary:

To be addressed during detailed design stage.

7.11 Signage

Signage to identify sanitary facilities, hearing augmentation and required exits are to be provided in accordance with BCA Clause D3.6. This includes provision of the International Symbol for Access or International Symbol for Deafness as appropriate. Signage to comply with AS1428.1 (2009), Clause 8.

Compliance Summary:

To be addressed during detailed design stage.

7.12 Slip Resistance (Stairs and Ramps)

The BCA defines the following slip resistance requirements for stairs and ramps:

Application	Surface Conditions	
	Dry	Wet
Ramp steeper than 1:14	P4 or R11	P5 or R12
Ramp steeper than 1:20 but not steeper than 1:14	P3 or R10	P4 or R11
Tread or Landing surface	P3 or R10	P4 or R11
Nosing or landing edge strip	P3	P4

Compliance Summary:

To be addressed during detailed design stage.



8 BCA | Sanitary Facilities

The BCA / Access Code for Buildings (Clause F2.4) require the provision of sanitary facilities catering for people with disabilities.

8.1 Distribution of Accessible Sanitary Facilities

Accessible sanitary facilities are required as follows – these are general requirements and not project specific.

- A unisex accessible toilet at each level that provides sanitary facilities. Where more than one bank of toilets is provided at any level, at least 50% of those banks will have an accessible toilet facility.
- At each bank of toilets where there is one or more toilets in addition to a unisex accessible sanitary compartment at the bank of toilets, a sanitary compartment suitable for a person with an ambulant disability in accordance with AS1428.1 must be provided for use by males and females.
- A unisex accessible shower is required where showers are required by F2.3.
- A unisex accessible adult change facility must be provided in some public buildings (not required within this development).

Compliance Summary:

Compliant

Commentary:

A unisex accessible sanitary compartment is provided at each commercial level of the building and includes a shower.

In addition to the unisex accessible sanitary compartment at the First to Fourth Floor levels (inclusive), an ambulant toilet for male and female use is provided.

8.2 Unisex Accessible Sanitary Compartments (including shower)

A unisex accessible sanitary compartment is provided at each commercial level of the development.

Compliance Summary:

Capable of compliance

Commentary:

Overall room dimensions and the set-out of fixtures within each facility is conducive to compliance with current accessibility legislation.

All facilities are a right-handed configuration. BCA requires the provision of left and right-handed facilities – this will need to be addressed in the detailed design.



8.3 Cubicles for People with an Ambulant Disability

Ambulant toilets are required within this development.

Compliance Summary:

Capable of compliance

Commentary:

Overall cubicle dimensions and the set-out of fixtures is conducive to compliance with current accessibility legislation.

9 BCA | Vertical Circulation

Lifts provide the main means of access between levels of the building. Three lifts are provided within the development. Stairs within the building are fire isolated egress stairs.

9.1 Passenger Lifts

Where passenger lifts are provided within a building to facilitate access between levels, they must meet the minimum requirements of the NCC / BCA with regard to the internal lift car size, which is dependent upon the total vertical distance that the lift travels.

Compliance Summary:

Capable of compliance

Commentary:

The overall size of the lift shafts are capable of accommodating lift cars of adequate dimensions for compliance with BCA.

9.2 Fire Isolated Egress Stairs

Designated fire egress stairs are not considered public access stairs and therefore are not subject to the requirements of AS1428.1 with the exception of contrasting nosing strips and handrail requirements. These are required per AS1428.1.

Compliance Summary:

Capable of compliance |

Commentary:

Stairs are provided throughout the development to enable egress in the event of a fire.

We recommend the use of the staggered stair to maintain a constant height along the length of the handrail per AS1428.1 (2009), Clause 12.



10 SDA | Fully Accessible Design Category

There are seven (7) units provided for Specialist Disability Accommodation at the fifth-floor level of the building. They have been designed to meet the “**Fully Accessible**” design category. There are five (5) two-bedroom units and two (2) one-bedroom units, each having open plan living areas. An onsite overnight assistance room is also provided. A large communal outdoor area that includes covered pergola and barbeque area is provided for use in common by the residents. The units are accessed via a dedicated residential lift.

10.1 General Requirements

Dwellings shall have one (1) of each of the following: one bedroom (exclusively for use of a participant); one WC pan; one shower on entry level or level serviced by lift; one handwash basin; one living area, one kitchen; one laundry.

Compliance Summary:

Compliant

10.2 Pedestrian Entry from Site boundary.

A safe, continuous step-free accessway shall be provided from the front boundary of the site to an entry doorway of the dwelling.

Compliance Summary:

Capable of compliance.

Commentary:

An accessible path of travel is provided to the building entrance from the allotment boundary along Showground Road – a ramp is provided.

The gradient and configuration of the ramp are to be confirmed (as outlined in section 6.4 of this report). The width of the ramp is in excess of the required 1200mm required by SDA.

10.3 Carparking

A safe, continuous step-free accessway shall be provided to an entry door of the dwelling from any car parking space associated with the dwelling (excluding staff only parking), to an entry doorway of the dwelling.

Where a car parking space is provided for use of the participant, it shall be provided with all of the following: minimum dimensions of 3800mm (width) x 5400mm (length); an even, firm and slip-resistant surface of P4 or R11; a level surface with a maximum 1:40 gradient in any direction.

Compliance Summary:

Not applicable

Commentary:

There is no carparking for participants provided within the development.

10.4 Entrance, doorways and door hardware

The external entry doorway must be provided the following on the arrival side of the door: a step-free level landing area of at least 1500mm x 1500mm; a maximum gradient and crossfall of 1 in 40; door circulation spaces as per AS1428.1 Clause 13.3. All door circulation spaces (excluding internal door circulation spaces for bedrooms) shall be provided in accordance with AS1428.1 to both sides of the door.

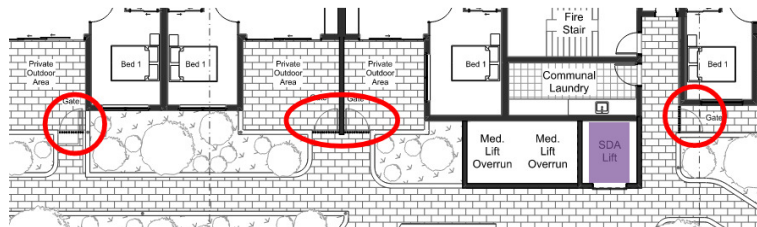
All internal and external doorways to provide a minimum clear opening of 900mm.

Compliance Summary:

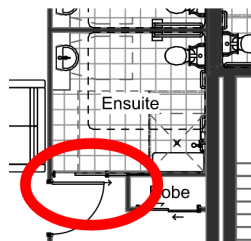
Not yet compliant

Commentary:

The gates to Units 3, 4, 5 & 7 do not achieve the required latch side circulation areas for compliance with AS1428.1 (2009).



Doorway to ensuites within the two-bedroom units do not have the required circulation at the latch side for compliance with AS1428.1 (2009).



10.5 Power and cabling

Power and control cabling to head of entry doors of participants bedrooms, one external entry doorway and one external doorway to an open area (where provided) and windows of bedroom and living area shall be provided for future automation of doors and blind automation.

Compliance Summary:

To be addressed during detailed design stages



10.6 Corridors

All internal corridors and passageways shall provide a minimum clear width of 1200mm measured skirting to skirting.

Compliance Summary:

Compliant

Commentary:

The floor plan arrangement eliminates corridors generally.

10.7 Windows

Window sills must be positioned no higher than 1000mm above FFL in each participant bedroom and to living areas.

Compliance Summary:

To be addressed during detailed design stages

10.8 Sanitary Facilities

On the entry level, or a level serviced by a lift, one WC pan, one shower, one hand wash basin all in the same bathroom are required

At least one WC pan on the entry level, or level serviced by a lift meets all requirements of AS 1428.1 Clause 15; at least one shower on the entry level, or a level serviced by a lift, is provided in a corner of the room with a minimum shower size of 1160mm x 1100mm; and circulation circulation spaces outlined in AS 1428.1 Figure 47; and at least one hand wash basin on the entry level, or a level serviced by a lift, meets AS 1428.1 Clause 15.3. Walls to be reinforced to enable installation of grabrails.

Compliance Summary:

Compliant Configuration

Commentary:

Bathrooms within each of the units has a layout conducive to compliance with AS1428.1.

10.9 Kitchen

The kitchen shall be provided with the following: fixed cooktop (with a rangehood); in-built oven; sink (with tap); a dishwasher; minimum 1550mm is required in front of fixed benches and appliances. One accessible benchtop and one height-adjustable benchtop surface shall be provided. A pantry shall be provided which is wheelchair accessible.

Compliance Summary:

Capable of Compliance

Commentary:

The layouts for kitchens provided incorporates SDA requirements for circulation.



10.10 Laundry

Laundry is to be provided with a sink or tub (with taps) and min 1550mm clearance is provided in front of fixed benches and appliances.

Compliance Summary:

To be confirmed

Commentary:

Location of laundries not indicated within the current documentation,

10.11 Bedroom

Bedroom must be designed as follows: allowance for a minimum queen bed of size 1530mm x 2100mm; circulation space around three sides of bed; space with minimum width of 1540mm on any one side on the bed; space with minimum width of 1000mm to the other two sides of the bed.

Door circulation spaces to bedrooms must be provided as follows: internal door circulation shall be a minimum of 1540mm (width) and 1450mm (depth); external door circulation as per AS1428.1 based on the direction of approach or a minimum of 1200mm when measured from skirting to skirting (whichever is more).

A robe must be provided in the bedrooms as follows: minimum 1400mm wide clear of required bedroom size; minimum space of 1540mm in front of robe.

Compliance Summary:

Capable of compliance

Commentary:

All Units provide adequately sized bedrooms for compliance.

10.12 Living Area

The family/living room shall accommodate a free space, minimum 2250mm in diameter, clear of furniture.

Compliance Summary:

Compliant

10.13 Storage

A storage cupboard must be provided with min 600mm width and adjustable shelves.

Compliance Summary:

To be confirmed

Commentary:

Location of storage cupboards not indicated within the current documentation,



11 Conclusion

This report demonstrates that the fundamental aims of accessibility legislation are achievable within the proposed Integrated Medical Office Building and Specialist Disability Accommodation located at 60, 62 & 64 Showground Road Gosford. Spatial planning and general arrangements of facilities will offer inclusion for all building users.

Disability is often defined as any limitation, restriction or impairment which restricts everyday activities and has lasted or is likely to last for at least 6 months. Disabilities can be very varied. They can be physical, cognitive, intellectual, mental, sensory, or developmental. They can be present at birth or can occur during a person's lifetime. They can also be permanent or temporary. In Australia, almost one in five people – 4.3 million – have a disability with one in three having severe or profound core activity limitation.

Equity and dignity are important aspects in the provision of access to buildings for all users. With respect to people with a disability, equity and dignity are sometimes overlooked in the construction of new buildings or refurbishment works. The design approach needs to maintain a high level of equity for people with disabilities and meet the performance requirements of the BCA. The performance requirements adopt two main concepts in the provision of access for people with a disability being **to the degree necessary** and **safe movement**. Both of these concepts need to be achieved within the context of equitable and dignified access.

In this respect, a wide range of disabilities needs consideration and a compromise reached between requirements of different disability groups. Measures need to be implemented to ensure inclusion of all users, not a particular disability group in isolation.

We consider that the drawings presented for assessment, for the purposes of a development application, demonstrate that compliance with current statutory requirements affecting accessibility is achievable subject to detailed design at the construction certificate stage (refer to Appendix 1 for requirements).



Appendix 1 | Accessibility Requirements



The following accessibility requirements are to be incorporated into the detailed design to ensure compliance of the built form.

Accessible Ramps – External

AS 1428.1 has access requirements for accessible ramps as follows:

- a. Ramp to comply with AS1428.1, Clause 10.3. Maximum allowable gradient of the ramp is 1:14, minimum clear width to be 1000mm (1500mm for curved ramps) and maximum length between landings to be 9m (for 1:14 gradient). Increased circulation areas are required at landings to facilitate wheelchair maneuverability.
- b. Accessible ramp is to have a maximum rise of 3.6m (BCA Clause 3.11).
- c. The ramp is required to be set back a minimum 900mm from the property boundary (AS1428.1, Clause 10.3 (f)). This allows tactile indicators and handrail extensions to occur within the boundary and not protrude into the footpath area.
- d. Provide handrails, with extensions, to both sides of the ramp to comply with AS1428.1, Clause 12. Handrails to have an external diameter between 30-50mm to assist persons with a manual disability such as arthritis. Handrails are required on both sides of the ramp to cater for left and right handed disabilities.
- e. Where ramp is not enclosed, provide kerb rails in accordance with AS1428.1. The height of kerb rails is to be less than 65mm or greater than 150mm above the finished surface level. This is to ensure that the foot plate of a wheelchair cannot become lodged on the kerb rail.
- f. Provide tactile indicators at the top and bottom of the ramps to comply with BCA Clause D3.8 and AS1428.4. Tactile indicators to be detectable, durable, non-slip and have a minimum 30% luminance contrast to the background colour.

Tactile indicators at the top and bottom of the ramps to be 600-800mm deep across the width of the ramp and set back 300mm from the edge of the ramp (refer AS1428.4, Figure A1).

Stairs – External

AS 1428.1 has access requirements for all public access stairs as follows:

- a. Stairs to comply with AS1428.1(2009), Clause 11.2.
- b. Stairs to have closed or opaque risers. Open risers cause confusion for persons with a vision impairment and may trigger conditions such as epilepsy due to light penetrating through the open riser.



- c. Provide handrails, with extensions, to both sides of the stair (AS1428.1 (2009), Clause 11.2 & 12). Handrails to have an external diameter between 30-50mm to assist persons with a manual disability such as arthritis.

Handrails are required on both sides of the stair to cater for left and right-handed disabilities. A central handrail is also an acceptable solution where adequate width is available. In this instance, the use of a double handrail is encouraged so that two users can travel in opposite directions and maintain their grip on the handrail.

- d. Stair nosings to have minimum 30% luminance contrast strip 50-75mm wide to the top of the stair tread to assist persons with a vision impairment. The strip can be set back 15mm from the edge of the riser.
- e. Stair nosings shall not project beyond the face of the riser.
- f. Provide tactile indicators at the top and bottom of the stair to comply with BCA Clause D3.8 and AS1428.4.

Tactile indicators to be detectable, durable, non-slip and have a minimum 30% luminance contrast to the background colour.

Tactile indicators at the top and bottom of the stair to be 600-800mm deep across the width of the stair set back 300mm from the edge of the stair.

Accessible Carparking

Access requirements for the accessible carparking are as follows and should be addressed during preparation of the construction certificate documentation.

- a. Accessible carparking to be a minimum of 2400mm wide with a shared area to one side of the space 2400mm wide. Circulation space can be shared between adjacent accessible carparks. For a single space, a total width of 4800mm is required.
- b. Provide a bollard to the shared circulation space as illustrated in AS2890.6, Figure 2.2.
- c. The maximum allowable crossfall of accessible carparking area to be 1:40. This crossfall applies both parallel and perpendicular to the angle of parking.
- d. For covered carparking, the clear height of the accessible carparking space to be 2500mm as illustrated in AS2890.6, Figure 2.7.
- e. Designated accessible carparking is to be identified using the International Symbol for Access (ISA) between 800 and 1000mm high placed as a pavement marking in the centre of the space between 500-600mm from its entry point. The perimeter of the space is to be identified by an



unbroken yellow & slip resistant line 80-100mm wide (except where there is a kerb or wall)

- f. Shared space to be identified using yellow slip-resistant & unbroken stripes 150 to 200mm wide with spaces 200 to 300mm between stripes. Stripes to be at an angle of 45° to the side of the space.

Accessible Entrances

Access requirements for entrances are as follows.

- a. Entrance to comply with AS1428.1(2009), Clause 13 as part of the accessible path of travel.
- b. Doors are to have a minimum clear opening width of 850mm to comply AS1428.1(2009), Clause 13.2 as part of the accessible path of travel.
- c. Door threshold to be level to provide seamless entry as part of the accessible path of travel. Maximum allowable construction tolerance is 3mm for compliance with AS1428.1(2009), 5mm where beveled edges are provided between surfaces – refer to Figure 6.
- d. Door to have hardware within the accessible height range of 900-1100mm above the finished floor level (AS1428.1(2009), Clause 13.5)
- e. For glass doors, provide decals to assist persons with a vision impairment. Decals to be solid and have a minimum 30% luminance contrast to the background colour and be not less than 75mm high located within the height range of 900-1100mm above the finished floor level. Decals are to be solid. AS1428.1, Clause 6.6.
- f. Where double door sets are provided, one door leaf is to be capable of being held in the closed position to provide door opening widths and circulation to comply with AS 1428.1.

Circulation Areas Generally

BCA (Clause D3.3) requires the provision of turning spaces and passing areas to corridors to enable wheelchair circulation throughout a building.

Turning spaces 1540mm wide by 2070mm long are required within 2m of the end of corridors to enable a wheelchair to turn through 90° and passing areas 1800mm wide by 2000mm long are required every 20m along a corridor unless there is a clear line of sight.

Within corridor areas, 1500x1500mm is required to facilitate a 90° turn by a wheelchair. This must be accommodated within accessible areas.



Doorways

Access requirements for doorways within the accessible path of travel are as follows:

- a. Doorways within the accessible path of travel to have a minimum clear opening width of 850mm (AS1428.1(2009), Clause 13.2). We recommend the use of a 920 leaf door as a minimum to achieve adequate clear width.

For double doors, the operable leaf must achieve this clear opening width to facilitate single leaf operation.

- b. All doorways within the accessible path of travel to have complying circulation areas as illustrated in AS1428.1(2009), Figure 31. Circulation areas to have a maximum crossfall of 1:40.
- c. Doors between indoor and outdoor spaces to have a level threshold for seamless transition.
- d. Doorways to have minimum 30% luminance contrast as described in AS1428.1(2009), Clause 13.1.
- e. Doors to have hardware within the accessible height range of 900-1100mm above the finished floor level (AS1428.1(2009), Clause 13.5). Note that within a childcare centre, this is applicable to the unisex accessible sanitary facilities only.
- f. Door handles and related hardware shall be able to be unlocked and opened with one hand per AS1428.1 (2009), Clause 13.5.1. The handles shall enable a person who cannot grip to operate the door without their hand slipping from the handle. We recommend the use of lever handles.
- g. For manual controls to automatic doorways, buttons to be located no closer than 500mm from an internal corner and between 1000mm and 2000mm from the hinged door leaf or surface mounted sliding door in the open position. Height of controls to be 900-1100mm affl.
- h. Doorways to external areas to achieve a level threshold as part of the accessible path of travel. Maximum allowable construction tolerance is 3mm for compliance with AS1428.1(2009), 5mm where beveled edges are provided between surfaces.
- i. Doorways to have operational forces per AS1428.1 (2009), Clause 13.5.2. A maximum allowable force of 20N is required to operate the door.

Doorways within Vestibules and Airlocks



AS1428 has requirements for circulation areas between doorways within vestibules / airlocks to enable independent access for people using a wheelchair. Clause 13.4 requires a minimum dimension of 1450mm between doors. Where a doorway encroaches into the space, 1450mm plus the door leaf width is required.

Floor Finishes

All floor finishes are to be flush to provide an accessible path of travel throughout the different areas of the building. Maximum allowable construction tolerance is 3mm (5mm for bevelled edges) as part of the accessible path of travel. Refer to AS1428.1(2009), Clause 7.2 for further details.

Carpet

BCA requires that the pile height or pile thickness does not exceed 11 mm and the carpet backing thickness shall not exceed 4 mm.

Controls

Controls such as light switches, GPOs, alarm keypads, card swipes, etc are to be located within the accessible height range of 900-1100mm above the floor level and not within 500mm of an internal corner to comply with AS1428.1(2009), Clause 14.

Visual Indication to Glazing

Provide decals to all full height glazing that can be mistaken for a doorway to assist persons with a vision impairment. Decals to be solid and have a minimum 30% luminance contrast to the background colour and be not less than 75mm high located within the height range of 900-1100mm above the finished floor level. Decals are to be solid. AS1428.1, Clause 6.6.

Tactile Indicators

For a building that is required to be accessible, tactile ground surface indicators must be provided to warn people who are blind or have a vision impairment that they are approaching a stairway (other than a fire isolated stair); an escalator; a moving walkway; a ramp (other than a fire isolated ramp, step ramp, kerb ramp or swimming pool ramp); and in the absence of a suitable barrier, an overhead obstruction less than 2m above the floor level or an accessway, meeting a vehicular way if there is no kerb or kerb ramp (BCA D3.8).

Tactile indicators to be detectable, durable, non-slip and have a minimum 30% luminance contrast to the background color (45% for discrete tactile indicators and 60% for discrete two-tone tactile indicators).

Signage

Access requirements for signage are as follows. Note that this does not include general wayfinding signage.

- a. Braille and tactile signage formats as outlined within BCA Specification D3.6 that incorporate the international symbol of access or deafness, as appropriate, in accordance with AS 1428.1 must be provided to identify the following:



- a sanitary facility, except a sanitary facility associated with a bedroom in a Class 1b building or a sole-occupancy unit in a Class 3 or Class 9c building
 - a space with a hearing augmentation system
 - each door required by E4.5 to be provided with an exit sign and state level
 - an accessible unisex sanitary facility and identify if the facility is suitable for left or right handed use
 - an ambulant accessible sanitary facility 1 and be located on the door of the facility
 - where a pedestrian entrance is not accessible, directional signage incorporating the international symbol of access to direct a person to the location of the nearest accessible pedestrian entrance
 - where a bank of sanitary facilities is not provided with an accessible unisex sanitary facility, directional signage incorporating the international symbol of access must be placed at the location of the sanitary facilities that are not accessible, to direct a person to the location of the nearest accessible unisex sanitary
- b. Braille and tactile components of the sign to be located not less than 1200mm and not higher than 1600mm affl.
- c. Signage to be located at the latch side of the doorway with the leading edge of the sign 50-300mm from the architrave. Where this is not possible, the sign can be located on the door.

Sample signs are as follows. These are examples only – ensure selected signage complies with BCA Specification D3.6 including provision of Braille locator for multiple lines of text and characters.





Slip Resistance

The BCA defines the following slip resistance requirements for stairs and ramps:

Application	Surface Conditions	
	Dry	Wet
Ramp steeper than 1:14	P4 or R11	P5 or R12
Ramp steeper than 1:20 but not steeper than 1:14	P3 or R10	P4 or R11
Tread or Landing surface	P3 or R10	P4 or R11
Nosing or landing edge strip	P3	P4

Unisex Accessible Sanitary Compartment

Access requirements for the accessible toilet facilities are as follows. For compliance with AS1428.1(2009), the minimum room dimensions of the accessible toilet are to be 1900x2300mm plus additional area for the handbasin. These are **CLEAR** dimensions. Provision for wall linings needs to be considered.

- Accessible toilet facilities to be unisex facilities for compliance with the BCA.
- Unisex accessible facilities to comply with AS1428.1(2009), Clause 15 including set-out of fittings and fixtures, circulation areas and doorways.
- Where more than one unisex accessible toilet is provided within the building, they should be in a mirrored configuration to allow for both left and right handed use.

WC Pan:

- Crucial dimensions for the toilet are 450mm from centreline of pan to side wall, 800mm from front of pan to rear wall and a seat height of 470mm.
- A minimum clear dimension of 1400mm is required from the toilet pan to any other fixture (see figure 43).
- Grabrails to be provided at the side and rear of the toilet in compliance with AS1428.1 at a height of 800mm.
- Toilet seat shall be of the full round type, be securely fixed in position when in use and have fixings that create lateral stability. They should be load rated to 150kg, have a minimum 30% luminance contrast to the background colour (eg pan, wall or floor) and remain in the upright position when fully raised.
- Provide a backrest to accessible toilets to comply with AS1428.1, Clause 15.2.4.

Basin:



- f. For the basin, a minimum dimension of 425mm is required from the centreline of the basin to the side wall and height of basin to be between 800 and 830mm.
- g. Taps to have lever handles, sensor plates or similar controls. For lever taps, a minimum 50mm clearance to be provided to adjacent surfaces.

Door:

- h. Doorways to have a minimum clear opening width of 850mm to comply AS1428.1(2009), Clause 13.2 as part of the accessible path of travel. Adequate circulation area at the latch side of the doorway is required to allow independent access to the facility – for details refer to AS1428.1, Figure 31.
- i. Door hardware to be located within the accessible height range of 900-1100mm above the finished floor level. The use of lever handles is encouraged to assist persons with a manual disability such as arthritis.

Controls:

- j. Controls such as light switches within the accessible toilet facilities to be in the accessible height range of 900-1100mm above the finished floor level to comply with AS1428.1(2009), Clause 14. Controls should be located not less than 500mm to a corner.

Unisex Accessible Shower

Access requirements for the accessible shower facilities are as follows. These are **CLEAR** dimensions. Provision for wall linings needs to be considered.

- a. Accessible showers are to comply with AS 1428.1, Clause 15.5 and include accessible features such as grabrails, adjustable height shower rose and fixtures within an accessible height range.
- b. Floor waste to be positioned 550mm and 580mm from enclosing shower walls as illustrated in AS1428.1 (2009), Figure 47a.
- c. The minimum dimension of an accessible shower to be 1160 x 1000mm. A folding seat, at a height of 470mm is to be provided. All taps to be located within the height range of 900-1100mm above the finished floor level.
- d. Circulation space in front of the shower is to be provided as illustrated in AS1428.1, Figure 47.

Ambulant Toilet Cubicles



Requirements for the ambulant toilets are as follows.

- a. Options for the configuration of the ambulant cubicles are illustrated in AS1428.1, Figure 53.
- b. Provide an ambulant cubicle within each bank of male and female toilets in compliance with AS1428.1, Clause 16.
- c. Minimum width of ambulant cubicles to be 900-920mm.
- d. Minimum distance between the front of the WC pan and cubicle door / wall is 900mm,
- e. Seat height to be 460-480mm.
- f. Provide grabrails to ambulant cubicles to comply with AS1428.1, Clause 17 and Figure 53A.
- g. Provide toilet paper holder within the accessible reach zone (within 300mm of the front of the pan at a height less than 700mm).
- h. Doors to have a minimum opening width of 700mm and comply with AS1428.1, Figure 53B.
- i. Provide signage to the ambulant cubicles to comply with AS1428.1, Clause 16.4.

Passenger Lifts

The following access requirements apply to the lifts. These requirements are for disabled access only and do not include requirements for stretchers.

- a. Lift is to comply with AS1735.12 and be fully automatic as required by the BCA, Clause E3.6.
- b. Minimum internal dimensions of the lift car to be 1400mm wide x 1600mm deep BCA, Clause E3.6 – for a lift that travels over 12m.
- c. Clear opening of the lift door to be minimum 900mm.
- d. Provide a handrail complying with the provisions for a mandatory handrail in AS1735.12.
- e. All lift control buttons are to be in the accessible height range of 900-1100mm affl and have a minimum 30% luminance contrast to the background colour. This includes buttons within the lift car and at each public lift lobby. All buttons are to be provided with information in Braille and tactile formats.
- f. Auditory / voice cues are to be provided within the lift car to assist persons with a vision impairment.



- g. Series of door opening devices that will detect a 75mm diameter rod across the door opening between 50 mm and 1550mm above the floor level.
- h. Emergency hands-free communication, including a button that alerts a call centre of a problem, a light to signal that the call has been received by the call centre and a light indicating assistance is being dispatched.

Fire Isolated Egress Stairs

Designated fire egress stairs are not considered public access stairs and therefore are not subject to the requirements of AS1428.1 with the exception of contrasting nosing strips and handrail requirements. These are required per AS1428.1.

- a. Stair nosings to have minimum 30% luminance contrast strip 50-75mm wide to the top of the stair tread to assist persons with a vision impairment. The strip can be set back 15mm from the edge of the riser.
- b. Stair nosings shall not project beyond the face of the riser.
- c. Handrails in a required exit serving an area required to be accessible, are to be designed and constructed to comply with AS 1428.1, Clause 12 (BCA D2.17).

Note: handrails within fire-isolated stars are required to one side only and do not require the provision of handrail extensions. They must have a diameter between 300-50mm; be between 865-1000mm high above the nosing; be a consistent height along the length of the stair – no vertical sections; have a clearance to the wall not less than 50mm; have no obstruction along the length of its passage; and have an end that turns through 180, turns to the ground, or returns fully to an end post.

We recommend the use of the staggered stair to maintain a constant height along the length of the handrail per AS1428.1 (2009), Clause 12.

Specialist Disability Accommodation Units | Fully Accessible

General Requirements

Dwellings shall have one (1) of each of the following: one bedroom (exclusively for use of a participant); one WC pan; one shower on entry level or level serviced by lift; one handwash basin; one living area, one kitchen; one laundry.

Pedestrian Entry from Site boundary.

A safe, continuous step-free accessway shall be provided from the front boundary of the site to an entry doorway of the dwelling.

All accessways must have: no steps; a level transition of surface materials; a maximum vertical tolerance of 3mm or 5mm between abutting surfaces (if round or beveled); an even and firm surface; a crossfall of not more than 1:40.



A 1:20 grade is provided as part of the accessway it shall incorporate, minimum clear width of all accessways (including ramps) must be 1200mm measured from the narrowest part, for a change of direction not exceeding 90° landings no less than 1500mm x 1500mm, a firm level surface abutting the sides of the walkway for a minimum of 600mm at the same grade or: Kerb or, Kerb-rail and handrail or, Wall with min height of 450mm and a slip resistance with a minimum of P4 or R11.

A 1:10 grade is provided as part of the accessway it shall incorporate a maximum level change or transition which can be dealt with by a step ramp is 190mm and maximum length of ramp is 190mm. All features of 1:10 step ramp including landing sizes, handrail/kerb rails (if required) shall comply with the requirements of AS1428.1. Slip resistance shall be a minimum of P5 or R12

Where a ramp or walkway is part of the accessway, level landings no less than 1200mm x 1200mm, exclusive of the swing of the door or gate that opens onto them must be provided.

Carparking

A safe, continuous step-free accessway shall be provided to an entry door of the dwelling from any car parking space associated with the dwelling (excluding staff only parking), to an entry doorway of the dwelling.

Where a car parking space is provided for use of the participant, it shall be provided with all of the following: minimum dimensions of 3800mm (width) x 5400mm (length); an even, firm and slip-resistant surface of P4 or R11; a level surface with a maximum 1:40 gradient in any direction.

Entrance, doorways and door hardware

The external entry doorway must be provided the following on the arrival side of the door: a step-free level landing area of at least 1500mm x 1500mm; a maximum gradient and crossfall of 1 in 40; door circulation spaces as per AS1428.1 Clause 13.3, a covered roof shall be provided over the entire required landing area outside main external entry doorway; where the threshold at an external entry doorway exceeds 5mm and is less than 35mm, a doorway threshold ramp must be provided in accordance with AS1428.1 Clause 10.5.

All internal and external doorways to provide a minimum clear opening of 900mm.

All door circulation spaces (excluding internal door circulation spaces for bedrooms) shall be provided in accordance with AS1428.1 to both sides of the door.

All door handles to be 900mm-1100mm AFFL, provide 'D' lever style and meet profile requirements as per AS1428.1.

Doorway circulation spaces in accordance with AS1428.1 Clause 13.3 shall be provided to all doorways (excluding exclusive staff use areas, non-accessible toilets and storage rooms). Door automation can be provided in lieu door circulation spaces that are required as per AS1428.1 to the latch side of the door.



Note: If door circulation is not provided as per AS1428.1 then door automation must be provided at the onset and not simply provision for door automation at a future time

Provide a capped GPO at door head for future automation to all participants bedrooms, one external entry door and one external entry door to one area (where provided).

Corridors

All internal corridors and passageways shall provide a minimum clear width of 1200mm measured skirting to skirting.

Windows

Window sills must be positioned no higher than 1000mm above FFL in the following locations

- At least one sill in each participant bedroom.
- All sill in the living areas.

All windows to be lockable and window controls located between 600mm to 1100mm above FFL. (a concession is reasonable in kitchen, bathroom and utility spaces).

A capped GPO at window head is provided for future automation to the following areas:

- All windows in participant bedrooms
- All windows in living areas

Sanitary Facilities

On the entry level, or a level serviced by a lift, one WC pan, one shower, one hand wash basin all in the same bathroom.

At least one WC pan on the entry level, or level serviced by a lift meets all requirements of AS 1428.1 Clause 15, including correct set out of fixtures and fittings with circulation space of 1900mmx2300mm.

At least one shower on the entry level, or a level serviced by a lift, meets the following provisions: Provided in a corner of the room; minimum shower size of 1160mm x 1100mm; provided with one of the two circulation spaces outlined in AS 1428.1 Figure 47

At least one hand wash basin on the entry level, or a level serviced by a lift, meets the following provisions: compliant with AS 1428.1 Clause 15.3; minimum basin depth of 430mm; minimum circulation space as required by AS1428.1 Figure 46.

Except for walls constructed of masonry or concrete, the internal side of the full sanitary room with the required WC pan, shower, hand wash basin and fixed



bathtub (if provided) shall have wall reinforcement of minimum 12mm thick sheeting, from FFL and extend to a height of minimum from FFL

Kitchen

The kitchen shall be provided with the following: fixed cooktop (with a rangehood); in-built oven; sink (with tap); a dishwasher; minimum 1550mm is required in front of fixed benches and appliances.

One accessible benchtop shall be provided with features as follows: Benchtop surface of minimum 600mm depth shall be provided right next to the cooktop and wall oven (on the latch side of the oven door) and minimum space of 900mm (width) x 440mm (depth) clear of any fixtures under the benchtop.

One height-adjustable benchtop surface, of 600mm depth, shall be provided with features as follows: Minimum space of 900mm (width) x 440mm (depth) clear of any fixtures under the benchtop and height adjustment capability from 720mm clear space underneath to 1020mm clear space underneath from FFL)

A pantry shall be provided which is wheelchair accessible.

Note: Where the appliances are not installed the recessed area provision for an appliance shall be a minimum of 700mm in depth.

Laundry

Laundry is to be provided with a sink or tub (with taps) and min 1550mm clearance is provided in front of fixed benches and appliances.

Note: Where the appliances are not installed the recessed area provision for an appliance shall be a minimum of 700mm in depth.

Bedroom

Bedroom must be designed as follows: allowance for a minimum queen bed of size 1530mm x 2100mm; circulation space around three sides of bed; space with minimum width of 1540mm on any one side on the bed; space with minimum width of 1000mm to the other two sides of the bed.

Door circulation spaces to bedrooms must be provided as follows: internal door circulation shall be a minimum of 1540mm (width) and 1450mm (depth); external door circulation as per AS1428.1 based on the direction of approach or a minimum of 1200mm when measured from skirting to skirting (whichever is more).

A robe must be provided in the bedrooms as follows: minimum 1400mm wide clear of required bedroom size; minimum space of 1540mm in front of robe.

Living Area

The family/living room shall accommodate a free space, minimum 2250mm in diameter, clear of furniture.

Switches and Power points



Light switches to be in a consistent location between 900-1100mm affl and horizontally aligned with door handles at the entrance to a room.

GPOs shall be installed between 600mm and 1100mm above the FFL

Light and GPO switches shall be rocker action, toggle or push pad in design with a minimum width of 35mm.

Dimmable lighting switches shall be provided in living areas and bedrooms.

Storage

A storage cupboard must be provided with min 600mm width and adjustable shelves.

Heating and Cooling

Reverse cycle air-conditioning shall be provided to living areas and bedrooms with control panels located between 900mm and 1100mm from FFL and not closer than 500mm to any internal corner. Where ducted air-conditioning is used, zoning of habitable rooms shall be provided.

Assistive Technology

Internet connection shall be provided with the ability for high internet speeds to be maintained and stable in nature with wi-fi coverage throughout all areas of the dwelling.



Appendix 2 | Best Practice Options for Consideration



We recommend a best practice approach to accessibility that goes beyond minimum standards and embraces the intent of the DDA. The following measures will promote inclusion and participation for all users.

Accessways

We recommend that the accessible path of travel be a minimum 1200mm wide to comply with AS1428.2. Wider pathways will allow easy access for more people who have a permanent disability, people with a temporary disability, people pushing prams and elderly people using walking frames and the like. This is in keeping with the principles of Universal Design.

For or a wheelchair and a pram to pass 1500mm is required and for two wheelchairs to pass requires 1800mm.

Automatic Entrance Doors

The provision of automatic sliding doorways maximizes access for people with a disability. Further, delivery drivers, people carrying parcels and the elderly also benefit from the provision of automatic doors.

Automatic doors provide safe, convenient access for everyone, regardless of age or ability in keeping with universal design principles. They also offer COVID-19 mitigation measures, reducing the transfer of germs and bacteria.

Accessible Service Counters

The provision of an accessible section of counter will benefit people using wheelchairs and people of short stature.

AS1428.2 contains access requirements for service counters and recommends the height of the counter be between 750mm (± 20) and 850mm (± 20) above the finished floor level and have foot and knee clearance under the counter. The minimum width of an accessible counter and clearance below is recommended as 900mm.

Luminance Contrast

Luminance contrast assists people with a vision impairment to navigate the built environment. Mandatory items that require luminance contrast are tactile indicators, accessible toilet seats and doorways as outlined in other sections of this report. The following can also be provided as a best practice measure to ensure ease of use:

- Minimum 30% luminance contrast between floors and walls or between walls and skirting boards;
- Minimum 30% luminance contrast between the ground surface and obstructions such as columns, bollards and street furniture;
- To assist people with a vision impairment, locate the building entrance, consider providing features with a minimum 30% luminance contrast to the background surface such as an entry mat or awning.
- Minimum 30% luminance contrast between the floor and the entrance mat (this allows people with vision impairment to locate the entrance);
- Minimum 30% luminance contrast between walls and handrails.



Visual Indication to Glazing (additional measures)

To ensure full height glazing that can be mistaken for a doorway is highlighted, we recommend the provision of a “double decal” as per international precedent. This involves the provision of two (2) decal strips that have a minimum 30% luminance contrast to each other. As such, the background colour does not need to be relied upon.

Wayfinding – Signage

Signs and symbols should be provided to inform all users. A signage system which informs all users is encouraged. The use of pictograms and directional cues is recommended as is the use of luminance contrast to ensure the message is clear and legible.

Wayfinding – Landmarks and Tactile Indicators

To assist people with vision impairment navigate their environment, the use of directional tactile indicators can be implemented, noting that their use should be minimised. The design of directional tactile indicators is site / building specific.

Additionally, landmarks such as entry features, statues, sculpture, fountains, or other unique features can be used as a means of way-finding throughout a building. This especially assists people with intellectual disabilities.

Terminology (Best-practice recommendation)

The use of positive terminology such as “accessible” should be used when referring to accessible facilities such as toilets and carparking. This term is preferable to “disabled” which is commonly used. This principle is to be adopted through the design and documentation of a project and on signage throughout the completed building.

Emergency Call Button in Sanitary Compartments

If provided, emergency call button should be located at 600+/- 20mm above the finished floor level in front of the toilet roll holder to enable ease of access for someone who has fallen off the pan. People do fall off the pan, in particular those with no or limited upper trunk control.

Places of Comparative Safety

Consider providing a refuge area within fire isolated stairs by incorporating a 800mm x 1300mm area at stair landings of every accessible floor. A 1000mm unobstructed egress width to the area should be provided.

We recommend that signage displaying the International Symbol of Access (ISA) be provided to identify any places of comparative safety provided. Signage should state that the area is safe in the event of an emergency. Evacuation procedures for the building should address the provision of places of comparative safety for people with limited mobility. Signage should comply with BCA D3.6 and BCA Specification 3.6 and have braille and tactile components.

We also recommend that as a part of the emergency evacuation plan for the building, egress for persons requiring assistance be addressed. The provision of places of comparative safety within fire isolated passages would be advantageous to persons



with a disability. This consists of a waiting area large enough to accommodate a wheelchair where persons can wait for assistance from emergency services. The waiting area should be identified with appropriate signage that incorporates the International Symbol for Access.

Lighting and Glare

Minimum interior lighting levels should generally consider AS1428.2 (1992) Clause 19. Consistent lighting levels should be provided throughout, without pools of light or dark areas. AS1428.2 (1992) recommends the following minimum illumination levels:

- Entrances 150lx
- Passages and walkways 150lx
- Stairs 150lx
- Toilets and Locker rooms 200lx
- Counter tops 250lx
- General displays 200-300lx

Glare and excessively reflective surfaces should be avoided. This includes glare from windows.

