

Development Application **ACCESS REPORT**

Reference Number: 22364

Client:

Kennedy Associates Architects

Site Address:

1-3 Walker St, 2-4 Caldwell Avenue, East
Lismore



Vista Access Architects Pty. Ltd.

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Executive Summary and Design Compliance Statement

This Access Compliance Report is to accompany a Development Application (DA) for the development proposed at **1-3 Walker St, 2-4 Caldwell Avenue, East Lismore**

The development is within Lismore City Council LGA and proposes **New Buildings** The development also provides 3 Adaptable units to a **Class C** level.

The development proposes the following:

	Building 1	Building 2
Residential units	8	8
Adaptable units	3	0
Livable Housing Units	4	4
Total Accessible parking spaces (allocated to adaptable units)	3	

The development has building classification as detailed below:

- Class 2 (building containing more than 2 SOUs i.e., sole-occupancy units)

This report is based on the relevant components of:

- Building Code of Australia (BCA) 2019, Volume 1- Performance requirements of DP1, DP2, DP8, DP9, EP3.4, FP2.1 and Parts D2, D3, E3 and F2 (where applicable)
- Disability (Access to Premises-Building) Standards 2010 (henceforth referred to as APS)
- AS1428.1-2009 Part 1: General requirements for access, including any amendments
- AS1428.1-2009 Part 1: General requirements for access, including any amendments
- AS1428.4.1-2009 Part 4.1: TGSIs (Tactile ground surface indicators), including any amendments
- AS2890.6-2009 Part 6: Off-street parking for people with disabilities.
- AS4299-1995 Adaptable Housing
- Livable Housing Australia's Livable Housing Design Guidelines- Fourth Edition

The assessment of the proposed development has been undertaken to the extent necessary to issue DA consent under the Environmental Planning and Assessment Act. The proposal achieves the spatial requirements to provide access for people with a disability and it is assumed that assessment of the detailed requirements such as assessment of internal fit-out, details of stairs, ramps and other features will occur at CC (Construction Certificate) stage.

By compliance with the recommendation in this report, the development complies with the requirements of Access Code of Disability (Access to Premises-Building) Standards 2010, the Disability Access relevant sections of Building Code of Australia 2019, the essential criteria of AS4299-Adaptable Housing and the requirements of LHA Silver level to nominated units (additional LAHC requirements)

The information contained in this statement is true and accurate to the best of our knowledge. Our qualifications and accreditations are listed below.

Assessed by



Art Phonsawat

Associate Access Consultant

ACAA Accredited Membership number 695

Qualified- Certificate IV in Access Consulting

Peer reviewed by



Farah Madon

Accredited Access Consultant and LHA Assessor

ACAA Accredited Membership number 281

Qualified- Diploma in Access Consulting

LHA Assessor Licence number 10032

Vista Access Architects Pty. Ltd.

Relevant Dates:

Fee proposal, number FP-22583 dated **15-07-2022**. Fee proposal was accepted by Client on **20-09-2022**

Assessed Drawings:

The following drawings by Kennedy Associates Architects have been assessed for compliance.

Drawing no	Issue	Date	Details
DA-103	A	26-04-2023	Site plan
DA-201	A	26-04-2023	GA – External works
DA-202	A	26-04-2023	GA – Ground floor
DA-203	A	26-04-2023	GA – First floor

Document Issue:

Issue	Date	Details
Issue A	21-04-2023	Issued for DA
Issue B	03-05-2023	Issued for DA

Limitations and Copyright information:

This report is based on discussions with the project architect and a review of drawings and other relevant documentation provided to us. No site visit was undertaken for the purposes of this report.

This assessment is based on the provided drawings and not based on constructed works; hence the assessment will provide assurance of compliance only if all the recommendations as listed in this report are complied with and constructed in accordance with the requirements of the current BCA, AS1428.1, AS2890.6 and other latest, relevant standards and regulations applicable at the time of construction.

Assessment is based on classification/use of the building. If the class of the building changes to any other building class, this access report will have to be updated accordingly.

Unless stated otherwise, all dimensions mentioned in the report are net (CLEAR) dimensions and are not to be reduced by projecting skirting, kerbs, handrails, lights, fire safety equipment, door handles less than 900mm above FFL (finished floor level) or any other fixtures/fit out elements. When we check drawings, we assume that the dimensions noted are CLEAR dimensions and therefore the Architect / Builder shall allow for construction tolerances.

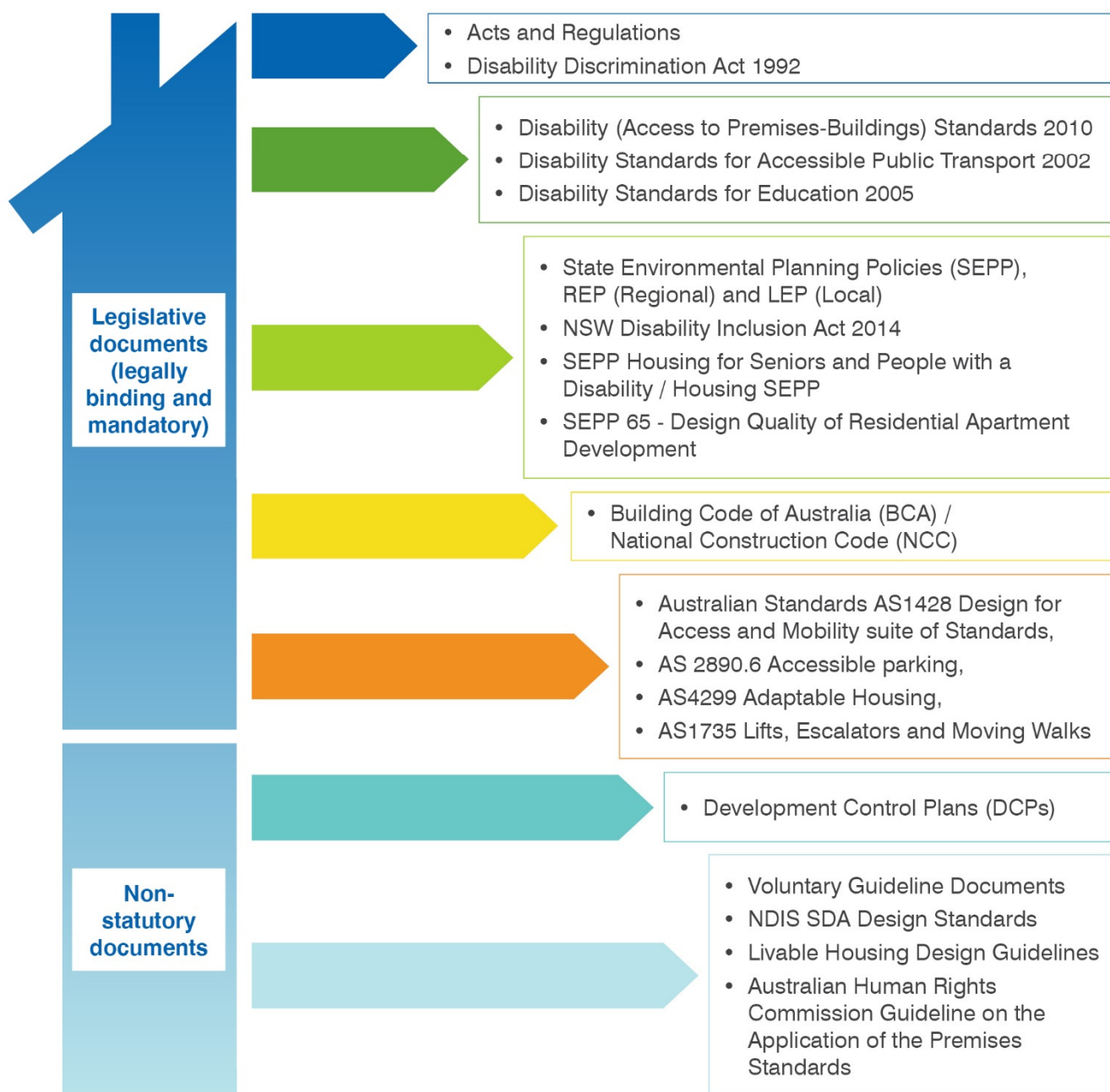
Only some numerical requirements from relevant AS (Australian Standards) have been noted in the report and for further details and for construction purposes refer to the latest relevant AS.

This report and all its contents including diagrams are a copyright of Vista Access Architects Pty Ltd (VAA) and can only be used for the purposes of this specific project. Copy-pasting diagrams from this report to Architectural plans will constitute copyright infringement.

This report does not assess compliance matters related to WHS, Structural design, Services design, Parts of DDA other than those related to APS or Parts of BCA or Parts of AS other than those directly referenced in this report. VAA gives no warranty or guarantee that this report is correct or complete and will not be liable for any loss arising from the use of this report. We will use our best judgement regarding LHA assessments. However, we are not to be held responsible if another licenced LHA assessor comes to a different conclusion about compliance, certification, or allocation of a particular Quality mark to us as several items in LHA are subject to interpretation.

We have no ability to check for slip resistance of surfaces. All wet areas, parking areas, pavement markings shall have the appropriate slip resistance for the location. We also have no ability to check for wall reinforcements once the walls have already been constructed. The builder shall take full responsibility that the requirements listed in this report are met and the construction and slip resistance shall be as per requirements of AS1428.1/ AS4299 / AS2890.6/ AS3661/ AS4586/ HB197/ HB198 and any other applicable regulation and Australian Standard

Hierarchy of Access-related Legislation and Standards



The Federal Disability Discrimination Act 1992 (DDA) provides protection for everyone in Australia against discrimination based on disability. Section 32 of the DDA focuses on the provision of equitable and dignified access to services and facilities for people with mobility, sensory and cognitive disabilities.

Disability discrimination happens when people with a disability and their relatives, friends, carers, co-workers or associates are treated less fairly than people without a disability.

Compliance with Access to Premises Standards give certainty to building certifiers, building developers and building managers that, if access to (new parts) of buildings is provided in accordance with these Standards, the provision of that access, to the extent covered by these Standards, will not be unlawful under the DDA. This however applies only to the new building or new parts of an existing building and its affected part. All areas outside the scope of these areas are still subject to the DDA. We cannot guarantee or certify for DDA compliance because DDA compliance can only be assessed by the Courts.

Scope of DDA extends beyond the building fabric and also includes furniture and fittings.

Compliance assessment with Access related requirements of BCA and Disability (Access to Premises-Building) Standards 2010 (APS)

Development consists of new building/s and therefore compliance is required to full development

BCA 2019 Part D3 Access for People with a Disability

BCA D3.1 General building Access requirements

SOU refers to a Sole Occupancy Unit

Requirement

Class 2 - building containing more than 2 SOUs i.e. sole-occupancy units

For residential use components, access is required:

- From a required accessible pedestrian entrance to at least 1 floor with SOUs and till the entry of door of each SOU on that level.
- To and within 1 of each type of room or space in common use.
- Where floor is accessed by an AS1428.1 ramp or lift, access is required to the entry doorway of each SOU on that level and to and within all common use areas on that level.

Compliance

Complies

Comments

- Access has been provided from the main pedestrian entry doorway to the entry doors of all SOUs on at least one floor level by means of accessible pathways
- Since access has been provided to the entry level, lift access is not required to the upper floor levels
- Access has been provided to at least 1 of each common use areas
- Access has been provided to the common use garbage storage areas on site (each building provided with step free access to one garbage bin area) .
- Access is provided to common use letterbox area with min 1540x2070mm flat circulation space in front of the letterboxes.
- All common use accessway widths are to be a minimum of 1M clear measured from skirting to skirting (increases to comply with door circulation spaces where doorways provided) with vertical clearance of at least 2M
- Step free access is provided to the carking from the building (facing Caldwell Avenue) that has been provided with adaptable units. Since no accessible parking spaces are allocated to one of the building (facing Walker Street), step free access from that building to the parking is not required to be provided.

Details to be verified at CC stage of works.

BCA 2019 Part D3.2 Access to buildings

Requirement

Accessway is required from:

- Main pedestrian entry at the site boundary for new buildings.
- Any other accessible building connected by a pedestrian link.
- Accessible car parking spaces.

Compliance

Complies

Comments

Building 1, Access from Caldwell Avenue

- Access by means of 1:20 grade walkways have been provided from the main pedestrian entry at the site boundary.
- Access has been provided from accessible car parking spaces by means of accessible pathways

Building 2, Access from Walker Street

- Access by means of 1:10 grade ramp and 1:20 walkways have been provided from the main pedestrian entry at the site boundary.

Details to be verified at CC stage of works.

Requirement

Common use External Walkway / Pedestrian access requirements as per AS1428-2009:

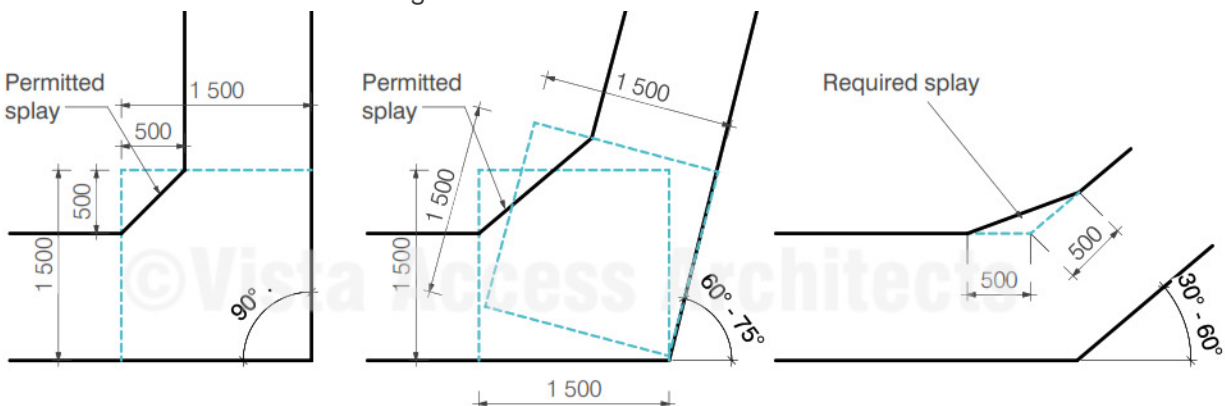
- Accessible path of travel to have a gradient no steeper than 1 in 20 and a cross fall no steeper than 1:40 (1:33 for bitumen).
- For 1:20 grade walkways, landings are required every 15M.
- The floor surface abutting the sides of the walkway to be provided with a firm and level surface (of a different material) at the same level and grade of the walkway and extend horizontally for a minimum of 600mm unless one of the following is provided: kerb, kerb-rail and handrail or wall of minimum 450mm height.
- Curved walkways to be min 1500mm width with crossfall towards the centre of curvature.
- At 90-degree bends in pathways provide a 1500mmx1500mm space with maximum 500mm splay permitted at internal corner.

Compliance

Complies with spatial requirements

Comments

Details to be verified at the CC stage of works.



[Image description: Spatial requirements of walkways with bends as per AS1428.1]

Requirement

Common use floor or ground surfaces

- Use slip-resistant surfaces
- The texture of the surface is to be traversable by people who use a wheelchair and those with an ambulant or sensory disability.
- Abutment of surfaces is to have a smooth transition.
- Construction tolerances to be +/- 3mm vertical or +/-5mm, provided the edges have a bevelled or rounded edge (See diagrams below)

Grates if used in the accessible path of travel are required to comply with the following:

- Circular openings maximum of 13 mm in diameter
- Slotted openings maximum of 13 mm wide and be oriented so that the long dimension is transverse to the dominant direction of travel

Where slotted openings are less than 8 mm, the length of the slots may continue across the width of paths of travel

Compliance Capable of compliance

Comments

Details to be verified at the CC stage of works.

Requirement

Accessway is required through:

- Principal pedestrian entry; and
- Not less than 50% of all pedestrian entrances; and
- In building with floor area over 500m², a non-accessible entry must not be located more than 50M from an accessible entry.

Compliance Complies

Comments

All pedestrian entries have been designed to be accessible.

Requirement

All common use doorways and doorways to and within Adaptable units to comply with AS1428.1. Where accessible pedestrian entry has Multiple doorways:

- At least 1 to be accessible if 3 provided
- At least 50% to be accessible, if more than 3 provided
- Where doorway has multiple leaves, at least 1 leaf is to have clear opening of 850mm (excluding automatic doors)

Doorway requirements

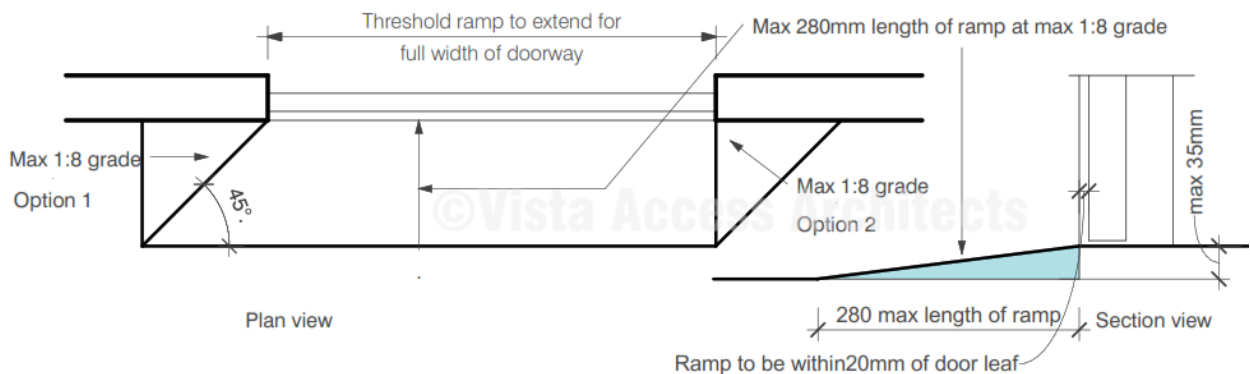
- All common use doorways in the development within accessible path of travel (other than doorways non-accessible sanitary facilities) to have a clear opening of at least 850mm with appropriate door circulation spaces in accordance with AS1428.1. In case of multiple leaf doorways, at least 1 operable leaf is required to provide a clear opening of 850mm with the door circulations spaces as per AS1428.1.
- Ambulant toilet cubicle door to have a clear door opening of 700mm.
- Space required for door circulation spaces to have a maximum floor grade of 1:40 (doorway threshold ramps are permitted within the circulation space).
- Door thresholds are to be level, or they can incorporate a doorway threshold ramp with a maximum grade of 1:8, for maximum rise of 35mm and a maximum length of 280mm and located within 20mm of the door leaf, with edges to be tapered or splayed at a minimum of 45° where it does not abut a wall.
- Sliding doorways to be provided with recessed floor tracks to enable flush transition from the inside of the building.
- Distance between successive doorways in airlocks to be 1450mm which is measured when the door is in open position in case of swinging doors.
- Door hardware including door handles, door closers and the in-use indicators / snibs in accessible and ambulant toilets are required to comply with requirements of AS1428.1.
- Luminance contrast requirements to doorways and other glazed areas to comply with AS1428.1

Compliance

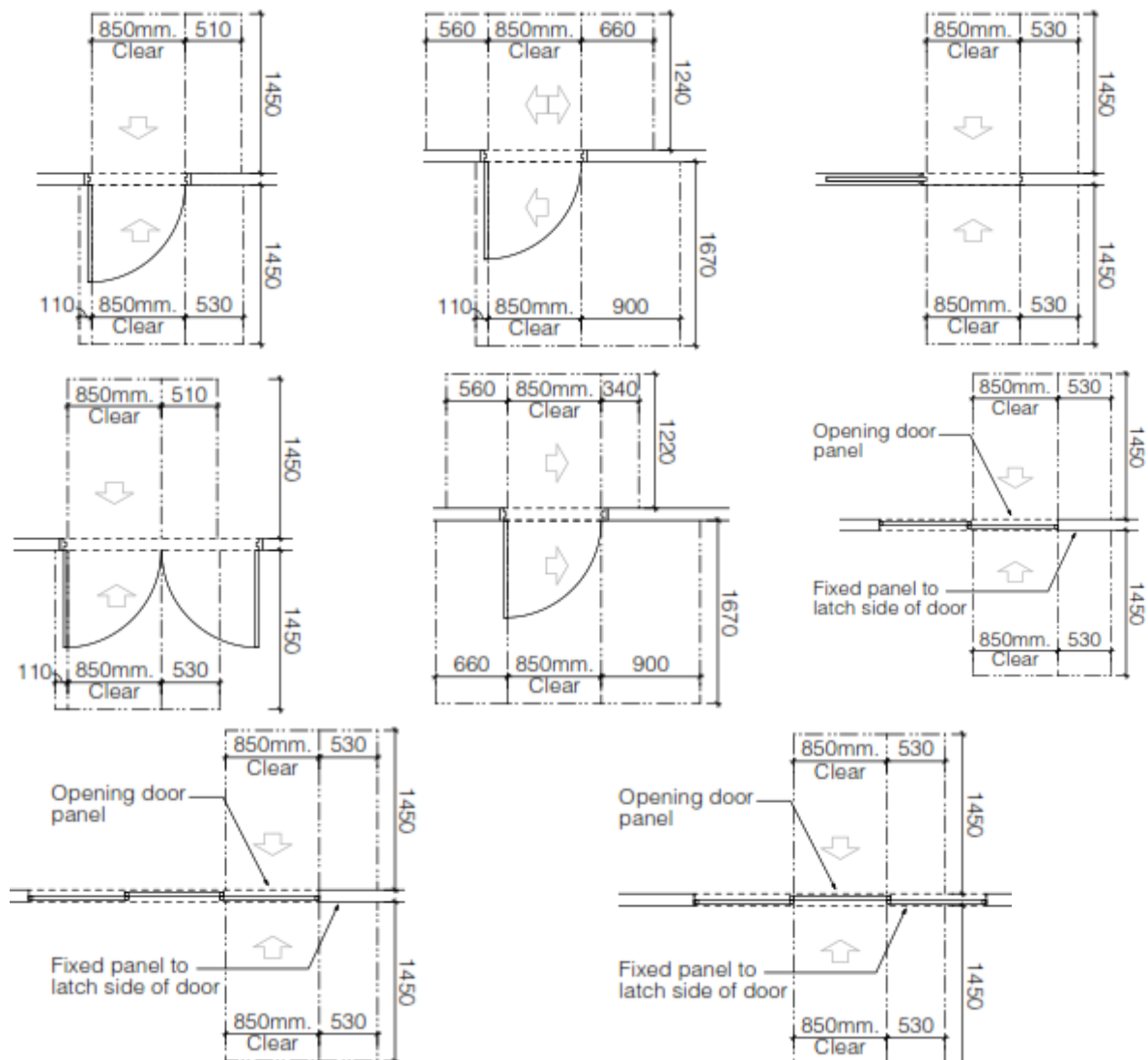
Complies with spatial requirements

Comments

Details to be verified at the CC stage of works.



[Image description: Diagram showing requirements for door circulation spaces and door threshold requirements as per AS1428.1]



[Image description: Diagram showing requirements for door circulation spaces and door threshold requirements as per AS1428.1 for clear opening of 850mm]

BCA 2019 Part D3.3 Parts of buildings required to be accessible

Requirement

Every common use **Ramp** with grades steeper than 1:20 and less than or equal to 1:14 (excluding fire-isolated ramp) is to be compliant with Clause 10 of AS1428.1:

- AS1428.1-2009 (including but not limited to - maximum grade of 1:14 with appropriate landings at a maximum of 9M of a flight of ramp).
- 1M clear width to be provided between handrails / kerb / kerbrails. (curved ramps to be min 1.5M width between handrails / kerb / kerbrails with crossfall towards the centre of curvature) and located at height between 865mm-1000mm above FFL (finished floor level).
- Handrails and kerbs to be provided on both sides with appropriate handrails extensions.
- Slip resistance of ramp and landings to comply with BCA Table D2.14

Compliance

Complies with spatial requirements

Comments

Detailed features of the ramp will be assessed with the requirements of AS1428.1-2009 at the CC stage of works.

Requirement

Step ramp if provided in common use areas is to be compliant with AS1428.1-2009 including;

- Max grade of 1:10, max height of 190mm, max length of 1.9M
- Slip resistance of ramp and landings to comply with BCA Table D2.14.
- A landing for a step ramp must not overlap a landing for another step ramp or ramp

Compliance

Complies with spatial requirements

Comments

Detailed features of the step ramp will be assessed with the requirements of AS1428.1-2009 at the CC stage of works.

Requirement

Kerb ramp if provided in common use areas is to be compliant with AS1428.1-2009

Compliance

N/A

Comments

No kerb ramps have been identified in the development.

Requirement

Every **Stairway** in common use areas (excluding fire-isolated stairway) is to be compliant with:

- Clause 11 of AS1428.1-2009 (including but not limited to opaque risers, handrails on both sides including appropriate handrail extensions between 1M clear width and compliant nosing strips).
- Diameter of handrails to be between 30mm-50mm and located not less than 50mm from adjacent walls with no obstructions to top 270° arc.
- Slip resistance to comply with BCA Table D2.14 when tested in accordance with AS4586.

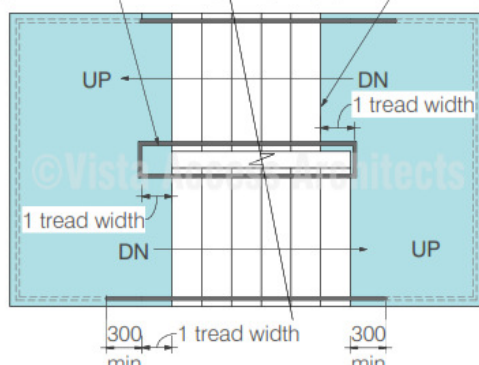
Compliance

Complies

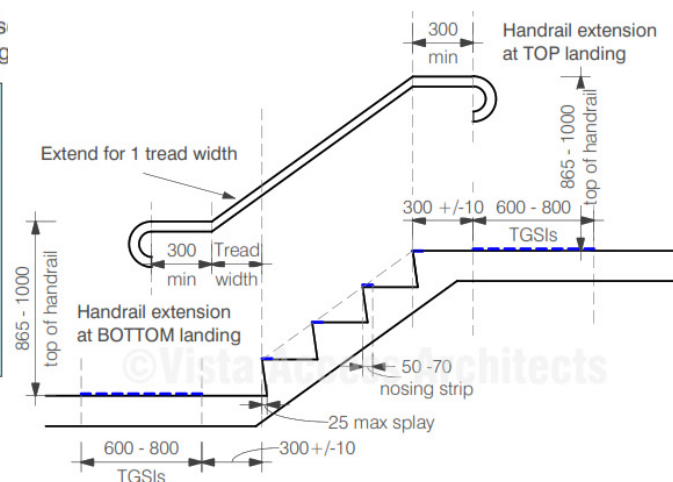
Comments

Where non-fire-isolated stairways have been provided, the features of the stairway will be assessed with the requirements of AS1428.1-2009 at the CC stage of works

Option A- extend handrail by 1 tread at midlanding
Option B- offset first riser going up at midlanding



[Image description: Diagram showing the requirements of a non-fire-isolated stairway as per AS1428.1]



600-800 TGSIs are required where the distance of the landing is 3000mm or more. For landings less than 3000mm, reduce the width of TGSIs to 300-400

Requirement

Every **Fire-isolated Stairway** is to be compliant with AS1428.1-2009 in the following aspects:

- Handrail on one side (requirement under D2.17) with 1M clear space. Handrail extensions are not required however since the handrails cannot have any vertical sections and since handrail is required to be at a consistent height throughout the stairway including at landings, it may be essential to either provide handrail extensions or offset first riser going up at mid landings to achieve this at 90° to 180° turns. Handrails to both sides of the stairway are required if the total width of the stairway is 2M or more.
- Diameter of handrails to be between 30mm-50mm and located not less than 50mm from adjacent walls with no obstructions to top 270° arc.
- Slip resistance to comply with BCA Table D2.14 when tested in accordance with AS4586.

Compliance

N/A

Comments

No fire-isolated stairways have been identified in the development

Requirement

Nosing for common use fire-isolated and non-fire-isolated stairways require the following:

- Each tread to have a nosing strip between 50mm-75mm depth (of any one colour) for the full width of the stair, which can be setback for a maximum of 15mm from the front of the nosing.
- Multiple strips making up the 50mm-75mm depth is NOT permitted.
- This strip is to have a minimum luminance contrast of 30% to the background and to comply with any change in level requirements if attached on the treads.
- Where the nosing strip is not set back from the front of the nosing then any area of luminance contrast shall not extend down the riser more than 10mm
- Slip resistance to comply with BCA Table D2.14 when tested in accordance with AS4586.

Compliance Capable of compliance

Comments

Detailed features of the nosing strips will be assessed with the requirements of AS1428.1 at the CC stage of works.

Requirement

Slip resistance requirements as per BCA

BCA Table D2.14 Slip –resistance requirements when tested in accordance with AS4586:

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

Slip resistance requirements as per AS4299

AS4299 has slip resistance requirements based on requirements of AS3661 (Slip resistance of pedestrian surfaces) for the following areas:

- Floor surfaces in sanitary facilities including all toilets and bathrooms (essential feature).
- Floor surfaces in the kitchens and Laundries (essential feature).
- Pathways / walkways within the site, within landscaped areas, balconies and other external paved areas (desirable feature for Class A or B developments).
- AS3661.1-1993 is an old Australian standard which has been superseded with AS4586:2013 (Slip resistance classification of new pedestrian surface materials).

HB 197/ HB198 An introductory guide to the slip resistance of pedestrian surface materials provides guidelines for the selection of slip-resistant pedestrian surfaces

Compliance Capable of compliance

Comments

For Slip resistance of surfaces the builder is required to provide a Certificate stating that the Slip resistance of the surfaces comply with the above listed requirements when tested as per AS4586 at CC stage of works.

Requirement

Every **Passenger lift** is to comply with the requirements of BCA E3.6.

Compliance N/A

Comments

No lifts have been identified in the development

Requirement

Passing spaces requirement

It is a requirement to provide passing spaces in common use accessways complying with AS1428.1 at maximum 20 M intervals, where a direct line of sight is not available. Space required is 1800x2800mm (in the direction of travel). Chamfer of 400x400mm is permitted at corners.

Compliance N/A

Comments

There are no accessways over 20M lengths in the development where a direct line of sight is not available.

Requirement

Turning spaces requirement

It is a requirement to provide turning spaces in common use accessways complying with AS1428.1-2009 within 2M of the end of accessways where it is not possible to continue travelling and at every 20M intervals. CLEAR Space required is 1540mmx2070mm in the direction of travel (measured from skirting to skirting).

Compliance Complies

Comments

- Adequate turning spaces have been provided with minimum common use passageway widths being 1540mm clear or alternatively a space of 1540mmx2070mm provided at or within 2M of the end of the passageway.

Details to be verified at CC stage of works.

Requirement

Carpet specifications

Carpet if used in areas required to be accessible are to be provided with pile height or thickness not more than 11mm and carpet backing not more than 4mm bringing the total height to a maximum of 15mm.

Compliance Capable of compliance

Comments

Applies only if carpets are provided in the common use areas
Details to be verified at CC stage of works.

BCA 2019 Part D3.4 Exemption

Requirement

Access is not required to be provided in the following areas:

- Where access would be inappropriate because of the use of the area
- Where area would pose a health and safety risk
- Any path which exclusively provides access to an exempted area

Compliance For information only

Comments

Areas such as lift machine rooms, fire services room, commercial kitchens etc. in the development are exempted from providing access under this clause due to WHS concerns.

Where a caretaker is provided in the development, the toilet provided exclusively for use by the caretaker can be excluded from providing access based on the provisions in this clause.

BCA 2019 Part D3.5 Accessible Carparking

Requirement

Class 2

There are no Accessible carparking requirements for a Class 2 under the BCA.

If adaptable housing has been mandated by the Council, then carparking spaces for Adaptable units will be required under the requirements of AS4299- Adaptable housing.

Compliance

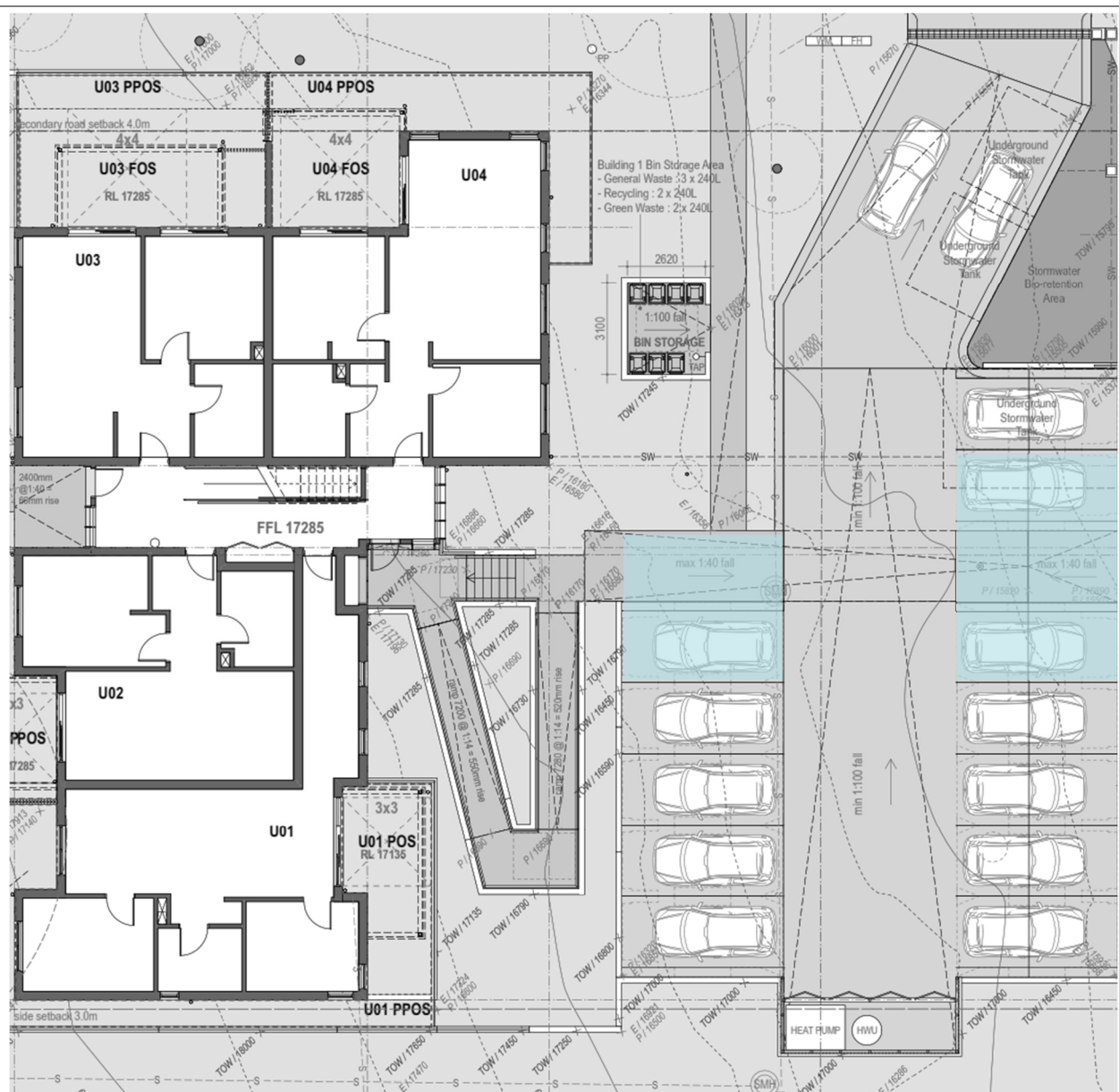
Complies

Comments

3 Adaptable units have been provided in the development

Therefore, 3 accessible carparking spaces are required for the residential component of the development. 3 Accessible car parking spaces have been provided in development.

One accessible parking space is required to be allocated to each of the Adaptable units.



[Image description: Plan of the ground level above shows the provision of Accessible parking spaces]

AS2890.6-2009 requirements for Accessible car parking space

Requirement

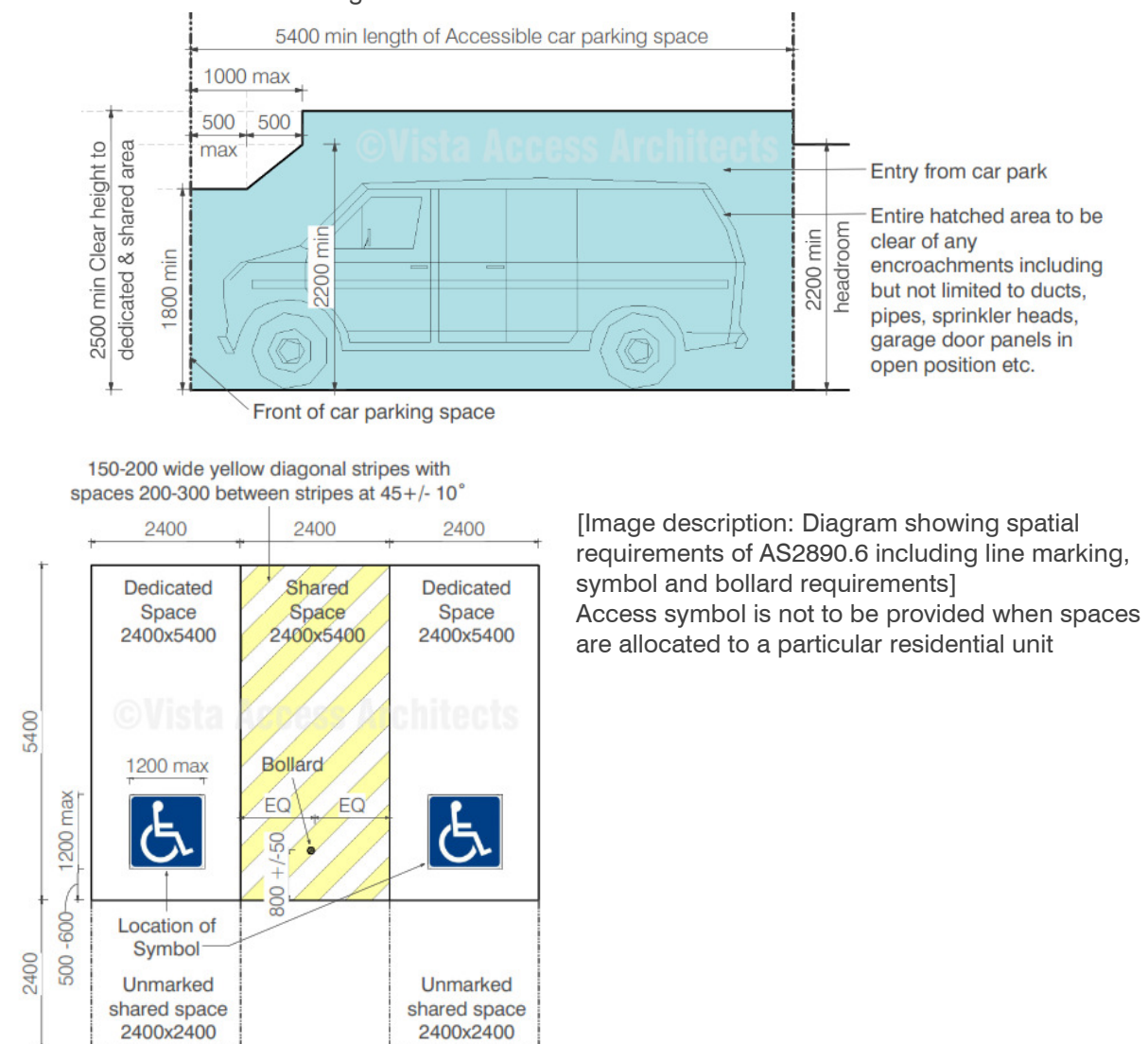
- Dedicated space 2.4Mx5.4M, Shared space 2.4Mx5.4M at the same level
- Slip resistant flooring surface with maximum fall 1:40 in any direction or maximum 1:33 if bituminous and outdoors.
- Central Bollard in shared space at 800+/-50mm from entry point.
- Pavement marking in dedicated space by means of access symbol between 800mm-1000mm high placed on a blue rectangle of maximum 1200mm and between 500mm-600mm from its entry point (marking not required where allocated to an Adaptable unit).
- Minimum headroom of 2.2M at entrances and 2.5M is required over shared space as well as dedicated spaces.
- Non-trafficked area of the shared space to have marking strips at 45°, 150-200mm wide at 200mm-300mm spaces (not required where driveways are used as shared spaces)
- The pavement marking shall have the appropriate slip resistance for the location. This requirement is to be added to the project specifications to ensure compliance.

Compliance

Complies with spatial requirements

Comments

Details to be verified at CC stage of works.



BCA 2019 Part D3.6 Signage

Requirement

Braille and Tactile signage are required to identify Accessible Sanitary facilities

Compliance N/A

Comments

No common use sanitary facilities have been identified in the development.

Requirement

Braille and Tactile signage are required to identify Ambulant Sanitary facilities

Compliance N/A

Comments

No ambulant sanitary facilities have been identified in the development.

Requirement

Braille and Tactile signage is required to identify Hearing Augmentation

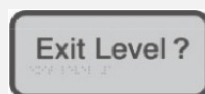
Compliance N/A

Comments

Hearing augmentation is not provided since there is no inbuilt amplification system identified in the development.

Requirement

Braille and Tactile signage is required to identify a Fire exit door required by E4.5 by stating the 'Exit' and 'Level', followed by either the floor level number or floor level descriptor or a combination of both of the above and located on the side that faces a person seeking egress



[Image description: Image of Signage The "?" shown in image is to be replaced with the floor level where the door is located]

Compliance Capable of compliance

Comments

Signage selections generally take place at CC stage of works. Selection and location of signage as specified above will lead to compliance. Details of selected signage to be verified at CC stage of works.

Requirement

Signage is required to a non-accessible pedestrian entrance

Compliance N/A

Comments

All pedestrian entrances have been designed to be accessible.

Requirement

Signage is required where a bank of sanitary facilities is not provided with an accessible unisex sanitary facility.

Compliance N/A

Comments

Requirement

Signage is required where a bank of sanitary facilities is not provided with an accessible unisex sanitary facility.

Directional signage incorporating the international symbol of access as per AS1428.1 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 facility.

Compliance N/A

Comments

N/A

Requirement

Directional signage: In a building subject to F2.9, directional signage complying with Specification D3.6 must be provided at the location of each—

- i. bank of sanitary facilities; and
- ii. accessible unisex sanitary facility, other than one that incorporates an accessible adult change facility, to direct a person to the location of the nearest accessible adult change facility within that building.

Compliance N/A

Comments

N/A

Requirement

Signage is required to be as per Specification D3.6 Braille and Tactile Signs

This includes location of signage, specifications in regard to braille and tactile characters, luminance contrast and lighting.

Compliance Capable of compliance

Comments

Signage selections generally take place at CC stage of works. Selection and location of signage as specified above will lead to compliance. Details of selected signage to be verified at CC stage of works.

BCA 2019 Part D3.7 Hearing Augmentation

Requirement

Hearing Augmentation is only required where an inbuilt amplification system (other than emergency) is installed in a Class 9b building, or in an auditorium, conference / meeting room or a reception area where a screen is used.

Compliance N/A

Comments

No areas with provision of inbuilt amplification have been identified on plans and hence no hearing augmentation requirements apply to this development.

BCA 2019 Part D3.8 Tactile ground surface indicators (TGSIs)

Requirement

TGSIs are required when approaching:

- Stairways other than fire-isolated stairways.
- Escalators / passenger conveyor / moving walk.
- Ramp (other than fire-isolated ramps, kerb ramps, step ramps or swimming pool ramps).
- Under an overhead obstruction of <2M if no barrier is provided.
- When accessway meets a vehicular way adjacent to a pedestrian entry (if no kerb / kerb ramp provided at the location).

Compliance is required with AS1428.4.1 including Luminance contrast and slip resistance requirements for all TGSIs. TGSIs to extend for full width i.e., handrail to handrail.

Compliance Complies

Comments

TGSI selections generally take place at CC stage of works. Selection of TGSIs as specified will lead to compliance and these selection details are to be verified at CC stage of works.

BCA 2019 Part D3.11 Limitations on Ramps

Requirement

On an accessway:

- A series of connected ramps must not have a combined vertical rise of more than 3.6M;
- And a landing for a step ramp must not overlap a landing for another step ramp or ramp.

Compliance Complies

Comments

Compliance is met

BCA 2019 Part D3.12 Glazing on Accessways

Requirement

Glazing requirements:

- Where there is no chair rail, handrail or transom, all frameless or fully glazed doors, sidelights and any glazing capable of being mistaken for a doorway or opening are required to have a glazing strip
- The marking should be for the full width with a solid and non-transparent 75mm wide, contrasting line located 900-1000mm above FFL and provide a minimum luminance contrast of 30% when viewed against the floor surface within 2M of the glazing on the opposite end. Graphical representation or cut-outs are not permitted.

Compliance

Capable of compliance

Comments

Glazing strips are required to be provided to full height glazed areas (doors and windows) used in common use areas such as lift lobbies and common passageways

Glazing strip selections generally take place at CC stage of works. Selection of glazing strips as specified above will lead to compliance and details are to be verified at CC stage of works.

BCA Part F Accessible Sanitary Facilities

BCA 2019 Part F2.4 Accessible Sanitary facilities

Requirement

Accessible unisex toilet is to be provided in accessible part of building such that;

- It can be entered without crossing an area reserved for 1 sex only
- Where male and female sanitary facilities are provided at different locations, Accessible unisex toilet is only required at one of the locations
- Even distribution of LH and RH facilities
- An accessible facility is not required on a level with no lift / ramp access.

Compliance

N/A

Comments

No accessible toilets have been identified in the development

BCA 2019 Part F2.4(a) Accessible unisex sanitary compartments

Requirement

Class 2

At least 1 unisex Accessible toilet when sanitary compartments are provided in common areas.

Compliance

N/A

Comments

No common use sanitary facilities have been identified in the development

BCA 2019 Part F2.4(b) Requirements for Accessible unisex showers

Requirement

Class 2

At least 1 unisex Accessible shower when showers are provided in common areas.

Compliance N/A

Comments

No common use shower facilities have been identified in the development

Requirement

Accessible unisex toilet is to be designed in accordance with AS1428.1-2009

Compliance N/A

Comments

No accessible toilets have been identified on the plans

Requirement

Showers for Accessible use are to be designed in accordance with AS1428.1

Compliance N/A

Comments

No accessible showers have been identified on the plans

Requirement

Ambulant use male / female toilets are to be provided if an additional toilet to the Accessible unisex toilet is provided

Compliance N/A

Comments

No ambulant toilet facilities have been identified in the development

AS4299.1995- Adaptable Housing

Appendix A of AS4299 schedule is a list of features to be incorporated into a housing unit for it to be termed an 'Adaptable House'.

There are 3 Classification levels for Adaptable Housing

Adaptable Class C in which all essential features are to be incorporated.

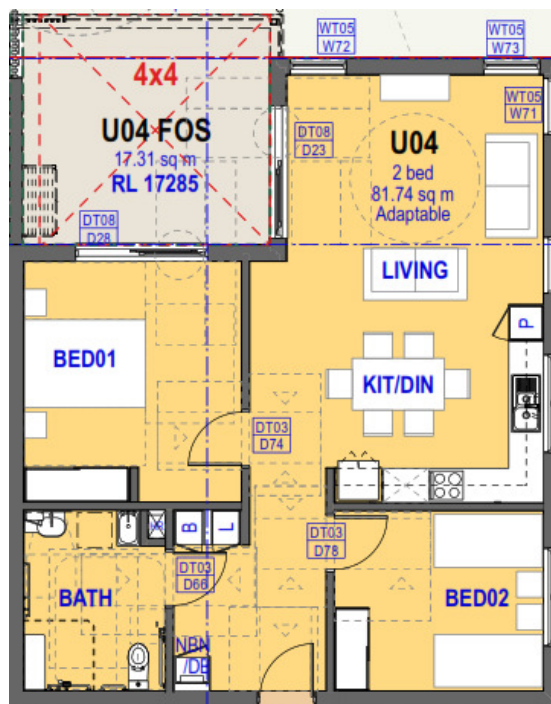
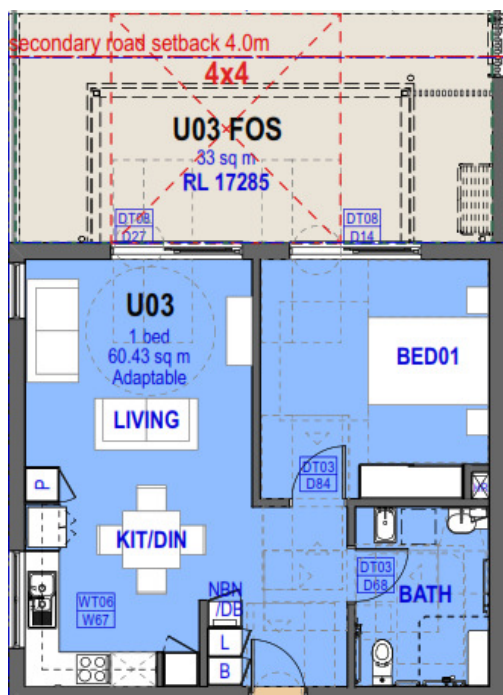
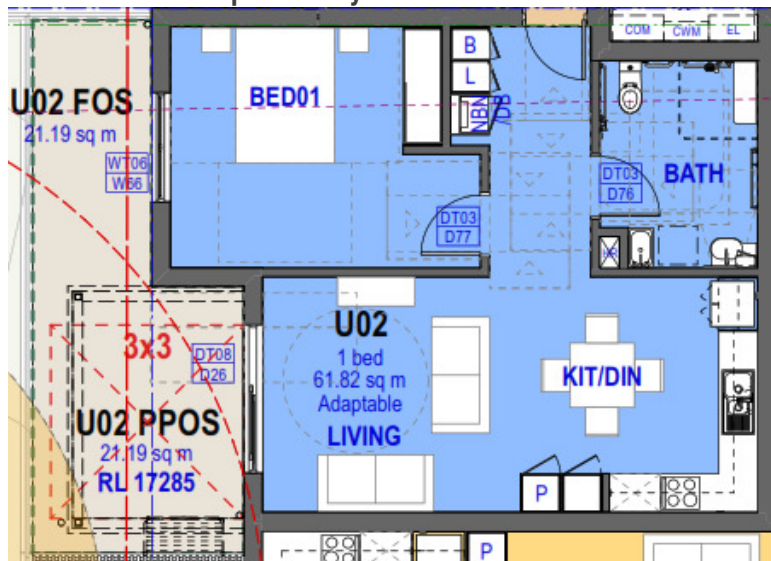
Adaptable Class B in which all Class C and 50% of 64 available desirable features are to be incorporated

Adaptable Class A in which all 119 essential and all desirable features are to be incorporated.

As per the special LAHC requirement, 3 Adaptable units have been provided to a **Class C** level.

The units designated as adaptable are unit numbers **2, 3 and 4**

Pre cum Post adaptation layout



By incorporating the essential requirements listed Checklist below in the Specifications, the nominated Adaptable units can achieve full compliance with Adaptable House Class C

AS4299.1995 - Class C – Essential requirements

R☑ = Required;

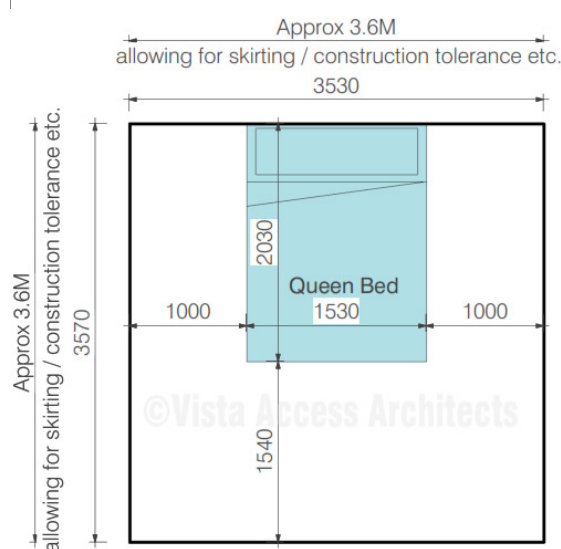
C☑ = Capable of compliance at **by adding the requirement to the project specifications** or in some cases capable of compliance at post adaptation stage (where noted in comments).

	Clause No	Requirements as per AS4299	R	C	Comments
	Drawings				
1	2.3	Provision of drawings showing the housing unit in its pre-adaptation and post-adaptation stages	☑	☑	
	Siting				
3	3.3.2	A continuous accessible path of travel from street frontage and vehicle parking to entry complying with AS 1428.1	☑	☑	Access is provided from street by means of an AS1428.1 compliant walkway and from accessible parking space by means of a 1:14 grade ramp. Details to be verified at the CC stage
	Letter boxes				
11	3.8	Letterboxes to be on hard standing area connected to accessible pathway	☑	☑	Letterboxes for all Adaptable units to be between 900mm to 1100mm above FFL and min 500mm from any internal corner. Details to be verified at the CC stage
	Parking				
14	3.7.2	Car parking space or garage min. area 6.0Mx 3.8M or a hard surfaced level outside of 5.4Mx3.8M is provided as a sheltered car park or can be provided in the future	☑	☑	Can also be provided as per AS2890.6, which is permissible. Details to be verified at the CC stage
	Accessible Entry				
20	4.3.1	Accessible entry	☑	☑	Refer to door circulation requirements noted earlier in the report. Details to be verified at the CC stage
22	4.3.2	Accessible entry to be level (i.e. maximum of 1:40 slope)	☑	☑	
23	4.3.2	Threshold to be low-level	☑	☑	
24	4.3.2	Landing to enable wheelchair manoeuvrability	☑	☑	
25	4.3.1	Accessible entry door to have 850mm min. clearance	☑	☑	Usually achieved by 920mm door leaf. Door circulation spaces to be as per AS1428.1

	Clause No	Requirements as per AS4299	R	C	Comments
27	4.3.4	Door lever handles and hardware to AS1428.1	✓	✓	Details to be verified at the CC stage
32	4.3.3	Internal doors to have 820mm minimum clearance	✓	✓	Provide an 850mm clear opening door to the adaptable bathroom and 1 main bedroom. Rest to have 820mm clear opening.
33	4.3.7	Internal corridors min. width of 1000mm	✓	✓	
34	4.3.7	Provision for compliance with AS1428.1 for door approaches	✓	✓	Can be compliant post adapt, with easily removable cabinetry.
36	4.7.1	Circulation space of min. 2250mm diameter.	✓	✓	
38	4.7.4	Telephone adjacent to GPO	✓	✓	Details to be verified at the CC stage
41	4.10	Potential illumination level minimum 300 lux	✓	✓	Details to be verified at the CC stage
42	4.5.2	Minimum width 2.7M, (1550mm clear between benches)	✓	✓	Can be compliant post adaptation.
43	4.5.1	Provision for circulation at doors to comply with AS1428.1	✓	✓	N/A, No door provided to kitchen.
44	4.5.5	Provision for benches to include at least one work surface of 800mm length, adjustable in height from 750mm to 850mm or replaceable.	✓	✓	Can be compliant post adaptation.
45	4.5.5	Refrigerator adjacent to work surface	✓	✓	Can be compliant post adaptation.
46	4.5.6	Kitchen sink adjustable to heights from 750mm to 850 mm or replaceable	✓	✓	Can be compliant post adaptation.
47	4.5.6	Kitchen sink bowl maximum 150mm deep	✓	✓	Can be compliant post adaptation.
48	4.5.6 e	Tap set capstan or lever handles or lever mixer	✓	✓	Can be compliant post adaptation.
49	4.5.6 e	Tap set located within 300mm of front of sink	✓	✓	Can be compliant post adaptation.
51	4.5.7	Cooktops to include either front or side controls with raised cross bars.	✓	✓	Can be compliant post adaptation.
52	4.5.7	Cooktops to include isolating switch	✓	✓	Can be compliant post adaptation.
53	4.5.7	Work surface minimum 800 mm length, adjacent to cook top at same height	✓	✓	Can be compliant post adaptation.

	Clause No	Requirements as per AS4299	R	C	Comments
54	4.5.8	Oven located adjacent to an adjustable height or replaceable work surface. It is recommended that a side door opening wall oven is provided with the clear work surface to be on the opposite side of the hinge.	✓	✓	Can be compliant post adaptation.
59	4.5.11	GPOs to comply with AS1428.1. At least one double GPO within 300mm of front of work surface.	✓	✓	Can be compliant post adaptation.
60	4.5.11	GPO for refrigerator to be easily reachable when the refrigerator is in its operating position.	✓	✓	Can be compliant post adaptation.
61	4.5.4	Slip-resistant floor surface as per AS3661 and AS 4586	✓	✓	Details to be verified at the CC stage.

Main bedroom

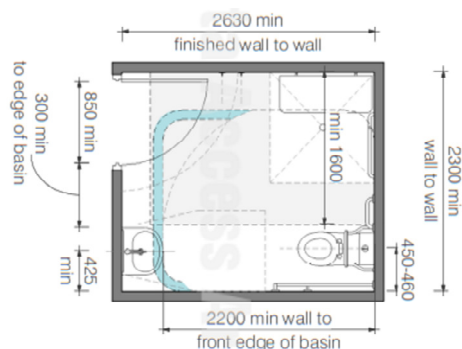


[Image description: Diagram showing circulation spaces around a queen bed as per AS4299]

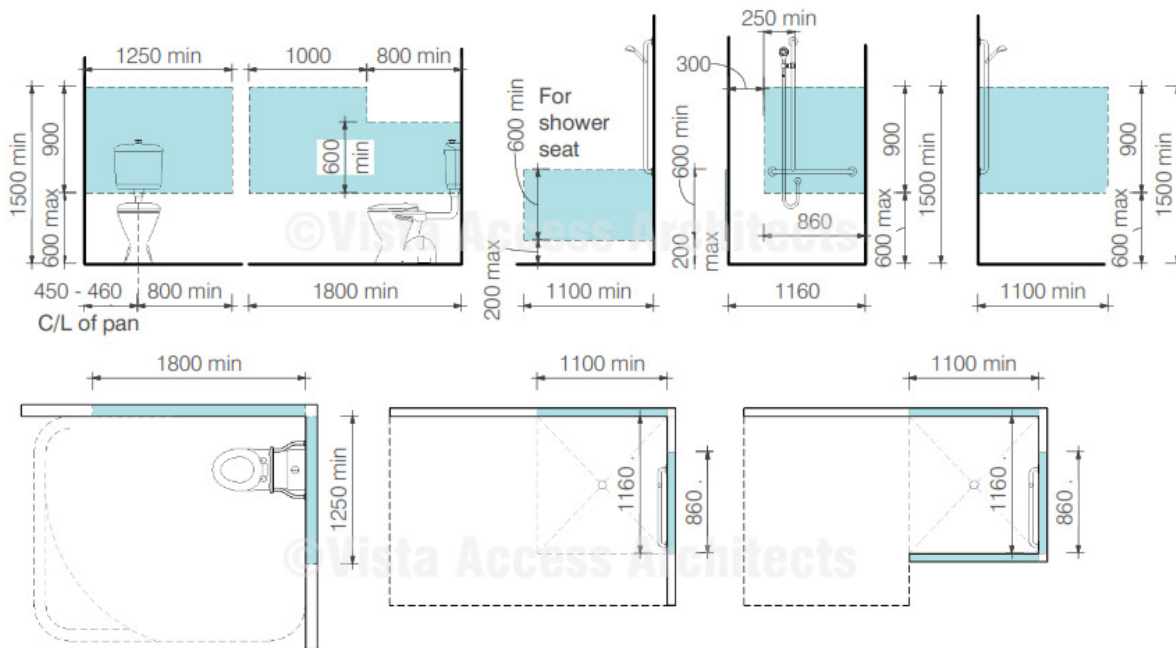
62	4.6.1	At least one bedroom of area sufficient to accommodate queen size bed and wardrobe and circulation space requirements of AS1428.2	✓	✓	A space of 1.54Mx2.07M at the base or one side of the bed is considered to be compliant.
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Main Adaptable bathroom

75	4.4.1	Provision for bathroom area to comply with AS1428.1	✓	✓	A bathroom with minimum space of 2Mx 2.95M or 2.3Mx2.7M or 2.4Mx2.45M is required.
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[Image description: Diagram shows Post Adaptation bathroom layout and location of wall reinforcements in pre-adaptation locations with reference to post adaptation layout]
Noted dimensions on the above diagrams are approximate and depend on selected features such as size of the basin.

	Clause No	Requirements as per AS4299	R	C	Comments
76	4.4.2	Slip-resistant floor surface as per AS3661 and AS 4586	✓	✓	Details to be verified at the CC stage
77	4.4.4 f	Shower recess - no hob. Minimum size 1160x1100mm to comply with AS1428.1	✓	✓	Details to be verified at the CC stage
78	4.4.4 f	Shower area waterproofed to AS3740 with floor to fall to waste	✓	✓	Details to be verified at the CC stage
79	4.4.4 f	Recessed soap holder	✓	✓	If recessed is not provided a heavy duty load bearing soap holder will be required.
80	4.4.4 f	Shower taps positioned for easy reach to access side of shower sliding track.	✓	✓	Details to be verified at the CC stage
82	4.4.4 h	Provision for adjustable, detachable hand held shower rose mounted on a slider grabrail or fixed hook plumbing and wall-strengthening provision (unless brick walls provided)	✓	✓	Reinforcement to wall to take the grabrails has to be provided as per requirements of AS4299
83	4.4.4 h	Provision for grabrail in shower to comply with AS1428.1	✓	✓	Details to be verified at the CC stage
 <p>The diagram illustrates the wall reinforcement requirements for an adaptable unit in its post-adaptive position. It includes plan and elevation views with the following dimensions:</p> <ul style="list-style-type: none"> Plan View (Top): Shows the layout of the toilet, shower, and grabrail areas. Key dimensions include 1250 min, 1000, 800 min, 1500 min, 900, 600 max, 450 - 460, 800 min, 1800 min, 200 max, 600 min, 250 min, 300, 900, 1500 min, 600 max, 1100 min, 1160, and 1100 min. Elevation View (Bottom): Shows the side profile of the unit with dimensions 1800 min, 1100 min, 1100 min, 1250 min, 1160, and 860. 					
[Image description: Diagram showing wall reinforcement requirements for the Adaptable unit for WC and Shower, in post adaptive position]					
86	4.4.4 c	Tap sets to be capstan or lever handles with single outlet	✓	✓	Details to be verified at the CC stage.
88	4.4.4 g	Provision for washbasin with clearances to comply with AS1428.1	✓	✓	Min of 425mm is required from the side wall to the centre line of the basin. Basin is required to be at least 300mm away from door swing.

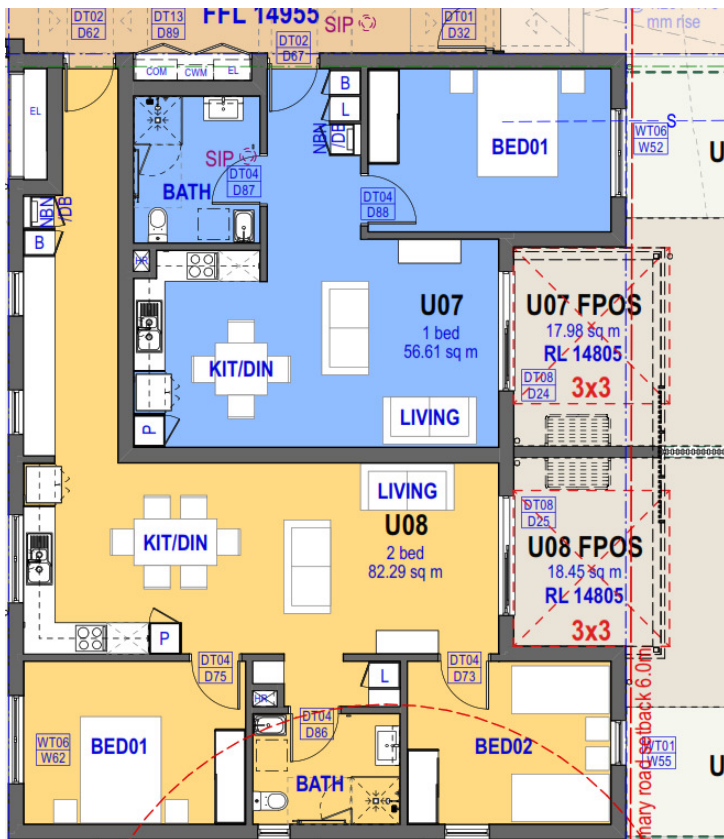
	Clause No	Requirements as per AS4299	R	C	Comments
90	4.4.4 d	Double GPO bedside mirror	✓	✓	Details to be verified at the CC stage.
Toilet					
92	4.4.3	Provision of either 'visitable toilet' or accessible toilet	✓	✓	Visitable is provided. Accessible can be provided post-adaptation.
93	4.4.1	Provision to comply with AS 1428.1	✓	✓	
94	4.4.3	Location of WC pan at correct distance from fixed walls	✓	✓	450mm – 460mm is required from the side wall to the centre line of the WC pan. Details to be verified at the CC stage.
95	4.4.4 h	Provision for grabrail zone.	✓	✓	Reinforcement to wall to take the grabrails has to be provided as per requirements of AS4299 unless brick walls have been provided. Details to be verified at the CC stage.
96	4.4.2	Slip-resistant floor surface as per AS3661 and AS 4586	✓	✓	Details to be verified at the CC stage.
Laundry					
98	4.8	Circulation at doors to comply with AS1428.1	✓	✓	N/A cupboard style laundry is proposed.
99	4.8	Provision for adequate circulation space in front of or besides appliances (minimum 1550mm depth)	✓	✓	Details to be verified at the CC stage.
100	4.8 e	Provision for automatic washing machine	✓	✓	Details to be verified at the CC stage.
102	4.8 a	Where clothes line is provided, an accessible path of travel to this	✓	✓	Details to be verified at the CC stage.
105	4.8 g	Double GPO	✓	✓	Details to be verified at the CC stage.
108	4.9.1	Slip-resistant floor surface as per AS3661 and AS 4586	✓	✓	Details to be verified at the CC stage.
Door locks					
110	4.3.4	Door hardware operable with one hand, located 900-1100mm above floor	✓	✓	Details to be verified at the CC stage.

Requirement

- Where the location of fixtures such as WC pans, wash basins, sinks, laundry fixtures and any other fixtures are to be relocated post-adaptation to comply with AS1428.1, then the service pipes (waste and water supply pipes) have to be laid in the correct AS1428.1 specified position at pre-adaptation itself and the services to be capped off for future use.

General recommendations (Advisory only / not mandatory)

- It is recommended that where balconies / outdoor areas have been provided to Adaptable units, provide the sliding doors such that the floor tracks are recessed, so level access can be provided to the balcony / outdoor areas from inside the unit.
 - Sliding doors in the living areas leading to outdoor areas are to be such that opening of the door is able to provide a clear opening space of 850mm with a latch side space of 530mm.
 - If the balcony is to be brought up to the same level as the unit at post-adaptation by means of decking etc. then ensure that the minimum handrail height requirements required under the BCA are complied with, considering the raised height of the balcony.
 - Consideration to be given to recess the slab to the wet areas so that there is no level difference once the floor finishes are applied (i.e. flush transition from carpeted area to tiles area).
-



By incorporating the requirements of the below Checklist in the Specifications of the project, the nominated Livable units can achieve full compliance with Livable Housing Guidelines- Silver Level

All details to be verified at the CC stage

Design Element	Requirements (All dimensions noted are required to be clear of finishes as required under AS1428.1)	Compliance / Comments
1 Dwelling Access	<p>a. Provide a safe and continuous 1M clear width pathway from front site boundary to an entry door to the dwelling.</p> <p>b. Path including any ramps and walkways to have no steps, even firm, slip-resistant surface, max 1:40 crossfall, max slope of 1:14 with landings of 1.2M every 9M and landings every 15M for 1:20 walkways. 1M clear width of ramps are required.</p> <p>c. Pathway may be provided via an associated car parking in which case the car parking space to be</p> <ul style="list-style-type: none"> 3200 (width) x5400 (length), even, firm and slip resistant, level surface of 1:40 max grade and 1:33 max grade for bitumen <p>d. Step ramp may be provided at an entrance doorway. The step ramp to be max 190mm height, max 1:10 grade, max 1900mm length.</p> <p>e. Level landings of 1200mm are required exclusive of the swing of the door or gate and to be provided at the head and foot of the ramp.</p>	<p>Complies. Details to be verified at CC stage of works</p> <p>N/A Access is provided from the site boundary.</p> <p>Complies. Details to be verified at CC stage of works</p> <p>Complies. Details to be verified at CC stage of works</p>

2

Dwelling entry

- | | |
|---|---|
| a. Dwelling Entry should provide an entrance door with <ul style="list-style-type: none">i. min clear opening width of door to be 820mmii. Step free threshold of max 5mm with rounded or beveled lipiii. reasonable shelter from the weather | Complies.
Details to be verified at CC stage of works |
| b. Level landing of 1200x1200mm at step-free entrance door on the arrival / external side of the entrance door. | Complies.
Details to be verified at CC stage of works |
| c. Max permissible threshold is less than 56mm where provided with a 1:8 grade threshold ramp. | N/A |
| d. Entrance to be connected to a pathway (specified under Element 1) Note: The entrance to incorporate waterproofing and termite management requirements as specified in the NCC | Complies.
Details to be verified at CC stage of works
Waterproofing compliance by others. |

3

Internal doors and corridors

- | | |
|---|--|
| a. Doors to rooms on the entry level used for living, dining, bedroom, bathroom, kitchen, laundry and sanitary compartments to be <ul style="list-style-type: none">i. 820mm clear opening andii. provided with a level threshold of max 5mm between abutting surfaces with rounded or beveled lip | Complies.
Details to be verified at CC stage of works |
| b. Internal corridors and passageways to doorway to be min 1M clear (measured from skirting to skirting) | Complies.
Details to be verified at CC stage of works |

4

Toilet

- | | |
|--|--|
| a. One Toilet to be provided on the ground or entry level that provides, <ul style="list-style-type: none">i. Min 900mm between walls or amenitiesii. Min 1200mm clear space in forward of the WC pan exclusive of door swing.iii. The toilet pan to be positioned in the corner of a room to enable handrails | Complies.
Details to be verified at CC stage of works |
|--|--|

5

Shower

- | | |
|---|--|
| a. One bathroom should feature a slip resistant, hobless shower recess. Shower screens are permitted provided they can be easily removed at a later date. | Complies.
Details to be verified at CC stage of works |
| b. The shower recess should be located in the corner of the room to enable the installation of grabrails at a future date. | Complies.
Details to be verified at CC stage of works |

For hobless specification please see Australian Standard AS3740-3.6. Reinforcement guidelines for walls in bathrooms and toilets are found in element 6

6

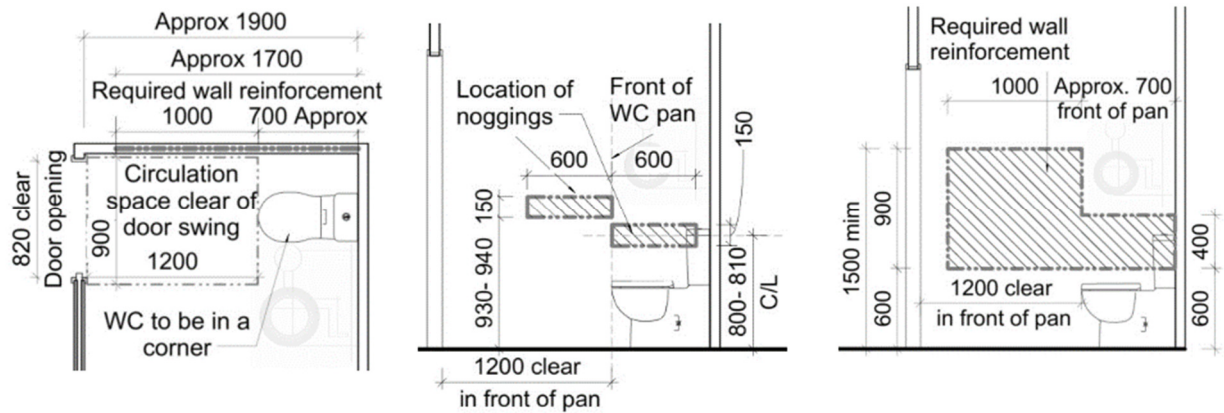
Reinforcement of bathroom & toilet walls

- | | |
|---|---|
| a. Except for walls constructed of solid masonry or concrete, the walls around the shower, bath (if provided) and toilet should be reinforced to provide a fixing surface for the safe installation of grabrails. | Capable of compliance.
Details to be verified at CC stage of works |
|---|---|

- (b), (c) and (d) the walls around toilet, bath and shower to be via:
- Noggins with a thickness of at least 25mm
 - Sheeting with a thickness of at least 12mm

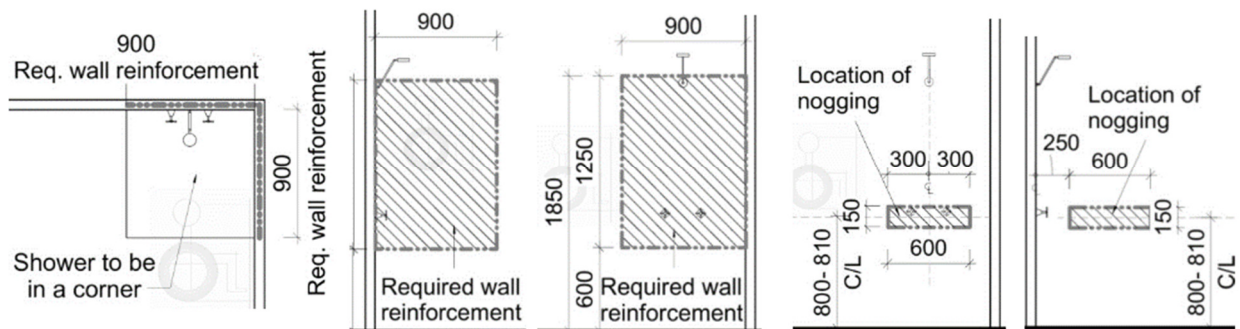
Capable of compliance.
Details to be verified at CC stage of works

Refer to diagrams provided in the Livable Housing Guideline document.



[Image description: Diagram shows wall reinforcements options of noggings or sheeting for a toilet]

Note: In a standalone toilet, the wall reinforcements are required to both sides. Any door openings/ door frames are required to be clear of the required wall reinforcements. If wall with cavity slider is used for wall reinforcements, then allow for additional thickness for the wall.



[Image description: Diagram shows wall reinforcements options of noggings or sheeting for a shower]

7 Internal Stairways

Stairways in dwellings must feature:

- a continuous handrail on one side of the stairway where there is a rise of more than 1m. a minimum clear width of 1000mm

N/A
No internal stairway in units.

Statement of Experience

Vista Access Architects specialises in access consultancy services, including, Access requirements and Access Performance Solutions under the NCC, NDIS SDA Certifications, Livable Housing Certifications and Changing Places Certifications.



Farah Madon - Director

ACAA Accredited Access Consultant
NDIS Accredited SDA Assessor
Livable Housing Assessor
Changing Places Assessor

- Accredited member of the Association of Consultants in Access Australia (ACAA) - 281
- NDIS Accredited SDA (Specialist Disability Accommodation) Assessor SDA00001
- Architect registered with the NSW Architect's Registration Board - Registration 6940
- Member of Australian Institute of Architects (RAIA), A+ Practice Member 49397
- Registered Assessor of Livable Housing Australia - Registration 10032
- Global Alliance on Accessible Technologies and Environments (GAATES) - BE-02-021-20
- Registered Assessor of Changing Places Australia - Registration CP006

Farah's Educational Profile and Qualifications include:

- Bachelor of Architecture Degree with Honours (B.Arch.)
- International Certification of Accessibility Consultants – Built Environment (ICAC-BE) Program, Level 2 Advanced Accessibility Consultant
- Diploma of Access Consulting

Farah has 20 years of experience of working in the field of Architecture and Access.

Farah is the lead author of the NDIS SDA Design Standard. She has been invited on multiple occasions as an expert witness for Access related matters in the NSW Land and Environment Court.

Farah currently participates on the following key committees concerning access for people with disabilities, on an honorary basis:

- Member of Standards Australia's ME-064 Committee responsible for the AS4299 and AS1428 suite of standards.
- Vice President of Association of Consultants in Access Australia (ACAA)
- Community Representative Member of the Penrith City Council's Access Committee
- Member of Australian Institute of Architect's National Enabling Architecture Committee (NEAC)
- Management Committee member of NSW Network of Access Consultants
- Director of Livable Housing Australia (LHA)
- Member of Changing Places Australia Technical Advisory Team

Some Recent Awards presented to Farah include:

- 2021 Australian Access Awards Winner for the Educational App of the Year - SDA Tools
- 2021 Excellence in Inclusion - Altitude Awards - Winner
- 2021 Western Sydney Executive Woman of the Year - Finalist
- 2019 Penrith Citizen of the Year
- 2019 Access Inclusion Award
- 2019 Australian Access Awards Educational App of the Year - LRV Contrast App - Finalist





Vanessa Griffin

ACAA Accredited Access Consultant
NDIS Accredited SDA Assessor
Livable Housing Assessor
Changing Places Assessor

- Accredited member of the Association of Consultants in Access Australia (ACAA) - 500
- NDIS Accredited SDA (Specialist Disability Accommodation) Assessor SDA00009
- Registered Assessor of Livable Housing Australia - Registration 20035
- Registered Assessor of Changing Places Australia Registration CP010

Vanessa's Educational Profile and Qualifications include:

- Diploma of Surveying and Diploma of Health and Building Surveying, Sydney Institute of Technology
- Certificate IV in Access Consulting



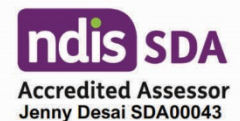
Jenny Desai

ACAA Accredited Access Consultant
NDIS Accredited SDA Assessor
Livable Housing Assessor

- Accredited member of the Association of Consultants in Access Australia (ACAA) - 572
- NDIS Accredited SDA (Specialist Disability Accommodation) Assessor SDA00043
- Registered Assessor of Livable Housing Australia - Registration 20242

Jenny's Educational Profile and Qualifications include:

- Master of Design (M.Des) from University of Technology, Sydney
- Certificate IV in Access Consulting



Art Phonsawat

ACAA Associate Access Consultant

- Associate member of the Association of Consultants in Access Australia (ACAA) - 695

Art's Educational Profile and Qualifications include:

- Advanced Diploma in Interior design, Sydney
- Certificate IV in Access Consulting



Trin Woo

ACAA Affiliate Access Consultant

- Affiliate Member of the Association of Consultants in Access Australia (ACAA) - 776

Trin's Educational Profile and Qualifications include:

- Architect registered with the NSW Architect's Registration Board - Registration 11059
- Master of Urban and Regional Planning at the University of Sydney (in progress)