Report Type: DA Access Report

Reference Number: 20309

Client: Hume Community Housing

Site Address: 23-25 Charles St, Liverpool NSW



Company Details

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Project Compliance Statement:

This Access Compliance Report is to accompany a Development Application for the development proposed at 23-25 Charles St, Liverpool NSW

This development proposes a New Building with a total of 23 Residential units. The development is within Liverpool City Council LGA that requires the provision of 10% Adaptable units and therefore the development proposes 3 Adaptable units. A total of 3 Accessible parking spaces has been provided in the development.

The project also provides 5 Livable units to comply with the SEPP 65 Objective 4Q1, that requires 20% of the units to incorporate the features of the Silver level of the Livable Housing Guidelines.

The development plans also indicate provision of some Silver and Platinum level units. Since these are not required for compliance under the DCP or BCA they do not form a part of this assessment report.

The development has building classification as detailed below;

- Class 2 (building containing more than 2 SOUs i.e. sole-occupancy units)
- Class 7a (car park)

This Access 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
- AS1428.4.1-2009 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
- AS1735 Lifts types included in the BCA including Part 12: Facilities for persons with disabilities
- State Environmental Planning Policy 65 (SEPP 65), Objective 4Q1, relating to requirements of the provision of Livable Housing Australia's Silver Level Apartments
- 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 (Development application) 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, Disability Access relevant sections of Building Code of Australia 2019, the requirements of SEPP 65 related to Objective 4Q1 - Livable Housing and the essential criteria of AS4299-Adaptable Housing.

ASSESSED BY

Art Phonsawat

Access Consultant

PEER REVIEWED BY

Farah Madon

Accredited Access Consultant and LHA Assessor ACAA Accredited Membership number 281 LHA Assessor Licence number 10032

Vista Access Architects Pty. Ltd.

Relevant dates:

Fee proposal, number FP-20620 dated 02-10-2020. Fee proposal was accepted by Client on 20-10-2020.

Assessed Drawings:

The following drawings by Idraft Architects have been assessed for compliance.

Drawing no	Issue	Date	Details
0009	2	21-07-2020	Site plan, emailed on 24-11-2020
1001	2	21-07-2020	Ground floor plan, emailed on 24-11-2020
1002	2	21-07-2020	Level 1 plan, emailed on 24-11-2020
1003	2	21-07-2020	Level 2 plan, emailed on 24-11-2020
1004	2	21-07-2020	Level 3 plan, emailed on 24-11-2020
1005	2	21-07-2020	Level 4 plan, emailed on 24-11-2020
1006	2	21-07-2020	Level 5 plan, emailed on 24-11-2020
1007	2	21-07-2020	Level 6 plan, emailed on 24-11-2020
1008	2	21-07-2020	Level 7 plan, emailed on 24-11-2020
1009	2	21-07-2020	Level 8 plan, emailed on 24-11-2020

Document Issue:

Issue	Date	Details
Draft 1	23-10-2020	Issued for Architect's review
Α	26-11-2020	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 project.

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, AS1428.1-2009 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 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 particular project. Copy pasting diagrams from this report to Architectural plans will constitute copyright infringement.

This report is 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 in regard to the 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 a number of items 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 and any other applicable regulation and Australian Standard.

A report issued for DA (development application) is not suitable for use for CC (construction certificate) application.

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

	BCA Part D3 Access for People with a Disability
Requirement	BCA D3.1 General building Access requirements SOU refers to a Sole Occupancy Unit 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 Comments	 Complies. Access has been provided from the main pedestrian entry doorway to the entry doors of all SOUs on all levels by means of accessible pathways and lifts. Where common use areas are on a floor that is accessible by means of a ramp or lift (Levels 08 in this case), access has been provided to the same. Access has been provided to common use garbage storage rooms on the ground floor level. Details to be verified at CC stage of works.
Requirement	Class 7a- Covered car park. - To and within any level containing accessible carparking spaces.
Compliance Comments	Complies. Access has been provided to the Ground level containing Accessible carparking spaces. Details to be verified at CC stage of works.
	BCA 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 Comments	 Complies. Access by means of a 1:20 walkway has been provided from the main pedestrian entry at the site boundary. Access has been provided from accessible car parking spaces by means of lifts. Details to be verified at CC stage of works.
Requirement	External Walkway / Pedestrian Access- to be as per requirements of AS1428-2009.
Compliance Comments	Complies with spatial requirements. Details to be verified at 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 Comments	Complies The building has only 1 pedestrian entry, which has been designed to be accessible. An accessway has been detected from Mills Road and we consider this to be a fire-escape only (ie exit not entry). If the PCA determine this to be a secondary entry then it will be required to be no more than 50M from the accessible entry point on Charles Street which appears to be easily

Requirement

All common use doorways and doorways to and within Accessible and Adaptable units to comply with AS1428.1.

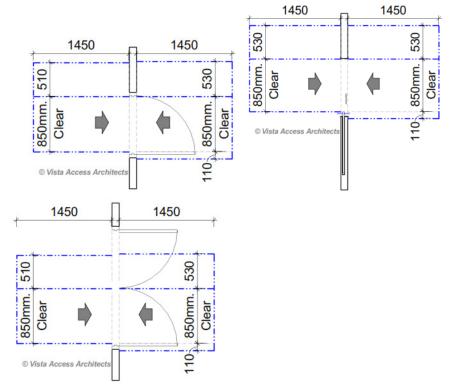
Where accessible pedestrian entry has Multiple doorways:

- 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)

Compliance Comments

Capable of compliance.

In common use areas, all single hinged doors and 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 AS1428.1-2009.

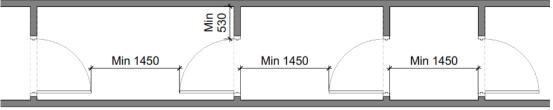


[Image description: Different types of doorways with door circulation requirements as per AS1428.1]

Note that the circulation spaces to have a maximum floor grade of 1:40 (doorway threshold ramps are permitted within the circulation space). Sliding doorways to be provided with recessed floor tracks to enable flush transition from the inside of the building.

Where there is an external level difference at the door threshold, the maximum level difference can be 35mm if provided with a 1:8 doorway threshold ramp. This is achievable and the door selections are to be verified at CC stage of works.

Distances in between airlocks to provide for a minimum 1450mm clear of door swing and minimum latch side space as shown in following diagram.



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[Image description: Circulation spaces required in airlocks in a required accessible path of travel]

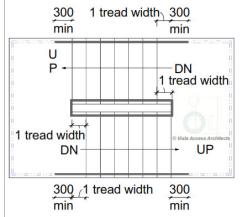
Note: If platinum level units are provided then all doorways would be required to be 900mm clear opening in lieu of 850mm clear opening.

	BCA Part D3.3 Parts of buildings required to be accessible			
Requirement	<u> </u>			
Compliance Comments	N/A No 1:14 ramps have been identified in the development.			
Requirement	 Step ramp if provided 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 Comments	N/A No step ramps have been identified in the development.			
Requirement	 Kerb ramp if provided is to be compliant with: AS1428.1-2009 including max grade of 1:8, max height of 190mm, max length of 1.52M Slip resistance of ramp and landings to comply with BCA Table D2.14. 			
Compliance Comments	N/A No kerb ramps have been identified in the development.			
Requirement	 Every Stairway (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). Slip resistance to comply with BCA Table D2.14 when tested in accordance with AS4586. 			
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Compliance Comments

Capable of compliance.

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.



Note: For stairways with 90° to 180° turns at landings, in order for the handrails to comply with the consistent height requirement, the risers have to be offset at the mid-landings OR provided with a 300mm handrail extension, so that no vertical sections are created in the handrails. This applies to both non- fire-isolated and fire-isolated stairways.

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

Note stairway to the service only area may also be considered to be a non-fire-isolated stairway that requires full compliance. Details to be verified at CC stage.

Requirement

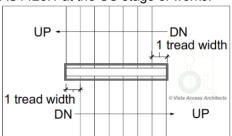
Every **Fire-isolated Stairway** is to be compliant with AS1428.1-2009 in the following aspects:

- 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.
- Slip resistance to comply with BCA Table D2.14 when tested in accordance with AS4586.

Compliance Comments

Capable of compliance.

Detailed features of the fire-isolated stairways will be assessed with the requirements of AS1428.1 at the CC stage of works.



Note: For stairways with 90° to 180° turns at landings, in order for the handrails to comply with the consistent height requirement, the risers have to be offset at the mid-landings OR provided with a 300mm handrail extension, so that no vertical sections are created in the handrails. This applies to both non- fire-isolated and fire-isolated stairways.

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

Requirement

Nosing strips to both fire-isolated and non-fire-isolated stairways

- 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 Comments

Capable of compliance.

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

Requirement

Handrail cross-sectional profile – for stairways and ramps to comply with AS1428.1

- Diameter of handrails to be between 30mm-50mm and located not less than 50mm from adjacent walls with no obstructions to top 270° arc.

Compliance Comments

Capable of compliance.

Detailed features of the handrails 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 has the following 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. Details to be provided at the CC stage of works. Requirement Every **Passenger lift** is to comply with the requirements of BCA E3.6. Compliance This has been assessed further in the report in the Lifts section. Comments Refer to Lifts section. Requirement Passing spaces requirement It is a requirement to provide passing spaces in 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 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 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. A space of 1540mmx2070mm is also required / provided in front of all passenger lift doors. Details to be verified at CC stage of works. **Carpet specifications** Requirement 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 Comments Use of carpets have not been identified in the common use areas. BCA Part D3.4 Exemption Access is not required to be provided in the following areas: Requirement 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 Part D3.5 Accessible Carparking

Requirement

Class 2

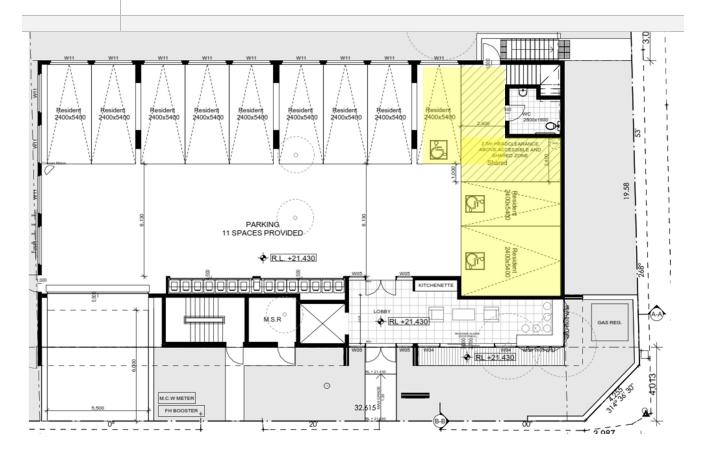
There are no Accessible carparking requirements for a Class 2 under the BCA. If adaptable housing has been mandated by the Council, then carparking spaces for Adaptable units will be required under the requirements of AS4299- Adaptable housing.

Compliance Comments

Complies.

Liverpool City Council requires provision of 10% Adaptable units in the development. Development has total number of 23units. 10% of 23 = 2.3= 3 required Adaptable units. Therefore, 2 accessible and 1 (AS4299 compliant) carparking spaces are provided for the residential component of the development.

One accessible/ (AS4299 compliant) parking space is required to be allocated to each of the Adaptable units.



[Image description: Plan of 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)

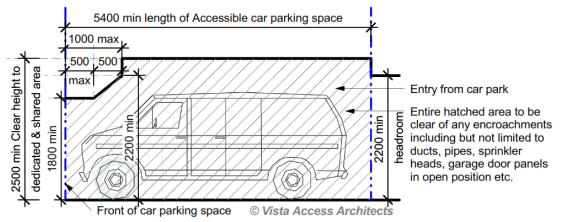
Compliance Comments

Capable of compliance.

Details to be verified at the CC stage of works.

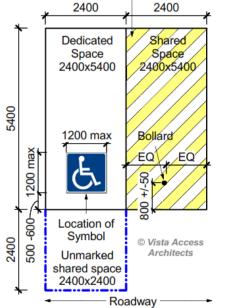
Refer to diagrams below for requirements, especially in regards to head height requirements.

Note: 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.



[Image description: Diagram shows head height requirements as per AS2890.6 for both dedicated accessible parking space and the shared space. No beams, pipes, sprinklers or any other encroachments are permissible within the required clear head height space]

150-200 wide yellow diagonal stripes with spaces 200-300 between stripes at 45+/- 10°



[Image description: Diagram shows spatial requirements of AS2890.6 including line marking, symbol and bollard requirements]

Access symbol is not to be provided when spaces are allocated to Adaptable or Platinum level units.

BCA Part D3.6 Signage Braille and Tactile signage is required to identify Accessible Sanitary facilities Requirement Signage must incorporate the international symbol of access in accordance with AS 1428.1 and identify each sanitary facility, except a sanitary facility associated with a Unisex Toilet RH **Unisex Toilet RH** bedroom in a Class 1b building or a SOU unit in a Class 3 or Class 9c building. Signage in accordance with AS 1428.1 must be provided for accessible unisex sanitary facilities to identify if the facility is suitable for left or right handed use. [Image description: Image of Signage] Capable of compliance. 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 Braille and Tactile signage is required to identify Ambulant Sanitary facilities Compliance Comments No common use, ambulant sanitary facilities have been provided in the development. Requirement Braille and Tactile signage is required to identify Hearing Augmentation Compliance Comments Hearing augmentation is not provided since there is no inbuilt amplification system proposed in the development. Braille and Tactile signage is required to identify a Fire exit door Requirement Exit Level? 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. - Sign must be located on the side that faces a person seeking egress The "?" shown in image above is to be replaced with the floor level where the door is located. [Image description: Image of Signage] Compliance Capable of compliance. Comments All doors nominated as Exit doors require signage as described above. Signage selections generally take place at CC stage of works. Selection 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 The development has only 1 entry which has been designed to be accessible. Comments All signage is required to be as per Specification D3.6 Braille and Tactile Signs Requirement This includes location of signage, specifications in regards to braille and tactile characters, luminance contrast and lighting. Compliance Capable of compliance. Signage selections generally take place at CC stage of works. Selection of signage as Comments specified above will lead to compliance. Details of selected signage to be verified at CC stage of works. BCA Part D3.7 Hearing Augmentation Hearing Augmentation is only required where an inbuilt amplification system (other than Requirement 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 Comments No areas with provision of inbuilt amplification have been identified on plans and hence no hearing augmentation requirements apply to this development.

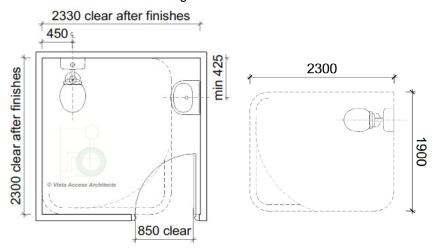
BCA Part D3.8 Tactile indicators (TGSIs) Requirement TGSIs are required when approaching: Stairways other than fire-isolated stairways. Escalators / passenger conveyor / moving walk. Ramp (other than fire-isolated ramps / kerb or step or swimming pool ramps). Under an overhead obstruction of <2M if no 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. Compliance Capable of compliance. 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 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 N/A Comments No ramps have been identified in the development. BCA 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 length 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 these selection details are to be verified at CC stage of works. **BCA Part F Accessible Sanitary Facilities** BCA 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 Comments 2 unisex accessible facilities have been provided in the development. Ground floor: 1 unisex accessible LH transfer toilet Level 8: 1 unisex accessible RH transfer toilet

Requirement Compliance Comments

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

Capable of compliance.

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



Note: Location of door is indicative only.

[Image description: Diagram showing requirements for circulation spaces for fixtures in an Accessible toilet as per AS1428.1]

Accessible unisex toilet is provided N/A.				
14/7 G				
No common use ambulant use facilities have been provided in the development.				
Ambulant use toilets are to be designed in accordance with AS1428.1-2009				
N/A. No common use ambulant use facilities have been provided in the development.				
BCA F2.4(a) Accessible unisex sanitary compartments				
 Class 2 At least 1 unisex Accessible toilet when sanitary compartments are provided in common areas. 				
Complies. 2 unisex accessible facilities have been provided in the development. Ground floor: 1 unisex accessible LH transfer toilet Level 8: 1 unisex accessible RH transfer toilet				
BCA F2.4(b) Requirements for Accessible unisex showers				
Class 2 - At least 1 unisex Accessible shower when showers are provided in common areas.				
N/A No common use shower facilities have been provided in the development.				
Showers for Accessible use are to be designed in accordance with AS1428.1.				
N/A No common use shower facilities have been provided in the development.				

	BCA Part E Lift Installations
	BCA E3.2 Stretcher facility in lifts
Requirement	A Stretcher lift is to be provided if a passenger lift is installed to serve any storey with an effective height of 12M. The space requirement is 600mm wide x 2000mm deep x 1400mm high above the floor level. Confirm this requirement with your BCA consultant.
Comments	For information only. Contact BCA consultant / PCA in regard to applicable requirements.
	BCA E3.6 Passenger lift
Requirement	In an accessible building, Every Passenger Lift (excluding electric passenger lift, electrohydraulic passenger lift, inclined lift) must be subject to limitations on use and must comply with Tables E3.6a and E3.6b
Compliance Comments	Capable of compliance. A certificate of compliance from the lift supplier will be required at the CC stage of works stating that the proposed lift complies with the requirements of BCA Part E3- Lift installations
Requirement	BCA E3.6 Table E3.6a -Limitations on use of types of passage lifts Limitations on use of Stairway platform lifts, Low-rise platform lift, Low-rise, low-speed constant pressure lift and small sized, low-speed automatic lift
Compliance Comments	N/A Not identified in the development.
	BCA E3.6 Table E3.6b -Application of features to passenger lifts
Requirement	Handrail requirements for passenger lifts. Apart from stairway platform lift and low-rise lifts, a handrail is required as per AS1735.12.
Compliance Comments	Capable of compliance. Details to be verified at CC stage of works.
Requirement	Lift floor dimensions (excluding stairway platform lift) - Lifts traveling 12M or under, floor size, 1100mm wide x 1400mm deep - Lifts travelling more than 12M, floor size 1400mm wide x 1600mm deep
Compliance Comments	Capable of compliance Details to be verified at CC stage of works. Additional lift car size may apply if stretcher lift is required under the BCA.
Requirement	Minimum Door opening size complying with AS1735.12, not less than 900mm clear (excluding stairway platform lift).
Compliance Comments	Capable of compliance Details to be verified at CC stage of works.
Requirement	All lifts with a power operated door are required to have a Passenger protection system complying with AS1735.12.
Compliance Comments	Capable of compliance Details to be verified at CC stage of works.
Requirement	Lift landing doors to be provided at upper landing (excluding stairway platform lift).
Compliance Comments	Capable of compliance Details to be verified at CC stage of works.
Requirement	Lift car and landing control buttons to comply with AS1735.12 (excluding stairway platform lift and low-rise platform lift).
Compliance Comments	Capable of compliance Details to be verified at CC stage of works.

Requirement	Lighting (for all enclosed lift cars) to be provided in accordance with AS1735.12 and AS1680. Minimum illuminance of 100 lx is required at the level of the car floor and average of 50 lx is required on the control panel surface.
Compliance Comments	Capable of compliance Details to be verified at CC stage of works.
Requirement	To all lifts serving more than 2 levels , audible and visual indication to be provided as per AS1735.12.
Compliance	Capable of compliance.
Comments	Details to be verified at CC stage of works.
Requirement	Emergency hands free communication (excluding stairway platform lift) – provide a button that alerts a call centre and a light that the call has been received.
Compliance	Capable of compliance
Comments	Details to be verified at CC stage of works.

Additional Features required as per AS1428

Refer to AS1428 for full list of requirements.

	The following accessibility requirements apply only to:
	- Common use areas within the residential component (including passageways leading to
	SOUs)
Requirement	Accessway width requirements
	- All Accessway widths are to be a minimum of 1M clear (measured from skirting to
Compliance	skirting) with vertical clearance of at least 2M Complies.
Comments	Details to be verified at CC stage of works.
	Details to be verified at 55 stage of works.
Requirement	Doorway requirements
	- All common use doorways in the development to be in accordance with AS1428.1
	- Door thresholds are to be level or they can incorporate a doorway threshold ramp as pe
	AS1428.1 i.e. max 1:8 grade, max height of 35mm and located within 20mm of door lear Distance between successive doorways in airlocks to be 1450mm which is measured
	when the door is in open position in case of swinging doors.
Compliance	Capable of compliance.
Comments	Details to be verified at CC stage of works.
Requirement	Door hardware requirements
	- 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.
Compliance	Capable of compliance.
Comments	Door hardware selections generally take place at CC stage of works.
	Selection of door hardware as specified above will lead to compliance and these selection
	details are to be verified at CC stage of works.
Requirement	Luminance contrast requirements for doorways.
requirement	- All doorways to have a minimum luminance contrast of 30% provided as per AS1428.1
	with the minimum width of the luminance contrast to be 50mm.
Compliance	Capable of compliance.
Comments	The painting schedule of walls/doors and door frames are to consider the above requirement
	when colours are selected. Check Contrast requirements via LRV of colours on http://www.accessarchitects.com.au/luminance-contrast-calculator or download free LRV
	calculator App from Apple Store or Google Play.
	Add the above listed requirements to project specifications to ensure compliance.
_	
Requirement	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 as pe
	AS1428.1
	- Grates if used in the accessible path of travel is required to comply with the requirement
	as per AS1428.1
Compliance	Capable of compliance.
Comments	Floor surface selections generally take place at CC stage of works. Selection of floor surfaces as specified above will lead to compliance and these selection
	details are to be verified at CC stage of works.
	Switches, Controls and Lighting requirements
	- All switches and controls (including controls for intercom facilities and external lift control
	buttons) on an accessible path of travel, Accessible SOUs and Accessible sanitary facilities to be located as per requirements of AS1428.1
Compliance	Capable of compliance.
- 5	Lighting fixture selections and locations generally take place at CC stage of works. Selection
Comments	
Comments	of lighting fixtures and locating them as specified above will lead to compliance. These

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'.

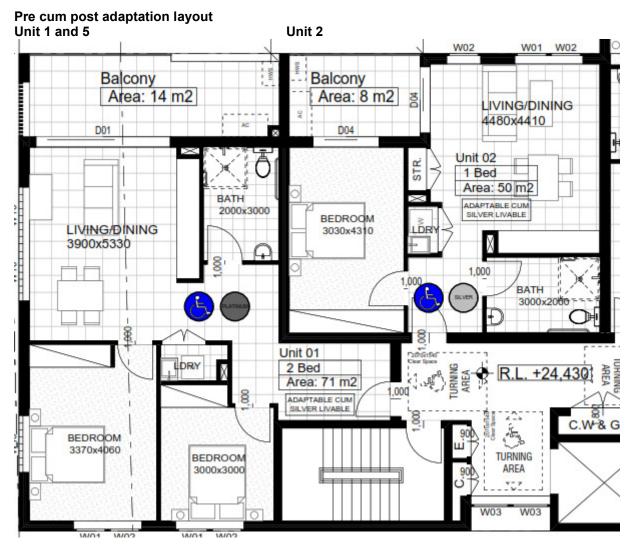
There are 3 Classification levels for Adaptable Housing

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.

3 Adaptable units are required by the Council's DCP to a Class C level. The nominated units designated as adaptable are unit numbers Units 1, 2 and 5

At DA stage there is insufficient information to certify compliance with the Standard, however, in accordance with the table below, the nominated units can comply with the spatial requirements of AS4299 for Adaptable Housing.



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

- Note that ALL internal passageways are required to be 1M clear when measured from skirting to skirting so allow for the same.
- To comply with Livable, the wet areas are to be such that flush transition is available. One option is achieve this is to recess the floor slab.

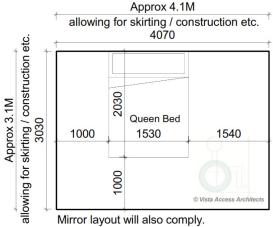
AS4299.1995 - Class C – Essential requirements.

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).

Requirements as per AS4299	R	С	Comments
Drawings			
Provision of drawings showing the housing unit in its pre- adaptation and post-adaptation stages	V	V	
Siting			
An AS1428.1 compliant, continuous accessible path of travel is required from street frontage and vehicle parking to entry doorway of the Adaptable unit.	V		Complies. Access is provided from street by means of an AS1428.1 compliant walkway and from accessible parking space by means of a lift. Details to be verified at the CC stage
Letter boxes			
Letterboxes to be on hard standing area connected to accessible pathway	V	$\overline{\mathbf{V}}$	Capable of compliance. Details to be verified at the CC stage
Parking			
Car parking space or garage of minimum 6.0Mx 3.8M or a hard surfaced level outside of 5.4Mx3.8M is to be provided as a sheltered car park or can be provided in the future		$\overline{\mathbf{V}}$	Complies. Space can also be provided as per AS2890.6 Details to be verified at the CC stage
Accessible Entry			-
Door circulation requirements of AS1428.1 with approach directions shown with arrows below. Accessible entry to be provided with, - An accessible door threshold - 1550mm diameter landing - 850mm clear opening door with clearances, door hardware operable with one hand and located 900-1100mm above floor			Capable of compliance. Refer to door circulation requirements noted earlier in the report. Details to be verified at the CC stage
Interior: General			
 Internal doors to have 820mm minimum clearance with provision for compliance with AS1428.1 for door approaches and minimum corridors width of 1M Door hardware operable with one hand and located 900-1100mm above floor 			Capable of compliance. Provide an 850mm clear opening door to the adaptable bathroom and 1 main bedroom. Rest to have 820mm clear opening. Details to be verified at the CC stage
Living room and dining room			
Circulation space of minimum 2250mm diameter.		V	Complies.
Kitchen			
It is general industry practice to accept that kitchen is something that has a very short life span and can be completely replaced when required to be adapted. As such only the following requirements apply, Potential of achieving the following at Post- Adaptation: - Minimum width 2.7M and 1550mm clear between benches - Provision for circulation at doors to comply with AS1428.1 (if doors provided) - Provision for benches, taps, cooktops, ovens as	V	V	Can be compliant post adaptation. Details to be verified at the CC stage
required under AS4299			

Main bedroom

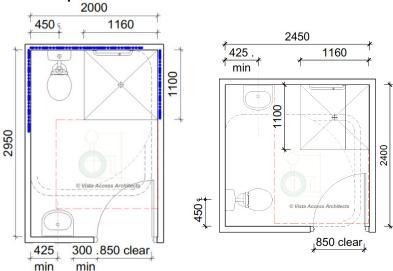


[Image description: Diagram showing circulation spaces around a queen bed as per AS4299]

At least one bedroom of area sufficient to accommodate a queen size bed and wardrobe and circulation space requirements of AS1428.2

 $\sqrt{}$ $\sqrt{}$ Complies Details to be verified at the CC stage

Main Adaptable bathroom



[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 in these diagrams are approximate and depend on selected features such as size of the basin. These dimensions include allowances for reinforcements and normal construction tolerances.

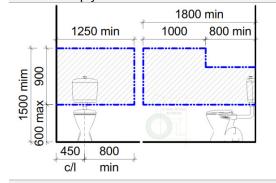
Thick blue line indicates the location of wall reinforcements which are to be provided at preadaptation itself. Red dotted line indicates the shower circulation space. Black dotted line indicates the WC pan circulation space.

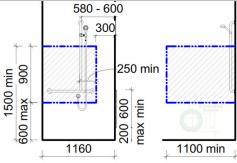
- Provision for bathroom area with Circulation spaces of Shower and WC (including fixtures) to comply with
- Note that wall reinforcements and waterproofing details to comply with AS4299

 $\sqrt{}$

Complies A bathroom with minimum space of 2Mx 2.95M Wall reinforcement details to be

verified at the CC stage.





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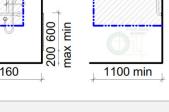
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Note: Shower seats are not required to be provided in Adaptable units.

[Image description: Diagram showing wall reinforcement requirements for the Adaptable unit for WC and Shower, in post adaptive position]

Laundry

- Provision for adequate circulation space in front of or besides appliances (minimum 1550mm depth)
- Circulation at doors to comply with AS1428.1
- Provision for automatic washing machine



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

Other General requirements All surfaces to be Slip resistant to AS3661 and AS 4586 Capable of compliance. All GPOs and Lighting/ lux requirements as per AS4299 Details to be verified at the CC stage All waterproofing as per AS4730 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 It is recommended that where balconies / outdoor areas have been provided to recommenda 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. tions (Advisory only Sliding doors in the living areas leading to outdoor areas are to be such that opening of / not the door is able to provide a clear opening space of 850mm with a latch side space of mandatory) 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).

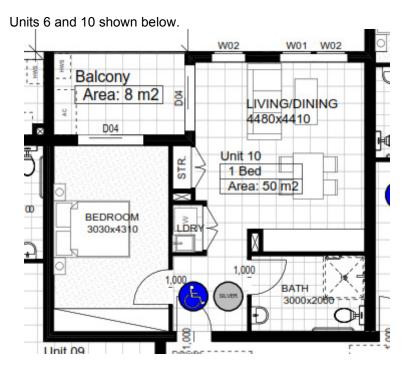
SEPP 65 – Part 401

Compliance assessment with Objective 4Q1 that requires 20% of the units to incorporate the features of the **Livable Housing Guidelines Silver level**.

Total number of residential units in the development = 20% of 23 = 4.6 = 5 required Livable units.

Since **3** of the units (**1**, **2** and **5**) already comply with the Adaptable unit requirements, these units are also capable of satisfying the intent of Silver level of Livable Housing Guidelines as noted in the table below.

In addition to the adaptable units provided the following 2 units **6 and 10** are capable of providing compliance with the features of Silver level of Livable Housing Guidelines as noted in the table below.



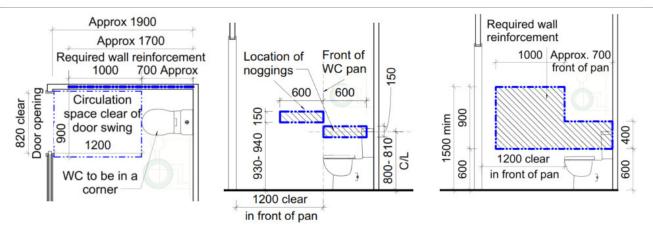
- Note that ALL internal passageways are required to be 1M clear when measured from skirting to skirting so allow for the same.
- Note that the wet areas are to be such that flush transition is available. One way of achieving this is to recess the floor slab.

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

Note that in this case the adaptable units are also be counted as Livable / LHA Silver level unit in which case the below requirements apply in addition to the AS4299 requirements.

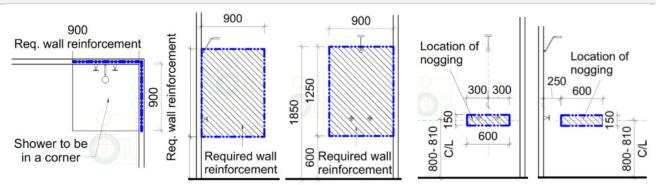
Design Element	Requirements (All dimensions noted are required to be clear of finishes as required under AS1428.1)	Compliance / Comments
1 Dwelling Access	 (a) Provide a safe and continuous 1M clear width pathway from front site boundary to an entry door to the dwelling. (b) Path including any ramps 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. 1.2M clear width of ramps are required. 	Complies. Verify at CC
	 (c) Pathway may be provided via an associated car parking in which case the car parking space to be 3200 (width) x5400 (length), even, firm and slip resistant, level surface of 1:40 max grade and 1:33 max grade for bitumen 	N/A Access is provided from the site boundary.

	(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.	N/A
	(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.	N/A
2 Dwelling entry	(a) Dwelling Entry should provide an entrance door with (i) min clear opening width of door to be 820mm (ii) Step free threshold of max 5mm with rounded or beveled lip (iii) reasonable shelter from the weather	Capable of compliance. Verify at CC
	(b) Level landing of 1200x1200mm at step-free entrance door on the arrival / external side of the entrance door.	Complies Verify at CC
	(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
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 (i) 820mm clear opening and (ii) provided with a level threshold of max 5mm between abutting surfaces with rounded or beveled lip 	Capable of compliance. Verify at CC
	(b) Internal corridors and passageways to doorway to be min 1M clear (measured from skirting to skirting)	Capable of compliance. Verify at CC
4 Toilet	 (a) One Toilet to be provided on the ground or entry level that provides, (i) Min 900mm between walls or amenities (ii) 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. Verify at CC
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.(b) The shower recess should be located in the corner of the room to enable the installation of grabrails at a future date.	Capable of compliance. Verify at CC
	For hobless specification please see Australian Standard AS3740-3.6. Reinforcement guidelines for walls in bathrooms and toilets are found in element 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. Verify at CC
	 (b), (c) and (d) the walls around toilet, bath and shower to be via: (i) Noggins with a thickness of at least 25mm (ii) Sheeting with a thickness of at least 12mm Refer to diagrams provided in the Livable Housing Guideline document. 	Capable of compliance. Verify at CC



[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	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
Internal Stairways		stairway in units.

Disability Discrimination Act

Advisory Only

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.

Some recommendations to address common furniture and fittings have been listed below. Non-provision of the below recommendations may not affect compliance under the BCA but may leave the building owner vulnerable to a claim under the DDA.

For new BBQ areas in residential common use areas, it is suggested that this kitchen could be made partially accessible by providing a width of 900mm next to the sink as vacant space (without cabinetry under the bench top) and a long lever tap with spout and handle within 300mm from the front of the benchtop. The distance in between the benches to be 1550mm. I double GPO to be provided within 300mm from the edge of the benchtop. This would allow a person in a wheelchair to independently move within the kitchen and use basic facility, being the sink independently.

Statement of Experience

Farah Madon- Director

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

- Accredited member of the Association of Consultants in Access Australia (ACAA).
 Membership no 281
- NDIS Accredited SDA (Specialist Disability Accommodation) Assessor SDA00001
- Architect registered with the NSW Architect's Registration Board. Reg number 6940
- Member of Australian Institute of Architects (RAIA), A+ Practice member. No 49397
- Registered Assessor of Livable Housing Australia. License no 10032
- Internationally Certified Access Consultant GAATES ICAC. Membership BE-02-021-20
- Registered Assessor of Changing Places Australia. Registration no 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 CPP50711
- Accredited Specialist Disability Accommodation (SDA) Assessor's Course
- Standards Australia's course on 'Writing Australian Standards'
- OHS Construction Induction Training Certificate
- Changing Places Australia's Training for Assessors

Farah has 20 years of experience of working in the field of Architecture and Access. Farah specialises in access consultancy services, including NDIS SDA Assessments, access related advise, auditing and reporting services, performance solution assessments for access related issues under the BCA.

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

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

- Committee member of ME-064 Committee of Standards Australia responsible for the AS4299 and AS1428 suite of standards.
- Community Representative Member of the Penrith City Council's Access Committee
- Member of Australian Institute of Architect's (RAIA) National Access Work Group (NAWG)
- Management Committee member of NSW Network of Access Consultants
- Livable Housing Australia's Industry Reference Group (IRG) Member

Farah has previously held the following roles:

- Vice President of ACAA from 2016 to 2019 and Management committee member of ACAA from 2011 till 2019.
- Convener of the ACAA's Access related Practice and Advisory Notes

Meet our team

Vanessa Griffin- ACAA Accredited Access Consultant, NDIS SDA Assessor, Livable Housing Assessor & Changing Places Assessor

- Accredited member of ACAA. Membership no 500
- NDIS Accredited SDA (Specialist Disability Accommodation) Assessor SDA00009
- Registered Assessor of Livable Housing Australia.
- Member of AIBS Australian Institute of Building Surveyors

Vanessa's Educational Profile and Qualifications include:

- Diploma of Surveying and Diploma of Health and Building Surveying
- Certificate IV in Access Consulting
- OHS Construction Induction Training Certificate
- Registered Assessor of Changing Places Australia.

Jenny Desai- ACAA Accredited Access Consultant

- Accredited member of ACAA. Membership no 572
- Registered Assessor of Livable Housing Australia.
- Jenny's Educational Profile and Qualifications include:
 Master of Design (M.Des) from University of Technology, Sydney
- Certificate IV in Access Consulting
- OHS Construction Induction Training Certificate













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