



Access Report

**Proposed Multi-Unit Development  
– 2 Adaptable Units**  
39 & 41 Fairfax Street,  
RUTHERFORD NSW 2320

For: Greentree Projects  
Ref: PAA\_23448



## Document Control

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

### Revision Summary:

<b>prepared by:</b> Lee-May Whong	Draft Revision 1	Issued for review Issued for DA	13 September 2023 7 December 2023

### Contact Details:

Lindsay Perry Access Pty Ltd t/a **purple apple access**  
PO Box 453 NEW LAMBTON NSW 2305

**Lindsay Perry**  
[lindsay@purpleapple.com.au](mailto:lindsay@purpleapple.com.au)  
0418 909 180

**Lee-May Whong**  
[lee@purpleapple.com.au](mailto:lee@purpleapple.com.au)  
0457 784 328

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### Clarifications:

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

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

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

### Definitions:

The following terminology has been used throughout this report:

- Compliant** | compliance with current accessibility legislation has been achieved.
- Compliant Configuration** | circulation and spatial planning requirements are compliant.
- Capable of Compliance** | compliance is achievable through detailed design.
- Not Yet Compliant** | circulation and spatial planning requirements have not yet been met.
- To be addressed during Detailed Design** | details not available or applicable at DA stage.
- To be Confirmed** | inadequate information is provided to determine compliance.

## Executive Summary

Development application documentation for the multi-unit development, of which it includes two (2) adaptable units that is located at 39 & 41 Fairfax Street, Rutherford NSW 2320, has been reviewed against current accessibility legislation. This review is specifically for the assessment of the adaptable units provided.

The following table summarises our findings:

Item No.	Description	Compliance Status
<b>Adaptable Housing</b>		
<b>Pre Adaption Requirements</b>		
5.1	Accessible Entrance	Compliant
5.2	Visitable Toilet	Compliant
5.3	Accessible Path of Travel	Compliant
<b>Post Adaption Requirements</b>		
5.4	Car Accommodations and Path	Compliant
5.5	Letterbox	To be addressed during detailed design
5.6	Doorways	Compliant
5.7	Internal Corridors	Compliant
5.8	Bathroom	Compliant Configuration
5.9	Kitchen	Compliant Configuration
5.10	Bedroom	Compliant
5.11	Living Area	Compliant
5.12	Laundry	Compliant Configuration
5.13	Floors Generally	To be addressed during detailed design
5.14	Ancillary Items	To be addressed during detailed design

We consider that the drawings presented for assessment, for the purposes of a development application, generally comply with current statutory requirements.

Accessibility requirements are included in Appendix 1 of this report to guide the detailed design. Best Practice options are provided within Appendix 2 and we encourage their implementation into the design.

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



### LEE-MAY WHONG

Access Consultant (ACAA Associate Member No. 517)  
Diploma of Access Consulting



## 1 Project Background

The project is a multi-unit development incorporating two (2) adaptable units. The development is located at 39 & 41 Fairfax Street, Rutherford and provides twenty-one (21) units arranged around a central communal space. This review is specifically for the assessment of the adaptable units provided within the proposed.



Figure 1 | Proposed Development

## 2 Reviewed Documentation

Documentation for the adaptable units prepared by AGCAD building designers has been reviewed as follows:

dwg no.	drawing name	revision
S01	Cover Page	5
S02	Site Analysis Plan	5
S03	Site Plan – SH1	5
S04	Site Plan – SH2	5
S05	Bulk Earthworks Plan	5
S06	Landscape Plan	5
S07	Sections – SH 1	5
S08	Sections – SH 2	5
S09	Floor Plans – SH1	5
S10	Floor Plans – SH2	5
S11	Window Schedule	5
S12	Elevations – SH 1	5
S13	Elevations – SH 2	5
S14	Elevations – SH 3	5
S15	Elevations – SH 4	5
S16	Elevations – SH 5	5
S17	Elevations – SH 6	5
S18	Elevations – SH 7	5
S19	Elevations – SH 8	5
S20	Perspectives – SH 1	5
S21	Perspectives – SH 2	5
S22	Perspectives – SH 3	5
S23	Perspectives – SH 4	5
S24	Perspectives – SH 5	5
S25	Perspectives – SH 6	5
S26	Shadow Diagrams – SH1	5
S27	Shadow Diagrams – SH2	5



### 3 Council DCP Requirements for Accessibility

Maitland City Council DCP (2011) Part 3 Design Guidelines contains requirements for accessibility. The overall principles are as follows:

- a) To ensure all new developments are constructed to accommodate the needs of those people who may use the services that the proposed land use may provide.
- b) To ensure people with a disability enjoy the same level of access, both in gaining entry to and moving within, those buildings which meet a high public demand.
- c) To ensure those land uses which provide a service which is likely to attract a larger proportion of people with a disability, adequately provide for the needs of these people.
- d) That the provisions of continuous access path of travel to and within a building is the primary principle.
- e) The secondary principle is the provision of car parking and other amenities.
- f) To ensure that all existing commercial buildings in Maitland are upgraded to meet the primary principle of the Plan, over time.

### 4 Legislation

Access assessment has been made against Access Legislation including:

- The Commonwealth Disability Discrimination Act 1992 (DDA).
- Disability (Access to Premises (Buildings)) Standards 2010.
- Access Code for Buildings 2010.
- The National Construction Code Building Code of Australia Volume 1 2022 (BCA):
  - Part D3D15 Landings (Slip Resistance)
  - Part D4 – Access for People with Disabilities
- Australian Standard AS1428.1 (2009) Amendment 1 & 2, – Design for Access and Mobility.
- Australian Standard AS1428.2(1992) – Design for Access and Mobility: Enhanced and additional requirements – Buildings and facilities.
- Australian Standard AS2890.6 (2009) – Parking Facilities – Off street carparking For People with Disabilities.
- Australian Standard AS4299 – Adaptable Housing.

A summary of the requirements of relevant legislation follows:

#### **The Disability Discrimination Act 1992**

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

#### **The Disability (Access to Premises) Standards**

Any application for a building approval for a new building or upgrade of an existing building triggers the application of the Premises Standards.

The Premises Standards include an **Access Code** written in the same style as the Building Code of Australia. It has a number of Performance Requirements



that are expressed in broad terms and references a number of technical Deemed-to-Satisfy Provisions. Not applicable to this development. For existing buildings only.

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

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The Building Code of Australia (BCA) is contained within the National Construction Code (NCC) and provides the minimum necessary requirements for safety, health, amenity and sustainability in the design and construction of new buildings (and new building work in existing buildings) throughout Australia. The BCA is a performance-based code and compliance can be met through satisfying the deemed-to-satisfy provisions or by meeting the prescribed performance requirements. For this development:

The BCA for Class 1a buildings, being a detached house or a group of dwellings such as terrace houses, townhouses or a villa unit, BCA has no specific accessibility requirements.

However, for this development. There are two adaptable units provided and this report has been prepared to assess these two adaptable units per AS 4299 Adaptable Housing requirements.

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### **AS1428 – Design for Access and Mobility**

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

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

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

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

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### **AS4299 Adaptable Housing**

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AS4299 (1993) provides housing for different community groups with different needs. It involves a move away from special accommodation for persons with a disability, avoiding social dislocation.

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## **5 Adaptable Housing (Council Requirement)**

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Council requires the provision of two (2) adaptable apartments, based on a total of twenty-one (21) apartments. The internal layouts of the adaptable units have been assessed in this report.



An adaptable housing unit is defined by AS4299 as follows:

*A housing unit which is designed and constructed to meet the performance requirements stated in the standard. It is designed in such a way that it can be modified easily in the future to become accessible to both occupants and visitors with disabilities of progressive frailties.*

There are six (6) performance requirements being: visitability; avoidance of level changes; maneuverability; ease of adaption; ease of reach; and future laundry facilities.

Both the pre-adaption state and post-adaption state need to be considered. In the pre-adapted state, an adaptable unit is required to be “visitable”, and these requirements are applicable at the time of construction. Other elements are to be provided on adaption of the unit. Documentation needs to demonstrate that compliance in the post-adapted state is achievable.

At **time of construction**, the following are required:

- An accessible entrance per AS1428.1 (2009).
- A visitable toilet at the entry level per AS4299.
- An accessible path of travel from the entrance to the visitable toilet and living areas within the meaning of AS1428.1 (2009).

At **time of adaption**, the following are required:

- Compliance with AS4299 Appendix A – essential criteria. This includes kitchen layouts, laundry layouts, carparking, etc

The following requirements for adaptable apartments are based on AS4299, Section 4 – Design of the Housing Unit, essential criterion as listed in Appendix 1, AS4299 Schedule of Features for Adaptable Housing. Compliance with the following features will achieve a Class C adaptable housing unit.

**Commentary:**

The adaptable apartments have been nominated as Unit 20 and Unit 21. Pre- and post-adaptable layouts has been provided and as combined floor plan.

## Pre-Adaption Requirements:

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### 5.1 Accessible Entrance

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Entrances to adaptable housing units are to comply with AS4299 Clauses 4.3.1 and 4.3.2. AS4299 which require that the entry doors comply with AS1428.2 **at time of construction**. The minimum clear opening width of the doorway is to be 850mm and allow for wheelchair maneuverability (provide minimum 1550mm long area in front of the doorway). Entrances to the adaptable housing units to be weatherproofed.

Door hardware is to comply with AS1428. In this regard, entry door hardware is to be in the accessible height range of 900-1100mm above finished floor level. The use of lever handles is encouraged to assist persons with a manual disability such as arthritis.

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**Compliance Summary:**

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Compliant

**Commentary:**

The entry doorway to the adaptable unit offer areas conducive to an accessible entrance. The following is provided:

- 1550mm diameter landing circulation, external side.
- 850mm clear door width (1000mm door leaf) along with door approaches both sides of entry door.
- 1540x2070mm within 2 meters of corridor end.

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**5.2 Visitable Toilet**

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Each adaptable housing unit is required to have a toilet on the entry floor that is a visitable toilet within the meaning of AS4299 **at time of construction**. The toilet is to be installed in compliance with AS1428 (correct set-out distance from fixed walls) and have the capacity to accommodate a grabrail that complies with Figure 4.5 of AS4299. The visitable toilet door is required to have a clear opening width of 820mm. Slip resistant floors are also required.

A visitable toilet is defined as a toilet which has a space of minimum 1250x900mm in front of the toilet clear of door swings.

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**Compliance Summary:**

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Compliant.

**Commentary:**

The ensuite bathroom offers a layout that can accommodate an accessible arrangement and a visitable toilet with a 900x1250mm is achieved within this arrangement.

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**5.3 Accessible Path of Travel from Entry to Visitable Toilet & Living Area**

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The performance requirements of AS4299 require the provision of an accessible path of travel, within the meaning of AS1428.1 (2009), from the entrance to the visitable toilet and a living area. Door circulation and corridor widths need to be designed to reflect this requirement.

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**Compliance Summary:**

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Compliant.

**Commentary:**

The provision of an accessible path of travel, within the meaning of AS1428.1 (2009), from the entrance to the visitable toilet and a living area has been provided.





## Post Adaption Requirements:

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### 5.4 Private Car Accommodations and Accessible Path of Travel

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Private carparking spaces for adaptable housing units shall be large enough to enable a person with a wheelchair to get in and out of both the car and the parking space. A width of 3.8m is necessary to enable the driver to alight, open the passenger door and assist a person with a disability into a wheelchair.

Carparking spaces for the adaptable units to have a minimum floor plan dimension of 3.8m x 6.0 (AS4299, Clause 3.7.2).

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#### Compliance Summary:

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Compliant

#### Commentary:

Carparking for the adaptable unit has been provided. The configuration of the garage is in keeping with AS2890.6 with a size of 6x6m.

An accessible path of travel has been provided to the entrance doorway for both units.

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### 5.5 Letterboxes

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Letterboxes to adaptable housing units should be located on a hard standing area connected by an accessible path of travel to the adaptable housing unit.

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#### Compliance Summary:

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To be addressed at detail design

#### Commentary:

The grades of the existing topography do not offer an accessible path of travel within the meaning of AS 1428.1 (2009) to the letterbox. As the gradients will be in excess of those that facilitate wheelchair access under AS 14281.1, the letterbox will be provided within a hard standing area with a vehicular path adjacent to the letterbox to facilitate access. Given the provision of vehicular access to the letterbox, we consider this is fit-for-purpose in this instance.

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### 5.6 Doorways

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Doorways throughout adaptable housing units are required to have a clear opening width of 820mm. At time of construction, an accessible path of travel within the meaning of AS1428.1 is required from the entrance to the visitable toilet and living area. Other door circulation areas are to comply with AS1428.1 on adaption of the unit.

All door hardware is to be operable with one hand and in the height range of 900-1100mm above the floor level. The use of lever handles is encouraged to assist persons with a manual disability such as arthritis.

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**Compliance Summary:**

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Compliant

**Commentary:**

Internal doorways are provided with adequate door width and circulation areas along the accessible path. A 920mm door leaf will provide the minimum 850mm clear opening width.

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**5.7 Internal Corridors**

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There is a requirement for all corridors to be minimum 1000mm and adequate circulations for paths of travel.

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**Compliance Summary:**

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Compliant.

**Commentary:**

Corridors within the adaptable units are a minimum of 1200mm wide.

**Informational:**

An accessible path of travel is not provided to Bed 2 & 3, and associated amenities with steps. We consider access path need not be provided to these areas.

An accessible path of travel has been provided to the entry, a bedroom, a bathroom, living and kitchen areas and meets the following performance requirement criteria of Clause 2.2 (c)(ii) regarding maneuverability to include the following:

To provide space sufficient to maneuver a wheelchair within a bedroom, a bathroom and a toilet or to provide a design and details whereby after adaptation there will be sufficient space to maneuver a wheelchair within these facilities and an accessible path of travel linking these facilities to the entry, living and kitchen areas.

The doorways to these areas need not provide door circulation spaces but a minimum of 820mm clear door width should continue to be provided to at least the bedroom 2 & 3 doors (including the garage door) and this has been achieved.

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**5.8 Bathroom**

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Bathrooms within an adaptable housing unit are to comply with AS1428 after adaption. Issues to be considered include slip resistant floor, shower minimum 1100x1160mm with future provision for accessible features including handheld shower and grabrails, shower waterproofing to AS3740, recessed soap holder, washbasin with knee clearance, adequate circulation areas, automatic control of hot water, double GPO next to the mirror and the provision of capstan or lever taps. Refer to AS4299, Clause 4.4.4.



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**Compliance Summary:**

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Compliant configuration.

**Commentary:**

The ensuite bathroom offers dimensions conducive to adaption.

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**5.9 Kitchen**

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Essential requirements for kitchens within an adaptable housing unit allow for future adaption and include items such as sinks, taps, cooktops, location of oven, cupboard handles, general power outlets, dimensions of the space and location of refrigerator.

Kitchens are required to have a clear space between benches of 1550mm. An area of bench top 800mm wide is required that can be adjusted through the height range of 750 – 850mm above floor level. Alternatively, a section of this dimension needs to be easily replaceable to achieve this requirement.

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**Compliance Summary:**

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Compliant configuration.

**Commentary:**

Kitchen offers circulation areas as described above.

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**5.10 Bedroom**

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At least one bedroom within an adaptable housing unit is required to have adequate space for a wardrobe and a queen size bed with minimum 1540mm wide circulation at the foot of the bed and 1000mm at the side of the bed (1200mm preferred) for compliance with AS1428.2, Clause 6.1.

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**Compliance Summary:**

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Compliant.

**Commentary:**

Bedroom 1 offer compliant circulation areas, a queen size bed, 1000mm bedside circulation and 1540mm wide end of bed circulation. The bed and circulations are shown on documentation.

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**5.11 Living Area**

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Living areas within an adaptable housing unit are required to have circulation areas that allow a wheelchair to maneuver within the space at time of construction. In this regard, an area with 2250mm diameter is required, clear of furniture. AS4299, Clause 4.7 outlines this requirement. A telephone outlet adjacent to a general power outlet is also a requirement for living areas.

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**Compliance Summary:**

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Compliant.



**Commentary:**

The living area within the adaptable unit is an open-plan area which meets the circulation requirements of AS4299. A 2250mm diameter is shown on documentation.

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### 5.12 Laundry

Requirements for laundry areas within adaptable housing units include the provision for an automatic washing machine / clothes dryer with clear space in front of the appliances. An area of 1550mm diameter will achieve this requirement. Laundries are to have slip resistant floors and door circulation areas in compliance with AS1428.1.

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**Compliance Summary:**

Compliant configuration.

**Commentary:**

Laundry offers compliance with an area of 1550mm between bench and the wall.

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### 5.13 Floors Generally

AS4299 requires that all floor surfaces including bathrooms, laundry and external paved surfaces be slip resistant to comply with AS3661.1.

Non-essential items include that after modification, carpets should have short pile and consideration should be given to the fire hazard indices. Floors should be easily cleanable and bold patterns should be avoided to eliminate confusion for persons with vision impairment.

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**Compliance Summary:**

To be addressed during detailed design

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### 5.14 Ancillary Items

Ancillary items are not considered essential items. Switches such as light switches must be located within the accessible height range of 900-1100mm above the floor level.

Power outlets should be located at a height not less than 600mm affl – a height of 1000mm is preferred. They should be located not less than 500mm from internal corners.

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**Compliance Summary:**

To be addressed during detailed design



## 6 Conclusion

This report demonstrates that the fundamental aims of accessibility legislation are achievable within the proposed development. Spatial planning and general arrangements of facilities will offer inclusion for all building users.

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

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

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

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



## Appendix 1 | Accessibility Requirements



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

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### **Adaptable Units**

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An adaptable housing unit is defined by AS4299 as follows:

*A housing unit which is designed and constructed to meet the performance requirements stated in the standard. It is designed in such a way that it can be modified easily in the future to become accessible to both occupants and visitors with disabilities of progressive frailties.*

There are requirements for both the pre-adaption state and post-adaption states. In the pre-adapted state, an adaptable unit is required to be “visitable” and these requirements are applicable at the time of construction. Other elements are to be provided on adaption of the unit.

At **time of construction**, the following are required:

- An accessible entrance per AS1428.1 (2009).
- A visitable toilet at the entry level per AS4299
- An accessible path of travel from the entrance to the visitable toilet within the meaning of AS1428.1 (2009)
- An accessible path of travel from the entrance to the living area within the meaning of AS1428.1 (2009)

At **time of adaption**, the following are required:

- Compliance with AS4299 Appendix A – essential criteria. This includes kitchen layouts, laundry layouts, carparking, etc

The following requirements for adaptable apartments are based on AS4299, Section 4 – Design of the Housing Unit, essential criterion as listed in Appendix 1, AS4299 Schedule of Features for Adaptable Housing. Compliance with the following features will achieve a Class C adaptable housing unit.

#### **Private Car Accommodations**

Private carparking spaces for adaptable housing units shall be large enough to enable a person with a wheelchair to get in and out of both the car and the parking space. A width of 3.8m is necessary to enable the driver to alight, open the passenger door and assist a person with a disability into a wheelchair. A clear vertical clearance of 2.5m is desirable.

The introduction of AS2890.6 in 2009 offers an approach to the provision of accessible carparking that can be easily accommodated in a standard carparking layout. It offers an accessible space 2400mm wide with a circulation area 2400mm wide adjacent to the space (4800mm for a single space). The circulation area can be “shared” between two accessible spaces (7200mm for two spaces). This offers carparking spaces in excess of the minimum requirement of AS4299 (3800mm).



### Letterboxes

Letterboxes to adaptable housing units should be located on a hard standing area connected by an accessible path of travel to the adaptable housing unit. Letterboxes to adaptable apartments should be provided within the accessible height range of 900-1100mm affl.

### Accessible Entrance

Entrances to adaptable housing units are to comply with AS4299 Clauses 4.3.1 and 4.3.2. AS4299 which require that the entry doors comply with AS1428.2 **at time of construction**. The minimum clear opening width of the doorway is to be 850mm and allow for wheelchair maneuverability (provide minimum 1550mm long area in front of the doorway). Entrances to the adaptable housing units to be weatherproofed.

Door hardware is to comply with AS1428. In this regard, entry door hardware is to be in the accessible height range of 900-1100mm above finished floor level. The use of lever handles is encouraged to assist persons with a manual disability such as arthritis.

### Doorways

Doorways throughout adaptable housing units are required to have a clear opening width of 820mm. **At time of construction, an accessible path of travel within the meaning of AS1428.1 is required from the entrance to the visitable toilet and living area.** Other door circulation areas are to comply with AS1428.1 on adaption of the unit.

All door hardware is to be operable with one hand and in the height range of 900-1100mm above the floor level. The use of lever handles is encouraged to assist persons with a manual disability such as arthritis.

### Internal Corridors

There is a requirement for all corridors to be minimum 1000mm.

### Visitable Toilet

Each adaptable housing unit is required to have a toilet on the entry floor that is a visitable toilet within the meaning of AS4299 **at time of construction**. The toilet is to be installed in compliance with AS1428 (correct set-out distance from fixed walls) and have the capacity to accommodate a grabrail that complies with Figure 4.5 of AS4299. A circulation area 1200mm x 900mm in front of the toilet and clear of door swings and fixtures is required complying with Figure 1.1 of AS4299. Slip resistant floors are also required.

### Bathrooms

Bathrooms within an adaptable housing unit are to comply with AS1428 after adaption. Issues to be considered include slip resistant floor, shower minimum 1100x1160mm with future provision for accessible features including handheld shower and grabrails, shower waterproofing to AS3740, recessed soap holder, washbasin with knee clearance, adequate circulation areas, automatic control of hot water, double GPO next to the mirror and the provision of capstan or lever taps. Refer to AS4299, Clause 4.4.4.





### **Kitchens**

Essential requirements for kitchens within an adaptable housing unit allow for future adaption and include items such as sinks, taps, cooktops, location of oven, cupboard handles, general power outlets, dimensions of the space and location of refrigerator.

Kitchens are required to have a clear space between benches of 1550mm. An area of bench top 800mm wide is required that can be adjusted through the height range of 750 – 850mm above floor level. Alternatively, a section of this dimension needs to be easily replaceable to achieve this requirement.

### **Bedrooms**

At least one bedroom within an adaptable housing unit is required to have adequate space for a wardrobe and a queen size bed with minimum 1540mm wide circulation at the foot of the bed (for compliance with AS1428.2, Clause 6.1).

### **Living Area**

Living areas within an adaptable housing unit are required to have circulation areas that allow a wheelchair to maneuver within the space **at time of construction**. In this regard, an area with 2250mm diameter is required, clear of furniture. AS4299, Clause 4.7 outlines this requirement. A telephone outlet adjacent to a general power outlet is also a requirement for living areas.

### **Laundry**

Requirements for laundry areas within adaptable housing units include the provision for an automatic washing machine / clothes dryer with clear space in front of the appliances. An area of 1550mm diameter will achieve this requirement. Laundries are to have slip resistant floors and door circulation areas in compliance with AS1428.1.

### **Floors Generally**

AS4299 requires that all floor surfaces including bathrooms, laundry and external paved surfaces be slip resistant to comply with AS3661.1.

Non-essential items include that after modification, carpets should have short pile and consideration should be given to the fire hazard indices. Floors should be easily cleanable and bold patterns should be avoided to eliminate confusion for persons with vision impairment.

### **Ancillary Items**

Ancillary items are not considered essential items. Switches such as light switches must be located within the accessible height range of 900-1100mm above the floor level.

Power outlets should be located at a height not less than 600mm affl – a height of 1000mm is preferred. They should be located not less than 500mm from internal corners.



## Appendix 2 | Best Practice Options for Consideration



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

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### **Luminance Contrast**

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

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

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### **Terminology (Best-practice recommendation)**

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

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### **Lighting and Glare**

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

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

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

