



PSE ACCESS CONSULTING

Access/Built Environment
Architectural Advice/Training
Adaptation/Certification/B.C.A
ACAA Accredited.

ASSESSMENT REPORT
CLARIFICATION; ADAPTABLE/VISITABLE HOUSING.

ACCESS AND COMPLIANCE REQUIREMENTS

BUILDING CODES AUSTRALIA (BCA),
DISABILITY DISCRIMINATION ACT 1992 (DDA),
KU-RING-GAI COUNCIL, Development Control Plan No. 31, ACCESS.
DCP No. 55 Railway-Pacific Hwy Corridor.

SUBJECT; RESIDENTIAL DEVELOPMENT.

SITE ADDRESS; 6a-8 Buckingham Road, Killara, NSW.

REPORT BY; Mr PETER SIMPSON.
ACAA Accredited Access Consultant.
Accreditation No. 185

14th August 2012

14 Mashman Ave
Wentworthville 2145



SUBJECT; RESIDENTIAL DEVELOPMENT. ACCESS AND COMPLIANCE REQUIREMENTS.

This report/clarification, and previous reports, is in regard to the residential development complying (Adaptable and visitable housing) with the Building Codes Australia (BCA & specifically Part D3), and related Australian Standards/ KU-RING-GAI COUNCIL DCP No. 31-*Access*/ KU-RING-GAI COUNCIL DCP *Multi unit housing* No.55 Railway-Pacific Hwy Corridor, in addressing the requirements of Disability Discrimination Act 1992 (DDA) pertaining to access for people with disability.

COMPOSITION OF PROPOSED DEVELOPMENT;

This residential development at this address consists of;

1. Three levels, in total, of basement car parking under the residential block with access from Buckingham Road the basement parking, and subsequent street access, to the adjacent property 6A-8 Buckingham Road Killara.
2. All apartments in the building are "accessible to the disabled" from Buckingham Road, Pacific Highway and the provided basement parking "following a reasonable route" to satisfy the requirements of DCP No. 31 Clause 10.
3. Apartments are "**accessible to the disabled**" from the provided basement parking and from the street "following a reasonable route" for the requirements of KU-RING-GAI COUNCIL DCP No. 31-*Access* Clause 10 *Types or Class of development* 1 and DCP *Multi unit housing* No.55 *Railway-Pacific Hwy Corridor* Clause 4.7 *Adaptability and Accessibility* C-3.
4. Apartments No. 04, 15, 20, 27 & 34 (5 apartments classified as "**Manageable**") are **finished**, as built, to Council "**Access**" requirements (DCP No. 31-*Access* Clause 10) for people with disability as well as being **fully compliant** with the enhanced requirements/features of AS4299-1995 *Adaptable housing*.
5. Proposed are no less than 70% **visitable** units for people with disability.
6. Apartments No. 02, 03, 05, 06, 07, 08, 10, 11, 13, 17, 18, 19, 22, 24, 25, 26, 29 31, 32, 33, 36, 38, 39, 40, 41 are "**VISITABLE**"/**accessible to the disabled**" from the provided basement parking "following a reasonable route" to satisfy the requirements of KU-RING-GAI COUNCIL DCP No. 31-*Access* Clause 10 *Types or Class of development* 1.
7. Apartments No. 04, 15, 20, 27 & 34 (5 apartments classified as "**Manageable**") are **finished**, as built, to Council "**Access**" requirements (DCP No. 31-*Access* Clause 10) for people with disability as well as being (but not called for in Council DCP No. 31) **fully compliant** with the enhanced requirements/features of AS4299-1995 *Adaptable housing*.
8. Plans assessed for this report, but not limited to, are by Aleksandar Design Group Pty Ltd and include Drawing Nos DA-01, - DA 19 Issue B dated 17 June 2011 prepared by Aleksandar Design Group.
9. Plans show clearance and circulation areas required for **VISITABLE** and ADAPTABLE/**MANAGABLE** units.

REFERANCING;

➤ Disability Discrimination Act 1992.

Part 3 Objects

The objects of this Act are:

- (a) to **eliminate**, as far as possible, **discrimination** against persons on the ground of disability in the areas of:
 - (i) work, **accommodation**, education, **access to premises**, clubs and sport; and
 - (ii) the provision of goods, facilities, services and land; and
 - (iii) existing laws; and
 - (iv) the administration of Commonwealth laws and programs; and
- (b) to ensure, as far as practicable, that persons with disabilities **have the same rights** to equality before the law as the rest of the community; and
- (c) to promote recognition and acceptance within the community of the principle that persons with disabilities have the same fundamental rights as the rest of the community.

Disability Discrimination Act 1992 applies to people with disability in making it, as far as possible, unlawful to discriminate in regard to access to premises. The objectives of the DDA Part 2 Division 2 Section 23 are:-

Part 23 Access to premises

Disability Discrimination Act 1992

Part 4 Interpretation

premises includes:

- (a) a **structure, building**, aircraft, vehicle or vessel; and
- (b) a place (whether enclosed or built on or not); and
- (c) a part of premises (including premises of a kind referred to in paragraph (a) or (b)).

- (1) It is unlawful for a person to discriminate against another person on the ground of the other person's disability or a disability of any of that other person's associates:
 - (a) by refusing to allow the other person access to, or the use of, any premises that the public or a section of the public is entitled or allowed to enter or use (whether for payment or not); or
 - (b) in the terms or conditions on which the first-mentioned person is prepared to allow the other person access to, or the use of, any such premises; or
 - (c) **in relation to the provision of means of access to such premises**; or
 - (d) by **refusing to allow the other person the use of any facilities in such premises that the public or a section of the public is entitled or allowed to use** (whether for payment or not); or
 - (e) in the terms or conditions on which the first-mentioned person is prepared to allow the other person the use of any such facilities; or
 - (f) by requiring the other person to leave such premises or cease to use such facilities.

Part 25 Accommodation

- (1) It is unlawful for a person, whether as principal or agent, to discriminate against another person on the ground of the other person's disability or a disability of any of that other person's associates:
 - (a) by refusing the other person's application for accommodation; or

- (b) in the terms or conditions on which the accommodation is offered to the other person; or
- (c) by deferring the other person's application for accommodation or according to the other person a lower order of precedence in any list of applicants for that accommodation.

Australian Standards/Legislation called into effect by the DDA;

- **Building Codes Australia (BCA)**
- **AS1428.1-2009 *Design for access and mobility***
- **AS4299-1995 *Adaptable Housing*.**
- **KU-RING-GAI COUNCIL, Development Control Plan No. 31, ACCESS.**

- **BCA Part D3 Access for People with disability** applies to any **new building** work.

The Building Codes Australia (BCA) calls for compliance with BCA Part D3 *Access for people with disability* for general building access for people with disability however it does not stipulate requirements for access in Class 2 buildings only in the associated car parking facilities. This area must meet the requirements of **AS2890.1-2004, Off Street Parking** in design specifications.

Australian Standards called into effect in addition to BCA requirements;

- **AS1428.1-2009 *Design for access and mobility***
- **AS4299-1995 *Adaptable Housing*.**
- **AS2890.6-2009 *Parking facilities-Off street parking for PWD*.**
- **AS1735.12 Lifts, Escalators and Moving Walkways.**

- **KU-RING-GAI COUNCIL,**
Development Control Plan No. 31, ACCESS.

This specific local Government legislation reinforces the requirements of BCA and DDA with some parts of this DCP calling on the enhanced features of AS1428.2 *Continuous path of travel*.

The primary purpose of this DCP is to assist proponents and Council in ensuring the requirements for equality of access, in addressing the Australian Disability Discrimination Act 1993, are satisfied when building work is proposed.

It provides guidelines for access, assists in better design of buildings and space, ensure that new development is accessible and useable as well as compliant with relevant standards, codes and legislation.

This plan provides an assessment tool, along with the relevant Australian Standards/Codes, for both building and development application with respect to the provision of facilities for improved access and mobility.

For the purpose of this plan (DCP No. 31 **Clause 10. Categories to which plan applies**) **access** is defined as;

1. An ability to travel from one point to another in a **continuous and uninterrupted** manner following a **reasonable route**.

Type or Class of Development;

2. Medium density residential flat buildings;

Areas to Be Accessible;

Any residential development containing eight or more dwellings shall **provide one dwelling that is accessible to the disabled**. A further dwelling, accessible to the disabled, shall be provided for every 20 dwellings provided thereafter. For further information on this matter, see **Disability Discrimination Act**. In buildings where designated units are required all facilities provided for the building occupants are to be accessible.

DCP No.31 Clause 3. AIMS OF PLAN.

f. Ensure that dwellings suitable for the disabled are provided in new multi-unit residential construction.

There is proposed to be provided five (5) of the adaptable/accessible apartments, which is in excess of the requirements of Councils DCP 31, to be finished at construction to comply with the **enhanced features required by AS4299-1995 Adaptable Housing**. These enhanced features provides for accessibility/adaptability and liveability, for a person with disability, without restrictions (as far as possible) to their daily life routine.

At a minimum no less than five percent (>5% adaptable automatically making them "VISITABLE") of the apartments are to the technical specifications/requirements of AS4299 1995 *Adaptable housing* as required by KU-RING-GAI COUNCIL DCP No. 31-*Access* Clause 10 *Types or Class of development* 2. These are distributed within the buildings with Apartments No. A101, A204, 304 on each residential level being "typical" examples but not limited to.

➤ DCP Multi unit housing No.55 Railway-Pacific Hwy Corridor.

4.7 Social dimensions

Adaptable housing is housing that is designed to be flexible to be easily modified at a later stage to cater for the special needs of an occupant or frequent visitor who may become frail, develop a disability or who have a disability that may become worse over time. Simple inexpensive design features incorporated during construction can save the need for expensive renovations as needs change in the future.

| Design Objectives | Design Controls |
|--|---|
| Adaptability and accessibility | |
| O-1 Housing choice for aged and disabled persons. | C-1 Applicants are to demonstrate that planning and design measures provide access for people with disabilities: |
| O-2 Housing that allows people to stay in their home as their needs change due to aging or disability. | i. Building design shall be consistent with the Controls of AS 1428.1-1998 Design for Access and Mobility. |
| O-3 Housing that is appropriate to the needs of visitors who are elderly or who have a disability. | ii. Disabled access paths / ramps should be of a sufficient width and gentle slope up to 1 in 14 slope, include handrails and path lighting and offer direct access between the street frontage and principal building entrances. |
| | iii. Bends or corners in access paths and ramps shall be of sufficient width and radius to allow the maneuvering of wheelchairs and mobility scooters. |
| | iv. The ramp should not dominate the visual appearance of the development. |
| | C-2 Each adaptable dwelling must be provided with at least one disabled car parking space designed in accordance with AS2890.1 |
| | C-3 At least 70% of dwellings are to be "vitable" in accordance with the definition prescribed under Appendix F. |

"Visitable housing unit" is to be visitable by people who use wheelchairs, in that there must be at least one wheelchair accessible entry and path of travel to the living area and to a toilet that is either accessible (A toilet complying with the floor space requirements described in AS1428.1) or visitable (A toilet which has a space of minimum 1250mm in front of the toilet that is either accessible or visitable).

The process of adaptation are all varying/needs specific parts of the adaptation process and are individual person oriented with no one adaptation suiting all.

➤ **AS4299-1995 Adaptable housing;**

The concept of 'Adaptable housing' or "barrier free/accessible" design has traditionally been considered 'special'- separate from mainstream housing design. Custom designed housing to meet the needs of people with disabilities can be expensive because they fall outside common design and building practices.

Adaptable design, or universal design, involves a move away from designing special accommodation for different community groups with different needs. It is design which avoids the personal and economic costs that accompany social dislocation.

The objectives of 'Adaptable housing' standards are

- a) That **housing is designed and constructed or altered** in a way which **satisfies the performance requirements for adaptable housing** enumerated in Clause 2.2 in having visitability, avoidance of level changes, manoeuvrability for occupants & visitors as well as ease of further adaptation.
- b) That housing is designed in such a way that **later alterations to suit individual requirements can be achieved at minimal extra initial cost.**
- c) That they are designed in such a way that it will **adapt to suite the widest range of lifetime needs.**
- d) The **initial design will allow** for visitability through an **accessible path of travel** to the living room and toilet.
- e) These units to meet the "adaptable housing" criteria must ensure that they are **capable of being adapted** with **relative ease** and at **minimal inconvenience** and cost (*AS4299 Foreword, principals (b).*)

AS 4299 Adaptable housing;

Clause 2.2 Performance requirements.

- (d) **Ease of adaptation** If the design for adaptation requires further demolition of walls then these walls shall be non load-bearing and free of electrical and plumbing services.

2.3 POTENTIAL FOR ADAPTATION To obtain certification as an adaptable housing unit, 'as built' drawings showing the housing unit in its pre-adaptation and post-adaptation stages shall be provided. A description of how the adaptation is to be achieved shall also be provided.

AS 1428.2—1992

6

6.2 Circulation space for 180° wheelchair turn The space required for a wheelchair to make a 180° turn shall be not less than 2070 mm in the direction of travel and not less than 1540 mm wide.

➤ Accessible Housing;

What is an accessible and adaptable home?

An **accessible** home is easy for people with access needs to live in or visit through simple changes like wider doors and hallways.

A level entry and wider doors can benefit a family with young children, while extra circulation space in the corridors and kitchen will benefit those who use wheelchairs. Access in the home can be improved through measures such as:

- stepless entry
- minimum clear door openings of 850mm
- minimum corridor widths of 1000mm
- easy grip door handles
- an accessible toilet on the ground level of the home
- no step into the shower
- car parking close to an accessible entrance

➤ Visitable Housing;

- Visitable housing is important to ensure that everyone can visit the homes of relatives, friends and neighbours.
- Everyone benefits from being able to readily visit others in their home or for everyone to be able to live temporarily in their home with a disability.
- Visitable dwellings allow everyone (including wheelchair users) to visit with dignity, stay overnight, and for an occupant with a disability to reside temporarily.
- In visitable dwellings the following is provided:
 - access to and through the front door (i.e. wider door and no step)
 - access into all rooms (i.e. wider doors and no steps) and adequate circulation space throughout
 - appropriate door furniture such as lever door handles and reachable switches, outlets and controls.
- All areas essential for visitability are located at the **entry level(s)** of a dwelling or are accessible via a lift or stair lift. This includes
 - Access to a living room, food preparation and eating area,
 - A bathroom with a hobbles (i.e. step free) shower, toilet,
 - A room for staying overnight.
- **Entry level (s)** is the level at which all people can enter a dwelling, including wheelchair users. There may be more than one entry level (e.g. with a lift) or the entry level may not be at street level (e.g. where the dwelling is on a slope and access is possible at another level)

Kuring-gai Multi-unit Housing

DCP No.55

Railway/Pacific Highway Corridor and St Ives Centre

Appendix F

Adaptable housing in Ku-ring-gai

"Visitable housing unit" is to be visitable by people who use wheelchairs, in that there must be at least one wheelchair accessible entry and path of travel to the living area and to a toilet that is either accessible (A toilet complying with the floor space requirements described in AS1428.1) or visitable (A toilet which has a space of minimum 1250mm in front of the toilet that is either accessible or visitable).

AS4299 contains the technical requirements to achieve a visitable dwelling.

SUBJECT; RESIDENTIAL DEVELOPMENT

ACCESS and COMPLIANCE;

The requirements of BCA/NCC-2011 Part D3 *Access for people with disabilities* and AS1428.1-4, as well as associated standards/legislation/Council DCP No.31, are met with these proposed development and in their relation to the requirements to satisfy relevant State and Federal legislation.

These requirements of BCA/DCP have been addressed in the following manner;

Basement Car parking;

All levels of basement car parking is provided with access from Buckingham Road via the adjoining allotment,

- The appropriate “headroom” is present in the car park to satisfy the requirements of AS/NZS2890.6:2009 *Parking facilities-Off street parking for people with disability* Clause 2.4 *Headroom* which calls for a general “floor to an overhead obstruction” measurement of 2200mm. The dedicated accessible (disabled) car parking spaces/garages with 2500mm clearance above the majority of that area as detailed in Clause 2.4 & Figure 2.7 *Headroom required above car space for people with disability*.
- The accessible (disabled) car parking space for each of the adaptable/”Manageable” units is proposed to be technically and feature designed to comply with the AS2890.2009 Part 6 *Parking facilities-Off street parking for people with disability* and Figure 22.
 - i. The parking space is proposed to be technically and feature designed to comply with the AS2890.2009 Part 6 *Parking facilities-Off street parking for people with disability* Section 2.2 *Parking space-dimensions* Point 1 *Angle parking spaces*.

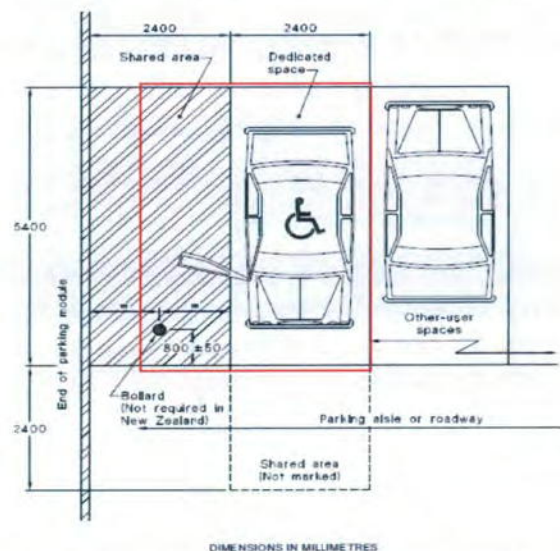


FIGURE 2.2 EXAMPLE OF AN ANGLE PARKING SPACE WITH SHARED AREA ON ONE SIDE ONLY—DIMENSIONS FOR AUSTRALIA ONLY*

- This arrangement is a more usable configuration for all users (those with disability, 1 or 2 users, and need the wider spacing and those who do not) and pedestrians.

- This meets/exceeds the requirements of AS4299-1995 *Adaptable housing* Clause 3.7.

3.7 CAR PARKING

3.7.1 General Private car parking spaces 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 car parking space width of 3.8 m minimum is necessary to enable a driver to alight, open the passenger side door, and assist a person with a disability into a wheelchair, or for a side-loading ramp. A 3.8 m, minimum width is also required for a driver with a disability to unload a wheelchair and to alight. A roof to the car parking space is desirable.

NOTE: If it is required to unload the wheelchair within the garage, an internal vertical clearance of 2.5 m is necessary to operate a car roof wheelchair unit.

- It is also noted that further spaces of this size could be allocated without compromising overall numbers. Not all accessible apartments require a parking space of this larger size as in most cases they will not be occupied by a person with disability.
- Basement level 01 (8 visitor & 4 resident parking) is proposed to have pedestrian line marking between the two lifts to provide clearly apparent/defined and safe paths of travel from the parking to either of the lifts or for connectivity between the lifts.
- Appropriate signage (overhead signage and on ground for providing maximum driver awareness) will be installed for pedestrian safety with high quality finish wall/ceiling paint finish to impart an atmosphere of prestige in the building finish to pedestrian area.
- The wheelchair accessible lifts (one in each building provided, each adjacent to the manageable apartments) are provided for access to all level of the buildings and have a lift car size in excess of that required to be compliant with **AS1735.12 Lifts Escalators and Moving Walks, Section 2** (at a minimum 1100mm wide X 1400mm and a door opening of 900mm). This will allow an unobstructed path of travel from the dedicated accessible (disabled) car parking spaces to the various levels in this development.
- The lift car will have the appropriate controls/grab rails and emergency phone/intercom system for operation by a person with disability satisfying the requirements of AS1735.12 Part 7.2 *Provision in lift cars*, Part 7.3 *Location* & Part 7.4 *Design*.
- Access from the allotment boundary on Buckingham Road is provided to the entrance foyer/lift lobbies "following a reasonable route" and most convenient for people with disability or all residents including parents with prams to satisfy the requirements of KURRING-GAI COUNCIL DCP No. 31-*Access* Clause 10 ***Categories to which plan applies*** **access is defined as; 1.**

Residential;

- As detailed above (item 3 *Composition of proposed development*), at a minimum, five percent of the proposed apartments are not only accessible to Council "Access" requirements (DCP No. 31-*Access* Clause 10) but **fully compliant with** the requirements of **AS4299-1995 Adaptable housing**. These **manageable** apartments are compliant with the requirements of AS4299-1995 *Adaptable housing*, AS1428.1, to satisfy the requirements of DDA Part 25.
- These units meet the "adaptable housing" criteria in that they are **capable of being adapted** with relative ease and at minimal inconvenience and cost (**AS4299 Foreword, principals (b)**).

The technical requirements for “Adaptable” units are met in the following manner;

- Each of the “Adaptable” apartments has access to it by an uninterrupted **accessible path of travel** from the designated car spaces and allotment boundary compliant with the requirements of **AS4299 Clause 3.3.2 Accessible pathway** and BCA Part D3.2 (c) (ii).
- Access is available to the common areas and its letterbox area as called for to be considered in **AS4299 Clause 3.3.3 Residential development (a)** and complies with Councils DCP No. 31, Clause 10 Item 2.
- The entrance door, to each apartment, and their circulation area are to the dimension mandated by **AS4299** as well as **AS1428.1** which is called into effect. The doors have a clear opening dimension of minimum 850mm compliant with **AS4299 Clause 4.3 entrances, doorways & circulation spaces** as well as with AS1428.1-2009 Clause 13.2 *Clear opening of doorways* and door circulation space dimensions compliant with AS1428.1-2009 Clause 13.3 *Circulation space at doorways on a continuous accessible path of travel* and Figure 31.

Bathroom;

- The bathroom is designed **to be able to be adaptable** depending on the requirements of the adaptor. Any adaptation has the potential to meet the requirements of **AS4299-1995 Adaptable housing**.
- In general the bathroom has **the potential to comply** with AS1428.1 as specified in AS4299-1995 *Adaptable housing* Clause 4.4 *Sanitary facilities* Part 1 *General, All sanitary facilities and components shall be adaptable, at minimum cost, to potentially comply with AS1428.1 as a minimum and preferably with AS1428.2.*

The technical specifications for the bathroom are as follows,

- (i). The entry door will be compliant with AS1428.1-2009 Clause 13.2 *Clear opening of doorways* with a minimum 850mm clear opening dimension.
- (ii). The toilet pan is **able to be repositioned** in the adaptation process, **if required**, into the correct position as per **AS1428.1-2009 Clause 15.2.2 WC pan clearances & Figure 38 Water closet pan clearances, seat height and width** at 800mm to front of pan & 450mm centre from the side wall & the seat 470mm high. These are the same specifications set out in **AS4299 Figure 4.3**. This is also person specific and a change would be to meet their own needs.
- (iii). The grab rails, if required in the adaptation process, will be **able to be fitted** correctly for position and design compliant with **AS1428.1-2009 Clause 15.2.7 & Figure 42 Position of grab rails in water closet** along with all other fittings and fixtures such as the basin/vanity and mirror etc adapted for adaptors requirements. This is also person specific and a change would be to meet their own needs.
- (iv). The clear turning circle requirement of 1550mm is achievable in the adaptation process to comply with **AS1428.2 Clause 6.2**
- (v). It will be built with a hobbles shower area of the dimensions required and walls capable of having grab rails mounted in a manner to satisfy AS1428.1-2009 Clause 15.2.7 & Figure 42 *Position of grab rails in water closet*. The currently installed shower screen is of a type easily removed if required in the adaptation process. This is also person specific and a change would be to meet their own needs.

Bedroom;

- The bedroom **has the potential to be adaptable** to meet the requirements of AS4299 Clause 4.6 *Bedrooms* in having the potential to accommodate a queen size bed and wardrobe with the circulation space required of AS1428.2 Clause 6.2.
- The GPOs/light switches/telephone outlets/television outlets and other fittings/ fixtures are installed in accordance with the specifications of AS4299 Clause 4.6.2 to Clause 4.6.7.
- The remaining internal doors are compliant with **AS1428.1 7.2** Figure 11 with a minimum 820mm clear opening dimension.

❖ Example of adaption;

1. The “adaptable” unit has the dimensions required to comply with AS4299 Adaptable housing. Plans show “typical post adaption” layout of bathroom/ bedroom /living area are shown separate and required clear turning areas are shown on “Manageable” unit plans.
2. The bathroom has the required dimensions to allow full adaption, if required and typical, with the removal of the bath and relocation of the basin to that area to if a larger shower area and greater clear turning areas compliant fully with AS4299 or AS1428.2.
3. Repositioning of any required dividing wall, if required for instances above the 90 percentile wheelchair circulation, of light frame construction, allowed under AS4299 Adaptable housing Clause 2.2 *Performance requirements (d) ease of adaption*, allows this larger area
4. The bedroom has the required dimensions to allow full adaption with the repositioning of the wardrobe (if required) hanging space if the adaption is to satisfy a requirement above the 90percentile.
5. The living area and kitchen has the required dimensions to allow full compliance with the required clear turning areas and unhindered access to appliances/cupboards.

Laundry area;

- There is present the required clearance in front of appliances in the laundry area to be compliant with the requirements of AS4299 Clause 2.3 in that it has the “POTENTIAL FOR ADAPTION” to meet the specific needs of the adaptor.
- There is the “POTENTIAL” for the required clear turning area (AS4299 Clause 4.8 Laundry area Notes (1)) to be achieved on adaptation.
- For people with disability/occupant with disability (wheelchair users) the use of “clear floor space parallel approach” to the appliances, after adaption of the laundry has occurred, will in some cases be needed. Following is elaborated the technical detail.
- It is proposed the AS1428.1 Clause 5.1.2 *Continuous path of travel*, of not less than 1000mm and using the requirements/specifications of AS1428.2 *Design for access and mobility, Enhanced and Additional*, Clause 22 *Reach ranges*, Part 2 Side reach- *Wheelchair users* for “clear floor space parallel approach” for allowances.

4.8 LAUNDRY AREAS If a separate room is used for a laundry, circulation spaces at doors shall be in accordance with AS 1428.1. Provision for adequate circulation space shall be made in front of or beside appliances and under or adjacent to the tub to enable people who use wheelchairs to use all the facilities.

NOTES:

- 1 An area of 1550 mm diameter will satisfy this requirement.
- 2 For a work surface height of 870 mm a tub of maximum depth 210 mm is necessary to allow knee space underneath. Where a full depth laundry tub is provided knee space shall be provided beside it.

Living area/Kitchen;

- The required access to and within all living areas is provided with the required circulation space in the kitchen/dining/lounge/bedroom area to satisfy the requirements of AS4299 Clause 4.5.2 & 4.7.1.
- The work surface configuration of the kitchen is adaptable to comply with the requirements/specifications of **AS4299 Clause 4.5.5.** and Figure 4.8
- The remaining internal doors will be compliant with **AS1428.1 7.2** Figure 11, in having a minimum 850mm clear opening dimension.

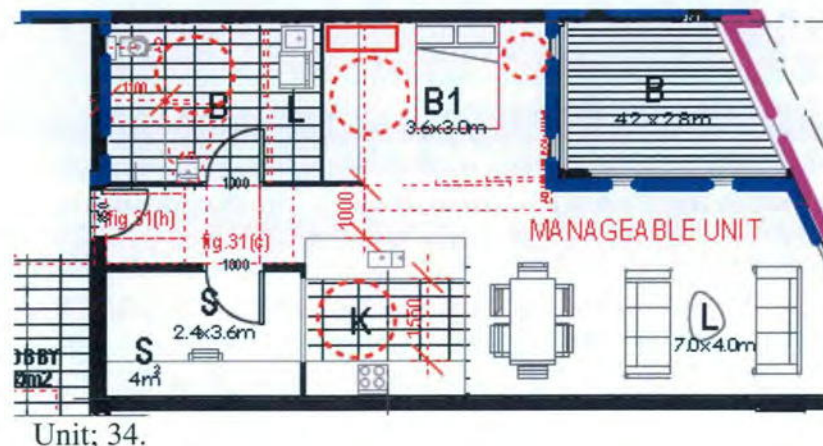
The “adaptable” apartments shown are “Typical unit layout” the number required by KU-RING-GAI COUNCIL DCP No. 31-*Access* as shown above. Access to and within the adaptable apartment is called for in this document as well as BCA and is provided as documented along with the provisions to satisfy the relevant standards.

Typical “Post adaption” showing 1550mm clear circulation spaces.

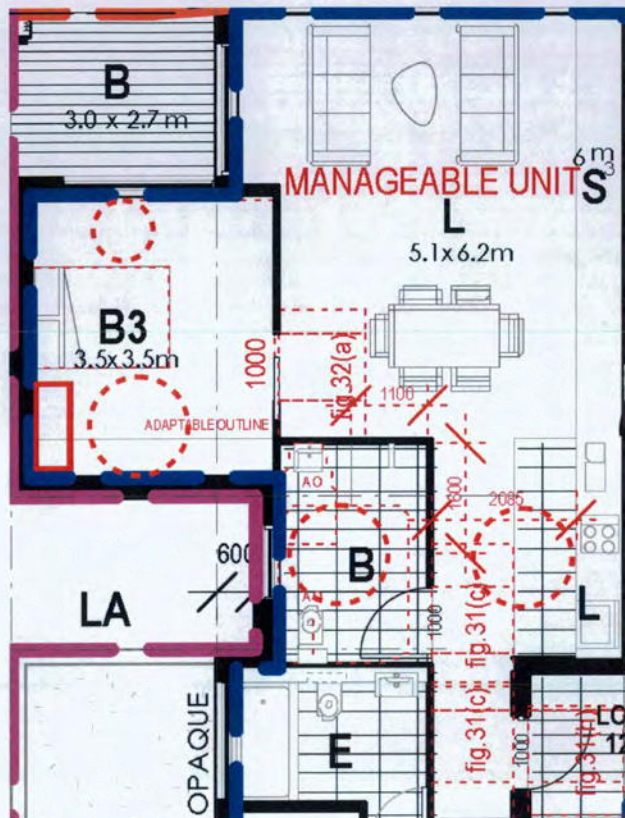
AS 1428.2—1992

6

6.2 Circulation space for 180° wheelchair turn The space required for a wheelchair to make a 180° turn shall be not less than 2070 mm in the direction of travel and not less than 1540 mm wide.



- Plans show for circulation spaces at doorways and the required hall width approaching a doorway.

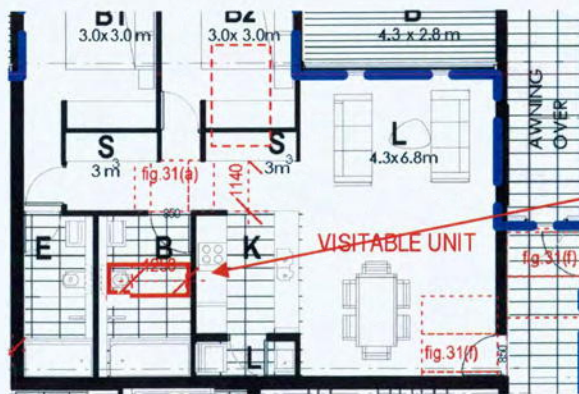


Apartment; 04.

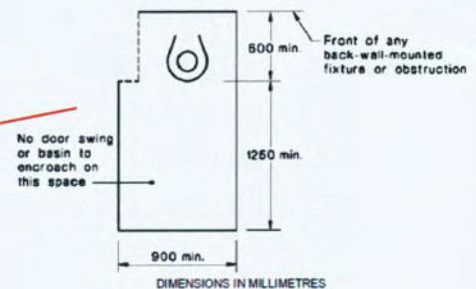
Typical "Visible" unit/bath room; Example, Unit Nos 17, 18 & 29..

AS4299 Adaptable housing.

1.4.12 Visible toilet → a toilet which has a space of minimum 1250 mm in front of the toilet × 900 mm wide clear of door swings and fixtures. (See Figure 1.1.)



Unit; 18.





Unit; 17.



Unit; 29.

- Proposed are no less than 70% **visitable** units (Including the >5% “Adaptable units as no stipulation in Council DCP that they are exempt from inclusion) for people with disability (Typically Apartments No. 02, 03, 05, 06, 07, 08, 10, 11, 13, 17, 18, 19, 22, 24, 25, 26, 29 31, 32, 33, 36, 38, 39, 40, 41).
- This meets the “Design objectives” of KU-RING-GAI COUNCIL DCP *Multi unit housing No.55 Railway-Pacific Hwy Corridor* Clause 4.7 *Adaptability and Accessibility* C-3 and Appendix F in that it is “visitable” by a person in a wheelchair with accessible paths of travel from the property boundary and accessible car space.
- They have accessible point of entry, required circulation space at doorways as per AS1428.2-1992 Clause 6.2, paths of travel within the unit a “visitable toilet” as per AS4299 *Adaptable housing* Clause 1.4.12 and a hobbles shower area.

COMMON FEATURES.

Residential Access;

1. Direct street access, by walkway to the ground floor level is available from Buckingham Road for the residential entry court to apartment lift foyers to hallways, staircases/lift lobby and apartments.
 2. All residential floors are accessed by lift/stairs from the residential street front entrance foyers and lift/stairs from the basement level of car parking.
- All walkways/ramps and paths of travel are compliant with the design and technical specifications of AS1428.1 Clause 10 *Walkways ramps and landings* for their gradients, surface finish and other relevant features.

6 CONTINUOUS ACCESSIBLE PATHS OF TRAVEL

6.1 General

A continuous accessible path of travel shall not include a step, stairway, turnstile, revolving door, escalator, moving walk or other impediment.

6.2 Heights of a continuous accessible path of travel

The minimum unobstructed height of a continuous accessible path of travel shall be 2000 mm or 1980 mm at doorways (see Figure 2).

6.3 Width of a continuous accessible path of travel

Unless otherwise specified (such as at doors, curved ramps and similar), the minimum unobstructed width (see Figure 2) of a continuous accessible path of travel shall be 1000 mm and the following shall not intrude into the minimum unobstructed width of a continuous accessible path of travel:

- (a) Fixtures and fittings such as lights, awnings, windows that, when open, intrude into the circulation space, telephones, skirtings and similar objects.
- (b) Essential fixtures and fittings such as fire hose reels, fire extinguishers and switchboards.
- (c) Door handles less than 900 mm above the finished floor level.

- Also the location (Preferred by Housing New South Wales to satisfy STATE ENVIRONMENTAL PLANNING POLICY (Housing for Seniors or People with a Disability) 2004 policy) of this residential development giving reasonable convenient access to public transport, buses and rail, for nearby shops, services, medical, education and leisure facilities as well as industrial/work areas for those in or seeking employment.
 - People with disability and the aged are also reasonably catered for by the public transport in the area as most that would be living here do not retain their personal transport due to their socio economic position.
- The entrances from Buckingham Road and common use open spaces are to have accessible/clearly defined paths of travel for all residents.
 - In this situation access is provided as far as is reasonable and to the highest degree possible, for people with disability to and within the development in line with the requirements of Building Codes Australia (BCA & specifically Part D3)/National Construction Code (NCC)-2012 Part D3.2.
 - Compliance, at a minimum, with the relevant Australian Standard 1428.1-2009 *Design for access and mobility* is adhered to in the technical requirements of the "Accessible paths of travel" giving safe, equitable, clearly defined paths of travel.

SECURITY & ACCESSIBILITY SEPARATION:

- Access to the residential levels/sections is proposed to be appropriately restricted to residents and authorised persons with, it would be envisaged, an intercom type security system to be installed in each unit for authorising access to non-residents.
- Entry to the residential car parking basement levels is appropriately security restricted to residents and those with the appropriate authorised security clearance.

Summary; 6a-8 Buckingham Road Killara.

As documented above all areas of compliance requirements have been catered for with this development. It is evident from the above that the requirements of KU-RING-GAI COUNCIL, DCP N0. 31, *ACCESS* and KU-RING-GAI COUNCIL DCP *Multi unit housing* No.55 *Railway-Pacific Hwy Corridor* Clause 4.7 *Adaptability and Accessibility* and Appendix F has been implemented in the design of these residential apartments at 6a-8 Buckingham Road Killara, including the provision of "Visitable apartments, no less than 70%, adaptable apartments, no less than 5%", and its surround, where/if applicable, built environment.

There is provided apartments "visitable" to people with disability which is compliant with Council "Access" requirements (DCP No. 31-*Access* Clause 10) as detailed above.

Access to and within this development, the provision of the required "Manageable/adaptable housing" is proposed as required by the varies legislation, Australian Standards and planning instruments pertaining to access for and provision of appropriate housing for people with disability.

There is proposed to be provided equitable and dignified access to and from all areas, between the public domain and residential units including common open space areas.

There will be provided equitable access to and within these dwellings and access to appropriate accommodation in a manner which will comply with AS1428.1-2009 *Design for access and mobility*, AS4299-1995 *Adaptable housing*, DDA and BCA/NCC-2011 Part D3.

The technical requirements called for in these standards, and related legislations/DCP's, are adhered too in addressing the Disability Discrimination Act 1992 legislation for access to premises and access to appropriate accessible/visitable/adaptable accommodation for people with disability.

Yours sincerely



Peter Simpson

Accredited by,
Association of Consultants in Access Australia