

PSE ACCESS CONSULTING

Access/Built Environment
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ACCESS/COMPLIANCE REPORT



ACCESS/ADAPTABILITY & SECURITY/ACCESSIBILITY SEPARATION

DISABILITY DISCRIMINATION ACT 1992 (DDA)

BUILDING CODES AUSTRALIA (BCA) 2016,

NATIONAL CONSTRUCTION CODE (NCC)-2016.

Disability (Access to Premises-Buildings) Standard-2010, (DAtP-BS-2010).

PENRITH DEVELOPMENT CONTROL PLAN 2010;

Referencing; PENRITH DEVELOPMENT CONTROL PLAN 2006.

SEPP No 65 Apartment Design Guide.

SUBJECT; RESIDENTIAL UNIT DEVELOPMENT.

SITE ADDRESS; 104-108 Lethbridge Street Penrith.

REPORT BY; PETER SIMPSON.

*ACAA Accredited Access Consultant.
Accreditation No. 185.*

9th April 2017.

SITE ADDRESS; 104-108 Lethbridge Street Penrith.

Access requirements for people with disability.

This report is in regard to the residential development complying with the Building Codes Australia (BCA- National Construction Code (NCC) 2016 & specifically Part D3), SEPP No 65 *Apartment Design Guide* and related Australian Standards/ accessibility requirements of PENRITH DEVELOPMENT CONTROL PLAN 2006. Part 4.6 *Residential-Apartment Development* in addressing the requirements of Disability Discrimination Act 1992 (DDA) pertaining to access (and applicable technical detail for Construction Certificate issuance) to and housing for people with disability.

A person with disability (wheelchair user or user of other mobility aid who cannot, or is limited in, negotiate stairs) purchasing or renting a unit would be aware of any geographic factors gradient/topography and location of the site and the issues in their negotiating access around such. These factors, such as such as location/availability of public transport, would influence their decisions on suitability for their occupancy.

COMPOSITION OF PROPOSED RESIDENTIAL DEVELOPMENT;

This proposed residential development at this address will consist of;

1. Twenty self-contained residential apartments with vehicle access from Evans Street.
2. Not less than two (>10% of apartments nominated) nominated, as built (Drawings indicate Typical layout) compliant with **AS4299 1995 *Adaptable housing***, “adaptable Class B” Units No 001 & 002 addressing a usual Council DCP requirement.
3. One level of residential basement car parking is provided.
4. Interconnecting pathways/paths of travel connecting all units and common/communal use deck/podium/areas internal too development as well as to street frontage pedestrian link to Lethbridge Street and basement pedestrian link to Evans Street.
5. This development is situated in close proximity (within the 400metre radius to transport nodes stipulated by Government) to public transport on Derby Street/High Street and (Most service to Penrith Station/Rail Interchange) which is, to the degree required by Disability Standards for Accessible Public Transport 2002, wheelchair accessible.
6. Provided is access “*where a passenger lift is installed to the entrance doorway of each sole-occupancy located on the levels serviced by the lift*” unit as per BCA/NCC-2016 Part D3 Table 3.1 Class 2 (a) and DAtPS-2010.
7. Provided is 20% of the units (001, 002 010 & 011) with the “Seven Core Design Elements” of Liveable Housing Australia being an objective of SEPP No 65 Apartment Design Guide Part 4 Clause Q4.

ACCESS COMPLIANCE FOR PEOPLE WITH DISABILITY.

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.

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.
 - (2) This section does not render it unlawful to discriminate against a person on the ground of the person's disability in relation to the provision of access to premises if:
 - (a) the premises are so designed or constructed as to be inaccessible to a person with a disability; and
 - (b) any alteration to the premises to provide such access would impose unjustifiable hardship on the person who would have to provide that access.

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.

(2) 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 the other person's associates:

Disability Discrimination Act 1992

Section 25

- (a) by denying the other person access, or limiting the other person's access, to any benefit associated with accommodation occupied by the other person; or
- (b) by evicting the other person from accommodation occupied by the other person; or
- (c) by subjecting the other person to any other detriment in relation to accommodation occupied by the other person; or
- (d) by refusing to permit the other person to make reasonable alterations to accommodation occupied by that person if:
 - (i) that person has undertaken to restore the accommodation to its condition before alteration on leaving the accommodation; and
 - (ii) in all the circumstances it is likely that the person will perform the undertaking; and
 - (iii) in all the circumstances, the action required to restore the accommodation to its condition before alteration is reasonably practicable; and
 - (iv) the alteration does not involve alteration of the premises of any other occupier; and
 - (v) the alteration is at that other person's own expense.

Standards/Legislation called into effect by the DDA;

- National Construction Code (NCC)-2016. (BCA)
- AS1428.1-2009 *Design for access and mobility*
- AS2890.6-2009, Off Street Parking.
- AS1735.12 Lifts, Escalators and Moving Walkways.
- AS4299-1995 Adaptable Housing.

The required proportion of the proposed residential apartments will have implemented the technical specifications/requirements of AS4299 1995 *Adaptable housing* in catering for housing for people with disability in addressing Part 25 of DDA and accessibility requirements of PENRITH DEVELOPMENT CONTROL PLAN 2006. Part 4.6 *Residential-Apartment Development* Clause 6.11 *Accessibility and adaptability C. Mandatory controls.*

➤ **Building Codes Australia (BCA/NCC-2016) Part D3.**

The Building Codes Australia (BCA)/ National Construction Code (NCC) 2016 clearly specifies, BCA/NCC Part D3 *Access for people with disabilities* Part D3.2 *General building access requirements* (c) (i) from the allotment boundary at the main **points of entry**, access compliant with AS1428.1 is to be provided to people with disabilities.

The BCA/NCC-2016 calls for general access to a building to be compliant with **BCA Part D3 Table D3.2** *Requirements for access for people with disability; Class 2 building or group of buildings. (a) To and within; Common areas and unique features and services.*

BCA/NCC-2016; Part D3 Access for People with disability

The BCA is referred to as a 'performance based' code, describing acceptable **Performance Requirements** that **buildings** and other structures throughout Australia must meet.

D3.1 General building access requirements

Buildings and parts of buildings must be *accessible* as *required* by **Table D3.1**, unless exempted by **D3.4**.

Table D3.1 REQUIREMENTS FOR ACCESS FOR PEOPLE WITH A DISABILITY

Class of building	Access requirements
Class 2	
Common areas	<p>From a pedestrian entrance <i>required</i> to be <i>accessible</i> to at least 1 floor containing <i>sole-occupancy units</i> and to the entrance doorway of each <i>sole-occupancy unit</i> located on that level.</p> <p>To and within not less than 1 of each type of room or space for use in common by the residents, including a cooking facility, sauna, gymnasium, <i>swimming pool</i>, common laundry, games room, individual shop, eating area, or the like.</p> <p>Where a ramp complying with AS 1428.1 or a passenger lift is installed—</p> <p>(a) to the entrance doorway of each <i>sole-occupancy unit</i>; and</p> <p>(b) to and within rooms or spaces for use in common by the residents, located on the levels served by the lift or ramp.</p>

SECTION D ACCESS AND EGRESS

OBJECTIVE


D01

The *Objective* of this Section is to—

- (a) provide, as far as is reasonable, people with safe, equitable and dignified access to—
 - (i) a building; and
 - (ii) **the services and facilities** within a building; and
- (b) safeguard occupants from illness or injury while evacuating in an emergency.

Compliance with the BCA/NCC-2016 will encompass the basement car parking levels and all other levels including the residential “adaptable” apartments of this development. The residential “adaptable” apartments will have additional requirements to comply with Councils DCP and relevant standards/legislation.

➤ **PENRITH DEVELOPMENT CONTROL PLAN 2010.**

	Penrith City Council: Development Control Plan 2010	D2 Residential Development
<h2>D2 Residential Development</h2>		
<h3>A. Background</h3>		
<p>Penrith Local Environmental Plan (LEP) 2010 and Penrith Development Control Plan (DCP) 2010 (this Plan) apply primarily to the industrial and rural areas of the City. With the exception of the R5 Large Lot Residential zone, there are no residential zones within Penrith LEP 2010. Consequently, the R5 zone is the only residential zone to which this Plan applies. All other residential land in the City will continue to be zoned under the relevant, current instrument and the provisions of other DCPs, such as Penrith DCP 2006, will continue to apply.</p>		

➤ **PENRITH DEVELOPMENT CONTROL PLAN 2006.**

Part 4 Section 4.6 Residential – Apartment Development

Part F – Urban design – important details

6.11 Accessibility and Adaptability

A. Objective

Ensure that dwellings are accessible to persons with impaired sight or partial mobility.

B. Explanatory Notes / Rationale

As our population ages, dwellings must be capable of adaptation in order to accommodate residents who may experience declining mobility or sight.

C. Mandatory Controls

I. Demonstrate that planning and design measures do not prevent access by people with disabilities:

- a) access pathways should slope gently and evenly, with a non-slip finish and no steps between the street frontage and principal building entrances;
- b) stair nosings should have a distinctive colour and texture;
- c) dwellings should have:

- d) dimensions consistent with AS 1428.1-1998-Design for access and mobility.
- e) hallways at least 1m wide.
- f) circulation areas in bathrooms at least 1 m wide.

II. Demonstrate that dwellings have been designed to meet the needs of an ageing population:

- a) incorporate design measures which are appropriate to people with disabilities; and
- b) employ lever-type door handles and traditional cruciform tap-handles; and
- c) provide for future low cost modifications to bathrooms:
 - future removal of hobs from shower recesses;
 - provision for future attachment of grab-rails to walls.
- d) provide for future low-cost modifications to kitchens including replacement of underbench shelves with drawers & attachment of grab-rails.
- e) provide appropriate levels and location of lighting.

➤ 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

➤ 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.

The AS4299-1995 *Adaptable housing* "schedule of features for adaptable housing" should be provided as part of the "description of how the adaptation is to be achieved" for certification.

The AS4299-1995 *Adaptable housing* "schedule of features for adaptable housing" is also critical in ensuring that the appropriate requirements are in place at construction and final detail. This gives the schedule of features for completion to enable later adaption with out unforeseen complications and expenses.

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 people with disability.

➤ **Disability (Access to Premises-Buildings) Standard-2010.**

Purpose of the Premises Standards

4. The purpose of the Premises Standards is to provide:
- a nationally applicable set of provisions that detail what must be done to provide for non-discriminatory access to public buildings for people with disability
 - the first and perhaps the most significant step in the development of consistent and uniform requirements for non-discriminatory building access — bringing together the access requirements under the DDA and building law, and

Premises Standards would harmonise the requirements of the Building Code and the Disability Discrimination Act in relation to access to buildings through incorporation of the Access Code into the Building Code. The Access Code forms Schedule 1 of the Premises Standards and contains its technical requirements.

Part 2 Scope of Standards

2.1 Buildings to which Standards apply

- (1) Subject to subsection (2), these Standards apply to the following:
- (a) a new building, to the extent that the building is:
- (i) a specified Class 1b building; or
 - (ii) a Class 2 building that has accommodation available for short-term rent; or

Access Code for Buildings Schedule 1
Access for people with a disability Part D3

Class of building	Access requirements
Class 2	
Common areas in buildings where one or more <i>sole-occupancy units</i> are made available for short-term rent	<p>From a pedestrian entrance <i>required</i> to be accessible to at least one floor containing <i>sole-occupancy units</i> and to the entrance doorway of each <i>sole-occupancy unit</i> located on that level.</p> <p>To and within not less than one of each type of room or space for use in common by the residents, including a cooking facility, sauna, gymnasium, <i>swimming pool</i>, common laundry, games room, individual shop, eating area, or the like.</p> <p>Where a ramp complying with AS 1428.1 or a passenger lift is installed-</p> <ol style="list-style-type: none"> (a) to the entrance doorway of each sole-occupancy unit; and (b) to and within rooms or spaces for use in common by the residents, <p>located on the levels served by the lift or ramp.</p>

➤ **STATE ENVIRONMENTAL PLANNING POLICY No 65**

Design Quality of Residential Flat Development.

Aims of Policy;

The aims of this Policy are as follows:

- (a) improve the design quality of residential flat development in New South Wales,
- (b) recognises that the design quality of residential flat development is of significance for environmental planning for the State due to the economic, environmental, cultural and social benefits of high quality design,
- (c) Improving the design quality of residential flat development aims:
 - (a) to ensure that it contributes to the sustainable development of New South Wales:
 - (i) by providing sustainable housing in social and environmental terms, and
 - (ii) by being a long-term asset to its neighbourhood, and
 - (iii) by achieving the urban planning policies for its regional and local contexts,

Part 4 | Designing the building

4Q Universal design

Universal design is an international design philosophy that enables people to continue living in the same home by ensuring that apartments are able to change with the needs of the occupants. Universally designed apartments are safer and easier to enter, move around and live in. They benefit all members of the community, from young families to older people, their visitors, as well as those with permanent or temporary disabilities.

Incorporating universal design principles in apartment design is a step towards producing a robust, flexible housing stock. It ensures that simple and practical design features are incorporated into new buildings that would be difficult and costly to retrofit at a later date.

Universal design is different to adaptable housing which is governed by *Australian Standard AS 4299-1995 Adaptable Housing* and is specifically designed to allow for the future adaptation of a dwelling to accommodate the occupant's needs.

In addition flexible apartment design is also desirable to allow buildings to accommodate a diverse range of lifestyle needs such as different household structures, live/work housing arrangements and future changes in use.

Objective 4Q-1

Universal design features are included in apartment design to promote flexible housing for all community members

Design guidance

Developments achieve a benchmark of 20% of the total apartments incorporating the Livable Housing Guideline's silver level universal design features

Objective 4Q-2

A variety of apartments with adaptable designs are provided

Design guidance

Adaptable housing should be provided in accordance with the relevant council policy

Design solutions for adaptable apartments include:

- convenient access to communal and public areas
- high level of solar access
- minimal structural change and residential amenity loss when adapted
- larger car parking spaces for accessibility
- parking titled separately from apartments or shared car parking arrangements



Silver Level

Seven core livable housing design elements

Focuses on the key structural and spatial elements that are critical to ensure future flexibility and adaptability of the home. Incorporating these features will avoid more costly home modification if required at a later date.

Objective 4Q-3
Apartment layouts are flexible and accommodate a range of lifestyle needs

Design guidance

Apartment design incorporates flexible design solutions which may include:

- rooms with multiple functions
- dual master bedroom apartments with separate bathrooms
- larger apartments with various living space options
- open plan 'loft' style apartments with only a fixed kitchen, laundry and bathroom

Introducing the seven core design elements:

- | | |
|--|---|
| <p>1 A safe continuous and step free path of travel from the street entrance and / or parking area to a dwelling entrance that is level.</p> <hr/> <p>2 At least one, level (step-free) entrance into the dwelling.</p> <hr/> <p>3 Internal doors and corridors that facilitate comfortable and unimpeded movement between spaces.</p> <hr/> <p>4 A toilet on the ground (or entry) level that provides easy access.</p> | <p>5 A bathroom that contains a hobless (step-free) shower recess.</p> <hr/> <p>6 Reinforced walls around the toilet, shower and bath to support the safe installation of grabrails at a later date</p> <hr/> <p>7 A continuous handrail on one side of any stairway where there is a rise of more than 1 metre.</p> |
|--|---|

This unit No. 010 & 011, in addition to the designated adaptable units, have the “Seven Core Design Elements” of Liveable Housing Australia being an objective of SEPP No 65 *Apartment Design Guide* Part 4 Clause Q4 with the visitable toilet/pan in the ensuite with privacy provided by it being in the bedroom.

- After market fold down grab rails, AS1428.1 compliant, can be installed off the solid or reinforced walls.
- The ensuite door could be removed as privacy provided in bedroom.
- The hobbles shower is provided in the main bathroom.
- Only 23% of wheelchair users require the “visitable toilet” circulation 90° in front of the pan with (for transfer or use of pan) the others using circulation space beside the pan or at angle to the centre line.
 - This non-front approach pan circulation includes a provided 90° circulation without the privacy of a shut bathroom door.
 - Front angle transfer 32% of users, side transfer 27% of users or side angle transfer 9% of users.
 - Based on commentary provided in the AS1428 Supplement 1 – 1993 and feedback from wheelchair users and occupational therapists


ACCESS and COMPLIANCE ASSESSMENT;

Adaptable Housing Component of development;

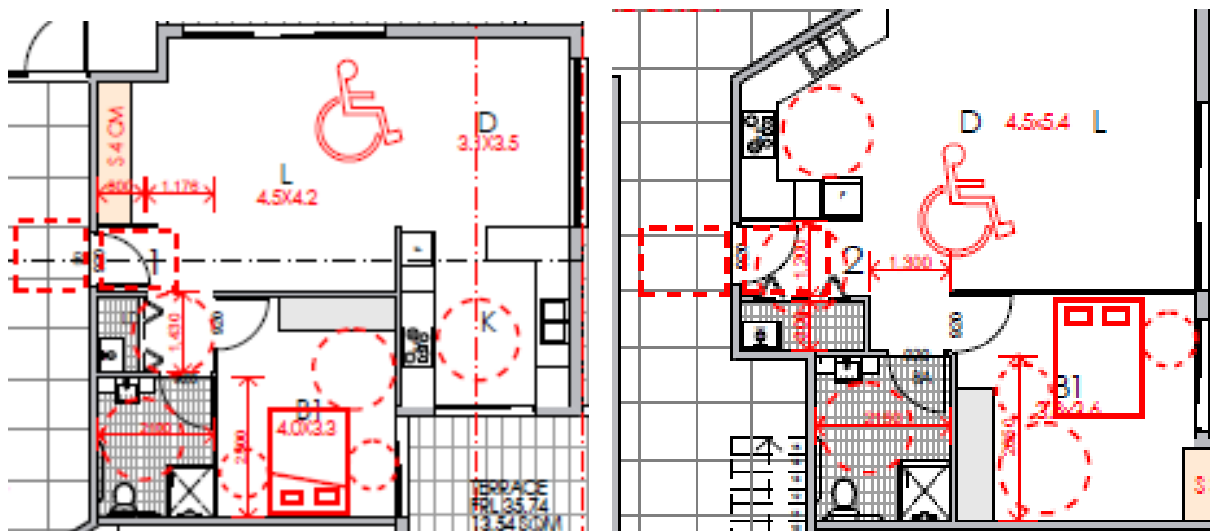
At a minimum no less ten percent (>10%) of the apartments are to the full technical specifications/requirements of AS4299 1995 *Adaptable housing* to Class B specifications as well as addressing accessibility requirements called for by PENRITH DEVELOPMENT CONTROL PLAN 2006. Part 4.6 *Residential-Apartment Development* Clause 6.11 *Accessibility and adaptability C. Mandatory controls* distributed throughout the buildings.

❖ **Example of adaption:** Apartments listed have the dimensions required to comply with AS4299 *Adaptable housing*.

1. The bathroom has the required dimensions to allow full adaption with the removal of the bath, if fitted, to give easy access/circulation to shower area, fit shower seat/grab rails and circulation compliant with AS4299 or AS1428.2.
2. The bedroom has the required dimensions to allow full adaption with the relocation of the wardrobe, new position beside the bed or building a wardrobe through the wall to the living area allowing the required clear turning areas.
3. The living area has the required dimensions to allow full compliance.
4. AS4299-1995 *Adaptable housing* Figure 1.1 **Visible toilet**, as built to address Liveable Housing Australia “Seven Core Design Elements”, in the adaptable units and unit No. 010 & 011.

Typical “Post adaption” showing 1540mm & 1000mm clear circulation spaces. 

Typical adaptable unit layout Units No 001 & 002.



- 820mm wide doors used throughout
- circulation spaces and clearances to be in accordance with AS4299
- laundry doors to be removed for adaption if required

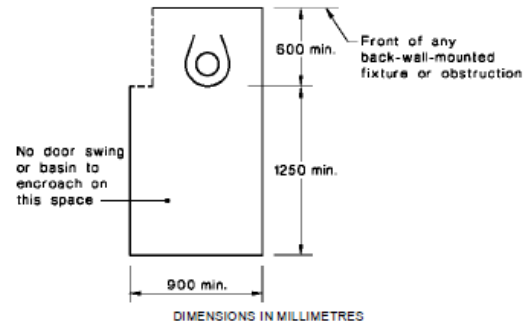
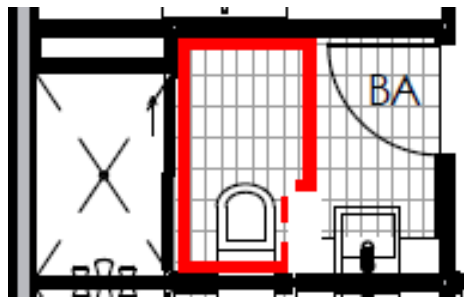



FIGURE 1.1 VISITABLE TOILET

Plans show  for circulation spaces/width at doorways/hall width approaching a doorway.

- The “Visitable toilet” toilet detailed above addresses Liveable Housing Australia “Core Design Element” four and five with privacy not an issue as ensuite is within the bedroom with bedroom privacy.

The “adaptable” apartments are the number required by PENRITH DEVELOPMENT CONTROL PLAN 2006. Part 4.6 *Residential-Apartment Development* Clause 6.11 *Accessibility and adaptability C. Mandatory controls* as shown above. Access to and within the adaptable apartments are called for in this document and BCA is provided as documented along with the provisions to satisfy the relevant standards,

- Each of the nominated “Adaptable” apartments has access to it by an uninterrupted path of travel from the street frontage and dedicated resident’s car parking spaces (via a lift) compliant with the requirements of **AS4299 Clause 3.3.2 Accessible pathway** and BCA Part D3.2 (c) (ii) and PENRITH DEVELOPMENT CONTROL PLAN 2006. Part 4.6 *Residential-Apartment Development* Clause 6.11 *Accessibility and adaptability C. Mandatory controls*.
- Access is available to any common/communal areas/lift lobbies and its letterbox area as called for to be considered in **AS4299 Clause 3.3.3 Residential development (a).6**
- The entrance door, to each of these apartments, and their circulation area are of a dimension mandated by **AS1428.1 Clause 7.2 & 7.3**. The doors have a clear opening dimension of minimum 850mm which is compliant with **AS4299 Clause 4.3 entrances, doorways & circulation spaces** as well as with AS1428.1 Clause 7.2 & Figure 11 and door circulation space dimensions are compliant with AS1428.1 Clause 7.3 & Figure 12.
- The entrance door hardware and locking mechanism as fitted are technically compliant with the requirements of AS4299 Clause 4.3.4 *Door handles and hardware*.
- Access for a wheelchair user to the private balcony of each of these units would be, if required by the adaptor, achieved by the use of a step ramp or other appropriate methods for other people with disability.

Bathroom;

- The bathroom is designed **to be “capable of adaption”** depending on the requirements of the adaptor. The highest degree of 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 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, to allow when adapted, 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 to meet their own needs.
- iii. The grab rails/shower seat, 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 1540mm is present/achievable in the adaptation process to comply with **AS1428.2 Clause 6.2**
- v. It will be built with a hobbles shower area, or the bath can be removed from this area, of the dimensions required and walls capable of having grab rails mounted in a manner to satisfy AS1428.1 Clause 10.2.8 & Figure 21. The currently installed shower screen is of a type easily removed if required in the adaptation process
- vi. Light frame walls with 12mm structural plywood reinforcing in required areas (AS4299 Clause 4.4.4 *Bathroom (h)* & Figure 4.5-4.7) are **capable of** having grab rails/shower seat mounted to satisfy AS1428.1 Clause 10.2.8 & Figure 21.

Adaption scenario;

To achieve the full dimensions in clearances, if required by adaptor, on post adaption the bathroom, where a bath is present, will have that extend/replaced with a shower area utilising the existing plumbing.

Living area/Kitchen;

- The required access to and within all living areas is provided or is achievable (if required & to extent required) in the adaptation process with the required circulation space in all area to satisfy the requirements of **AS4299 Clause 4.5.2 & 4.7.1**.
- The kitchen work surface/cupboard configuration has the potential to be adaptable to comply with the requirements/specifications of **AS4299 Clause 4.5.5**, and Figure 4.8.
- The required 1540mm clear turning area between opposing base kitchen cupboards is present to satisfy the requirements of AS4299 Clause 4.5.2 *Circulation prior to adaption* and thus AS1428.1 for guidance.

Bedroom;

- The bedroom has the potential to be adaptable to meet the requirements of **AS4299 Clause 4.6 Bedrooms** in being able to accommodate a queen size bed and wardrobe with the circulation space required of AS1428.2 Clause 6.2. The bedroom will accommodate a Queen size bed with the required clearances 1000mm to walls and a clear turning circle dimension between the bed and wardrobe, repositioned, fixtures of 1540mm as stipulated.
- 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.

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.
-

RESIDENTIAL Basement Car park:

Typical under the block is a one level common basement car park for the residents of the apartments and visitors, and is accessed from the abutting Evans Street.

- 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* for a general “floor to an overhead obstruction” measurement of 2200mm.
- The dedicated accessible (disabled) car parking spaces with 2500mm clearance above the majority of that area as detailed in Clause 2.4 & Figure 2.7 *Headroom required above car space*.
- The dedicated accessible (disabled) car spaces are provided at/in close proximity to the lift which services all level of the buildings. These, as stated, are for the nominated “adaptable” units as a person with disability would usually also require an accessible parking space. The location (NOT specified in AS2890.6-2009) of these dedicated spaces satisfies the requirements of **AS2890.1-2004, *Off Street Parking, Part 2.4.5 (d)*** in being in a location near a wheelchair accessible lift and are of the required technical dimension set out in **AS4299-1995 *Adaptable housing*** (parking space specifications applicable to the “Adaptable housing” BCA Class 2 buildings).
- The provision, numerically wise, of accessible (disabled) car parking spaces for the nominated “adaptable” units is in accordance with **AS4299-1995 *Adaptable housing*** which requires a length of six meters, width of 3.8 metres with an internal vertical clearance of 2.5 metres is achieved to satisfy these and all the requirements of AS2890.1-2002 *Off Street Parking, Part 2.4.5 & Figure 2.6*.
- The accessible (disabled) car parking space for each of the adaptable units and visitor spaces 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*.

This meets the requirements of AS4299-1995 *Adaptable housing* Clause 3.7 if being applied.

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.

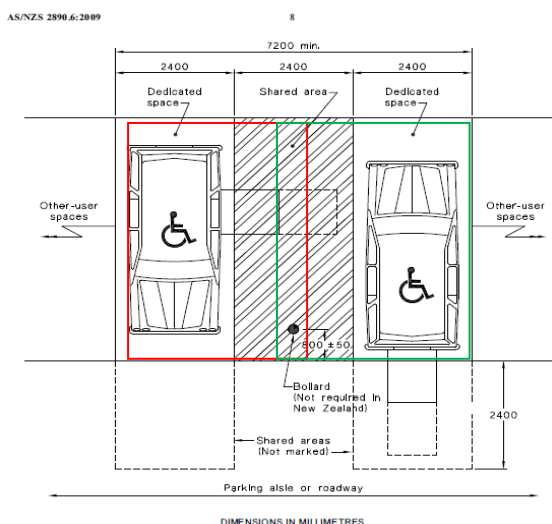


FIGURE 2.3 EXAMPLE OF TWO PARKING SPACES WITH A COMMON SHARED AREA—DIMENSIONS FOR AUSTRALIA ONLY*

- 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.
- The wheelchair accessible lift is provided for access all level of the buildings and has a lift car size no less than that required to be compliant with **AS1735.12 Lifts Escalators and Moving Walks, Section 2** (minimum 1400mm X 1600mm and door opening of 900mm). This will allows an unobstructed path of travel from the dedicated accessible (disabled) car parking spaces in this development for a person with disability.
- The lift car has 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*.

COMMON FEATURES.

- There is proposed lifts to provide access to all units as required by PENRITH DEVELOPMENT CONTROL PLAN 2006. Part 4.6 *Residential-Apartment Development* Clause 6.11 *Accessibility and adaptability C. Mandatory controls* from residential parking and street front entrances to the entrance door of all units.
 - Access is provided (BCA/NCC-2016 Part D3.2 (a) (i) & (ii) for all residents “*from the main points of a pedestrian entry (Lethbridge Street) at the allotment boundary*” and “*from another accessible building connected by pedestrian link*” by continuous accessible paths of travel, pedestrian links which are compliant with AS1428.1-2009 Clause 6 *Continuous accessible paths of travel*.
 - The apartment development has access to it (“*to at least one floor containing sole-occupancy units*” and “*to and main within not less than one of each type of room or space for use in common by the residents*”) by an uninterrupted accessible path of travel “*from the main points of a pedestrian entry (Lethbridge Street & basement entry from Evans Street) at the allotment boundary*” and dedicated resident’s car parking spaces (via lift) compliant with the requirements of AS4299 Clause 3.3.2 *Accessible pathway* and BCA/NCC-2016 Part D3.2 (c) (ii).
 - Provided is “a high level of accessibility to and within the development” meeting the “Objectives” of Council DCP 2010 including “*where a passenger lift is installed to the entrance doorway of each sole-occupancy located on the level serviced by the lift*” unit as per BCA/NCC-2016 Part D3 Table 3.1.
- **STATE ENVIRONMENTAL PLANNING POLICY No 65; Objectives 4Q-1.**

Liveable Housing Australia “Seven Core Design Elements”;

 - Access, via lift, is provided “to the entrance doorway of each sole-occupancy unit” from street entrance off Middle Street and basement parking, by continuous accessible paths of travel, pedestrian links compliant with AS1428.1-2009 Clause 6, COUNCIL DCP and Liveable Housing Australia “Core Design Element” one and two.
 - The entrance door and internal doors/hallways, to each of these apartments, and their circulation area are of a dimension mandated by AS1428.1 Clause 7.2 & 7.3 to “facilitate comfortable and unimpeded movement between spaces”. This addresses Liveable Housing Australia “Core Design Element” three.
 - The “Visitable toilet” toilet detailed above addresses Liveable Housing Australia “Core Design Element” four and five with six being achievable as shower walls are solid masonry and some aftermarket grab rails can be installed without reinforcing.
 - Liveable Housing Australia “Core Design Element” seven not applicable in this instance as no stairs within the units.

Dimensions refer to finished surfaces (e.g., face of wall tiles and floor finishes).

Unless otherwise indicated, limiting dimensions for an inclined surface on a continuous accessible path of travel shall be taken as horizontal and vertical only.

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:

- The requirements of NCC-2016/BCA-2016 Section D *Access and egress*, Part D3 *Access for people with disability* have “as far as is reasonable” in these circumstances, due to the exceptional technical factors of the exceptional geographic factors gradient/topography of the site, been addressed.
- All stairways/walkways on the accessible paths of travel to and within the development, where applicable, are compliant with the requirements of AS1428.1-2009 (called upon by BCA) in their technical specifications.
- All stairways, where applicable, are compliant in design and construction with **AS1428.1 Clause 9.1 Stair construction** and **Clause 9.2 Stairway handrails** and Figure 17 as called for by PENRITH DEVELOPMENT CONTROL PLAN 2006. Part 4.6 *Residential-Apartment Development* Clause 6.11 *Accessibility and adaptability C. Mandatory controls*.
- All staircases/ramps are to comply (**Except for fire isolated stairs/ramps BCA/NCC 2016 Part D3.3 Parts of a building to be accessible (a) except for stair nosing of 30% luminance contrast**) with AS1428.1-2009 Clause 10.3 *Ramps*, Figure 14-19 & Clause 11 *Stairways*, Figure 26-29 in finish and construction detail as called for by PENRITH DEVELOPMENT CONTROL PLAN 2006. Part 4.6 *Residential-Apartment Development* Clause 6.11 *Accessibility and adaptability C. Mandatory controls*.
- All walkways/ramps have, where required, the required (**Except for fire isolated stairs/ramps BCA/NCC 2016 Part D3.3 Parts of a building to be accessible (a)**) TGSI's at the top/intermediate and bottom landing compliant with **AS1428.4.2 Clause 2.2.3** and Figure A1 as called for by PENRITH DEVELOPMENT CONTROL PLAN 2006. Part 4.6 *Residential-Apartment Development* Clause 6.11 *Accessibility and adaptability C. Mandatory controls*.

- All walkways/ramps and paths of travel are direct, clearly defined and without unnecessary barriers as called for by PENRITH DEVELOPMENT CONTROL PLAN 2006. Part 4.6 *Residential-Apartment Development* Clause 6.11 *Accessibility and adaptability C. Mandatory controls.*
 - These are compliant with the design and technical specifications of AS1428.1-2009 *Design for access and mobility* Clause 10 *Walkways ramps and landings* for their gradients, surface finish and other relevant features.
 - The entrance doors to the entrance foyers and all their internal doors and their circulation area will be of a dimension mandated by **AS1428.1 Clause 7.2 & 7.3**. The doors have a clear opening dimension (Minimum 850mm for single leaf or at least one of a dual leaf door configuration) compliant with **AS1428.1 Clause 7.2 & Figure 11** and their internal and external circulation spaces compliant AS1428.1 Clause 7.3 & Figure 12.
 - The entrance doorway to the entrance foyers have a zero step entrance, or up to the 5mm difference as called for in AS1428.1 Clause 6 *Continuous path of travel* Paragraph 3 *Accessways, walkways, ramps and landings no lip or step at joints between abutting surfaces.*
 - Access is available to the common/communal areas/lift foyers and its letterbox area as called for to be considered in **AS4299 Clause 3.3.3 Residential development (a)**.
 - The letterboxes are centrally located, adjacent to street entry on a hard standing surface connected to an accessible path of travel compliance with AS4299 Clause 3.8 *Letterboxes.*
1. The location (Preferred by Housing New South Wales) of this development gives convenient access to public transport and 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 personnel transport due to their socio economic position.

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.
- An intercom security system is installed in each unit for authorising access to the residential areas/basement visitor parking by non-residents.

SUMMATION; 104-108 Lethbridge Street Penrith.

As documented above all areas of compliance requirements of National Construction Code (NCC)-2016/BCA Part D3, DDA 1992 and accessibility requirements of PENRITH DEVELOPMENT CONTROL PLAN 2006. Part 4.6 *Residential-Apartment Development* Clause 6.11 *Accessibility and adaptability C. Mandatory controls*, in to regard access for people with disability, have been catered for with this proposed development at 104-108 Lethbridge Street Penrith. It is evident from the above that the requirements of Councils DCP have been implemented (and applicable technical detail for Construction Certificate issuance) in the design of the dedicated “adaptable unit” and its surround built environment.

As detailed above it is proposed that overall not less than 10% of the units are adaptable (compliant with AS4299-1995 *Adaptable housing* Class B) whereas PENRITH DEVELOPMENT CONTROL PLAN 2006. Part 4.6 *Residential-Apartment Development* Clause 6.11 *Accessibility and adaptability C. Mandatory controls* calls for units to be accessible to AS1428.2 or adaptable to AS4299-1995 *Adaptable housing*.

Provided is 20% of the units with the “Seven Core Design Elements” of Liveable Housing Australia being an objective of SEPP No 65 Apartment Design Guide Part 4 Clause Q4.

This access is in a manner which complies with AS1428.1, AS4299 and NCC/BCA-2016 Part D3. The technical requirements called for in these standards, and related legislations/ DCPs, has been adhered to in addressing the Disability Discrimination Act 1992 legislation in regard to access by, provision of appropriate housing and the rights/aspirations of people with disability.

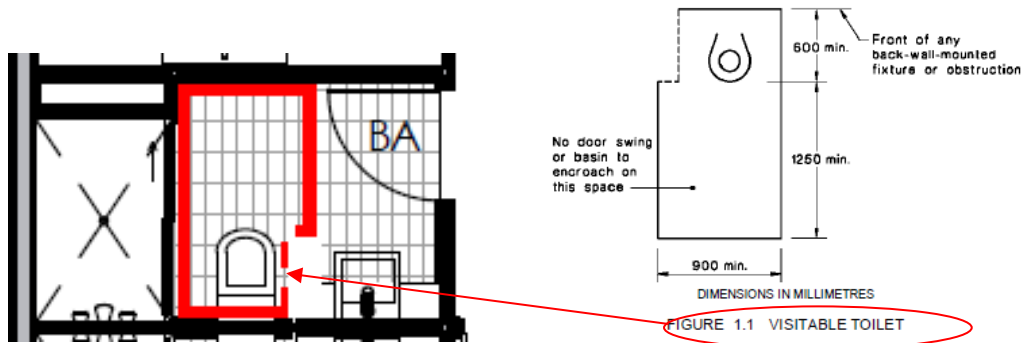
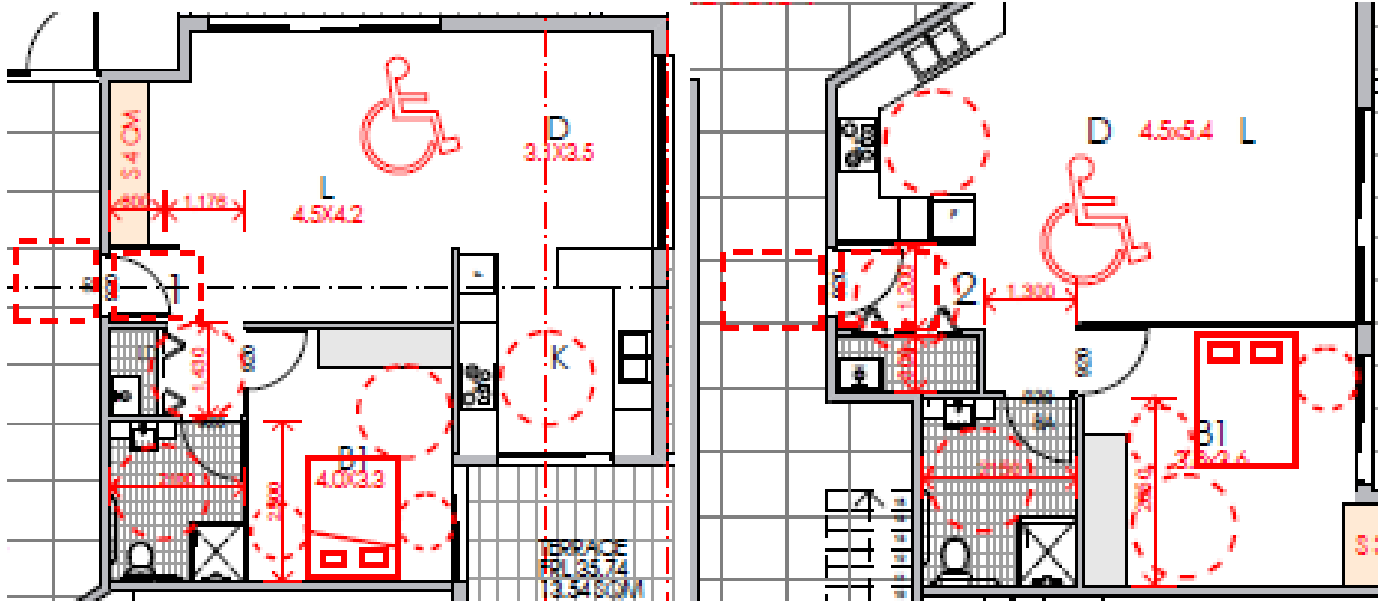
Yours sincerely



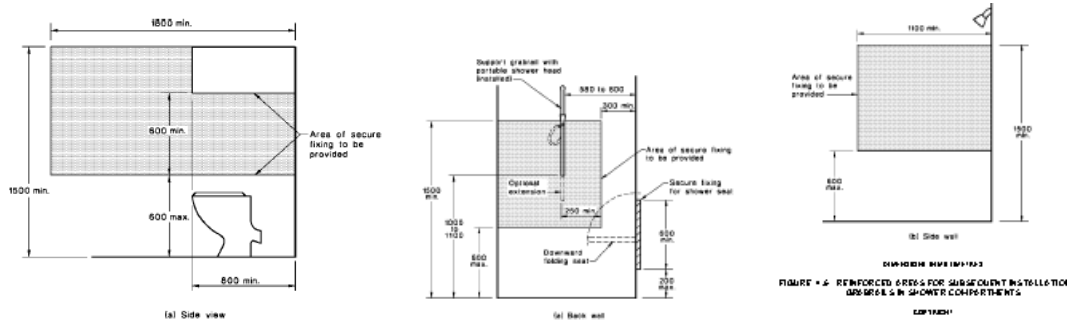
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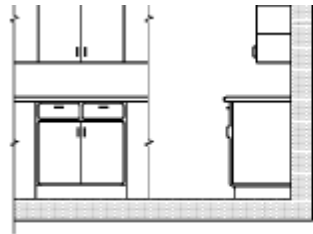
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APPENDIX ;

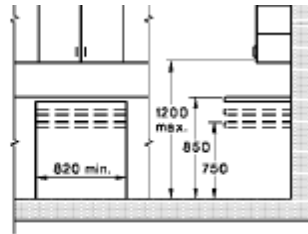


Reinforcing of light frame walls in bathroom.

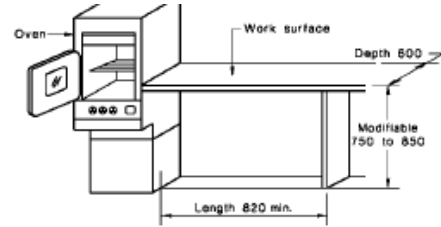




(a) Before removal of cabinets



(b) After removal of cabinets



DIMENSIONS IN MILLIMETRES

FIGURE 4.10 OVENS

Kitchen benches “Capable of”.

APPENDIX A
SCHEDULE OF FEATURES FOR ADAPTABLE HOUSING
(Normative)

This schedule is a list of essential features to be incorporated into a housing unit for it to be termed an 'Adaptable House'. A higher level of 'Adaptable House' classification may be achieved by incorporating some or all of the desirable elements.

It is intended that this schedule be also used as a checklist to record the features incorporated.

CLASSIFICATION LEVELS

Adaptable house class A All essential and all desirable features incorporated.

Adaptable house class B All essential and 50% desirable features incorporated, including all those notated 'first priority'.

Adaptable house class C All essential features incorporated.

Item No.	Room/Item	Clause No.	Essential		First priority desirable		Desirable	
			Required feature	Certified by	Proposed feature	Certified by	Proposed feature	Certified by
DRAWINGS								
1	Provision of drawings showing the housing unit in its pre-adaptation and post-adaptation stages	2.3	✓					
SITING								
2	A level or gently sloping site with up to 1:14 gradient	3.2.2			✓			
3	A continuous accessible path of travel from street frontage and vehicle parking to entry complying with AS 1428.1	3.3.2	✓					
4	Additional paths and walkways to be continuous, slip-resistant and hard-surfaced with gradients complying with AS 1428.1	3.3.2					✓	
5	Within a residential estate development, common use facilities to be accessible	3.3.3			✓			
6	Within a residential estate development, street names with house numbers at each intersection	3.3.3					✓	
7	Within a residential estate development, internal roadways to be separate from pedestrian walkways	3.3.3			✓			
SECURITY								
8	Pathway lighting shall be positioned at low height to avoid glare and to provide min. 50 lux at ground level	3.6.1			✓			
9	Clear line of sight from a well-lit vehicle drop-off point to safe pedestrian entry point	3.6.2			✓			

Item No.	Room/Item	Clause No.	Essential		First priority desirable		Desirable	
			Required feature	Certified by	Proposed feature	Certified by	Proposed feature	Certified by
	LETTERBOXES IN ESTATE DEVELOPMENTS							
10	Within residential estate developments, letterboxes centrally located adjacent to street entry. Lockable	3.8			✓			
11	Letterboxes to be on hard standing area connected to accessible pathway	3.8	✓					
12	Letterbox area roofed and in a well lit location	3.8			✓			
13	Parcel rack included with letterboxes	3.8			✓			
	PRIVATE CAR ACCOMMODATION							
14	Carparking space or garage min. area 6.0 m × 3.8 m	3.7.2	✓					
15	Roof to car parking space	3.7.1			✓			
16	Internal clearance of garage or carport 2.5 m min.	3.7.2					✓	
17	Provision for power-operated roller door to garage	3.7.2					✓	
18	Covered access to dwelling unit	3.7.3			✓			
19	Illumination level min. 50 lux	4.10			✓			
	ACCESSIBLE ENTRY							
20	Accessible entry	4.3.1	✓					
21	Entry protected by porch or similar	4.3.1					✓	
22	Accessible entry to be level (i.e. max. 1:40 slope)	4.3.2	✓					
23	Threshold to be low-level	4.3.2	✓					
24	Landing to enable wheelchair manoeuvrability	4.3.2	✓					
25	Accessible entry door to have 850 mm min. clearance	4.3.1	✓					
26	Weatherproofed entry door	4.3.3					✓	
27	Door lever handles and hardware to AS 1428.1	4.3.4	✓					
28	Provision for combined door/security door	4.3.5			✓			
29	Potential min. illumination level 300 lux	4.10			✓			
	EXTERIOR: GENERAL							
30	All external doors to be keyed alike	4.3.4					✓	
31	Provision for security screen to exterior opening or sliding windows and doors	4.7.6			✓			
	INTERIOR: GENERAL							
32	Internal doors to have 820 mm min. clearance	4.3.3	✓					
33	Internal corridors min. width of 1000 mm	4.3.7	✓					
34	Provision for compliance with AS 1428.1 for door approaches	4.3.7	✓					
35	Window sills at max. 730 mm above floor level to living and 600 mm above floor level to bedroom areas	4.7.2. and 4.6.2					✓	

Item No.	Room/Item	Clause No.	Essential		First priority desirable		Desirable	
			Required feature	Certified by	Proposed feature	Certified by	Proposed feature	Certified by
LIVING ROOM & DINING ROOM								
36	Provision for circulation space of min. 2250 mm diameter	4.7.1	✓					
37	Minimum 4 double GPOs	4.7.3			✓			
38	Telephone adjacent to GPO	4.7.4	✓					
39	Telephone outlet location between kitchen and living space, adjacent to GPO	4.7.4					✓	
40	Two TV antenna outlets adjacent to GPO (positioned so viewing from dining and kitchen is achievable)	4.7.5			✓			
41	Potential illumination level min. 300 lux	4.10	✓					
KITCHEN								
42	Minimum width 2.7 m (1550 mm clear between benches)	4.5.2	✓					
43	Provision for circulation at doors to comply with AS 1428.1	4.5.1	✓					
44	Provision for benches planned to include at least one worksurface of 800 mm length, adjustable in height from 750 mm to 850 mm or replaceable. Refer to Figure 4.8	4.5.5	✓					
45	Refrigerator adjacent to work surface	4.5.5	✓					
46	Kitchen sink adjustable to heights from 750 mm to 850 mm or replaceable	4.5.6	✓					
47	Kitchen sink bowl max. 150 mm deep	4.5.6	✓					
48	Tap set capstan or lever handles or lever mixer	4.5.6(e)	✓					
49	Tap set located within 300 mm of front of sink	4.5.6(e)	✓					
50	Installation of thermostatic mixing valve	4.5.6(f)			✓			
51	Cooktops to include either front or side controls with raised cross bars	4.5.7	✓					
52	Cooktops to include isolating switch	4.5.7	✓					
53	Worksurface min. 800 mm length adjacent to cooktop at same height	4.5.7	✓					
54	Oven located adjacent to an adjustable height or replaceable work surface	4.5.8	✓					
55	Provision for microwave oven at height of 750 mm–1200 mm above floor	4.5.9					✓	
56	Central light with second light over sink. Potential illumination level min. 300 lux with 550 lux over work surfaces	4.10			✓			
57	Adjustable shelving: depth 600 mm max. up to 800 mm above floor; depth 450 mm max. from 800 to 1500 mm above floor; depth 300 mm max. above 1500 mm	4.5.10					✓	

Item No.	Room/Item	Clause No.	Essential		First priority desirable		Desirable	
			Required feature	Certified by	Proposed feature	Certified by	Proposed feature	Certified by
58	Locate handles towards the top of below bench cupboards and towards the bottom of overhead cupboards. Provide 'D' pull handles	4.5.10			✓			
59	GPOs to comply with AS 1428.1. At least one double GPO within 300 mm of front of worksurface	4.5.11	✓					
60	GPO for refrigerator to be easily reachable when the refrigerator is in its operating position	4.5.11	✓					
61	Slip-resistant floor surface	4.5.4	✓					
	MAIN BEDROOM							
62	At least one bedroom of area sufficient to accommodate queen size bed and wardrobe and circulation space requirements of AS 1428.2	4.6.1	✓					
63	Two double GPOs on wall where bedhead is likely to be	4.6.3			✓			
64	Minimum of one GPO on opposite wall	4.6.3					✓	
65	Telephone outlet next to bed on the side closest to door (with GPO adjacent to telephone outlet)	4.6.5			✓			
66	TV antenna point and double GPO on opposite wall to bedhead	4.6.6			✓			
67	2-way light switches, one located above bed. 1000 mm high above floor	4.6.4			✓			
68	Potential illumination level 300 lux	4.10			✓			
69	Sliding doors on wardrobe with full length mirror	4.6.7					✓	
	OTHER BEDROOMS							
70	Two double GPOs on one wall. Minimum of one GPO on opposite wall	4.6.3			✓			
71	Two-way light switch	4.6.4			✓			
72	Telephone outlet next to double GPO	4.6.5			✓			
73	TV antenna point adjacent to one GPO	4.6.6			✓			
74	Potential illumination level 300 lux	4.10			✓			
	BATHROOM							
75	Provision for bathroom area to comply with AS 1428.1	4.4.1	✓					
76	Slip-resistant floor surface	4.4.2	✓					
77	Shower recess-no hob. Minimum size 1160 x 1100 to comply with AS 1428.1. (Refer Figures 4.6 and 4.7)	4.4.4(f)	✓					
78	Shower area waterproofed to AS 3740 with floor to fall to waste	4.4.4(f)	✓					
79	Recessed soap holder	4.4.4(f)	✓					
80	Shower taps positioned for easy reach to access side of shower sliding track	4.4.4(f)	✓					
81	Shower waste min. 80 mm diameter	4.4.4(f)					✓	

Item No.	Room/Item	Clause No.	Essential		First priority desirable		Desirable	
			Required feature	Certified by	Proposed feature	Certified by	Proposed feature	Certified by
82	Provision for adjustable, detachable hand held shower rose mounted on a slider grabrail or fixed hook (plumbing and wall-strengthening provision)	4.4.4(h)	✓					
83	Provision for grabrail in shower (Refer to Figure 4.7) to comply with AS 1428.1	4.4.4(h)	✓					
84	Provision for additional grabrail	4.4.4(h)			✓			
85	Provision for folding seat in shower to comply with AS 1428.1	4.4.4(h)					✓	
86	Tap sets to be capstan or lever handles with single outlet	4.4.4(c)	✓					
87	Installation of thermostatic mixing valve	4.4.4(b)			✓			
88	Provision for washbasin with clearances to comply with AS 1428.1	4.4.4(g)	✓					
89	Wall cabinet with light over or similar	4.4.4(d)			✓			
90	Double GPO beside mirror	4.4.4(d)	✓					
91	Potential illumination level 300 lux generally with 600 lux task lighting	4.10			✓			
	TOILET							
92	Provision of either 'visitable toilet' or accessible toilet	4.4.3	✓					
93	Provision to comply with AS 1428.1	4.4.1	✓					
94	Location of WC pan at correct distance from fixed walls	4.4.3	✓					
95	Provision for grab rail zone. (Refer Figure 4.6)	4.4.4(h)	✓					
96	Slip resistant floor surface. (Vitreous tiles or similar)	4.4.2	✓					
97	Recessed toilet roll holder	4.4.3					✓	
	LAUNDRY							
98	Circulation at doors to comply with AS 1428.1	4.8	✓					
99	Provision for adequate circulation space in front of or beside appliances (min. 1550 mm depth)	4.8	✓					
100	Provision for automatic washing machine	4.8(e)	✓					
101	Provision for drier	4.8(f)			✓			
102	Where clothes line is provided, an accessible path of travel to this	4.8(a)	✓					
103	Installation of thermostatic mixing valve	4.8(d)			✓			
104	Taps positioned at side of tub	4.8(c)					✓	
105	Double GPO	4.8(g)	✓					
106	Provision of shelf for soaps and similar, 1200 mm max. height	4.8(h)					✓	
107	Potential illumination level 300 lux generally with 550 lux task lighting	4.10			✓			
108	Slip-resistant floor surface	4.9.1	✓					

Item No.	Room/Item	Clause No.	Essential		First priority desirable		Desirable	
			Required feature	Certified by	Proposed feature	Certified by	Proposed feature	Certified by
	STORAGE							
109	Linen cupboard min. 600 mm wide with adjustable shelving	4.11.5			✓			
	DOOR LOCKS							
110	Door hardware operable with one hand, located 900–1100 mm above floor	4.3.4	✓					
	FLOOR COVERINGS							
111	Slip resistant surfaces — balconies and external paved areas. (Vitreous tile or similar)	4.9.1			✓			
	ANCILLARY ITEMS							
112	Switches located 900–1100 mm above floor in line with door handles	4.11.1			✓			
113	GPOs located not less than 600 mm above floor	4.11.1			✓			
114	Electrical distribution board located inside housing unit	4.11.2					✓	
115	Window controls located in an accessible position	4.11.4					✓	
	GARBAGE							
116	Provision for bin in an accessible location	4.11.6			✓			
117	Provision for external wheelchair storage	4.11.6					✓	
118	Provision for external battery charging facility	4.11.6					✓	
119	Guide dog accommodation	4.11.6					✓	

IMPLEMENTATION The Table indicates essential/desirable categories and the level required of the feature noted. All essential items are pre-checked in the 'essential' features column. The independent certifier must initial the second column to confirm the item has been incorporated into the building.

The developer/builder shall indicate which 'first priority desirable' and 'desirable' features are intended to be incorporated in the 'adaptable house' by checking the relevant boxes. The independent certifier must initial the second column to confirm the item has been incorporated into the building.

Upon addition of the number of 'first priority desirable' and 'desirable' features provided, and conversion to a percentage of the total possible desirable features, the classification level can be ascertained.

The certifier should sign the checklist as to the class of adaptable housing achieved.

No. of desirable features incorporated

Add number of first priority desirable features

Total

$$\begin{array}{|c|} \hline \\ \hline \\ \hline \\ \hline \end{array} = \boxed{} \% \text{ of }$$

64 possible desirable features

NOTE: Minimum 50% must be achieved for class B certification; 100% must be achieved for class A certification.

Certified Class B.

Peter Simpson