



PROPOSAL FOR CHANGE NATIONAL CONSTRUCTION CODE SERIES

**ABCB Livable Housing Design
Standard: Beyond Minimum**

2028



Australian Network
for Universal
Housing Design



Building Better Homes
A National Building Code **for All Australians**

1 July 2023

Proposal for change

National Construction Code series

SUBJECT	Regulation of ABCB Livable Housing Design Standard: Beyond Minimum in 2028
BCA Volume One:	Part G7
BCA Volume Two:	Part H8
PCA Volume Three:	N/A

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Overview

The purpose

This Proposal for Change (PFC) is that the ABCB Livable Housing Design Standard: Beyond Minimum be mandated in all new housing from 2028.

The problem

The ABCB Livable Housing Design Standard does not meet the objectives of Volume 1 Part G7 and Volume 2 Part H8; that is, *to ensure that housing is designed to meet the needs of the community, including older people and those with a mobility-related disability*. People most affected are those who rely on mobility aides, including wheelchairs and scooters. See p 2 for background, Australia's policy position and evidence of the problem.

The impact of the PFC

See p. 5 for a discussion on the costs and benefits of mandating the ABCB Livable Housing Design Standard: Beyond Minimum, including a review of the costs and benefits of the current ABCB Livable Housing Design Standard.

Alternatives to the PFC

Two alternatives have been considered:

1. An enhanced voluntary approach aimed to increase the supply of housing to the ABCB Livable Housing Design Standard: Beyond Minimum, through education and awareness (see p. 8).
2. A financial incentive aimed to increase the supply of dwellings to the ABCB Livable Housing Design Standard: Beyond Minimum (see p. 8).

Consultation

Refer to p. 11 for a list of organisations consulted.

The Solution

Refer to p. 13 for details.

Recommendation

To measure and understand fully the impact of the proposed regulation of the Livable Housing Design Standard on housing providers, residents and visitors, we recommend the ABCB initiate the following activities:

1. A collaborative review by the CIE and the MDI of the CIE's 2020 cost/benefit analysis;
2. Reports from the Commonwealth Departments of Housing, Health and Aged Care, Department of Social Services, and the National Disability Insurance Agency on their policies supporting the regulation of the ABCB Livable Housing Design Standard: Beyond Minimum and the expected impacts on their programs; and
3. A study assessing the impact of the current ABCB Livable Housing Design Standard on the housing industry's productivity.

The objective

The objective of this Proposal for Change is to mandate the ABCB Livable Housing Design Standard: Beyond Minimum, which has additional and enhanced provisions to ensure that housing is designed to better meet *the needs of the community, including older people and those with a mobility-related disability*.

The problem

In spite of the regulation of ABCB Livable Housing Design Standard in the NCC, it is insufficient to meet the objectives of Volume 1 Part G7 and Volume 2 Part H8; that is, *to ensure that housing is designed to meet the needs of the community, including older people and those with a mobility-related disability*.

More specifically, many people with mobility limitations will not be able to reside in a dwelling to ABCB Livable Housing Design Standard without the need for specialised or adapted features.

Background

Since 2011, the three levels of government through the 2010-2020 National Disability Strategy committed to improve the provision of accessible and well-designed housing so that people with disability will have greater choice in where they live. They committed to support the agreed target that all new homes would meet the Livable Housing Design Standard by 2020.

In October 2017, the Building Ministers¹, in consultation with Disability Ministers, agreed to undertake a national Regulatory Impact Assessment (RIA) of accessibility in housing. The RIA was to examine Livable Housing Australia's Silver and Gold performance levels² as options for a minimum accessible standard.

In April 2021, a majority of Building Ministers³ agreed to include minimum accessibility provisions to Silver performance level (now called the ABCB Livable Housing Design Standard) with the publication of a voluntary accessibility standard to Gold level (now called ABCB Voluntary Livable Housing Design Standard: Beyond Minimum).

In making this decision, the Ministers were furnished with substantial community and human rights feedback to accompany CIE's economic analyses. They concluded that regulation *"will result in significant and lasting benefit to Australians who need access to homes with accessible features"*³.

The objective of the NCC is *"to set the minimum required level for the safety, health, amenity, accessibility and sustainability of certain buildings"*⁴. The ABCB is clear that it does not define the needs of the community; rather, it looks to relevant policymakers for direction. A key problem for the project from the start has been the lack of will by government institutions to meet this stated policy priority⁵.

Australia's current policy position

Largely supporting a market-driven housing industry, the Australian Government⁶ recognises the role of government in ensuring the quality of housing from two perspectives:

- * From a social perspective, housing provides a stable base from which we can participate in society, form families, and enjoy retirement. Housing can determine lifetime education, employment, and health outcomes.
- * From an economic perspective, housing has a significant impact upon investment, productivity and participation, as well as consumption and saving trends across the economy.

The Australian Government acknowledges the significant role all levels of government play in the housing market through:

- * Regulation (in this case, through the NCC); and
- * Alternative interventions in the market, (in this case, funding for social housing, residential care facilities, and Specialist Disability Accommodation), or where governments are seeking to stimulate specific outcomes (in this case, funding education and training).

Australia is a signatory to the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) and its Optional Protocol⁷. The UNCRPD calls on signatories to promote “universal” (known here as “livable”) design in the development of standards.

Australia's Disability Strategy 2021-2031 (the Strategy)⁸ is Australia's response to its obligations under the UNCRPD. In the Strategy, references to people with disability include people with disability of all ages, whether their disability has been present from birth or acquired through illness, injury, accident or the ageing process. The Strategy focuses on removing barriers from everyday life to enable people to participate in society fully and effectively, rather than providing alternative specialist solutions.

Of significance is the decision by Building Ministers in April 2021 to regulate the ABCB Livable Housing Design Standard. This pre-dates the agreement of First Ministers to the Strategy⁸ in December 2021. The Strategy now establishes a clear policy position for the ABCB and a benchmark against which the NCC's objective must be measured.

Of direct relevance is the Strategy's Policy Priority 2, which states that:

Housing is accessible and people with disability have choice and control about where they live, who they live with, and who comes into their home.

Accessible and well-designed housing supports independence and social and economic participation. Increasing the availability of accessible housing provides choices on where to live, who to live with, and enables people with disability to visit, socialise and connect with neighbours, family, and friends. Improved takeup of universal design principles will support people regardless of age or disability to live in their home through all stages of their lives.
(p. 10)

Evidence

The NCC's current Livable Housing Design Standard fails to meet the nationally agreed policy priority for housing provision and design.

For evidence of the failure of alternative interventions in the housing market to remove these same barriers, refer to p. 8.

For evidence of the failure of the individual features in the Livable Housing Design Standard, refer to p. 13.

For evidence supporting the regulation of ABCB Livable Housing Design Standard: Beyond Minimum, refer to p. 13.

The impact

Introduction

The Centre for International Economics (CIE)⁹ has previously measured the costs and benefits of the ABCB Livable Housing Design Standard: Beyond Minimum^a. The CIE Regulatory Impact Statement concluded “*that regulatory options to amend the NCC for all new houses and apartments ... impose costs that outweigh the benefits*”. The CIE acknowledged, however, that their cost-benefit analysis did not provide a well-rounded picture:

Decision-makers are best placed to weigh up factors, such as social justice for people with disability supporting more inclusive communities and ageing in place, as well as Australia's future progress towards international human rights treaties, against the net cost imposed on other members of the community.

That said, the submission from Melbourne Disability Institute (MDI)^{10,11} in 2020 provided important economic evidence that supported the regulation of the ABCB Livable Housing Design Standard: Beyond Minimum. The MDI concluded that:

- Benefits of the ABCB Livable Housing Design Standard: Beyond Minimum outweigh costs.

^a Known in the CIE report as Option 2

- There are significant social, health and economic benefits that cannot be readily monetised.
- Many of the costs of the requirements of the ABCB Livable Housing Design Standard: Beyond Minimum had already been absorbed into the costs of established practice.

Benefits outweigh costs

Using the CIE data for the Consultation RIS¹², the MDI found that the benefits of the ABCB Livable Housing Design Standard: Beyond Minimum outweighed the costs. The submission argued *“that Option 2^b had particular merit as the most cost-effective of the options that achieve functionality for those elderly and/or disabled people in wheelchairs”* (p. 10).

Social, health and economic benefits beyond the monetised benefits

To address the gaps in both qualitative and non- monetised quantitative data informing the CIE’s Consultation RIS, the MDI conducted in 2020 an online questionnaire that elicited 1,187 responses, followed by 45 in-depth interviews. The aim was to measure and to develop a greater understanding of the social, health and economic impacts of accessible housing on people with mobility limitations.

The research concluded that:

- Building all new homes to accessible standard as mainstream practice will be the most effective way to address the shortage in accessible housing.
- Modification of existing housing has comparatively poor outcomes and is not cost-efficient.
- The negative impact of inaccessible housing on social benefits such as dignity, freedom, social inclusion, health, and workforce participation is profound.
- the CIE Consultation RIS underestimated the economic costs of inaccessible housing, by ignoring impacts on workforce participation and productivity of people with mobility limitations; underestimating the impact on paid and unpaid support needs; underestimating adverse impacts on mental health and wellbeing; and, underestimating the extent to which a shortage in accessible housing limits housing choice and mobility.

^b Option 2 is equivalent to ABCB Livable Housing Design Standard: Beyond Minimum

Impact on established building practice

The MDI submission included an audit of the accessible features in 20 new build, high volume house plans. The audit found that, prior to regulation of the ABCB Livable Housing Design Standard, many accessibility features were already incorporated into most popular house designs being built in Australia, but not in a reliable and consistent manner (for example, a large bathroom with a step at the entry).

Given the high take-up of individual elements prior to regulation, and the consistent exceeding of minimum standards for some elements, the MDI submission suggested that the cost of accessibility had already be factored into current designs to a significant extent. This is likely to be more evident by 2028, the proposed time of regulation of the ABCB Livable Housing Design Standard: Beyond Minimum.

To measure and further understand the impact of the proposed regulation of the ABCB Livable Housing Design Standard: Beyond Minimum on housing providers, residents and visitors, we recommend:

1. A collaborative review by the CIE and the MDI of the CIE's 2020 cost/benefit analysis;
2. Reports from the Commonwealth Departments of Housing, Health and Aged Care, Department of Social Services, and the National Disability Insurance Agency on their policies supporting the regulation of the ABCB Livable Housing Design Standard: Beyond Minimum and the anticipated impacts on their programs; and
3. A study measuring the current ABCB Livable Housing Design Standard on the housing industry.

Alternative approaches

The following alternative approaches to regulation have been considered:

- An enhanced voluntary approach

This voluntary approach aims to increase the supply of dwellings suitable for a greater number of people with mobility limitations, through education and awareness of key stakeholders in the mainstream housing market.

- A financial incentive

This approach aims to increase the supply of dwellings suitable for people who have mobility limitations to reside in or visit by targeting financial incentives within the mainstream housing market.

An enhanced voluntary approach

This voluntary approach aims to increase the supply of dwellings suitable for a greater number of people with mobility limitations, through education and awareness of key stakeholders in the mainstream housing market.

This would include:

- Widespread voluntary uptake of ABCB Livable Housing Design Standard: Beyond Minimum.
- information provision to developers, designers, builders and buyers.
- better matching services of buildings to buyers and renters.

Evidence against an enhanced voluntary approach

This approach reflects the Strategic Plan of the National Dialogue for Universal Housing Design and Livable Housing Australia. Commenced in 2010, this voluntary initiative failed to reach its 2013 target and has little chance of reaching less than 5% of its 2020 target¹³. This demonstrates a fundamental failure of this option.

Ward & Franz¹⁴ suggest that this low uptake is the outcome of flawed assumptions underpinning the voluntary approach to provide livable housing design. These assumptions are that:

- Buyers and builders of new housing will automatically consider the needs of future users;
- The housing industry will transform voluntarily to take up an optional access standard; and
- The housing industry will take responsibility for the social inclusion of people with mobility limitations.

Both Bringolf¹⁵ and Ward & Jacob¹⁶ argue that without regulation, there is unacceptable financial risk for many builders to change their established building practices to provide accessibility.

We do not support a voluntary approach. The ABCB Voluntary Livable Housing Design Standard: Beyond Minimum is unlikely to change building practice on a large scale. We acknowledge that the ABCB Voluntary Livable Housing Design Standard: Beyond Minimum may be used to a greater extent by:

- Increased effort to raise awareness of the ABCB Voluntary Livable Housing Design Standard: Beyond Minimum.
- Free certification of completed dwellings to ABCB Voluntary Livable Housing Design Standard: Beyond Minimum.
- Use of mainstream real estate websites to match dwellings certified to ABCB Voluntary Livable Housing Design Standard: Beyond Minimum with buyers and renters.

A financial incentive

This approach aims to increase the supply of dwellings suitable for people who have mobility limitations to reside in or visit by targeting financial incentives within the mainstream housing market.

This approach has been used in contractual arrangements between governments and housing providers to ensure government-subsidised housing is designed for its anticipated residents.

For example, Specialist Disability Accommodation payments¹⁷ are at varying rates according to the residents' design needs. Housing providers have responded to the generous level of funding and an expectation of a long-term political commitment. Nonetheless, the Specialist Disability Accommodation program aims to assist only a small cohort of people with severe disability. It is not intended to reduce barriers within the mainstream housing market.

Evidence against a financial incentive

The Housing Industry Association¹⁸ argues that the uptake of livable housing design is the responsibility of the government and the buyer. The position it presented in relation to the (then proposed) 2022 provisions is that:

Accessibility features for people with disabilities, 'ageing in place', visitability or adaptability in private homes should be addressed through voluntary market-based incentives, improved consumer and industry information and education programs, and direct Government assistance to people with disabilities.

Evidence suggests that financial incentives have not been supported by governments. Prior to the NCC 2022 amendment, various States and Territories used a range of regulatory, contract-driven and voluntary approaches, all failing to substantially increase the supply of accessible dwellings¹⁹.

Although financial incentives are aimed to increase and target supply (this has yet to be tested), builders require a long-term government commitment to funding

and an attractive subsidy. A poorly funded, short-term subsidy for the ABCB Voluntary Livable Housing Design Standard: Beyond Minimum will not lead to the productivity advantages of economies of scale, higher quality and new products, and lower costs that regulatory reform is known to deliver²⁰.

We do not support this approach because:

- Governments are unlikely to provide substantial financial incentives to the housing industry into the indefinite future to voluntarily implement the ABCB Voluntary Livable Housing Design Standard: Beyond Minimum.
- Financial incentives are likely to impede the housing industry to become competitive in providing ABCB Voluntary Livable Housing Design Standard: Beyond Minimum.

Consultation

ANUHD and BBH is the voice of people whose lives are impacted by the design of housing and considers that ABCB Livable Housing Design Standard-Beyond Minimum is the appropriate minimum access requirements in the NCC for all new and extensively modified housing.

This position is supported by the following national organisations:

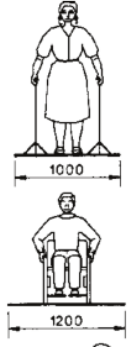
- Australian Association of Gerontology
- Australian Council of Social Service
- Australian Federation of Disability Organisations
- Brain Injury Australia
- Building Designers Association Australia
- Carers Australia
- Centre for Universal Design Australia
- Children and Young People with Disability Australia
- Community Housing Industry Alliance
- Country Women's Association
- Dementia Australia
- Economic Security for Women
- Every Age Counts
- First People's Disability Network Australia
- Griffith University -the Hopkins Centre
- Home Modifications Australia
- Independent Advisory Council to the NDIS
- MS Australia
- National Disability Services
- National Foundation for Australian Women
- National Rural Women's Coalition
- National Seniors Australia
- National Shelter
- Occupational Therapy Australia
- People with Disability Australia
- Physical Disability Australia
- Polio Australia
- Rights and Inclusion Australia
- Specialist Disability Accommodation Australia
- Spinal Life Australia
- Summer Foundation
- University of Melbourne – Melbourne Disability Institute
- Women with Disability Australia

The following institutions have provided supporting research:

- Australian Housing and Urban Research Institute
- Griffith University -the Hopkins Centre
- Summer Foundation
- University of Melbourne – Melbourne Disability Institute
- Access Consultants Association of Australia

The solution

ABCB Livable Housing Design Standard: Beyond Minimum

Barriers	Proposed improvements	Purpose of and evidence for improvement
1. Dwelling access		
1.1 Step-free access path (Class 1a buildings only)		
<p>The current minimum path width does not suit the use of a user of a A90* wheelchair in comfort.</p> <p>* 90th percentile (or A90) wheelchair footprint represents the size of 90 percent of all wheelchairs (sampled at the time).</p>	<p>The minimum clear pathway width is increased to 1100 mm.</p> <p>Any gates along the access path must have a minimum clear opening width of 850 mm, measured as if the gate were an entrance door.</p>	<p>Widths of paths recommended by AS1428.2-1992 (see diagram below)</p>  <p>(a) A clear width of 1000 mm is adequate for people with ambulant disabilities, just allows passage for 80 percent of people who use wheelchairs, and is in accordance with AS 1428.1</p> <p>(b) People who use wheelchairs require a clear width of 1200 mm</p> <p>1200mm width is preferable, however familiarity gained in home environments allow for greater accuracy. Clear width for passing is not required.</p>
1.2 Parking space incorporated into step-free access path		
<p>The ceiling height of a Class 10A (non-habitable) appurtenant carport or garage may not allow for wheelchair mechanisms on car roofs or wheelchair accessible vans.</p>	<p>An appurtenant Class 10a garage or carport will have:</p> <p>a. a vertical clearance over the parking space of at least 2500 mm; and</p>	<p>This improvement provides shelter for a person entering or exiting a vehicle and space for a wheelchair accessible van or a car with a chair on the roof (See ACAA Practice note PN : 01 – March 2014)</p>

Barriers

A person using a mobility aid takes more time than an ambulant person to exit or enter a vehicle. Lack of protection from the weather presents a slip, trip and fall risk.

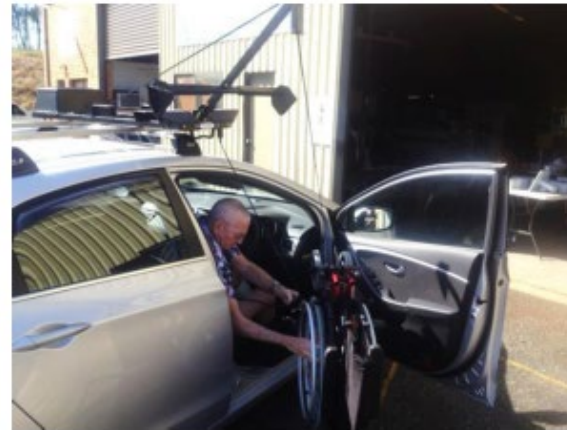
Proposed improvements

- b. a covered parking space to ensure protection from the weather.

Purpose of and evidence for improvement



Wymo Hoist



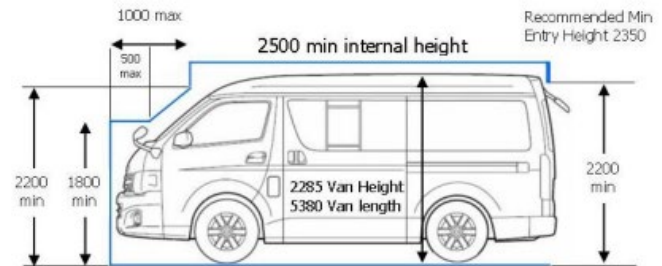
Wymo Hoist

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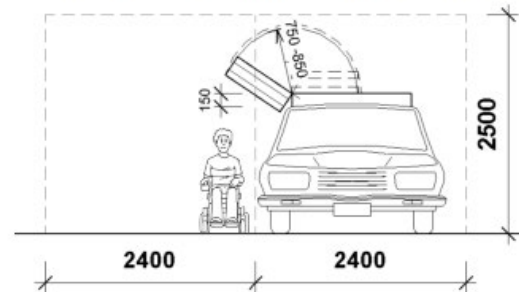
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Vehicle with Wymo hoist in closed position.



Permissible heights under AS2890.6, with Toyota Commuter Hi Ace LWB Van



Car height 1450mm-1550mm, Wymo hoist arc and roof rack 900mm-950mm

Barriers	Proposed improvements	Purpose of and evidence for improvement
2.Dwelling entrance		

2.1 Clear opening width
 The current minimum door width remains inaccessible to or minimal tolerance for error for a A90 size wheelchair.

Minimum clear door opening width increased from 820 mm to 850 mm.

This improvement provides an adequate turning space for a person using a mobility-aid without damage to the walls, door or door frame. Refer to width of a A90 size wheelchair in the market (See diagram below from AS1428.1-2009).

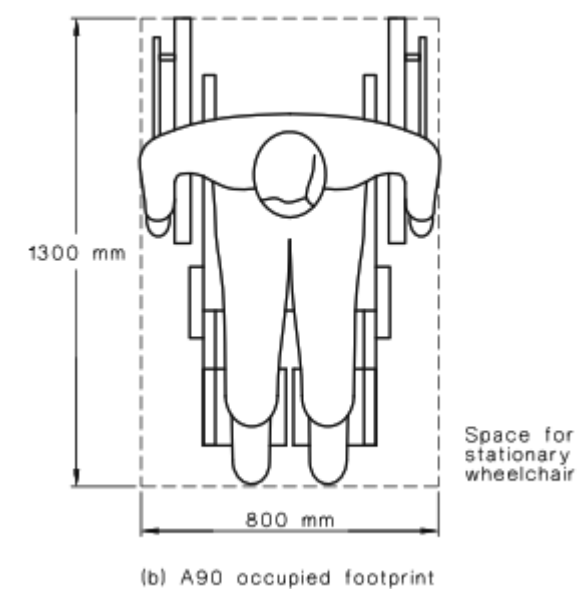


Figure 1 of AS1428.1-2009
 820mm clear opening means entry at sharp 90 degrees only with 20mm margin of error.
 To allow for a A90 size wheelchair AS1428.1-2009 requires an 850mm min clear opening door.

Barriers	Proposed improvements	Purpose of and evidence for improvement
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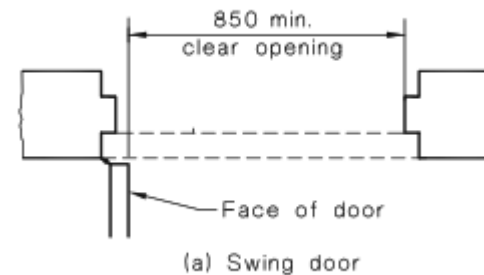


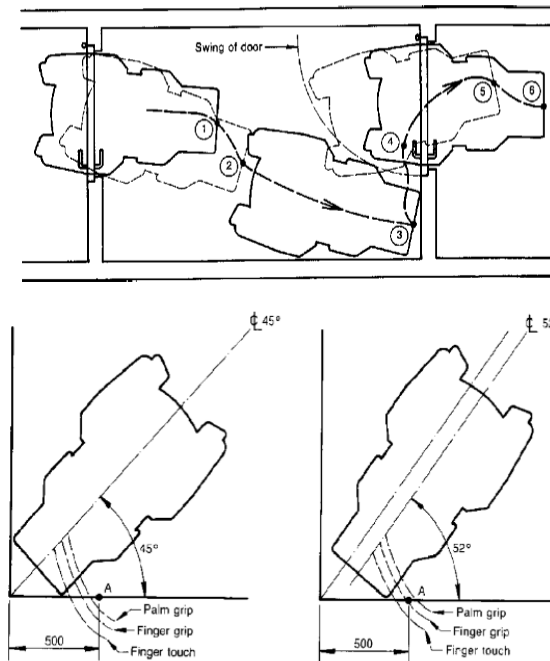
Fig 40 of AS1428.1

2.2 Threshold		
Existing provisions have adequately reduced barriers	No change	
2.3 Landing area		
The current landing area width does not suit the use of a A90 size wheelchair in comfort.	A level landing area is increased from 1200 mm x1200 mm to 1350 mm x 1350 mm.	1350 mm x1350 mm remains inadequate for turning space for a wheelchair (1540x2070 req for a turn). It may be adequate for other mobility aids.
2.4 Weatherproofing for step-free entrance		
Existing provisions have adequately reduced barriers	No change	
3.Internal doors & corridors		
3.1 Clear opening width		
The current minimum door width remains inaccessible to or minimal tolerance for error for A90 size wheelchair.	Minimum clear door opening width increased from 820 mm to 850 mm,	This provides an adequate turning space for a person using a mobility-aid without damage to the walls, door or door frame (evidence required). See comments in 2.1 in this Table. Note that even if the door size increases it does not mean that a person requiring use of wheelchair can independently access the

door as there is no latch side space requirement in LHA Gold or Platinum. This is a known issue with LHA which is one of the reasons it does not work for independent wheelchair users.

AS 1428.1 Suppl—1993

14



DIMENSIONS IN MILLIMETRES

FIGURE C17 HAND REACH TO WALL-MOUNTED OR DOOR-MOUNTED CONTROLS

3.2 Threshold

Existing provisions have adequately reduced barriers.

No change

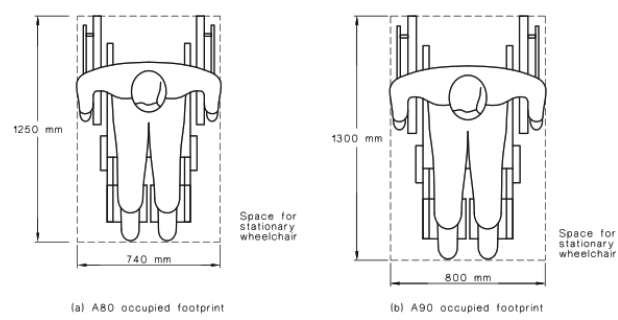
Barriers	Proposed improvements	Purpose of and evidence for improvement
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<p>3.3 Corridor width</p> <p>The current minimum corridor width restricts navigability for users of A90 size wheelchairs.</p>	<p>Minimum corridor width of 1000 mm increased to 1200 mm.</p>	<p>Refer to 1.1 in this Table</p> <p>AS1428.2-1992 Clause 6.4 states “the minimum clear width of a path of travel shall be 1200 mm”.</p>
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4. Toilet

<p>4.1 Location</p> <p>Existing provisions have adequately reduced barriers.</p>	<p>No change</p>	
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<p>4.2 Circulation space</p> <p>The current minimum space in front of the toilet makes it inaccessible to users of A90 size wheelchairs.</p>	<p>Minimum clear width of 1200 mm between the walls of the bathroom if located in a separate room, or between amenities if located in a combined bathroom.</p>	<p>It should be noted that, according to AS 1428.2-1992, 1200x1200 will not be suitable for a wheelchair user as the even the 80th percentile wheelchair size is more than 1200x1200.</p> <p>Also a wheelchair user would need more space to manoeuvre in the toilet to be able to use it (not just fit in the space).</p>
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5. Shower

<p>5.1 Application</p> <p>Showers located on levels other than the entry level are</p>	<p>The hobless, step-free shower recess will be located in a bathroom on the entry level;</p>	<p>This allows for all people to reach the space containing a hobless step-free shower.</p>
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Barriers	Proposed improvements	Purpose of and evidence for improvement
inaccessible to people who cannot use stairs.		
5.2 Hobless and step-free entry		
Existing provisions have adequately reduced barriers.	No change	
5.3 Dimensions and circulation space		
The current minimum space in front of the shower makes it inaccessible to ##% of mobility-aid users	The shower must have dimensions of not less than 900 mm x 900 mm, with a clear space of not less than 1200 mm x 1200 mm adjacent to the shower.	See comments in 4.2 of this Table.
6.Reinforcement of bathroom and toilet walls		
6.1 Location		
Existing provisions have adequately reduced barriers.	No change	Remove exemptions for door / window locations in areas that need wall reinforcement.
6.2 Construction		
Existing provisions have adequately reduced barriers.	No change	
7.Internal stairways		
7.1 Location		
Access is not required for mobility-aid users to levels of a building other than entry level.	Where an internal stairway is provided within a dwelling, it must be positioned—	Key points from Chapter 4: Falls on and from stairs and steps.* * Falls outnumber fire related injuries by one or two orders of magnitude and injuries related to stairways outnumber civilian injuries from fire by a factor of approximately 35.

Barriers	Proposed improvements	Purpose of and evidence for improvement
	<p>(a) adjoining a wall that is capable of supporting a handrail; or</p> <p>(b) if the stairway contains more than one flight, with its longest flight adjoining a wall that is capable of supporting a handrail.</p>	<ul style="list-style-type: none"> * In Australia stair and step fall injuries increased by over 70 percent during the decade 1993/4 to 2002/3 * In the U.S., Australia and many other countries, falls have been identified as the leading cause of non-fatal injuries and the second leading cause of spinal cord and brain injuries. * In the U.S., for falls involving stairways where the location of the stairway is reported, 85% occur in residential settings. * The annual cost of stair related falls in the U.S was approximately three times that of the annual stair construction cost. * Falls account for over 80 percent of deaths possibly associated with building features, and falls on stairs account for over 60% of slip, trip and fall deaths in buildings. * Stairway falls also lead to increased mortality post hospital-admission over non stairway falls, with 35 percent of stairway fall patients dying in hospital, compared to 19% of non-stairway fall patients*. <p style="text-align: right; font-size: small;">* Ozanne-Smith J, Guy J, Kelly M, Clapperton A. The relationship between slips, trips and falls and the design and construction of buildings. 2008</p>

7.2 Construction

There is no provision for the installation of a stair-climber or equivalent assistive technology at a later date.

A stairway that is subject to Clause 7.1 must be constructed in accordance with the following:

- (a) Each flight must have a minimum clear width of 1000 mm.
- (b) Winders must not be used in lieu of a landing to connect flights.

See 7.1 in this Table

Barriers	Proposed improvements	Purpose of and evidence for improvement
	<p>(c) Spiral stairs must not be used.</p> <p>(d) Positioned adjacent a load bearing wall.</p> <p>(e) a handrail must be installed to the full length of one side of the stairway</p>	
8.Kitchen space		
8.1 Circulation space		
<p>The kitchen space is not required to be accessible for wheelchair users.</p>	<p>(1) A kitchen must provide not less than 1200 mm circulation space in front of fixed benches and appliances or spaces for appliances.</p> <p>(2) The space required by (1) must be measured from the face of cabinet doors, disregarding any handles, benchtop overhangs and the like.</p> <p>(3) be a minimum of 600 mm in depth.</p>	<p>This allows for improved circulation (will not suit a person requiring use of a wheelchair for mobility)</p>
8.2 Floor finishes		
<p>Kitchen floors are not required to be slip resistant</p>	<p>Floor finishes will be:</p> <p>1. slip resistant; and</p>	<p>Specify slip resistance level e.g. P3/ R10</p>

Barriers	Proposed improvements	Purpose of and evidence for improvement
	2. extend under cabinetry.	Extending under cabinetry has been an issue on a number of sites and has little benefit.
9.Laundry Space		
9.1 Circulation space		
	<p>(1) A laundry space must provide not less than 1200 mm circulation space in front of a washtub and any other fixed benches or appliances.</p> <p>(2) The space required by (1) must be measured from the face of cabinet doors, disregarding any handles, benchtop overhangs and the like.</p> <p>(3) Where space is provided for a washing machine, it must be not less than 600 mm in depth, and must not overlap with the space required by (1).</p>	This allows for improved circulation (will not suit a person requiring use of a wheelchair for mobility)
9.2 Floor finishes		
Kitchen floors are not required to be slip resistant.	<p>Floor finishes will be:</p> <ol style="list-style-type: none"> 1. slip resistant; and 2. extend under cabinetry. 	See 8.2 in this Table

Barriers	Proposed improvements	Purpose of and evidence for improvement
10. Bedroom space		
10.1 Location and circulation space		
<p>There is no requirement for a suitable space on the entry level of the building where a person can sleep in privacy. This means that people who cannot access other levels are unable to return home or stay at short notice.</p>	<p>1. There must be a suitable room or space on the ground or entry level of the dwelling that—</p> <ul style="list-style-type: none"> (a) has a floor space of not less than 10 m²; and (b) provides a clear path of travel not less than 1000 mm wide along at least one side of the space intended for placement of a bed. <p>2. For the purposes of (1)(a), the area of the required floor space must be measured exclusive of—</p> <ul style="list-style-type: none"> (a) any wall linings, skirting boards or fixed wardrobes; and (b) the swing arc of any door that opens in to the room or space. <p>3. Within the space required by (1)(a), the space for placement of a bed must—</p>	<p>This space allows for people unable to use the stairs to return home or stay over at short notice, and have access to a toilet and shower.</p>

Barriers	Proposed improvements	Purpose of and evidence for improvement
	(a) be rectangular, with dimensions of not less than 1520 mm x 2030 mm; and (b) not overlap with the space required by (1)(b).	
10.2 Suitability See above	For the purposes of Clause 10.1(1), a room is considered suitable if it is— (a) a habitable room; and (b) provided with natural light and ventilation in accordance with the relevant requirements for habitable rooms set out in NCC Volume One or Two, as appropriate.	See above
11.Switches and general power outlets		
11.1 Height and location		
There is no requirement to position switches and power outlets to be accessible for people with cognitive, mobility or sight limitations.	1.Light switches must be positioned— (a) at a height of not less than 900 mm, but not more than 1100 mm, above the finished floor level; and	Switches and general power outlets should be at easy reach for use by people with cognitive, mobility or sight limitations. It is recommended that the height is 600mm to match with other access standards).

Barriers	Proposed improvements	Purpose of and evidence for improvement
	<p>(b) if installed adjacent to a doorway, horizontally aligned with the door handle.</p> <p>2. General power outlets must be positioned not less than 300 mm above the finished floor level.</p> <p>3. The requirements of (1) and (2) need not be complied with where—</p> <p>(a) doing so would result in a risk to the safety of users; or</p> <p>(b) the light switch or general power outlet is located above a fixed benchtop, shelf or the like.</p> <p>4. The requirements of (2) do not apply to general power outlets that are provided for a specific purpose which necessitates their location at a specific height.</p>	

Barriers	Proposed improvements	Purpose of and evidence for improvement
12.Door hardware		
12.1 Height above finished floor level		
<p>There is no requirement to position door hardware to be accessible for people with cognitive, mobility or sight limitations.</p>	<p>1.Door hardware must be located not less than 900 mm and not more than 1100 mm above the finished floor level if the door hardware is a handle or the like which is used to operate—</p> <p>(a) an entrance door that is subject to Part 2; or</p> <p>(b) an internal door that is subject to Part 3.</p> <p>2.The requirements of (1) do not apply where they would be in conflict with the NCC or other regulatory requirements for doors that form part of a swimming pool safety barrier.</p>	<p>Door handles and light switches at the same height allow for intuitive and ease of use by people with cognitive, mobility or sight limitations.</p> <p>It is recommended that door handles to align with the location of switches.</p>

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