

31st August, 2020
Australian Building Codes Board
GPO Box 2013
Canberra ACT 2601



BY POST/EMAIL – abcbris@abcb.gov.au

To whom it may concern,

RE: Consultation RIS: Proposal to include minimum accessibility standards for housing in the National Construction Code (NCC)

The Urban Development Institute of Australia (UDIA) is the leading industry body representing the interests of the urban development sector across Australia, with over 3,000 member companies. UDIA advocates for better planning, timely and affordable housing, and the building of vibrant communities to increase local job opportunities.

Thank you for the opportunity to comment on the Consultation Regulatory Impact Statement (RIS) on the proposal to include minimum accessibility standards for housing in the National Construction Code. Thank you also for taking the time to brief our members directly on 4 August.

UDIA supports the Australian government in the driving purpose of the Consultation RIS to improve the availability of improved accessibility homes. The RIS report, including material from earlier work, is an important contribution of critical material to the discussion.

In providing the following submission, UDIA draws on the extensive experience of its members across Australia in the development and construction of residential dwellings, understanding of market dynamics and economic feasibilities for housing delivery as well as independent research and expert professional opinion.

Summary

UDIA supports the Building Ministers Forum goal of increasing the choice of housing options for people with a disability and/or ageing in place. However, we believe the costs of a mandatory and/or sector-wide approach to achieving this goal significantly outweigh the benefits under the central estimates for all of the Options tested (1 to 5), and would not be commensurate with the level of demand for accessible housing.

Assessments undertaken by our members also indicate that the costs of delivery of new homes, particularly class 2 (apartments) identified in the report are very conservative and not reflective of contemporary construction delivery realities

UDIA is concerned that if options 1 to 4 were approved, **all** new houses, dual occupancies, townhouses, villas, apartments, granny flats and other houses will need to incorporate substantial additional accessible housing features. We point out that in general new homes are already more accessible than older homes. A major concern is that the burden of this requirement would be placed on a small proportion of the new homebuying community, whereas medical care and disability support for those in need is a much broader community responsibility.

Options 1 to 4 result in high construction delivery costs, which has a direct impact on housing affordability, but are also not well targeted to the cohort with the accessibility difficulties. This is forecast to be true to the extent any potential home buyer with accessibility needs who has a lower income would not be able to afford the housing delivered under options 1- 4. As a result, these options would not improve the availability of suitable housing to this group.

The Options 1 to 4 have been assessed to induce high costs in general and high risks of imposing unintended excessive costs. On some sites, the costs of complying with the proposed standards will be high and also works against some buyers that have a strong preference for other layouts that do not accord with design elements.

Affordable access to new housing in the community is finely balanced and generally severely weighted in price against lower income households. Additional costs exclude additional Australian families from home ownership and less demand for new dwellings reduces the through-put of second-hand homes to other families.

The proposed solutions will create significant increased costs for class 2 dwellings (apartments). Option 1 requiring all apartment car parking spaces to be around a third larger, creates underestimated costs in the report. Significant costs are also generated from slab finished level requirements, balcony step, stair landings, additional space use and the ground floor bedroom requirement.

For Class 1a dwellings there is considerable concern that the stepless entries and stepless outdoor thresholds will not be in accordance with the NCC and Australian Standards and will require performance solutions.

UDIA is concerned that with options 1 to 4 substantial costs would be imposed but with no or very limited benefits accruing to the very majority of principle purchasers of new dwellings, and even less benefit accruing to those who are the intended beneficiaries of this proposal. Essentially, limited benefit would also flow to those in most in need of enhanced mobility surroundings as a consequence of their general lower income.

UDIA's preferred approach is:

- Option 5 providing a targeted subsidy for new accessible homes to meet the specific needs of the person, acknowledging the specific person's requirements. This is likely to have significant impact in addressing the present needs, acknowledges the higher likelihood that these persons are often on lower incomes and can achieve significant social benefit.

- Option 6 if further developed, to incorporate an enhanced approach to voluntary guidance, which involves replacing the Livable Housing Design Guidelines (LHDG) and associated regulations with a non-regulatory ABCB handbook as proposed and take up encouraged by incentives from regulatory authorities (UDIA notes a number of local governments presently incentivise enhanced accessibility arrangements). The new ABCB handbook would not include:
 - Stepless Entry and Threshold requirements in Class 1a and Class 2;
 - Increases to the volume of car parking space in Class 2 dwellings.

UDIA also considers other measures should be considered to stimulate a market response to the provision of accessible homes. These being potentially of particular benefit at this time of COVID-19 where support for construction is desirable rather than additional private costs. This could include:

- Stamp duty holidays or reductions or other incentives to assist older Australians to down size to new more accessible housing;
- Development of additional social housing;
- Support for housing incentive schemes which spread the cost burden of increased accessibility across a broader cross spectrum of the community in line with the whole-of-community responsibility for improving quality of life for Australians with disabilities.

Further details of our comments are provided below.

Context

The report identifies 1.59 million people in Australia in 2018 had a substantial mobility limiting disability which represented around 6.4% of the population (and this number is expected to grow as the population ages). It is noted that mobility issues are a significant factor in the Australian community for a specific group. Through programs like the Specialist Disability Accommodation (SDA), under the National Disability Insurance Scheme, the government is acting to provide accessible accommodation directly for those with substantial needs.

This is an important action by the government recognising the responsibility of the wider community to those in need. These schemes and those assisting with modifications to homes, utilise the whole community's tax contributions to assist this group. The program assisting with modifications to homes to suit people in the community currently modifies around 22,000 dwellings each year at a weighted average cost of \$27,524.

The report identifies costs across options 1 to 4 ranging from:

- \$1,839 to \$15,656 per townhouse dwelling,
- \$1,322 to \$12,210 for 3 storey walk up apartment, and
- \$1,637 to \$18,391 for 4 storey plus apartments.

UDIA has received concerns from members that these cost estimates are particularly conservative and in many instances the modification costs are considerably higher. It is noted that the unfortunate irony of the cost impacts of accessibility measures on housing flows through to increased end price of housing which would likely further exacerbate the pricing-out or conferring heightened housing stress upon individuals most in need of the accessibility provisions.

UDIA is concerned that the proposed changes to the NCC in options 1 to 4 miss this shared community responsibility and would unfairly send the costs involved in heightened accessibility changes to a limited new home buying sector of the community. The UDIA also considers a better targeted approach is required to avoid reducing the affordability of new homes.

Key costs to home affordability

While the UDIA commends the ABCB for commissioning a detailed assessment of the costs of the proposal, we would like to highlight the potential impact costs at subdivision stage, including the need to adjust lot typologies. Some of the most prevalent and popular lot typologies in the market would no longer be possible under the proposed changes, including lots less than 350m², narrow frontage lots, and lots with small front setbacks. Requiring larger and wider lots with longer front setbacks would significantly reduce residential densities and increase the cost of a typical lot, negatively impacting already stressed housing affordability.

The critical costs that are of most concern to the development industry derive from indicated options 1 to 4 for class 2 dwellings. These derive particularly from the requirements for:

- wider and higher car parking spaces
- greater toilet, laundry and bathroom space
- stair landings
- window height and size costs
- balcony step free
- reduced level change permitted between the street kerb and slab finished level.

An assessment of the provisions against practicality and cost of delivery has been undertaken of options 1 to 3 for class 1a and class 2 dwellings and is attached for information. The assessment highlights in red those requirements most concerning.

Land division issues

The requirements of the options 1 to 4 would drive increases to the overall size of the dwelling to address greater space requirements in bathrooms, toilets, laundry and stair landings. As noted above this in turn will require increased lot sizes and hence higher dwelling prices.

Options 1 to 4 seek a maximum 1:14 rise from front boundary to slab finished level. This would require a lower underlying pad level of finished allotments to change from what is normally produced in land divisions today. The impact of this will mean in most cases that there will be higher costs associated with site excavation and exported material. This would also create the need for the majority of lots to have a more developed stormwater drainage system to drain the surface and roof water to protect the dwelling as there will be less fall to the street kerb and channel.

Providing adequate flooding mitigation for homes and preventing moisture penetration to the structure of these homes is a key concern for sustainable development and construction.

Dwelling design and construction impacts

Options 1 to 4 include a requirement for all car parking spaces to be 3.2 metres wide versus the current 2.4 metres. Height clearance also increases to 2.5 metres from the more usual 2.2 metres. This will have some significant effects on designs for detached dwellings but would be very onerous on class 2 dwellings - particularly those relying on basement or structure parking. In general, this represents a 1/3 increase in space and substantially more in excavation of basements, engineering, and concrete form work.

The requirement for a ground floor bedroom in townhouses and apartments is a very substantial change from present development arrangements. A preliminary assessment of contemporary development products indicates almost no affordable townhouses and apartments are produced in this way. In practice, car parking space, other uses, and market demand for affordable homes directly conflict with providing ground bedrooms.

UDIA is also concerned at the resources and cost associated with redrafting of home designs, slab engineering design, services, landscaping, as well as point of sale material. Costs will also be incurred in the training of the new detailing and construction methods for many trades in the industry.

We would also like to raise the issue of excavation costs for apartments, which the ABCB decided not to include in the central case cost estimates at this stage. UDIA members advise us that this component of works is significant. One example is that the larger car parking spaces required under the LHDG Silver Level would introduce column grid inefficiencies, and possibly mean additional basement parking levels are required. Similarly, the higher parking height requirements under the LHDG Gold Level would require 900mm of additional excavation for a 2-3 basement level development, and increase perimeter shoring wall depths, foundation pile depths, and hydrostatic slab requirements.

Resolution of issues is required

UDIA is concerned that a number of matters raised in the RIS report are not well resolved and it is recommended that further industry liaison should be undertaken to resolve these issues before advancing the accessibility standards proposals.

Key areas of concern include:

- the proposals do not account for or resolve the impacts on dwellings acquired by other parts of the NCC such as the provision of weep holes and would require more costly and possibly unsustainable slab requirements;
- overlap of the proposals and existing regulation and guidelines that are in use differing parts of the community;
- the options presented might not be adequate for wheelchair accessibility, particularly large electric wheelchairs and would require additional modification;
- inadequate consideration of incentive approaches to achieving improved accessibility;
- not accounting for the need to ensure flood safety of dwellings and the requirements of local governments and others for increasing freeboard of the slab above street.

The policy content should also refer to the National Housing and Homelessness Agreement and the individual bi-lateral agreements for each State. While this is not specifically related to accessible

housing, the gaps in supply of housing are intrinsically related and many of the bi-lateral agreements include some accessible housing commitments by the States.

UDIA is concerned the setting of the NCC is not the right place to be setting the amount of accessible housing we should have in our communities. The quantum of accessible housing required or when it is required is not a core skill for the organisation.

The RIS report does not appropriately consider all the dwelling typologies provided across the wider housing continuum. It is arguable different sectors of housing should have different targets for accessibility. For example, social housing may be a better setting for a very high percentage of accessibility.

It is considered some forms of housing do not lend themselves to being very accessible by their nature. Examples include townhouses, split level homes, those incorporating mezzanines, pole homes, traditional Queenslanders, and those on sloping sites. It is considered that good accessible home choices can be achieved across industry without creating an impost on these forms. In practice, stringent application of the option 1 to 4 requirements would likely lead to reduced construction of these forms and could lead to more flat blocks with slab on ground only construction. This would reduce overall housing diversity that meets the broader housing needs of the community.

Preferred approach

UDIA does not support implementation of options 1 to 4 that would require all new houses, dual occupancies, townhouses, villas, apartments, granny flats and other dwellings to incorporate substantial additional accessible housing features. UDIA is concerned the burden of this requirement would result in high costs in general and risks the imposition of unintended excessive costs on many development sites. This would have direct impacts on housing affordability and reduce housing supply.

UDIA considers options 1 to 4 would impose substantial costs with limited benefits accruing to the majority of purchasers of new dwellings. It would also have limited or sporadic benefit to those who are the intended beneficiaries.

Medical care and disability support for those in need is generally a broad shared community responsibility. Options 1 to 4 however would apply substantial costs to the limited number of new homebuyers including first homebuyers in the community, and without surety of achieving the desired care for all those in need.

UDIA would prefer an approach targeted to members of the community with accessibility difficulties including those on lower incomes not be able to afford new housing. This approach would be better targeted, and we consider be delivered at lower cost.

A preferred approach would be:

- A targeted subsidy for new accessible homes to meet the specific needs of the mobility limited persons;
- Voluntary encouragement of the broader inclusion of accessible features into new dwellings through:

- further development of voluntary guidelines, along the lines of the Livable Housing Design Guidelines to provide national guidance
- provision of incentives and subsidies to stimulate new construction
- Acknowledgement that a substantial number of new dwellings would not meet all accessible requirements but the total quantum of need does not require this, and the supply of a diverse range of homes is desirable for the diversity of household types and compositions, preferences and affordable options across our community.

UDIA notes the LHDG are presently incentivised by a number of local governments to varying degrees. Since at least 2012, Local Government NSW has been recommending local councils include Development Control Plan (DCP) provisions relating to the LHDG. A number of local councils have since adopted such provisions in their DCPs.

For example, Bellingen Shire Council currently requires *all* new dwellings and multi-dwelling housing to meet the LHDG Silver Level requirements, and 20% of all multi-dwelling housing and residential flat buildings to meet LHDG Gold Level requirements. Sutherland Shire Council requires up to a third of residential flat building dwellings to meet the LHDG Silver Level requirements.

UDIA estimates approximately 10% of new residential flat building dwellings across NSW meet the LHDG requirements through this mechanism. While these DCP provisions are not always workable and may require negotiations with council on a case-by-case basis, they are likely to more closely reflect the level of demand for accessible housing. UDIA is more supportive of this approach to encouraging accessible housing, compared to a mandatory and/or sector-wide requirement.

UDIA also considers other measures should be considered to stimulate a market response to expand the provision of accessible homes. This can target housing suited to those in need and increase the overall supply of relevant housing for population groups that are growing. This includes:

- Stamp duty holidays or reductions to assist older Australians to downsize to new accessible housing;
- Development of additional accessible social housing.

Consideration of further incentive-based schemes should also be investigated. At this time of serious impacts on employment and construction activity as a consequence of COVID-19, this is of particular relevance, and the opportunity exists for incentives to preserve and generate additional employment. Incentives could increase the supply of accessible homes and generate housing led construction employment, while also assisting the accessibility needs of the community. This is UDIA's preferred approach rather than imposing additional private costs that would reduce construction activity.

Conclusion

The proposed options 1 to 4 would create significant increased costs on new dwelling construction and class 2 dwellings in particular. Significant costs are generated from increased car parking space requirements, finished slab level requirements, balcony step, stair landings, additional space use and the ground floor bedroom requirement in multi-level homes.

UDIA supports the preliminary recommendation of the RIS report; that in general, the costs associated with including an accessible housing standard in the NCC are estimated to outweigh the benefits. UDIA also indicates these costs would not be well targeted to the need and rather have significant negative impacts on housing affordability and housing supply and employment associated with residential construction in general.

UDIA recommends support for targeted subsidy and housing incentive schemes rather than increasing general homebuyer costs. This would spread and reduce the cost burden of increased accessibility across the broad cross spectrum of the community in line with the whole-of-community responsibility for improving quality of life for Australians with disabilities.

In terms of the RIS report. UDIA supports in general options 5 and 6 as varied below:

- Option 5 providing a targeted subsidy for new accessible homes to meet the specific needs of the individual. This is likely to have significant impact in addressing the present needs, while acknowledging the higher likelihood that these persons are often on lower incomes and can achieve significant social benefit.
- Option 6 if further developed, by incorporating an enhanced approach to voluntary guidance, which involves replacing the LHDG and associated regulations with a non-regulatory ABCB handbook as proposed and take up encouraged by incentives from regulatory authorities (the UDIA notes a number of local governments presently incentivise enhanced accessibility arrangements). A new ABCB handbook would not include:
 - Stepless Entry and Threshold requirements in Class 1a and Class 2
 - Increases to the volume of car parking space in Class 2 dwellings.

UDIA also considers other measures should be considered to stimulate a market response to the provision of accessible homes and can be particular benefit at this time of COVID-19 to support construction employment. This could include:

- Stamp duty holidays or reductions or other incentives to assist older Australians to downsize to new more accessible housing;
- Development of additional accessible social housing;
- Or other measures.

We would be pleased to discuss this submission with you in further detail. Please contact our National Policy Consultant, Glenn Byres, on 0419 695 435 or glenn@headlandadvisory.com.au.

Yours sincerely



Simon Basheer

UDIA National President

Accessible Housing: Drafting of proposed NCC Changes

ISSUES:

- If these changes are integrated into NCC will the LHDG be redundant?
- How to the proposed changes integrate/ complement the AS 4299 - 1995 Adaptable Housing and requirements for Visitable Units
- Simplify system – one base standard (select silver) and one upgrade (gold/ Platinum hybrid) to simplify process and avoid ‘cherry’ picking between options
- For items which are ‘future adaptable’ eg grab -how will owners know they can adapt in the future, will there be mandatory inspections to ensure fit for purpose (safety issue)?

MAJOR ITEMS

- Stepless Entry and Access – difficult to achieve; requires performance solutions for weepholes, termites barrier, water egress issues and Class separation (Class 1a to Class 10)
- Stepless Access to balconies – difficult to achieve; requires performance solution for balcony access, water egress
- Most other items have impact on space and planning eg Location of bathroom on Ground floor – does not recognise reverse living where we may not provide a full bathroom on ground floor

| Accessible Housing Class 1a Vol 2 | Option 1 | Option 2 | Option 3 |
|--|--|--|---|
| 3.9.3.2 Access Path | <p><i>'to have no steps..'</i></p> <p>Difficult to achieve; assumes relatively level lot, will require NCC performance solutions for weephole setout or additional hobs at slab rebate, issues with termite barrier and water egress issues. Class separation (Class 1a to Class 10) 50mm min had to achieve</p> | As per Option 1 | As per Option 1 |
| 3.9.3.2 variation | <p><i>'incorporate 1 single step (190mm max)'</i></p> <p>This is preferred though still issues where lots are steeply graded and/ or garage is on lower level with steps to house entry level above</p> | As per Option 1 | As per Option 1 |
| 3.9.3.3 Access to balconies and outdoor areas | <p><i>'step-free access'</i></p> <p>Difficult to achieve; will require NCC performance solutions for weephole setout or additional hobs at slab rebate and for 50mm setdown to balconies, issues with termites barrier and water egress issues. Class separation (Class 1a to Class 10) 50mm min had to achieve</p> <p>NOTE: typical residential door suites not designed to be 'accessible' eg Stegbar. Additional cost and detailing to achieve stepless (min5mm lip) door suites.</p> <p>NOTE: this is not part of LHDG Silver requirements</p> | As Per Option 1 | As per Option 1 |
| Variation 3.9.3.3 | <p><i>'.. 1 single step..if required to prevent water'</i></p> <p>This is preferred and is achievable in most instances. Access to balcony achievable, currently have 50mm step down and to external patios etc (172)</p> | As per Option 1 | As per Option 1 |
| 3.9.3.4 Carparking Space | <p><i>'Min unobstructed width 3200 x 5400'</i></p> <p>All homes have an enclosed garage. Increase on NSW garage size by 200mm Victoria 3500 x 6000 and NSW 3000x 5400</p> | | |
| | | <p><i>'vertical clearance 2500mm'</i></p> <p>generally, garage ceiling at 2700mm</p> | <p><i>'vertical clearance 2500mm'</i></p> <p>generally garage ceiling at 2700mm</p> |
| P2.5.4 Dwelling Entrance Door | <p><i>'at least one /level and step free entrance door'</i></p> <p>Difficult to achieve; assumes relatively level lot, will require NCC performance solutions for weephole setout or additional hobs at slab rebate, issues with termite barrier and water egress issues.</p> | As per Option 1 | As per Option 1 |
| 3.9.3.5 Dwelling entry door | <p>(a) <i>'Min clearance 800mm Level step-free transition and threshold between abutting surfaces no higher than 5mm...'</i></p> <p>Min 800mm (850 clearance – achievable currently have 920mm leaf (870 clear) for entry doors.</p> <p>Step-free: Difficult to achieve; assumes relatively level lot, will require NCC performance solutions for weephole setout or additional hobs at slab rebate, issues with termite barrier and water egress issues.</p> | <p><i>Min clear opening 850mm</i></p> | <p><i>Min clear opening 850mm</i></p> |

| | | | |
|---|--|--|--|
| | NOTE: residential door suites not designed to be 'accessible' eg Stegbar. Additional cost and detailing to achieve stepless (min5mm lip) door suites. | | |
| | (c) ramped threshold 56mm Achievable but a poor result at a front porch, poor presentation and issues with tiling. | As per Option 1 | As per Option 1 |
| | (d) 1200 x 1200 landing Achievable but difficult in the narrower townhouse type product (5.2m and under) | Landing 1350 x 1350 | Landing 1350 x 1350 |
| 3.8.2.3 Internal doors and corridors | (a) (ii) at least one – (A) bathroom and (B) laundry and (C) sanitary compartment <i>Located on the same level..'</i> Wording implies all rooms are on the entry level, consider change wording to: (a) (ii) at least one – (A) bathroom or (B) laundry or (C) sanitary compartment If located on the entry level..' | As per Option 1 | As per Option 1 |
| | (b) internal corridors....clear 1000mm | Increase clear opening to 850mm and corridor to 1200mm | Increase clear opening to 850mm and corridor to 1200mm |
| 3.8.3.3 Sanitary Compartment | 900 x 1200 in front of WC clear of door swing Impact on house design and space. Increase of standard powder room size, increase nom 500mm x 900mm. | Increase 1200 wide Will impact on house design as will no longer fit under stairs | Increase 1200 wide Will impact on house design as will no longer fit under stairs |
| 3.8.3.4 Shower Compartment | No requirement .no requirement | (c) min 900x900 with 1200 x 1200 clear adjacent to shower entry 900x900 is min standard – achievable 1200 x 1200 will impact on bathroom design. NB: Not a requirement of LHDG (d) shower must be located on entry level This is too prescriptive. Does not allow for reverse living or 2 bed options | (c) min 900x900 with 1200 x 1200 clear adjacent to shower entry 900x900 is min standard – achievable 1200 x 1200 will impact on bathroom design. NB: Not a requirement of LHDG (d) shower must be located on entry level This is too prescriptive. Does not allow for reverse living or 2 bed options |
| 3.8.3.5 Reinforcement of bathroom and sanitary compartment walls | As per AS 1428.1 Relative low cost with small impact on room size. How will occupiers know the walls have been reinforced and will this be an inspection point to ensure fit for purpose? | As per AS 1428.1 Relative low cost with small impact on room size. How will occupiers know the walls have been reinforced and will this be an inspection point to ensure fit for purpose? | As per AS 1428.1 Relative low cost with small impact on room size. How will occupiers know the walls have been reinforced and will this be an inspection point to ensure fit for purpose? |
| 3.9.1.2 Stairway Construction | no requirement | (i) straight stair Has major impact on house layout and size | (i) straight stair Has major impact on house layout and size |
| 3.8.2.4 Kitchen Space | no requirement | 1200mm between benches Will impact on house designs, possible result taking from living/ dining rather than increase house size. | 1500mm between benches Will impact on house designs, possible result taking from living/ dining rather than increase house size. 1500 not useful for able bodies persons, too far apart. |
| 3.8.2.5 Laundry | no requirement | ..not less than 1200mm clearance in front of appliance Achievable with 1200mm corridors | ..not less than 1550mm clearance in front of appliance |
| P2.4.2(e) Ground Floor Bed | no requirement | There must be space provided on ground floor or entry level..suitable for use as a bed | There must be space provided on ground floor or entry level..suitable for use as a bed |

| | | | |
|--------------------------------------|----------------|--|--|
| 3.8.2.6 Bedroom Space | no requirement | <p>(i) min clear room size 10m² with 1520 x 2030mm bed (ii) 1m clear path</p> <p>Large room 13m² +, impact on planning and house size</p> | <p>(i) min clear room size 10m² with 1520 x 2030mm bed (ii) 1m clear path</p> <p>Large room 13m² +, impact on planning and house size</p> |
| 3.8.2.7 Switches and GPOS | no requirement | As per 1428.1, in line or close to Mirvac standard | As per 1428.1, in line or close to Mirvac standard |
| 3.8.2.8 Door hardware | no requirement | As per 1428.1, in line or close to Mirvac standard | As per 1428.1, in line or close to Mirvac standard |
| 3.8.2.9 Window Sills | no requirement | <p>no requirement</p> <p>..any window (i) located in habitable room (ii) transparent and the sill must be set not more than 1000mm above finished floor level'</p> | <p>Do not support. Overly prescriptive on house and facade design. Section (b) lists where it does not need to be complied with making it over complicated. Eg clerestory windows, windows above a bed etc</p> |
| 3.8.2.10 Window Operating | no requirement | <p>no requirement</p> <p>..internal controls must be operable using one hand from a standing or seated position..'</p> | <p>Do not support. Overly prescriptive on house and facade design eg clerestory window</p> |

| Accessible Housing Class 2 NCC | Option 1 | Option 2 | Option 3 |
|---|--|--|--|
| G7.2 Balconies & Outdoor Areas | Step free access- Door complies with G7.5 (870mm) | Step free access - Door complies with G7.5 (920mm) | Step free access - Door complies with G7.5 (920mm) |
| Variation to G7.2 G7.2 Balconies & Outdoor Areas | No more than 1 single step (maxi 190mm) Door complies with G7.5 (870mm) | No more than 1 single step (maxi 190mm) Door complies with G7.5 (920mm) | No more than 1 single step (maxi 190mm) Door complies with G7.5 (920mm) |
| G 7.3 Step ramp | Additional requirement - 1000mm width | Additional requirement - 1000mm width | Additional requirement - 1000mm width |
| G7.4 Car parking spaces serving a Sole occupancy unit in Class 2 | Where a car space is provided at least 1 space to be an unobstructed space of 3200 width x 5400. Max 1:33 -Bitumen, 1:40 Max for other surfaces | As per OPTION 1 + If cover unobstructed clear height of 2500mm | As per OPTION 1 + If cover unobstructed clear height of 2500mm |
| G7.5 Entrance door to Units | Minimum entrance door to be 870mm door leaf (800mm clear opening) 1200 x 1200mm circulation space on arrival side of door | Minimum entrance door to be 920mm door leaf (850mm clear opening) 1200 x 1200mm circulation space on arrival side of door | Minimum entrance door to be 920mm door leaf (850mm clear opening) 1350 x 1350mm circulation space on arrival side of door |
| F3.2 Internal doors and corridors | Corridors 1070mm (to achieve current Nibs each side) Clear door opening of 800mm to the following Bedroom doors 870mm leaf at Least 1 x Bathroom + any powder room 870mm leaf Laundry room 870mm | Corridors 1200mm Clear door opening of 850mm to the following Bedroom doors 920mm leaf at Least 1 x Bathroom + any powder room 920mm leaf Laundry room 920mm | Corridors 1200mm Clear door opening of 850mm to the following Bedroom doors 920mm leaf at Least 1 x Bathroom + any powder room 920mm leaf Laundry room 920mm |
| F2.5 Sanitary compartments Toilet criteria | Toilet space 900mm Circulation forward of pan 1200 x 900mm width No door swings or basins in circulation space In a corner when combined with a bathroom | Toilet space 1200mm Circulation forward of pan 1200 x 1200mm No doors swings or basins in circulation space In a corner when combined with a bathroom | Toilet space 1200mm Circulation forward of pan 1200 x 1200mm No doors swings or basins in circulation space In a corner when combined with a bathroom |
| F2.10 Shower compartments | shower screen to be capable of removal without causing damage to the other elements of the shower enclosure Any hob, step down or the like must not exceed 25mm | All the requirements of OPTION 1 Plus shower 900mm x 900mm size Circulation outside the shower entry 1200 x 1200mm | All the requirements of OPTION 1 Plus shower 900mm x 900mm size Circulation outside the shower entry 1200 x 1200mm |

| Accessible Housing Class 2 NCC | Option 1 | Option 2 | Option 3 |
|---|--|---|---|
| F2.11 Reinforcement of bathroom & Sanitary compartments NOTE: free standing baths not required To have reinforcements | Reinforcements of walls at least 1 x Toilet, shower & bath where provided with either plywood sheeting or noggings Detailed diagrams provided. | As per OPTION 1 | As per OPTION 1 |
| DO1 Internal Stairways D2.13 Goings and risers | Current standards in NCC meet requirements however the wording in the document may be interpreted For all the options (including option 1) | Straight stair design no winders in lieu of landings adjoining a wall that will support the handrail | Straight stair design no winders in lieu of landings adjoining a wall that will support the handrail |
| FP 3.3 Kitchen space | no requirements | Space between benches is 1200mm Excludes handles | Space between benches is 1500mm excludes handles |
| FP 3.4 Laundry space | No requirements | 1200mm clear space in front of appliances and wash tub washing machine space no less than 600mm depth | 1550mm clear space in front of appliances and wash tub washing machine space no less than 600mm depth |
| FP 3.5 ground or entry level Bedroom space | No Requirements | Habitable room 10sqm with a bed space of 1520 x 2030mm The room must be clear of robes, wall linings, skirtings, swing of robe doors & the swing arc of any door into the room with clear path of travel of 1000mm to one side of bed. | Habitable room 10sqm with a bed space of 1520 x 2030mm The room must be clear of robes, wall linings, skirtings, swing of robe doors & the swing arc of any door into the room with clear path of travel of 1000mm to one side of bed. |
| F 3.6 Switches & general purpose outlets Does not apply to GPOs for specific purpose Above benches or where it poses a safety risk | No requirements | Light switches positioned between 900 & 1100mm AFFL Aligned horizontally with door handle GPOS in Habitable rooms at not less than 300mm AFFL | Light switches positioned between 900 & 1100mm AFFL Aligned horizontally with door handle GPOS in Habitable rooms at not less than 300mm AFFL |
| F3.7 Door Hardware applies to Entry doors, balcony access door and internal doors | no requirements | Door handles are positioned between 900 & 1100mm AFFL | Door handles are positioned between 900 & 1100mm AFFL |
| F3.8 Window Sills | No requirements | No requirements | In a habitable room: and transparent: a window sill must not be more than 1000mm AFFL |
| F3.9 Window operating controls | No requirements | No requirements | Internal controls must be able to operate one handed from seated or standing position |