

Building: Livable Housing NCC 2022

Q&A

The following answers have been provided to questions asked during the [Building: Livable Housing NCC 2022 webinar](#) on 28 March 2024.

The answers provided are correct as of 9 April 2024.

Where can I find a copy of the presentation slides?

A copy of the presentation slides and recording of the webinar are available from the [VBA website](#).

Is there any exemption made for developments where sections of the Livable Housing design are not possible to implement, such as ramp access etc?

There are exemptions relating to not having to provide a step free access pathway which are outlined within *Part 3.5* of the [Livable Housing Design Handbook](#).

Can you confirm if an existing class 1a buildings will need to be upgraded to comply with the new standard if an extension is proposed, that is greater in size than 50 per cent of the existing building.

There are exemptions available based on the floor and volume limitations for the residential extension, and these exemptions are clarified within our educational resource guidance. Please use the following links that helps clarify the requirements: [BP-12](#) and [EE-04](#) (for the volume and floor area calculation guidance).

Are the Livable Housing requirements applicable to residential extensions?

Yes, the Livable Housing requirements are applicable to extensions, however there are exemptions available based on the floor and volume limitations, and these are clarified within our educational resource guidance. Please refer to [EE-04](#) that helps clarify the requirements.

Can I have one step ramp in the access path?

Yes, the use of one step ramp is allowable within the access path. Please refer to section *Clause 1.1(5) of the livable design standard* which permits the use of one step ramp in an access path. The step ramp must have a single step (no more than 190 mm high), but it can't be longer than 1900 mm or steeper than 1:10. Refer to [Livable Housing Design Handbook](#) for more information.

Step free access is fine on a reasonably level (suburban) site. What about houses built on very steep lots (i.e.15 per cent slope?). Not practical for a ramp up to the entrance door (i.e. steps required onto a deck as the ramp would be "miles" long!

There are exemptions to having to provide a step free access path and these exemptions are outlined within *Part 3.5 of the Livable Housing Design Handbook*. The use of the garage with the interconnected door provided under *Clause 1.1(1)(b) of the Standard* would indeed meet compliance.



A small second dwelling can only be 60sqm under roof, therefore it is quite difficult to provide access with zero step threshold. I doubt they will have access through a garage. Then how do we keep water out of the building? If we don't, then having a roofed area would be advantageous over the doorway and entry, but this would take up some of their 60sqm. So how do we provide a dwelling with waterproofing and reduce water ingress? Not all entry are going to be uphill.

The [webinar](https://www.vba.vic.gov.au/building/PES-previous-sessions) provides a summary of some of the options that are available. Please refer to the weatherproofing and drainage guidance provided within the PES webinars using the following link: <https://www.vba.vic.gov.au/building/PES-previous-sessions>

Are there any DTS changes coming to damp proof course clearance to work in conjunction with step-free access?

We are not aware of any impending changes by the Australian Building Codes Board, however PES webinars provide a summary of some of the DTS options that are available. Please refer to the weatherproofing and drainage guidance provided within the webinar using the following link: <https://www.vba.vic.gov.au/building/PES-previous-sessions>

If you travel up a 1:14 drive and need to turn onto the entrance path, does that part of the driveway need to be a flat landing?

A driveway can be part of an access path if it complies with other Standard requirements for access path gradients and length. If the gradient for part or all of a driveway used as an access path is 1:20 or steeper, it would be subject to *Clauses 1.1(4) and (5)* in the same way as for a separate access path.

What about drainage consideration when land has a reverse fall towards the dwellings?

The [webinar](#) outlines that the drainage must be designed in accordance with *AS 3500.3*.

Does Section 23 of the *Disability Discrimination Act 1992* apply to class 10a buildings for the purpose of regulation 233?

Section 23 of the Disability Discrimination Act 1992 does not apply to a class 10 building that is appurtenant to a residential dwelling on the same allotment as the class 10 building does not require non-discriminatory access to premises which the public or a section of the public is entitled or allowed to use.

Does the livable standard apply to alterations/extensions?

Yes, it does, however there are exemptions available based on the floor and volume limitations, and these are clarified within our educational resource guidance. Please refer [EE-04](#).

Would garage and porch have no stepdown and will be on the same level as main house finished floor level?

Yes, potentially there will be no stepdown. Please refer to *section 3 of the [Livable Housing Design Handbook](#)* for the varying options available.

Is there going to be examples of what constitutes 'insufficient space' for the exemptions?

Yes, there will be examples provided that relate to the exemptions from providing a step free access pathway within our *Practice Note LH01*, which will be published in May 2024.

Will the VBA be doing any Practice Notes to help guide the industry?

Yes, there will be a VBA Practice Notice published in May 2024.

If step-free door is provided through garage into dwelling, then the front door can still be stepped?



Yes, that is correct only one entrance door has to be step-free.

What if the land is located in a flood overlay zone? What about Melbourne Water freeboard requirements and overland flow path?

An alternative if applicable to designs which have a garage is to use the interconnected door option provided under Clause 1.1(1)(b) in the Standard.

What is determined as the entrance door (more applicable for the exemptions)? Is the door required to be on the front of the house or the garage access door? In which case, if both couldn't be complied with due to site fall, a side or rear door wouldn't then be required to be used to provide a step free access?

If the side or rear are clearly identified as the entry to the dwelling, then this is allowable. However, if the exemptions from providing step free access do not apply then the access path must lead to the identified side or rear entry of the dwelling and that entry must comply with *section 2 of the design standard*.

If we go with the garage entry option do we need a minimum 50mm stepdown for waterproofing or have to get a performance solution each time if we can't get a ramp to work as most sites would not comply to the 190mm max high ramp from the allotment boundary?

For step-free access through the interconnected garage door, the drainage at the garage opening must be installed and designed in accordance with *AS 3500.3*.

I have a new home design that is in a Special Building Overlays (SBO) due to flooding as such council requires a Finished Floor level (FFL) 760mm above Natural Ground Level (NGL). The dwelling is setback 5.5m from the front boundary as such we have not been able to have a ramp comply with the new standard, who will approve the non-compliant ramp, or do I level the ramp off & have steps only?

An alternative if applicable to designs which have a garage, is to use the interconnected door option provided under Clause 1.1(1)(b) of the Standard) and apply for an exemption to the step free access path from the relevant building surveyor assessing the building permit application.

Are there any exemptions for step free entry based on the slope of the lot/rather than each case being applying for R&C? (e.g. slope is greater than 1:x).

Due to the slope of the land please refer to *NCC Clauses H8D2(2)(a) and (b)* for the exact requirements that may apply.

If the design is made before 01/05/2024 - and proof is available - can section 10 be used?

The use of s10 is based on the discretion of the relevant building surveyor. To assist, please refer to the following guideline that helps clarify when s10 can be used:

https://www.vba.vic.gov.au/_data/assets/pdf_file/0016/134305/Ministers-Guideline-MG-13-2023-FINAL.pdf

Can step free access be made of concrete?

The step free access path can be made of concrete as well as bitumen. Please note it cannot be made with dispersed gravel or stone that does not provide a stable surface.



If building a deck as the step free walkway/landing to the building, can a 25mm visual perimeter for termites be provided, or does it have to be maximum 8mm as per the livable housing standard?

For sites identified as being termite prone, a minimum 25mm clear visual termite inspection zone must be provided as outlined in the [webinar](#).

What would happen with the weep holes, and potential water slippage into the cladding? Will we need performance solution from now on?

Please refer to *NCC Volume 2 and the Deemed to Satisfy clause 5.7.4(2) of the Housing Provisions* that describes the requirements. In summary, a minimum 75mm is required to be provided above the finished surface level of an adjacent paved, concreted or landscaped area that slopes away from the walls as outlined also in the [webinar](#). Please refer to the following links which help clarify the requirements: [Practitioner Education Series previous sessions | Victorian Building Authority \(vba.vic.gov.au\)](#) and [Part 5.7 Weatherproofing of masonry](#).

Can the term back and forth be clarified so there is no confusion with exemptions between RBS and designer?

We can confirm that the draftsman or architect must ensure the documentation they provide demonstrates compliance prior to an application of a building permit and documentation submission to the relevant building surveyor. The responsibility is on the draftsman or architect to ensure their documentation demonstrates compliance prior to submission.

In context with step free entrance, what about the door sill threshold, does that need to be step free? Its approx. 30mm.

Yes, that is correct. Only one entrance door to the dwelling must be step free, all other doors can have a threshold.

What are the drainage requirements at the building entry? Previously, a 100mm step was deemed to exclude moisture penetration from ground inundation into the home.

The [webinar](#) provides that the drainage provided at the perimeter opening of the dwelling entry must be designed in accordance with *AS 3500.3 and LHDS Part 4.4.2*. In addition, please refer to *NCC clause 3.3.3* which does not apply to a landing area provided for the purposes of *Clause 2.3 of the ABCB Standard for Livable Housing Design*, except for a channel drain or drainage surface provided under *Clause 2.4 of that Standard*.

When would these requirements be applicable to new builds?

The Livable Housing Design Standard is in effect from 1 May 2024.

How can we achieve to comply with maximum street setback regulation with this new long ramp with landing design?

In the event the step free access path exemptions under the NCC are not applicable and or the access path with a change of direction is achievable, then a report and consent may be required from council.

What happens to 1:8 which is still provided under safe movement and access for Volume 2? where an external ramp is provided for the purposes of compliance with the ABCB Standard for Livable Housing Design. Does the requirements of that Standard apply?

Please refer to the [Housing Provisions Part 11.2 Stairway and ramp construction](#).



Please advise if a floor waste is a mandatory requirement in the bathroom (not in shower area).

Please refer to *10.2 of the Housing provisions*. In Victoria, a floor waste is not mandatory for a bathroom. Please refer to the following link that outlines the requirements:

https://ncc.abcb.gov.au/editions/ncc-2022/adopted/housing-provisions/10-health-and-amenity/part-102-wet-area-waterproofing#_5f444c4f-9a64-468b-9ab0-37f28146fa53

If you have metres of non-permeable pathways, does that exempt from the permeability calculation and garden areas on the site?

Please refer to the Building Regulations 2018, specifically regulation 77 which states that if a building is to be constructed on an allotment, at least 20 per cent of the area must have a permeable surface. Please note that the report and consent of the relevant council must be obtained to an application for a building permit in relation to a design that does not comply with this regulation.

Does the step free access apply to areas within the class 2 sole-occupancy unit (SOU) ie. living to wet area?

The step free threshold does apply to the SOU entry door and to the applicable internal parts of the SOU that are required to comply with the standard. Please refer to the [Livable Housing Design Handbook](#).

Under Clause 2.2 (C) of the Livable Housing Design (LHD), if we create a 200mm wide door jamb for the internal garage access door, with a gradient not steeper than 1:8, which is facilitating dwelling access via the appurtenant garage, would this be compliant with the standard Livable Housing Australia (LHA) giving us a 25mm step down from the dwelling slab to the garage slab?

In the event you are using the garage interconnected door option to satisfy the step free access to the dwelling entrance, then a step ramp is required in accordance with *clause 1.1(5)* and a door threshold in accordance with *clause 2.2 of the Livable Housing Design Standard (LHDS)*. Please refer to the helpful guidance provided in the [Livable Housing Design Handbook](#) and LHDS available using the following link: <https://www.abcb.gov.au/news/2022/new-livable-housing-design-requirements>

Is a step free access required between the sole-occupancy unit (SOU) and the balcony for class 2?

Please refer to *NCC Volume 1 Part G7 and G7P1*, which exempts the balcony from the Livable design standard requirements. If you require a copy of NCC, it can be located using the following link: <https://ncc.abcb.gov.au/editions/ncc-2022/adopted/volume-one/g-ancillary-provisions/part-g7-livable-housing-design>

In considering upgrading existing homes, if the RBS is unable or unwilling to consider partial compliance, could an application for modification be made to the Building Appeals Board?

Yes, an application can be made to the BAB to allow a clause in the standard not be adhered to.



Does the 1000mm clear width for corridors only apply to ground/entry level, or all levels? 1000mm minimum corridor width is that between skirtings or finished wall face? The clear width is measured between finished wall surfaces (e.g. plasterboard or timber cladding), is that right? You do not take the measurement between the wall skirting boards or other wall mouldings such as picture rails. Features such as power outlets, wall tiles, door stops and so on are also excluded from this measurement. Door hardware may encroach the minimum required corridor width.

Please refer to Part 3 that states that a minimum clear width of 1000mm is required for corridors, hallways and the like if they are connected to a door that is subject to Part 1 Dwelling access.

Under AS1428 & BCA Ramps greater than 1:14 require handrails. Is a threshold ramp a ramp? How do you fit handrails on a door?

AS1428.1 is not applicable to a *class 1 residential home*. Refer to *Part 1 of the standard*.

Are there any provisions for exception to the step free sanitary compartment access requirements where it will adversely impact the viability of constructing a dwelling? For example, an exceptionally small lot where only a garage and stairs can be constructed on ground level with the dwelling to be constructed on the 1st level and above.

Please refer to *Part 4 of the standard*. There must be at least one sanitary compartment located on the ground or entry level of a dwelling. If the entry level is above the garage, then that meets the intent of the clause.

If I have an opening instead of a door, does it have to be 1m clear, or can it be 820mm min clear?

The opening can be 820mm clear, unless it is a hallway or corridor which would require 1000mm.

Do all sanitary compartments need to comply with this circulation space requirements? Or only one sanitary compartment in the home?

Please refer to part 4.1 - There must be at least one sanitary compartment located on the ground or entry level of a dwelling that would need to comply.

What's the point of a step free shower being upstairs?

There are differing variations to mobility and the Standard seeks to ensure access for the occupant to at least one shower in a dwelling regardless of where it is located. This objective does recognise, meet and enable the occupant to have access to the shower and therefore the dwelling does meet the overarching requirements of the standard.

If a toilet door has lift off hinges can the door swing overlap the 1200x900 clearance?

Clause 4.2(c) requires that a minimum circulation space of 1200mm long by 900mm wide clear space be provided in front of the toilet pan, and this applies for both a separate sanitary compartment and for a sanitary compartment that is combined with a bathroom. The minimum circulation space must be clear of the door swing, and this is unrelated to the requirement of lift off hinges.

Does the length of the WC pan have a minimum length?

There is no length specified within the standard.



Does it mean that as long as you have a sanitary compartment on the same level as the step free dwelling access, you can then have a series of steps to the rest of the home and be compliant to livable standards?

That is not correct. The threshold of an internal doorway that is subject to Clause 3.1 must— be level; or:

- (i) have a height not more than 5mm if the lip is rounded or bevelled; or
- (ii) have a ramped threshold that—
 - (a) does not extend beyond the depth of the door jamb; and
 - (b) has a gradient not steeper than 1:8; and
 - (c) is at least as wide as the minimum clear opening width of the doorway it serves. Clause 3.1 only applies to a doorway that connects to, or is in the path of travel to, any of the following:
 - Habitable room or laundry on the ground or entry level.
 - Attached Class 10a garage or carport that forms part of an access path required by Clause 1.1.
 - Sanitary compartment on the ground or entry level complying with Parts 4 and 6.
 - room containing a shower complying with Parts 5 and 6.

Do the future grabrails also need to provide the 900mm clear width?

The intent of Part 6 is to ensure that walls adjacent to toilet pans, showers and baths provide a fixing surface able to support the future installation of grabrails, if needed. This part does not require the installation of grabrails at the time of construction or for a minimum clearance or size to comply with Part 4.

How can almost the entirety of our designs from now on, be subject to the Building Surveyor's (BS) discretion on exemptions later when applying for the building permit even though we have designs that need to go through planning? Therefore, potentially causing a huge issue with needing to go back for a planning amendment if the BS is not satisfied later on. BS very rarely will commit to providing any prelim feedback at early stages. What will happen here?

Owners will already have additional costs and time delays involved without adding more. The onus is on the registered draftsman or architect to demonstrate an exemption applies prior to submission of the building permit and planning permits.

Can an entry/ground level include a slit level say 450mm [3 steps]?

The chosen entry door to the dwelling must be step free and have no steps. Refer to *Part 1 of the standard*.

Is there guidance on suitable wall material that can be relied upon?

Please refer to *Part 6* reinforcement allowable materials.

Will the nogging requirements mean another inspection?

Only if the Relevant Building Surveyor requires. It is RBS discretion.

Does this apply to all new Class 1a dwellings or just those building Special Disability Accommodation?

Please refer to our [presentation](#), it applies to all class 1 dwellings, which includes new and existing dwellings subject to extensions and alterations.

How wide does the entrance to a shower need to be?



There is no requirement to provide a clear dimension for a shower. Please refer to *Part 5 of the standard* which outlines the exact requirements.

Can we accept a performance solution in lieu of Reg. 233 or Mod? If so, does that need to come from a Disability Access Consultant (DDA consultant)?

With regard to performance solutions, please refer to the following guidance which outlines the requirements and the use of a DDA consultant can be used: [PS 01](#) and [Performance Solution Process](#)

Why a 1200x900 clearance in front of the WC pan, where door swing cannot encroach? Any reason why this could not have been similar to say ambulant toilets under *Fig 53 of AS1428.1* where a 900x900 clearance is required?

The Standard sets out requirements for dwellings to include features that are designed to improve their accessibility and usability for occupants and visitors, including those with a mobility-related disability. Hence the reason why for *class 1* and the internal parts of a *class 2* dwellings the requirements are different. *AS1428.1* is not applicable as mentioned in the webinar, please refer to the following link for the [webinar](#).

If the shower must have a max. lip of 5mm but waterproofing code requires a minimum 5mm waterstop with potential to go over, this allows no room for error during construction. Can you confirm there are performance solutions available for this scenario and how we are able to comply with both required codes?

The design standard is consistent with the requirements of the NCC, AS3740 and the Livable Design Standard and therefore industry need to be mindful that their work is completed accurately.

Is cement 7.5mm or greater thickness cement sheet suitable as a "similar" wall reinforcement?

Refer to *Part 6 (6.2(3(a))* of the [Livable Housing Design Handbook](#) for the exact requirements.

Does a 1:10 step ramp from a garage require a 1200mm landing at the top? This isn't required for class 2-9 building to a door threshold under AS1428.1? Also, can a 1:8 threshold ramp be used for up to 35mm high threshold, as permitted to a class 2-9 building?

Where it is nominated to provide step-free access from an attached Class 10a garage or carport, the connecting door is to comply with *Part 2* Dwelling entrance. In this instance, it is not necessary to provide a landing area that complies with *Part 2* of the standard (refer to *section 3.3* of the [Livable Housing Design Handbook](#) and *part 2.3* of the standard).

Is the 900mm clear for sanitary compartments and 1000mm clear for hallways between the plaster walls? Can architraves enter these widths?

For the allowable encroachments, please refer to [Livable Housing Design Handbook section 5.3.2](#) Corridor width.

This has major implications for alterations and additions. Is the VBA going to provide information on what areas the RBS can consider as partial compliance?

The VBA already have an existing educational resource guide on alts and adds. Please refer to [BP-12](#) and [EE-04](#) (for the volume and floor area calculation guidance).



I would like to know what would be the best way to achieve the access to the building in snow area/alpine area where we require the floor level to be raised 600 to 800 above ground to allow for snow loads on ground? Works within the Alpine villages are often too tight to allow for the ramp length.

There are exemptions relating to not having to provide a step free access pathway which are outlined within *Part 3.5* of the [Livable Housing Design Handbook](#).

For further information or clarification please contact the Technical and Regulation Team via technicalenquiry@vba.vic.gov.au

Copyright

© 2021 Victorian Building Authority (VBA). This publication must not be copied, reproduced, published, adapted, or communicated by any person without the VBA's prior written consent or as permitted by the Copyright Act 1968 (Cth)

Disclaimer

The information set out in the VBA's resources is for general information purposes and guidance only. It is a reader's responsibility to obtain independent advice in respect of the application of legislation, a technical instruction or industry standard relevant to their circumstances. A person's use of the VBA's resources is not a substitute for obtaining independent advice.

While we have made every attempt to ensure our resources contain correct information at the date of publication, the VBA makes no warranty or representation that its resources are error free. To the extent permitted by applicable laws, the VBA, its employees, agents and consultants exclude any and all liability whatsoever for any direct, indirect, incidental, special or consequential loss or damage a person may suffer arising out of or in connection with the access and use of the VBA's resources (including any third-party material included in these resources).