NCC 2022 Essential Changes

The experience of Master Builders members has been that the changes have incurred additional cost and have been technically difficult to implement. In some cases, the high cost and technical challenges bring only a limited benefit and mean that, on balance, they cannot be warranted.

There are amendments that government can make urgently within the Queensland Development Code that will address the most significant of these concerns.

These include:

Livable Housing

1. Exempt dwellings from all the Livable Housing requirements where they are exempt from providing the step-free access path.
2. Provide an exemption to the accessible entry requirement where it cannot be achieved through the attached parking area for slab on ground construction.
3. Increase the maximum entry threshold to 8 mm on the shower designated to be hobless and step-free where it is also an enclosed shower.
4. Where owners undertake to supply and install floor coverings after completion, compliance to the step-free threshold requirements becomes the owner's responsibility.
5. Reduce the requirement for the reinforcing behind the toilet to 900 mm wide.
6. Provide an additional option for studs at 300 mm maximum centres around the toilet and shower areas.
7. Remove the requirement that the toilet be exactly in the centre of the circulation space.
8. Allow the swing of the door to overlap with the circulation space as is permitted under AS1428.

Energy Efficiency

9. Provide a concession that allows raised houses to be built to the energy efficiency requirements that were in place prior to NCC 2022.

Falls to Waste

10. Remove the requirement for the maximum gradient 1:50 gradient in the shower area.

417 Wickham Tce, Brisbane Qld 4000
1300 30 50 10
mbqld.com.au

Livable Housing

PROPOSED AMENDMENT #1
Exempt dwellings from the Livable Housing requirements where they are exempt from providing the step-free access path.

There is a significant cost involved in providing appropriate set downs and weatherproofing to achieve the step-free entrance and thresholds. There is also additional cost in providing the larger circulation space in the sanitary compartment and paths of travel. Builders are regularly finding that this is coming at an additional cost in the order of $7,000 to $10,000. Where a person needs to climb a set of stairs to reach the dwelling the additional cost is not offset by the benefit gained.

There is a lack of understanding why there are requirements for accessible housing after having to climb stairs – the second storey on a house or a house on a sloping block of land.

> *"What is the purpose of worrying about level thresholds between rooms or showers when the person has just had to climb a set of stairs?*

Take the example of the "Queenslander" style home with wide verandas. Here there are usually many entry doors leading from the verandas. If the construction has to be adjusted to suit a level entrance at the entry door, then all the doors will need to be set up the same way. This adds significant cost and increases the risk of water ingress across many doorways. At the same time providing little benefit for someone who has just climbed a set of stairs.

PROPOSED AMENDMENT #2
Provide an exemption to the accessible entry requirement where it cannot be achieved through the attached parking area for slab on ground construction.

Balancing NCC requirements for termite management and water ingress with the requirement for an accessible entrance has proved challenging from the beginning.

There have been many attempts to try to address this problem. For the most part builders are responding by either refusing to take on projects where the accessible entrance cannot be achieved through the attached garage or by going through the expensive and complicated

process of a performance solution…often resulting in a removable ramp being signed off an appropriate solution.

For industry and consumers alike, all this effort appears nonsensical, when the policy intent of providing ready access to the building of someone with a mobility need, can be as easily achieved through the use of a post market ramp. Readily purchased at a hardware store.

This example is available at Bunnings for a cost of $99. Solid Rubber Wheelchair Threshold Door Ramp

PROPOSED AMENDMENT #3
Increase the maximum entry threshold to 8 mm on the shower designated to be hobless and step-free where it is also an enclosed shower.

When providing the accessible shower which is also an enclosed shower, the lack of tolerances allowed for it to be hobless and step-free do not allow for variations in workmanship or materials (e.g. tiles). The maximum 5 mm lip is unrealistic given the variables that are outside a builders' control and can easily result in the threshold varying greater than or less than 5 mm at some point along a shower access.

Increasing the maximum allowed under livable housing to 8 mm will be buildable and still achieve the policy intent.

PROPOSED AMENDMENT #4
Where owners undertake to supply and install floor coverings after completion, compliance to the step-free threshold requirements becomes the owner's responsibility.

It is not uncommon for homeowners to take possession of a dwelling without floor coverings, either in whole or in part, to reduce the up-front cost of construction. The level threshold requirements of the LHDS Section 3.2 mean that a building certifier cannot issue the building final when the absence of floor coverings means that there is not a level threshold. While the

requirements include some flexibility in being able to use a ramped threshold in place of level access at internal doors, the utility of this is limited by the ramp needing to be within the door jamb.

In these cases, meeting the requirements should be the responsibility of the owner. Should this not be possible, the requirements must be amended to allow for threshold ramps that comply with the Australian Standard for disability access - AS1428, that is they extend beyond the width of the door jamb.

PROPOSED AMENDMENT #5
Reduce the requirement for the reinforcing behind the toilet to 900 mm wide.

Where the wall adjacent the centre line of the toilet pan is further than 460 mm then Figures 6.2f or 6.2g of the Livable Housing Design Standard require that reinforcing must be installed behind the toilet and extend 500 mm both sides of the centre line to the toilet pan.

The consequence of this is that a compliant reinforcement cannot be installed behind the toilet pan when the toilet pan centreline is situated more than 460 mm from the side wall but does not extend a minimum of 500 mm for the centreline of the toilet pan from the side wall.

There is effectively a 40 mm space that would require a performance solution for the installation of reinforcement behind the toilet pan.

Similarly, where a windowsill or door encroaches on the reinforcing required to be provided adjacent to the toilet pan, then reinforcing must be provided behind the toilet (Figures 6.2f or 6.2g apply). If the toilet pan is within 500 mm of the wall, from the centre line of the pan, it cannot comply with the Standard.

Reducing the reinforcing dimensional requirement behind the toilet to 900 mm will address both these concerns. In lining up with the required circulation space in front of the toilet pan (900 mm wide) it will have the added benefit of removing any design constraints based solely on the reinforcing for future grabrails that may never be required.

PROPOSED AMENDMENT #6
Provide an additional option for studs at 300 mm maximum centres around the toilet and shower.

Allowing the additional option to provide extra studs positioned more closely together will the increase the flexibility for the placement of grabrails while also providing a reliable option.

PROPOSED AMENDMENT #7
Remove the requirement that the toilet be exactly in the centre of the circulation space.

This requires a level of detailing that is not possible to achieve in practice. Requiring a minimum clearance of 450 mm from the wall is workable.

PROPOSED AMENDMENT #8
Allow the swing of the door to overlap with the circulation space as is permitted under AS1428.

Not allowing the swing of the door to encroach in the circulation space where the door needs to swing inwards results in an excessively large space in front of the toilet. It is a level of stringency not required under the specialist standard for access and mobility - AS1428. It is a requirement that is very difficult for home owners to understand, often leaving builders in a difficult position.

> *"I am experiencing push back from clients who are finding that the area provided in front of the toilet is excessive."*

Energy Efficiency

PROPOSED AMENDMENT #9
Provide a concession that allows raised houses to be built to the energy efficiency requirements that were in place prior to NCC 2022.

Energy assessors have provided feedback that achieving 7 Stars for raised homes (built on stumps) is difficult and expensive, requiring additional construction detailing and insulation (even with the 1 star credit). This impacts Queenslander style housing as well as housing built on slope sites and in flood zones.

> *"Suspended floor homes will be difficult to get approved. Suspended floor two storey homes impossible to approve."*
>
> *"Suspended floor homes in flood zones that cannot put underfloor insulation in place will be difficult to get approved."*
>
> *"Still struggling to understand how we can get the ratings required."*
>
> *"Homes built on stumps, to suit our climate, are difficult if not impossible to achieve a 7 star rating."*

In colder climates such as the Darling Downs (Zone 5) builders are reporting additional costs in the order of $50,000 to $75,000.

The concession could be achieved by returning to the previous version of QDC MP4.1 Sustainable Buildings (Version 1.13), September 2020.

Falls to Waste

PROPOSED AMENDMENT #10
Remove the requirement for the maximum gradient 1:50 gradient in the shower area.

QDC 4.5 prescribes that the gradients within a shower area must be within the NCC gradients of 1:80 and 1:50.

Within a shower area the central floor drain will always be at varying distances from the walls. Providing a constant gradient from the central floor drain to the walls would create a wave affect at the floor wall junction.

Therefore, standard industry practice has been to provide a combination of gradients within the floor surface to provide a constant line at the floor wall junction. With the QDC reference being no less than 1:80, contractors can only choose between the closest or further most floor junction to do the calculation. In both circumstances at least one gradient will be flatter than 1:80 or steeper than 1:50, and therefore impossible to build a compliant shower area without a wave line junction at the floor wall junction.

This problem can be addressed by amending QDC 4.5 to state that a 1:80 gradient in combination with gradients steeper than 1:50 may be used to provide a constant alignment of the floor wall junction and grade surface water into a central floor drain, or similar floor drain offset from a central location.

March 2025