

Understanding the NCC

Waterproofing in houses



The NCC Performance Requirements can be met using either a Performance Solution, Deemed-to-Satisfy (DTS) Solution, or a combination of both.

The following is a general representation and introduction to the DTS Provisions for waterproofing in Class 1 buildings (houses). The NCC 2022 waterproofing provisions in Volume Two, aim to safeguard the occupants from illness or injury and protect the building from damage caused by the accumulation of internal moisture arising from the use of wet areas in a building.

The waterproofing provisions in NCC Volume Two require a building to be constructed in a way that prevents potential health risk, dangerous conditions or any damage to building elements which can caused by dampness or waterflow from wet areas such as bathrooms, laundries or the like in a building.

The information presented provides a national overview of the NCC and does not contain any state or territory variations. For further information about floor waste requirements in Queensland, please refer to Newsflash 622.

This information is useful for architects, building designers, building surveyors (certifiers), plumbers, builders, and educators.

Requirements for wet areas: A history lesson

Before we start outlining the NCC 2022 requirements for wet areas, it is important to provide some background to the history of the wet area requirements.

The first edition of NCC Volume Two was issued in 1996, and that edition had construction details for wet areas. In NCC 2012, it was decided to remove construction details from Volume Two. This meant Volume Two set out what needed to be waterproofed or made water resistant- and then you had to go to waterproofing of domestic wet areas Australian Standard (AS) 3740 for construction details. In summary from 2012 to 2019, the NCC told us what to do, and AS 3740 told us how to do it.

Fast forward to NCC 2022 and a review of the wet area provisions resulted in a decision to reinstate the construction details back into code itself, with the option to choose AS 3740 for a construction solution if desired.

In addition, NCC 2022 introduced changes to clause numbering due to the introduction of a consistent volume structure (CVS) across all 3 volumes of the NCC and with it, the introduction of the ABCB Housing Provisions Standard (Housing Provisions).



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Where are the requirements in NCC 2022 located and what compliance options do I have?

The requirements for wet areas in NCC 2022 are in:

- Volume Two, Part H4 Health and amenity,
- the Housing Provisions, Part 10.2 Wet area waterproofing, and
- AS 3740 (depending which option you use).

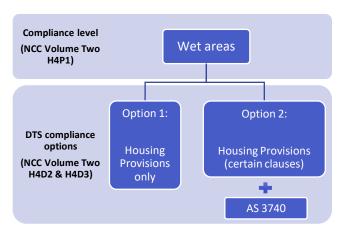
Let's unpack this further.

H4P1 is the only Performance Requirement for wet areas in Class 1 buildings (houses).

H4D2 and H4D3 are the relevant DTS Provisions for wet areas in Volume Two. H4D2 sets out where protection is required for wet areas and H4D3 (new for 2022) sets out what materials must be used and how they must be installed.

Together, these 2 DTS Provisions outline 2 compliance options to meet H4P1. These options are outlined in the figure below.

Figure 1 Waterproofing compliance options for houses



This means the available options and where they are located is as follows:

- **Option 1:** Use of the Housing Provisions only Part 10.2 in full (i.e., 10.2.1 to 10.2.32)
- Option 2: Use of the Housing Provisions (10.2.1 to 10.2.6 and 10.2.12) and AS 3740.

Next let's have a look at these requirements in more detail.

What are the requirements?

In short, the actual technical requirements to tell us what needed to be waterproofed or made water resistant have not changed very much compared to NCC 2019, but they look different as they are no longer contained in tables.

Clauses 10.2.1 to 10.2.5 closely replicate the requirements contained in Table 3.8.1.1 from NCC 2019, with an additional clause to cover waterproofing requirements for toilets with a bidet spray, refer 10.2.5. There is also a modification to 10.2.2 which now mandates the walls of the shower area to be waterproofed to a height of 1800mm.

Clause 10.2.12 is a new requirement for falls in the Housing Provisions. It isn't making you install a floor waste. But – if you do put a floor waste in – then the NCC will now require you to grade the floor towards that waste. It's always been a good idea, but now it's mandatory in NCC 2022.

Example

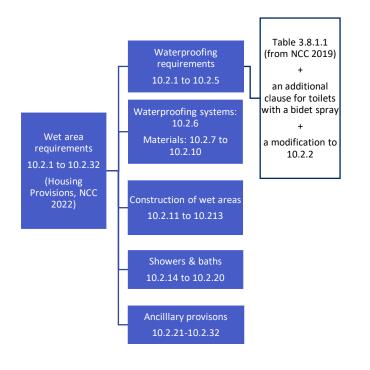
A floor waste may be installed outside an enclosed shower area in a residential bathroom even though a floor waste may not be required by the NCC outside the shower area in Class 1 buildings (houses). In that case, if you do decide to install a waste outside an enclosed shower area, the NCC requires the floor to be graded to the floor waste as specified in 10.2.12 of Housing Provisions.

We will not go into the details of these clauses (10.2.6 to 10.2.32) and construction details in the Housing Provisions, however, to provide an overview on their inclusions, they are grouped and presented in Figure 2.



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Figure 2 Wet areas clauses in the Housing Provisions



A few other things to note

- The construction details in the Housing Provisions does refer you to AS 3740 in one place and that's for some additional options for bath/wall intersection details.
- If you choose to use the option that includes AS 3740, make sure you use the correct version, AS 3740: 2021. This revised edition is referenced in NCC 2022 and specifies the minimum construction and installation methods to demonstrate compliance.