

# NATIONAL CONSTRUCTION CODE (NCC) 2022 CHANGES; A TOP-LINE SUMMARY

## NCC implementation dates and changes

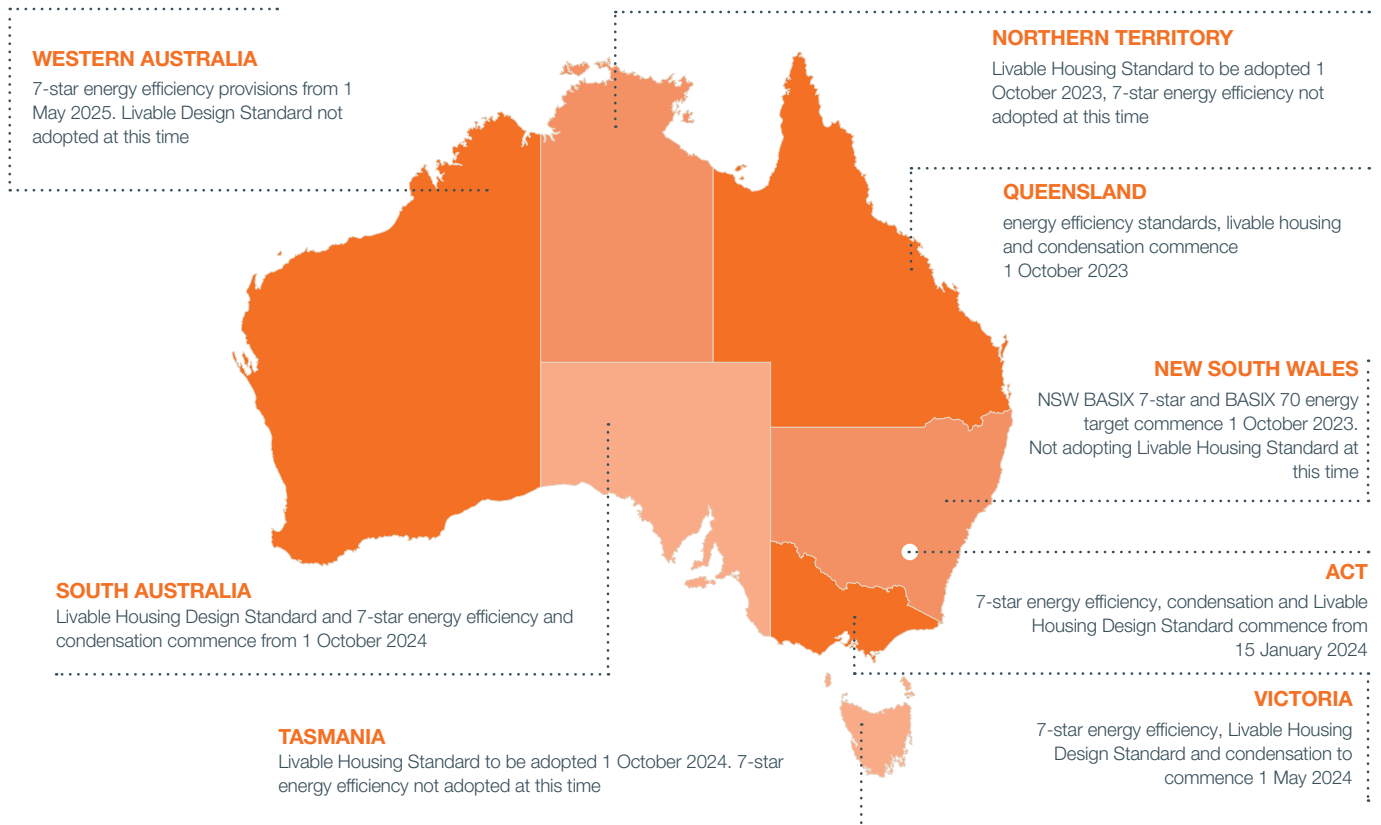
[hia.com.au/national-construction-code](https://hia.com.au/national-construction-code)

[www.abcb.gov.au](https://www.abcb.gov.au)

Advice from the HIA is summarised below.

## The following approaches will be taken:

- Queensland, energy efficiency standards, livable housing and condensation commence 1 October 2023
- NSW, BASIX 7-star and BASIX 70 energy target commence 1 October 2023. Not adopting Livable Housing Standard at this time
- Tasmania will adopt Livable Housing Standard, 1 October 2024. 7-star energy efficiency not adopted at this time
- Northern Territory will adopt livable Housing Standard from 1 October 2023, 7-star energy efficiency not adopted at this time
- Western Australia will adopt 7-star energy efficiency provisions from 1 May 2025. Livable Design Standard not adopted at this time
- South Australia will adopt livable Housing Design Standard and 7-star energy efficiency and condensation from 1 October 2024
- ACT, 7-star energy efficiency, condensation and Livable Housing Design Standard commence from 15 January 2024
- Victoria, 7-star energy efficiency, Livable Housing Design Standard and condensation to commence 1 May 2024



## Key points to understand:

Note, Dahlsens has prepared this summary in consultation with thermal performance consultant and registered builder, Brad Hoad. This information is intended as a guide only. Please ensure independent research is undertaken.

## Class 1: Key areas to be familiar with and prepared for

Note, requirements of each state should be researched.

1. Separation of BCA Volume Two and Housing Provisions. Note, familiarity with these documents is recommended  
<https://ncc.abcb.gov.au/editions/ncc-2022/adopted/volume-two/preface/introduction-ncc-volume-two>  
<https://ncc.abcb.gov.au/editions/ncc-2022/adopted/housing-provisions/front-matter/how-use-housing-provisions>
2. The most significant change is to energy efficiency; 7 stars and Whole of Home (energy budget)
3. Liveability; design changes and step free path, issues regarding the threshold (surface water & termite protection)
4. An increased emphasis for evidence of suitability of a product
5. Changes to referenced standards. The checking of regular Australian Standards is recommended to determine whether the Housing Provisions or Australian Standards will be the path to compliance
6. Condensation management; additional requirements to note
7. Wet areas; falls in floors, compliance with AS 3740 and Housing Provisions, 1 : 80 fall

## ENERGY EFFICIENCY: KEY AREAS TO BE FAMILIAR WITH AND PREPARED FOR

### Considerations to achieve 7 star:

- The design of the living areas; key is for windows in the living areas to face north to achieve efficient outcomes
- Insulation will be the lowest cost method available to improve thermal performance
- Consider the insulation in areas of the home which might not be typically insulated for eg. joists above garages
- Consider insulation as being a continuous barrier, with minimal to no gaps

- Colour selections can impact performance. Consider actions to compensate. For eg, ventilation under a dark roof will assist in cooling
- Consider shading and the installation of ceiling fans to help reduce energy use
- Identify the impact of large overhangs eg. the roof in alfresco areas
- Windows can have the most significant impact on the budget:
  - Performance glass will need to be considered as a standard
  - Low e glass is mostly about keeping heat out (cooling)
  - The performance gains of double glazing are largely in heating - “keeping heat in”
  - Consider the impact of large voids in a two storey build - these will contribute to heat loss
  - Consider glass to floor ratios and the impact of over-glazed designs
  - Windows make up roughly 90% of a home’s heat gain and 50% of a home’s heat loss
- Understanding the Deem to Satisfy via natHERS software can be a low cost and effective path to compliance
- Form a strong relationship with your local energy assessor. You and your owner/designer can benefit from guidance to meet new 7-star requirements. Engage assessor early during concept design to avoid expensive solutions
- Invest in educating the home owner about the premiums that may be incurred to achieve designs which aren’t efficient. Additional insulation or better performing windows, as examples, come at a premium

## Whole of Home: Key areas to be familiar with and prepared for

Whole of home is newly introduced in the NCC2022. This is an energy budget for fixed appliances; the more efficient the appliances installed, the more efficient the home will be. The rating considers energy used for heating, cooling and appliances minus the energy generated from solar panels.

- Consider 'Trade Off' appliances to help meet the targets.

The new assessment builds on the thermal performance assessment by providing information about the energy use of the following appliances:

- Heating and cooling
- Hot water systems
- Lighting
- Pool/spa pumps
- Cooking and plug-in appliances
- Onsite energy generation and storage

Information can be found here:

<https://www.nathers.gov.au/whole-of-home>

## Condensation Management;

- Ensure the building wrap is a class 4 membrane, installed in accordance with AS 4200.2. In some climate zones, this is mandatory. Some zones are class 3. Find the zones here. <https://www.abcb.gov.au/resources/climate-zone-map>
- Understand the different strategies available for membranes and insulation in your climate
- Note the change in regulation for range hoods and exhaust fans; these must be ducted to outside air and no longer re-circular
- With exhaust fans and range hoods, a dampener or self-closing device must be used to reduce air leakage
- In climate zones 6, 7 and 8, note the roof ventilation requirements regarding insulation and clearances

## LIVEABILITY/ ACCESSIBILITY (HOUSING PROVISIONS)

Points to consider for Class 1 dwellings;

### 1. Step free path

- a. From the location of arrival (pedestrians from the street, or from the car, the garage or car space) to the dwelling door
- b. Must be step free, min. width of 1m, max grade 1 : 14, max cross fall 1 : 40
- c. Several rules around ramps and grades, specific details need to be checked
- d. Can have one step ramp max. 190mm height, max. grade 1 : 10, max. length 1900mm

### 2. Car space

- a. Size, min. unobstructed width 3200mm and length 5400mm
- b. Max. grade 1:40 for concrete finish, 1 : 33 for bitumen
- c. The car space provision applies where the entrance to the dwelling is through the interconnected garage or carport in lieu of front entrance door option listed in 1

### 3. Entry Door (can be front door or door from garage)

- a. Min. clear opening width 820mm (typically a 870mm door)

### 4. Door threshold (note, this area is particularly challenging)

- a. Needs to be a level transition (max. height/bump of 5mm with rounded edges)
- b. Ramps, decking with 8mm gaps, tiles and linear drains are options to comply
- c. Ramp can only be width of wall/jamb, max grade 1:8 for width of door

### 5. Various circulation spaces and areas; check the ABCB Liveable Housing Design available at [www.ncc.abcb.gov.au](http://www.ncc.abcb.gov.au)

## 6. Internal doors and corridors

- a. Doors min. 820mm clear (870mm door) opening, mainly around the path of travel from entry to habitable rooms on the ground floor applies to minimum of one: bedrooms, living rooms, lounge rooms, music rooms, television rooms, kitchens, dining rooms, sewing rooms, studies, playrooms, family rooms, home theatres and sunrooms
- b. Door thresholds similar to entry door
- c. Corridors, min. 1000mm wide (door handles, skirt/arch can encroach)

## 7. Sanitary Compartment (can be wc/bathroom/ensuite)

- a. Must be on the ground floor or entry level of the dwelling
- b. Min. 900mm between opposing walls
- c. Must be 450mm clear of obstructions such as basins/vanities
- d. Clear circulation space of 1200 x 900mm in front of the pan

## 8. Shower

- a. Doesn't have to be on the ground or entry level
- b. Must be hobless and step free
- c. Max. lip of 5mm for water retention

## 9. Reinforcement of bath/sanitary walls (depends on construction methods i.e. timber frame will need additional support, cavity brick may already comply)

- a. Must be provided to the areas considered accessible as the wc, shower, bath (if provided)
- b. Options for type of reinforcement noggings, blocks, ply
- c. Specific location requirements around wc, shower and bath (if provided)

**This information is intended as a guide only. Please ensure independent research is undertaken.**

**YOUR DAHLSSENS TEAM IS HERE TO SUPPORT AND CONNECT YOU WITH SUPPLIERS WHO CAN HELP WITH AND RECOMMEND SUITABLE PRODUCTS TO SUPPORT YOUR COMPLIANCE.**