# NCC 2022 KEY CHANGES

## READABILITY & COMPLIANCE PATHWAYS

Both NCC 2022 Volume 1 and Volume 2 have been subject to substantial structure and formatting changes to improve overall readability and clarity. In particular, the NCC 2022 Volume 2 document has been shortened in length, with the information being relocated to the 2022 ABCB Housing Provisions standard.

Users would primarily be focused on using Section H of NCC Volume 2 which pertains to Class 1 and 10 buildings. This section contains DTS Provisions comprising more than one compliance pathway. Usually, the first of these pathways will be by reference to a relevant Australian Standard (or similar) and the second will be by reference to a particular Section or Part of the ABCB Housing Provisions. In these cases, the use of the ABCB Housing Provisions is one option for complying with the relevant DTS Provision.

### Volume Structure for NCC 2022



#### Volume Structure for NCC 2022

To meet the mandatory Performance Requirements H6P1, the BCA provides three different compliance pathways, as well as the option to use a performance solution.



# COMBUSTIBILITY

NCC 2022 Volume 1 now explicitly defines concrete and terracotta roof tiles as non-combustible materials. Therefore, testing using AS1530.1 is no longer required, and roof tiles may be used as a deemed-to-satisfy solution wherever a non-combustible roof covering is necessary.



## **ROOF TIE DOWNS**

The 2022 ABCB Housing Provisions Standard have introduced Section 5.6.6 Fixing straps and tie-down systems and Section 5.4.2 External walls, both of which mostly comprise of existing information extracted from AS3700 and AS4773.1. In particular, the Provisions now make concessions for an unreinforced wall with engaged piers given it has:

• A 30 mm x 0.8 mm galvanised steel strap fixed to the roof structure that extends the full height of the engaged pier

• A steel rod which is cast into the footing when poured and looped and fixed around the galvanised steel strap (see Figure below)





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# **ENERGY EFFICIENCY & CONDENSATION CHANGES**

## VENTILATION MEASURES

#### Ventilation of Roof Spaces

The Condensation Provisions now place greater emphasis on providing roof spaces with greater ventilation. The current iteration of the document now specifies the location of insulation elements and the minimum free ceiling area associated with a particular roof pitch.

### Ventilation of Roof Spaces

Roof Pitch	Ventilation openings
<10°	25,000 mm2/m provided at each of two opposing ends
≥10°and <15°	25,00 mm2/m provided at the eaves and 5,000 mm2/m at high level
≥15° and <75°	7,000 mm2/m provided at the eaves and 5,000 mm2/m at high level, plus an additional 18,000 mm2/m at the eaves if the roof has a cathedral ceiling

## ENERGY EFFICIENCY MEASURES

Compared to the previous iteration of the NCC, the energy efficiency measures for roofs and ceilings require end users to add up the thermal resistance (R-value) of each building element to quantify and achieve the

Minimum 20 mm gap maintained between insulation and sarking	Figure 1: A with low leve	roof space el ventilation
		Ridge and eave ventilation in accordance with Table 10.8.3

minimum Total R-value. The minimum R-value that must be achieved corresponds to a range of variables which include climate zone, ventilation status and solar absorptance. In most cases, the updated energy efficiency tables read as follows:

		00		
Roof Ventilation	Reflective insulation under-roof	Under-roof insulation R Value	0.2 < SA < 0.64	0.64 < SA < 0.96
Vented 01	Yes	< 1.0	4.0	3.5
		> 1.0	3.5	
	No	< 1.0	4.0	
		>1.0	3.5	
Standard	Yes	< 1.0	3.5	
		> 1.0	3.0	
	No	< 1.0	4.0	
		> 1.0	3.5	

Example table for minimum R-Value for pitched roofs in climate zone 6. Taken from Section 13.2.3 of 2022 ABCB Housing Provisions Standard.





Tiled roof with reflective insulation



Tiled roof with bulk fibre insulation

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