

NCC 2019 – FAÇADES AND CLADDING AND WHAT YOU NEED TO KNOW

CSR CEMINTEL WANT TO HELP ITS CUSTOMERS AND CLIENTS INTERPRET THE NUMEROUS CHANGES TO THE **2019 NCC** WITH KEY POINTS SPECIFIC TO THE EXTERNAL WALL ENVELOPE.

THESE AMENDMENTS BRING ABOUT SIGNIFICANT CHANGES IN WALL DESIGN, **EFFECTIVE FROM MAY 2019.**

WHAT IS SPECIFICALLY CHANGING?

Volume 1 of the BCA comprises three main areas of change for the external envelope: fire resistance, condensation management and energy efficiency.

Fire Resistance

There are concessions for certain combustible sarking-type materials so they are exempted from the non-combustible requirement.

A new, non-mandatory Fire Safety Verification Method (CV4) has been provided as a voluntary tool for the design of fire safety Performance Solutions. The adoption of this transitory tool has been deferred until May 2020.

Under C1.9, there has been **an additional allowance for the use of sarking-type materials where a non-combustible material is required**, provided that they do not exceed 1mm in thickness and does not have a Flammability Index greater than 5.

Note, fibre cement is a Deemed-to-Satisfy (DtS) material according to the NCC Vol 1 Section C1.9 and does not contribute to the spread of flame.

Condensation Management

A new Condensation Management part has been included to reduce associated health risks and building damage.

Verification Method FV6 provides for the use of hygrothermic modelling to comply with the clause.

The DtS clauses require either:

- Pliable building membrane (ie. sarking) that is vapour permeable in climate zones 6, 7 and 8 (this includes Melbourne, Canberra and non-coastal areas of Sydney); or
- A drained cavity separating the primary water control layer from water sensitive materials, except in the case of single skin concrete or masonry walls.

Energy Efficiency

The energy efficiency provisions of commercial buildings have had a significant review with a focus on reducing energy consumption. As a result, the thermal performance requirements of walls and building air-tightness have been substantially lifted.

New Verification Methods have been provided to demonstrate compliance with Performance Requirements.

There is a 12-month transition period for the new energy efficiency provisions, during which either the NCC 2019 or NCC 2016 may be used.

What this is likely to mean for external envelope design

1. Deemed-to-Satisfy will be the most common route to compliance for fire performance of external walls as the membrane concession allows both fire performance and condensation to be addressed as Deemed-to-Satisfy. If a performance solution was to be used to assess fire performance, the combustibility of a sarking membrane would need to be factored into this. Additionally, the Fire Safety Verification method has not been popularly received in the industry.
2. The increased focus around thermal performance and condensation is likely to create more interest in externally installed insulation and rainscreen systems. Note the condensation management systems 'vapour barrier' shall be located on the exterior side of the major insulation component of the wall system.
3. In areas with higher wind loads or ventilated cavities, traditionally, products such as galvanised sheeting have been used in lieu of sarking. The condensation requirements mean this system will no longer be compliant in many applications. A breathable rigid air barrier (Cemintel RAB) or external sheathing board will be required.

For further information on the 2019 NCC changes regarding your fibre cement cladding system, contact Cemintel on 1300 236 468.