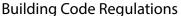
# Weather and Energy (

















# **National Construction Code (NCC) Requirements**

# **Commercial**

Class 2 to Class 9 buildings

### J3.4 Windows and doors

- (a) A door, openable window or the like must be sealed:
  - (i) when forming part of the envelope; or
  - (ii) in climate zones 4, 5, 6, 7 or 8.
- (b) The requirements of (a) do not apply to:
  - (i) a window complying with AS 2047; or
  - (ii) a fire door or smoke door; or
  - (iii) a roller shutter door, roller shutter grille or other security door or device installed only for out-of-hours security.
- (c) A seal to restrict air infiltration:
  - (i) for the bottom edge of a door, must be a draft protection device; and
  - (ii) for the other edges of a door or the edges of an openable window or other such opening, may be a foam or rubber compression strip, fibrous seal or the like.
- (d) An entrance to a building, if leading to a conditioned space must have an airlock, self-closing door, rapid roller door, revolving door or the like, other than:
  - (i) where the conditioned space has a floor area of not more than 50 m<sup>2</sup>; or
  - (ii) where a café, restaurant, open front shop or the like has: (A) a 3m deep un-conditioned zone between the main entrance, including an open front, and the conditioned space; and
    - (B) at all other entrances to the café, restaurant, open front shop or the like, self-closing doors.
- (e) A loading dock entrance, if leading to a conditioned space, must be fitted with a rapid roller door or the like.

# Residential

Class 1 and Class 10 buildings

### 3.12.3.3 External windows and doors

- (a) An external door, internal door between a Class 1 building and an unconditioned Class 10a building, openable window and other such opening must be sealed when serving:
  - (i) a conditioned space; or
  - (ii) a habitable room in climate zones 4, 5, 6, 7 and 8.
- (b) A seal to restrict air infiltration:
  - (i) for the bottom edge of a door, must be a draft protection device; and
  - (ii) for the other edges of a door or the edges of an openable window or other such opening, may be a foam or rubber compressible strip, fibrous seal or the like.
- (c) A window complying with the maximum air infiltration rates specified in AS 2047 need not comply with (b)(ii).

# **Ember Attack - BAL Ratings**

Where door sets are being specified in Bush Fire Prone areas, door seals, weather stripping and draught excluders are required to meet AS 3959 to comply with the NCC. The BAL rating is determined by the site location and the attributing factors for bushfire attack to which AS 3959 gives guidance. Attention needs to be paid to specifying to the correct BAL rating as determined by AS 3959. Refer to the selection table on page 29.



# **Related Building Codes**

There are several standards, which refer to seal properties and testing for weather - energy:

# **AUS/NZ**

Requirements are noted in the Australian National Construction Code (NCC) and New Zealand NZ BC Compliance Doc. H.

## UK / EU

Requirements are noted in the British Building Regulations Approved Document L1 & L2.

Requirements are noted in the Building Code and the Residential Code IBC 2000.

For further details, refer to Standards / Authorities on page 122.