



A new provision was included in the BCA 2010 Volume 1 Class 2 to 9 buildings to reduce the risk of glass breakages due to nickel sulphide inclusions.

The use of toughened and some heat strengthened glass may involve a relatively small risk of breakage resulting from nickel sulphide inclusions. Breakage may cause the glass to evacuate the opening potentially causing injury or property damage. Glass shall be selected to minimise this risk.

Sloped overhead glazed assemblies more than 3 m above floor or ground level and all vertical glazed assemblies more than 5 m above floor or ground level, must incorporate measures to reduce the risk of breakages due to nickel sulphide inclusions.

In 2012, these provisions were moved to AS 1288-2006 Amendment 2, under Clause 3.8, and they remain valid today.

If using toughened safety glass:

- It must have been heat soak tested in accordance with Clauses 3, 5, 6 and 12 and Annex A of EN 14179-1; or
- It must be suitably protected by a balcony, awning or the like such that, in the event of glass breakage, the risk of injury to people or property damage is minimised.

When using toughened glass in these situations in Class 2 to 9 buildings it must be heat soak tested or suitably protected.

Figure 1 Overhead Glazing Restrictions

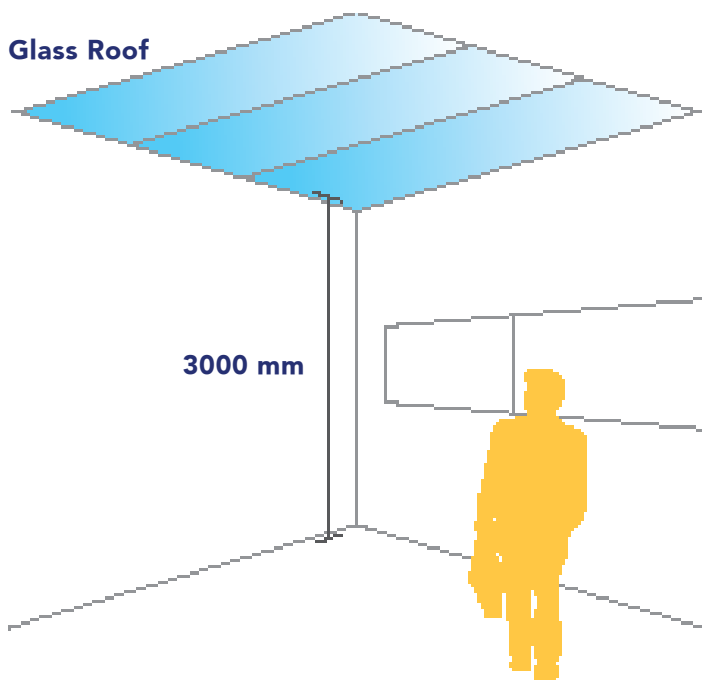
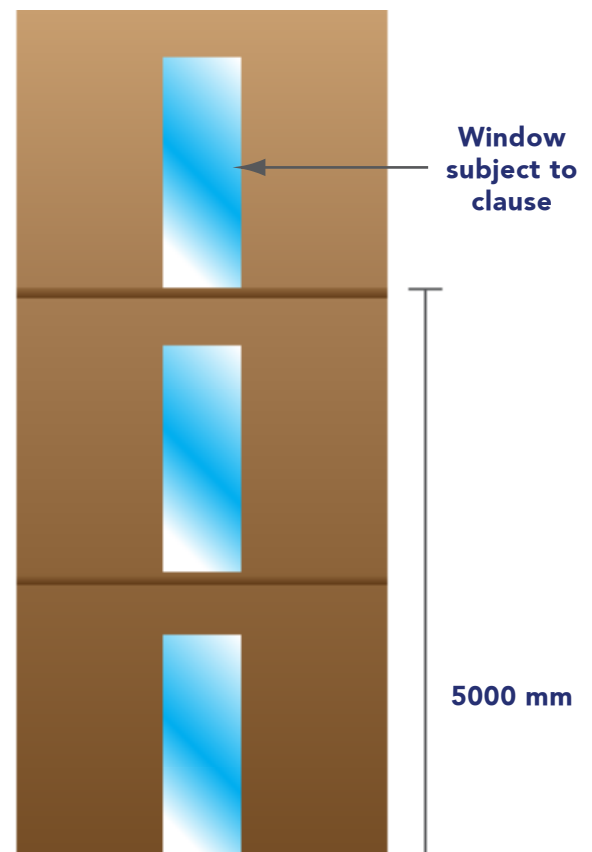


Figure 2 Unprotected Vertical Glazing:
Toughened glass required



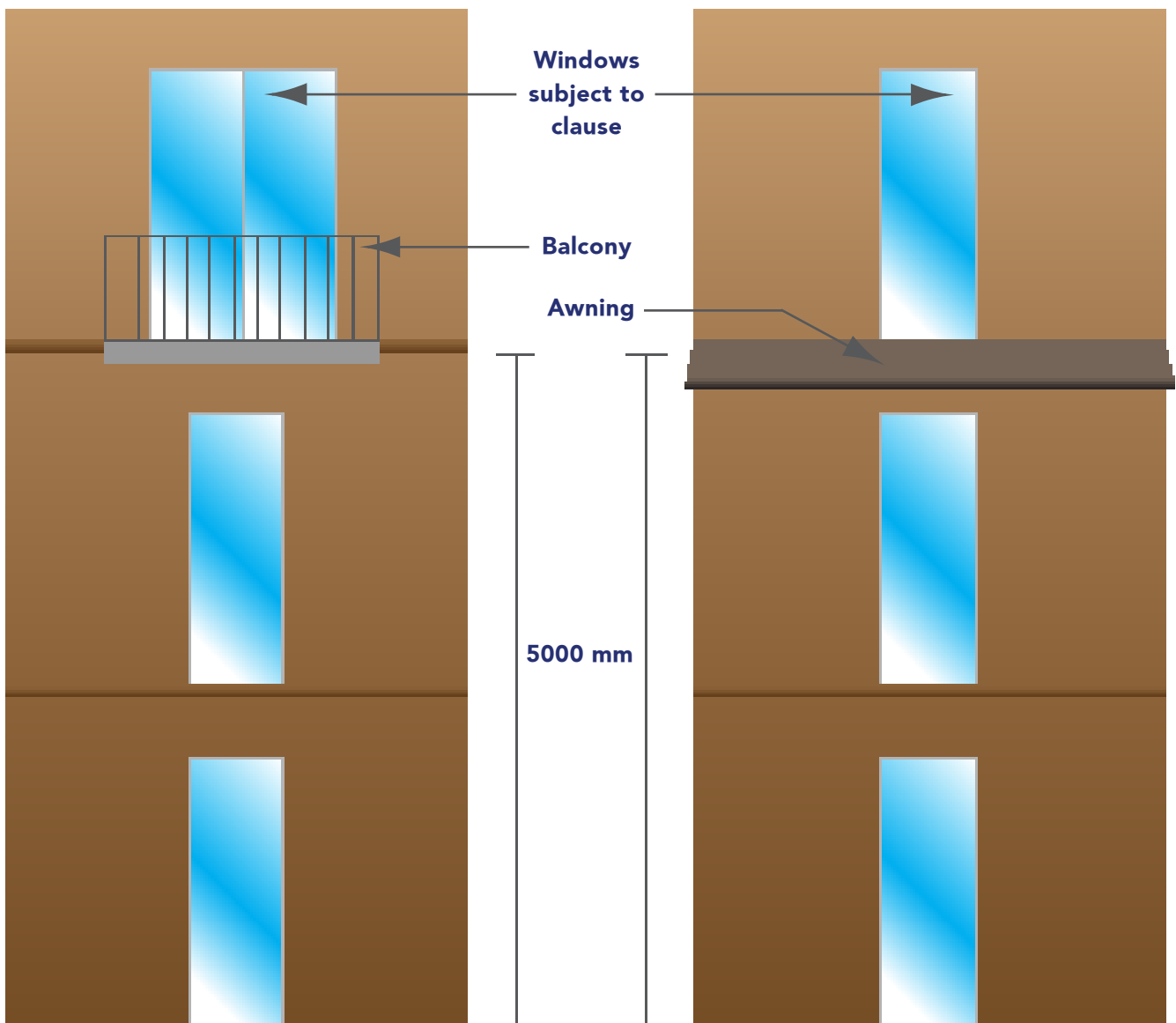
Awnings, balconies or barriers may be considered suitable protection if they are designed to minimise the risk of injury or property damage from falling glass.

Suitable protection would be considered to be a projection (e.g. balcony) that extends from

the building a minimum of 2/3 the height of the adjacent panel.

Heat soaking will significantly reduce but not totally eliminate the risk of fracture due to nickel sulphide.

Figure 3 Adequately Protected Vertical Glazing: Heat Soaking Not Required.



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