



Prints on Glass: Safety Glass Quick facts:

The Minimum requirements for the use of safety glass in homes is specified by two Australian Standards:

- AS1288 – Glass in buildings: selection and installation
- AS2208 – Safety glazing: glass in buildings

All low level glazing (close to the floor), internal and external glass doors, shower screens, balcony balustrades and overhead glazing must be Grade A Safety glass.

Grade A Safety glass is available in two forms:

- Toughened
 - If broken it fragments into very small pieces
 - Is up to 5 times stronger than standard float glass (non- toughened) - available from 3mm.
- Laminated
 - If broken the glass sticks to the vinyl interlayer. Most glass stays in the frame. Available from 6.38mm

Safety is not just about meeting Australian Standards. It may be wise to use safety glass in specific applications, for example in a child's bedroom.

Use safety glass in areas where active children and adults are located.

Glass – the basics

Toughened glass: Toughened glass is produced by passing cut-to-size annealed float glass through a heat furnace and rapidly cooling the glass. This process introduces stress into the glass and produces a glass 4–5 times stronger than annealed float glass. Toughened glass can still be broken, however if this does happen it shatters into small fragments, minimising the risk of injury caused by glass splinters.

Laminated glass: Laminated glass is safety glass that has been manufactured by adhering two or more sheets of glass with a flexible interlayer. The interlayer is most commonly made from polyvinyl butyral (PVB) or other interlayers and prevents the glass from disintegrating when broken. The interlayer does not impact the transparency of the glass.

Toughened vs Laminated

- Toughened glass is cheaper because it is only a single panel of glass that is processed, while laminated glass is made up of two panels of glass and a vinyl interlayer that all needs to be adhered together using heat within a vacuum.
- Toughened glass is lighter and therefore will not put as much wear and tear on the operating mechanisms in windows and doors.
- Laminated glass dramatically reduces fading. Toughened toned glass also reduces fading but is less effective than laminated glass.

Laminated glass provides a security benefit far in excess of toughened.

- While laminated and toughened glass can be used interchangeably to comply with the Australian Standards, selecting the most appropriate type for the location and use is essential