

PRODUCT

VTough™

Quality toughened glass – for superior strength, safety & resilience

Why settle for ordinary glass when there's a tougher option available? Viridian VTough™ offers a total glass solution that allows greater scope in your design.

Five times stronger than ordinary glass, VTough™ is perfectly suited to a wide range of applications that would normally put ordinary glass at risk of breaking. This includes splashbacks, basketball backboards and lots more. Think of the possibilities!

Whenever the benefits of ordinary glass need to be combined with extra strength, safety or heat resistance, VTough™ toughened glass offers a complete and proven solution, allowing designers and specifiers greater scope with glass for building.

VTough™ toughened glass is a Grade A safety glass manufactured to AS/NZS2208 for use in buildings or AS/NZS2080 safety glass for land vehicles. It is manufactured by heating and then rapidly cooling float glass. As a result, opposing compressive and tensile stresses are set up in the glass, which gives toughened glass four to five times more strength than ordinary glass of the same thickness, combined with much greater resistance to impact. In the unlikely event of breakage, VTough™ fragments into small blunt-edged pieces, reducing the risk of injury. VTough™ toughened glass cannot be cut or edgework processed after manufacture.

Virtually all glass types can be supplied in toughened form, the exceptions being some deeply patterned glass, mirrors, wired and glass for leadlighting.

Considerations

- **Heat soak treatment.** In accordance with the NCC (2016), heat soak testing on toughened glass will be mandatory in certain applications.
- **Tolerances** – as listed in AS/NZS2208, toughened glass is inherently less flat than ordinary glass.
- **Windload** – toughened glass can be used in larger areas than ordinary glass of the same thickness. This allows a consistent thickness and appearance to be achieved in areas of higher windload or panel dimensions. Deflection should be checked.
- **Selection and glazing** – glass must be selected and installed in accordance with Australian Standard AS1288. Attention is also drawn to the breakage characteristic of toughened glass and it is the specifier's responsibility to assess suitability for each application.
- **Heat strengthened glass** – this is not a safety glass, but has approximately double the strength of ordinary glass. It is resistant to thermal breakage (temperature differential of 160°C) and if broken, breaks into larger pieces. This glass may have less distortion than fully toughened glass and is used where additional strength without safety is required.



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Features and benefits

- **Strength** – toughened glass allows large, clear spans with minimum fixing. Toughened glass is used with bolt or patch fittings for frameless doors and assemblies, or glass shapes, including holes, that may weaken normal annealed glass. Toughened glass has good resistance to soft body impacts.
- **Thermal resistance** – resists temperature differences of 250°C in a range of -70°C to +300°C. This means that toughened glass can be used in splashbacks and where thermal stress breakage is an issue.
- **VTough™** can be laminated for additional safety, solar control or appearance.
- Wide range of glass types available.
- Manufactured and distributed throughout Australia for ease of availability.



Applications

- Splashbacks
- Shower Screens
- Partitions
- Spandrels
- Facades
- Wall Cladding
- Furniture
- Balustrades
- Windows
- Doors

Thickness

- 4mm to 19mm

How to Specify

- **Select glass name**
VTough™
- **Select thickness – process**
4mm to 19mm – Toughened
4mm to 12mm – Heat Strengthened
9.52mm to 39.52mm – Toughened/
Laminate
- **Select colour**
From VFloat™ range

Viridian VTough™ is a trademark of Viridian Glass