

**ESSENTIAL** 

# VTough<sup>TM</sup> Quality toughened glass

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.

When 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.

VTough<sup>™</sup> is manufactured by heating and then rapidly cooling float glass, creating opposing compressive and tensile stresses which gives toughened glass five times more strength than ordinary glass of the same thickness, combined with much greater resistance to impact. VTough<sup>™</sup> is a Grade A safety glass, so in the unlikely event of breakage the glass will fragment into small blunt-edged pieces, reducing the risk of injury.

#### **Features and Benefits**

- Provides good resistance to soft body impacts.
- Can be used in splashbacks and where thermal stress breakage is an issue.
- VTough<sup>™</sup> can be laminated for additional safety, solar control or appearance.
- VTough<sup>™</sup> is a Grade A safety glass.

## Considerations

#### Standards and Installation

- Toughened glass is a Grade A safety glass manufactured to AS/NZS 2208 – Safety Glazing Materials in Buildings.
- Heat soak testing on toughened glass is available where required for NCC compliance.
- The heating and cooling process of toughening glass creates levels of distortion over the finished glass surface. Toughened glass is less flat than standard annealed float glass.
- The increased strength of toughened glass can be used in areas of higher wind load or panel dimensions.
  Deflection should be checked.
- Breakage characteristics of toughened glass should be considered in case of failure. It is the specifier's responsibility to assess suitability for each application.
- Heat strengthened glass is not safety glass but has double the strength of ordinary glass. If broken, it breaks into larger pieces and may have less distortion than fully toughened glass.

## Sectors

- Residential
- Commercial
- Automotive / Transport

# **Applications**

Toughened glazing only.

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

### How to Specify

- Select glass processor Viridian Glass
- Select glass name VTough™
- Select tone & thickness See chart below.
- Select processes Toughened, toughened heat soaked and heat strengthened.

## **Standard Stock Sizes**

Product Name	Thickness	Stock Size
VTough™	4mm	2400mm x 1200mm
VTough™	5mm	3000mm x 2000mm
VTough™	6mm	5100mm x 2800mm
VTough™	8mm 10mm 12mm	5900mm x 3100mm
VTough™	15mm 19mm	5000mm x 3000mm

**Note:** Subject to further processing requirements. Standard stock sizes do not reflect actual available stock, please consult Viridian.

