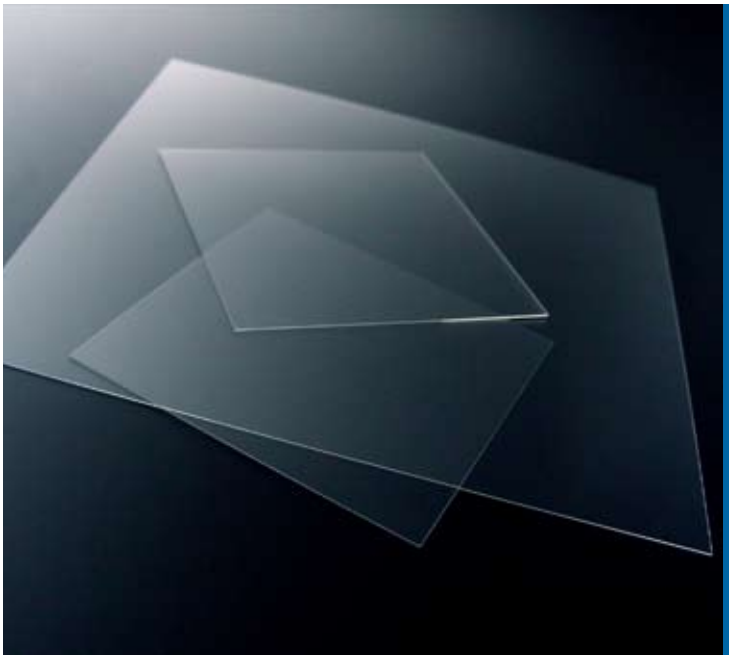
Corning® Gorilla™ Glass

Technical Materials



Corning Gorilla™ Glass, an alumino silicate thin sheet glass, produced by Corning's proprietary Fusion forming technology, is designed to provide users with a durable glass substrate ideal for use in applications where high strength and damage resistance is required.

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Benefits

- Glass designed for a high degree of chemical strengthening
  - -High compressive stress AND
  - -Deep depth of compression layer
- High retained strength after use
- High resistance to scratch damage
- Pristine surface

Applications

Ideal for protective covers for electronic displays in:

- -Cellular phones
- -Laptop and tablet computer screens
- -GPS and other mobile devices

- Optical components
- High strength glass articles
- Frangible glass parts

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Dimensions

Standard sheet size:	405 mm x 460 mm
Available thicknesses:	0.7mm – 2.0mm

Viscosity

Softening Point ($10^{7.6}$ poises)	837°C
Annealing Point ($10^{13.2}$ poises)	602°C
Strain Point ($10^{14.7}$ poises)	553°C

Properties

Density	2.45 g/cm^3
Young's Modulus	73.3 GPa
Poisson's Ratio	0.21
Shear Modulus	30.1 GPa
Vickers Hardness (200g load)	
Un-strengthened	622 kgf/mm^2
Strengthened	701 kgf/mm^2
Fracture Toughness MPa m$^{1/2}$	0.7

Thermal

Coefficient of Expansion (0-300°C)	91 x 10^{-7}/°C

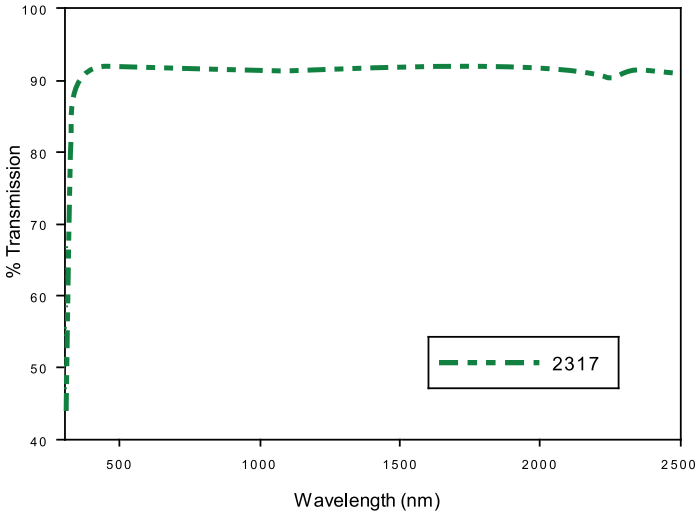
Optical

Refractive Index (633 nm)	
Core glass	1.5031
Compression layer	1.5114
Photo-elastic constant	31.8 nm/cm/MPa

Chemical Strengthening*

Compressive stress	Capable > 800 MPa
Depth of layer	Capable > 100 µm

Optical Transmission



*A key aspect of the design of the strengthened glass article includes proper selection of the magnitude of compressive stress and the depth of compression layer appropriate for the application.

For additional information, or to request a sample, please contact:

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