CORNING
Gorilla® Glass

Corning® Gorilla® Glass for Large Format Applications

Corning® Gorilla® Glass is Big, Bold, and Beautiful

Corning® Gorilla® Glass is an ideal cover glass for the most innovative large-format displays, including interactive white boards, digital signage, and other large-size public displays. It is elegant, lightweight, and durable enough to resist many real-world events that commonly cause glass damage and failure.

The unique composition of Gorilla Glass allows for a deep layer of high compressive stress created through an ion-exchange process. This compression layer makes the glass exceptionally tough and damage resistant. The composition also helps to prevent the deep chips and scratches that degrade appearance and can cause glass to break.

Additionally, Gorilla Glass is formed using the same proprietary fusion process as all of Corning's high-technology display substrates. This extraordinarily precise, highly-automated process produces glass with exceptionally clean, smooth, flat surfaces and outstanding optical quality.

Gorilla Glass is also remarkably thin and clear, which reduces weight, helps reduce the appearance of parallax, enables more sensitive and accurate touch responses, creates a more precise and professional display, and helps deliver on the promise of high-definition and 3D technologies.

Product Information

Display Screen Diagonal Size

Typical sizes	32 inches to 84 inches

Finished Part Dimensions

Width (max)	2020 mm
Length (max)	1365 mm @ 1 mm thickness 1200 mm @ 2 mm thickness
Thickness (mm)	2.0, 1.5, 1.0, 0.7, 0.55

Viscosity

Softening Point ($10^{7.6}$ poises)	896 °C
Annealing Point ($10^{13.2}$ poises)	627 °C
Strain Point ($10^{14.7}$ poises)	573 °C

Mechanical Properties

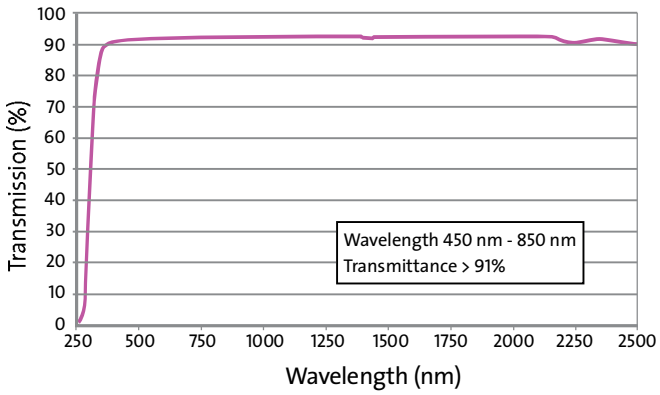
Density	2.39 g/cm^3
Young's Modulus	68.0 GPa
Poisson's Ratio	0.22
Shear Modulus	27.9 GPa
Vickers Hardness (200 g load)	
Un-strengthened	551 kgf/mm^2
Strengthened	654 kgf/mm^2
Fracture Toughness	0.69 MPa m$^{0.5}$

Thermal

Coefficient of Expansion (0 °C - 300 °C)	75.5 x 10^{-7}/°C

Optical

Refractive Index (590 nm)	
Core index (no ion-exchange)	1.50
Compression layer	1.51

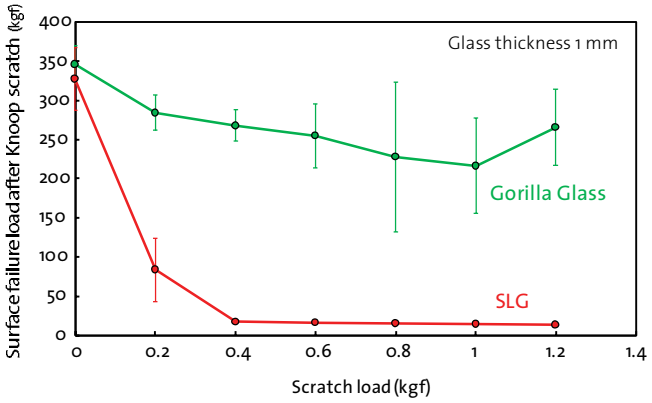


Chemical Strengthening

Compressive stress	≥ 650 MPa @ 40 µm DOL
Depth of Layer	≥ 40 µm

Note: Additional surface treatments are available, such as screen printing, optical films, and anti-glare finishes. For more information please contact Corning with your specific requirements.

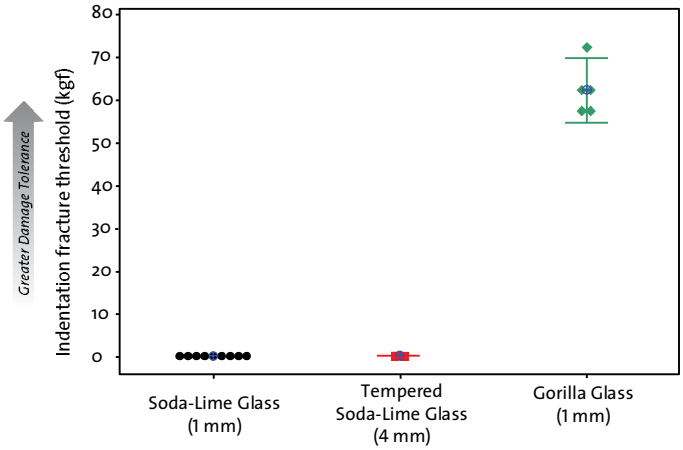
Greater retained strength for Gorilla® Glass after scratch



Error bars represent 95% CI

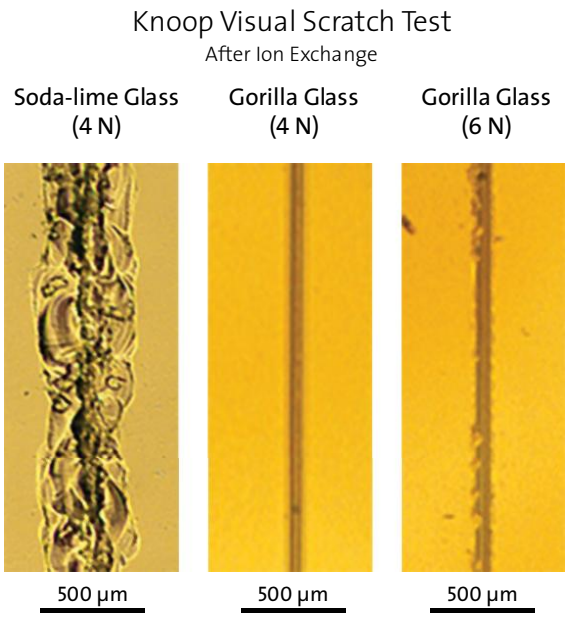
Greater retained strength for Gorilla® Glass enables use of thinner glass

Higher damage resistance for Gorilla® Glass



Error bars represent 95% CI

Scratches are less visible



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For more information about Corning® Gorilla® Glass:
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