



Corning® Gorilla® Glass Victus®

Toughest Gorilla® Glass yet; Corning® Gorilla® Glass Victus® significantly improves both drop and scratch performance for the first time ever in the Gorilla Glass family, addressing consumer demand for improved durability.

Product Information

Benefits

- Improved drop performance, up to 2 m
- High resistance to scratch and sharp contact damage
- High retained strength after use
- Superior surface quality
- Lower softening point vs. Corning® Gorilla® Glass 5 and Corning® Gorilla® Glass 6

Applications

Ideal protective cover material for the front and back of all electronic devices:

- Smartphones
- Notebook PCs
- Tablets
- Smartwatches and wearables
- Smart Home devices
- Cameras
- Commercial and Point of Sale Displays

Thickness

Standard 0.4 mm – 1.2 mm
 Other Available upon request

Viscosity

Softening Point (10^{7.6} poises) 827 °C
 Annealing Point (10^{13.2} poises) 591 °C
 Strain Point (10^{14.7} poises) 543 °C

Properties

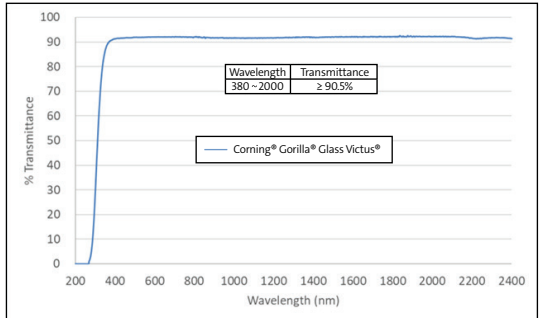
Density 2.40 g/cm³
 Young's Modulus 77 GPa
 Poisson's Ratio 0.22
 Shear Modulus 31.4 GPa
 Vickers Hardness (200g load)
 Unstrengthened 590 kgf/mm²
 Strengthened 651 kgf/mm²
 Fracture Toughness 0.76 MPa m^{0.5}
 Coefficient of Thermal Expansion (0-300°C) 72.5 x 10⁻⁷/°C

Chemical Strengthening

Please contact a Corning Account Manager for chemical strengthening capability based on thickness and application.

Optical

Refractive Index (590 nm)	
Core Glass*	1.51
Compression Layer	1.52
Photo-elastic constant	30.6 nm/cm/MPa
Transmission @ 0.7 mm thickness	≥ 90.5%



*Core index is used for FSM-based measurements since it is unaffected by ion-exchange conditions.

Chemical Durability

Durability is measured via weight loss per surface area after immersion in the solvents shown below. Values are highly dependent upon actual testing conditions.

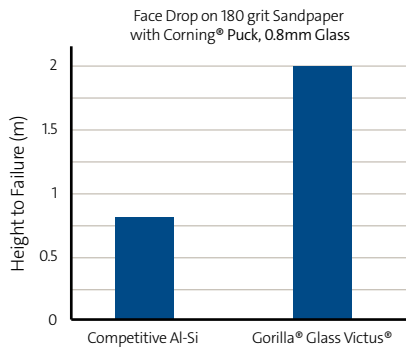
Reagent	Time	Temperature (°C)	Weight Loss (mg/cm ²)
HCl – 5%	24 hrs.	95	49.9
NH4F:HF – 10%	20 min.	20	1.1
HF – 10%	20 min.	20	30.5
NaOH – 5%	6 hrs.	95	4.4

Electrical

Frequency (MHz)	Dielectric Constant	Loss Tangent
54	6.82	0.008
163	6.78	0.008
272	6.77	0.009
381	6.75	0.009
490	6.74	0.009
599	6.74	0.009
912	6.81	0.010
1499	6.80	0.011
1977	6.78	0.011
2466	6.78	0.012
2986	6.76	0.012

Terminated coaxial line similar to that outlined in NIST Technical Notes 1520 and 1355-R.

Drop Test Performance

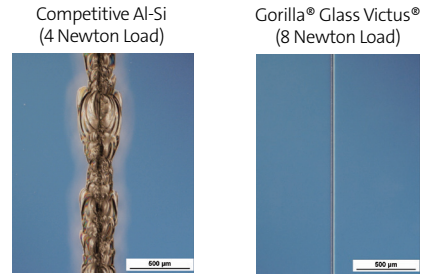


In lab tests, Gorilla® Glass Victus® survived drops from up to 2 meters.

Competitive aluminosilicate typically fails from less than 0.8 meters.

Scratch Test Performance

We tested for scratch threshold using our Knoop Diamond Scratch Test.



The typical threshold for competitive aluminosilicate is at 2-4 Newtons.

For Gorilla® Glass Victus®, the scratch threshold is typically at 7-10 Newtons. That's up to 4x better!

#TougherTogether



Corning® Gorilla® Glass Victus®

Always Tough. Always Innovating.

Contact us
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CORNING
Gorilla® Glass