



Corning® Gorilla® Glass for Automotive—Interior Applications



Product Information

Corning® Gorilla® Glass for Automotive Interiors is tough, can be cold formed into 3D shapes at a low cost, and has high-performance surface treatment options including Anti-Glare (AG), Anti-Reflective (AR), and Easy-To-Clean (ETC) for long-lasting displays. Collectively these technologies can improve display readability under bright ambient lighting conditions and reduce fingerprint visibility while offering design flexibility and the damage-resistant properties of Corning® Gorilla® Glass.

Benefits



Corning® Gorilla® Glass for Automotive Interior Applications is glass designed with improved native damage resistance, which enables:

- Enhanced retained strength after use
- High resistance to scratch and sharp contact damage
- Superior surface quality

Enhanced Durability

Safety

Meets display module level surrogate test for headform impact test (HIT)

- Tested in accordance with industry standards FMVSS201 and ECE-R21
- Thicknesses of 0.4mm – 2.0mm tested

Damage Resistance

vs. *Plastics*:

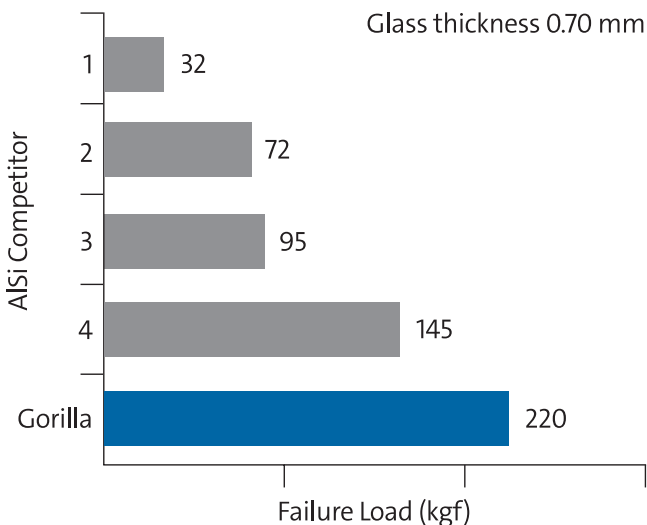
- More damage resistance to scratch than conventional plastics

vs. *Soda Lime Glass (SLG)*:

- More scratch resistant than SLG by more than 8x

vs. *Aluminosilicate Glass (AlSi)*:

- Increases retained toughness by more than 2x, relative to median AlSi



Design Flexibility

Enables 3D shapes with superior performance through cost-effective cold forming.

- Preservation of pristine, fusion-formed surface
- Avoidance of hot-form-induced waviness
- 2D processing for 3D shapes
- Ability to apply decoration to 2D surface



Enhanced Display Readability

- Anti-glare/reflection surfaces improve visibility in strong ambient lighting
- Satin finish reduces fingerprint visibility
- Mitigates need for recessed designs

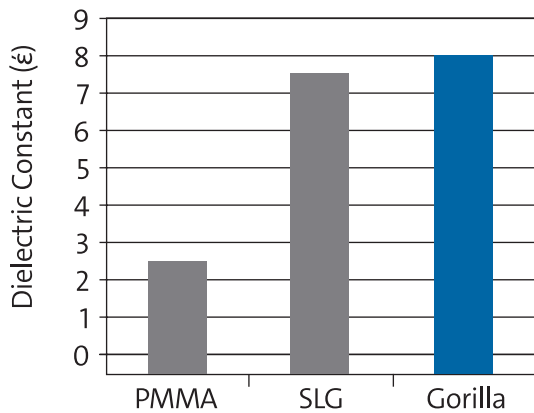
Optical Properties with AG+AR+ETC

Low Sparkle AG	Gloss at 60°	120	115	100	85	65
	Tx Haze (%)	1.5	3	5	10	15
	Sparkle (PPDr%)	<2	<2	<2	<2	<2
Ultra Low Sparkle AG	Gloss at 60°	110	100	90	80	70
	Tx Haze (%)	8.1	10.6	13.1	15.5	18
	Sparkle (PPDr%)	<1	<1	<1	<1	<1
AR/ ETC	Front Surface Total Reflectance	Rx, SCI < 0.45%				
	Color ΔE within a part	ΔE ≤ 3				

Ultimate Connectivity

Brings consumers' experiences with their smartphones into their cars.

- Signal-to-noise is a key performance focus for touch applications
- Corning® Gorilla® Glass for Automotive Interiors exhibits a 3x signal-to-noise improvement vs. plastic due to its dielectric constant
- The dielectric constant of Corning® Gorilla® Glass for Automotive Interiors is ~5-10% better than SLG
- Corning® Gorilla® Glass for Automotive Interiors enables a smooth and sleek tactile experience



(A higher dielectric constant indicates a better signal-to-noise ratio.)

Properties of Corning® Gorilla® Glass for Automotive Interiors:

Density	2.39 g/cm ³
Young's modulus	69.3 GPa
Poisson's ratio	0.22
Shear modulus	28.5 GPa
Vickers hardness (200g load)	
Un-strengthened	534 kgf/mm ²
Strengthened	649 kgf/mm ²
Fracture toughness	0.66 MPa m ^{0.5}
Coefficient of expansion (0 °C – 300 °C)	75.8 10 ⁻⁷ /°C



CORNING

For more information about Corning® Gorilla® Glass for Automotive:

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