



Corning® Fusion5™ Glass

Corning® Fusion5™ Glass is the world's first purpose-built auto exterior glass composition, optimized for glazing constructions and processes, and designed to deliver windshields with superior durability, reliability and optical performance.

Advantages

Corning® Fusion5™ Glass outperforms incumbent glasses* on key windshield attributes:



Failure Rate

- >4x better sharp impact**
- >2x better thermal shock resistance
- 50% lower edge stress (low CTE)



In-Use Durability

- Mechanical: 5x better scratch performance
- Chemical: >10x better weathering performance



Windshield Distortion

- Optical Distortion: ~10 mdpt lower



Weight

- 12% lower density

Dimensions***

Available sizes:

- Width up to 1900mm
- Height up to 2150mm

Samples available upon request

Material Properties

Density	2.266 g/cm ³
E-Modulus	63.7 GPa
Poisson's Ratio	0.2
Fracture Toughness	0.76 Mpa·m ^{0.5}
Vickers Hardness	523 kgf/mm ²

Durability

Scratch (Knoop Scratch Threshold)	6N
Blunt Impact** — Break Velocity (mph)	42
Sharp Impact** (Vickers Drop)	>3000mm

Optical Properties

Optical Distortion (@69°, 2.2mm)	10-15 mdpt
TUV [300-380nm]	61.6%
Refractive Index (589.3nm)	1.4804
Optical Transmission	Tint Options Available
Photoelastic Constant	38.2nm/cm/MPa

Thermal Properties

Coefficient of Thermal Expansion (0-300°C)	46.6 x 10 ⁻⁷ /°C
Softening Point (10 ^{7.6} Poise)	777°C
Anneal Point (10 ¹³ Poise)	542°C
Strain Point (10 ^{14.5} Poise)	496°C
Thermal Conductivity	1.09W/m.K



*Annealed soda-lime glass

**when used in a highly asymmetrical construction and compared to a typical 2.1SLG/2.1SLG laminate

***Contact your account representative for additional product specifications and availability.

For more information about Corning Automotive Glass Solutions
Web: corninggorillaglass.com/auto