



Always Tough.
Always Innovating.

CORNING

Gorilla® Glass

Always Tough.
Always Innovating.

What's Next?

John Bayne
Vice President and General Manager



Forward looking and cautionary statements

Certain statements in this presentation constitute “forward looking statements” within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. Such forward looking statements are based on current expectations and involve certain risks and uncertainties. Actual results might differ from those projected in the forward looking statements. Additional information concerning factors that could cause actual results to materially differ from those in the forward looking statements is contained in the Securities and Exchange Commission filings on the Company and at the end of this presentation.

Corning is the world leader in specialty glass and ceramics

For 165 years, we have been creating keystone components that enable life-changing innovations

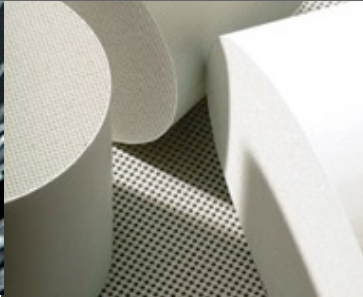
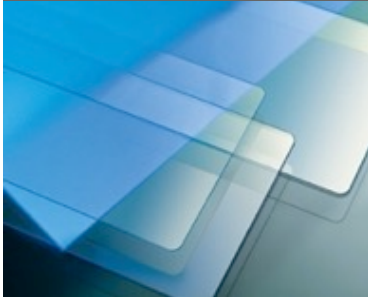
DISPLAY
TECHNOLOGIES

OPTICAL
COMMUNICATIONS

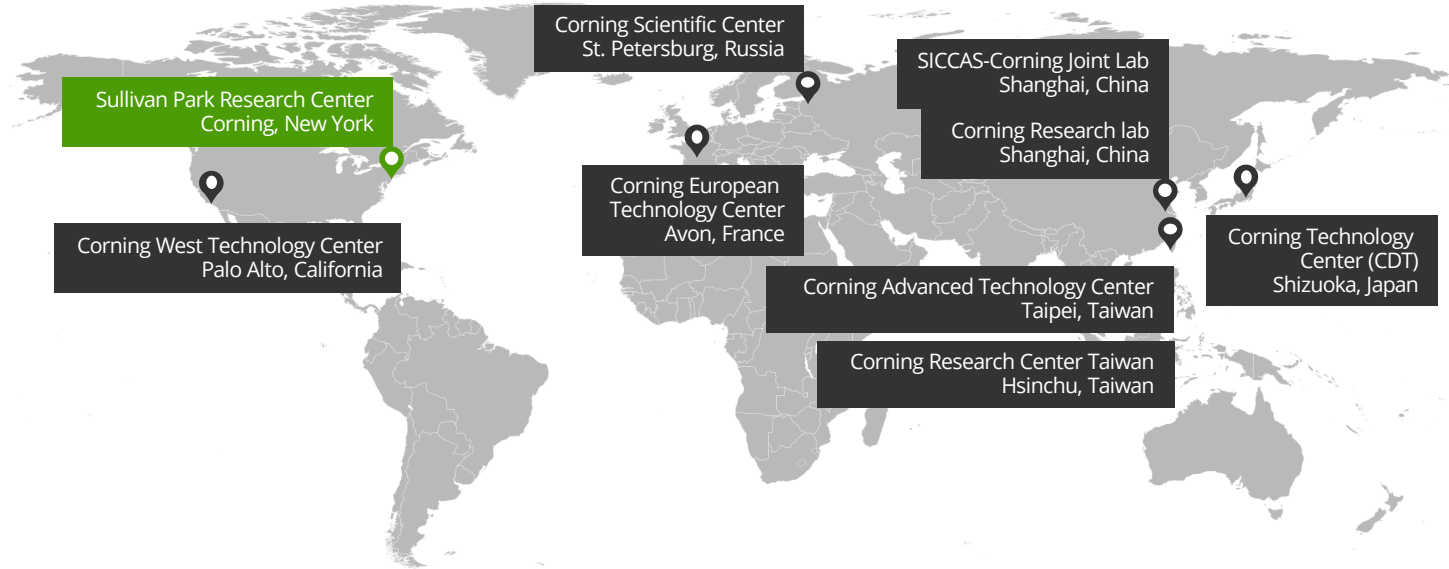
ENVIRONMENTAL
TECHNOLOGIES

LIFE
SCIENCES

SPECIALTY
MATERIALS



R&D has global reach with core technology residing in Corning, NY



Corning Specialty Materials manufactures where our customers are



North America

Big Flats, NY

Fairport, NY

Canton, NY

Keene, NH

Wilmington, NC

Harrodsburg, KY

Europe

Bagneaux, France

Krailling, Germany

Asia

Fuzhou, China

Jiangmen, China

Shizuoka, Japan

Asan, Korea

Tainan, Taiwan

Corning® Gorilla® Glass uses two essential Corning processes

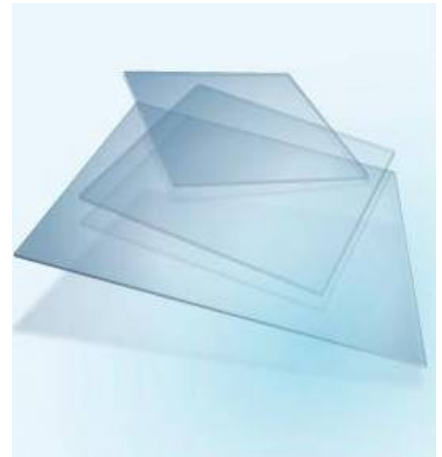
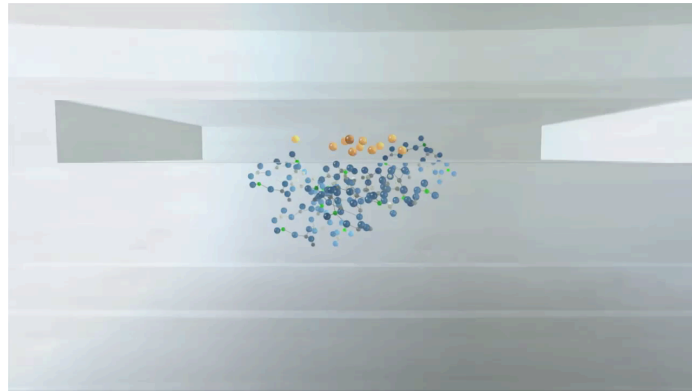
Proprietary fusion forming process: superior surface, scalability, reliability



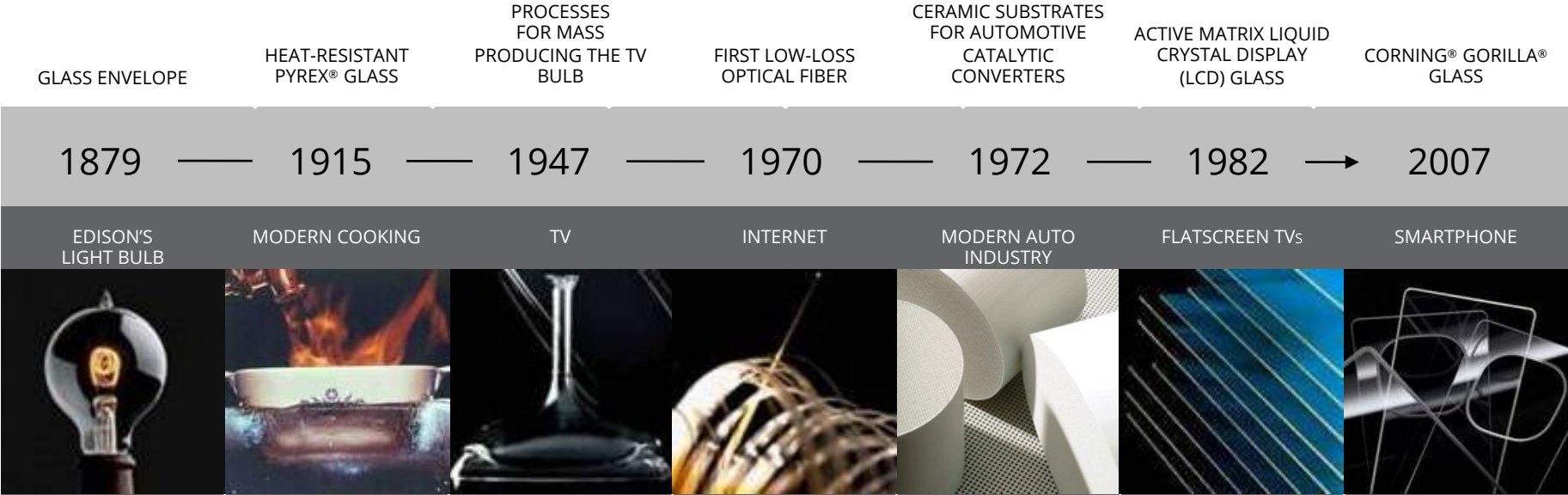
Innovative glass composition optimized for chemical strengthening



Gorilla Glass



Corning delivers life changing innovations



Corning started a continuous journey of glass innovation in 2007



We started with...



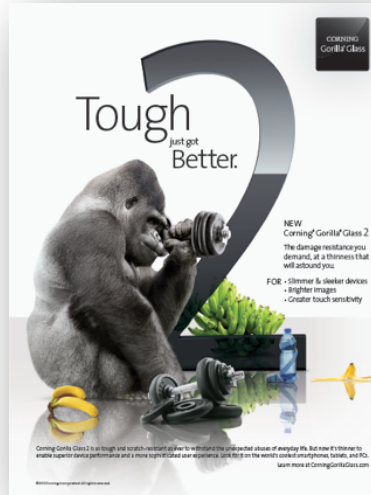
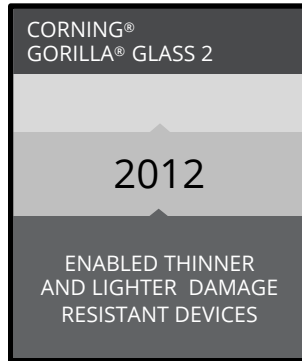
Scratch Resistance

- Gorilla Glass significantly outperforms plastic covers

Retained Strength

- Gorilla Glass retained strength is nearly 3x at ~half the thickness of soda lime

We made it tougher...



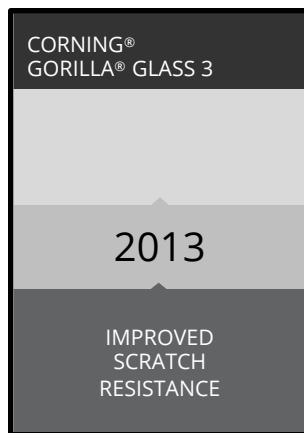
Higher performance

- Improve damage resistance by 25% at same thickness

Thinner

- Up to 20% reduced thickness while maintaining Gorilla Glass damage resistance

We improved scratch...



Improves scratch resistance

- 3x improvement in the force required to cause lateral cracking

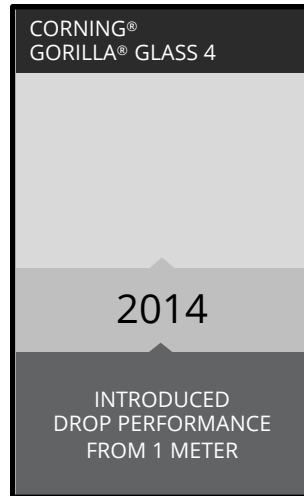
Reduces scratch visibility

- >40% reduction in the number of highly visible scratches

Enables improved strength after scratch

- >40% improvement in retained strength IF a deep flaw/scratch occurs

We addressed the key consumer pain point...



Drop Performance

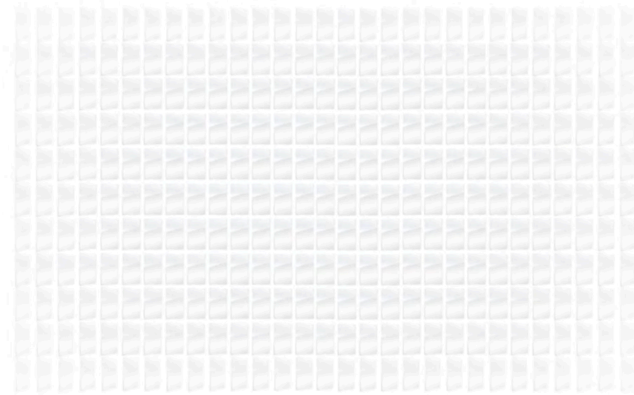
- Corning Gorilla Glass 4 survives up to 80% of the time when dropped from 1 meter onto a rough surface

Which is why Corning is the industry standard in cover glass



Global smartphone penetration

73%



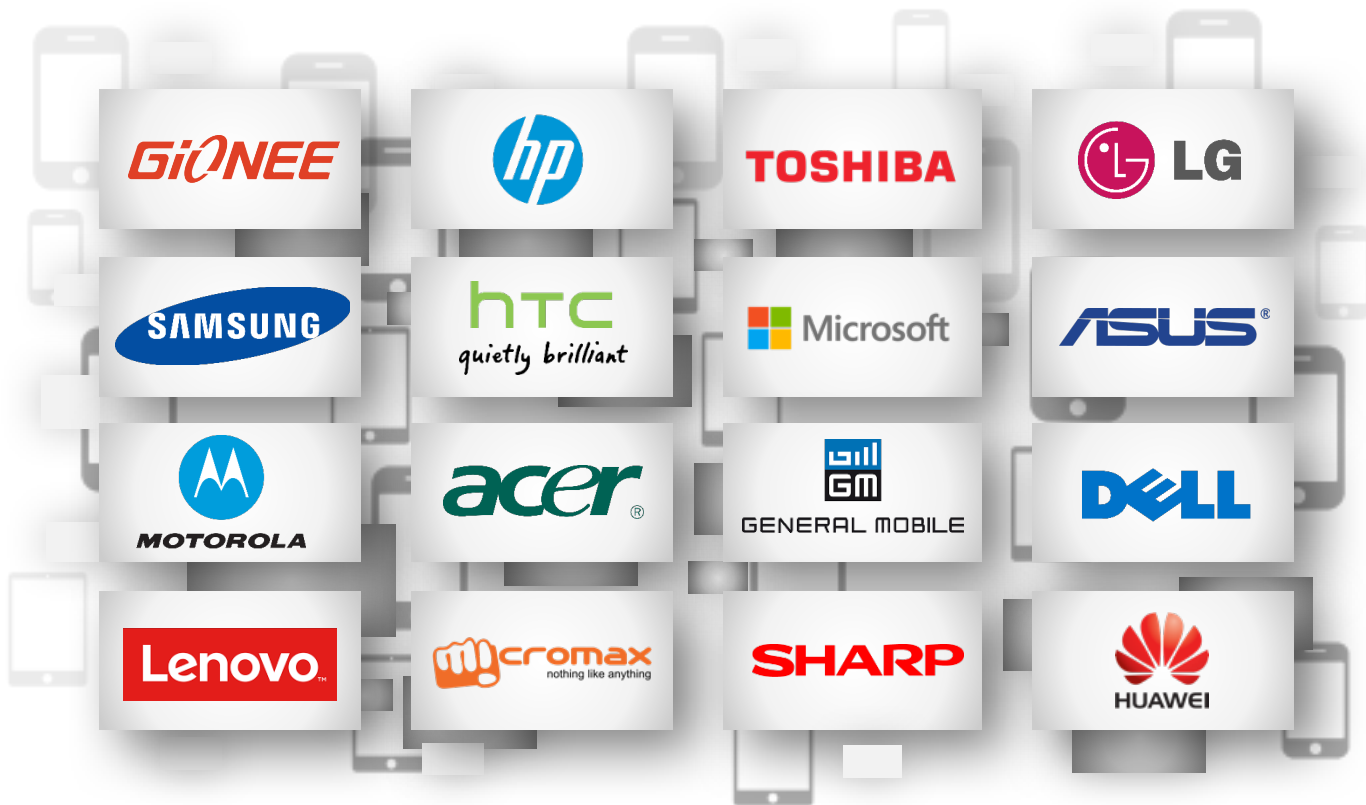
Corning® Gorilla® Glass has been used on

4.5 BILLION
devices

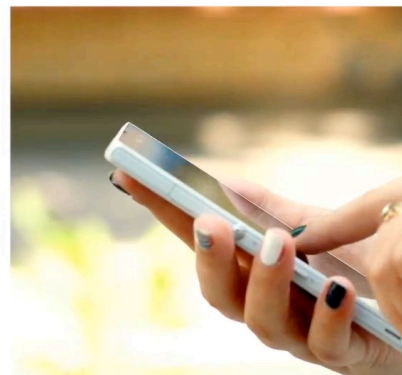
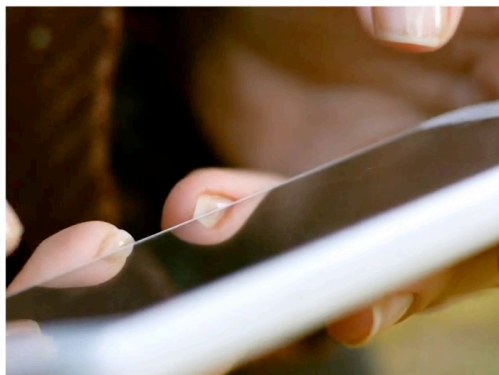
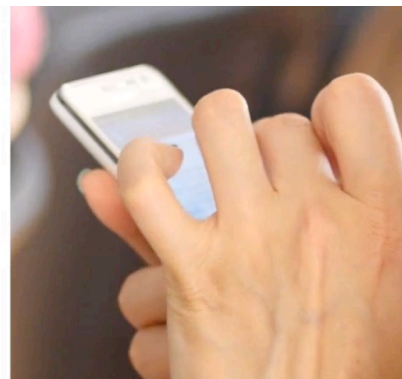
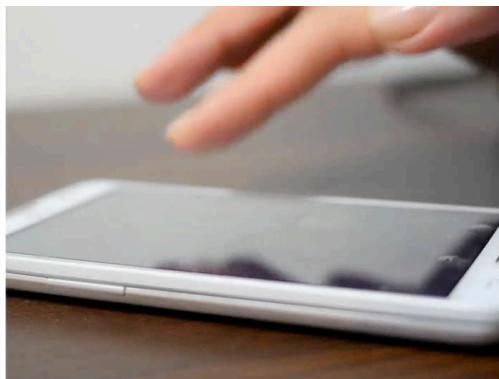
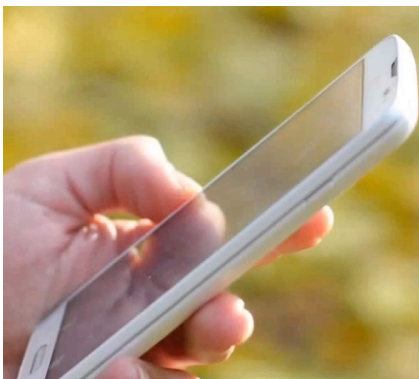


Source: World Development Indicators from Data World Bank and collection of height sources by country

Today there are 40 major OEMs using Corning® Gorilla® Glass



Where does this leave us today?



While Corning® Gorilla® Glass 4 focused on test drop from 1 meter, we decided to take it higher



Global study of smartphone owners



85% of smartphone owners have dropped their phones at least once in the past year

* Numbers above are averages of an 11 country study of global smartphone users using Toluna's Quicksurvey panel. Countries included U.S., Brazil, U.K., France, Germany, Italy, Turkey, India, Russia, China, Indonesia. Collectively these countries represent 3.9 billion people or 54% of the world's population.

Global study of smartphone owners



On average most drops occur while

- Walking (55%)
- Talking (45%)
- Texting (44%)

* Numbers above are averages of an 11 country study of global smartphone users using Toluna's Quicksurvey panel. Countries included U.S., Brazil, U.K., France, Germany, Italy, Turkey, India, Russia, China, Indonesia. Collectively these countries represent 3.9 billion people or 54% of the world's population.

Global study of smartphone owners



On average, nearly two thirds (63%) of respondents said they have dropped their smartphones from a height between shoulder and waist

* Numbers above are averages of an 11 country study of global smartphone users using Toluna's Quicksurvey panel. Countries included U.S., Brazil, U.K., France, Germany, Italy, Turkey, India, Russia, China, Indonesia. Collectively these countries represent 3.9 billion people or 54% of the world's population.

Taking Tough To New Heights

Corning® Gorilla® Glass 5 improves drop performance while preserving optical clarity, touch sensitivity and damage resistance

CORNING

Gorilla® Glass

Corning® Gorilla® Glass 5
A highly damage-resistant
cover glass for improved
drop survivability in
mobile devices

Dr. Jaymin Amin
Division Vice President



Step change in damage-resistant glass technology with potential for significant drop improvement in mobile device cover glasses

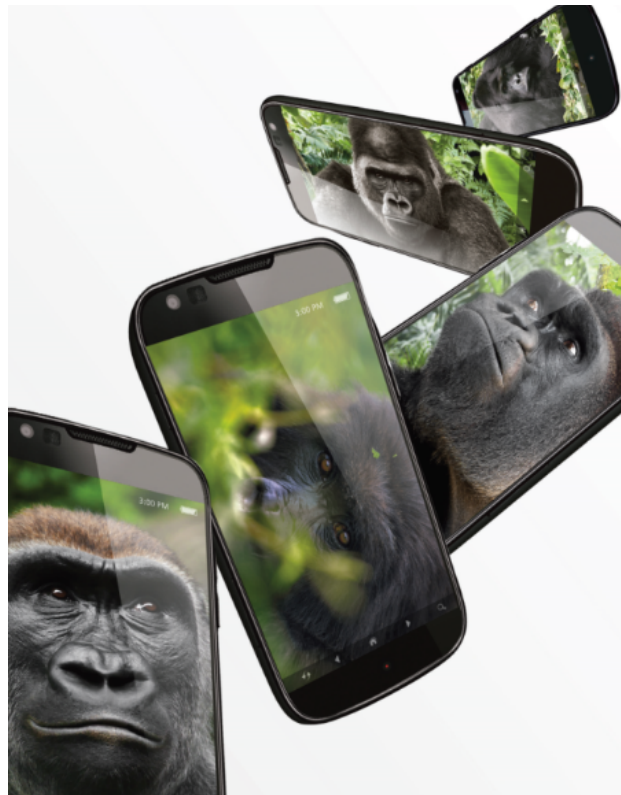
Up to 2x improvement in damage resistance over Corning Gorilla Glass 4, and up to 4x improvement over alternate glasses

- Damage resistance = ability of a material to survive sharp-contact damage

Up to 1.8 x improvement over Gorilla Glass 4 in drop performance on rough surfaces

Gorilla Glass 5 survives up to 80% of the time from drops at 1.6 meters

- 1) As measured in Corning's dynamic impact test
- 2) As measured in Corning's internal drop test (incremental face drops on 180-grit sandpaper), using a puck. Glass thickness 0.4 - 0.8mm
- 3) As measured in Corning's internal drop test, glass thickness >0.6mm



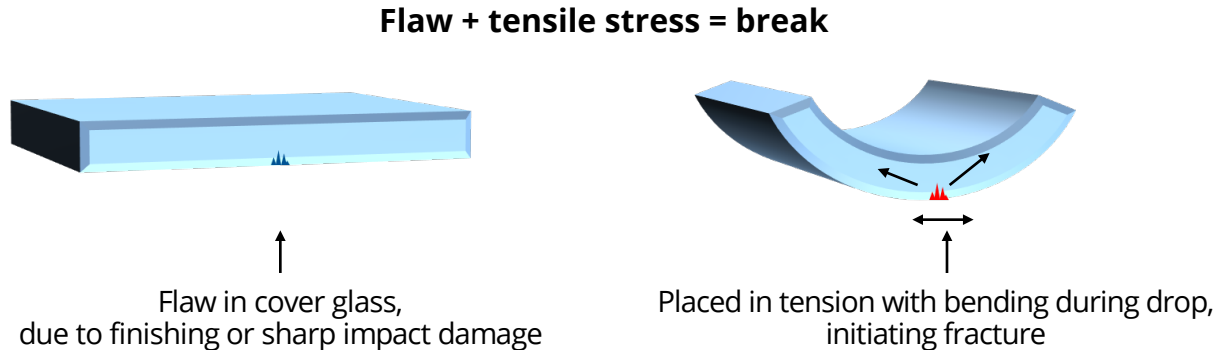
What causes cover glass failure in a handheld device?

Theoretical strength of glass is very high

- Glass strength is greatly reduced when a defect or flaw is introduced
- During finishing or through sharp contact damage during a drop event

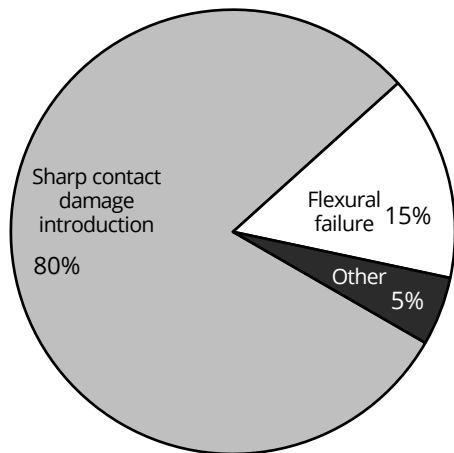
Glass typically breaks from a surface flaw that is subjected to tensile stress (pulling apart/stretching)

- Such tensile stresses can be imparted through bending during a drop event



Our glass innovation approach always starts with failure mode analysis (FMA) of field returns

FMA Results of 100s of Field Returns



Primary field failures for cover glass are associated with sharp-contact damage from drop on rough surfaces

- Typically accompanied with simultaneous bending that puts the flaw into tension

When designed well, phones with strengthened glass do not generally encounter flexural failures

While cover glass failures cannot be eliminated, we strive to reduce the frequency by developing glasses with increasing damage resistance

We designed Corning® Gorilla® Glass 5 to improve survivability on rough surfaces

What is Corning® Gorilla® Glass 5?

New strengthened glass demonstrating significantly improved damage resistance over previous glasses

- Outperforms all existing glasses for sharp contact damage and associated drop survivability on rough surfaces

Validated at Corning

- At glass level using newly developed dynamic impact test
- With drop testing in Corning pucks on rough surfaces

Validated by OEMs

- At component level and with actual device drops

In production now



Corning® Gorilla® Glass 5 will improve in-field reliability for cover glass

Up to 2x improvement in damage resistance over Corning Gorilla Glass 4, and up to 4x improvement over alternate glasses¹

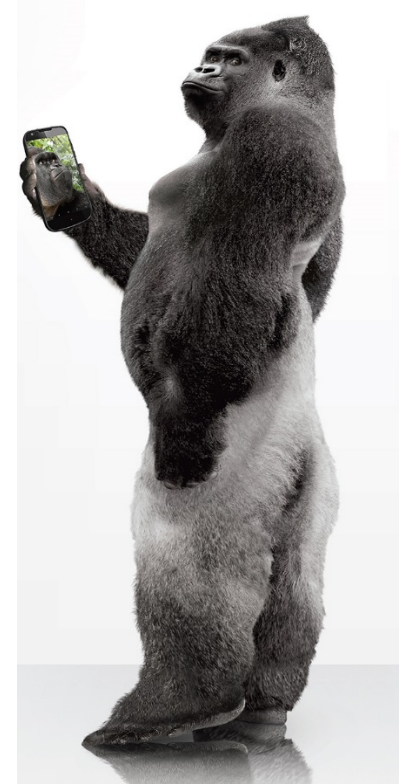
Up to 1.8 x improvement over Gorilla Glass 4 in drop performance on rough surfaces²

Gorilla Glass 5 survives up to 80% of the time from drops at 1.6 meters³

In-field performance improvement with Gorilla Glass 5 will depend upon the overall device design

Gorilla Glass 5 is in production now

- 1) As measured in Corning's dynamic impact test
- 2) As measured in Corning's internal drop test (incremental face drops on 180-grit sandpaper), using a puck. Glass thickness 0.4 – 0.8mm
- 3) As measured in Corning's internal drop test, glass thickness >0.6mm





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