

THE GLASS AGE, PART 2: STRONG DURABLE GLASS

In “The Glass Age, Part 2: Strong, Durable Glass,” hosted by Adam Savage and Jamie Hyneman, you will learn about one of the smartest design elements behind smartphones — Corning® Gorilla® Glass — which has made handheld devices exponentially more durable and has impressive implications for a wide variety of industries, including the automobile industry. Watch the video at TheGlassAge.com.

Adam and Jamie explain how “compressive strength” makes Corning® Gorilla® Glass seemingly unbreakable, and how Corning creates that compressive strength through an “ion exchange” process. But that’s only one step in the process. Get the whole story on how Corning produces Gorilla Glass at corninggorillaglass.com/en/technology/how-its-made, including animations that give you a close-up look at ion exchange in action. Then test your glass-making savvy by numbering these steps in the production process to show the right order.



- A. ____ Individual glass sheets are cut.
- B. ____ The molten glass is poured into a special trough and allowed to overflow.
- C. ____ As the glass cools, the potassium ions are squeezed together to form a deep compression layer that strengthens the surface of the glass.
- D. ____ The flowing glass fuses into a sheet of glass just millimeters thick.
- E. ____ Raw materials are combined, melted to 1000°C, and conditioned.
- F. ____ As sodium ions leave the glass, larger potassium ions replace them.
- G. ____ Glass sheets are bathed in a potassium salt bath at 400°C.

Creative Challenge: Strong, Durable Solution

As you saw in the video, scientists have only scratched the surface of how Corning® Gorilla® Glass can be used. Get together with a classmate and brainstorm new uses for Corning® Gorilla® Glass in each of the areas below that would take advantage of its impressive strength and clarity and would improve the way we live.

Sports _____

Home Life _____

Transportation _____

Architecture _____

Art _____



CORNING