

ELEVATORS GO LIGHT, MODERN AND DURABLE WITH CORNING® GORILLA® GLASS

Designers pour a lot of effort into making elevator interiors reflect the buildings around them. The realities of working with a moving vehicle that has stringent weight and damage resistance requirements complicates the process. Even a simple task like matching an elevator interior to a color scheme isn't so simple when the matching materials are too heavy, or can't take the wear and tear elevators endure, or don't meet fire and safety standards.

SnapCab Elevator Interior Systems is a Warrington, Pennsylvania - based company that specializes in easy-to-install, modular elevator cab interiors that help designers balance aesthetics and function. The company manufactures and installs more than 50 cab designs with a wide variety of customizable appearances. Corning® Gorilla® Glass is one of the materials SnapCab uses to give designers the appearance they want with the lightweight and durability they need.

"Gorilla Glass offers durability and aesthetic qualities. Its pristine clarity enables us to print any image we want or back paint to match colors exactly. We can do virtually any design with Gorilla Glass panels," said Evan Epstein, director of architecture at SnapCab. "It's also much tougher, more durable and lighter than laminated glass, and minimizing weight is important in elevator cab design."

SnapCab used Gorilla Glass in an elevator cab design in the Nemours/ Alfred I. duPont Hospital for Children in Wilmington, Delaware. The multi-year, \$272 million expansion project includes construction of a five floor patient tower. With its completion, Nemours is starting an extensive re-design of the existing hospital building. Below is a view of the SnapCab elevator featuring Corning Gorilla Glass in the Nemours/ Alfred I. duPont Hospital for Children in Wilmington, Delaware.



The duPont Hospital approached SnapCab for an elevator design that would match a new color-coded décor created to help patients and visitors find their way around the one-million-square-foot original building. The colors in each of the original building's six elevators had to match the colors on walls and floors – bright shades of purple, blue, orange, green and yellow. SnapCab customized one of its designs for the hospital and recommended Gorilla Glass as the wall covering.

“At first, there was some skepticism about using glass. Hospital elevators get beaten up pretty badly. But once we showed the hospital a video of Gorilla Glass’ durability they were pretty amazed,” Epstein said.

When SnapCab recommended Gorilla Glass to Stefanie Kreider, the hospital’s project manager, she “absolutely did not” believe it could take the pounding a hospital elevator endures. She quickly changed her mind after Epstein told her it was the same material used to cover smart phones and tablets, and provided a sample for her to test. The hospital opted for Gorilla Glass and Kreider said the results have been positive.

“We’ll have stretchers, nutrition and housekeeping carts in the elevators, and being a children’s hospital we also have wagons the children ride in and families with strollers. The Gorilla Glass has withstood all of the impact. We’re actually seeing more bumps and bruises on the stainless steel than the glass,” she said. “It still looks like it was just installed yesterday.”

In the first phase of the renovation, SnapCab installed two elevator cab interiors with purple and blue panels of Corning® Gorilla® Glass. Matching the exact shades of purple and blue on the elevator

walls to the outside walls was easy, Epstein said, because Gorilla Glass does not have conventional glass' green cast, which can distort colors.

The 3/8-inch-thick panels with 1/16-inch-thick glass barely protrude from the cab walls and take up less space than the previous fabric coverings. Corning® Gorilla® Glass was also an advantage over the previous fabric wall coverings because it is non-porous, so liquids and bacteria cannot penetrate it.

"The elevators hadn't been touched in 20 years and the previous covering was outdated," Kreider said. "Most important, it wasn't cleanable. The Gorilla Glass surfaces are easy to keep clean."

The durability of Gorilla Glass enables SnapCab to use thin panels and save on weight. A heavier wall covering would have increased the interiors' weight beyond five percent of the cab's total weight and could have forced the hospital to re-engineer the elevators. With counterweighting and re-balancing comes higher costs, something the hospital needed to avoid.

"We've gotten requests for designs that included conventional glass, replaced it with Gorilla Glass, and reduced the material use by as much as 20 percent," Epstein said. "That's a significant savings." The image below shows the brightly colored SnapCab elevators that help visitors navigate the one-million-square-foot original building.



Lightweight Gorilla Glass also can speed installation and help keep project costs down. Lighter panels are easier to install so elevators are out of service for shorter periods of time and labor costs are reduced. That was important during the DuPont Hospital project because the original hospital building had to remain operational during its renovation and construction of the new building.

“I was surprised at how quick the install was,” Kreider said. “Including the floor, it was a day and a half. That was awesome; I was anticipating two to three days.”

Gorilla Glass offers design options beyond colors. “The beauty of being able to print on Gorilla Glass is that you can use custom images provided by a customer to create a unique elevator interior. You can also take a digital photograph of materials like the wood veneer or stone from a lobby and make an exact duplicate in the elevator,” said Dave Kane, commercial sales manager at Corning. “If you ever need more glass with the same pattern you just print a duplicate without the time and expense of matching actual materials.”

Gorilla Glass can also turn elevators into giant touch screens.

“Gorilla Glass enables us to offer touch screens and video displays in wall panels. Before, if a customer wanted a screen in a cab they’d have to frame it out and mount it onto the panel,” Kane said. “If they decide they don’t want a screen now, but change their minds in five years, it can easily be installed using the SnapCab modular system.”