

Less and More

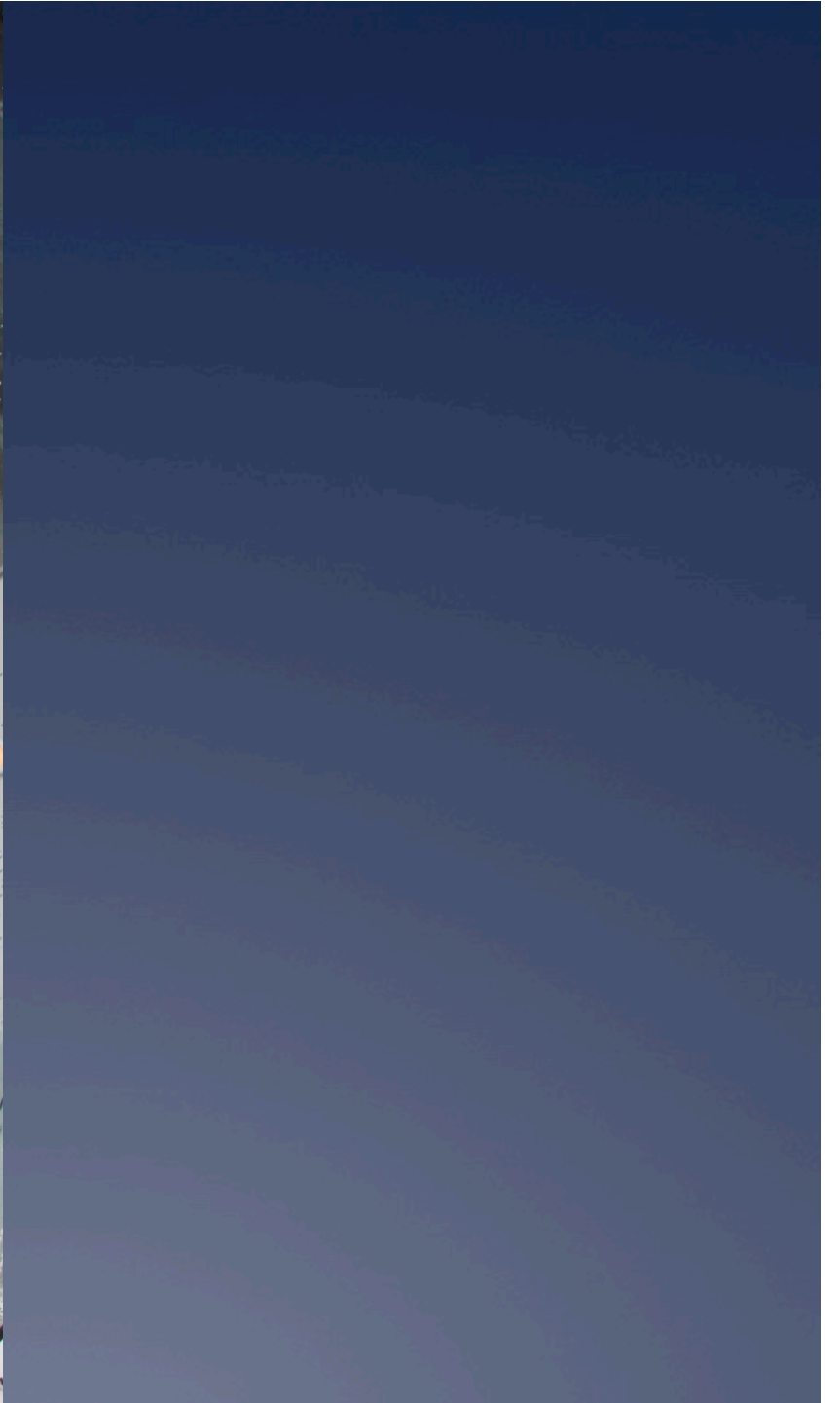
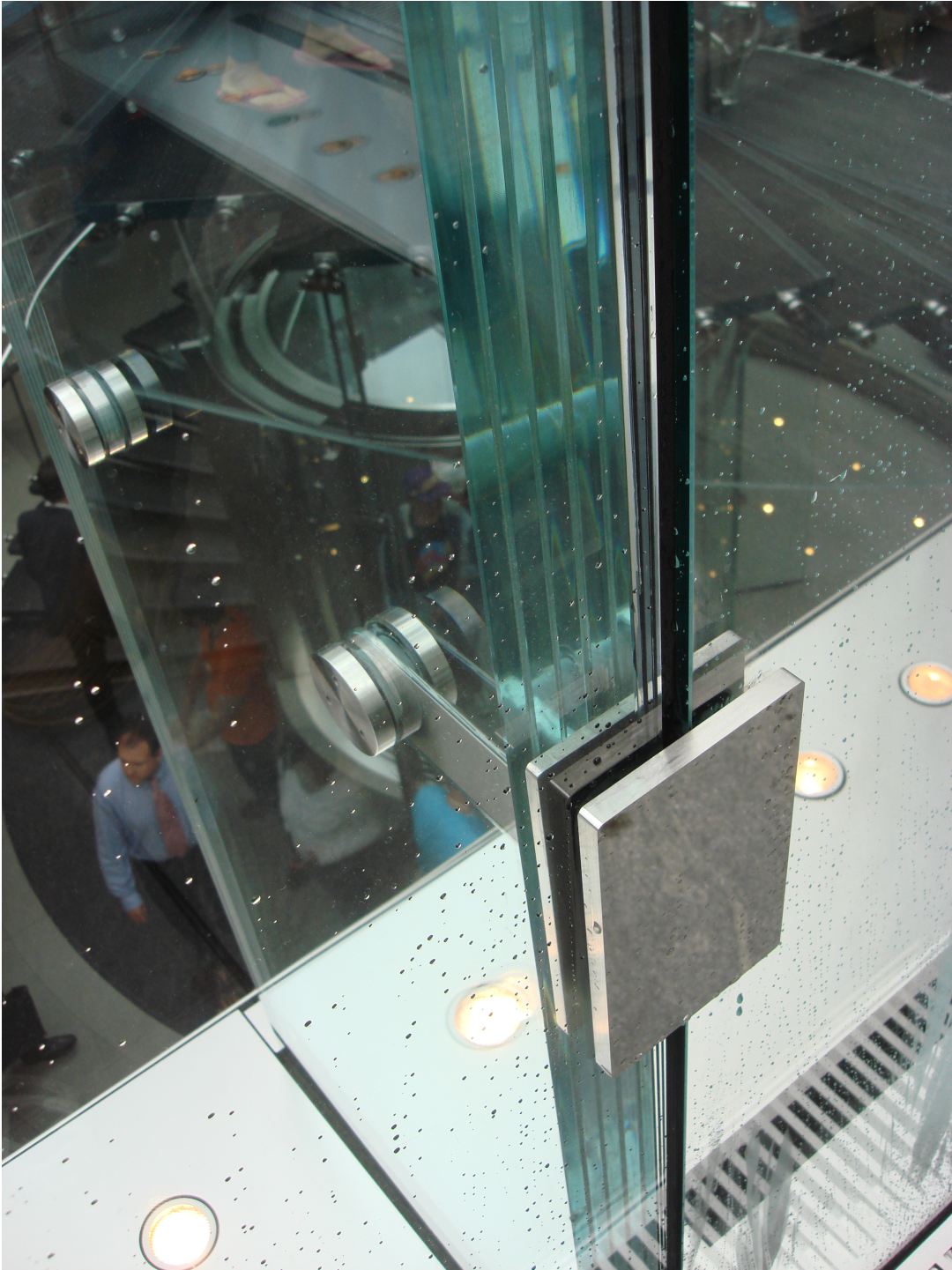
32 feet in the
skyline

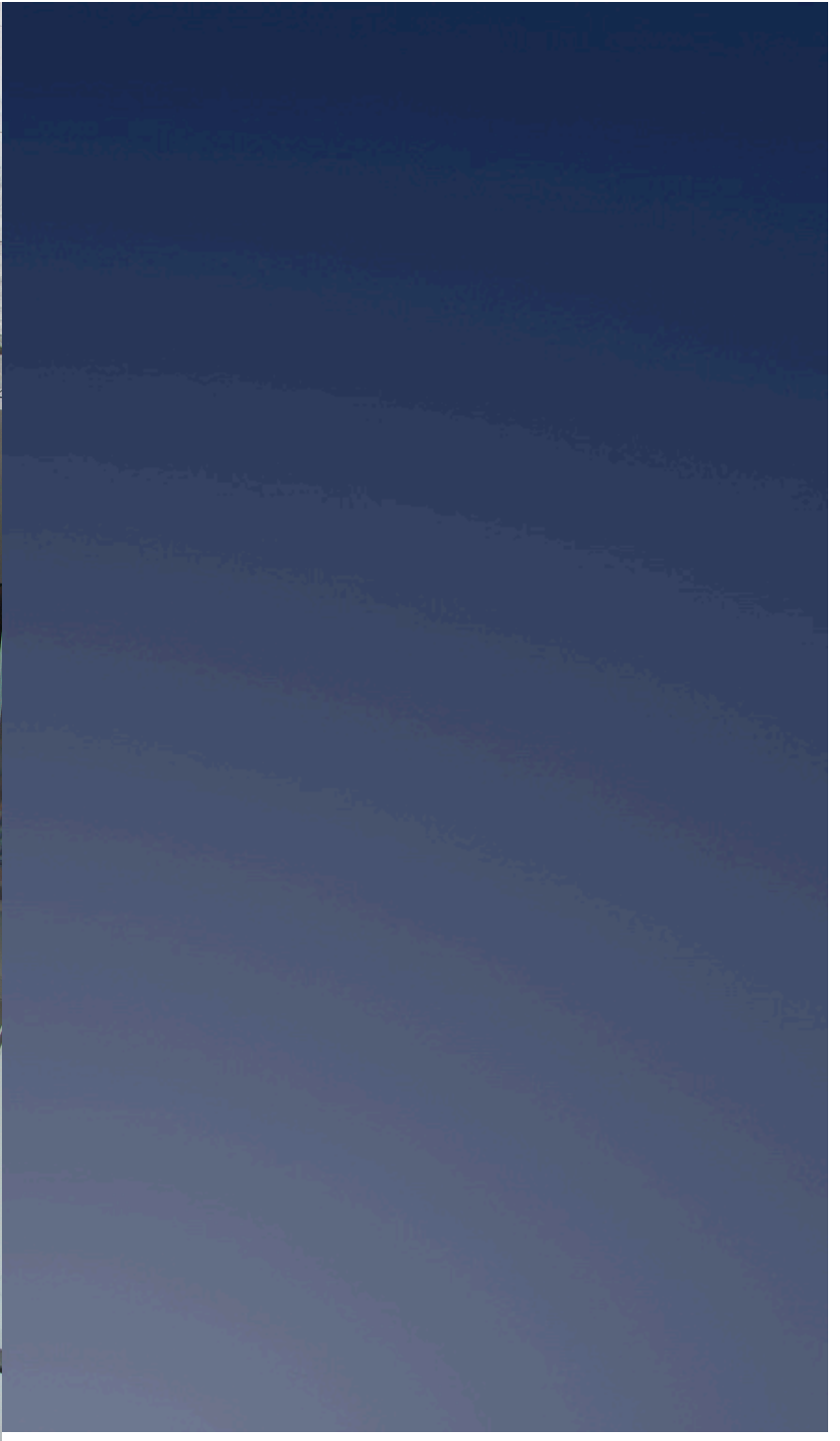
http://www.youtube.com/watch?v=XPi7aC57EY4&feature=player_detailpage

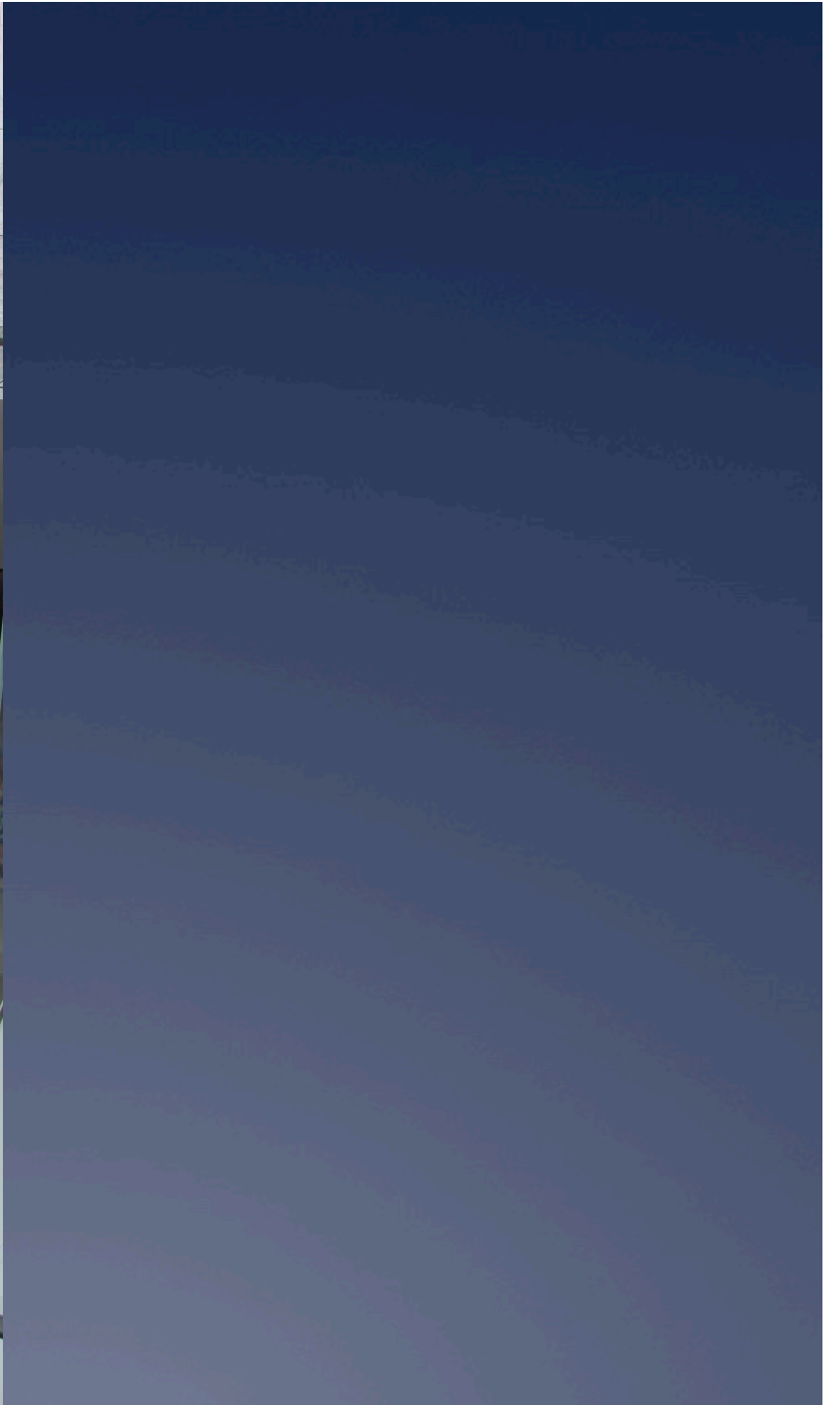




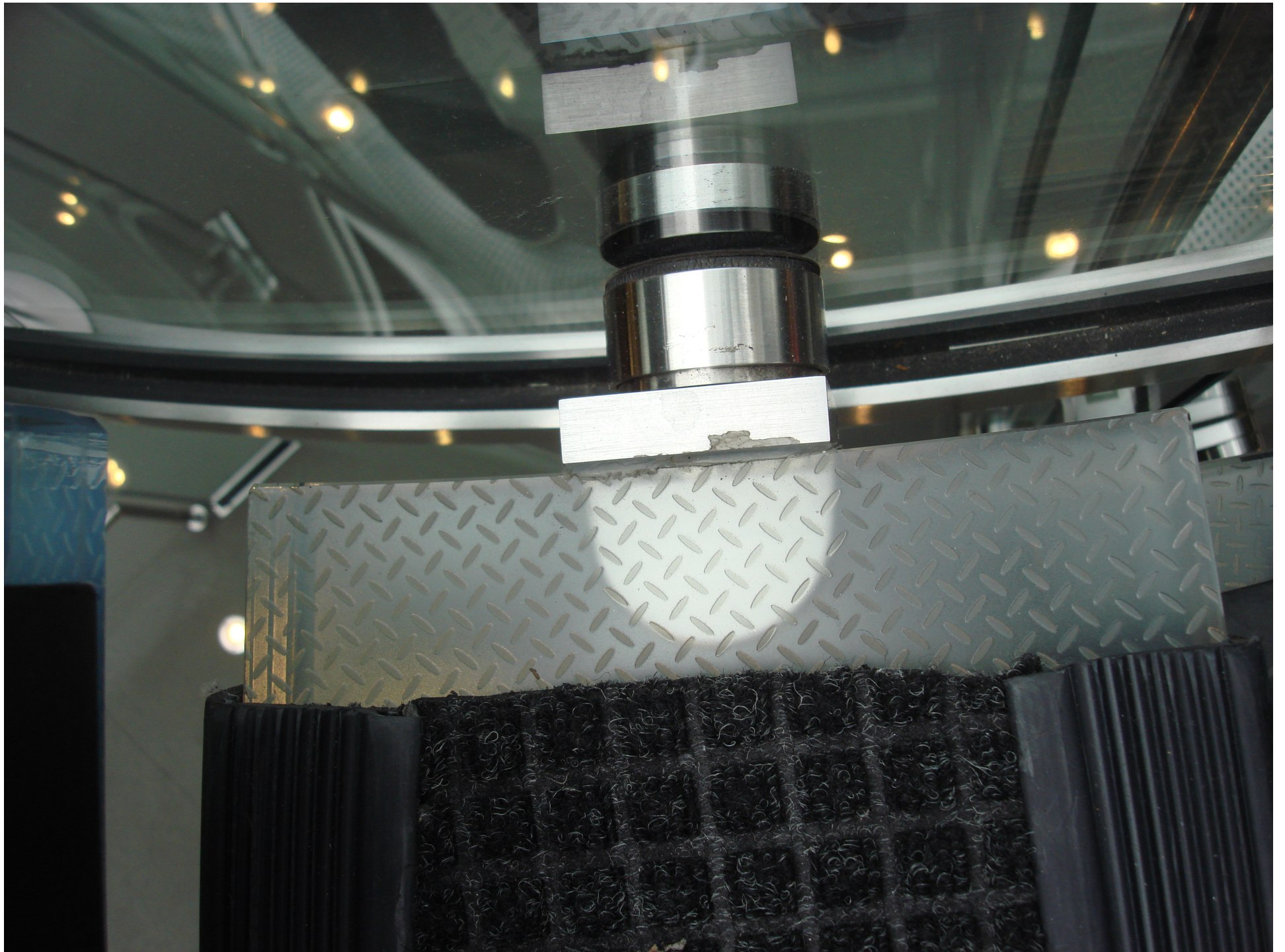




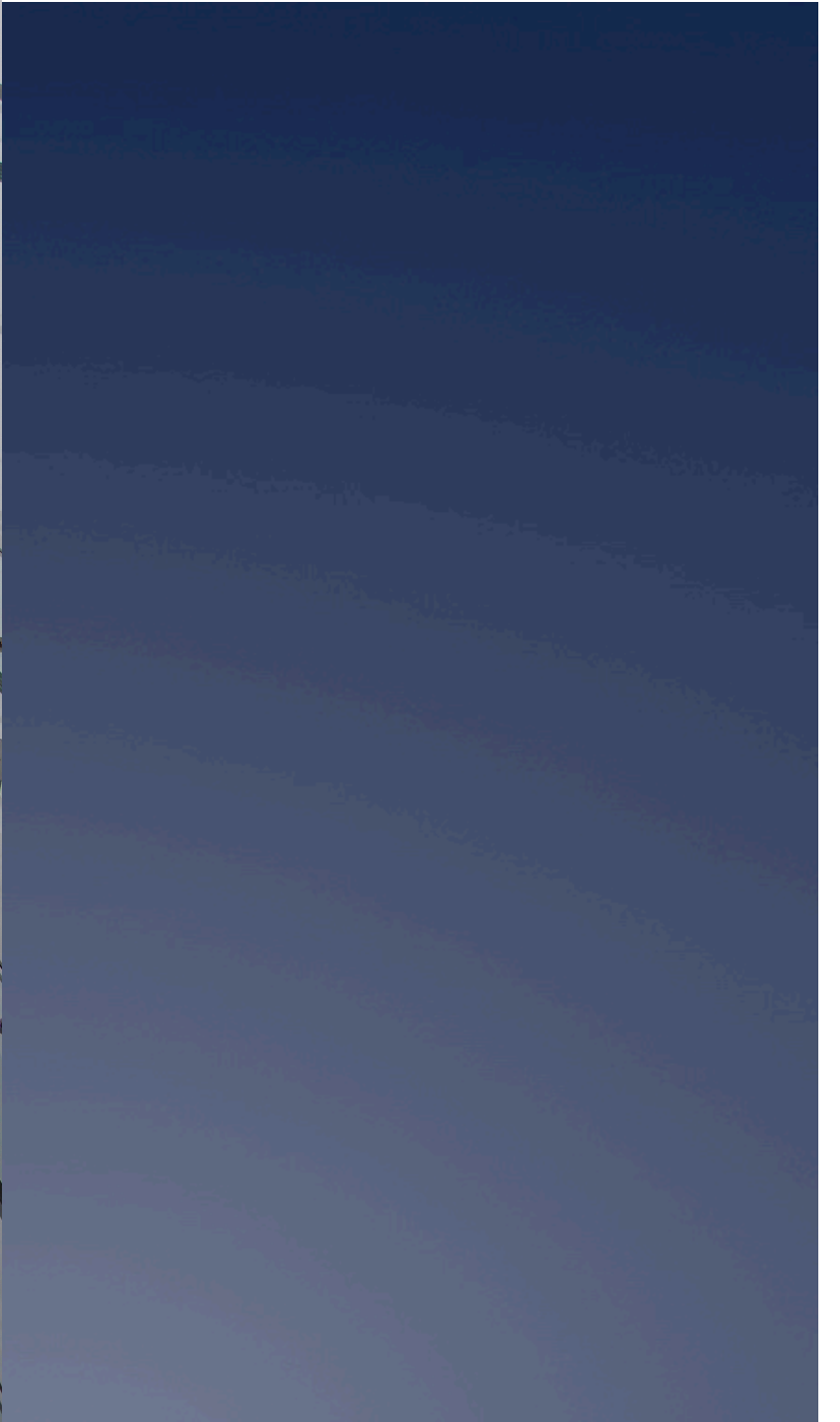


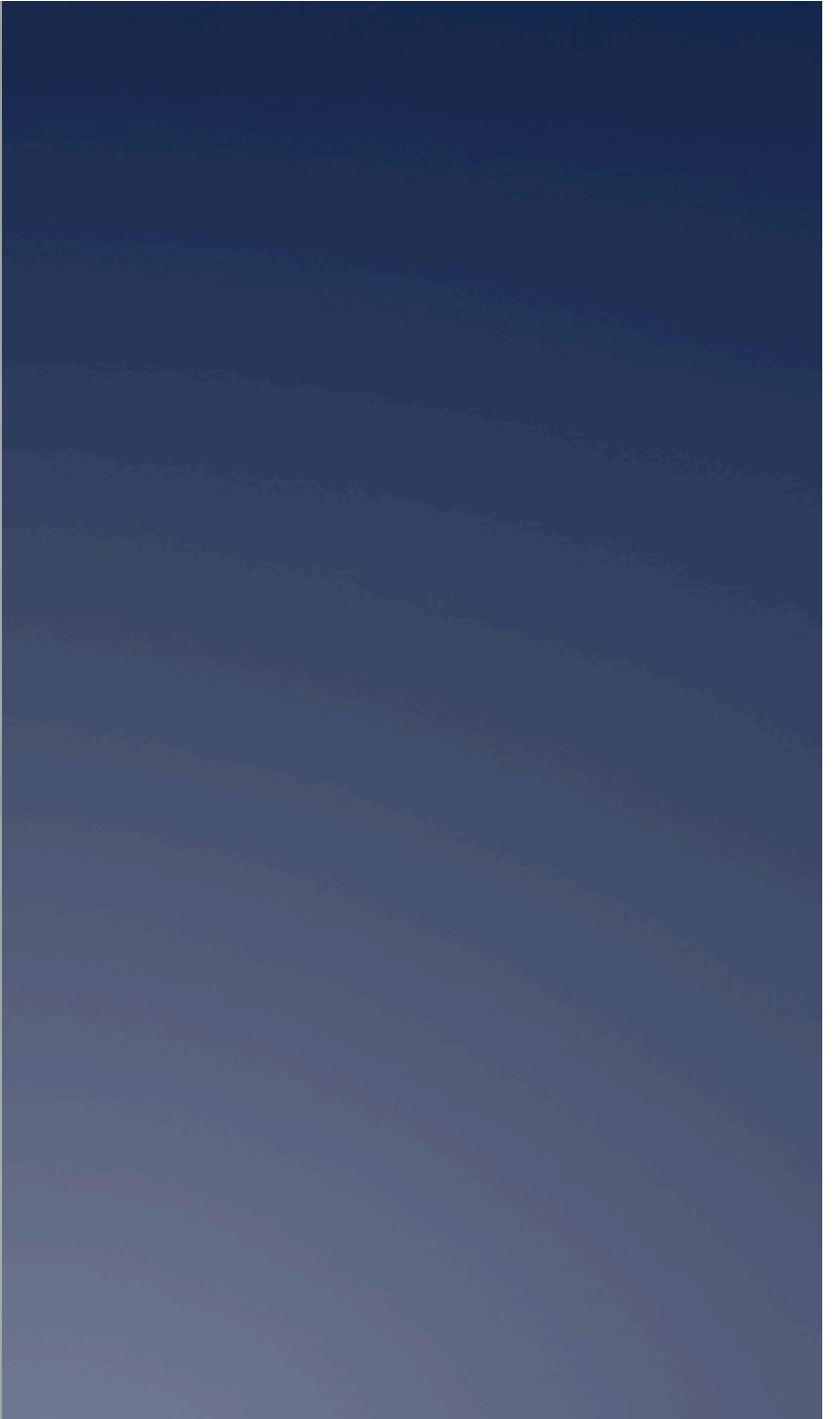


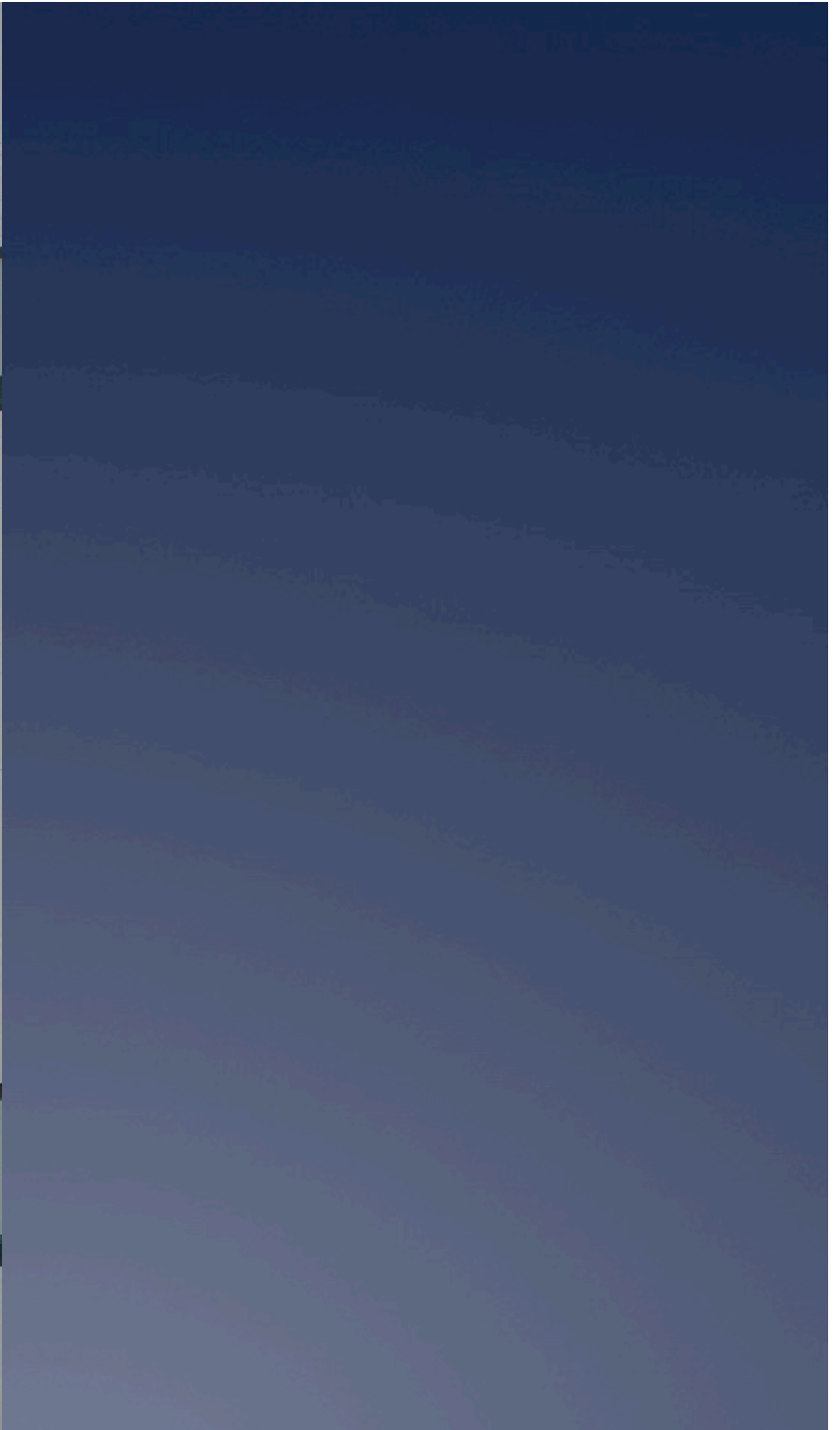


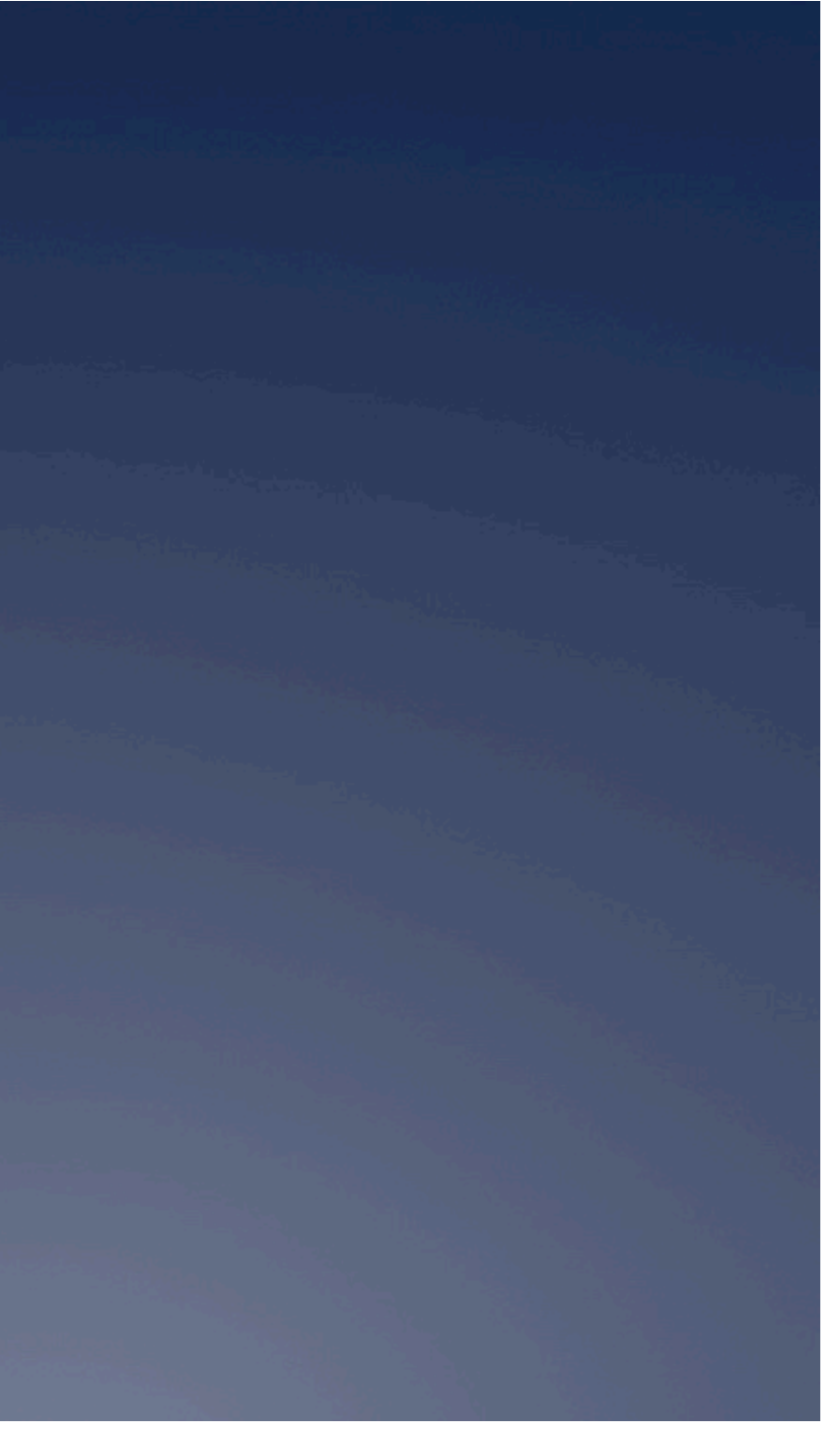












1 the glass elevator cylinder provides the primary support structure

2 glass "fins" provide a support connection from the elevator cylinder to the outer glass sidewall that spirals up adjacent to the stair treads

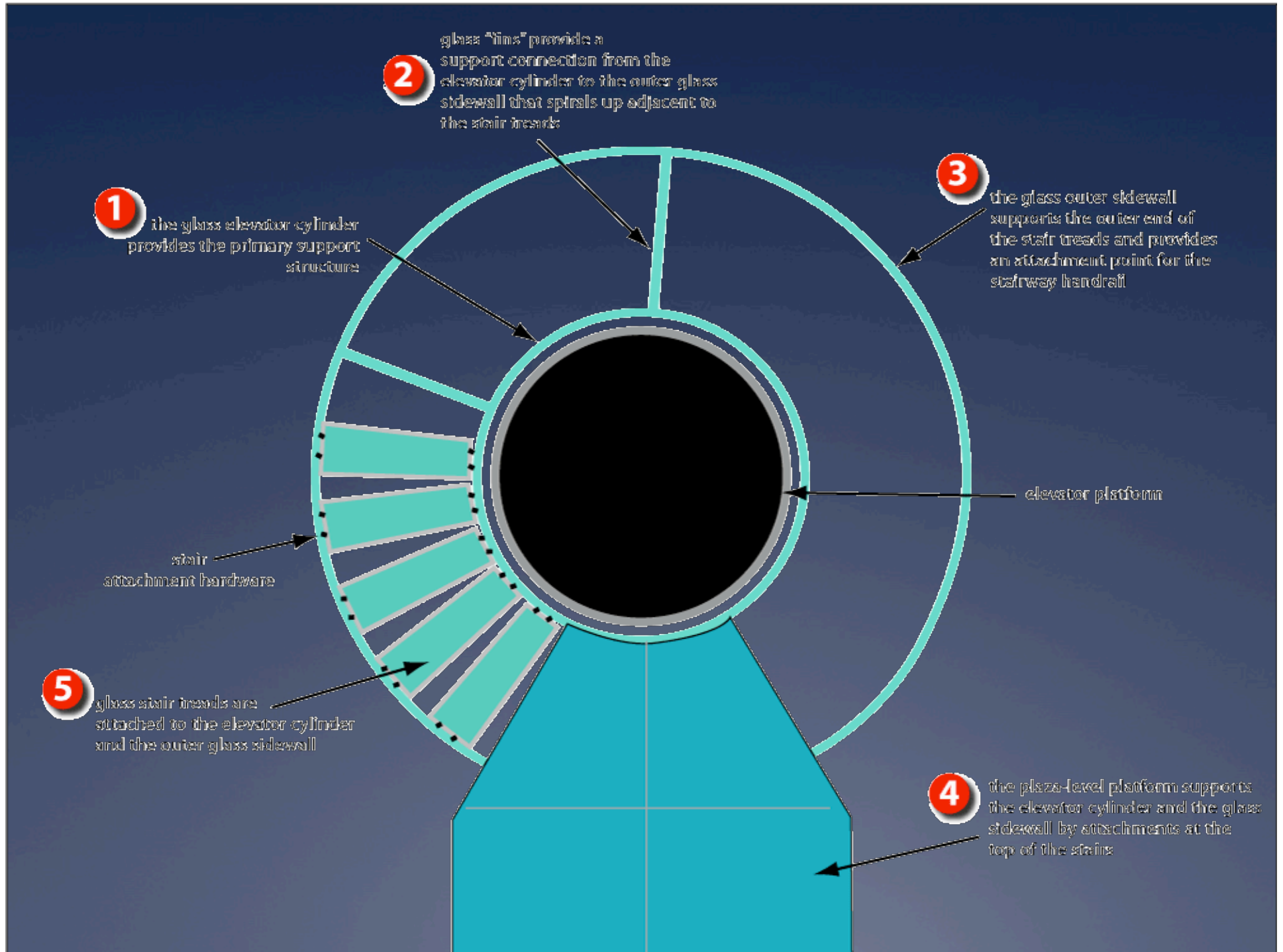
3 the glass outer sidewall supports the outer end of the stair treads and provides an attachment point for the stairway handrail

stair attachment hardware

elevator platform

5 glass stair treads are attached to the elevator cylinder and the outer glass sidewall

4 the plaza-level platform supports the elevator cylinder and the glass sidewall by attachments at the top of the stairs



A - The glass sidewalls of the staircase are connected to the first landing of the staircase.

B - The glass sidewalls are connected to each other.

C - The outer end of the stair treads are connected to the glass sidewall.

D - The glass elevator wall panels are connected to arched support panels that hold up the sidewalls.

E - The glass elevator wall panels are connected to each other.

F - The inner end of the stair treads are connected to the glass sidewall.

G - The arched support panel (difficult to see in this view) is connected to the stair sidewall.

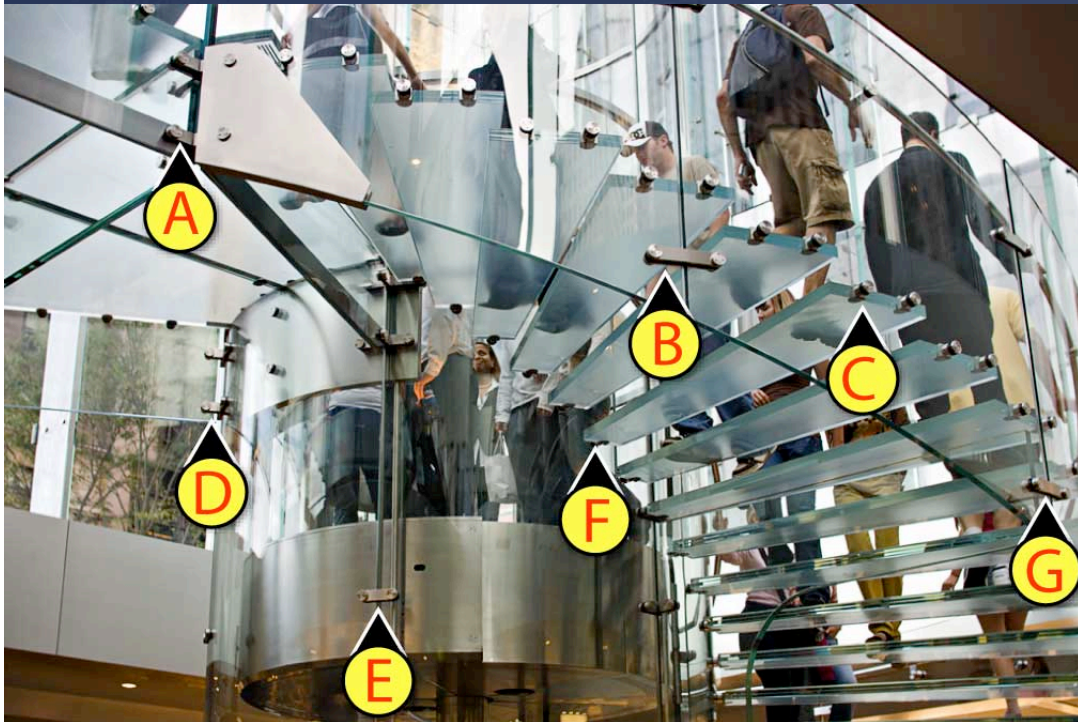
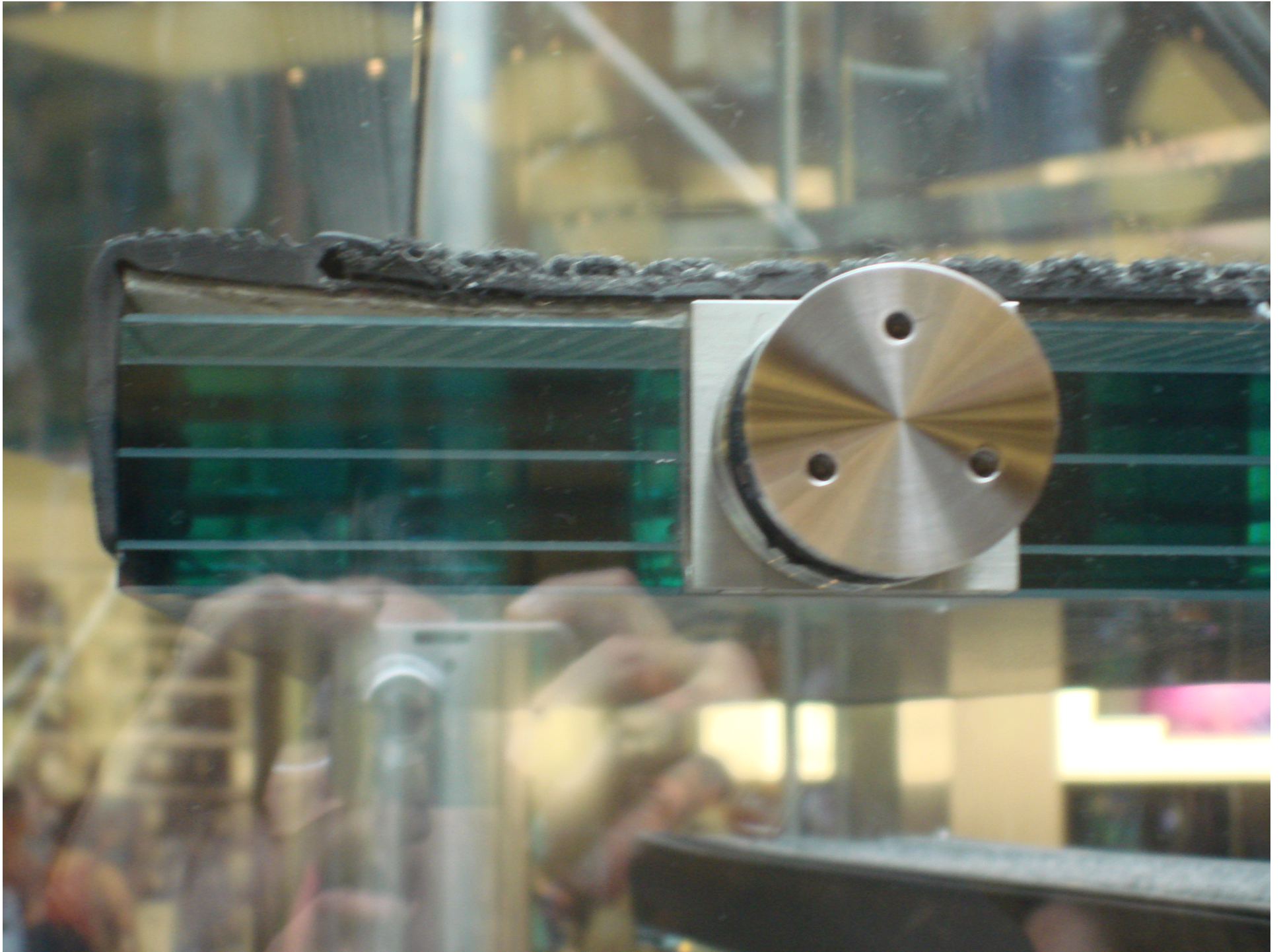
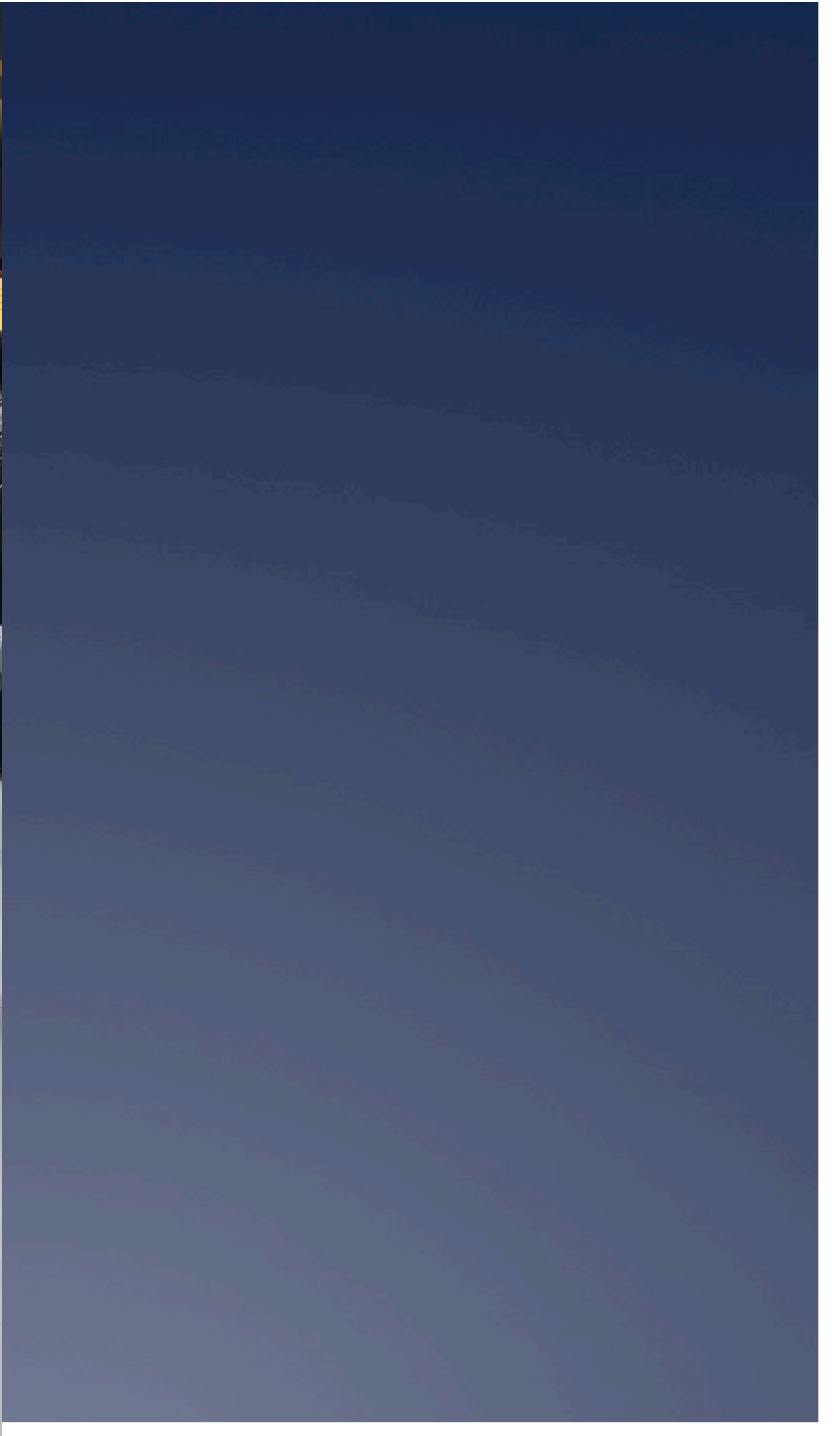


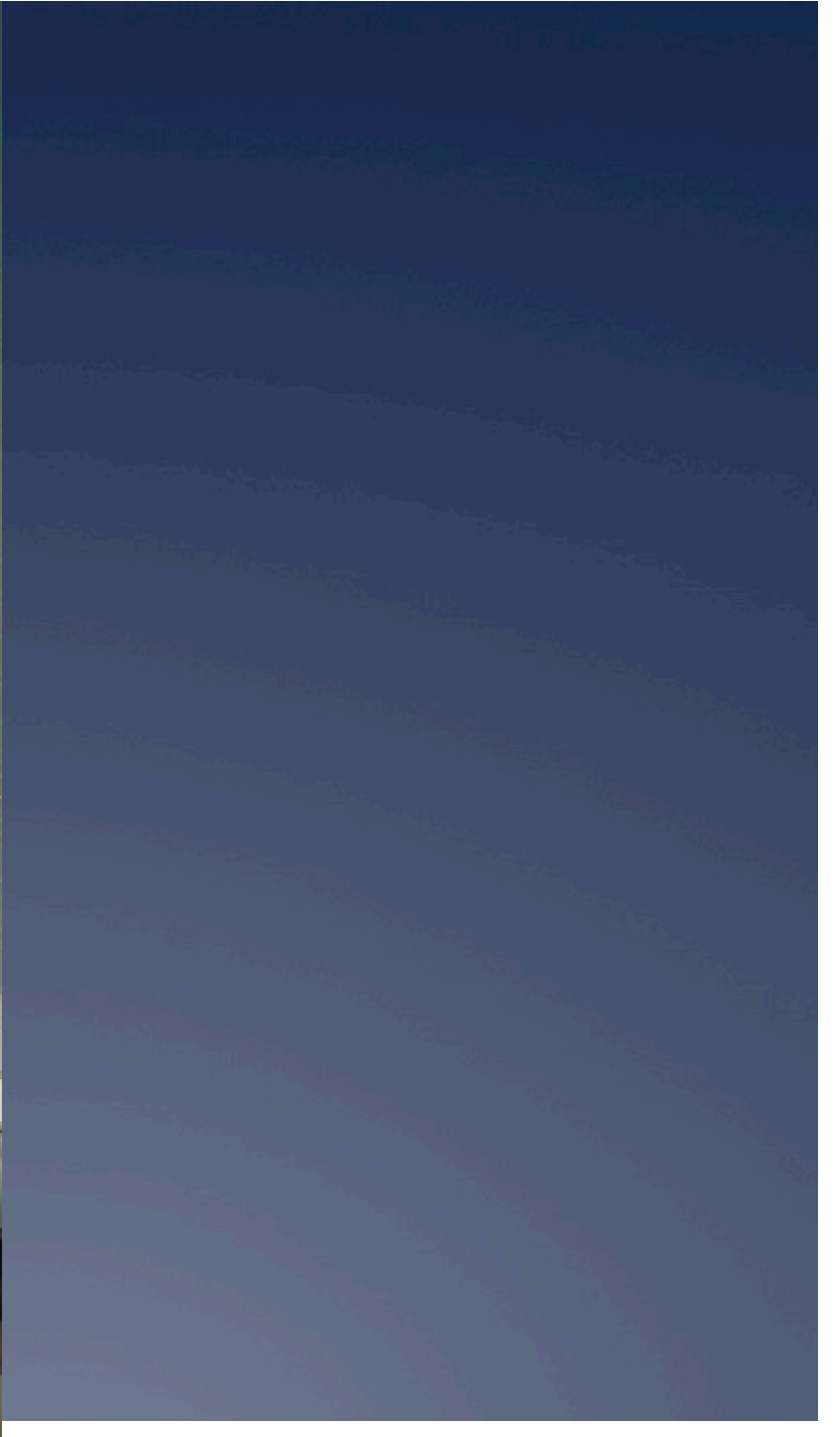
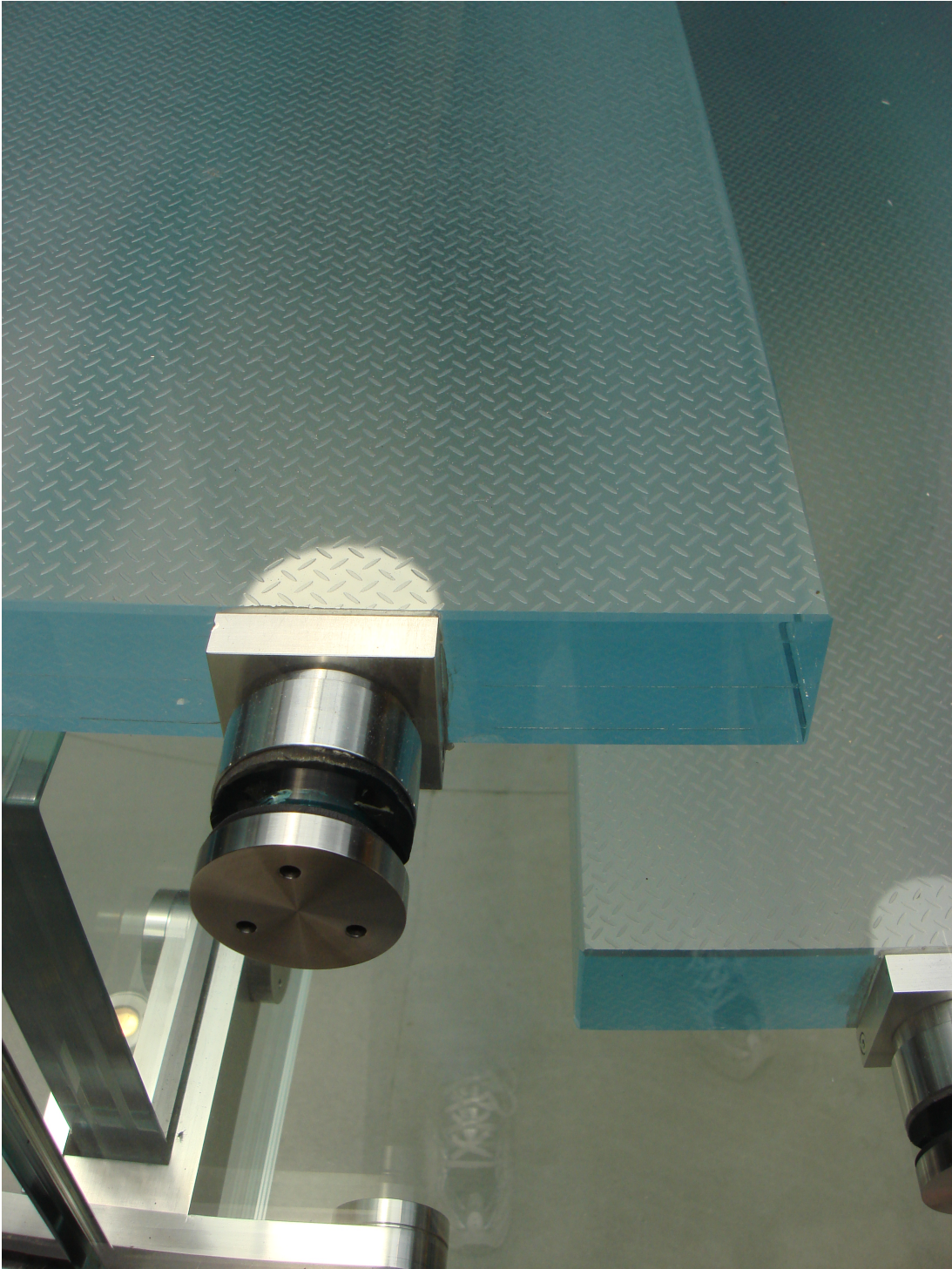
photo- Josh Stagler









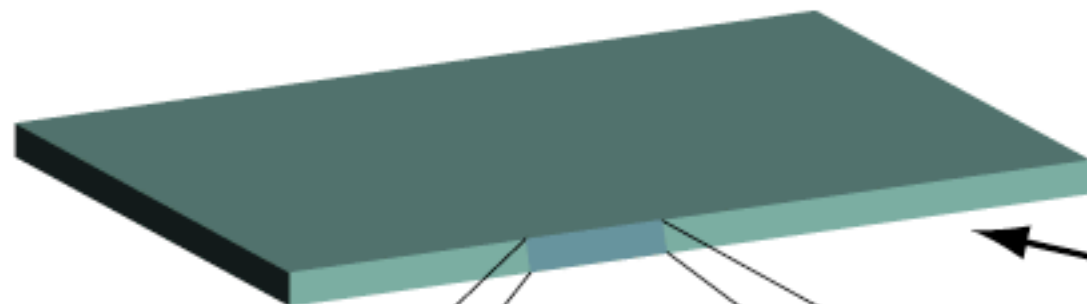


When the design and manufacturing process was finalized, Depp Glass (NY) was selected to manufacture the staircase components, while the titanium hardware was manufactured by Tripyramid Structures Inc. (Mass.). The actual fabrication, installation and safety tests were performed by Seele GmbH & Co. (Gerthofen, Germany).

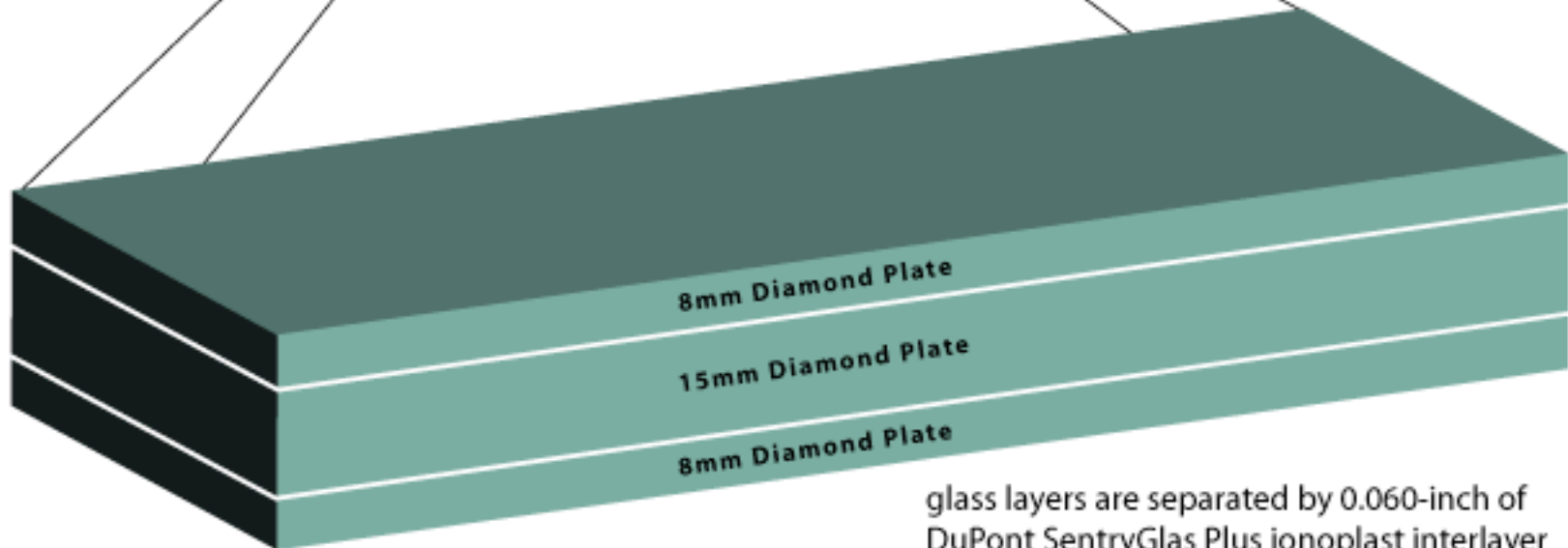
The staircases are constructed of 3-ply glass treads, bonded together with a Dupont SentryGlas Plus **ionoplast** interlayer [tech info]. The treads are tied through titanium hardware to the glass side panels. The treads are surface acid-etched to provide slip and privacy protection.

Specifically, the glass treads at the SoHo store consist of an 8mm extra clear Depp Glass Diamond Plate layer, a 0.060-inch DuPont SentryGlas Plus ionoplast interlayer, a 15mm extra clear Diamond Plate layer, another 0.060 DuPont SentryGlas® Plus ionoplast interlayer, and another 8mm extra clear Diamond Plate layer.

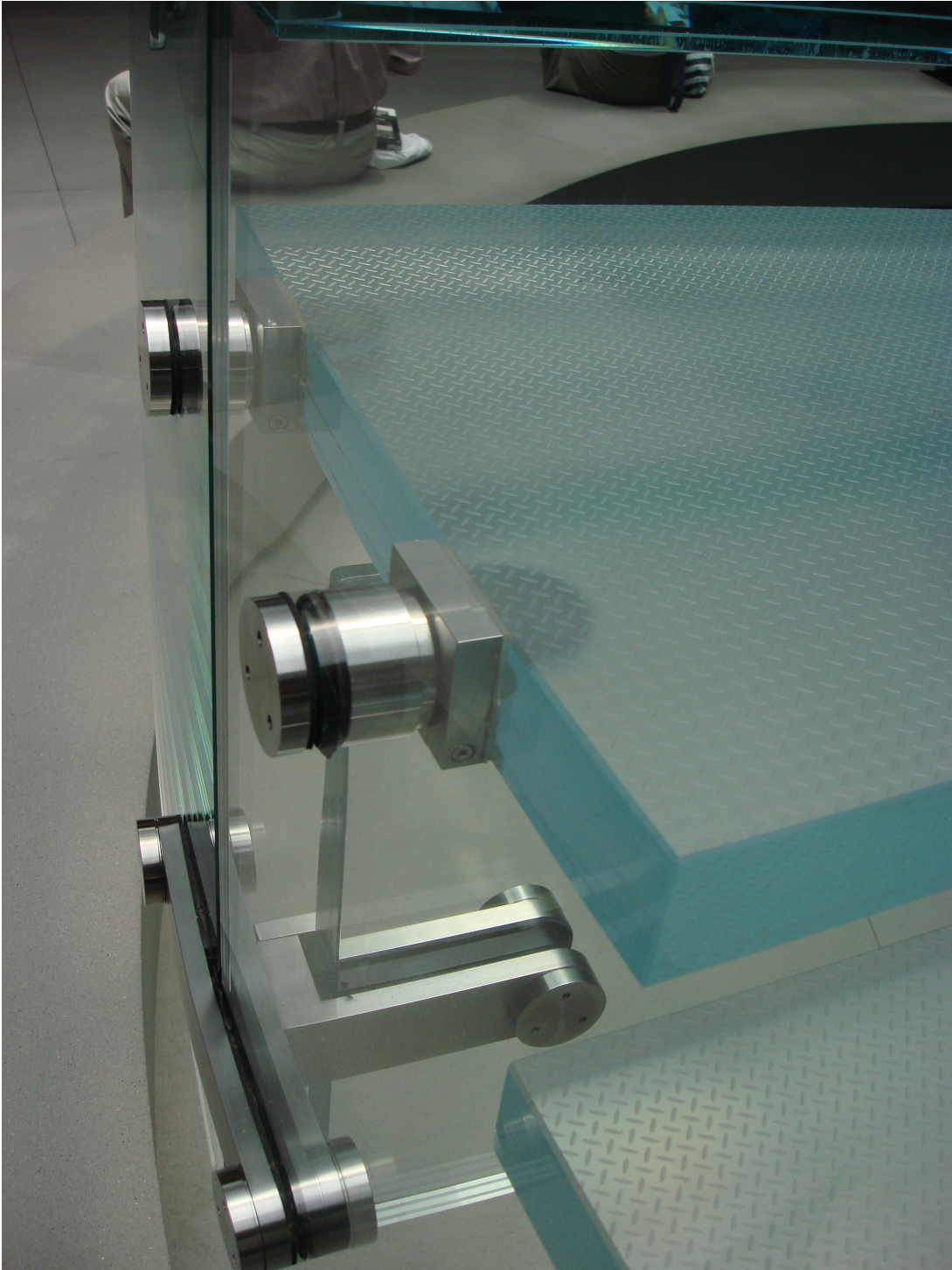
The tread is a total of 55mm thick, or about **2.1 inches**.



stair tread



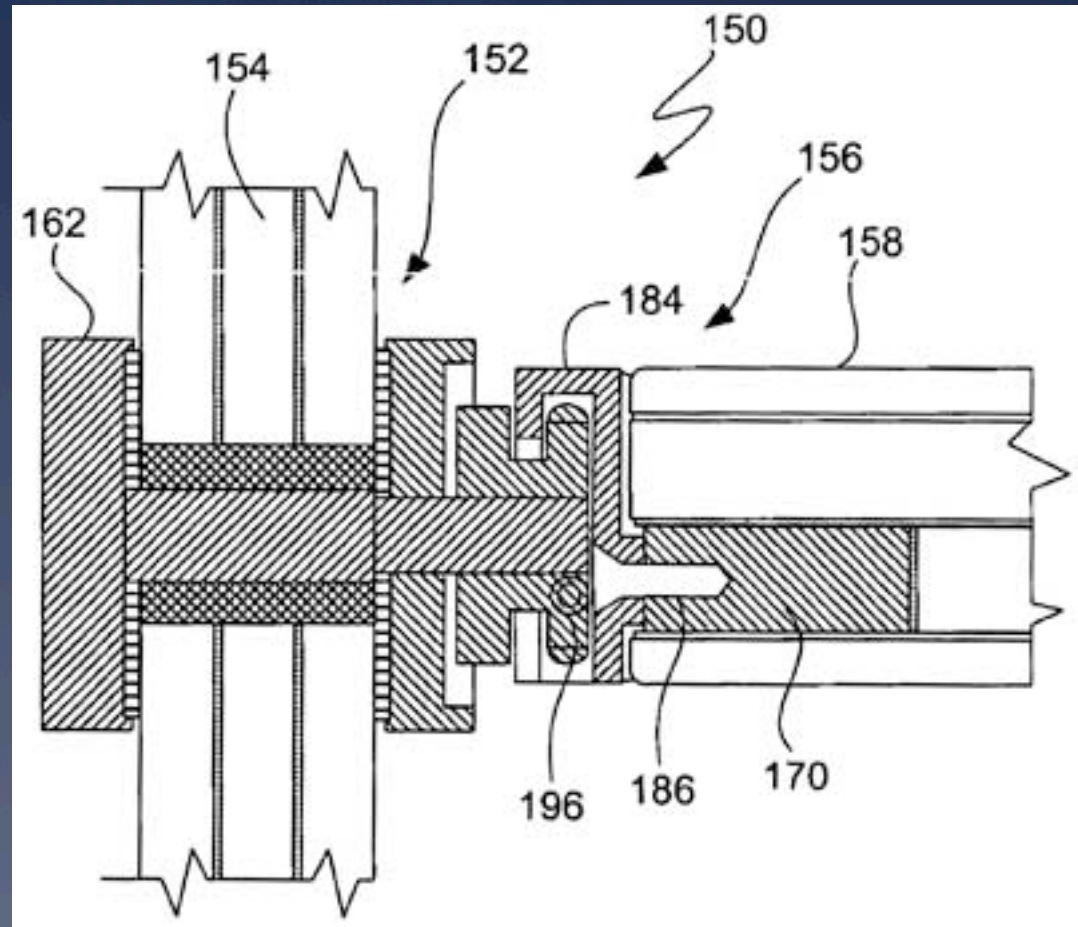
glass layers are separated by 0.060-inch of DuPont SentryGlas Plus ionoplast interlayer



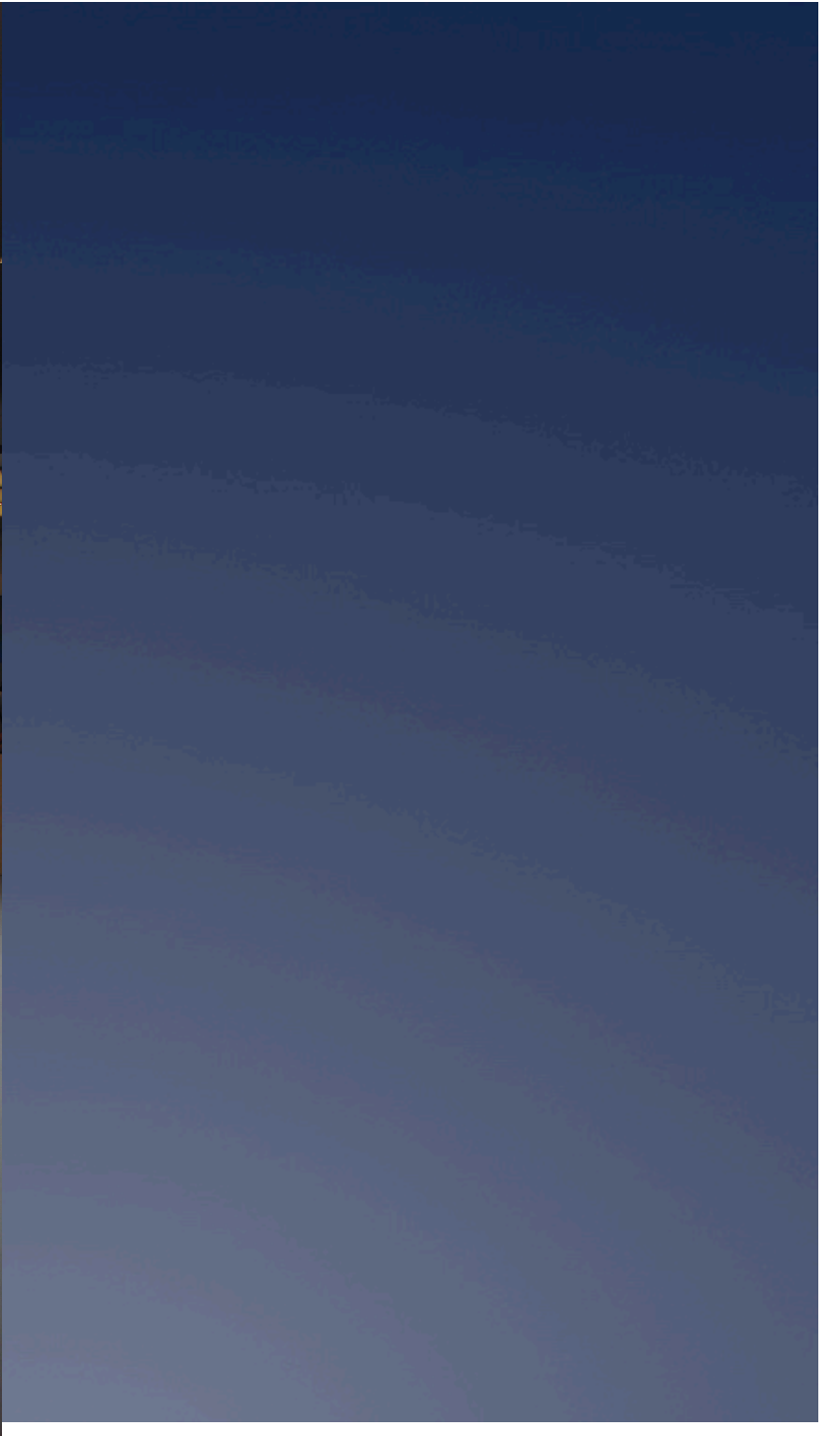
The staircase vertical, laminated glass sidewalls were supplied by BGT Bischoff Glasstechnik GmbH (Germany). They consist of a center 15mm laminate, with 12mm layers on either side. The side glass panels range up to 5.8m high x 1.6m wide, which O'Callaghan said generally need to be craned in through the skylight roof during off peak hours.

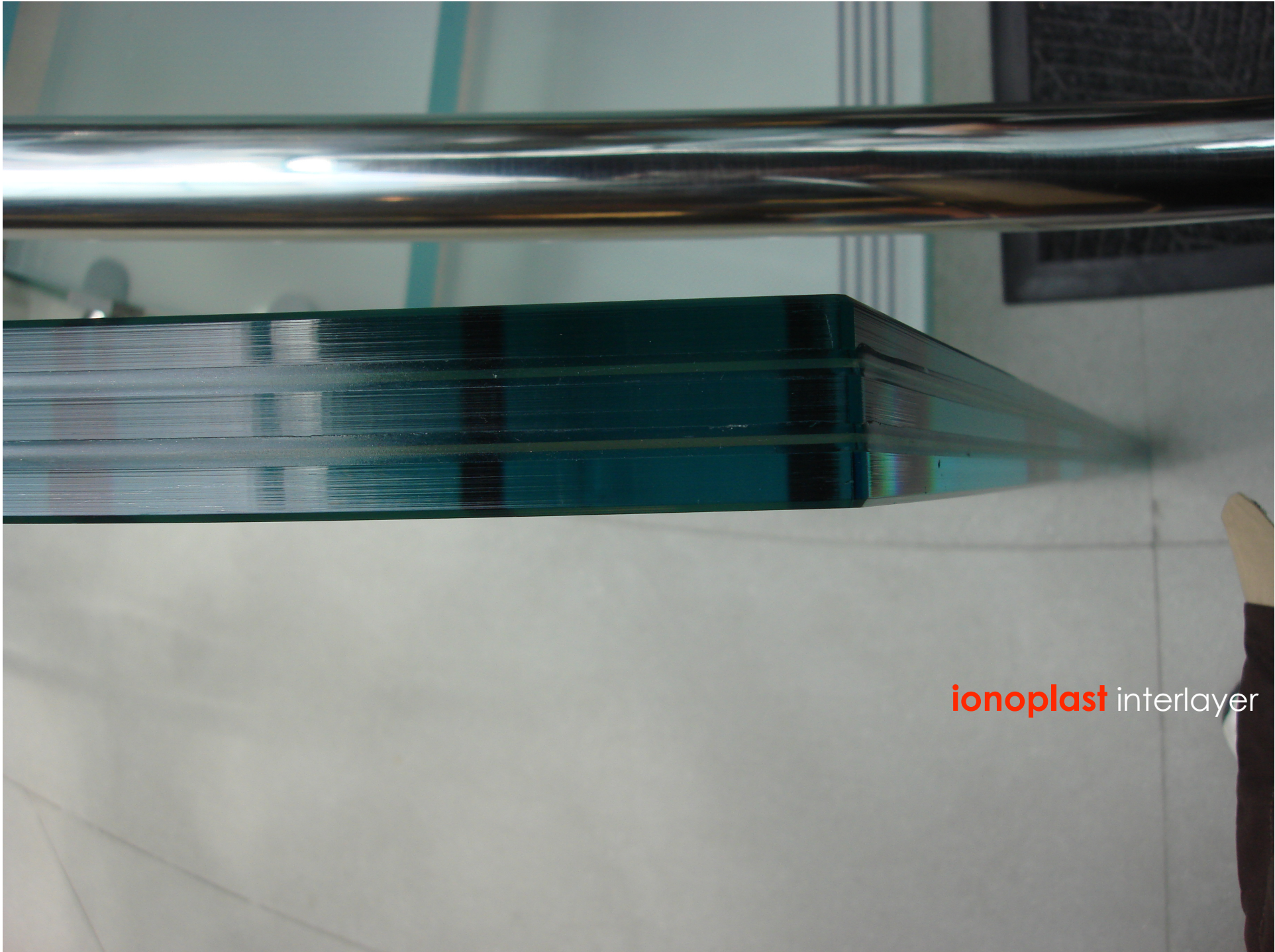
The top surface of each tread has a diamond-pattern surface to provide some gripping so customers don't slip on the stairs.

One of several technical diagrams submitted by Apple in 2002 to the U.S. Trademark and Patent Office in support of its application for a patent on the glass staircase design. This is a side view of the tread support hardware. The part on the left (#162) is the same one shown in the photo directly above. The glass side support wall is #154, the tread hardware is #184, and the glass tread itself is #158

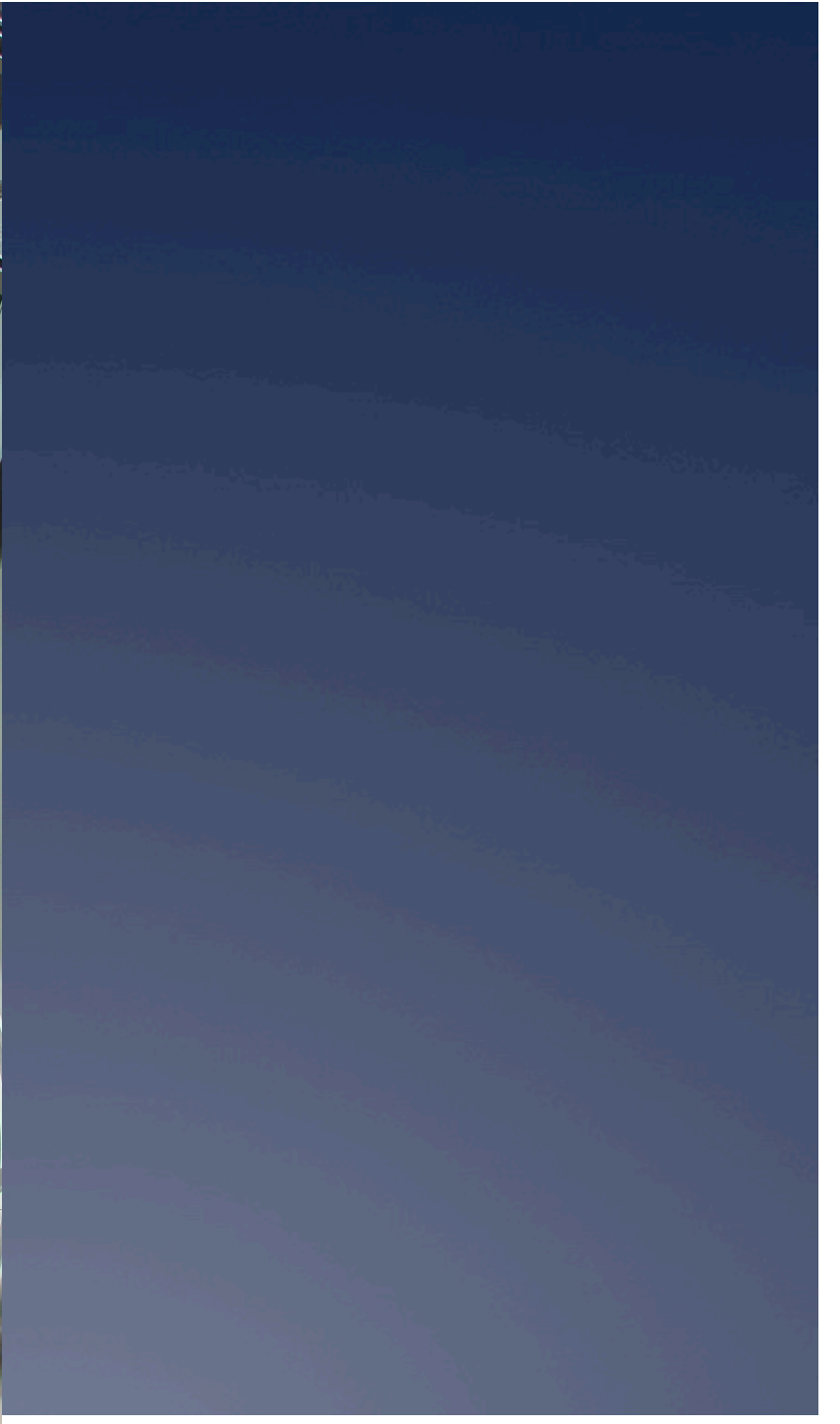


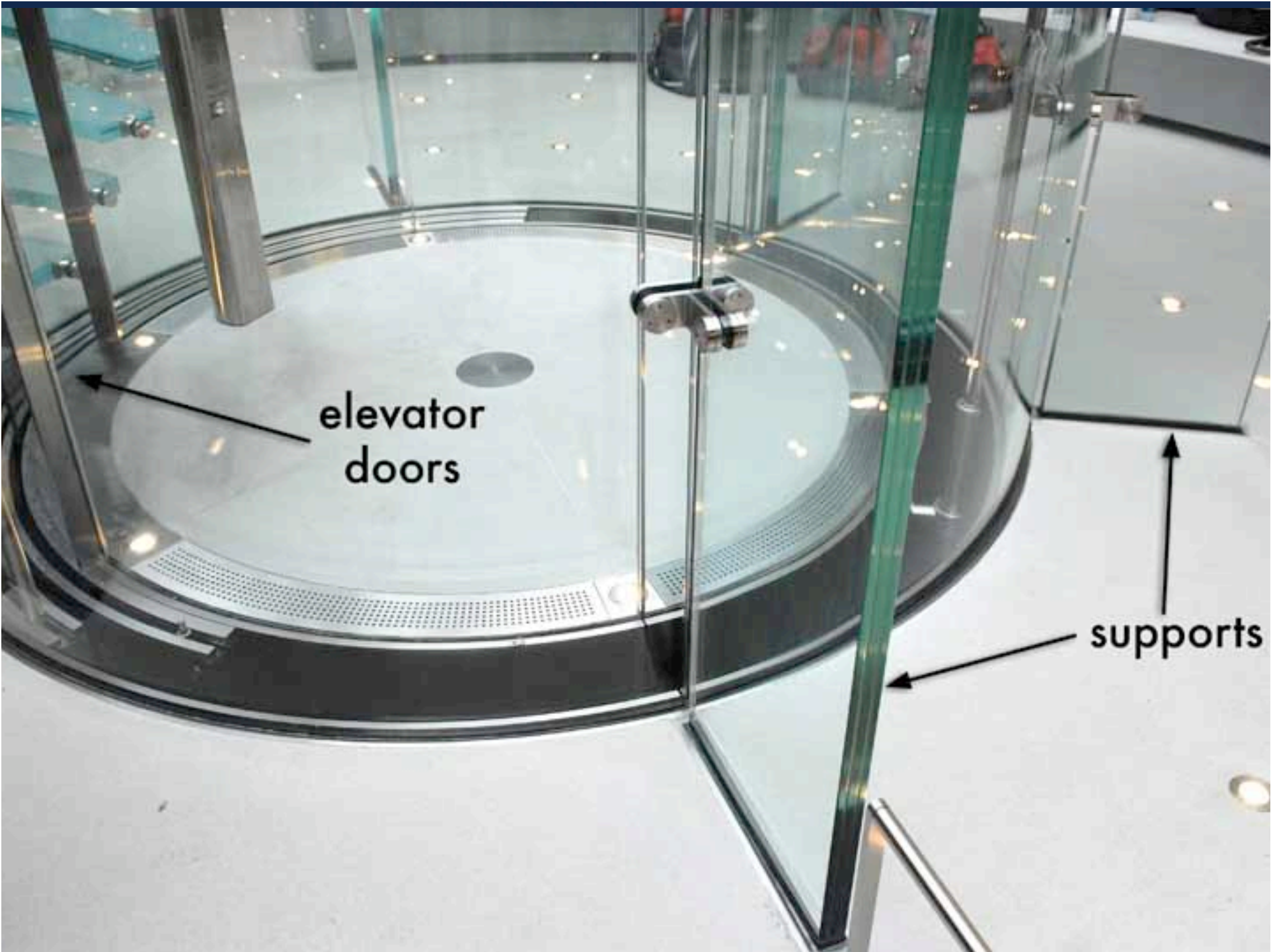






ionoplast interlayer





elevator
doors

supports

























