

# FIRST FAÇADE IN THE WORLD.

ARCHITECTURE



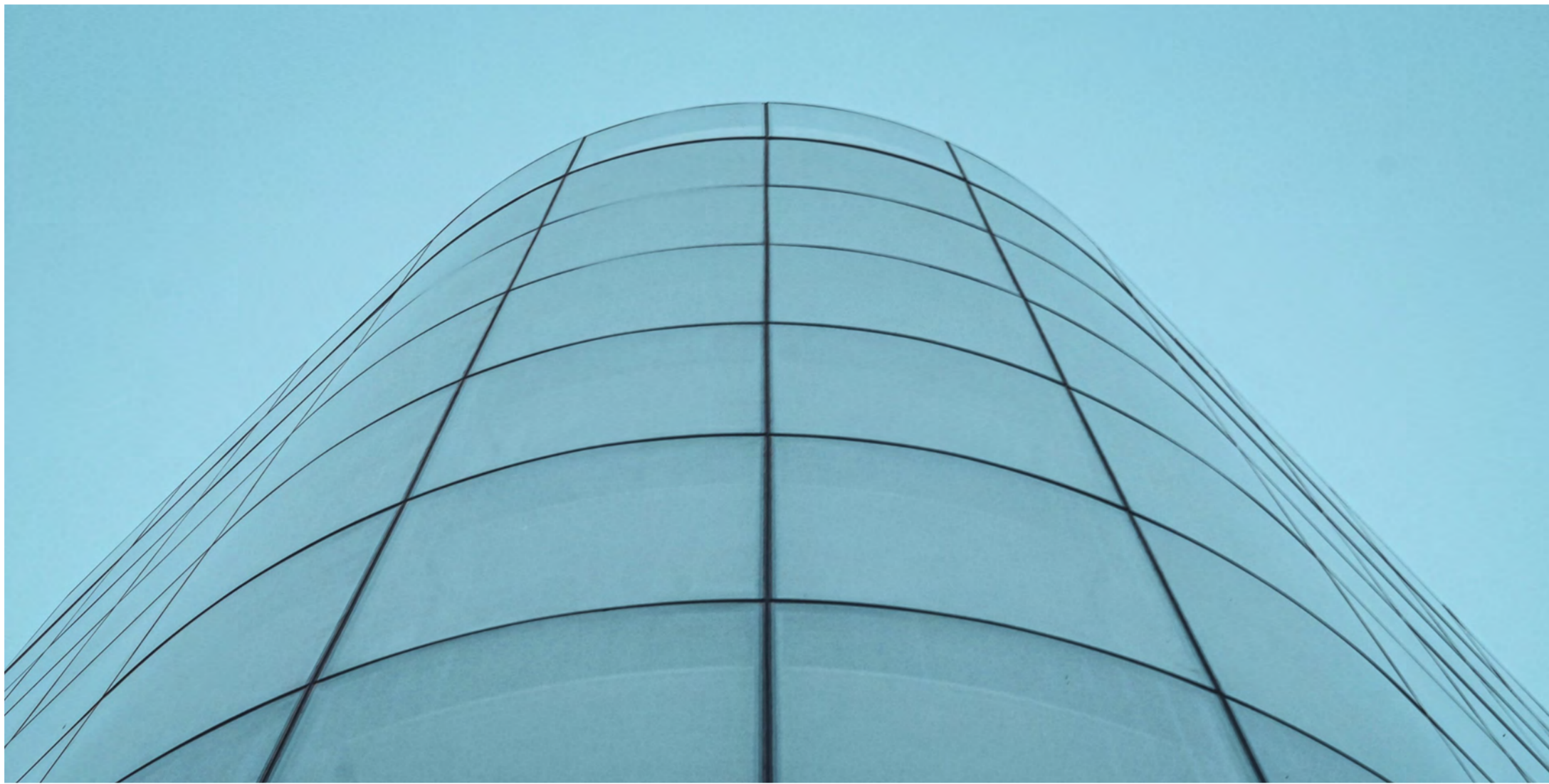
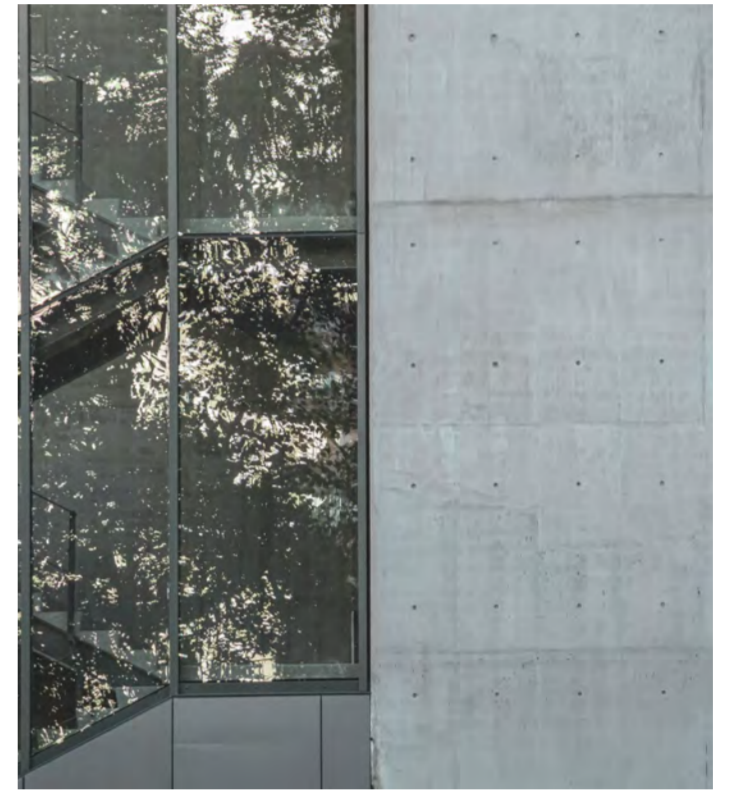
Arch. Jorge Salleras  
Construction Manager



**When Eduardo Eurnekian envisioned an iconic headquarters for his company, he wanted a design that was not only architecturally distinct but also created the best working environment for his team.**

## Architect Selection

We collaborated closely with Eduardo in selecting a world-renowned architectural firm, ultimately choosing Rafael Viñoly. Known for projects such as Uruguay Airport, Tokyo Forum, and 432 Park Avenue, Viñoly's initial sketch was impressively simplistic but revealed a series of extremely complex challenges.



## The Glass Façade Vision

Viñoly proposed a unique façade, featuring curved super jumbo glass up to 25 ft (7.15 m) supported by a glass structure (glass mullions) and a rear hanging structure with horizontal glass panels extending up to 18 ft (5.5 meters) without mullions. This innovative use of glass required an extraordinary level of precision, compounded by the tight schedule of Corporacion America/CGC (the tenant).

## Structural Solutions

To realize this vision, we had to maintain a precision of less than 3 mm in (x, y, z) and we proposed a tri-structural solution:

- **Concrete Core:** Incorporating shear walls up to 2 feet thick.
- **Mixed Steel and Concrete:** For the front section.
- **Steel Only:** For the hanging structures.

The design features eight columns and a core with a 30-foot span. Additionally, we devised a multilayered concrete system to meet stringent firestop requirements for the glass façade.

## Engineering and Testing

We employed advanced computer simulations and collaborated with RWDI for further testing in India to validate the necessary glass thickness and structural integrity. The glass panels, among the largest orders globally, consisted of double 1/3 inch layers separated by a 3/4 inch air chamber, with glass mullions comprising 3 to 5 layers of 3/4 inch glass.

## Procurement

Due to the specialized nature of the glass, procurement began concurrently with excavation, as production occurs only twice a year. We immediately found only one global vendor who can deliver the quality and precision we needed, SEDAK GmbH & Co, a German company who specialized in very unique glass size and characteristics of glass. The process took more than 4 months of adjustments and decisions until we all were ready to proceed.

## Installation

With the collaboration of Obras Metálicas, we designed a custom system from Spain (Tecnocat) to handle the installation of the 2,500-pound (1,250 kg) panels. The installation process involved 244 pieces for the front façade, with a daily installation rate of five pieces and only two minor edge damages, for which replacements were available.



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It has been a remarkable journey, and we are thrilled with the positive outcomes we have achieved together.

A **collaborative spirit** were evident in every interaction, fostering a **positive and constructive working relationship** even though it was happening during complicated times when covid pandemic was hitting on us.

The high standards set by both companies in terms of **quality, safety, and adherence to timelines** were consistently met and exceeded. Both teams **attention to detail and proactive problem-solving approach** ensured that any challenges encountered during the project were swiftly addressed and I believe that this collaboration has not only been a success in terms of the end result but has also laid a solid foundation for future opportunities.

**I am confident that the positive impact of our partnership will be felt for years to come.**

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Beatriz Fernández  
International Business Development Manager  
sedak