

# Case Study



## Old Chicago Post Office

CHICAGO

**Owner**

601W Companies, New York

**Architect:**

Gensler

**Vitro Glass Products:**

Solarban® 60 Glass

**Vitro Certified™ Fabricators:**

Oldcastle BuildingEnvelope®;  
Schofield, Wisconsin  
Oldcastle BuildingEnvelope®;  
Indianapolis, Indiana

**Window Installation Contractor:**

The Auburn Corporation;  
Orland Park, Illinois

**Curtainwall Fabricator/Installer:**

SG Metals & Glass; Bridgeview, Illinois

**Window Manufacturer:**

Wausau Window and Wall Systems;  
Wausau, Wisconsin

## PROJECT BACKGROUND

Long before Amazon existed, Chicago-based catalog houses such as Sears, Roebuck and Company and Montgomery Ward shipped their wares to the masses through the world's largest post office on the city's West Loop. Now, many decades since it first opened, the once-shuttered facility is gaining new life as a vast office and retail complex center, beautified, modernized and made more energy efficient in part by 2,400 historically accurate windows fabricated with Solarban® 60 solar control, low-e glass by Vitro Architectural Glass.

As a major historic landmark built in 1921, refurbishing the iconic 9-story limestone structure that stretches a full city block and serves as a tunnel over Interstate 290, required city, state and federal approval from Chicago Landmarks, the Illinois Historic Preservation Landmarks and the National Park Service.



Photo Courtesy of Tom Kessler

Solarban® 60 glass by Vitro Architectural Glass helped meet historic landmark requirements for visible light transmittance and reflectivity at the renovated Chicago Post Office.

To help navigate the complex approval process, the developer 601W Companies turned directly to The Auburn Corporation, a long-established Chicago-based window installation contractor with lots of historic retrofit experience. Gensler served as the architect on the project, and Wiss, Janney, Elstner and Associates was brought in for the façade work, which included the window specifications.

Oldcastle BuildingEnvelope, a member of the *Vitro Certified™* Network, was another critical partner in the project. It provided more than 120,000 square feet of *Solarban® 60* glass, which was fabricated into finished windows by Wausau Window and Wall Systems, and another 8,500 square feet of the glass for a new interior lightwell.

### Fitting It All Together

Directly involved in the historical approval process, Rick Erickson, president and owner of The Auburn Corporation, was able to point to many local jobs the company had done with *Solarban® 60* glass, which it often specifies to meet select visible light transmittance and reflectivity criterion for landmark buildings. Jim Price, business development manager, The Auburn Corporation, believes the choice of *Solarban® 60* glass for this rehabilitation project helped streamline and accelerate the approval process.

As an historical landmark, the Post Office building was exempt from meeting local energy code requirements. However, the developer was intrigued by the energy efficiencies offered by insulating glass units (IGUs) fabricated with *Solarban® 60* glass, which transmits 70% of the available visible light while blocking 62% of the sun's heat energy.

"Rick Erickson worked closely with Wausau to create multiple dies for the windows and cut new dies to be able to replicate the existing sightlines of those windows," Price explained. "It was a very time-consuming, laborious task, and we used 3-D printers to make the extrusions and small cuts of the windows for the initial approval."

To replicate the horizontal and vertical patterns in the historical muntin windows, each piece of componentry—including the sill, head and jambs—required its own die.

Another challenge was matching the variation in window sizes. Unlike today's construction methods which produce uniform windows, early 20th-century commercial windows in large buildings varied slightly in size. For the Post Office project, the building team had to recreate more than two dozen different sizes of window units.

### The Hidden Curtainwall

In addition to the windows surrounding the massive Post Office structure, *Solarban® 60* glass found a place in a new curtainwall behind the elevator bank running up the full length of the building. While the curtainwall isn't visible, it creates a large lightwell, bringing ample natural light into the spacious lobby.

Designed with insulated metal panels and louvers, the curtainwall was installed on two elevations and measures 8,500 square feet, replacing the unsightly punched windows and solid metal panels that had been in its place.

As an unoccupied building, the old Post Office afforded the contractors and subcontractors the luxury of room to access the property, accept deliveries and stage materials. However, curtainwall installation was made difficult by the need to use a single freight elevator that provided access only to three stories of the curtainwall's 10-story height.

"It was logistically challenging to have to pull up the 400-pound panels from three floors, load them on to different floors and then stack them and stand them in place," reported Jeff Hall, vice president, SG Metal & Glass.

Reflecting on the project, Price relates that The Auburn Corporation has been specifying and installing Vitro glass his entire career. "I started in the glass business at 18 years old, and 50 years later, I'm still buying the product and using it. Vitro has excellent representation in Chicago, and they're very, very helpful to my company and me. Without them, it would be very difficult to do all the things we do."

To learn more about *Solarban® 60* glass, visit [vitroglazings.com](http://vitroglazings.com) or call 1-855-VTRO-GLS (887-6457).