

Congress Square

BOSTON, MASSACHUSETTS

Owner:

Related Beal, Boston

Architect:

Arrowstreet, Inc., Boston

Vitro Architectural Glass Products:

Solarban® 60 Starphire® Glass

Vitro Certified™ Fabricator:

Oldcastle BuildingEnvelope®, Wright City, Missouri

Glazing Contractor:

Cheviot Corp., Needham Heights, Massachusetts

General Contractor:

Consigli Construction, Boston

Curtain Wall Contractor and Fabricator:

Kreysler and Associates; American Canyon, California, and Midwest Curtainwalls, Bedford, Ohio

PROJECT BACKGROUND

As part of a larger initiative to reinvigorate downtown Boston, Arrowstreet, a local architectural firm, was tasked with redesigning a block of 1900s-era bank buildings in the city's Congress Square district. In a creative blending of old and new, the architects designed a seven-story jewel box with a trendy soffit that sits atop two adjoining Class B office buildings.

To successfully execute its bold design, Arrowstreet needed a lightweight material to contrast the original granite and limestone building facades with the new curtainwall addition. Their solution was Solarban® 60 Starphire® glass from Vitro Architectural Glass.

"We felt strongly the materiality and massing of the new addition needed to be distinct from the existing buildings to preserve their original character," explained Jason King, AIA, LEED® AP BD+C, senior associate, Arrowstreet. "The custom unitized curtainwall system incorporates ultra-transparent Solarban® 60 Starphire® glass, providing



Photography by Halkin Mason Photography

Solarban® 60 Starphire® glass by Vitro Architectural Glass provides the ultra-clear, lightweight material needed to successfully blend a modern seven-story glass box addition atop a block of existing century-old masonry buildings at Boston's Congress Square.

Congress Square, Boston, Massachusetts

both striking views into and out of the building and allowing the addition to feel lighter above the weightier masonry building below.”

To integrate the 24-foot cantilevered glass box, the design bends inward along Congress Street, adjacent to Post Office Square, at the exact point where the 1904 and 1906 building façades connect below. The faceted, angular design then extends downward through the existing building on the north façade, forming the building’s second entry point and connecting it to the popular boutiques and cafés located along Quaker Lane.

“While coordinating these faceted curtainwall panels with the existing structure was challenging, the result is a wonderful moment where the juxtaposition of old and new is no longer experienced from afar,” King added.

Another key aspect of Arrowstreet’s melding of modern curtainwall with century-old masonry is a custom-designed fiberglass reinforced plastic (FRP) soffit with a gold finish. The soffit’s unique depth and texture enables the glass to float gracefully above and complement the existing cornice line.

The renovation and addition also feature exterior roof decks on levels five, 10 and 17, providing beautiful garden-like spaces where tenants can work, meet and take breaks while enjoying fresh air and majestic views of Beantown.

While indoors, employees also are afforded striking city views through the low-e-coated *Starphire Ultra-Clear*® glass, which is 87% less

green than ordinary clear glass. When coated with *Solarban*® 60 solar control, low-e coating, Vetro Glass’s premier low-iron glass delivers visible light transmittance of 74%, while blocking 59% of solar heat gain.

To arrive at the ideal glazing selection, Arrowstreet tapped into the *Vetro Concierge Program*™ for assistance with glass selection and specification and technical and logistical support.

“There were numerous challenges associated with erecting a new seven-story structure above an existing 1900s era building in a dense, urban environment like downtown Boston,” explained King.

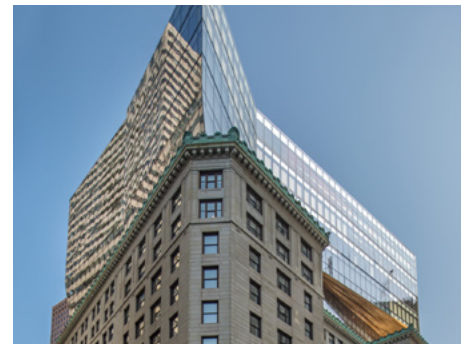
Working from a tower crane to build the steel superstructure and pour the concrete floors, the glazing installers hung each unitized panel from the interior using a spider crane.

In addition to the glass box, *Solarban*® 60 *Starphire*® glass was installed in two-story curtainwall sections adjacent to the buildings’ historical main entrance on Water Street. Because the original street-level windows were dark and faced with decorative metal grillwork, the beautifully crafted details of the interior lobby were hidden from public view. “By introducing *Starphire*® glass at the ground level, we were able to showcase those historical elements and re-brand the building from dark and uninviting to bright and welcoming,” King said.

Experts from the *Vetro Concierge Program*™ coordinated with fabricators at Oldcastle BuildingEnvelope to optimize glass sizes and shapes for the jewel box to achieve its angular, faceted design.

The building team also renovated and consolidated the elevator core, which consisted of three sets of elevators, restrooms and stairwells from three separate buildings. “Adding to this inefficiency was an existing lightwell in the center of the building, which brought little light to the interior spaces due to the much taller surrounding buildings,” King explained.

With the incorporation of a new central core within the footprint of the lightwell, the building owner was able to reclaim the old elevators, restrooms and stairwells as usable square feet. In replacing the lightwell with *Solarban*® 60 *Starphire*® glass, the lobby was transformed into a bright, daylit, energy efficient space.



Arrowstreet’s angled, cantilevered jewelry box and custom-designed fiberglass reinforced plastic (FRP) soffit bends inward at the exact point where the 1904 and 1906 building façades connect below.

About the *Vetro Concierge Program*™

The *Vetro Concierge Program*™ is designed to help ensure supply-chain success for large or complex construction projects fabricated with products from Vetro Architectural Glass (formerly PPG glass). It’s available at no cost to members of the *Vetro Certified*™ Network and their glazing contractor customers in the U.S. and Canada.

While most projects, even very large ones, can be handled effectively by *Vetro Certified*™ Network’s normal supply chain

approach and with standard Vetro inventory, some unique projects with atypical glass configurations or non-standard glass components require extra production and logistics management. The *Vetro Concierge Program*™ provides customized coordination through a dedicated *Vetro Concierge Program*™ manager, who will align Vetro inventory and production schedules, even providing priority access and reserving inventory and glass production scheduling.

To learn more about the *Vetro Concierge Program*™, visit [Concierge.VetroGlazings.com](https://www.concierge.vetroglazings.com), call 412-820-8004 or email concierge@vetro.com.

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