

Case Study



PROJECT CREDITS

Owner

The Bank of China

Architect/Designers

Pei Cobb Freed & Partners
New York

Vitro Architectural Glass Products

Solarban® 60 on *Starphire Ultra-Clear*™
Glass

Vitro Certified™ Fabricators

J.E. Berkowitz
Pedricktown, New Jersey

Curtain Wall Contractor

Benson Industries
Portland, Oregon

7 Bryant Park

NEW YORK, NY

PROJECT BACKGROUND

Set in New York's bustling Garment District and overlooking one of the city's most cherished green spaces, 7 Bryant Park melds curved glass, stainless steel spandrels and highly transparent 10-by-10-foot openings glazed with *Solarban* 60 on *Starphire Ultra-Clear* glass to create a statement befitting the neighborhood's fashion-centered legacy.

Looking from the outside, the most striking elements of the 29-story tower are two conical incisions carved out of its northeast corner, which architects Yvonne Szeto and Henry Cobb designed to interface with neighboring Bryant Park. Extending from two sharp points situated at the structure's 10th floor, the cones widen symmetrically towards the top and bottom of the façade to create two echoing hourglass shapes.



Photo Courtesy of Tom Kessler

The conical incisions carved out of 7 Bryant Park are complemented by stainless steel spandrels and highly transparent Vitro Architectural Glass.

7 Bryant Park

That distinct design gesture is complemented by extra-large panels of *Solarban 60* on *Starphire*[®] low-iron glass, which the architects specified to provide unobstructed park views while mitigating the heating and cooling loads associated with a glass-walled building. Horizontal spandrels finished with stainless steel add another element of texture, reflecting sunlight during the day and colored lights in the evening.

Jeff Heymann, vice president of business development for curtain wall contractor Benson Industries, Inc., said *Solarban 60* was specified on *Starphire Ultra-Clear* glass for 7 Bryant Park after it won a “beauty contest” between competing low-iron, low-e glass products displayed on a 40-foot-tall-by-15-foot-wide replica of the curtain wall.

“The fact that *Solarban 60* on *Starphire* glass let in so much light made it easier to harmonize with the conical elements of the facade, which were performance-tested separately, then assembled and installed in sequence with the rest of the curtain wall,” Heymann explained.

Solarban 60 on *Starphire* glass also contributes to lower energy use in 7 Bryant Park, helping it to achieve LEED[®] certification at the Gold level.

Despite its high levels of transparency, *Solarban 60* on *Starphire* glass delivers a solar heat gain coefficient (SHGC) of 0.41 via the 1¼-inch insulating glass units installed on the building. That means it blocks nearly 60 percent of the ambient solar energy from entering the building, while transmitting 74 percent of the available sunlight. This exceptional combination of solar control and daylighting lessens demand for cooling and lighting in 7 Bryant Park, strategically reducing the workload for three 65-kilowatt micro-turbines stored in the basement, which produce supplemental energy during peak periods of electricity use.

Benson Industries and glass fabricator J.E. Berkowitz (JEB) also helped fulfill the building developer’s quest for LEED certification. JEB packaged the glass units, each weighing more than 700 pounds, on returnable steel racks, which Benson assembled into aluminum frames at a nearby warehouse. Benson then used trucks and a fleet of custom-built dollies to transport the finished units to their final installation point on the job site.

To learn more about *Solarban 60* glass, *Starphire Ultra-Clear* glass and other high-performance glass products by Vitro Glass, visit www.vitroglazings.com or call 1-855-VTRO-GLS (887-6457).



Photo Courtesy of Tom Kessler

The distinct design of 7 Bryant Park features extra-large panels of *Solarban*[®] 60 on *Starphire*[®] low-iron glass from Vitro Architectural Glass.

By using returnable steel racks and dollies instead of traditional wooden-crate packaging for each curtain wall panel, general contractor Turner Construction says that the two companies created a zero-waste project from one that would typically have generated one 30-yard container of waste per building floor.