# Case Study





## **Prudential Center**

NEWARK, NJ

#### Owner

City of Newark

## Architect/Designers

Morris Adjmi Architects New York, NY

HOK Sport + Venue + Event Kansas City, KS

#### **Vitro Products**

Clear/Solarban® 60 glass

### **Glazing Fabricators**

JE Berkowitz Pedricktown, NJ

#### **Glazing Contractor**

Josloff Glass Newark, NJ

## PROJECT BACKGROUND

Newark's Prudential Center is a 700,000-square-foot sports and entertainment facility with a seating capacity of more than 17,000. Although its primary tenant is the New Jersey Devils of the National Hockey League (NHL), the state-of-the-art arena also is home to Seton Hall University's men's basketball team and the New Jersey Ironmen of the Major Indoor Soccer League (MISL).

Since opening in 2007, "The Rock," as it is now known, has served as the most visible symbol of Newark's newly revitalized downtown, a role that was fortified by the design of Morris Adjmi, a renowned New York architect who deliberately chose specific building elements to highlight the bond between the city and its gleaming showplace.



The Prudential Center in Newark features vast expanses of clear *Solarban*® 60 glass by Vitro Architectural Glass (formerly PPG glass), which connects the building to the local streetscape and helps control its lighting and cooling costs.



#### Prudential Center | Newark, NJ

One example of the visual and psychological connection is the Prudential Center's vast expanse of traditional red brick, which Adjmi selected in part to honor Newark's past as a railroad and masonry center.

Another is the placement of a massive LED video board just above the building's main entryway. Visible from surrounding downtown streets, the oversized screen bathes bystanders in its glow and makes them feel as if they are in the building even when they are not.

Transparent glass is another material that attaches Prudential Center to the local streetscape. "From the beginning, one of our key design considerations was to create a sense of transparency," Adjmi said. "We used a tremendous amount of glass so people outside the arena could look in and those indoors could look out."

It is no surprise that he and his designers specified *Solarban*® 60 glass for Prudential Center, not just for its clarity, but also because of its exceptional energy performance.

"When it comes to choosing glass for building projects, *Solarban*® [glass] is our default option," said Adjmi. "We like it because it's incredibly transparent but, at the same time, it's also very high performing."

Solarban® 60 glass is one of the industry's most trusted solar control, low-e products. When united with clear glass in a 1-inch insulating glass unit, it has visible light transmittance (VLT) of 70 percent and a solar heat gain coefficient (SHGC) of 0.38.



Solarban® 60 glass by Vitro Architectural Glass transmits light into Prudential Center through two 110-foot-tall glass and steel cylinders.

These performance characteristics, which simultaneously keep buildings cooler and reduce their reliance on artificial lighting, translate into real short- and long-term savings for building owners.

In one recent study, sophisticated energy modeling showed that office buildings and middle schools glazed with *Solarban®* 60 glass consume less cooling-related energy and need significantly less HVAC equipment than those finished with dual-pane tinted glass, enabling owners to save millions of dollars during a building's lifetime.

In addition to framing the giant LED screen, Solarban® 60 glass is featured on the two soaring 110-foot-tall glass and steel cylinders that frame the arena's entryway. Solarban® 60 glass also was used extensively on all four sides of the building.

Morris Adjmi, founder of Morris Adjmi Architects, established his own design firm in 1993 after working for more than a decade with famed Italian architect Aldo Rossi. The pair collaborated on many projects, including Disney's Celebration Office Complex in Orlando, Fla., and ABC Television headquarters in Burbank, Calif. A leading advocate of green design, he also has edited two books on Aldo Rossi and is a member of the American Institute of Architects.

