

## 804 CARNEGIE CENTER SETS THE SCENE FOR NEIGHBORHOOD'S NEW GREEN BUILDING INITIATIVES







## 804 CARNEGIE CENTER SETS THE SCENE FOR NEIGHBORHOOD'S NEW GREEN BUILDING INITIATIVES

Designers for the new three-story mixed-use facility, 804 Carnegie Center, in Princeton, New Jersey, had one goal: to create a new architectural direction for future developments in the area. The design intention was to pair cutting-edge technology with high-performance materials to create an ultra-green facility.

One of the building's most noticeable features is a smooth, monolithic glass curtain wall facing due south. Jacobs Engineering Group used the SteelBuilt Curtainwall Infinity™ SSG framing system from Technical Glass Products to create the highly visible, seamless glass box on the trading floor wall and meet the project's strict performance criteria. The design team also used the curtain wall system to surround the building's main entrance.

The SteelBuilt Curtainwall Infinity SSG framing system is typically three times stronger than aluminum assemblies of the same profile dimension, allowing for greater free spans of glazing. The system also supports high-performance glazing, which helps insulate and limit solar heat gain. Together, these components help maximize daylight transfer without increasing energy consumption.

This steel-based curtain wall system is also particularly useful for meeting the building's green guidelines without compromising on appearance. Installed by Josloff Industries, LCC, the versatile system uses toggles to hold the extruded aluminum cassettes, which are structurally silicone sealed to the glass, to the steel framing. The structural silicone glazing transfers wind loads through the glass and cassettes into the supporting steel curtain wall. It also promotes better U-values in the assembly by eliminating thermal breaks and unnecessary exterior exposed metal.



With no exterior caps and minimal back mullions, the resulting system allows for uninterrupted exterior sightlines and the desired smooth glass-to-glass, butt-glazed appearance. The steel framing also supports exterior-mounted sunshades. This lessens direct solar transmittance through the glass and helps cut down on glare when looking out through the wall to the exterior.

In addition to its high-performance curtain wall and glass assemblies, the 804 Carnegie Center features 10,000 square feet of solar panels, rainwater and daylight harvesting systems, a green roof, two wind turbines and more than 30 electric vehicle charging stations. For its collective approach, the building was awarded LEED Platinum Certification, the most stringent green building certification worldwide, according to lead designers on the project from Jacobs Engineering Group.

For more information on TGP's SteelBuilt Curtainwall Infinity family of products, along with TGP's other specialty architectural glass and framing products, visit <a href="https://www.tgpamerica.com">www.tgpamerica.com</a>.