

One World Trade Center's Exterior Shimmers with New Podium Wall Glass Panels

One World Trade Center (1 WTC), located in the northwest corner of the WTC redevelopment site, rises from a 200-foot-by-200-foot podium base that has the same dimensions as each of the original Twin Towers. Starting this month, the walls of the 186-foot-tall 1 WTC podium are being clad in vertical glass panels to create a dynamic exterior that will animate the ground level experience of the building for pedestrians.

More than 4,000 frosted glass fins, each measuring 13 feet 4 inches by two feet, are being specially created by the contractor Permasteelisa. The glass fins will attach to the exterior of the podium wall at varying angles to create a series of v-shaped wing effects along the building surface. In addition to its aesthetic appeal, the v-shaped glass cladding pattern will provide needed ventilation for the mechanical systems within the podium—including a 1.2-megawatt, next-generation fuel-cell plant housed above the lobby.

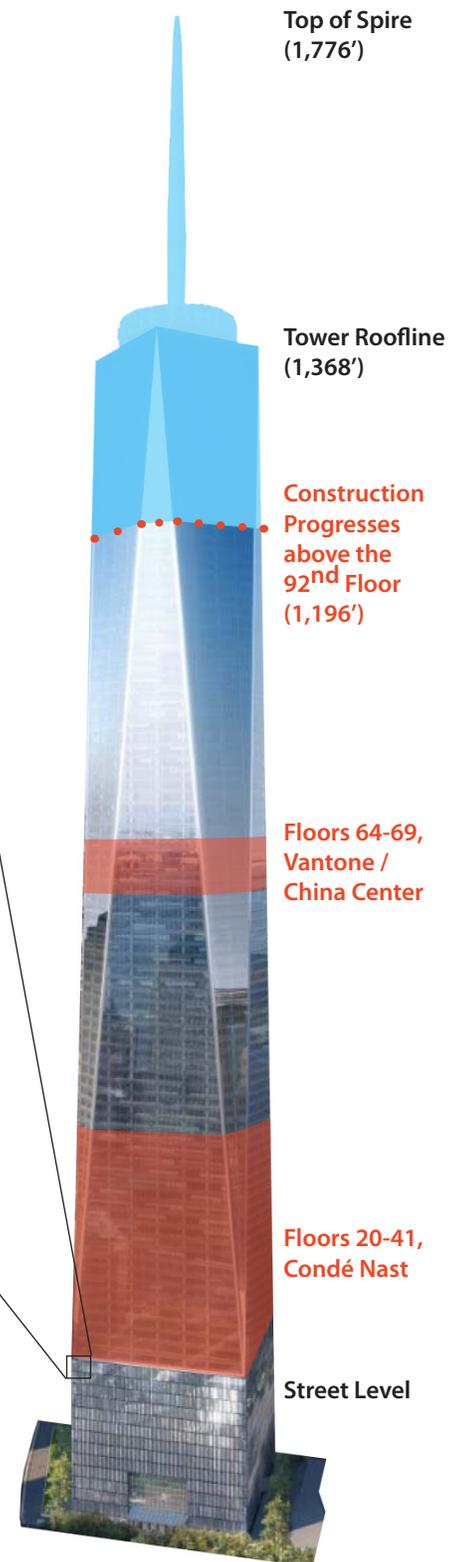
One WTC uses a new form of high-performance, low-emittance (low-E) glass coating technology on its glass panels to maximize sunlight and minimize heat gain within the building. This glass coating is also reflective, creating a shimmering effect on the building's surface. In addition, the podium wall will use concealed energy-efficient LEDs to create a soft exterior glow.

The podium cladding installation is a critical element of 1 WTC's aesthetic. The tower is scheduled to top off at 104 floors and 1,776 feet above street level (including its spire). Upon completion of its exterior structure this year, 1 WTC will be the tallest skyscraper in the United States.

So far, workers have finished installing metal decks at the 90th floor, which is the last of the typical office floors in the building. The next segment of the tower will contain mechanical equipment that will then be capped by an observation deck. By the end of the month, superstructure steel erection will extend beyond the 92nd floor while glass and metal curtain wall installation will reach past the 70th floor.



1 WTC Podium Glass Panels



Fun Facts About One World Trade Center

- The 1 WTC design has a simple, iconic form, much like that of the Washington Monument, says architect David Childs, of Skidmore, Owings & Merrill.
- The podium's new glass panels reflect, refract, and transmit light much like the water cascading in the nearby memorial pools.
- The low-emittance (low-E) coatings on 1 WTC's glass panels are microscopically thin layers of metal or metallic oxide that block the transfer of heat from sunlight through the window. Though made of metal, these layers are virtually invisible.

CONSTRUCTION PROGRESS AROUND THE WTC SITE

Vehicular Security Center



The Vehicular Security Center (VSC) will be a state-of-the-art underground security structure that will be the screening point for all vehicles entering below street level within the future WTC site. The VSC will also connect to an underground roadway system serving the entire WTC site, including the Transportation Hub, office towers, and Memorial Museum. Current construction activities on the west side of the VSC site include bolting and welding structural steel as well as installing steel decking. Current activities on the east side include line drilling and rock excavation.

Four World Trade Center



Upon its completion, 4 WTC will house the headquarters of the Port Authority of New York and New Jersey. Located at the southeast corner of the redevelopment site, 4 WTC faces the Memorial's South Pool. Steel erection of this Maki and Associates-designed tower will surpass the 52nd floor by the end of March. Core area walls are complete to the 45th floor. The glass curtain wall panels around the exterior of the building continue to be installed, and will reach the 35th floor by the end of the month. Ground floor preparations are being made for panel installations at the west and north elevations.

Transportation Hub

The Transportation Hub is a transit project that will improve upon pre-9/11 service when complete. The Hub will provide seamless underground connections between the Port Authority Trans Hudson (PATH) rail line, New York City Transit Subway lines, and destinations east and west of West Street/Route 9A. Current construction includes erecting steel, placing concrete to create each of the main underground levels of the Hub, and completing the installation of the Oculus' east arch truss. Foundation work in the East Bathub of the WTC site is substantially complete. Bolting and welding across the entire PATH Hall Roof and Number 1 Subway line structure have been nearly finalized.

