During the terrorist attacks on September 11, 2001, 7 World Trade Center was the last building to fall at Ground Zero. It is now the first tower to be rebuilt on the site. Construction began in May 2002 and was completed in May 2006.

“7 World Trade Center offers first-class companies a chance to relocate to the finest new building in New York, improve the quality and efficiency of their work environments, and contribute to the revitalization of downtown,” said Larry Silverstein, developer for Silverstein Properties, Inc., the project’s owner/developer. It sits on land owned by the Port Authority of New York and New Jersey.

Located just steps from New York’s financial district, the new, 1.7 million square foot tower offers unparalleled access to the city’s and region’s entire transit network; features the highest standards of excellence in design, life safety and technology; and heralds the spirit of redevelopment and renewal in lower Manhattan. Boasting 52 stories, the tower contains 42 tenant floors that have an average of 40,000 square feet of virtually column-free rentable space. Tenant floors begin at the 11th floor—125 feet above grade. The first 10 floors are dedicated to building services and a Consolidated Edison substation that supplies electrical service to lower Manhattan. [MBI Group, Inc. served as general contractor for the Consolidated Edison substation.]

“Our building had to be classic—to set the tone for
buildings to come at the site,” said Ken Lewis, project manager for Skidmore, Owings & Merrill LLP (SOM), the project’s architect. “And, of course, this site is highly symbolic and emotionally charged, and our design team was always aware of this added layer of meaning.”

The project is a pioneer in terms of environmental responsibility, energy efficiency and quality of life, and has already won an award from the Environmental Protection Agency (EPA). “Not only will 7 World Trade Center be the first LEED™ [Leadership in Energy & Environmental Design] certified high-rise office building in New York City, we believe it will set a new standard of commercial building design and construction across the country,” said David Childs, consulting design partner at SOM. The project has earned gold LEED™ certification.

Green design features include more open space, including a park; improved indoor air quality due to outside-air ventilation treated with high-efficiency filtration; energy conservation as a result of technologies such as steam-to-electricity turbine generators and variable speed fans; water conservation due to reuse of rainwater for building cooling and park irrigation; and better interior light due to state-of-the-art, ultra-clear glass technology that also conserves energy.

“The tower skin is comprised of floor-to-ceiling, crystal-clear glass,” said James Carpenter, glass artist and MacArthur Fellow who helped design the building’s surface. “It is animated with light, which evolves naturally by day with the changing exterior conditions and artificially by night with programmed LED [Light Emitting Diode] projection sequences.”

Silverstein Properties and Tishman Construction Corp., the project’s construction manager, built the original 7 World Trade Center in the 1980s. According to Mel Ruffini, senior vice president and project executive for Tishman, the project’s greatest challenge was coordinating the site’s logistics while disaster recovery work and other construction projects were taking place simultaneously. “Our key to project success was maintaining open lines of communication among all the groups involved through daily meetings,” he said.

Tishman took a unique approach to save time on the project. “We devised and implemented a system by which the tower’s steel frame was erected ahead of its concrete core,” said Ruffini. “This method allowed for the project to be topped out one month ahead of schedule and completed on time and on budget.”

–Dave Hornstein