



## Summary of Professional Experience and Qualifications for

**Narendra Shah, P.E.**  
**Principal**

Mr. Shah has thirty years of experience in the structural design of high-rise office buildings, high-rise residential buildings, healthcare facilities, sports facilities, hotel buildings, airport terminals, long-span structures and parking garages as well as in the rehabilitation of existing buildings. He has managed all phases of the structural design of numerous projects, from the development of conceptual framing schemes to the preparation of Contract Documents and providing project administration during the construction phase. He has broad depth of experience in handling a wide variety of structures utilizing cast-in-place concrete, structural steel, masonry and precast concrete. His experience includes complete analysis and design of structures, coordination with other design disciplines and review of Shop Drawings. In addition, he excels at Contract negotiation, project management and solving complex construction problems. Mr. Shah has played a pivotal role in the realization of his Clients' visions. Mr. Shah's knowledge has enabled him to develop creative, economical structural solutions that have contributed to the success of many projects.

**Education:** Master of Science in Civil Engineering, 1987, Manhattan College, NY.  
Bachelor of Science in Civil Engineering, 1981, India

**Registrations:** Registered Professional Engineer in New York, Maryland and Georgia

**Professional Activities:** American Society of Civil Engineers (ASCE), member  
Fiber Composites & Polymers Standards Committee, member  
American Concrete Institute (ACI), member  
Structural Engineers Association of New York (SEoNY), member

**Awards:** City of New York, Department of Design and Construction, Certificate of Appreciation for serving as a member of the structural engineering team for the World Trade Center rescue and recovery efforts.

### Representative Project Experience



Menara Carigali, Kuala Lumpur, Malaysia – Menara Carigali is a 60 story mixed use tower to be built in Kuala Lumpur, Malaysia with retail, parking, office and residential spaces for the Kuala Lumpur City Centre Complex. The current scheme envisions a curvilinear triangle form of the building in plan for the residential portion of the tower. At the base of the residential tower, the floor plan expands to rectangular shape at the office portion of the tower. The net area of the building is estimated to be 1,224,000 sq. ft.

**Gateway Center at Bronx Terminal Market**, Bronx, New York - A new mixed-use destination retail center in the Bronx. The site is near the Harlem River and was historically home to numerous heavy warehouse and distribution facilities. The new 2,000,000 SF complex will include 'big box' retailers, pedestrian plazas and a multi-level parking structure.

**Random House World Headquarters**, New York, New York. The structure of this 840,000 square foot, 56-story building transitions from steel framing to concrete construction at the 27<sup>th</sup> Floor. This combination of materials allowed the Owner to provide longer clear spans at the office floors and a greater number of floors at the residential levels above by using concrete flat slab construction. This building also had the first set of Liquid Column Mass Tuned Dampers ever used in a building in the USA. The damper system was built at the roof level to mitigate wind-induced vibrations in the building.



**NJ Public Health Environmental and Agricultural Laboratory**, The laboratory is located on a 16-acre parcel at the New Jersey State Police Headquarters Campus and has a gross floor area of approximately 250,000 square feet. This \$100 Million facility serves as the primary research and analysis operation for the State's Health Department. The facility is used to analyze suspicious substances for all types of events, including those thought to be used as terrorist weapons.



**Doubletree Hotel at 8 Stone Street**, New York, NY This project in downtown Manhattan is a new 43-story Hotel Building, with two below-ground levels, located at 8 Stone Street in New York City. A 4-star DoubleTree Hotel with 424 rooms and restaurants in the building. Typical floor construction is a concrete flat-plate system with core shear walls functioning as the lateral system. The structure sits on 400-ton caisson foundations.

**New York Hospital Expansion, New York, New York** - This project consisted of 850,000 SF of new construction to create modern hospital space, including a 12-story air-rights structure spanning over the heavily trafficked six-lane FDR Drive on the bank of the East River. The air-rights building was constructed on top of single-story 9' deep structural steel transfer trusses spanning 91 feet across the highway. The transfer structure is a two-level platform utilized for parking and emergency vehicle access and it acts as a base for the hospital tower above. River side (east side) columns are founded on caissons socketed into bedrock and west side columns are founded on shallow footings bearing on rock.



**Terminal One at JFK International Airport, New York, New York** - Design of a \$435-million new passenger terminal to serve five international carriers.

**St. George Intermodal Ferry Terminal, Staten Island, New York.** This project included the rehabilitation of the existing Waiting Room and Concourses, expansion of the NYC Department of Transportation's facility space and utility upgrades. A major design highlight of the project is the new arch structure, approximately 80 feet in height and 300 feet in length, that spans over the new and existing buildings and the new maintenance facility.

**Washington Dulles International Airport, Concourse B West Expansion, Sterling, Virginia.** Expansion of existing Midfield Concourse B by twelve gates to the west. Design of two new Automated People Mover (APM) Stations and two new International APM Stations to be used to transport all arriving and departing domestic passengers and all departing international passengers. Components of design also included a below-grade structural box, ventilation rooms, a temporary underground connector and a looped tug tunnel ramp.

**Hampton, Holiday Inn & Candlewood Suites**, New York, NY The complex comprises 32-story to 36-story adjoining hotel buildings with one below-grade level. Located near Manhattan's Times Square, the gross construction area of the building is 224,000 square feet. These three distinct hospitality brands offer a total of more than 500 rooms. Typical floor construction system is concrete flat-plate, with shear walls at the core providing a lateral bracing system. The structure sits on 400-ton mini-caisson foundations

**Element By Westin**, NY. This new 39-story hotel building, with two below-grade levels, is located near the famous Times Square in New York City. The gross construction area of the building is approximately 164,000 square feet. The building will house a 4-star Element by Westin hotel with more than 400 rooms. The façade system consists of window wall and modular brick. The structural system is flat-plate concrete floors with shear walls around the elevator core and the stairs.

**World Trade Center Disaster Recovery Effort, New York, New York.** Provided immediate damage assessment of buildings in the collapse area. Assisted with demolition and temporary stabilization procedures. Designed grillages and analyzed existing structures for support of construction equipment. Coordinated the survey and monitoring of existing damaged structures and performed inspections of buildings in the area surrounding the collapse site.