246 West 17th Street

New York, NY





Project Team

- Owner: Anthony Leichter
- Architects: Rawlings Architects
- Structural Engineers: Robert Silman Associates
- MEPF Engineers: Stanislav Slutsky
- General Contractor: Pav-Lak Construction

Building Information

- Occupation Type: Residential
- Size: 54,000 Square Feet
- Number of Stories: 10 Above Ground and 1 Below Ground
- Project Delivery Method: Design-Bid-Build

Structural Details

- Existing structure is steel moment frame, which has been encased in concrete for structural reinforcement and fireproofing
- Long-span beams and diagonal bracing have been added to support existing long span transfer beams beneath the new stories
- Original slab consists of concrete on composite deck
- New system consists of two-way flat plate concrete slab with both circular and rectangular concrete columns
- Additional lateral support provided by two sets of shear walls
- Foundation consists of spread footings and mat slab systems, both on a rat slab



Architectural Features

- Original structure was a three-story garage building circa 1925
- Project includes a seven-story addition and renovation of the existing building that will house a total of 34 condominium units
- Facade has two main components; the lower third features the original brick mass wall with new large punched windows, while the new stories above blend aluminum and IGU window walls, dark brick veneer, and metal paneling
- Roof consists of stilted pavers on built up polyethylene system

Mechanical & Electrical

- Individual AC systems for each condo unit
- Four boilers and four direct-fire hot water heaters in the cellar
- Electric radiant floor heat in each of the master bathrooms
- Three-phase, 4 wire, 208 Volt electrical feed

Alissa Leigh Popovich

Condo units feature wall-mounted and recessed ceiling lighting fixtures



Structural

http://www.engr.psu.edu/ae/thesis/portfolios/2009/alp5013

