360 State Stree

New Haven. Connecticut

Building Statistics

Location: 360 State Street, New Haven, CT Occupancy: Residential & Retail Size: 700,000 gsf. Height: 32 Stories Dates of Construction: Sept 2008 – Oct 2010 Project Delivery Method: Design-Bid-Build Total Development Cost: \$180 million



Project Team

architectural

Owner/Developer/Architect: Becker + Becker Associates Associate Architect SLCE Architects Structural Engineer: DeSimone Consulting Engineers MEP Engineers: Cosentini Associates Landscape Architect: Tower | Golde LEED Consultant/Lighting Designers: Atelier Ten General Contractor: Suffolk Construction Co., Inc.

The surrounding buildings offer a historic charm to the city of New Haven that 360 State Street continues in a new,

sleek manner. Its façade is clad with architectural pre-cast concrete panels that mix with smooth glass windows.

landscaped garden graces the sixth story terrace. And to top

Ornamentation also lines the street level retail and a

it off, 360 offers great views of the surrounding rolling hills and ocean harbor to its 500 apartment units.

Structural

360 rises out of the ground from a series of mini-piles and pressure injected footings that transition into reinforced concrete beams, columns, and post-tensioned slabs. Above the sixth story, the building is framed with steel W-shapes and hollow-core planks slabs. The lateral systems are comprised of concrete shear walls and a system of staggered trusses.

Mechanical

A 400kW fuel cell is located on the first floor and it supplies the hot water for the building. Each apartment unit is also supplied with its own heat pump and air conditioning unit. Small mechanical rooms are scattered throughout the building housing equipment such as exhaust or return fans. The rooftop mechanical room however, is dedicated to 360's two cooling towers.

Electrical/Lighting

360 is powered by five switchboards that range from 1600 to 3000 amps. Four are connected to the city's utility service grid at 120/280V and the last is connected at 277/480V. A 600kW emergency diesel generator is also provided. The ambient light is created by a combination of fluorescent, halogen, and LED downlights and wallwashers. The fixtures are either recessed or surface mounted.

Sabrina Duk

Structural

Senior Thesis: www.engr.psu.edu/ae/thesis/portfolios/2010/szd125/index.html