# THREE PNC PLAZA

Pittsburgh, PA

### **ARCHITECTURE**

Three PNC Plaza is a 23-story mixed use high-rise building located in the center of Downtown Pittsburgh. The property includes 326,000 square feet of office space, 185 room Fairmont Hotel, 28 luxury condominium units, restaurant and retail space, and 334 underground parking spaces. The building features a unique granite/limestone façade at the lower levels that is met with a glass and aluminum curtain wall covering the remainder of the building.

### **MECHANICAL & ELECTRICAL SYSTEMS**

#### **Mechanical:**

- -Gas furnaces with sealed combustion and DX cooling in the Condos
- -Vertical chilled water fan coil units with electric heat in the Hotel
- -21 VAV AHU located throughout Floors 1-13
- -3 Centrifugal Chillers, 3 induced draft cooling towers, 1 plate and frame heat exchanger, 4 variable flow primary chilled water pumps, and 4 condenser water pumps located in the Central Plant



## **BUILDING STATISTICS**

Size: 780,000 SF

Number of Floors: 23 Above/ 3 Below

Project Cost: 170 Million

Construction Dates: Aug 2006 - Oct 2009

Delivery Method: CM at Risk
Occupancy: Mixed-Use

#### **Electrical:**

-Primary Electrical Service: (6) 1000 kVA Transformer Vaults, each

fed by (2) 4" 40-PVC conduits

-Office Electrical Service: (9) 4" conduits, encased to a 2000A,

480Y/277 volt, Main Circuit Breaker

-Hotel Electrical Service: (9) 4" conduits, encased to a 3000A,

480Y/277 volt, Main Circuit Breaker

-Condo Electrical Service: (9) 4" conduits, encased to a 1000A,

480Y/277 volt, Main Circuit Breaker

# **PROJECT TEAM**

Owner: The PNC Financial

Services Group, Inc.

Design Architect: Gensler
Local Architect of Record: Astorino

LEED Consultant: Paladino & Company

**General Contractor:** P.J. Dick

Engineer: Chester Engineers

**CJL Engineering** 

# STRUCTURAL SYSTEM

Three PNC Plaza is a 23 story high rise building with 3 levels of underground parking. The building uses a hybrid steel frame with concrete core walls. The concrete cores extend through the building up to the 14th floor, with a size change at the 8th floor. The typical bay for the steel structure is 30' by 42.5'. These bays are typically filled with W21X44 beams and W24X62 girders at 10' on center. The parking garage is a one way post tensioned concrete deck utilizing a 9" slab on 42.5' concrete beams. The typical beam for the garage is 36" wide and 24" deep.

