



Sonja G. Hinish

Structural Option

1100 Broadway

Oakland, CA

Building Statistics

Building Occupancy: Office/Retail
Size: 320,000 sf
Stories Above Grade: 20
Dates of Construction: Start-June 2010,
Finish-December 2011
Cost Information: Confidential
Project Delivery Method: Design CM-at-risk-bid-build, with CM providing preconstruction services

Primary Project Team

Owner: SKS Investments
Architect: Kaplan McLaughlin Diaz Architect
Structural Engineer: Simpson Gumpertz & Heger, Inc.
MEP Engineer: Glumac, Inc.
Civil Engineer: Sandis
Lighting Designer: Horten Lees Brogden
General Contractor: Swinerton Builders
Historical Architect: Wiss, Janney, Elstner Associates

Architectural

- 310,000 S.F. of office space and 10,000 S.F. of ground floor retail space
- Combines a new high-rise tower with the renovated Key System Building façade, a 37,000 square foot historic office building damaged in the 1989 Loma Prieta earthquake
- Building site is located directly above the 12th Street/City Center BART public transportation station
- Building envelope is comprised of high performance glass from floor to roof with massive curtain walls on two of the four elevations
- Flat roof system consisting of self-adhered membrane waterproofing and rigid insulation

Structural

Gravity Framing System:

- Typical office floors are light weight concrete fill on composite steel deck supported by structural steel framing

Lateral System:

- Wind and earthquake forces are resisted by a dual system composed of Steel Special Concentric Braced Frames located around and across the building core and Special Moment Resisting Frames at the building perimeter. Braces are wide flange members with welded connections

Foundations:

- Main tower is supported by 110 ton, 14"-square, driven prestressed, precast concrete piles beneath a reinforced concrete mat foundation

Sustainability

- Building aims to achieve a LEED Gold rating
- Transit Oriented Development (TOD)
- High performance glass façade
- Photovoltaic solar panels on roof
- Green roof on the Key System Building

MEP

- 60,000 cfm Air handling units serving an Underfloor Air Distribution System
- 480/277V Primary feed, 208/120V Secondary feed
- Rainwater collection, filtration and reuse system
- Dimmable ballasts

