

Flood Building
Sandstone Facade Restoration
San Francisco, California



CLIENT

870 Market Street Associates

STRUCTURE

The Flood Building is a 12-story, steel frame structure with a highly ornamental stone facade built in 1904. The building, a historical landmark, is clad in colusa sandstone, a popular local building material used on many San Francisco buildings of this vintage.

CHALLENGE

The Flood Building withstood the great 1906 earthquake and the 1989 Loma Prieta earthquake with little structural damage; however, eighty-eight years of weathering had severely deteriorated the sandstone facade. In addition, the original Colusa sandstone arches and curtain wall was removed from the lower two floors in 1952 and replaced with a "modern" cladding. 870 Market Street Associates retained WJE to investigate the condition of the building's facade and develop repair alternatives.

SCOPE OF SERVICE

- Close-up condition inspections of each block recorded in the field on scaled elevation drawings prepared with rectified photography
- Material testing including in situ cleaning and paint removal tests and petrographic evaluation of stone
- Evaluation report including preparation of a detailed technical report and a presentation recommending repair alternatives before City Landmarks Board
- Construction documents including preparation of technical specifications and detailed drawings for complete architectural rehabilitation
- Construction administration including performing site inspections to allocate repairs and monitor work

SOLUTION

- Restored sandstone elements including patching deteriorated stone; replacing severely deteriorated elements; and pointing mortar joints
- Replaced 1950's era cladding with FRP to match original stone
- Added copper flashings at the cornice and water tables to protect the stone below
- Project received a California Presentation Foundation Award