



Beneficial Use Case Study

ACAA Transbay Block 9 Residential Tower

Coal Combustion Product Type

Fly Ash

Project Location

San Francisco, California

Project Participants

SOM, Fougeron Architecture, Balfour Beatty, Webcor Concrete Group

Project Completion Date

Concrete placement completed June 2017; residential tower expected to be finished in summer 2019

Project Summary

Over 10 years ago, SOM, working with the San Francisco Redevelopment Agency, developed a master plan for the area now known as Transbay and Rincon Hill. The design of Block 9 is consistent with this vision, strengthening Folsom Street as the neighborhood's new main commercial and public thoroughfare. The project is comprised of a tower flanked by two lower volumes that will house 456 market-rate units, 114 affordable units, shared open spaces and amenities, and retail along Folsom Street. The basement will feature six below-grade parking and mechanical levels with a total of 288 parking stalls. Although it will be constructed as one building, Block 9 will have the appearance of two low-rise buildings bracketing a high-rise tower.

Project Description

Balfour Beatty's U.S. California Division successfully completed a placement comprising 8218 cubic yards of concrete at the 42-story Transbay Block 9 residential tower project site at 500 Folsom Street in San Francisco. The amount of concrete poured is equivalent to 32 miles of a four-foot-wide sidewalk. The 24-hour, non-stop placement marks the largest on record for the company's California vertical construction business unit.

To meet the project's commitment to sustainability, the team used concrete comprising 40% fly ash, a cement replacement,

and recycled water in its production process. Fly ash is an environmentally friendly solution that meets or exceeds concrete performance specifications and is recognized by the U.S. Green Building Council's LEED rating system as a post-industrial recycled material.

Forty-five trucks, driven by 90 drivers on alternating schedules, delivered 888 truckloads of concrete to five pumps strategically located on the project site. The placement covered a 30,000-square-foot surface area to form the mat foundation situated 75 feet—or six floors—below the ground surface. Concrete thickness of the mat foundation ranged from 10 feet beneath the tower to five feet outside the tower. The mat is also composed of 2.5 million pounds of reinforcing rebar.



SOURCE: Balfour Beatty



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