The owner’s ultimate goal was to create an iconic addition to the San Francisco skyline, informed by the surrounding architecture and its creative design, which resulted from the vision of architect Stanley Saitowitz. A balanced juxtaposition of the classic and the eclectic, conceived with an imaginative living space that is artfully minded, elegant and 100% service-forward. Jasper draws its inspiration from the film noir aesthetic, a genre of American mid-century films that used expressionistic lighting and shadows, high contrast and stark camera angles to emphasize the allure of the mysterious. The building incorporates the best of modern 20th century design (glass and steel façade), while still offering playful and inviting interiors.

STRUCTURAL FRAMING SYSTEM
Typically for a residential project, concrete is selected for its noise reduction and fire proofing attributes. A post-tensioned concrete slab was used to minimize the floor-to-floor height so that more stories could be placed with the building height envelope. Due to the small core dimension of 31’x32’, and core height-to-width ratio of 12.9 to 1 (400’ to 31’), stiffness of concrete core is required to meet building drift criteria.

UNIQUE STRUCTURAL AND/OR ARCHITECTURAL DESIGN FEATURES
• Car elevator is installed at ground level (no ramps) for car access to four-story basement levels.
• The concrete shear wall core is eccentrically located from the floor plate and close to property line.
• Concrete moment frame columns are embedded into shear wall core: In one principle direction, the building only has one shear wall pier with built-up steel link beam and moment frame as backup system. Non-linear analysis was performed to insure the performance of building and monitor the interaction between concrete moment frame-column and shear wall core.
• Tower crane location was inside the building footprint because the building footprint occupied the entire site. The portion of the building occupied by the tower crane had to be installed after the tower crane was dismantled.
• Site was only accessible from one side (located between two on-ramps for the I-80). Two sides were within 1 foot of adjacent properties, and the final side was a one-way alley (no construction access allowed).
• Due to architectural constraint, a 37-story 30”x48” concrete column is transformed in to a 24”x24” composite column (built-up steel flange) at ground level.
• Wind tunnel test was performed for human comfort and building façade design.

REASONS FOR CHOOSING REINFORCED CONCRETE
• SUSTAINABILITY OBJECTIVES. High volume fly ash concrete (HVFAC) with 9000psi compressive strength was used for the shear wall and moment frame construction.
• Utilized a high/early 3000psi / 24-hour concrete mix to accelerate the schedule.