535 MISSION STREET

Relentless focus on operational efficiency leads to big savings

535 Mission Street San Francisco, CA

In April 2015, the 27-story 535 Mission Street tower was among the first projects in San Francisco to earn LEED Platinum[®] certification under the LEED Core and Shell rating system. Sustainability features include advanced mechanical systems, a high performance thermal envelope, fan wall air handlers, high efficiency low emissions heating boiler, high efficiency chillers, a state of the art energy management system, regenerative drive elevators, water efficient fixtures and a rainwater harvesting system. The façade glazing system integrates with indoor controls for exceptional energy and light transmission performance. Taken together, these features promote occupant health, comfort and productivity while simultaneously mitigating environmental impact.

A Good Neighbor

535 Mission Street is a green building that contributes to the dynamic South of Market urban environment. The 27-story, 336,000 square foot project provides 3,700 square feet of ground-floor retail, a covered outdoor plaza with flexible seating and generous landscaping - including the addition of new trees and planters. The project included improvements to the public alley which runs perpendicular to Mission Street and connects the main thoroughfare with the Transbay Terminal.

"The poised newcomer at 535 Mission St. is an urbane addition to the vertical scene, a good neighbor on the ground — and a reminder that, architecturally, a little restraint can go a long way."

> John King -Architecture Critic San Francisco Chronicle





The Realization of a Green Building

BXP has been focused on optimizing building operations and realizing the true potential of the design strategy.

- Upon turnover from construction, our engineering staff immediately began the process of learning the building systems. Many small adjustments to building operations were made to make the system perform more effectively and efficiently. After the commissioning process, temperature reset schedules for chiller and fan operation and economizer settings were all tuned to achieve improved overall performance. The engineering staff were careful to drive efficiency without compromising tenant comfort.
- During the initial months of operation, a flaw in the cooling tower piping was identified that prevented the system from operating both chillers at the same time. Engineering observed and escalated the deficiency issue over a period of months until the installing contractor came back and replaced a section of piping.
- BXP continues to make operational adjustments to maximize performance. When we first came on scene with the operating team, they saw an immediate opportunity in overlit areas and de-lamped 50% of the lighting in the stairwells, vestibules, mechanical areas and basement.
- In 2015, 10 exhaust fans were added to the BMS that had been operating 24/7. Reduced fan runtime saves 87,000 kWh/yr. The project cost \$750 to implement and yields \$16,500 in annual savings.
- In January of 2016, the project was awarded an ENERGY STAR® certification, earning 99 of 100 available points, 12 points above the San Francisco median score for office properties.
- As of March 2017, the project had an operational site energy use intensity (EUI) of 40 kBtu/sf/yr, the lowest in our portfolio and 18.4% better than the San Francisco median energy use intensity for office properties.

"Just because a building is new and built to current codes, does not mean there are no low hanging efficiency opportunities to be picked at low or no cost. The 535 Mission operating team will continue to "Trend, Study and Learn" the operating characteristics of the building as they relate to the building occupancy, and will continue to bring forward energy saving solutions that can reduce the energy spend and have no negative impact to the occupant's comfort experience."

> - Danny Murtagh VP, Engineering Boston Properties

