

SOLUTION AT A GLANCE: SHORENSTEIN PROPERTIES: CHILLER UPGRADE AND RENOVATION HELPS REPOSITION ICONIC MARKET SQUARE PROPERTY

SECTOR

Commercial

TOOL TYPE

Case Study

BUILDING TYPE

Office

TECHNOLOGY

HVAC, Chiller Systems, Lighting

OVERVIEW

Market Square, acquired by Shorenstein in 2011, consists of two buildings – 1355 Market and 1 Tenth Streets – joined by a landscaped plaza. The property spans an entire block between 9th and 10th streets in the Mid-Market area of downtown San Francisco. The original building (1335 Market) is an Art Deco icon, formerly known as the Western Furniture Exchange and Merchandise Mart. In 2014, Shorenstein completed an extensive renovation to reposition the property into first-class creative office space with supporting retail. The redevelopment offered modern and state-of-the-art conveniences, while still maintaining the classic architecture of the buildings. In addition, Market Square is now LEED Gold and ENERGY STAR[®] certified.

1355 Market Street is an 11-story, 744,000-square-foot building constructed in 1937 and last expanded in 1962. 1 Tenth Street, formerly known as 875 Stevenson, is a 10-story, 338,280-square-foot building constructed in 1974. The combined property features 1 million square feet of Class-A office, ground-level retail, and restaurant space. An emerging location for technology tenants, Market Square houses Twitter's corporate headquarters.

Shorenstein carried out several energy efficiency measures at Market Square, including HVAC and LED lighting upgrades. These upgrades to the base building helped insure that tenants were moving into a highly efficient building.

First step: Focusing on the Chiller Renovation of the HVAC system at 1 Tenth resulted in

reduced demand for the building's chiller, which was originally installed in 1975. The old chiller was oversized for the renovated space and caused surging when it operated on low loads, so Shorenstein retrofitted the existing chiller, resulting in significantly lower noise output and the ability to be turned down to 10% of its overall capacity while still maintaining efficiency.

Both 1355 Market and 1 Tenth participates in PDP (peak day pricing) curtailment. When a peak energy event is called, Shorenstein notifies their tenants and requests that they take the following actions: turn off any nonessential lighting, office equipment and ambient audio and visual displays, pull down window shades early in the day to stay cool, and leave operable windows closed (where applicable). In addition to encouraging their tenants to reduce their load, they minimize the HVAC system by increasing HVAC cooling set-point temperatures and decreasing HVAC heating set-point temperatures.

In 2018, the HVAC and additional LED lighting upgrades led to 40% energy savings in the base building compared to a 2017 baseline.

Sustainability Features

Market Square earned a LEED Gold certification from the U.S. Green Building Council, as well as the 2015 San Francisco Building Owners and Managers Association "Innovation Earth Award" for the creative re-use of reclaimed materials in the building's historic lobby. Shorenstein's development and construction group integrated approximately 6,000 square feet of reclaimed wooden beams and 85 reclaimed marble panels into the restored lobby wall and ceiling. The team also repurposed 540 mailboxes and 25 brass panels as decorative artwork. Saving this material diverted many tons of landfill waste and preserved distinctive elements of the building's original use.

To ensure their tenants participate in sustainability activities, Shorenstein deploys tenant engagement programs at their properties. During annual Earth Day and Bike to Work Day events hosted at Market Square, they give out prizes to tenants for answering sustainability questions correctly. They usually have their waste hauler vendor at the event to answer questions about sorting trash. Shorenstein performs annual trash audits and provides tenants with a report on each individual floor so tenants can work on improving their waste diversion rate. They then offer additional training on how to properly sort waste materials. Monthly sustainability tips are also posted to the tenant website.