

# ENERGY STORAGE

12 Powerwalls integrated into San Francisco's first multi-family passive house



“Sol-Lux Alpha tenants will represent a revolution of design and technology, embracing the opportunity to minimize San Francisco's carbon footprint.”

John Sarter, Managing Partner of Sol-Lux Alpha, LLC

## OPPORTUNITY

Developer John Sarter and his business partners aspired to design a luxury multi-unit residential building in San Francisco that would raise the bar for sustainable architecture and living. As part of their vision, they set out to create a solar-powered building that would be not just net zero (producing as much energy as it uses), but net positive (producing more energy than it uses). Residents would have the ability to store excess solar energy for nighttime use and backup power. In combination with advanced energy efficiency technologies and Passive House building design, the storage of solar energy in Powerwall could help Sol-Lux Alpha tenants achieve a new level of sustainability, comfort, and reliability.

## SOLUTION

As part of building construction, Sol-Lux Alpha installed a fleet of four 8kW DC rooftop solar arrays – one for each of its four residences. Each solar array connects to three Powerwalls (15kW / 40kWh AC) in the building garage. Residents can monitor and control Powerwall from anywhere with the Tesla App, to customize the balance between discharging stored power and reserving stored power for an outage. Enough solar energy can be stored within the Powerwalls to run a residence without grid power for extended, even indefinite, periods of time.

## RESULTS

The addition of Powerwall is a major selling point to its first residents since it provides energy security and autonomy. Widespread interest in the new residences has highlighted the value that real estate buyers place on the economic and reliability benefits of energy independence. Sol-Lux Alpha has become the first building in San Francisco to achieve an “alternate path of compliance” to San Francisco's rigid Green Building Code, earning certifications from the Passive House Institute US, Energy Star, EPA Watersense, and the DOE Zero Energy Ready Home program.

## CUSTOMER

Sol-Lux Alpha  
Condominiums

## LOCATION

San Francisco, California



## ENERGY STORAGE

12 Powerwalls  
60kW | 162kWh AC

## APPLICATIONS

Solar self-consumption  
Backup power  
Load Shifting

## COMMISSIONED

Early 2018