

SHOWCASE PROJECT: BRIDGE HOUSING: COPPER CREEK APARTMENTS COMMON AREA RETROFIT

SOLUTION OVERVIEW

BRIDGE Housing's Copper Creek Apartments at 1722 Elfin Forest Road in San Marcos, California consists of 48 affordable one-, two-, and three-bedroom apartments built in 2004. Adjacent to the San Elijo Hills town center, Copper Creek's apartment homes are targeted for low-income working families. Renovation began in 2019 to upgrade the common area into more energy-efficient spaces with a series of retrofits. These cost-saving measures replaced outdated, inefficient equipment and reduced electricity consumption.

SECTOR TYPE

Multifamily

LOCATION

San Marcos, California

PROJECT SIZE

43,000 Square Feet

FINANCIAL OVERVIEW

Project Cost \$49,476

SOLUTIONS

Primary energy efficiency measures included replacing a heat pump split system with a new, higher efficiency (16 SEER) unit. Fluorescent tube lights, CFLs, can lights, and incandescent light bulbs were all replaced with energy-efficient LED bulbs. This reduced energy consumption and improved light output for residents. BRIDGE Housing also introduced smart strip power outlets in the community space to minimize energy waste when appliances are not in use.

This project was made possible through San Diego Gas & Electric's (SDG&E's) "Energy Savings Assistance for Common Area Measures (ESA CAM)". The program offers eligible low-income multifamily properties (deed restricted/subsidized housing) no-cost energy saving upgrades to their common areas. This could include appliances, lighting, water heating, HVAC, pool heating and pumping, building envelope and other maintenance. For Copper Creek, all services were provided by Willdan Energy Solutions.

Key energy-saving measures:

- 16 SEER Heat Pump (2 units; 10 tons)
- Variable Speed Pool Pump
- Tier-2 Smartstrip Power Strips
- Interior LED Lighting (4' TLEDs, Can LED Retrofits, LED Screw-Ins)
- Exterior LED Lighting (Wall-Mounted LEDs)

OTHER BENEFITS

Annual Energy Use

(Source EUI)

Baseline(2017)



Actual(2019)



Energy Savings

23%

Annual Energy Cost

Baseline(2017)



Actual(2019)



Cost Savings

\$3,274



Copper Creek Apartments - exterior