



THE CITY OF SAN DIEGO

## ENVIRONMENTAL SERVICES DEPARTMENT

# *Fire Station 47 - LEED SILVER*

Construction of the 10,500 square foot Fire Station 47 was a partnership between the City of San Diego and Pardee Homes to design and construct a facility serving Pacific Highlands Ranch, Del Mar Mesa, and Torrey Highlands. The station brings together a mix of green building technologies and traditional early California Mission style architecture.



*Photo Courtesy STK Architecture, Inc.*

**Completion:** 2008

### **Energy**

- 8 kilowatt (AC) rooftop system.
- Optimized energy performance 35% better than 2001 CA Title 24 requirements via high performance building envelope and lighting design.
- Over 30% of the building's energy is produced by a photovoltaic system, and the remaining power is supplied by 100% wind power through a purchase agreement for the first two years, thereby reducing up to 122,397 pounds of CO<sub>2</sub> emissions.
- Cool roof design with Energy Star clay roof tiles and "cool" membrane roofing with high solar reflectance and high emissivity, along with light-colored, high-albedo concrete paving to reduce heat islands.
- Individual controls of operable windows, lighting, ceiling fans, thermostats, and skylights harvesting natural light to promote productivity, comfort, health and well-being of occupants.
- HVAC system free of CFC, HCFC and Halon-based refrigerants to reduce ozone depletion.

- High efficiency light fixtures.
- Low-E insulated glazing with high visible transmittance.

**Water:**

- Use of reclaimed water, water-efficient plants, and high-efficiency irrigation to reduce and eventually eliminate the use of potable water for landscape irrigation.
- Low-flow toilets and faucets.

**Materials:**

- Recycled, local/regional, seismically superior cold-formed tubular steel framing system wrapped with exterior rigid insulation to reduce thermal bridging.
- Over 75% of construction waste was diverted from landfill disposal and recycled.
- Over 35% of the building's materials were manufactured regionally, and 10% were extracted locally, within a 500-mile radius of the project.
- The building's materials contain over 10% combined recycled content.
- Cabinetry made from FSC-certified wood.

**Recycling**

- Large waste and recycling area and easy-access bins for separation, collection, and storage of recyclables

###