



# SCOTTSDALE CACTUS ACRES FIRE STATION #8

Scottsdale, AZ

Cactus Acres Fire Station #8 earned LEED for New Construction Platinum certification, exceeding the City of Scottsdale’s mandate to earn LEED Gold certification for all municipal buildings. The \$7 million facility features a three-bay Apparatus Bay, separate locker areas, medical storage, exercise room, sleeping quarters, administrative offices, communication room, kitchen, dining room and a large community room. Located in a highly populated neighborhood the project team was committed to designing the Station to fit with the urban and desert surroundings. Green Ideas integrated several sustainable strategies into the design, development and construction of the project, including a solar hot water heater, low-flow water fixtures, roof-mounted photovoltaics, the reuse of grey water from sinks and showers for irrigation, natural daylighting, and recycled and low maintenance building materials.



**ARCHITECT**  
WLC ARCHITECTS

**LEED CONSULTANT**  
GREEN IDEAS

**CONTRACTOR**  
CALIENTE CONSTRUCTION

## SUSTAINABLE STRATEGIES

- High R-value insulation, occupancy sensors and permanent monitoring systems were installed to minimize energy use
- Low-flow fixtures reduce domestic water use
- Architectural shading features control solar heat gain
- Renewable energy generated by onsite photovoltaic panels provides 20% of the building’s energy
- Energy-efficient lighting and daylighting strategies
- High-performance, reflective roofing system reduces the Urban Heat Island Effect
- Building materials with high-recycled content were sourced from local vendors

## PROJECT RESULTS

- LEED** for New Construction PLATINUM level achieved
- 58%** energy cost savings above ASHRAE 90.1-2004 energy standard
- 19%** of building electricity supplied by onsite photovoltaic system
- 88%** reduction of potable water use for irrigation
- 56%** of construction waste was diverted from the landfill

## LEED Facts

LEED for New Construction v2.2  
Size: 11,000 SF  
Certification Date: July 2012



POINTS ACHIEVED	55/69
Sustainable Sites	12/14
Water Efficiency	4/5
Energy & Atmosphere	16/17
Materials & Resources	5/13
Indoor Environmental Quality	14/15
Innovation in Design	4/5

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