

Queen Creek Public Library, Queen Creek, AZ.

Description of Project

Project is a new 48,000 s.f. +/- Library for the Town of Queen Creek. Delivery system is Design-Build with CORE Construction. Specifications and LEED Consulting to DFDG, Phoenix, AZ



Challenges Overcome

The Drury Inn and Suites on the Northern Arizona University campus is the first of the chain's 130 hotels to be LEED Certified.

Benefits Provided:

- Solar reflective roofing materials diminish the heat-island effect of the building.
- Exterior lighting is designed to reduce light pollution.
- Alternative-fuel parking encourages the use of alternative-fuel vehicles to reduce pollution impacts from auto use.
- The underground storm-water retention system prevents water that may be polluted with oil from nearby streets from reaching the groundwater.
- Bicycle racks encourage patrons and staff to use alternative modes of transportation to commute to the library site.
- The library is cooled using a highly energy-efficient electromagnetic chiller. The bearings of the machine are held in a magnetic field without oil. This means that the moving pieces have no friction or drag when they start up, lowering the amount of energy used by the machine.
- The building's plumbing fixtures are water-efficient, reducing water use by 20 percent.
- All construction waste was sorted, diverted from disposal and recycled.
- Certified sustainably harvested wood and recycled and regional materials were used in construction.
- Green housekeeping products are used to clean and maintain the building.
- All the paints, finishes, carpets and adhesives used in the library interior are low-volatile compound organic compound (VOC)-emitting, which means they do not emit toxic fumes.
- Library windows are designed to provide natural light to offset the use of electrical lighting and are shaded with overhangs and awnings.
- The library is heated using hot water, which is more stable than electrical heat and allows for finer control of the building temperature.

Architect: DFDG, Phoenix, AZ

LEED CERTIFICATION ACHIEVED: LEED-NC v2.2 Gold Certification September 24, 2009