

Tahoe Center for Environmental Sciences

Incline Village, NV

Project Information

owner: Sierra Nevada College, U.C. Davis
size: 3 Stories, 60,000sf
cost: \$24,000,000
dates: May 2005 - Nov. 2006

Project Team

architect: Lundahl & Associates
electrical: Integrated Design Associates
mechanical: Rumsey Engineers
lighting: David Nelson and Associates
structural: Martin & Peltyn



Architecture

interior: Central atrium that filters light to other spaces is a major design focus of the building.
exterior: Fiber-cement siding panels made of recycled materials and molded to look like cedar wood adorn the exterior.

Lighting

daylight: Light shelves and the central atrium help push light into the building. Daylight controls are found within the buildings to eliminate electric light when enough daylight is present.
electric: 120V fluorescent lighting can be found throughout the building, with indirect pendant fixtures, downlights, and track fixtures providing much of the lighting.

Electrical

service: Main incoming service is a 3 Φ , 4W feeder serving a 1600A, 208Y/120V switchboard.
pvs: (9) Photovoltaic arrays with a total of (87) tile elements are located on the roof and are tied to a 100A panel.
cogen: A 30kW Capstone microturbine supplies 480V and is connected via a 480Y-208/120 transformer.
emergency: Emergency power is supplied via a 50kW back-up generator due to slow start times on the cogen unit.

Special Considerations

lead: TCES is currently slated to be LEED Platinum certified and is 8 points over Platinum currently.

Mechanical

radiant: Radiant panels provide heating and cooling to numerous rooms instead of traditional HVAC systems
hot water: Solar panels on the roof provide hot water to the building systems.
greywater: A greywater collection system collects rain and snow melt to distribute to various building systems.
ventilation: Chilled beams of air provide induction ventilation to lab spaces.

Structural

concrete: One-way cast-in-place concrete slabs that are deeper than normal due to radiant piping in some areas.

