

# CAMPUS SUSTAINABILITY AT ARIZONA STATE UNIVERSITY

## Interdisciplinary Science and Technology Building II

Achieving USGBC  
LEED Silver . . .

### Sustainable Sites

- *Site Selection*
- *Alternative Transportation*
- *Reduced Site Disturbance*
- *Stormwater Management*
- *Heat Island Effect*
- *Light Pollution Reduction*

### Water Efficiency

- *Landscaping*
- *Reduction*

### Energy & Atmosphere

- *Optimize Energy Performance*
- *Additional Commissioning*
- *Ozone Depletion*

### Materials & Resources

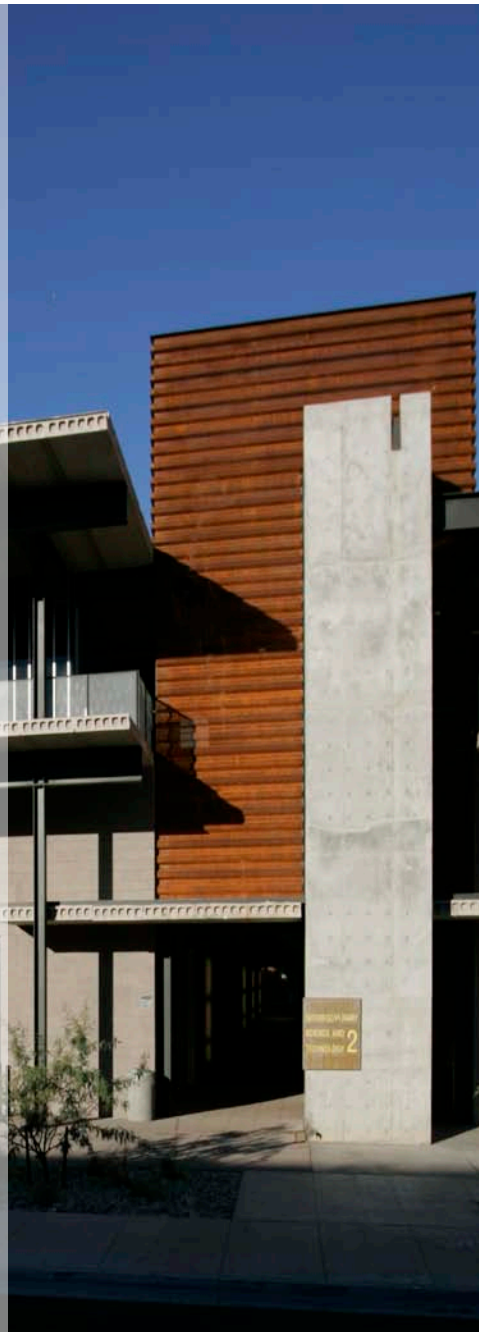
- *Construction Waste Management*
- *Recycled Content*
- *Local / Regional Materials*

### Indoor Environmental Quality

- *Construction IAQ Management*
- *Low-Emitting Materials*
- *Thermal Comfort*
- *Daylight & Views*

### Innovation & Design Process

- *Innovation in Design*
- *LEED Accredited Professional*



Environmentally friendly features incorporated into the design of the Interdisciplinary Science and Technology Building II range in scale from site and urban planning to interior finishes. The building meets LEED prerequisites including Erosion & Sedimentation Control, Fundamental Commissioning of the Building Energy Systems, Minimum Energy Performance, CFC Reduction in HVAC&R Equipment, Storage & Collection of Recyclables, Minimum IAQ Performance, and Environmental Tobacco Smoke Control, and was credited with 33 of the possible 69 points in the following areas:

**Sustainable Sites** - 13,148 sf, or 54%, of the site has been restored with native planting or adaptive vegetation. In addition, on-site retention basins have a capacity of 33,951 cf. These basins were designed to retain all stormwater based on 2-year, 24-hour discharge rates. Over 76% of roof surfaces include high albedo and corrugated perforated steel roofing, and almost 73% of non-roof surfaces consist of concrete designed to reduce heat island effects.



**Water Efficiency** - Lower planting density and high efficiency irrigation technology reduce potable water consumption by 50 percent. Additionally, the use of potable water was reduced by 34% through the use of waterless urinals and 0.5 gpm low-flow lavatories.

**Energy & Atmosphere** - Energy efficiency measures include an improved thermal envelope, exterior shading, high performance windows, daylighting controls, occupancy sensors, and efficient HVAC configuration.

Chilled water, provided by the campus' central chiller plant, utilizes HFC-134a refrigerant for ozone protection.

**Materials & Resources** - 89.47% of construction waste was diverted from the landfill. Recycled or locally harvested building materials accounted for approximately 25% of the total materials by cost, and almost 41% of the total materials were manufactured within 500 miles of the project.



**Indoor Environmental Quality** - All paint, including topcoats and primers meet the VOC requirements of Green Seal, and carpeting complies with the CRI Green Label Program.

**Innovations in Design** include the use of exterior space to offset the need for large volume, interior, air conditioned corridors. This eliminated the need for constructing 15,000 sf of interior space and cut the required cooling load in half while still providing year-round use.

