Interdisciplinary Science and Technology Building I

Achieving USGBC LEED Gold . . .

Sustainable Sites
- Site Selection
- Development Density
- Alternative Transportation
- Site Development
- Stormwater Design
- Heat Island Effect
- Light Pollution Reduction

Water Efficiency
- Landscaping
- Reduction

Energy & Atmosphere
- Optimize Energy Performance
- Enhanced Refrigerant Management
- Green Power

Materials & Resources
- Storage & Collection of Recyclables
- Recycled Content
- Regional Materials

Indoor Environmental Quality
- Outdoor Air Delivery Monitoring
- Increased Ventilation
- Low-Emitting Materials
- Indoor Chemical & Pollutant source control
- Controllability of Systems
- Thermal Comfort
- Daylight & Views

Innovation & Design Process
- Innovation in Design
- LEED Accredited Professional
Environmentally friendly features incorporated into the design of Interdisciplinary Science and Technology Building I range in scale from site and urban planning to interior finishes. The building meets LEED prerequisites including Construction Activity Pollution Prevention, Fundamental Commissioning of the Building Energy Systems, Minimum Energy Performance, Fundamental Refrigerant Management, Storage & Collection of Recyclables, Minimum IAQ Performance, and Environmental Tobacco Smoke Control, and was credited with 40 of the possible 69 points in the following areas:

**Sustainable Sites - Urban Redevelopment**
credit was given for the 96,160 sq ft/acre project being located in an area with a development density of 65,425 sf/acre. Over 98% of the roofing materials meet emissivity and reflectivity requirements, and over 30% of the non-roof impervious surfaces are shaded or constructed with light-colored, high albedo materials helping to reduce heat island effects.

**Water Efficiency** - Native and desert-adaptive, drought-tolerant plant materials together with below grade drip emitters, controlled by moisture sensors and separate valves for various species, reduce potable water use for irrigation by 74.21%. Low-flow lavatories and waterless urinals reduce the use of potable water by an additional 36.38%.

**Energy & Atmosphere** - Energy efficiency measures include exterior shading; low-e, double-glazed windows; occupancy sensors; and daylighting controls saving approximately 36% relative to an ASHRAE 90.1-1999 budget building.

**Materials & Resources** - 61.8% of project construction waste was diverted from the landfill. A combined recycled content value of over 28% of the total materials by cost was achieved for this project. Almost 66% of the project’s materials were manufactured within 500 miles with almost 18% of materials also being extracted regionally.

**Innovation & Design** - Permanent programmable LDC displays in the lobby educate building visitors about the building’s green features.

ISTB I also received innovation for Exemplary Performance credit for the development of a cross-connect system that works with a less critical area’s AHU system to provide back-up/standby air handling for the animal care laboratories. This measure saved the raw materials, installation, power and related costs that would have been necessary if a dedicated standby AHU system had been used.