Case Study: Utah State University Botanical Center Wetland Discovery Point Construction

Client | Owner:
Utah State University

Architect and LEED® AP:
AJC Architects, Salt Lake City, UT

Contractor:
Big-D Construction, Salt Lake City, UT

Project Recognition:
- 2009 Intermountain Contractor, Best Sustainable Project, Merit Award
- 2009 AIA Utah Sustainable Design, Merit Award
- 2010 USGBC LEED Platinum

Date Opened: May 2009
Building Size: 3,200 sq. ft.
Budget: $1.5 million

The Wetland Discovery Point is one of the newest buildings at the Utah Botanical Center (UBC), part of Utah State University. The building was designed and built to qualify for LEED Platinum certification. Designed by Salt Lake City-based AJC Architects and built by Big-D Construction, The 3,200 sq. ft. building will be a focal point for UBC field trips, along with the surrounding wetlands. More than 4,000 school children make field trips to the UBC to explore topics like wildlife biology, wetland ecology, energy and water conservation, horticulture, and water quality.
Challenge
Utah State University wanted the Wetland Discovery Point building to be a place that would both teach and model environmental solutions at the highest level possible. Part of this goal meant achieving LEED® certification. AJC Architects, who designed the Wetland Discovery Point, added a number of key sustainable features, including geothermal heating and cooling, a passive solar trombe wall, photovoltaics, solar hot water, rainwater harvesting, and a clever roof design that maximizes sunlight in the winter months while minimizing it during summer months. In order to earn enough points for platinum status, building materials needed to be sourced as locally as possible from recycled and/or sustainable sources.

Solution
Among the construction materials that were chosen was Roseburg Forest Products' SkyPly™ hardwood plywood panels. SkyPly™ features a no added urea formaldehyde (NAUF) Combination Fiber Core, which meets the requirements of low emitting materials for the Indoor Environmental Quality Credit in LEED 2009. FSC certified SkyPly™ was used in the ceiling of the building as a sustainable material with a natural look and great visual appeal.

Results
The project has earned special recognitions, including 2009 Best Sustainable Project by Intermountain Contractor, and a 2009 merit award for AIA Utah Sustainable design. In 2010, the Wetland Discovery Point became the first LEED Platinum certified building in Utah.