Now turn right at the desk, and look to your left along the hallway

EFFICIENT COOLING SYSTEM

Our innovative system cools the building using evaporation rather than refrigeration. This reduces our energy use by at least 40% and eliminates the need for refrigerants, which are harmful to the environment.

Turn right, into the theater room and continue through to the classroom on the other side. The next three will be found in this room.

BAMBOO FLOORING

Bamboo is a fast-growing grass that can be harvested every few years, unlike hardwood sources such as oak trees, which may take 100 years or more to mature. This rapidly renewable resource is lightweight and very durable.

RADIANT HEAT FLOORING

A mix of solar-heated water and glycol passes through pipes in the floor providing consistent, efficient heat. Radiant heat flooring uses 20-40% less energy than forced-air systems.

SMART LIGHTS

Our occupancy sensors reduce energy consumption by automatically shutting off the lights when the room is not in use.

Return to the Exhibit Hall, where you will find four more features.

The Swaner EcoCenter has achieved the U.S. Green Building Council's LEED Platinum criteria; the highest standards for green building. This makes it the first LEED Platinum New Construction Project in Utah, with an incredible 61 out of 69 possible points.

Here are some of the ways the EcoCenter achieved this rating:

- 75% of all building materials are from recycled or rapidly renewable resources
- 90% of water cost savings compared to conventional design
- 54% energy cost savings over conventional design
- 95% of all indoor spaces have a direct sight line to the outdoors
- Zero formaldehyde
- Zero refrigerants

How Does the EcoCenter's Sustainable Design Affect the Environment?

- 510 trees were diverted from being cut down through the use of bamboo flooring, bamboo cabinetry, sorghum board and cementitious siding throughout the EcoCenter
- 77.7% of construction waste was diverted from landfills through recycling and reuse
- 24.6% of the cost of materials used in the EcoCenter came from recycled content
- 85% of insulation came from denim, and factory scraps and thus was diverted from landfills
- 11% of structural steel was derived from recycled sources
- 60% of the composite deck was made from recycled materials including milk jugs, detergent bottles, and grocery bags

SELF-GUIDED GREEN

BUILDING TOUR

SWANER PRESERVE AND ECOCENTER
UtahStateUniversity

In this guide,

you will find directions to each plaque labeling Swaner's "green" features. Enjoy your Green Tour of the Swaner EcoCenter!

SUSTAINABILITY KEY

- Indoor Air Quality
- Resource Conservation
- Water Conservation
- Energy Conservation

The first three features can be found by the front desk.

3FORM ECORESIN

This beautiful non-toxic material called Ecoresin contains 40% post-industrial recycled content and has no VOCs (volatile organic compounds). This product was donated by 3form, a Utah-based corporate leader in sustainability.

SORGHUM BOARD

Sorghum is a fast-growing, globally cultivated cereal crop. Choosing products like these, helps to reduce both landfill waste and air pollution.

PRESSED PAPER COUNTERTOPS

These countertops are composed of recycled, formaldehyde-free wood fibers and contain no VOCs. The production process generates no hazardous waste and utilizes primarily renewable resources.

PHOTOVOLTAIC (PV) ARRAY

The Swaner EcoCenter has a rooftop array of PV panels that harness solar energy to generate 9,400 kilowatt hours of electricity annually. When the EcoCenter is “dark,” excess electricity produced on-site is fed back into the grid for public use.

SOLAR HOT WATER

The Swaner EcoCenter captures the sun’s energy with solar collection panels located on the roof to heat water for our faucets and radiant floor heating. These cost-effective solar hot water systems are available for homes and buildings of all sizes and can be used in any climate.

OPERABLE WINDOWS

Unlike many commercial buildings, the Swaner EcoCenter’s windows open and close, allowing for natural ventilation and providing a comfortable environment. Studies have shown that people are happier and more productive when they have control over their own environment.

HIGH PERFORMANCE WINDOWS

These windows dramatically reduce energy consumption and help maintain a consistent interior environment by maximizing natural light while minimizing heat transfer. These high-efficiency glazed windows are filled with dense argon gas, which insulates more effectively than air.

Return to the lobby and take the hallway into the Naturalist room. Look to your left while in the hallway to see the next two features.

FLY ASH FLOORS

The Swaner EcoCenter’s concrete is reinforced with 25% fly ash, a by-product of coal-powered electric plants, which keeps this waste out of landfills.

SAFE PAINT

The “new” smell of many products such as paints, stains, sealants, and adhesives comes from the off-gassing of VOC’s (volatile organic compounds). These toxic odors can cause many health problems including headaches, nausea, and neurological disorders. All of our building materials and finishes contain low or no VOC’s and no formaldehyde.

The next two features can be found in the men’s & women’s restrooms.

WATER-WISE TOILETS

At the Swaner EcoCenter, the rooftop collections system provides water for minimal irrigation and flushing toilets, contributing to 90% annual water savings.

WATERLESS URINALS

These innovative urinals use a biodegradable liquid sealant to eliminate the need for flushing, which saves water and prevents the release of microbes into the air. This system saves 1 gallon of water per use, an average of 15,000 gallons per year.

Now head toward the stairs and look to your left before you enter the doorway.

DENIM INSULATION

Denim scraps reclaimed from companies that make jeans can be used to create effective insulation. The Swaner EcoCenter uses denim insulation in its walls as a healthy alternative to conventional insulation, which has been linked to many health problems.

Continue through the hallway and go up the stairway.

IPE WOOD

Ipe(ee-pay) is an environmentally responsible choice which naturally resists rot, decay, insects, and mold without the use of sealants and stains. This sustainably harvested, long-lasting Brazilian wood is so hard it’s also known as ironwood.

Continue up the stairs onto the observation deck.

COMPOSITE DECKING

This eco-friendly decking material is a high quality, non toxic, 50/50 blend of recycled wood fibers and recycled plastics that would otherwise end up in landfills. The manufacturing process uses less fuel and recycles almost 100% of its waste. Composite decking requires no sealing, staining, or treating, and lasts two to three times longer than conventional decking materials.

Next, go back downstairs and head outside to explore the deck to find two more eco-friendly designs.

CEMENTITIOUS SIDING

Our fiber cement siding is eco-friendly, extremely durable, and a responsible alternative to wood. This long-lasting siding can handle water, heat, variable weather conditions, and UV radiation, requiring much less maintenance than conventional siding.

WATER COLLECTION

The roof of the Swaner EcoCenter is equipped with gutters and a snowmelt system that collect water to be used for flushing toilets and for landscape irrigation. This innovative system stores water in this above ground and underground cistern, providing 90% of the EcoCenter’s water needs, which saves an average of 25,000 gallons each year.

On your way out, observe the three features in front of our building.

BIKE AND SKI RACKS

We encourage visitors and employees to walk, bike, or ski to the Swaner EcoCenter. Using alternative means of transportation conserves natural resources and promotes health and fitness.

LANDSCAPING AND IRRIGATION

The native plants in the landscaped areas were chosen because they are drought-tolerant, thrive in our climate, and require no fertilizer. The irrigation system was specially designed to minimize water use, and is supplied entirely by the rooftop water collection and storage system.

PERVIOUS PAVERS

The outdoor entryway is made of pervious pavers. Water flows through the pavers mimicking the drainage and filtration of natural soils. They eliminate runoff, recharge groundwater, and reduce surface temperatures.

SWANER PRESERVE AND ECOCENTER
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