KY EXCEL
KENTUCKY EXCELLENCE IN ENVIRONMENTAL LEADERSHIP

Case Study of Jim Beam-Clermont

Keys to Success

- Project Description
- Economic Value
- Challenges & Advice
- Benefits
- Stewardship Meaning

Jim Beam Distillery was created in 1787 when Jacob Bohm (later changed to Beam) arrived in central Kentucky with a copper pot still. Since those humble beginnings, Jim Beam has grown immensely and become the world's best-selling bourbon. When officials at Jim Beam's Clermont facility decided to build a new visitors' center, they wanted it to be environmentally friendly, and but it also had to tell the distillery's remarkable story.

"We wanted something historic and new melded together," says Jim Noe, plant engineer at Clermont/Booker Noe Operations.

> **"If you want to construct a building and have it LEED-certified, you need to identify that at the start."**

The American Stillhouse was designed architecturally to fit into its surroundings, but it was constructed to include features to earn a LEED-Gold certification. To meet this standard, the concrete on-site has the required high ash content. On the exterior of the center, the concrete is designed to drain water, capturing the runoff and sending it to a lake. Thyme was planted in the cracks, along with gravel to keep the groundwater in the system. The landscaping contains native plants.

Bicycle racks and a building with showers are available to employees who use alternate means of transportation. A special parking lot is reserved for employees who carpool or drive energy-efficient vehicles. Any trees that were removed during the construction were ground into mulch. Asphalt that was removed was sent to an asphalt company to be reused. Permeable crushed gravel walkways lead from the rear of the building to other structures.

Inside the center, a geothermal heating and cooling system was installed. The walls are made of corrugated metal and provide an interesting viual effect. For the lighting, energy-efficient LEDs and fluorescent bulbs were used. Air curtains positioned over outside doors keep the outside air from entering. Non-VOC products, low-flow toilets and

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urinals, air dryers for hands and occupancy sensors in restrooms and staff work areas were installed. to minimize waste.

For the upstairs floor and elevator, reclaimed wood from an old barn added beauty and durability. The reception area counter was made of wood from pickle vats that had been left from a project at nearby Bernheim Forest.

$ Money was saved during the construction of the American Stillhouse, and due to its LEED-certified construction, it will continue to save money and energy. The geothermal system uses much less energy, which translates into more money saved.

Low-flow toilets, sensors on restroom sinks and other plumbing innovations resulted in a water-use reduction of more than 30 percent. Jim Beam received a LEED innovation credit for exceeding the water usage standard.

Restrooms feature air dryers for hands and motion sensors on the sinks.

? Noe says they designed what they thought was an earth-friendly style of building, but the owners had a different need and vision for a signature look. When the owners wanted a black roof, which normally would absorb heat, the builders found a dark charcoal roof that reflects heat. Going just a few shades lighter made a difference. What they learned is that it is possible to accomplish a traditional look and build an LEED-certified structure.

"Decide what you want and be flexible enough to accomplish the objectives. If you want to construct a building and have it LEED-certified, you need to identify that at the start," says Noe. "Hold monthly meetings to monitor the progress."

+ Seventy-eight percent of the construction materials were diverted from the landfill. Everything was reused or recycled. Even an old dinner bell from the Beam family home was salvaged and hangs outside the American Stillhouse. A lot of furniture was repurposed, including old ladders from a library. Sending used asphalt to an asphalt plant was not only the right thing to do, but was cost-neutral. Money was saved on tipping fees by keeping construction materials out of the landfill.

The American Stillhouse is LEED-Gold Certified.

"All of us love talking about going LEED with the American Stillhouse because we all are aspiring environmentalists," says Noe. "Being environmentally conscious is a mindset. We are stewards of the world we live in."

Helpful Hint: **LEED-certified buildings are designed to lower operating costs and increase asset value, reduce waste sent to landfills and conserve energy and water.**