

LEED-EB Case Study

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CTA Billings Office



BEFORE RENOVATION



AFTER RENOVATION



2004 Renovation

- **Design Philosophy:** Preserve building's humble origins. A very simple industrial design aesthetic was followed, leaving as much of the original building and its systems exposed.
- **Living Lab:** The building is not finished, and likely never will be because CTA intends for it to be a working laboratory where new approaches and products can be experimented with so we can better advise our clients.

2004 RENOVATION

The building was originally designed for LEED-NC Certification

- Reuse of Existing 1920 Marshall Wells Warehouse
- Downtown Location
- Green Roof
- Efficient HVAC System (Evaporative Cooling)
- Daylighting Controls, Occupancy Sensors, and Task Lighting



Green Roof



Plaza Conference Room

2004 RENOVATION

- **Water Conservation Measures**
 - Native/Adaptive Plants throughout site
 - Low-flow fixtures and Waterless Urinals
- On-site storm water retention (boulder pit under parking lot)
- Low-Voc Paints & Recycled/Rapidly Renewable Materials



Atrium Stairs



Reception Desk

WHY LEED-EB CERTIFICATION?

- “Walk the Walk”
- Sustainability as part of CTA’s corporate culture
 - YBP Uncommon Sense Program
- USGBC Member – Desire to certify one of our own buildings

2009 LEED-EB CERTIFICATION

- Alternative Commuting Program & Incentives
- Increased Irrigation Efficiency
(50% Savings)
- Water Conservation
(40% Savings)



Low-Flow Fixture

2009 LEED-EB CERTIFICATION

- Green Cleaning Contract and Policy
- Sustainable Purchasing Policy
- Waste Management / Recycling Program
- Low Mercury Lamps



2009 LEED-EB CERTIFICATION

- Retro-Commissioning and ASHRAE Level 1 Energy Audit
- 82 Energy Star Rating
- 100% Renewable Power Purchase



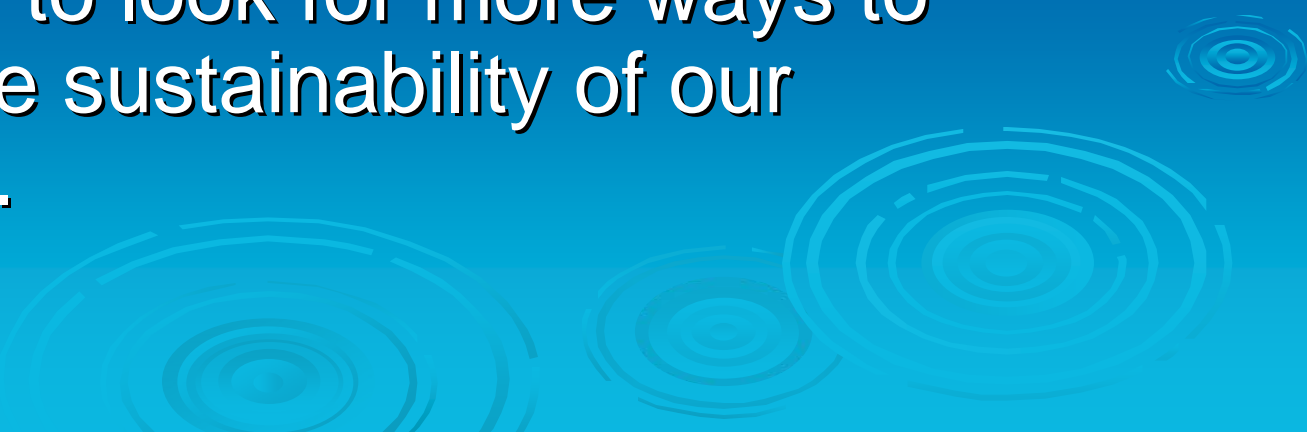
Evaporative & DX Cooling Systems

Certification Level - GOLD

- Earned 51 Points of 92 Possible
- Zero points denied!
- First LEED-EB O&M Building in Montana
- Invitations for Plaque Unveiling Sent by E-mail



LEED-EB Recertification

- LEED-EB requires recertification at least once every 5 years to maintain status.
 - In process of establishing in-house program to maintain trend logs and policies currently in place as part of this application.
 - Continuing to look for more ways to improve the sustainability of our operations.
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Questions?

