Mead & Hunt intentionally conducts our business operations and client projects using sustainable practices that make the most of available resources to achieve operational efficiency and low maintenance. This case study, highlighting the design and construction of our new corporate headquarters, illustrates these best practices.

ABOUT MEAD & HUNT

Mead & Hunt is a national firm offering design services in the fields of planning, design, architecture and engineering. Founded in Madison, Wisconsin in 1900, today it is a nationally-ranked, employee-owned corporation that has more than 500 employees in 30 offices nationwide and clients in almost every state.

To be dedicated environmental stewards, both as a service provider and global citizens, Mead & Hunt protects the natural and human environment through innovative planning and responsible design. We work with clients to create timeless, efficient and functional solutions for buildings, sites and their communities. The company is dedicated to providing sustainable designs that meet present needs without compromising those of the future.

These commitments to sustainability and excellence have been put into practice at our corporate office by providing a Leadership in Energy and Environmental Design (LEED)-certified, sustainable work environment that is beneficial for staff, visitors and the greater community.

ABOUT LEED

LEED is the foremost green building certification system for the design, construction and operation of green buildings. Over 100,000 projects are currently participating in the LEED rating systems, comprising over 8 billion square feet of construction space in all 50 states and 114 countries. By using less energy, LEED-certified buildings reduce greenhouse gas emissions, contribute to a healthier environment, and save money for families, businesses and taxpayers. For more information, visit www.usgbc.org.

CASE STUDY
MEAD & HUNT OFFICE
MIDDLETOWN, WISCONSIN

Project Summary
- Size: 69,000 SF
- Building Description: three story, tilt up construction
- Occupancy Types: Business
- Completed: July 2014
- LEED Certification: Pursuing Silver

Project Team
- Owner: Livesey Companies
- Architect: KEE Architects
- Interior Design: KEE Architects, Mead & Hunt, Inc.
- Civil Engineering: Mead & Hunt, Inc.
- General Contractor: Newcomb Construction Company
- LEED Commissioning: Mead & Hunt, Inc.
EFFICIENCY AND SUSTAINABILITY STRATEGIES

Design Process
- Project goals for sustainability and energy usage were set prior to beginning design.
- Energy modeling during the design process simulated the building’s energy consumption, prompting modifications that will reduce the building’s energy usage over time.

Sustainable Site
- The building location in the Madison metro area allows Mead & Hunt staff to use pollution-reducing transportation alternatives to cars, including public buses and bike trails.
- Site work near the building and parking lot restored habitat, maximized open space and preserved stormwater quality.

Water Efficiency
- Efficient plumbing fixtures reduce water demand by 30 percent [WEc3] compared to a traditional building.
- Native and adapted plant species used in the landscape do not require potable water for irrigation.

Energy Efficiency
- Building standards ensured that the building is well-insulated and that efficient lighting and mechanical systems were installed, reducing demand for power, heating and cooling.
- The building’s ongoing energy demand is expected to be 22 percent [EAc1] less than a similar traditional building.
- The performance of the building systems will be monitored and commissioned during occupancy.
- Refrigerants used in the building’s HVAC systems are not CFC-based.
- 35 percent [EAc6] of the power needs will be met by purchasing renewable energy from a local energy provider.
Materials and Resources

- 94.88 percent [MRc2] of construction waste was recycled or salvaged during construction, diverting it from local landfills.
- The exterior walls were poured on site, shortening construction transport distances.
- Casting beds used to make wall panels were crushed on site and used for a base course.
- More than 30 percent of the materials used in the building contain recycled content.
- Several building materials such as drywall, carpet tiles, acoustical ceiling tiles and structural steel contain recycled content, reducing the need for using natural resources.

Indoor Environmental Quality

- The quality of the air inside the building was preserved during the construction process.
- Building mechanical systems provide more fresh air than a baseline building, maintaining a healthy indoor environment over time.
- Finishes used in this building, such as paints and adhesives, emit few or no volatile organic compounds, contributing to the health of the building occupants.

Innovation

- The hydrologic cycle of the site was preserved by implementing a rainwater management program, capturing runoff and replicating the natural hydrology and water balance. [IDc1.3]
- Monitoring-based procedures were developed, ensuring the project will meet the owner requirements related to energy, water, environmental quality and durability over time.

Horizontal sunshades help reduce glare & solar heat gain on the south side of the building.

Native and adapted plants do not require site irrigation.

Cloud ceilings expose the mechanical system that provides occupants a healthy indoor environment.

Wood used to cast the board formed concrete in the lobby was re-purposed as an interior wall finish.