NEW LEED CERTIFIED PROJECT DETAILS

Project:
GMB Architecture + Engineering
Grand Rapids Collaborative Lab

Designing a new office space for your own architectural and engineering firm is a unique challenge. We wanted a place to focus our creative energy in a space that brings out the best in our firm, so that we can bring the best to our design. In the fall of 2011, we created “The Lab.” The Lab is a place where we retreat to collaborate together, explore new ideas and push boundaries. It is uniquely designed and laid out to reflect our firm’s creative skills. As we quickly jump from one space to another, the Lab enhances our creativity by allowing us to freely think. Our firm had a few clear design directives: Provide a range of choices in where and how to work; incorporate sustainability and environmental performance; build flexibility for outside community and client use; and foster increased knowledge sharing through collaboration. We designed the LEED Gold certified, 2,800 sq. ft. interior office space in an existing 5-story, early 80’s office building and created spaces that are open, flexible and light filled.

Certification Details: To gain LEED Gold (64 points) the following sustainable features were included.

1. Sustainable Sites
   a. The location gained 6 points plus a regional priority credit for its connection to community, featuring walking distance to banking, Calvin College, coffee shops and the Calvin College Bunker Interpretive Center.
   b. Additionally, the location is within walking distance of two “Ride the Rapid” bus routes, also 6 points plus a regional credit.

2. Energy Efficiency
   a. Lighting system features highly efficient design principles and fixtures that result in a 38% reduction in lighting power.
   b. Lighting design features daylight responsive controls for 100% of the occupied spaces within 15 feet of the windows, and in addition, occupancy sensors were installed on 98% of the connected lighting load.
   c. Capitalizing on the building boiler-cooling tower mechanical system, new, highly efficient water-source heat pumps were employed. The efficient heat pumps, in combination with the efficient lighting design, results in a 32% reduction in HVAC electrical load for the project space. The reduction exceeded the minimum requirement for HVAC energy reduction and resulted in 10 points. The heat pumps were fitted with high capture MERV 13 filters to enhance indoor environmental quality.
   d. Energy Star rated equipment and appliances were installed for 88% of the Energy Star qualified equipment.
   e. Green Power certificates that support renewable energy development were purchased for 100% of the estimated annual electrical consumption of the space.

3. Materials and Resources
a. 82% of the construction waste was diverted from landfill.

b. The project used building materials that were manufactured using 31% recycled material and purchased 32% of the materials within a 500-mile radius of the site. Materials included high recycle content drywall, flooring and ceiling systems.

c. A large portion of the flooring is resilient cork, a rapidly renewable material that also is easily cleaned, quiet and features low heat conduction, contributing to a thermally comfortable environment.

4. Indoor Environmental Quality
   a. The project featured low-emitting (low VOC) materials for adhesives and sealants, paints and coatings and flooring systems.

5. Innovation and Exemplary Performance
   a. The project was awarded innovation credits for use of low mercury lamps and environmentally friendly refrigerants, as well as exemplary performance in recycle content, green power and implementation of lighting controls.

Unique Features:

- Café features a backsplash wall made up of end cut recycled barn beams from a local farm
- Café countertop of recycled surface material composed of post-industrial scrap waste metal shavings
- Cork flooring
- A range of work spaces are available from a tall kitchen table with plenty of room to spread out, to an enclosed design lounge, the “egg”, featuring large-scale pivoting walls, lounge furniture and curved walls painted with a writable surface
- Writable and tackable wall surfaces line the core walls and team spaces so that one never has to hunt for a place to collaboratively sketch
- A tackable surface runs the full height and length of the perimeter wall

Contributing Contractors:

- Buist Electric, Inc.
- Creative Window Treatments
- Dykhouse Construction
- Godwin Plumbing Services
- Great Lakes Painting & Decorating, Inc.
- Heyboer & Bolt, Inc.
- Pleune Service Company
- Premier Granite & Stone, LLC
- S.A. Morman & Co.
- Syswerda Construction
- Van Wall Fire Protection, Inc.
- Weyhill Properties, LLC