

First Building in Michigan Certified under LEED-EB (Existing Building)

by James L. Newman

and it's GOLD!



LaSalle Bank Financial Center, Troy, MI

LaSalle Bank Financial Center, Troy, Michigan, winner of a TOBY Award in 2002 and 2005, recently became the first building in Michigan to achieve the coveted LEED-EB Gold Certification from the U.S. Green Building Council.

Prior to construction in 1987-88, the original owners, Standard Federal Bank, wanted a high-quality environment for the building occupants while minimizing energy and operational costs. At the time, a BOMA study had indicated that a building's HVAC system could improve employee productivity by more than 10% if it provided the proper environment.

LaSalle Bank's HVAC system was designed to accomplish this. It consisted of an ice storage system and centrifugal chillers designed to manufacture ice at night to reduce the daytime electric demand charges. Also included were a heat recovery chiller, humidifiers to maintain a minimum of 30% relative humidity in the occupied spaces in the wintertime, and dedicated outdoor air handling units to reduce the amount of moisture the indoor units would have to remove from the air. Many other unusual and energy-conserving features were also implemented.

In 1991, the building won a first-place award from ASHRAE for its minimal use of energy. At that time, 105,000 Btu/sq ft/year energy use in this type of building—a commercial office and data center—was considered extraordinary. Today, as a 20-year-old building designed far beyond the standards of that time, it uses more energy than a well-designed modern building of the same type because of new building standards, codes designed to minimize energy use, and new materials and types of construction.

ABN AMRO, the parent company of LaSalle Bank, is committed to sustainable building practices to reduce their impact on the environment. This commitment consists not only of reducing the amount of natural resources they consume and waste they produce, but also stimulates responsible procurement and encourages their suppliers to behave in a more sustainable way. Kevin Kmet, First Vice President of LaSalle Bank, and Penny Hewitt, Vice-President of Corporate Property Services of Jones Lang LaSalle (JLL) and a BOMA Detroit Board Member, have partnered together to further this commitment.

In 2005, the decision was made to seek a LEED-EB Certification for the building. The thought was that it would be a relatively easy undertaking because of the well-designed HVAC system, as well as all of the excellent operating and maintenance procedures that had been put into place by Bob Deacon, Chief Engineer of JLL, as well as Green purchasing and cleaning procedures implemented by JLL.

Newman Consulting Group/Greenworks Studio was hired in late 2005 to initiate the LEED-EB Certification and to help implement new policies and procedures to save energy. At that time, the final LEED-EB Guidelines were still in the pilot stage, and there were only a few LEED-EB Certified buildings in the country.

Early on, it became apparent that a Silver Certification level was attainable. What was not apparent, however, was just how much more work it would take to attain the Gold level. Much of the emphasis in LEED for Existing Buildings is on purchasing policies and operating and maintenance procedures, but the prerequisites for energy consumption, and the requirements for proper environmental control and minimal energy use must be met.

The decision was made to replace the 20-year-old roof with a "green" roof—a considerable additional capital expenditure. Not only would this improve the view for the majority of the employees in the pyramid-shaped building, it would also reduce the heat gain from the roof in the summertime and the heat loss in the wintertime. Other advantages are reduced stress on the storm water system, and a considerably longer roof life. It also contributed to additional points towards the Certification.

Some other decisions, such as reducing energy use, tighter procurement policies, and changes to and additional operating and maintenance procedures, were debated relative to the cost/benefit ratio, as well as the potential impact on the employees. These types of decisions continue to communicate the vision of ABN AMRO and JLL.

The LaSalle Bank Financial Center is currently in the process of creating an area within the building to showcase education and outreach to their employees, suppliers, and the community to highlight the LEED-EB Gold Rating and to show what can be done to preserve and sustain the environment in today's buildings, and buildings of the future.



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