LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN

AQUINAS COLLEGE
Our buildings have a major effect on human health and in achieving our goal to create a healthy environment. The college is committed to pursuing LEED certification for all new construction projects and major renovations, ensuring that environmentally considerate buildings and projects are undertaken on campus. Many of our facilities at Aquinas are LEED certified by the U.S. Green Building Council and achieve excellence in operational performance.

But we aren’t stopping at LEED. We approach every effort at Aquinas with the goal of contributing positively to our community and the planet. Not only does sustainability guide our journey at Aquinas, but we also take inspiration from “Economicology.” The term was coined by the visionary Peter Wege to define the balance needed between the economy and ecology. The word summarizes Mr. Wege’s advocacy for educating the public on the reality that a prosperous economy depends on maintaining a healthy environment.
Aquinas College’s first LEED certified building offers a wide range of environments from quiet to collaborative and is home to many learning resources and services.

**Green Building Features:**

- Natural lighting and motion sensors reduce the use of artificial lighting and operating costs.
- Low-flow faucets and toilets in the Grace Hauenstein Library require 32% less water than a standard facility of similar size.
- All adhesives, sealants, paints, carpet, padding, and particleboard used in the library are low VOC, compounds suspected to cause cancer in animals and humans.
- Storm water runoff from the building and surrounding area is diverted to an adjacent pond where it is used to irrigate nearby landscaping.
- A 12kW capacity photovoltaic array, installed in 1999, generates about 14,400 kWh of electricity per year, saving nearly 12 tons of CO2, 122 lbs of SO2, and 63 lbs of NOx.
- Kalamazoo College donated stack shelving and end panels for the library, which decreased furnishing cost by 30% and eliminated waste.
The second floor of the Academic Building includes a friendly common area for students and staff to relax, interact, or study in-between classes.

**Green Building Features:**

- Daylight sensors turn off the lights when adequate natural light for the space is present.
- Lighting and HVAC systems were designed to provide a high level of system control for individual occupants and rooms.
- Restrooms are fitted with low-flow toilets, sensor-operated faucets, and ultra-low-flow urinals to reduce water usage by 30%.
- Parking around the building was kept to a minimum to encourage patrons to use alternative forms of transportation.
Green Building Features:

- Storm water runoff is routed through infiltration basins—shallow impoundments designed for stormwater to infiltrate the ground—helping recharge groundwater as well as removing pollutants from the water.
- Low-VOC paints and carpets were used where possible to help maintain indoor air quality.
- Construction materials were carefully selected for their ability to be recycled. 95% of construction waste could be recycled.
- Electrical appliances within the building were carefully selected to maximize energy efficiency.
- 47% of materials were obtained within a 500 mile radius of campus, and 21% have either post-consumer or post-industrial recycled content.
- Aligned with Aquinas College’s Zero Waste effort, waste stations consisting of recycling, composting, and trash are located in common areas of the building with appropriate signage. A special recycling tower for unique waste can be found in the building’s lobby.

The St. Martin de Porres Hall complex houses the college’s upperclassmen. The building overlooks a natural landscape and is within easy walking distance of all campus facilities.
Green Building Features:

- Over 95% of all construction waste was diverted from local landfills through recycling and reuse.
- The building systems were designed to exceed energy savings of comparable buildings by 46%.
- Cooling and refrigeration systems support early compliance with the Montreal Protocol.
- Indoor air quality is protected through the selection of low VOC stains, wood sealers, and paints.
- Forest Stewardship Certified wood was also used in the building’s construction.

Aquinas’ Fieldhouse was fully renovated to feature basketball and volleyball courts, a fitness center, classrooms and offices.
Green Building Features:

- Over 10% of all construction materials were obtained within 500 miles of Aquinas and over 35% of the materials used contain either post-consumer or post-industrial recycled content.
- To decrease potable water use, a drought tolerant plant mixture was installed in place of an irrigation system, and storm water runoff is treated to remove total suspended solids before being discharged into the adjacent stream.
- The building is not air conditioned. To reduce energy use, sidewall exhaust fans in conjunction with sidewall intake louvers are controlled through the building management system.

ALKSNIS ATHLETIC & RECREATION BUILDING
Certified LEED Silver (2015)
Built to accommodate the rising demand for on-campus housing, this residence hall was designed and constructed to replicate St. Martin de Porres Hall.

**Green Building Features:**

- A tight building envelope is achieved with fiberglass windows and extensive insulation in the attic.

- LED lighting is installed in multiple locations including the parking lot, sidewalks, stairwells, and entrances, and is controlled via the building management system.

- Occupancy sensors detect when residents are in the halls and common areas which keeps the lights switched off unless necessary.

- Most adhesives, sealants, paints, carpet, padding, and particleboard used are low VOC.

Learn more:
aquinas.edu/sustainability-initiative