

# Albion College

## New Science Complex

Albion, Michigan



### Client Challenge

Continuing on the team with MacLachlan Cornelius & Filoni Architects, Inc., TowerPinkster provided engineering services for the Albion College Science Complex. This addition and renovation project presented our mechanical and electrical engineers with numerous complex challenges, such as designing new systems and equipment to fit into the existing buildings. Floor to floor height was 14 feet with no ceiling.

### TowerPinkster Solution

This project included a new 55,000 SF facility and the remodeling of three existing buildings on the Albion campus. In order to ensure that the plan worked, our engineers met weekly with the contractors to coordinate on-site.

The air pressurization requirements for chemistry and biology labs and research space in such a facility are very complex and create special demands on the DDC (Direct Digital Control) system. Due to the large outdoor air requirements for a lab building, the heat recovery system designed by our engineers cut the building's energy requirements nearly in half.

The finished building uses 30% less energy overall. A few of the innovative design elements include: Photovoltaic solar panels, a windmill, a rainwater recovery system used to irrigate the greenhouse, cork flooring, energy-efficient lighting and an acid-waste plumbing system.

**Size:** 167,000 SF

**Firm Role:** Mechanical and Electrical Engineering Services

**LEED Status:** Silver

