



# Ferris State University – Science Complex



## Location

Big Rapids, MI

## Owner

Ferris State University  
Dan Sovinski, PE CEM,  
Plant Engineer

## The R.L.D. Project Team

Jim Raley  
Dave Shugars  
Nathan Oliver



“We have estimated an annual savings of \$224,000 per year for this project and the Tower Tech Tower was instrumental as being a component of this savings. More importantly, it was a component for reliable operations which is critical to our classroom and lab environment.”

- Dan Sovinski, PE CEM, Plant Engineer, Ferris State University

## Challenge

In 2010, Ferris State University made the decision to renovate the Science Complex Building and as part of the design, changed the cooling system from a roof top DX reciprocating Air Conditioning system to a new chilled water plan configuration. Prior to the retrofit, there were weekly calls of complaints by the occupants resulting in constant, expensive service, but no solution to the problem. This project included improvements to the ventilation monitoring and controls, chilled water delivery, chiller modulation and cooling tower operation. Most important was the result in air flow control and system reliability.

## Why R.L. Deppmann?

The Deppmann team is all about providing solutions that result in better control, reliability and results. We began discussing the unique features, operation and reliability of the Tower Tech Cooling Tower prior to design. The Tower Tech cooling tower promotes a design that results in reducing drift, water make up, water treatment and energy consumption. This product design reduces maintenance as well as reducing the overall cost of ownership. So many incredible features in one product!

## Solution

After 8 years of operation, we asked the owner about the tower and here is what they reported:

- The Tower Tech Tower has reduced the amount of water lost to drift by 90% compared to an induced draft tower of similar size. This has resulted in a savings of over 100,000 gallons of water per year to drift alone.
- Drift plumes have been virtually eliminated. This is valuable as the tower sits next to the telescope conservatory providing better viewing results
- The Tower Tech tower is quiet and also looks nice. In a high density area, the importance of this is often underestimated.
- The Tower Tech design has reduced algae growth and this owner has noticed the reduction of sand and dirt in the tower. What a great testimony for savings in maintenance.
- Overall, there is a reduction in chemical treatment since the amount of make-up water was drastically reduced.