



University of Michigan Taubman A. Alfred Health Sciences Library

Objective: Identify and resolve significant mechanical and control inefficiencies in Taubman Library’s dedicated outside air units, collaborating with university stakeholders to deploy an optimized control sequence and restore enthalpy wheel functionality.

Solutions

- **Retrocommissioning:** Identified several deficiencies in the large Dedicated Outside Air Units (DOAS) through the retro-commissioning (Tune-Up) program
- **Optimized control sequence:** Deployed a holistic rewrite of the control program over several site visits.
- **Enthalpy Wheel Testing:** Hired Thermalnetics to do additional testing and maintenance on the enthalpy wheels

Results

- 23% reduction in Weather Normalized Source Energy Use Intensity (EUI) from 2024 to 2025
- Reduced about 100 – 125 metric tons of CO2 per year
- Improved thermal comfort
- Awarded in the 2025 Michigan Battle of the Buildings competition

Financials

- \$30,000 annual cost savings
- < 1 year payback

Project Highlights

- 143,973 square feet
- Collaboration across 5 departments
- Retro-commissioning (Tune-Up) program upgrades
- Control optimization
- Limited occupant impact

Project Partners

- Thermalnetics (enthalpy wheel expertise)
- University of Michigan: Office of Campus Sustainability & Innovation (OCSI), Health Science Region Maintenance (HSR), Central Shops (BAS / DDC), Architecture, Engineering & Construction (AEC), U-M Medical School (MS)



“The University of Michigan is advancing its campus energy transition, with a goal of achieving net-zero emissions across all campuses, by 2040. Sustainability at U-M remains strong, and efforts like the energy management work at Taubman Library show how the campus community continues to move progress forward.”

