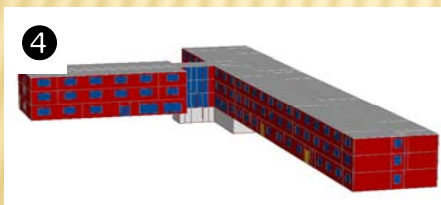


# COLLEGE AT BROCKPORT

## Thompson Hall Rehabilitation

Pathfinder provided full-service design for the rehabilitation of this 45,000 sq. ft., three-story dormitory – built in 1957 – creating a modern place for students to live and learn. The building houses the College's Residential Life Offices. Renovations were made to all bedrooms, bathrooms, offices and corridors – from architectural finishes to all building systems. An elevator addition and new study rooms and lounges were added to enhance dormitory life.

- 1 Improvements to the building envelope – including the replacement of all windows, exterior doors, and the installation of a high-albedo roofing system – greatly increased energy efficiency.
- 2 A rainwater harvesting system is capable of storing 2,500 gallons and provides gray water for flushing water closets and urinals. A dedicated piping system serves the building and in the event stored water is not available for non-potable use, a change-over valve with RPZ backflow preventer allows public water to be used. Rainwater or public water use is metered via the energy management system, allowing the College to monitor the use of rainwater versus public water.
- 3 The existing finned tube heating system was replaced with a new two-pipe "valance" system (upper right of photo), piping distribution, pumps, speed drives and controls in the lobby and all bedrooms. The system provides passive-convective heating/cooling without using fan energy, and provides a cost-effective way of heating and air conditioning spaces. Each room is equipped with its own thermostat and coil control valve. High-efficiency lighting, along with daylighting controls, also provide reduced energy consumption.



- 4 Energy modeling was provided as part of the requirements for Executive Order 111 and LEED® v 2.2 Silver Certification, ensuring that the design meets or exceeds energy efficiency requirements. The project achieved six Energy & Atmosphere points for LEED v2.2 and operates 35% better than ASHRAE 90.1 2004 and New York State Energy Code.
- 5 The new boiler plant features a modular high efficiency system, using three 1000 MBH condensing style boilers, providing heat and domestic hot water. The boilers are condensing high-efficiency units with 20:1 turn down, offering the maximum efficiency for seasonal loads when full load heating is not required. A seasonal changeover pipe loop allows Summer operation of chilled water in the valance system, while maintaining hot water flow to the domestic water heaters.
- 6 A key goal of the project was to update data, telecommunications, and plumbing services. These were concealed in a raceway (upper right of photo) along corridors and neatly integrated into decorative crown molding.

**ACEC New York**  
Association of Consulting Engineers of New York  
**GOLD AWARD**  
ENGINEERING EXCELLENCE

**PATHFINDER**  
ENGINEERS & ARCHITECTS LLP