

# Steuben ARC Office Building

Bath, NY, Steuben County

## Background

Steuben County constructed a 26,941 square foot two story office building for the ARC of Steuben County containing open and closed office areas, space for dining, fitness training, conference rooms, training rooms and a basement for document storage. The Steuben Arc Office Building was also awarded LEED Silver certification.

Erdman Anthony Associates (EAA) was retained by NYSERDA to evaluate electric energy efficiency opportunities for the major renovation and addition under the New York Energy Smart New Construction Program.

## Recommendations

EAA identified cost-effective improvements to the building and its systems that will reduce its energy consumption, decrease demands on the utility's distribution system, and increase occupant comfort.

Among the energy efficiency improvements implemented in the building were:

- Daylighting of Perimeter Areas, with Photo sensor Control of Light Fixtures
- High-Efficiency Lighting Design Incorporating Occupancy Sensor Control
- High Performance Building Envelope, Including Walls with Added Insulation, High-Efficient Windows with a High Shading Coefficient and a Low U-Value, Roofs with Reflective Surfaces and Increased Insulation
- High-Efficiency Water Source Heat Pump System
- Variable Speed Heat Pump Water Loop Pumps
- Energy Recovery on the Central Building Ventilation Unit

## Incentives and Results

NYSERDA's incentive of \$66,912 helped Steuben County defray a portion of the implementation cost to install the efficiency improvements. In total, Steuben County's investment could result in:

- Annual Energy savings of more than 277,524 kWh
- Peak demand savings of 49 kW in the summer
- Annual Energy Cost savings of almost \$34,599

The Steuben ARC Office Building is 35% above the energy code that was used for this project.

