

## **Commissioning - Public Library Clifton Park-Halfmoon Public Library Clifton Park, New York**

### **Program**

NYSERDA New Construction Program

### **Scope of Services**

- Project Scoping
- Design Assistance
- DOE-2.1E Whole Building Modeling
- Green Building Services
- EEM/Sustainable Design Coordination
- Cost Benefit Analysis
- Incentive Calculation & Reporting
- LEED Optimize Energy Performance
- LEED Fundamental Commissioning
- LEED Additional Commissioning

### **Level of Involvement**

NCP Technical Assistance Provider  
LEED Commissioning Authority

### **Facility Size**

55,000 sq. ft.

### **Facility Type**

Library

### **Project Results**

Achieved LEED-NC v2.1 Certification

The Towns of Clifton Park and Halfmoon constructed a 55,000 square-foot, two-story public library on a 10.9-acre site. The new public library houses a collection of literature, literary and media resources, and a local history collection. The library provides computer and internet access and resources for the residents, students and small businesses located within these townships.

The Library Board of Trustees wanted to incorporate additional energy efficiency into the design and were also interested in attaining a United States Green Building Council (USGBC) LEED®-NC certification. During the design process, EME led a LEED Charrette that identified 29 "potential" points, including Fundamental and Additional Commissioning.

Heating, ventilation and air-conditioning (HVAC) consists of packaged variable air volume (VAV)



**Clifton Park-Halfmoon  
Public Library**

rooftop units with inlet guide vane control. Lighting was high efficiency fluorescent and designed in accordance with ASHRAE Standard 90.1-2001 space-by-space method.

The commissioning process encompassed the entire lifespan of the project, from the development of the Owner's Program and Basis of Design, through the traditional design and construction phases, to acceptance phase at the end of construction. The primary goal of commissioning is a fully functional, fine-tuned building with complete documentation and an adequately trained operating and maintenance staff. Thorough system commissioning ensures that building systems perform in conformity with the design intent, and furthermore, provides the operations and maintenance staff with the information, documentation and training necessary to keep the system operating at peak efficiency and effectiveness for the life of the system.

Commissioning involved activities such as:

- Verifying that the facility has proper project documentation (e.g., "as-built" drawings, written sequence of operation for equipment, maintenance manuals, etc.),
- Personnel have been properly trained on the equipment, equipment tests have been performed (e.g., start-up reports, testing and balancing reports),
- Functional testing performed by the commissioning agent to ensure the equipment is performing according to design.