

# Wesleyan University Allbritton Center

Middletown, Connecticut

**Owner**

Wesleyan University

**Architects**

Noyes Vogt Architects

**Completion Date**

2010

**Construction Cost**

\$7.2 Million

**Total Area**

28,000 sf

**LEED Certification Level**

Gold

**Services Provided**

LEED Consulting

Energy Modeling



Fore Solutions, acquired by Thornton Tomasetti in 2012, provided LEED consulting services and energy modeling for the Wesleyan University Allbritton Center. The historic building once served as the campus student center and has now been transformed into classrooms and offices to support the Allbritton Center for the Study of Public Life.

The center uses an innovative active-chilled beam system for heating, cooling and ventilation, which consists of a hydronic radiant ceiling panel that is heated and cooled, and connects to the fresh air distribution system. This system is often avoided by MEP engineers because of concerns about condensation when windows are open and humidity levels are high. The project team worked closely with MEP engineers to analyze the energy efficiency of the system and included HVAC-contact sensors on the windows to avoid any condensation.

The building maintains most of its original structure and envelope, including triple-pane windows that have once again been made operable. Giving the building occupants access to functional windows allows for greater thermal control, increased energy efficiency in the shoulder seasons by taking advantage of natural ventilation and helps create a stronger connection to the outdoors.

Energy modeling resulted in savings from the active-chilled beams and significant savings also were recognized from the installation of a new combined heat and power plant at the central plant. The building uses low-flush toilets resulting in a 46 percent water reduction; 11 percent of the total building materials used were manufactured using recycled materials; and 84 percent of wood-based materials are from forests certified by the FSC.