

# Smith Memorial Hall #0060



**Building Gross Sq.Ft.:** 76,307

**Retrocommissioning** Jul 2014—Sep 2014

**Team Visit Period:**

**Principal Building Use:** Auditorium, Classroom, Practice rooms

## Building & Occupant Overview

Smith Memorial Hall was originally built in 1917 and is approximately 76,307 square feet. It houses its recital hall, classrooms, lecture halls, offices, practice rooms, and its renowned memorial room. A lecture hall was added to the basement in 1953. There are 4 air handling units. One of the large basement air handling units is a constant volume unit dedicated to the auditorium, balcony area and the basement lecture hall. The other large air handling unit in the basement supplies classrooms and toilets on all floors. There are two other air handling units located in separate third floor mechanical rooms. The two large basement air handling units (serving classrooms and the recital hall) were replaced in 2008.

The facility's total metered energy during FY14 was 19,774 MMBTU.

## Retrocommissioning Specifics & Results

Air-flow dampers were installed in the constant volume system serving the main auditorium and lecture hall to reduce air flow based on zone occupancy. Return CO2 sensors were added. The sequence of operation was modified for more efficient operation. The pneumatic lines and control valves was inspected for proper operation and fixed. DDC controls were added to the heat exchangers. There was issue with condensation issues all over the mechanical room. The steam condensate system operation was modified to control the condensation issues.



- Reduced air-flow to auditorium and Lecture hall based on occupancy
- DDC controls added to heat exchangers
- Resolved condensation issues in the mechanical room
- Sequence of operation modified for more efficient operation