

Law Building #0156

Building Gross Sq.Ft.: 189,730

Retrocommissioning Nov 2014 —Mar 2015

Team Visit Period:

Principal Building Use: Offices, Classrooms, and Conference Rooms



Building and Occupant Overview

The law building was originally constructed in 1956 and is approximately 180,730 sq.ft. There are two distinct sections to the Law Building. One is dedicated to educational pursuits, the other to research. In the educational section, there are classrooms, and auditorium, and a student lounge. In the area reserved for research, conference rooms, seminar rooms, offices and the law library can be found. The building is connected to the central campus chilled water loop and also has 4 on-site chillers. The building is also connected to campus steam. There are 17 significant air handling units in the building. Many of these units are VAV or multi-zone systems. There was a recent controls upgrade including controls to the heat exchangers in the building.

Retrocommissioning Specifics & Results

The air handling units (AHUs) providing air conditioning were maintaining space conditions in offices and classrooms based on an assumed schedule without input from the people occupying the spaces. The primary energy conservation method was scheduling the AHUs off during tighter non occupied hours based on actual utilization. Exhaust grilles in most spaces were drastically reduced (or removed completely) since the original design intent of spaces have changed over the years. For example, a former dark room had been converted to a kitchenette and nothing had been addressed with respect to the ventilation, so over 450 cfm was cut from this room alone. Missing insulation on the steam entrance was corrected on steam and condensate lines alike.



Project Highlights

- Installed occupancy sensors in 37 rooms
- Installed zone dampers to kill air-flow to rooms based on occupancy
- Designed and installed HX DDC controls
- Decommissioned AHU3
- Calibrated all thermostats and VAVs in entire building
- Added building pressurization control
- Modified ADA door operation to minimize air loss
- Reduced exhaust by decommissioning 3 large EF's
- Implemented tight schedules on all air handling units