

# Art and Design Building, #219

**Building Gross Sq.Ft.:** 72,112

**Campus Energy Rank FY11: 74**

**Retrocommissioned:** March 2013-July 2013

**Principal Building Use:** Offices, Classrooms, Labs, Studios

**Facility Contacts:** Chris Bonner



## Building & Occupant Overview

The Art and Design Building is an important building in giving instruction and experience to students in the School of Art and Design. The Art and Design Building houses several different labs and studios for use by students in the School of Art and Design. Labs include 3-D computer output equipment, woodcutting equipment, digital photographic printing, and chemical darkrooms.

There are four air handler units in the building. Building heat is provided by campus steam to two steam-to-hot-water heat exchangers. The heat exchangers supply hot water to a radiation system divided into a north zone and a south zone and to AHU heating coils.

The facility's total metered energy during FY10 was 16,462 MMBTU.

## Retrocommissioning Specifics & Results

The air handling units (AHUs) providing air conditioning were maintaining space conditions in offices and classrooms 24/7/365. The primary energy conservation method was scheduling the AHUs off during non occupied hours.

To improve comfort, all thermostats and temperature sensors were calibrated and / or replaced and the heating and cooling valves were inspected for proper operation. The AHUs were all inspected for proper operation and were calibrated and balanced which provides better space pressurization and energy savings while improving comfort.

Two new restroom exhaust fans were installed and are automated.

Sources of outside air infiltration such as abandoned exhaust ducts and grilles were eliminated to better control temperature and humidity in the building.

## Project Highlights

- Installed new DDC controls and new damper actuators.
- The user was given access to the Siemens web based graphics. They can now see how their mechanical systems are performing.
- We automated the temperature control system so that each floor will be controlled according to an occupancy schedule by sensing the space temperatures.
- Replaced restroom exhaust fans and programmed them to run when the building is occupied.
- Provided north and south zones for perimeter heat for better control.
- Improved building space pressurization to improve temperature and humidity control.
- The heating coils in the air handlings units were made operational.

## Facilities & Services