

The Wolf Law Building Boulder, CO



The Wolf Law Building at the University of Colorado received Gold Level LEED Certification in 2007 for energy efficiency and attention to the environment. Crestron provides facility-wide automation and remote helpdesk management throughout the five-story 184,000 square-foot building, including control of all AV presentation systems in all 26 rooms.



Building construction began in January 2005 and was completed on schedule in August 2006 for the start classes in September. The dedication ceremony was held on September 8th, 2006 with Supreme Court Justice Stephen Breyer presiding over the event in the Moot Court.

Wolf Law is a 46 million dollar cutting edge project in many ways. The architecture is stunning, and the University of Colorado recently received Gold Level LEED Certification for its energy efficiency and attention to the environment, and the project was largely funded with voluntarily donated student funds.

Another impressive aspect of this project is the expanded capabilities and functionality achieved through the collaborative value engineering process.

“Crestron provides facility-wide automation and remote help desk management throughout the building”

Having paid \$507,537 less than the high bid and \$81,492 less than the low bid this is highly unusual for a value engineering project. The original bid specification had Crestron control in the larger instructional areas only. The smaller classrooms

and instructional areas were specified to get the campus standard SP Control systems. There was no provision for help desk functionality or utilization reporting. There was also no requirement for tracking and

intuitive control system adaptability relative to mobile resources. Crestron’s hardware and software capabilities in conjunction with Digital Roads’ expertise in control system design and programming enabled the expanded functionality on a lesser budget. The solution was to build presentation systems, complete with Crestron control, onto mobile carts.

Crestron RoomView software allows administrators to quickly locate mobile resources wherever they are connected in the building. Expensive equipment components like videoconferencing have been leveraged for use in multiple rooms throughout the facility. A custom cart with LCD monitor and Tandberg MXP-6000 system with a second tripod camera allow users to connect to the audio and video systems that are built into the room for expanded group coverage. The advanced Crestron programming recognizes the addition of the cart to the room and automatically serves up the required control pages for the user. Flexibility for instructor usage today as well as provisions for future technology expansion represented the driving design focus for these systems.

Capabilities include everything from basic presentation systems to videoconferencing and digital recording in a variety of rooms such as classrooms, seminar rooms, colloquium, 250-seat Moot Court, teaching Court Room, and several interview rooms. These systems are used by law school faculty, students to record and archive depositions, community groups, 10th Circuit Court of Appeals and the Colorado Clean Air Council.



All systems are networked together to facilitate individual room control and facility-wide utilization reporting. All automated control and help desk management for the facility is provided via Crestron.



In the classrooms, seminar rooms and colloquium users interact with **Crestron TPS-2000L** touchpanels that are mounted in a Middle Atlantic SRSR slide out rack system. Two **TPS-3000LA** touchpanels are checked out by the faculty. These can be used interchangeably at the lecterns or tables in the all the classrooms. Once again advanced Crestron programming allows this technology to be leveraged between rooms, automatically sensing its location and providing the user with the correct room control based on this information.

The Moot and Teaching courts were designed to function independently as well as being a broadcast hub for the facility when overflow seating is required for larger events. A central control room facilitates advanced routing and equipment sharing between the two courts. Courtroom video and audio as well as presentation sources can be sent out to the rest of the building or anywhere in the world via the Tandberg videoconferencing equipment. These areas are used in many different ways instructionally. Therefore the technology had to be very intuitive, easy to use and configurable on the fly. The larger rooms all have multiple displays that allow instructors to present several different sources of media simultaneously, thereby enriching the learning experience.



Dealer/Installer: Mary Hood Digital Roads
Programmer: Joe Cantrell Crestron



Crestron is dedicated to the "green" initiative, providing the most energy efficient and environmentally safe systems on the planet.

As the global leader in advanced control and automation technology for commercial and residential solutions, Crestron develops products and automation solutions that are RoHS compliant and meet ASHRAE and LEED standards.

The American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE) is an international membership organization standards to provide minimum requirements for the energy-efficient design of buildings.

These standards set minimum requirements for the design and construction of new buildings, new portions of buildings, and new systems and equipment in existing buildings. ASHRAE standards apply to several systems and equipment used in conjunction with buildings including HVAC and lighting.

iLux is compliant with Standard 90.1-2004 – Energy Standard for Buildings, and specifically the Mandatory Provisions 9.4.1.1 (b) and (c) regarding the use of an occupant sensor that turns the lights within 30 minutes after leaving the space, and a control system that indicates that an area is unoccupied. iLux also complies with Provision 9.4.1.4, which pertains to the control of display, accent, task and demonstration lighting.

Crestron lighting systems may contribute to LEED certification depending upon system design and implementation.

The U.S. Green Building Council (USGBC) is the nation's foremost coalition of leaders from every sector of the building industry working to promote buildings that are environmentally responsible, profitable and healthy places to work. More than 6,000 member organizations work together to develop a variety of programs and services, including the LEED (Leadership in Energy and Environmental Design) Green Building Rating System®, which applies to new commercial construction, existing building operations and commercial interior projects.

Within the LEED rating systems, building products contribute to achieving LEED points following performance-based requirements. To meet these requirements, practitioners identify products that have specific attributes. iLux is compliant based on the integral motion sensor that provides substantial energy savings. In addition, by using an inexpensive third-party light sensor, iLux enables daylight harvesting with both lighting and drape control.

At Crestron, we believe that we have a responsibility to our community to be good corporate citizens, and to provide the best products and solutions for our dealers.

