SECTION 26 09 26
LIGHTING CONTROLS
Design Standard

PART 1 GENERAL

1.1 PURPOSE

This design standard has the purpose of creating a consistent application of lighting controls for the San Mateo County Community College District therefore achieving a standard of operation, reliability and quality throughout all renovation and new building projects.

PART 2 PRODUCTS

2.1 Lighting control systems include but are not limited to the following:

A. Wireless lighting control system.
B. Individual sensors designed to control individual lighting fixtures for maximum control. Sensors to include occupancy sensing and daylight sensing (photocell).
C. Central control panel that can be remotely operated by individual user from any PC.
D. Continuous Dimming Daylighting Controller: Provide dimming control systems capable of controlling 10VDC control input fluorescent dimming ballasts in three output zones via one photocell, with system adjustments capable of being made at control module instead of remote photocell. Similar control for LED controllers.
E. HID High/Low Ballast Switching: Provide HID bi-level HID controller for each HID luminaire in parking areas. Controller to contain both capacitor and control module, allowing HID ballast to be switched to 50 percent of full power output based on 24VDC control signal.
F. Lighting controls to be UL listed and carry factory warranty for minimum 5-year duration.

2.2 Design and specify all lighting controls to meet the following requirements based on Code requirements and industry standard of care:

A. Continuous Dimming Lighting Controller:
   1. Provide dimming control of interior lights in response to light level data, compatible with 0 to 10VDC dimming ballasts/controllers. Control system to be open loop, and will provide three output control zones consisting of a 0 to 10VDC signal compatible with fluorescent dimmable ballasts and LED controllers.

B. Installation
   1. Install sensors as directed by manufacturer's instructions. Complete connections to control circuits, photocells, control modules, power supply pack and low voltage wiring.
   2. Verify with manufacturer's representative that the sensors and photocells are laid out in compliance to manufacturer's published sensing distribution. Provide additional sensors for complete coverage of the space being served.
   3. Provide factory programming of sensors/fixtures. Manufacturer's representative to field adjust sensors physical operating characteristics as well as time delays.
   4. Provide factory representative to participate in commissioning. Make all adjustments required for correct operation of entire lighting system. Complete all commissioning and local authority paperwork required for occupancy.

5. Provide minimum four hours of training to district facility personnel in operation and maintenance of control system. Include software training to allow facility personnel to make field changes to the system.

2.3 APPROVED MANUFACTURERS

A. Enlighted
B. Lutron
C. Wattstopper

PART 3 EXECUTION

3.1 SUBSTITUTES ALLOWED?

Yes, if performance and quality equivalency can be evidenced.

3.2 ASSOCIATED DESIGN STANDARDS AND CONSTRUCTION SPECIFICATIONS

A. 26 50 00 – Lighting Design Standard

END OF SECTION