

LIGHTING CONTROLS

DESIGN GUIDELINES

1. Summary:
 - a. This section provides guidelines and standards for the control of lighting in typical interior and exterior spaces.
2. Design
 - a. Corridors: Shall have unswitched (Night Light) fixtures to meet code required illumination levels and connected to the emergency power panel where generator power is present. Utilize battery back-up where no generator. The remaining lights will be controlled by ceiling mounted ultrasonic sensors powered via power packs.
 - b. Restrooms: Shall be controlled via ultrasonic technology sensors powered via power packs.
 - c. Offices: Shall be controlled via dual-technology sensors with override switch installed at the room entrance. Small rooms may utilize wall-box type with integral on/off switch. Large rooms may require ceiling mounted sensors with override toggle switch and room entrance where wall-box coverage is insufficient.
 - d. Labs: Lighting control sensor technology shall be determined by the design team based on lab equipment. If occupancy sensors are utilized in labs, provide override switch at entrance.
 - e. Mechanical and Electrical Rooms: Shall be controlled via standard toggle switch. Refer to Wiring Device Design Standard.
 - f. Specialty Lab Spaces:
 - Microscope Rooms, Confocal, etc. may require dimming.
 - Animal Rooms may require time-of-day control of lighting. Project Manager shall provide specific requirements.
 - Exact control methods shall be determined by the design team with input from the end user/Project Manager.
 - g. Conference Rooms and Meeting Rooms: Typically, standard dimmers shall be utilized. Control zones shall be coordinated with the end user/Project Manager.
 - h. Under Cabinet Lights:
 - Preferably, a dedicated on/off switch shall be provided at the entrance of large labs to control all under cabinet lights within the room.
 - Provide under cabinet lights with integral control switch.
 - i. Exterior Lighting: Shall be connected to lighting contactor controlled via photocell. Lighting contactor shall be provided with toggle bypass switch for maintenance.
 - j. WUSM Project Manager shall be point of contact for coordinating specific lighting control requirements.

3. Related Sections
 - a. Wiring Devices
 - b. Interior Lighting
 - c. Identification of Electrical Systems

EQUIPMENT and PRODUCT REQUIREMENTS

1. Occupancy Sensors:
 - a. Approved Manufacturers:
 - Watt Stopper
 - Acuity Sensor Switch
 - b. Features:
 - All shall be provided with adjustable delay.
 - Dual-technology type shall be combination passive infrared (PIR) and ultrasonic.
2. Dimmer Switches
 - a. Approved Manufacturers:
 - Lutron Nova T or approved equal.
 - b. Features
 - Dimmer shall be compatible with the light fixture ballast or LED driver.
3. Programmable Time Switches
 - a. Approved Manufacturers:
 - Intermatic ST01
 - b. Features
 - Electronic Wall-box Timer.
 - Astronomic, 7-Day Programmable
4. Lighting Contactors
 - a. Approved Manufacturers:
 - ASCO 918 Series with two-wire control module (Preferred)
5. Refer to Wiring Device Design Standard for Coverplates, Mounting and Testing.

END OF SECTION