SECTION 16670D - LIGHTNING PROTECTION

A. MULTIPLE SWITCHING: The use of multiple switching shall be evaluated for each space and condition. Where possible, switching shall be circuited to effectively use artificial lighting from windows; to permit light reduction during part occupancy; and to permit reduced lighting for custodial activity.

B. REMOTE SWITCHING by means of a central control should be evaluated for new construction and for large renovation projects. This type control may be used in lieu of photocell and/or time clocks.

C. PARKING RAMP INTERIOR LIGHTING shall be circuited to permit lighting of dark interior areas during the day without lighting those areas which receive sufficient natural light. Automatic control of ramp lighting by photocell and/or time clocks is required.

D. ALL EXTERIOR AREA AND SECURITY LIGHTING shall be powered from one location in the building, and controlled from the campus lighting circuit or local master photocontrol, with provisions for manual override. Time clock control shall not be used on security lighting. Architectural lighting, when permitted, and area lights may be controlled by either photocontrol or time clock.

E. EXIT LIGHTS: Exit signs shall incorporate light emitting diodes for the source of illumination in the color specified (red). The LEDs shall have a life expectancy of not less than 80 years. Power consumption for the entire exit sign shall not exceed 7 watts (single face) 8 watts (double face). The unit shall be capable of accepting 120/277 volt input.

F. PARKING GARAGES: A grounding and lighting protection system with a Master Label shall be installed on the roof of parking garages. System shall be complete with ground conductors, ground rods, and supporting members.

A. GENERAL REQUIREMENTS: Each building shall be considered individually to determine the necessity for lightning protection. If it is deemed necessary to provide lightning protection, design and specify an Underwriter’s Laboratory Master Label System. If it is decided that lightning protection is not necessary, this decision should be made a matter of record. A listing of the people consulted shall be included in the conference memos.

B. GROUNDING SYSTEM REQUIREMENT: Steel frame buildings shall be grounded through a low resistance ground system whether or not a lightning protection system is installed. The resistant ground system shall be less than five ohms in measurement.

END