

16530S01 - SITE LIGHTING

1. SITE, STREET, AREA, WALKWAY, ACCENT AND OTHER OUTDOOR LIGHTING

1. Street lighting shall be High Pressure Sodium. Control shall be by photocell.
 1. Fixtures: Use black shoebox style fixtures manufactured by Holophane (Holophane Mirrostar, Somerset) or equivalent. Substitutions should have equivalent photometrics and a tempered glass lens. Poles will be a minimum of 30 foot and black aluminum.

Exception: Metal Halide may be used instead of High Pressure Sodium per the discretion of the owner.

2. Parking lot lighting shall be High Pressure Sodium. Lot lighting circuits shall be on a contactor. Contactor control listed in order of preference shall be by: 1.) photocell; 2.) battery backed LCD, astronomical time clock. Illumination to be 1.5 average maintained foot-candles minimum.
 1. Fixtures: Use black shoebox style fixtures manufactured by Holophane (Holophane Mirrostar, Somerset) or equivalent. Substitutions should have equivalent photometrics and a tempered glass lens. Poles will be a minimum of 30 foot and black aluminum.

Exception: Metal Halide may be used instead of High Pressure Sodium per the discretion of the owner.

3. Parking structure lighting is to be Metal Halide. Lighting at the parking structure entrance and for 75 feet past the entrance, shall be maintained at 6 foot-candles and will be on a separate circuit from the lot lighting. Lot lighting circuits shall be on a contactor. Contactor control listed in order of preference shall be by: 1.) the Facility Management System (FMS) using an algorithm for adjustment based on a schedule of exterior and interior light levels and on safety and efficiency; 2.) photocell; 3.) battery backed LCD, astronomical time clock. Illumination to be 6 average maintained foot-candles minimum.

1. Lighting Branch Circuits are to be arranged so that every other fixture is on a different circuit (i.e. if a breaker trips at the worst only every other light goes out). Branch circuits should be arranged that lighting levels can be staged at 25%, 50%, 75% and 100% in an area to provide maximum energy efficiency. The inner core should be controllable separate from the outer perimeter and east separate from west so that during daylight hours the light levels in the different areas may be on or off depending on the need and providing maximum energy efficiency.
2. Fixtures: Use fixtures manufactured by Holophane (Holophane Bantam 2000 Prismatic), KIM (KIM PGL Omni-System), or equal.

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4. Grounds and walkway lighting is to be Metal Halide. Grounds and walkway lighting circuits shall be on a contractor. Contactor control listed in order of preference shall be by: 1.) Photocell; 2.) Battery backed LCD, astronomical time clock.
Illumination to be 1.5 average maintained foot-candles minimum.
 1. Fixtures for Grounds and Walkway Lighting – The standard fixtures to use are based on the zone/area to be lit.
 1. South Campus area* - Use black shoebox style fixtures manufactured by KIM (Archetype), Hubbell (Hubbell RCS Series), Holophane (Holophane Mirrostar, Somerset), or equivalent. Substitutions should have equivalent photometrics and a tempered glass lens. Poles will be (16 to 20) foot black aluminum.
*South campus area is defined as the area South of Woodland Ave., Hilltop Ave. and University Drive to Huguelet Ave over to Rose Street. The Dorm Complex, Haggin Hall, Med Center, Ag Buildings and all parcels south of these buildings are included in this area.
 2. Central Campus area and other campus areas - Use black Holophane RSL 350 series with Charleston CH14F4 Black aluminum fluted pole.

Exception: High Pressure Sodium may be used instead of Metal Halide per the discretion of the owner.

5. Building exterior lighting shall be Metal Halide. Building exterior lighting circuits shall be on a contractor. Contactor control listed in order of preference shall be by: 1.) photocell 2.) battery backed LCD, astronomical time clock.
Illumination to be 1.5 average maintained foot-candles minimum.

Exception: High Pressure Sodium may be used instead of Metal Halide per the discretion of the owner.

6. Building exterior exit lighting is to be Quartz re-strike and shall be controlled by a photocell. Equip with non-glare diffuser. Building exterior exit lighting is to be powered from the emergency generator. If the building does not have emergency generator power, then use a battery pack inverter.
7. Building exterior accent lighting to be High Pressure Sodium. Accent lighting circuits shall be on a contractor. Contactor control listed in order of preference shall be by: 1.) the Facility Management System (FMS); 2.) battery backed LCD, astronomical time clock; 3.) photocell. Equip with non-glare diffuser.

Exception: Metal Halide may be used instead of High Pressure Sodium per the discretion of the owner.

2. BASKETBALL COURTS, TENNIS COURTS

Refer to standard 16540S01 for this and other similar lighting.

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3. OUTDOOR/SITE SPECIALTY LIGHTING

Review with owner in design phase of project and custom design as required.

4. GENERAL REQUIREMENTS OF ALL LIGHTING

1. No Mercury Vapor lighting is to be added on the UK Campus.
2. No Quartz area or accent lighting is to be added on the UK Campus.
3. All ballast to be low noise type, sound rated "Class A" UL Listed "Class P".
4. All ballast to be electronic type, power factor greater than .98, THD less than 10%, 3rd harmonic distortion less than 6%, transient protected per ANSI C62.41, Cat A, EMI must comply with FCC Part 18, Subpart C.
5. All louvers are to be metal unless the owner agrees in writing to accept plastic.
6. Unless specified otherwise, lighting is to be industrial quality.
7. All lighting is to be installed in accordance with UK Standards 16000 - 16999.
8. All lighting on emergency generator circuits will be fluorescent or HID with Quartz restrike.
9. At minimum, all lighting provided to be "Energy Saving" as defined by the 2005 National Electric Code.
10. Do not provide radio active lighting of any kind on University projects.
11. Install a 120 volt receptacle on an emergency power circuit at floor level near each exit that has an exit sign.
12. Lens to be tempered Glass, no polycarbonate, acrylic or other plastics.
13. Bollard lighting is not to be used as area, grounds, street, parking or walkway lighting. Bollard lighting may only be used with written exception by UK representative and then only as accent lighting. Other fixtures in the area must be used and must be mounted a minimum of fourteen feet high and provide light levels as specified in this section, independent of the bollard light contribution.
14. Low mounted wall floods or step lights will be considered accent lighting only. Other fixtures in the area must be used and must provide light levels as specified in this section above the wall floods or step lights.
15. No direct buried posts. Lighting shall be set on concrete pad with bolts.
16. All lighting poles less than 41 feet shall be aluminum.