

Product Recommendation For Care and Maintenance

Maintenance and Cleaning Schedule

All electrical devices, such as the switches, sockets, charging ports and outlets, should be kept clean and clear of any debris. Cleaning should also be performed whenever dirt or contaminants are observed during regular use. Periodic inspections should also be performed to check for damage that may affect safe operation of the fixture. Product lifetime will be extended by following a routine cleaning and maintenance program that includes timely replacement of bulbs nearing the end of their rated life, the removal of dirt and grime, and maintaining the integrity of components.

Cleaning Devices

To remove simple dust from the device, it is recommend using a clean, dry, lint free cloth for removing these particles. For cleaning the areas of the device that have more physical interaction, use a light mixture of warm water and dish detergent. The mixture should have approximately 1 teaspoon of detergent per gallon of water. With a damp nonabrasive cloth, preferably microfiber cloths, gently wipe and remove any dirt, films, or grime from the surface area of the device.

WARNING: Always disconnect any source of electricity to devices while using liquid products to clean and disinfect surfaces near outlets, switches, and sockets of any kind to avoid any harm.

Disinfecting Devices

Use a hydrogen peroxide based cleaner. Be careful to not apply liquid products directly to or around electronic devices. This may damage the product or cause harm.

Lightly spray the visible surface. Allow product to remain in contact with the surface for 5 minutes. Then, the solution may be removed with a damp cloth. **NOTE:** Do not use on wood surfaces, unless otherwise expressly stated acceptable.

NOTE: When using any chemical product on an Arkansas Lighting device, consult the product manufacturer's guidelines for use and instructions on acceptable and unacceptable surfaces. If unsure or concerned about a cleaning product, apply a small amount to an inconspicuous area of the device before applying to the whole or multiple devices.

Any chemical product may degrade the quality of the surface finish. Powder coated surfaces are the most durable, other painted or plated surfaces require extra care to avoid permanently damaging the finish over time.

For further information and instructions, consult the CDC and the EPA.

Cleaning Shades

Caution should always be taken when handling lamp shades to prevent damage and dirt accumulation. Solvent based cleaners should not be used.

A soft clean dry cloth can be used to gently dust off the lamp shade on a regular basis. A damp cloth can be used for light dirt. For heavier concentrations of dirt, a white HI-Polymer eraser can be used to lightly rub off the dirt.

The Value of Lighting System Maintenance

When employees and customers complain about poor lighting, facilities managers often attempt to resolve the problem by installing larger bulbs, adding new lamps, or reinstalling bulbs or fixtures previously removed to conserve energy. These attempts are high-cost, stopgap approaches. A more efficient, lower-cost solution to lighting problems is to implement a regular program to clean and maintain lighting equipment. If a proper cleaning and maintenance program is part of a property's overall operating plans, lighting designers can reduce the initial illumination requirements, leading to significant energy savings over the life of the facility.

The following information was taken from a website entitled KCPL Smart Lighting pages, <u>http://lighting.bki.com/</u>, with editing appropriate to the hospitality industry.

Lighting Degradation

Time wields a double-edged sword regarding lighting. The accumulation of dust, dirt, and other materials on bulbs, reflectors, and lenses can decrease the light leaving a lamp by 30% or more. This grime also reduces the amount of light reflected from walls, ceilings and other surfaces in the area. After a bulb reaches 80% of its rated life, it produces 15-35% less light-and the light output keeps dropping until the bulb burns out. Plastic covers, lenses, and reflectors used in some lamps may discolor over time, cutting light even further.

Merely adding new or larger bulbs does not solve the loss of illumination from dirty and discolored lamp components. Replacing bulbs without cleaning and maintaining the lamps is akin to buying a full tank of gas and driving off with the parking brake on—you are paying for energy that is wasted due to inefficiency. Dirt can also trap heat in a lamp, decreasing bulb efficiency and reducing the life of bulbs and ballasts.

Efficient Bulb Replacement

Spot Bulb Replacement--sending a worker to the storeroom to get a bulb, tools, etc., then to the site of a burned-out bulb to change it--is a time-consuming and expensive procedure. In addition, bulb flickering before burn-out can damage ballasts further reducing the life of the lamp components.

Group replacement--replacing all bulbs at once that have aged beyond their illuminating prime-provides numerous benefits that make the procedure highly cost-effective.

Programs that include cleaning fixtures, lenses, and reflective surfaces are an excellent approach to overall lighting system maintenance. Other benefits include:

- Higher average illumination
- The opportunity to order discount quantities of bulbs, ballasts, and replacement lamp components
- Using non -business hours to clean lamps, windows, walls, and ceilings, replace bulbs and repair fixtures without disrupting normal operations