

# Maintenance Guide

For wet location and natatorium applications

# DO NOT THROW AWAY THIS DOCUMENT MUST BE DELIVERED TO THE FACILITY MANAGER

#### IMPORTANT SAFETY INFORMATION

Qualified service personnel should perform servicing.

To avoid possible electrical shock, be sure that the power supply is turned off before installing or servicing the fixture.

Some fixtures may contain emergency circuits. Be sure to turn off emergency circuits and discharge emergency capacitor before servicing.

#### FACILITY MAINTENANCE INFORMATION

Congratulations on the arrival of your new luminaire/lighting system from SPI Lighting. To ensure that you get the most out of your new purchase, we want to provide additional information on the care and maintenance of your product. By following these instructions, you will improve the performance and life of your purchase, while promoting safety within your facility.

This document covers Wet Location and Natatorium environments. Depending on your specific environment, the product may have been designated for Wet Location (WL) or specified to use a Corrosion Resistant (CR) construction. Please refer to the corresponding section notes for your specific destination/environment.

**Note:** Wet Location (WL) is defined by Underwriter's Laboratories (UL) as a location in which water or other liquid may drip, splash, or flow on or against electrical equipment. **A WL listing does not protect against high-pressure sprays or immersion of the equipment.** 

A fixture supplied with "Corrosion Resistant Construction", or specified with a "CR" designation, is an SPI Lighting design standard that defines the materials and coatings used in the lighting fixture design as appropriate for moist or high humidity environments. When possible, aluminum and stainless steel are used for exposed surfaces while thermoset polyester paints are used to protect other surfaces. These corrosion resistant materials and finishes will minimize structural deterioration and unsightly "bleed" that can be caused by rust. Components such as lamp socket contacts, and some structural components, are not always available in alternative materials to steel. When these items are made out of ferrous material, they are tested for durability and evaluated for safety.

#### WET LOCATION APPLICATIONS

#### What you should do for Wet Location (WL) applications:

• Your lighting system should receive regular maintenance and cleaning. The frequency of this servicing depends on the operating parameters of your specific facility. At a minimum, regular maintenance and cleaning should be provided semi-annually. More regular servicing might be warranted depending on the facility and application. Excessive build-up of dirt, insects, moisture, or residue can be an indication of the need for more frequent servicing of the fixture(s).

#### The following recommendations should be used as a guide for routine maintenance the product should receive during its life:

- All glass, plastic, reflective surfaces, and painted surfaces should be cleaned with an ammonia and water solution or Windex® to remove any built-up residue. The use of other cleaning agents could damage the surface or integrity of fixture materials, and should be done with caution and at the risk of the facility service provider.
- **LED Cleaning / Maintenance:** Extreme care must be taken when attempting to clean exposed electrical components. All care should be taken to not touch the electronics directly. At no time should any liquids, solvents, or cleaners be used directly on LEDs or exposed electrical components, and avoid using towels or rags directly on the LEDs. A can of pressurized air can be used to lightly dust off electronics. Aim the compressed air at an angle almost parallel to the components surface and lightly blow dust and debris from the surface with a back and forth motion. If further cleaning is needed, a small delicate brush (horsehair) or a PCB vacuum cleaner can be used as well.
- If pressure sprayers are utilized to clean fixture(s), the spray should not exceed 5 PSI. Anything above this level could damage the fixture, degrade the integrity of the seals, or weaken the mounting condition of the fixture.
- Thoroughly inspect structural components for damage or excessive corrosion including: all fasteners (including contractor-supplied hardware), cables, cable grippers, stems, swivel balls, cotter pins, hanger plates, fixture structural surfaces, connection points, fastening substrates, and adjacent structures (i.e., piping, ducts, and trusses).
  - **Note:** You may need to remove lenses, canopies, and other service structures to complete this inspection.
- When a lamp fails, it is a good idea to group-relamp fixtures (replace the lamps in all of the fixtures) to maintain the designed luminance levels, You should also regularly inspect sockets and reflectors for indications of corrosion. Review lamp packaging or check with the lamp manufacturer for details on what the expected lamp life should be.
- Safety critical components, building structure, and load bearing fixture components should be inspected and tested for signs of any damage, corrosion, or cracking.

#### What you should NOT do for Wet Location (WL) applications:

- Do NOT service or clean fixtures when they are powered/switched on. Whenever possible, open circuit breakers for extra protection before initiating service or inspection procedures. Be aware that some fixtures contain special emergency circuits that may remain energized when the main fixture breaker has been tripped.
- If your fixtures are connected to an emergency circuit, it is recommended that you advise your certified electrician to turn off the emergency circuits and discharge the emergency capacitors.
- Do NOT leave covers unsealed after installation or servicing. Always inspect seals after servicing to ensure that they are making full contact.
- Do NOT disassemble the products' factory seals except for the purposes of servicing lamps and ballasts. If you have a situation that you believe requires breaking factory seals, contact SPI Lighting for specific instructions to ensure the integrity of your product is maintained.

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- Do NOT use high-pressure sprayers (delivery above 5 PSI) to clean the fixture(s). WL fixtures are designed to protect against water pressures of 5 PSI or less. Exceeding this will result in moisture getting inside of the fixture and can lead to premature failure.
- Do NOT use harsh chemicals to clean your fixtures. Gaskets, lenses, and even protective paint coatings can be damaged with the use of some chemical cleaners. SPI Lighting recommends using an ammonia and water solution or Windex® on non-electrical components.
- Do NOT wash the insides of the fixtures with anything more than a damp cloth. Dry all surfaces before resealing the fixture. Excessive moisture can collect in the working components, leading to premature failure.

### **NATATORIUM APPLICATIONS** -

#### Natatorium (pool) facility environments:

All recommendations made in this document, pertaining to Natatorium applications, are based on the lighting system operating in a natatorium environment that is maintained and operated within industry standards for ambient temperature, humidity levels, water temperature, ventilation, and treatment levels of the pool water.

If you are unsure of what these levels should be or how your natatorium environment is performing, it is extremely important that you contact an industry professional experienced in pool environments who can advise you in these areas. Facilities that do not adhere to these standards can accelerate the deterioration of metal surfaces and pose a serious safety hazard.

#### What you should do for Natatorium applications:

All guidelines listed under "Wet Location Applications" apply for natatorium applications as well. Follow all directions listed under "What you should do for Wet Location applications". These guidelines are especially important in chlorine environments.

#### Maintenance details include:

- Verify that the water chlorine levels are not excessive. Consult an industry professional for acceptable chlorine concentrations.
- Visually inspect the entire pool area for signs of corrosion or discoloration of metal parts, as they may be an indicator of a larger problem. **Note:** The absence of these visual indicators does not eliminate the possibility of degradation of metal components.
- Monitor pool condensation on the surfaces of light fixtures as that also may be an indicator of problems within the natatorium environment.
- If the above issues are observed within your facility, it is recommended that you consult with a professional experienced in the design and operation of natatorium environments. In addition, you should also perform a complete review of the lighting system, including the mounting details.

#### What you should NOT do for Natatorium lighting applications:

- Do NOT allow free chlorine levels in the facility to become excessive. Excessive chlorine levels in a pool or natatorium environment is a known factor in accelerating corrosion, even in stainless steel components. If your facility exceeds industry standards, the structural integrity of your fixture may be at greater risk. Contact a professional experienced in the design and operation of natatorium environments for recommendations on natatorium maintenance, ventilation/environmental controls, and appropriate operating levels.
- Do NOT allow for variations in pool area heating. This can contribute to an environment where chlorinated water can condensate on fixtures. This situation also puts your lighting fixtures at a greater risk for electrical and structural failure.

## **IMPORTANT INFORMATION**

By following these guidelines and instructions, your lighting system should perform at the appropriate level and last for many years. If you have any questions or concerns, please contact SPI Lighting for additional assistance. These instructions do not claim to cover all details and/or variations.

#### Failure to follow these maintenance guidelines may void your warranty and could result in serious injury.

**Note:** This document pertains to any fixture manufactured by SPI Lighting specified as a Wet Location luminaire or with a "WL" or "CR" designation. You can refer to SPI Lighting's website (www.spilighting.com) or contact SPI Lighting to help identify fixtures addressed within this document.

# **CONTACT INFORMATION**

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#### When contacting SPI Lighting, please be prepared with:

- 1. The name and location of your facility.
- 2. Your contact information (i.e., phone, fax, email, contact name).
- 3. The type/style of fixture that you are inquiring about, including lamp style and ballast location (remote or integral).
- 4. If available, the name of the SPI Lighting Sales Agent involved in the sale, the date the fixtures were purchased, and/or invoice information.