Installing In-Deck Light

1. In-deck light should be installed in a low-traffic area.
2. In-deck light can only be used when there is room under the deck to access the wire to make all of the connections.
3. Locate and mark the centerline of the deck where the in-deck light will be located.
4. Push the lighting fixture into the through hole until the flange touches the deck surface.
5. Guide the light’s wire into the through hole.
6. Wire connections can then be made under the deck’s surface.

Installing Stair Riser Light

1. Locate and mark the vertical and horizontal centerlines for Stair Riser Light location.
2. Drill a 3/8” hole to feed the wire through the RadianceRail Support Rail.
3. Feed the wire and mount the light to the RadianceRail Support Rail.
4. Set the deck post cap to the correct length - see Post and Rail Prep page.
5. The wire connections can then be made under the deck’s surface.

Installing Under-Rail Light

1. Choose the location for the Under-Rail Light so it is centered in the balusters.
2. Drill a 3/8” hole to feed the wire through the RadianceRail Support Rail.
3. Feed the wire and mount the light to the RadianceRail Support Rail (make sure the light is tilted in light comes with a 15˚ tilt which is usually facing the deck). Use the center alignment beam for a guide for the 2 screws. Use 8-3/4” screw size.
4. Wire connections can then be made under the deck’s surface.

Important Safety Precautions

WARNING – To reduce the risk of FIRE OR INJURY TO PERSONS:
1. Do not operate the luminaire fitting with a missing or damaged cover.
2. Keep lamp away from materials that may burn.
3. Do not operate the luminaire fitting with a missing or damaged cover.

Lighting Layout Overview

The AZEK and TimberTech system is designed for use with AZEK Railing and TimberTech Railing products.

Below is a sample lighting layout showing fixture placement and wiring routes. When laying out the wiring for your deck, keep the following in mind:

- Building codes vary by locale, please consult all applicable codes before beginning project.
- Modifications must be made to railing components during assembly to accommodate wiring and fixtures. Do not begin deck construction until you have read the lighting instructions.
- This unit’s secondary wiring shall be protected by routing in close proximity to the luminary or fitting, or next to a building structure such as a house or deck. The wiring shall not be buried except for a maximum 6 inches (15.2cm) in order to connect to the main secondary wire.
- A maximum of 40W can be applied to a single circuit, and no more than 90W should be applied to the transformer. Please refer to the chart below to determine the wattage of each fixture.
- Luminaires shall not be installed within 10 feet (1.52m) of pool, spa or fountain.
- Trim post covers to correct length - see Post and Rail Prep page.

Tools Required

In addition to a basic tool set, you will need the following for installation of the components.

- Spade Bits: 5/8”, 3/4”, 1”
- 2.5mm Allen Wrench
- Drill Bits: 7/64”, 3/32”, 3/16”, 1/4”, 3/8”
- 5/8” Allen Wrench

Important Safety Instructions

INSTRUCTIONS PERTAINING TO A RISK OF FIRE OR INJURY TO PERSONS

- Turn off/plug before servicing fixtures. Contact only switch/plug when turning on.
- Keep lamp away from materials that may burn.
- Do not operate the luminaire fitting with a missing or damaged cover.

Fixture Wattage

<table>
<thead>
<tr>
<th>Fixture</th>
<th>Wattage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Cap Light</td>
<td>4W</td>
</tr>
<tr>
<td>Lighted Island Cap</td>
<td>2W</td>
</tr>
<tr>
<td>Accent Light</td>
<td>2W</td>
</tr>
<tr>
<td>Under Rail</td>
<td>2W</td>
</tr>
<tr>
<td>Stair Riser</td>
<td>2W</td>
</tr>
<tr>
<td>In-Deck Light</td>
<td>1W</td>
</tr>
<tr>
<td>Mini Accent Light</td>
<td>1W</td>
</tr>
</tbody>
</table>

SAVE THESE INSTRUCTIONS
Installing In-Deck Light

- In-deck light should be installed in a low-traffic area.
- In-deck light can only be used when there is room under the deck to access the wire to make all of the connections.
- Locate and mark the locations of the post where the in-deck light will be mounted.
- On the desired post of the corner, use a 1/8” spade bit to create a through hole (be sure not to drill into the substructure.)
- Guide the light’s wire into the through hole.
- Push the lighting fixture into the through hole and the flange touches the deck surface.
- The wire connections can then be made under the deck's surface.

Wiring Instructions

Connections between the main 1/0AWG cable and the lighting fixtures are made using the space between the post and the Post Cap Light as a junction box.

When routing the main wire around the deck, leave a loop of extra wire at the top of each post to allow for splicing connections.

Use silicone filled wire nuts with corrosion protection and intended for outdoor use to make all connections. They shall be copper, copper alloy, or the equivalent.

When making splices, do not re-use wire nuts. Pre-twisting wires can lead to a poor seal inside the wire nut causing corrosion and/or voltage drop.

Refer to instructions provided with the Power Pack.

Post & Rail Preparation

5” Post Cap Light RadianceRail

- Follow the instructions for a rail height of 36”
- Wire four 5/8”-longer than the finished Post Sleeve length.
- Wire Post Sleeves to length: 38–40” for a split post, 21” longer for sold post.
- For best results, use a wire cutter with a fine toothed blade to make Post Sleeve cuts. Check cuts for square.
- Feed main 1/0AWG cable between post and Post Sleeve. (See Wire Connections section for more info.)
- Bare wire up to corner nuts are crimped onto Post Cover ribs.

Railing

- Install Support Rails and Balusters as needed. DO NOT INSTALL Top Rail yet.
- Drill a 5/8” hole through the Post Sleeve on centerline, directly above an In-Railing Bracket to run the wire into.
- Best practice recommends tying any excess wire in the hole with a 5/8”-longer clamp on the left or right to keep the cable from moving. Do not leave any excess screws protruding or visible, which could cause damage to the light.

4 x 4: RadianceRail Express

- Post & Post Sleeves

Transforming Settings

Consult the instructions provided with the transformer for additional information.

Power Pack

Refer to instructions provided with the Power Pack.

Lighted Island Cap Installation

This Lighted Island Cap is pre-assembled. Installation simply requires the wires to be properly connected and the unit placed onto the post.