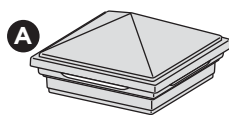


# LIGHTING

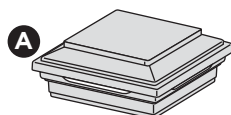


# HOW TO INSTALL TREX DECKLIGHTING

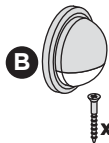
## PARTS



Pyramid Post Cap Light



Flat Post Cap Light



Deck Rail Light



Riser Light



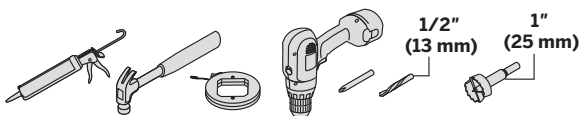
Recessed Deck Light



Splitter

- » 5ft, 10ft, 20ft, 40ft, and 60ft connection/extension wires sold separately (these are male-to-male connection wires).

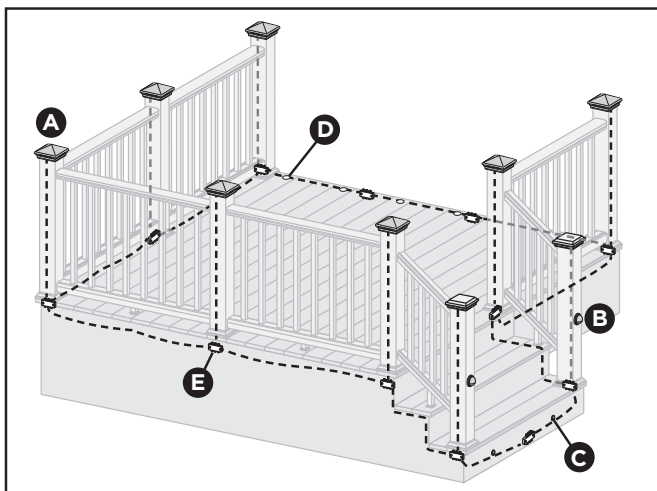
## TOOLS NEEDED



### WARNING:

- » **DO NOT INSTALL DECKLIGHTING IN CLOSE PROXIMITY TO POOLS OR HOT TUBS AS CHEMICALS FROM THE WATER CAN DAMAGE LIGHTING FIXTURES.**
- » **DO NOT INSTALL WIRING UNDER HEAVY WEIGHT OR LOAD AS THIS CAN DAMAGE WIRING.**

## Lighting and Wiring Overview



**NOTE:** All wiring and splitters are mounted to inside of framing, picture is just representation of where to place these in general.

**NOTE:** Avoid railing brackets and locations for deck rail lights when running wires up posts.

**NOTE:** It is recommended to install wiring and splitters before decking and railing have been installed. **DO NOT** run wires between joists and deck boards.

## HELPFUL TIPS

- » Please note that Trex lighting operates on DC power. **NEVER** mix AC and DC fixtures on the same circuit. Doing so will result in extremely premature fixture failure and is not covered by the Trex limited warranty. **You must use a Trex transformer on all Trex lighting installations.**
- » Leave slack in wire to make fixture terminations.
- » Recessed lights work well spaced 4' (1.22 m) to 6' (1.83 m) on center around perimeter of deck.
- » Deck rail lights work well at changes in levels of a deck—at the top or the bottom of the stairs, or in conjunction with post cap lights.
- » Recommended riser light placement is two lights per standard width tread. Otherwise, spacing of 2' to 3' is considered optimal.
- » Drill holes perpendicular to the surface, being careful to hold drill steady, to avoid producing an enlarged hole. If hole is enlarged, light fixture will have a loose fit. Use of a flexible outdoor semi-permanent adhesive (silicone caulk) may be required to anchor light in place.
- » Riser and deck rail light holes can be through holes. However, recessed light holes should be drilled to a depth of 3/4" (19 mm). Over-drilled recessed light holes will require use of silicone caulk to anchor light in place.
- » Splitters should be placed under the deck at the base of each post that has lighting installed. If not installing lighting on posts, splitter spacing will be dependent on spacing of light fixtures.
- » Cap all unused female connections with caps provided or weather-resistant silicone to prevent water damage or corrosion.
- » The splitter is cross-linked so there is no specified plug for lights versus lead wires.
- » Leads attached to each light are approx. 5' 6" (1.5 m to 1.8 m) in length and have male terminals to plug into splitter.
- » Use a separate dimmer control for each light type for maximum control (5-way transformer splitter may be required).
- » It is recommended to have power source installed and turned on when installing lights to ensure all components work.
- » When installing wiring, avoid extreme angles, pressure, or tension on the wiring, as this can cause pinching of the wiring and create a lighting failure.

# HOW TO INSTALL TREX DECKLIGHTING/CONTINUED

## General Information

- » Refer to [www.trex.com](http://www.trex.com) for instructional videos on how to install Trex Decklighting.
- » **USE TREX TRANSFORMER ONLY.** Use of any other transformer voids warranty.

### TRANSFORMER CAPACITY BY TYPE

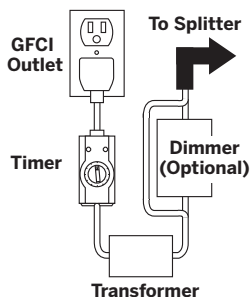
Type of Light	8.3A Transformer (83 DL TRANSFORMER)	2.5A Transformer (2.5 DL TRANSFORMER)
Riser	285	90
Recessed	285	90
Post Cap	85	22
Deck Rail	285	90

Above listing is for maximum number of each individual types of lights. If mixing and matching lighting, contact Trex to determine if more than one transformer is required.

## Planning

**NOTE:** When designing your deck, plan locations of lights, power supply, timer, and dimmer. These should be accessible for service. Installing a GFCI outlet is **REQUIRED** to help prevent damage to lighting from electrical surges.

1. The dimmer remote will work in a 30' (9 m) radius of the unit.
2. Dimmer should be installed in a dry location.
3. Timer must be installed vertically with receptacle facing downwards. Timer must be at least 1' (.305 m) from ground level when installed as per federal safety code height regulations. Timer must be in view of the sun to use the dusk/dawn feature.

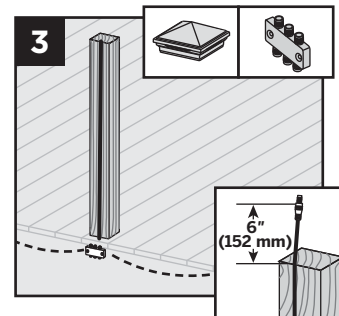
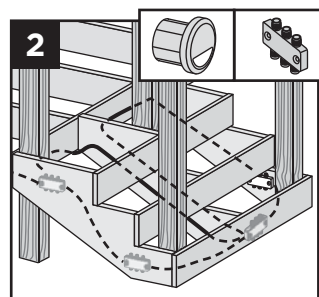
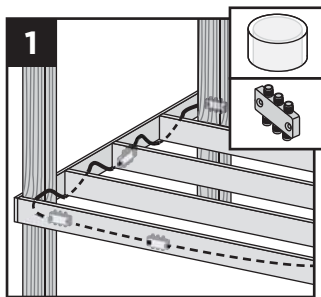


## Installing Wiring

**NOTE:** It is recommended to install wiring and splitters before decking and railing have been installed.

- » Use male-to-male connection wire (lengths vary) that will connect to each required splitter.

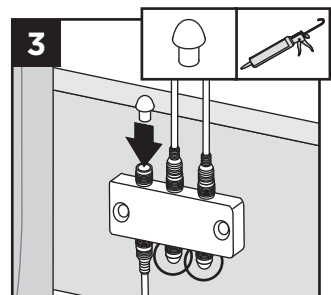
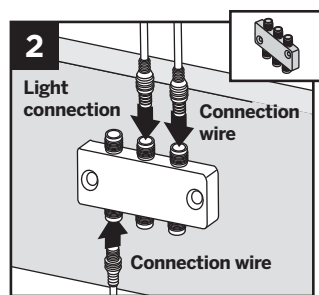
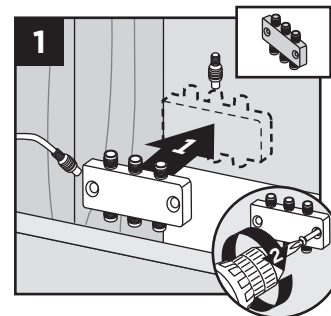
1. Wiring must be run under decking structure and behind stringers. **DO NOT** run wires between deck boards and joists. Staple to frame with cable staples at least 1/4" (6 mm) wide. **DO NOT** crush wire insulation with staple.



2. Wiring can be run under deck and behind risers. Staple to frame with cable staples at least 1/4" (6 mm) wide. **DO NOT** crush wire insulation with staple.
3. Remove 5' (1.52 m) lead wire that is connected to post cap and attach wire to post with male connection at top of post (female connection would be at bottom of post and connect into splitter). Avoid running wire on side of post where railing brackets or deck rail lights will be installed. Leave approximately 6" (152 mm) of lead at top to make connections. Staple to frame and posts with cable staples at least 1/4" (6 mm) wide. **DO NOT** crush wire insulation with staple.

## Making Connections

1. Install splitters to inside of framing using hardware provided. Install at every post base where lighting is present and depending on spacing in between each riser and recessed light.



2. Attach male lead from lights to female connections on splitter. Also attach male-to-male connection wires in between each splitter. Continue until all wiring from lights are attached to splitters and connector wires are attached in between splitters.
3. Cap off all unused female connections on splitters using caps provided or weather-resistant silicone.

## HOW TO INSTALL TREX DECKLIGHTING/CONTINUED

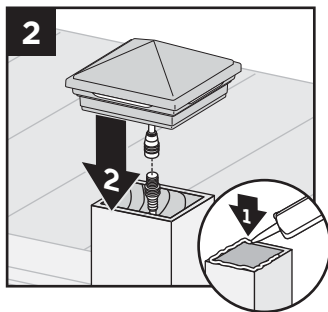
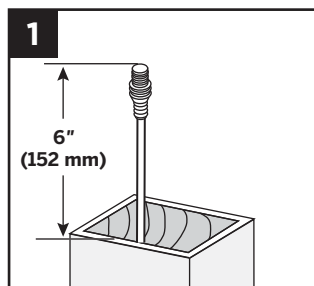
### Timer Operation Instructions

1. Select the mode of operation:
  - » Dusk to Dawn
  - » 2–8 hours
  - » Always “ON”
  - » “OFF”

Program repeats daily. When power is flowing to lights, green light above POWER is on.

### Installing Post Cap Lights

**NOTE:** Install post cap lights after the railing system, post sleeve skirt, and post sleeve have been installed.

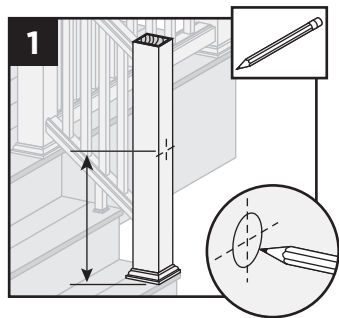


1. Connect male lead from wiring to female connector from cap. Also attach male-to-male connection wires in between each splitter. Continue until all wiring from lights are attached to splitters as well as connector wires are attached in between splitters. (See *Making Connections* section for details.)
2. After verifying wiring is correct by turning lights on, attach cap to top of post with silicone caulk.

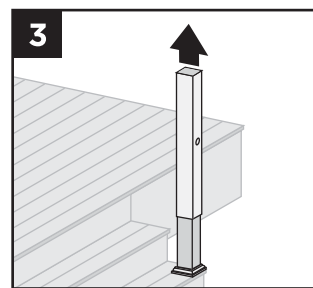
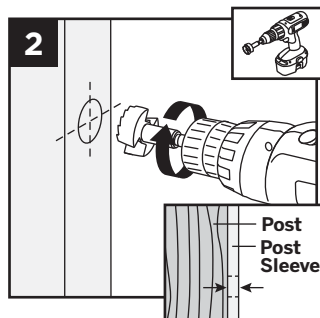
### Installing Deck Rail Lights

**NOTE:** Instructions shown below are for new deck installation and are shown **BEFORE** railing system has been installed.

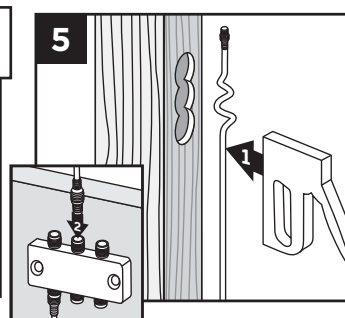
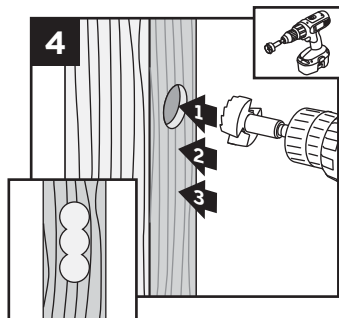
1. Place post sleeve over pressure-treated post and mark desired height, centered on post sleeve for deck rail light location.



**NOTE:** If deck boards are not installed yet, place a deck board on framing to ensure post sleeve is at correct height.

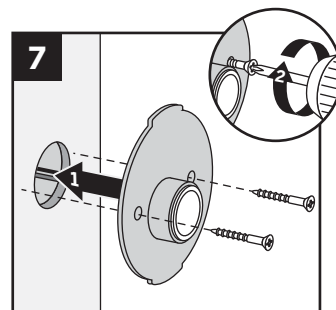
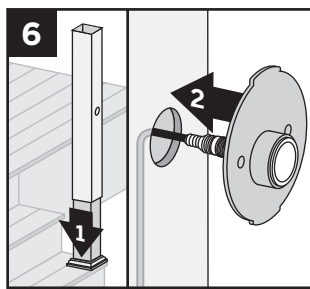


2. Drill a 1" (25 mm) hole through post sleeve. Drill deep enough to mark location on pressure treated post.
3. Remove the post sleeve from the post.



4. Drill out existing hole on pressure-treated post 3/4" (19 mm) deep. Drill two additional holes vertically below main hole—this will allow space for wiring after post sleeve is attached.
5. Leave enough slack at top of lead wire and attach lead wire to post using staples. Attach lead wire to splitter under decking.

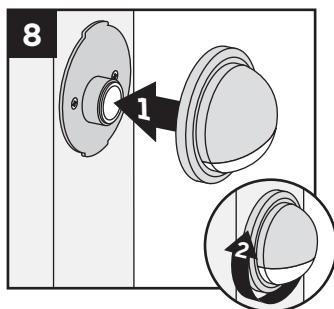
**TIP:** To hold lead wire in place at drilled out location use painters tape.



6. Slide post sleeve back over post. If using a post sleeve skirt, make sure to install the skirt first. Connect plug on deck rail light to lead wire and tuck wiring into previously drilled out pockets on post.
7. Align holes for screws horizontally and attach fixture base to post with provided screws.

## HOW TO INSTALL TREX DECKLIGHTING/CONTINUED

8. Line up polycarbonate lens with fixture housing. Twist onto fixture base. Continue until all wiring from lights are attached to splitters as well as connector wires are attached in between splitters. (See *Making Connections* section for details.)

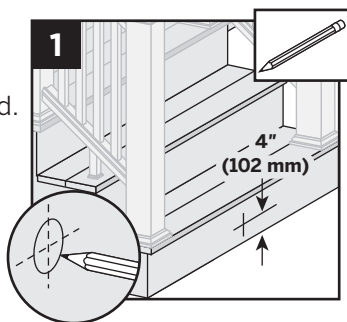


**NOTE:** If railing has already been installed, lead wires will need to be fished through the post sleeve to reach the desired location for the deck rail light. In some cases if the provided lead wire does not fit (due to connector size), the wire connectors can be cut off and wire nuts can be used. Test lights with the power on. If lights that are wired with this method do not function, then switch the connector wires.

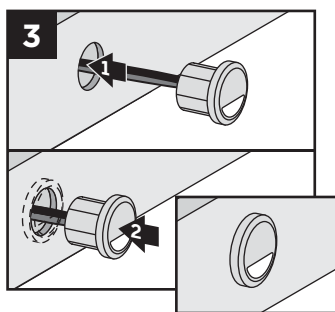
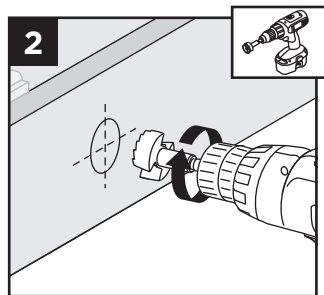
### Installing Riser Lights

**NOTE:** Install riser lights after stairs and risers have been installed.

1. Mark locations for each light, generally 4" (102 mm) above tread. Consult local codes for lighting requirements.



**NOTE:** If possible, avoid locations over stringers as holes will be more difficult to create.



2. Drill a 1" (25 mm) diameter hole at least 1" (25 mm) deep into riser. If riser material is thicker than 1" (25 mm), use a 1/2" (13 mm) drill bit to create a passage for wires.
3. Thread wires through hole. Press light into hole, ensuring lens is horizontal. Make connections behind stairs from male lead wire from recessed light into female connection on splitter. Also attach male-to-male connection wires in between each splitter. Continue until all wiring from lights are attached to splitters and

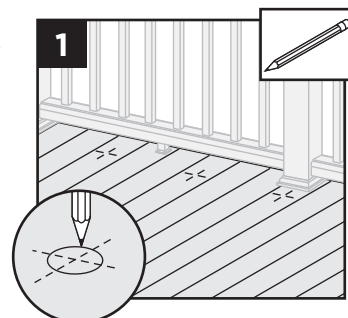
connector wires are attached in between splitters. (See *Making Connections* section for details.)

**NOTE:** DO NOT install riser light or deck rail light into top or bottom rails or balusters.

### Installing Recessed Deck Lights

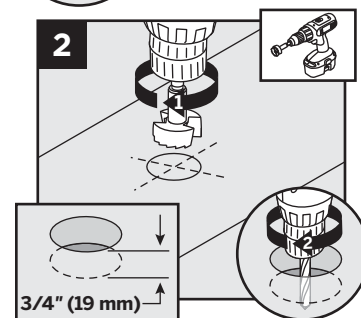
**NOTE:** Install recessed deck lights after installing decking.

1. Mark locations for lights in deck boards.

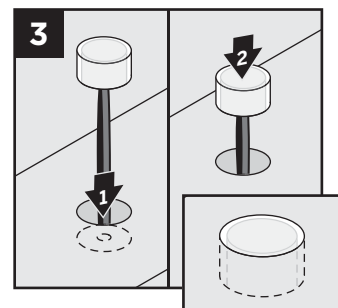


**NOTE:** If possible, avoid locations over joists as holes will be more difficult to create.

2. Drill a 1" (25 mm) diameter hole 3/4" (19 mm) deep into deck board. Hole cannot go all the way through deckboard or light will fall through. Make sure drill bit is perpendicular to board. Drill a 1/2" (13 mm) diameter hole in base of the first hole through deck board.

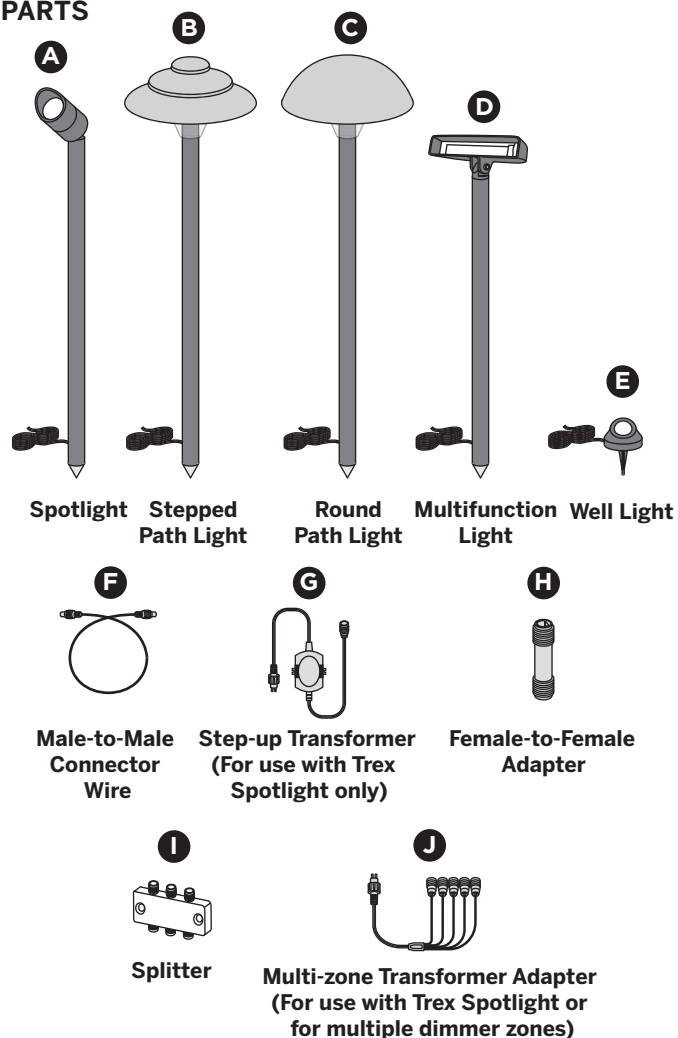


3. Thread wires through hole. **DO NOT pull LED into hole by pulling on wires. This may damage wires or LED.** Press light into hole until flush with surface. Make connections under deck from male lead wire from riser light into female connection on splitter. Also attach male-to-male connection wires in between each splitter. Continue until all wiring from lights are attached to splitters and connector wires are attached in between splitters. (See *Making Connections* section for details.)

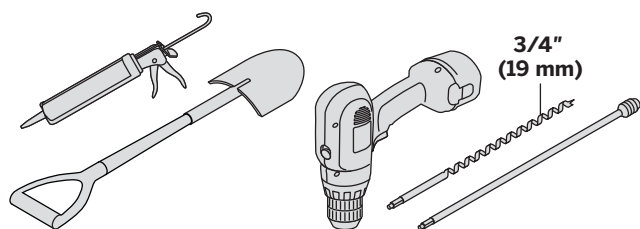


# HOW TO INSTALL TREX LANDSCAPE LIGHTING

## PARTS



## TOOLS NEEDED



**WARNING:**  
**BEFORE ANY TREX LANDSCAPE LIGHTING IS INSTALLED, IT IS THE INSTALLERS RESPONSIBILITY TO ENSURE THAT ALL UNDERGROUND UTILITIES/LINES ARE LOCATED (GAS LINES, ELECTRICAL LINES, DATA LINES, WATER LINES, ETC.) PRIOR TO ANY WORK BEING DONE.**

## HELPFUL TIPS

- » Location of Trex Landscape lighting is up to customer as to where they would like lighting components placed. Different length of lead wires can be purchased depending on the distances between lights.
- » Please note that Trex lighting operates on DC power. **NEVER** mix AC and DC fixtures on the same circuit. Doing so will result in extremely premature fixture failure and is not covered by the Trex limited warranty. **You must use a Trex transformer on all Trex lighting installations.**
- » Leave slack in wire to make fixture terminations. Keep in mind slack will also be required to properly bury wire.
- » Trex Landscape wires are approved for underground use. Wire is made from silver-coated copper.
- » Trex Landscape Lights will require the use of a female-to-female adaptor to connect light to male connector wire (this adaptor is included with each fixture and is also sold separately).
- » All Trex Landscape lights use male-to-male connector wires, sold in lengths of 5' (1.52 m), 10' (3.05 m), 20' (6.1 m), 40' (12.2 m), and 60' (18.3 m) (*sold separately*).
- » All lights EXCEPT the spotlight can be wired together on a circuit.
- » **Trex Spotlights require different wiring configurations; refer to detailed instructions on following pages for specifics.**
- » Only use a standard household AC GFCI protected outlet to help prevent damage from power surges or lightning.
- » When using timer, ensure this is in full view of the sun if using the dusk/dawn feature.
- » It is recommended to have power source attached when installing lights to ensure all components work.
- » When burying wire in live sod use spade shovel to make a slit in the soil. Bury the wire 1"–3" (25 mm–76 mm) deep and tamp down the soil. Water heavily to allow the soil to resettle and minimize impact on the installation site.
- » When installing wiring, avoid extreme angles, pressure, or tension on the wiring, as this can cause pinching of the wiring and create a lighting failure.



# HOW TO INSTALL TREX LANDSCAPE LIGHTING/CONTINUED

(TREX WELL LIGHT, PATH LIGHTS, AND MULTIFUNCTION LIGHTS)

TRANSFORMER CAPACITY BY TYPE

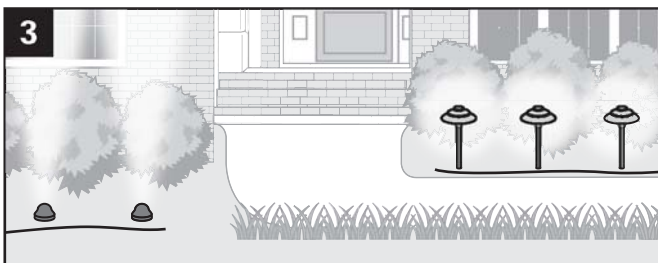
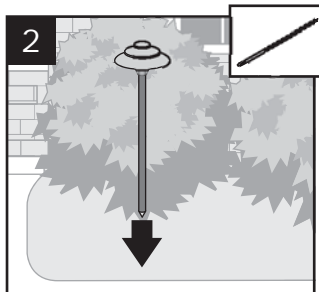
Type of Light	8.3A (100W) Transformer (83 DL TRANSFORMER)	2.5A Transformer (2.5 DL TRANSFORMER)
Well Light	74	23
Path Light	52	16
Wall Wash Light	52	16

Above listing is for maximum number of each individual types of lights. If mixing and matching lighting, contact Trex to determine if more than one transformer is required. Please visit [Trex.com](http://Trex.com) for an interactive capacity calculator.

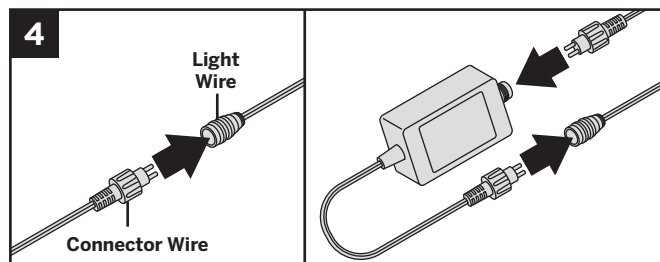


1. Locate placement of lights and lead wiring. Plan accordingly if you choose to bury wire under concrete or other permanent structures.

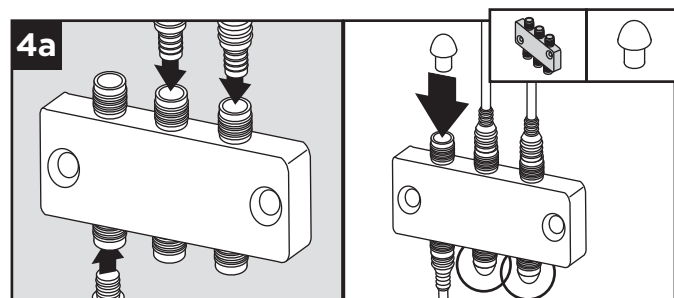
2. Place all lights in desired location. If necessary use 3/4" (19 mm) auger with optional extension in a drill to penetrate the surface enough to ensure the fixture is firmly implanted (**SEE WARNING ON PAGE 17**).



3. Run all wires from the power source locations to the lights on top of the soil, being mindful to leave slack. Pay special attention if using separate circuits with independent dimmers (*grouping lights by type is recommended*).

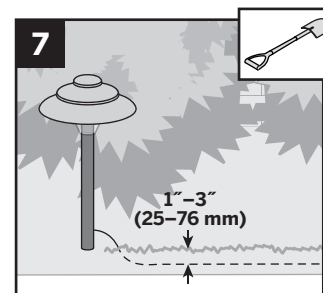


4. Connect all lights. Wire the optional dimmer (recommended) between the main 20' (6.1 m) transformer to male lead and the transformer for each circuit. Ensure connections (including splitters), fixtures, and power sources all work properly.



- 4a. Use male-to-male extension cables to make connections to splitters (*all sold separately*). Cap off all unused female connections on splitters using caps provided or weather-resistant silicone.
5. You can mix and combine all lights except the spotlight on the same circuit but make sure you **DO NOT** exceed the maximum number of lights per transformer. If running separate circuits with dimmers on each circuit, using a separate transformer for each circuit can simplify installation. However, use of a multi-zone transformer adapter will allow for separate circuits on the same transformer.
6. It is recommended the installer preview light placement in the dark to ensure desired effect is achieved.

7. Once the light, wire, and splitter placement is finalized, work from the light fixtures towards the power source to bury the wire to the desired depth. No more than 1"-3" (25 mm-76 mm) is required.



# HOW TO INSTALL TREX LANDSCAPE LIGHTING/CONTINUED

(TREX SPOTLIGHT)

TRANSFORMER CAPACITY BY TYPE	
Type of Light	8.3A Transformer (83 DL TRANSFORMER)
Spotlight	12

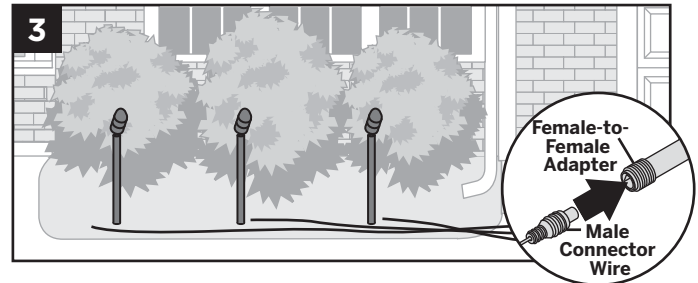
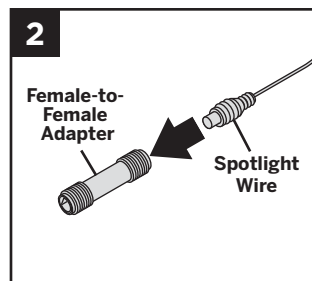
Above listing is for maximum number of each individual types of lights. If mixing and matching lighting, contact Trex to determine if more than one transformer is required.

## NOTES:

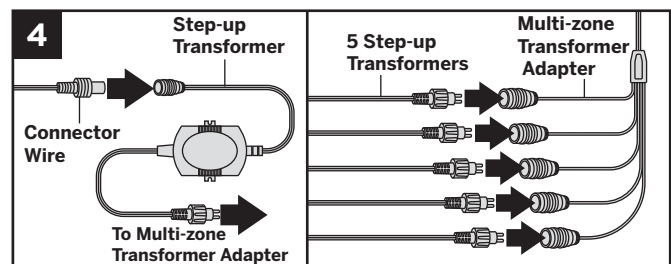
- » Each Trex Spotlight requires use of a dedicated 36V Step-up Transformer (included with each Trex Spotlight). **WARNING:** Step-up Transformer **DOES NOT** have fault protection, thus care must be taken if testing.
- » Spotlights must use a dedicated line running directly from the included 36V step-up transformer. **Maximum** of 12 spotlights are allowed per one 8.3 (100W)-amp transformer. (**NOTE:** Must use three multi-zone transformer adapters if installing all 12 spotlights to single 5A transformer as multi-zone transformer adapter is designed for up to five spotlights.) Spotlights have a male lead and require the use of a female-to-female adaptor to connect spotlight to connector wire. The spotlight fixture has a male lead. Install the extension cable accordingly. **DO NOT mix** any other lights on the spotlight circuit. Applying 36V to any other fixture types will result in very short diode life and will void warranty.
- » **DO NOT LOOK DIRECTLY INTO SPOTLIGHT WHEN ON. THIS LIGHT IS VERY BRIGHT.**



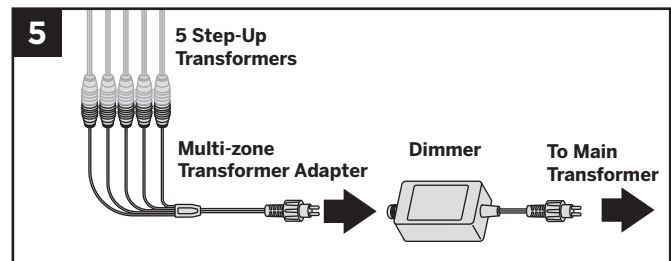
1. Locate placement of spotlights and lead wiring. Plan accordingly if you choose to bury wire under concrete or other permanent structures.
2. Connect male lead from light to female to one end of female adaptor.



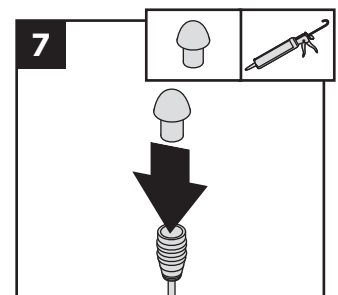
3. Connect opposite end of female adaptor to male connector wire. Choose appropriate length wire based on your needs. Run all wire on the surface back to the location of the power supply.



4. Connect opposite end of male connector wire cable to female end on Step-up Transformer. If using more than one spotlight, use multi-zone transformer adapter on Step-up Transformer, making sure that each spotlight is utilizing its own 36V Step-up Transformer. Wire the Step-up Transformer or multi-zone transformer adapter to the 8.3A (100W) main transformer.



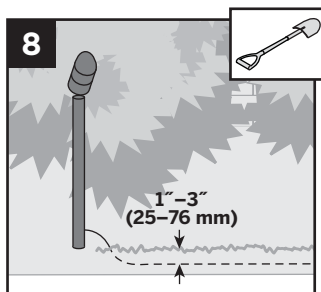
5. If using an optional dimmer (recommended), simply place the dimmer between the multi-zone transformer adapter and main transformer.
6. Test lights to ensure power supply, connections, and light fixtures all work properly and placement is appropriate.
7. Ensure that all unused connections on multi-zone transformer adapter are covered using weather-resistant silicone.



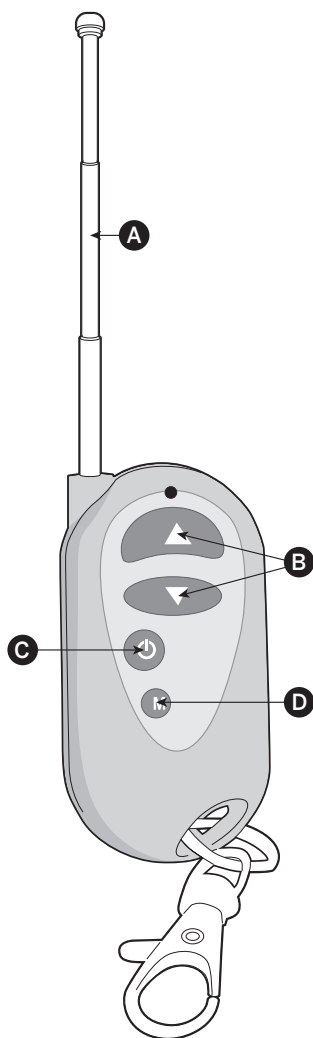
## HOW TO INSTALL TREX LANDSCAPE LIGHTING/CONTINUED

### (TREX SPOTLIGHT)

8. Ensure that lights are all working with all wiring attached prior to burying any wire. No more than 1"–3" (25 mm–76 mm) is required.



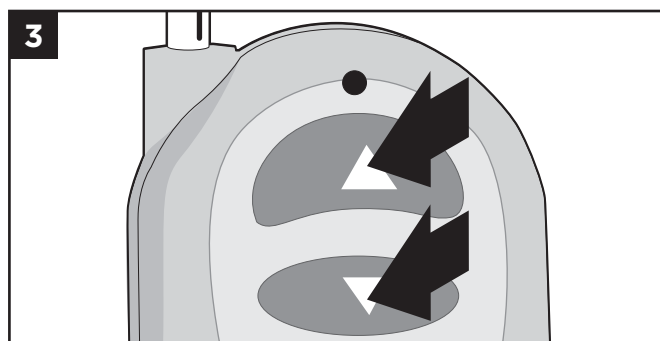
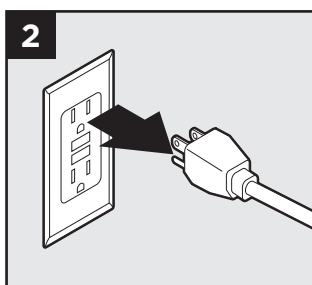
## HOW TO PROGRAM DIMMER REMOTE



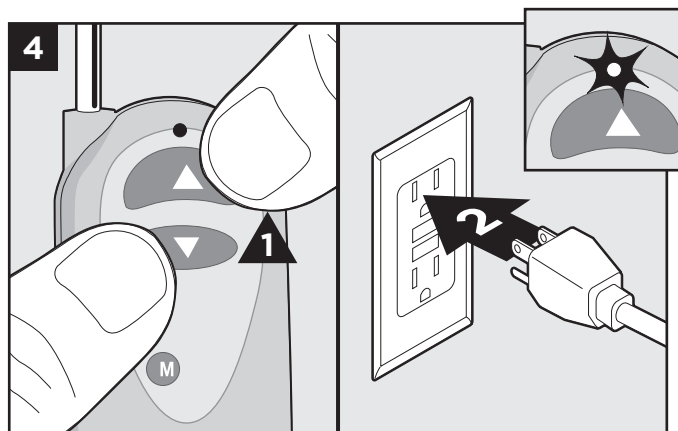
- A. **ALWAYS** keep antenna fully extended for max range.
- B. Up/Down arrows gradually dim or brighten lighting.
- C. On/Off button cycles lights ON/OFF.
- D. Mode button cycles through 3 preset dimming levels: High, Medium, Low, and Off.

**NOTE:** First make sure the red light is illuminating on the remote. If there is no red light and the product is new, contact 1-800 BUY-TREX for a replacement. If the product is not new, the A27 battery is replaceable.

1. Install dimmer per instructions and make sure lights are On and working properly.
2. Unplug the transformer to turn lights Off.



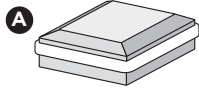
3. Press and hold both the up and down arrow on the dimmer remote simultaneously.



4. With the dimmer arrow buttons held down, plug the transformer back in. The lights should blink once to confirm programming.
5. Release the up and down arrows on the remote and test remote to confirm proper operation.

# HOW TO INSTALL TREX REVEAL POST CAP LIGHT

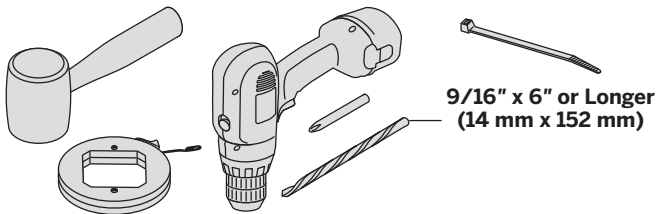
## PARTS



**Post Cap Light**  
(includes 5ft male-to-male wire)

- » 5ft, 10ft, 20ft, 40ft, and 60ft connection/extension wires sold separately (these are male-to-male connection wires).

## TOOLS NEEDED



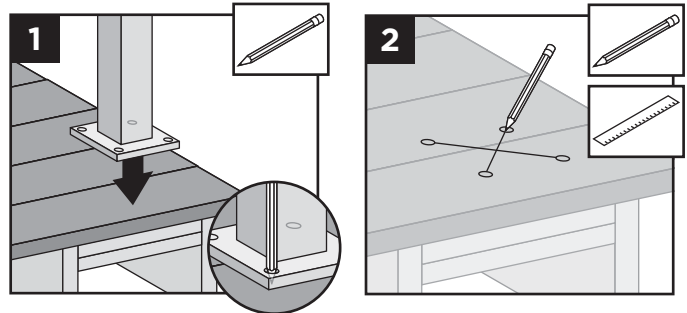
**9/16" x 6" or Longer**  
(14 mm x 152 mm)

## HELPFUL TIPS

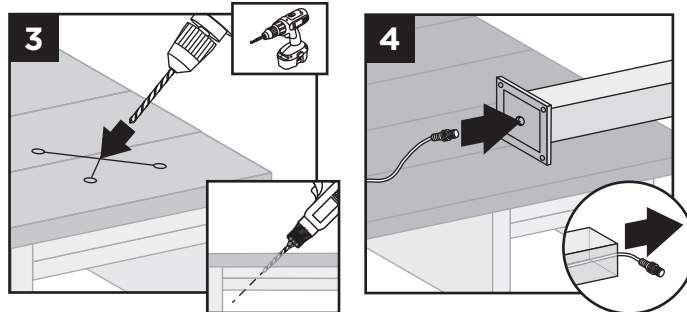
- » Leave slack in wire to make fixture terminations.
- » Post lamps work well at changes in levels of a deck—at the top or the bottom of the stairs, or in conjunction with post cap lights.
- » Splitters should be used at each post that has lights and depending on spacing in between each riser and recessed light.
- » Cap all unused female connections with caps provided or weather-resistant silicone to prevent water damage or corrosion.
- » The splitter is cross-linked so there is no specified plug for lights versus lead wires.
- » Leads attached to each light are approx. 5.5' (1.67 m) in length and have male terminals to plug into splitter.
- » Use a separate dimmer control for each light type for maximum control.
- » It is recommended to have power source on when installing lights to ensure all components work.

## Installing Post Cap Lights

**NOTE:** Instructions shown below are for new deck installation and are shown **BEFORE** railing system has been installed.

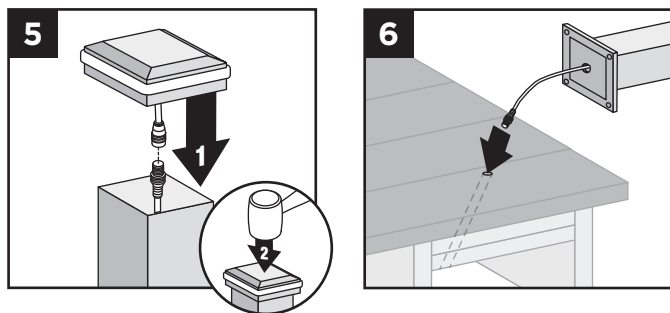


1. Before attaching post to deck, locate placement of post and mark desired bolt locations.
2. Using a straight edge, mark an "X" between the four bolt locations.

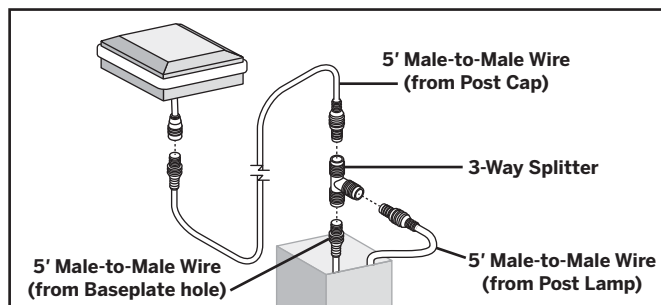


3. Using a 9/16" (14 mm) x 6" (152 mm [or longer]) drill bit, drill a diagonal hole through the decking and blocking. Ensure that the angle will allow wire to not be pinched by support plate under blocking (if using Trex ALPOSTHWDECK mounting kit). (See *Making Connections* section for details.)
4. Turn post upside down and fish 5' male-to-male wire (provided) through hole in baseplate.

## HOW TO INSTALL TREX REVEAL POST CAP LIGHT CONTINUED



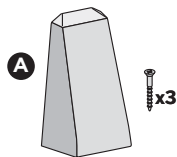
5. Connect the female connector on the post cap light to this wire and, using a rubber mallet, gently tap the cap onto top of post until it is secure.
6. Turn post over and carefully fish wire through hole created in Step 3 to underside of the deck. Ensure exit point of wire under blocking will not be pinched by ALPOSTHWDECK plate.
7. Mount post per instructions.



**NOTE:** If connecting a Reveal post lamp light as well, a 3-way adapter and extra 5' male-to-male wire (not provided) can be used inside the post so that only one wire must be run through the hole in the base of the post (and post blocking). This is optional.

# HOW TO INSTALL TREX REVEAL POST LAMP

## PARTS

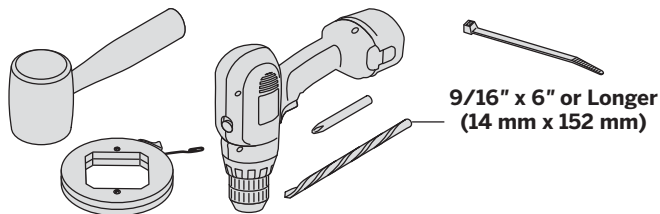


**Post Lamp**

(includes 5ft male-to-male wire)

- » 5ft, 10ft, 20ft, 40ft, and 60ft connection/extension wires sold separately (these are male-to-male connection wires).

## TOOLS NEEDED



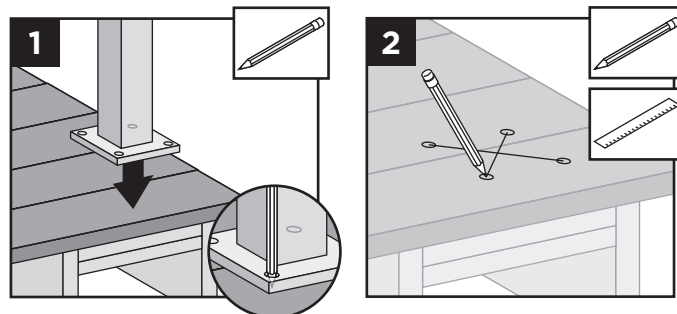
**9/16" x 6" or Longer  
(14 mm x 152 mm)**

## HELPFUL TIPS

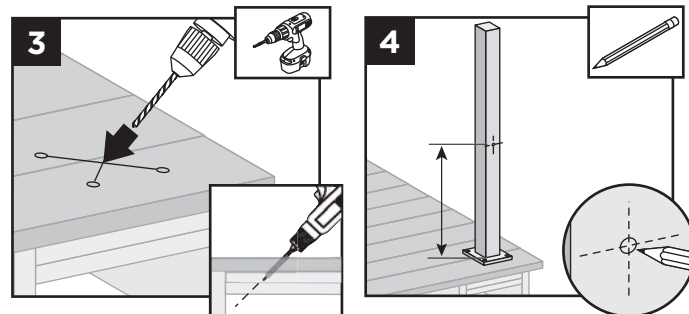
- » Leave slack in wire to make fixture terminations.
- » Post lamps work well at changes in levels of a deck—at the top or the bottom of the stairs, or in conjunction with post cap lights.
- » Splitters should be used at each post that has lights and depending on spacing in between each riser and recessed light.
- » Cap all unused female connections with caps provided or weather-resistant silicone to prevent water damage or corrosion.
- » The splitter is cross-linked so there is no specified plug for lights versus lead wires.
- » Leads attached to each light are approx. 5.5' (1.67 m) in length and have male terminals to plug into splitter.
- » Use a separate dimmer control for each light type for maximum control.
- » It is recommended to have power source on when installing lights to ensure all components work.

## Installing Post Lamps

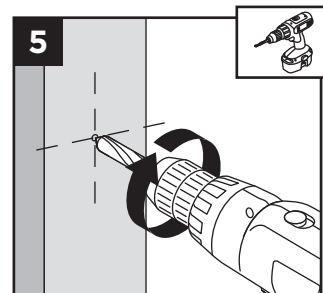
**NOTE:** Instructions shown below are for new deck installation and are shown **BEFORE** railing system has been installed.



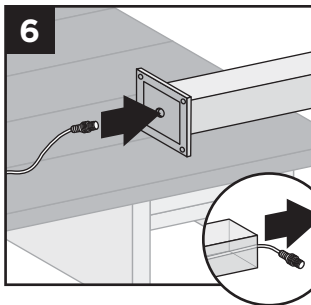
1. Before attaching post to deck, locate placement of post and mark desired bolt locations.
2. Using a straight edge, mark an "X" between the four bolt locations.



3. Using a 9/16" (14 mm) x 6" (152 mm [or longer]) drill bit, drill a diagonal hole through the decking and blocking. Ensure that the angle will allow wire to not be pinched by support plate under blocking (if using Trex ALPOSTHWDECK mounting kit).
4. Locate placement of post lamp. Mark entry point of the wire.
5. Drill 9/16" (14 mm) hole where wire will enter post.



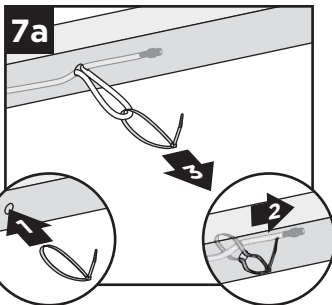
## HOW TO INSTALL TREX REVEAL POST LAMP CONTINUED



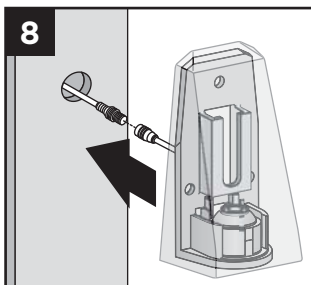
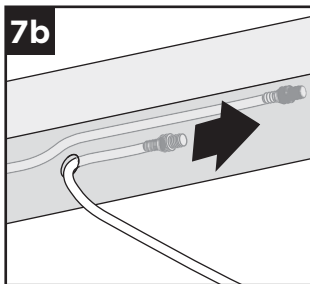
6. Turn post upside down and fish 5' male-to-male wire (*provided*) through hole in baseplate.

7a. If connecting a Reveal post lamp only, pull wire through hole.

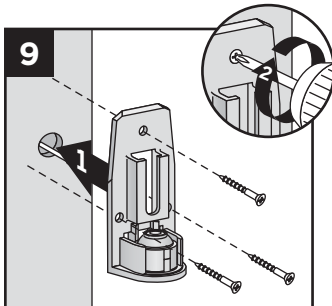
**TIP:** Insert a zip-tie loop (or small grabber tool) through 9/16" (14 mm) hole. Fish wire through loop in zip-tie. Pull wire through hole with zip-tie.



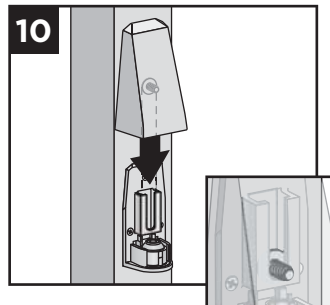
7b. If connecting a Reveal post cap light as well, and using the 3-way splitter (see *note after Step 12*), simply run one wire through the hole created in Step 5 to the top of the post.



8. Connect male connector to female connector on light housing.



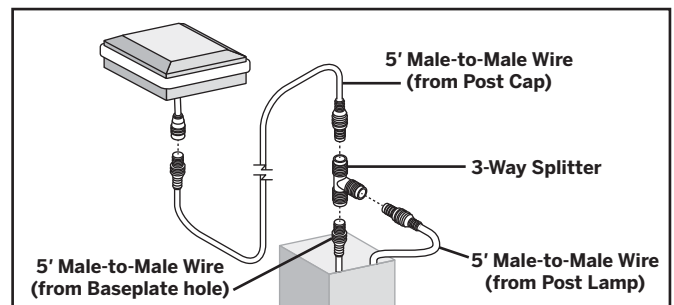
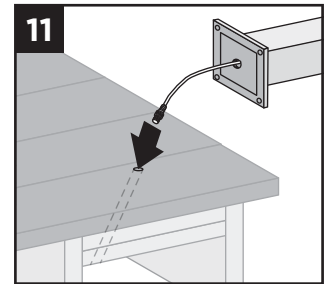
9. Place light and attach backing plate to post with three screws (*provided*).



10. Slide light cover down over backing plate, adjusting mounting screws as necessary to achieve a tight fit.

11. Turn post over and carefully fish wire through hole created in Step 3 to underside of the deck. Ensure exit point of wire under blocking will not be pinched by ALPOSTHWDECK plate.

12. Mount post per instructions.



**NOTE:** If connecting a Reveal post cap light as well, a 3-way adapter and extra 5' male-to-male wire (*not provided*) can be used inside the post so that only one wire must be run through the hole in the base of the post (and post blocking). This is optional.