

Installation Guide For:



This Packet <u>MUST</u> Accompany Materials To Job Site

Read all instructions before beginning installation

IMPORTANT

All the information in this guide is published in good faith and for general informational purposes only. DekPro EFFEX[™] does not make any warranties about the completeness, reliability and accuracy of this information. The intent is to provide guidelines for a successful project based on practical knowledge.

All fixture / light wattages should be added together to achieve total wattage for the project. Once total wattage is determined, select the appropriate transformer and installation method in the guide.

It is the responsibility of the installer to comply with applicable codes, laws and safety guidelines. Be safe and follow all instructions when using power tools and always wear eye protection!

Table of Contents

Component Guide	Pg. 2 - 3
DekPro EFFEX Overview	Pg. 4
Basic Lighting Guidelines	Pg. 5
Line Method - Up to 28 Watts	Pg. 6 - 7
T-Split Method - Up to 48 Watts	Pg. 8 - 9
Loop Method - Up to 80 Watts	. Pg. 10 - 11
Perimeter Wire - Any Configuration	. Pg. 12 - 13
Vertical Post Light	Pg. 14
Recessed Stair Lights	Pg. 15
Louvered Stair Light	Pg. 16
Strip Light for Stairs	Pg. 17
Solar Post Cap Install	Pg. 18
Unlit Post Cap Install	Pg. 19
Remote Dimmer Guide	Pg. 20
Warranty	Pg. 21





DekPro Component Reference Guide

DekPro[™] EFFEX Low Voltage Lighting System

Post Caps / Post Lights / Stair Lights



Unlit Post Cap Pyramid & Flat Top



Recessed Stair Light 1 Watt

2 - 3' Leads per fixture Fits 1" Diameter Hole



Band Light Post Cap 2.2 Watts 2 - 6" Leads per fixture Pyramid & Flat Top



Hooded Recessed Stair Light

1 Watt 2 - 3' Leads per fixture Fits 1" Diameter Hole



Component Reference Guide

Down Light Post Cap 3.5 Watts 2 - 6" Leads per fixture Pyramid & Flat Top



Louvered Riser Light 1 Watt 2 - 3' Leads per fixture

2 - 3' Leads per fixture Fits 1" Diameter Hole



Solar Post Cap LED Lights Fits 2" and 3" Posts



Vertical Post Light 1 Watt

2 - 3' Leads per fixture Fits 2" post or wider



30" Strip Light 2.5 Watt

- 2 Leads per fixture
- 1 12" Lead (Black)
- 1 6' Lead (White)

55" Strip Light 4.5 Watt

- 2 Leads per fixture
- 1 12" Lead (Black)
- 1 6' Lead (White)



DekPro Component Reference Guide

DekPro[™] EFFEX Low Voltage Lighting System

Power Supply / Wiring



Transformer Kits

36, 60 and 100 Watt Includes Dimmer, Timer, 9' Quick Connect and Y-Spliter.



Y - Splitter

Plug Connections 1 - White, 2 Black



DC Transformer 36, 60 and 100 Watt



In-Line Connector

6' Length For EFFEX 12-2 Gauge Wire



Dimmer w/ Remote 2.5 Watts On / Off Remote Fully Dimmable



EFFEX 12-2 Guage Wire

Component Reference Guide

100' & 250' Rolls 12-2 Gauge Outdoor Rated



Timer

On / Off Function Dusk to Dawn Feature Up to 8 Hr Adjustment



9' Quick Connect

9' Length Plug Connections 1 - White, 1 Black



DekPro EFFEX Overview

DekPro[™] EFFEX Low Voltage Lighting System



Post Caps

Dekpro[™] EFFEX post caps feature a durable powder coat finish and solid aluminum components to create a low maintenance fixture that is built to last. EFFEX fixtures are available both lit and unlit with multiple sizes and colors to choose from as well as pyramid or flat-top designs.

Lighting

Available for Post Caps (Glow Ring & Down Light), Vertical Post Lights & Recessed Stair Lights. Lights include high performance LEDs and Quick Connect wiring for fast and easy installation.

Wiring

Lights come standard with 2 quick connect leads (input/output). Wiring available in 2 styles, 9' Quick Connect for running wire from fixture to fixture and/or In-Line Connector for tapping into 12 gauge perimeter wire.

Power Supply

DC Transformers are available in 3 power outputs, 36, 60 & 100 Watt versions. Lights require a transformer for power, but a remote dimmer and/or timer can be added for additional convenience and functionality.

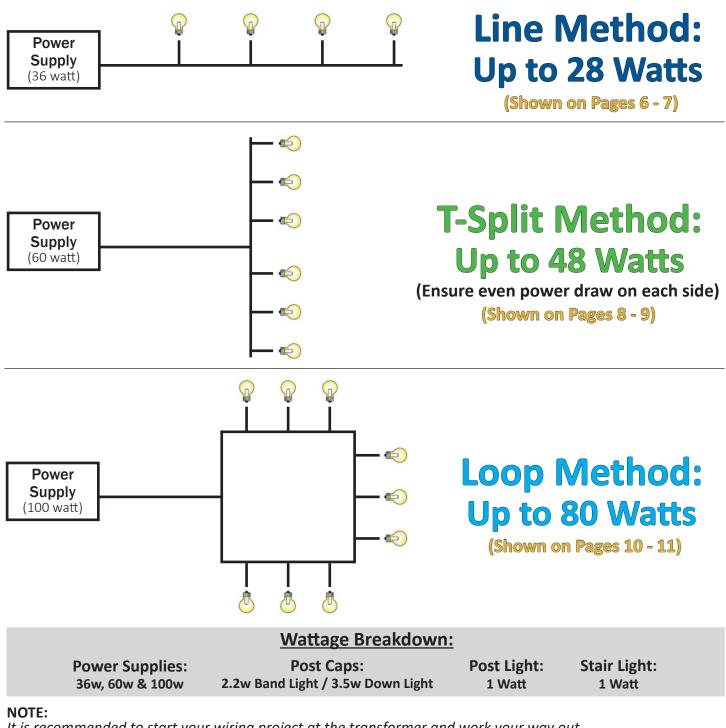


DekPro^m EFFEX Basic Layout Guidelines

Determining Wiring Configuration



Add total wattage of all fixtures being used for the job. Total wattage should not exceed 80% of the transformer's capacity. Once total wattage is determined, select the best wiring method.

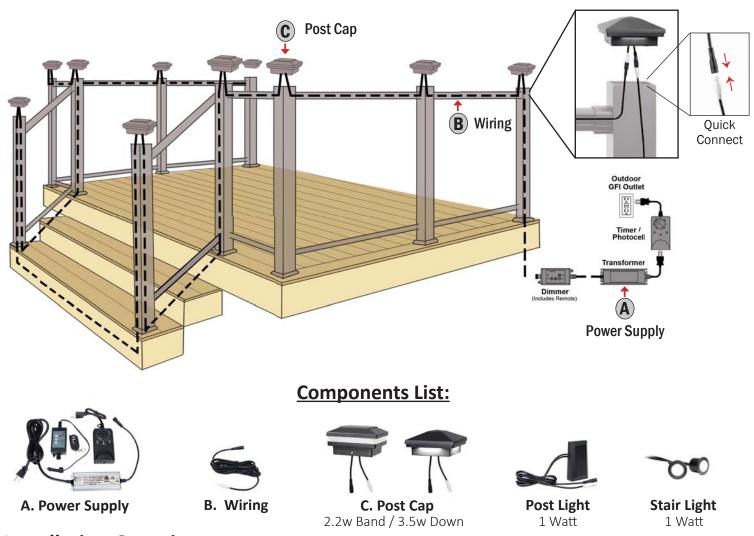


It is recommended to start your wiring project at the transformer and work your way out. These wiring methods are recommended for DekPro EFFEX Fixtures & Transformers only. Use of Non-EFFEX transformers and fixtures may void warranty

Line Method - Up to 28 Watts Using Quick Connect Wiring

Installation Guidelines

Deck Wiring Overview



Installation Overview:

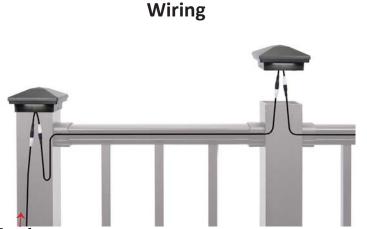
See illustration above as reference. Dashed lines are a representation of approximate wire locations, each installation will vary.

- Run wire from your transformer to the location of your first post. *Note:* Do not plug in transformer until all wires are run.
- Run wire up inside the post to your first lighting fixture. Drill a minimum 1/2" hole through the deck board to allow passage of the wiring through the board and into the post.
 - *Tip:* Laying post on its side prior to attaching to deck will allow for easier installation of wire. Use a fish tape or equivalent to pull wire to the top of the post. Tape wire to the top of post.
- Once wire is installed into first post, stand the post upright and secure into place. (Plumb as necessary)
- From the first lighting fixture, run a 9' Quick Connect Cable into the post and through the top rail to the next light. Continue this method until all lights are connected. (Brackets and posts need to be drilled using a 3/8" drill bit to run wire) Note: Wiring <u>cannot</u> be run through the top rail of stairs when using DekPro Prestige Railing. For stairs, wiring should be run up & down inside the posts.
- Once lights are all connected, plug transformer into GFI protected 115V outlet and check to ensure all lights are illuminated, if any lights have not illuminated unplug transformer and check connections. Once all lights are working properly securely attach caps to the post.

Line Method - Up to 28 Watts Using Quick Connect Wiring

Installation Guidelines

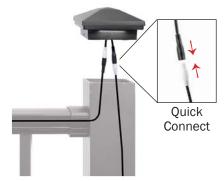
Lighting Components



Transformer

drill bit to accommodate cable)

Run cable from the transformer up inside the first post to the post light (left) and connect via Quick Connect connections. From there, use a 9' Quick Connect cable to run through the top rail to the next post. Continue this process until all post caps are connected. (Brackets and posts will need to be drilled using a 3/8" Post Cap

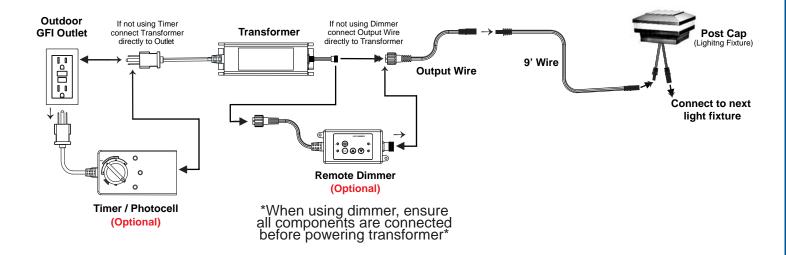


Step 1 Ensure that all cable has been properly installed and test the lights before mounting post cap to post.



Step 2 Fasten post cap to the post using 2 each screws included.

Power Supply Diagram

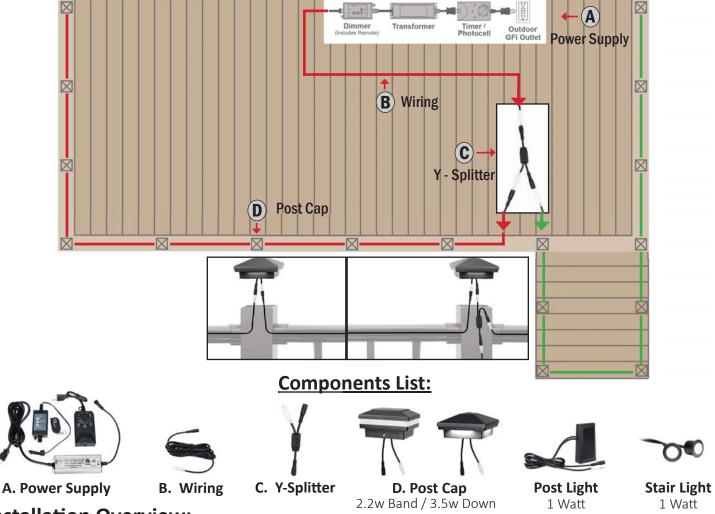


T-Split Method - Up to 48 Watts Using Quick Connect Wiring

Installation Guidelines

Deck Wiring Overview

When using up to 48 watts of lights with 9' quick connect leads it may be necessary to add a Y-Splitter near the center of the system to minimize voltage drop. This ensures even light output throughout the system.



Installation Overview:

See illustration above as reference. Red & Green lines represent approximate wire locations, each installation will vary. **Red & Green Lines denote wire paths after being split with the Y-Splitter.**

- Determine your electrical load mid-point and run wire from your transformer to a post nearest that point. Note: Do not plug in transformer until all wires are run.
- Run wire up inside the post to your first lighting fixture. Drill a minimum 1/2" hole through the deck board to allow passage of the wiring through the board and into the post.

Tip: Laying post on its side prior to attaching to deck will allow for easier installation of wire. Use a fish tape or equivalent to pull wire to the top of the post. Tape wire to the top of post.

- Once wire is installed into first post, stand the post upright and secure into place. (Plumb as necessary)
- From the first lighting fixture, run a 9' Quick Connect Cable into the post and through the top rail to the next light. Continue this method until all lights are connected. (Brackets and posts need to be drilled using a 3/8" drill bit to run wire) Note: Wiring <u>cannot</u> be run through the top rail of stairs when using DekPro Prestige Railing.
 - For stairs, wiring should be run up & down inside the posts.
- Once lights are all connected, plug transformer into GFI protected 115V outlet and check to ensure all lights are illuminated, if any lights have not illuminated unplug transformer and check connections. Once all lights are working properly securely attach caps to the post.

T-Split Method - Up to 48 Watts Using Quick Connect Wiring

Installation Guidelines

Lighting Components

Wiring

Run cable from the transformer to electric load mid-point. Run cable up that post and use a Y-Splitter to split the run. From there, use 9' Quick Connect cables to run cables in either direction through the top rail to the next posts. Continue this process until all lights are connected. (Brackets and posts will need to be drilled using a 3/8" drill bit to accommodate cable)

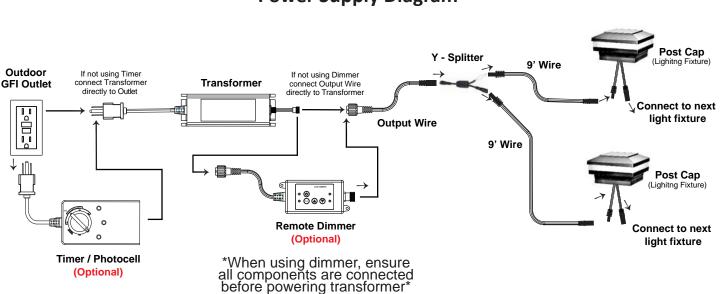
Post Cap



Step 1 Ensure that all cable has been properly installed and test the lights before mounting post cap to post.



Step 2 Fasten post cap to the post using 2 each screws included.

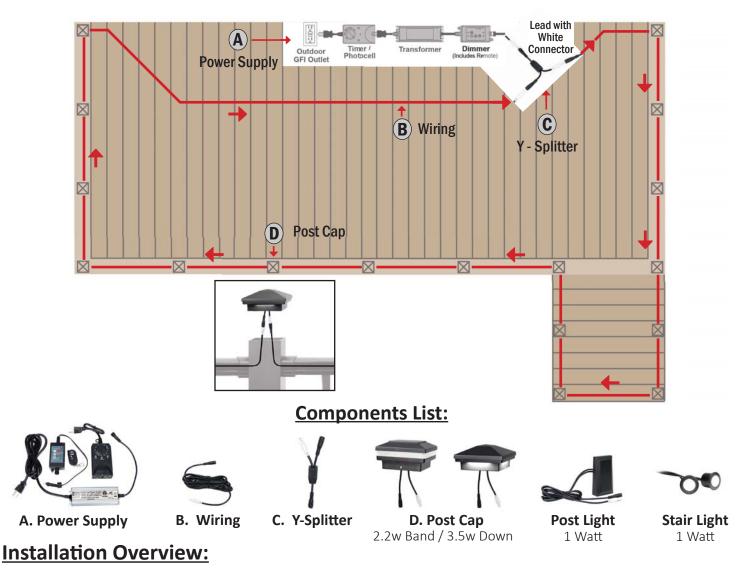


Power Supply Diagram

Loop Method - Up to 80 Watts Using Quick Connect Wiring

Installation Guidelines

Deck Wiring Overview



See illustration above as reference. Red lines are a representation of approximate wire locations, each installation will vary.

• Start at the transformer and connect a Y-Splitter. Run Quick Connect wire from the Y-Splitter to the location of your first post leading with the white connector

Note: Do not plug in transformer until all wires are run.

• Run wire up inside the post to your first lighting fixture. Drill a minimum 1/2" hole through the deck board to allow passage of the wiring through the board and into the post.

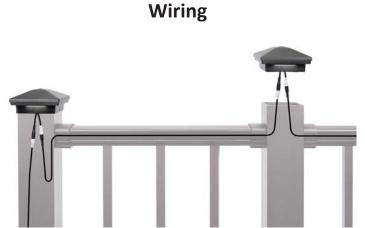
Tip: Laying post on its side prior to attaching to deck will allow for easier installation of wire. Use a fish tape or equivalent to pull wire to the top of the post. Tape wire to the top of post.

- Once wire is installed into first post, stand the post upright and secure into place. (Plumb as necessary)
- From the first lighting fixture, run a 9' Quick Connect Cable into the post and through the top rail to the next light. Continue this method until all lights are connected. (Brackets and posts need to be drilled using a 3/8" drill bit to run wire) Note: Wiring <u>cannot</u> be run through the top rail of stairs when using DekPro Prestige Railing. For stairs, wiring should be run up & down inside the posts.
- From the last post, run wire back to the Y-Splitter at the transformer and close the loop to complete the circuit.
- Once lights are all connected, plug transformer into GFI protected 115V outlet and check to ensure all lights are illuminated, if any lights have not illuminated unplug transformer and check connections. Once all lights are working properly securely attach caps to the post.

Loop Method - Up to 80 Watts **Using Quick Connect Wiring**

Installation Guidelines

Lighting Components

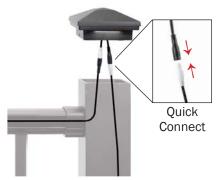


Transformer

Run cable from the transformer up inside the first post to the post light (left) and connect via Quick Connect connections. From there, use a 9' Quick Connect cable to run through the top rail to the next post. Continue this process until all post caps are connected.

(Brackets and posts will need to be drilled using a 3/8" drill bit to accommodate cable)

Post Cap

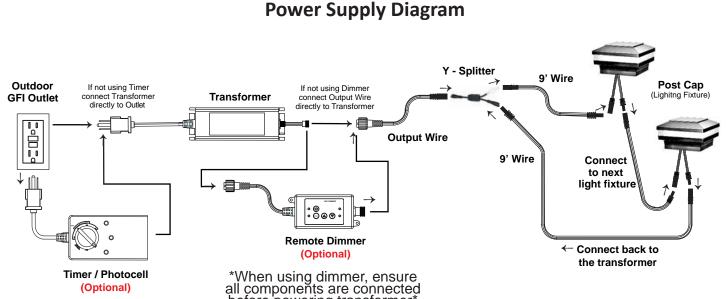


Step 1 Ensure that all cable has been properly installed and test the lights before mounting post cap to post.



Step 2 Fasten post cap to the post using 2 each screws included.

Lighting Overview using Quick Connect Wire

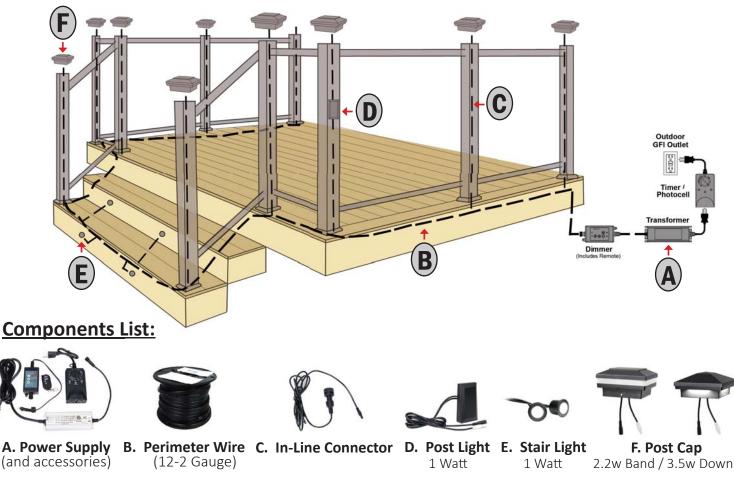


before powering transformer

Any Light Configuration Using 12-2 Gauge Perimeter Wire

Installation Guidelines

Deck Wiring Overview



Installation Overview:

- Run EFFEX 12-2 gauge outdoor rated low voltage wire from your transformer location to your first light fixture and around the perimeter of your deck to the last light fixture. Make sure to allow for some excess wire at each post to provide adequate room and allow for easy installation of In-Line Connector later. (Do not plug in transformer until all lighting is connected) (See illustration above. Dashed lines are a representation of approximate wire locations, each installation will vary.)
- Securely attach the 12-2 low voltage perimeter wire every 2-3 feet to deck structure to provide adequate support of wires.
- At each post location that will have a light fixture, use the In-Line Connector cable to splice into the perimeter wire and to provide power to the fixture. At the center where the post will attach to the deck drill a minimum ½" hole through the deck board to allow passage of the male end of the quick connect through the board and into the post.
 - *Tip:* Laying post on its side prior to attaching to deck will allow for easier installation of wire. Use a fish tape or equivalent to pull wire to the top of the post. Tape wire to the top of post.
- Once wire is installed into post, stand the post upright and secure into place. (Plumb as necessary)
- When all posts are permanently installed connect the light fixture to the wire attached to the post and ensure the connectors are securely seated (Do not secure caps to post until all lights have been checked and are working properly.)
- Once lights are all connected go to the power supply (unplugged) and wire nut the connection between the transformer (or Dimmer) and the perimeter wire. (Wires will need to be stripped and wire nuts attached to complete this step.)

Plug transformer into GFI protected 115V outlet and check to ensure all lights are illuminated, if any lights have not illuminated unplug transformer and check connections at post cap light and underneath the deck where the In-Line Connector is located. Once all lights are working properly securely attach caps to the post.

Page 12

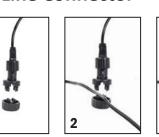
Any Light Configuration Using 12-2 Gauge Perimeter Wire

Installation Guidelines

Lighting Components

In-Line Connector







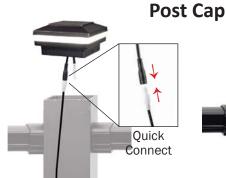
Step 1 Unscrew In-line Connector Module.

Step 2

Align In-line Connector with EFFEX 12-2 gauge perimeter wire.

Step 3

Screw In-line Connector together until wire is fully pierced and cap fully seated.



Step 1 Connect the male lead from wiring coming up the post to the female lead from the post cap. Ensure that the wires have been properly installed and test the lights.



Step 2 Fasten post cap to the post using 2 each screws included.

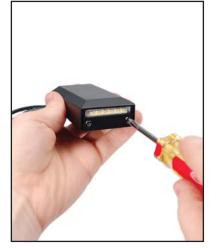
Power Supply Diagram Post Cap Wire Nut Connection If not using Timer connect Transformer If not using Dimmer connect Output Wire Transformer directly to Outlet directly to Transformer In-Line Connector EFFEX **Output Wire** 12-2 Perimeter Wire

(Lighitng Fixture) Outdoor **GFI** Outlet 000 **Remote Dimmer** (Optional) **Timer / Photocell** *When using dimmer, ensure all components are connected (Optional) before powering transformer*

Vertical Post Light Installation Guidelines

It is the responsibility of the installer to meet all code and safety requirements and implement the appropriate installation techniques for each situation. DekPro Manufacturing or it's distributors shall not be held liable for improper or unsafe installation.

Required Materials: Phillips head screw driver, drill, #2 phillips drill bit, 1/2" drill bit, pencil, and eye protection.



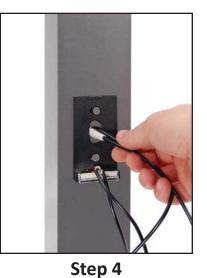
Step 1 Remove 2 ea. screws from bottom of light to dis-assemble fixture for installation.



Locate and attach backer plate to post using 2 ea. self-drilling screws. Ensure light is plumb and centered



Step 3 Drill 1/2" diameter hole to allow for passage of Quick Connect wires. Clean metal shavings from fixture.



Pass wires through the hole and fish up the post to connect to perimeter wires. Use of a fish tape or similar item may be useful.



Wiring diagram Shown with optional post cap light.



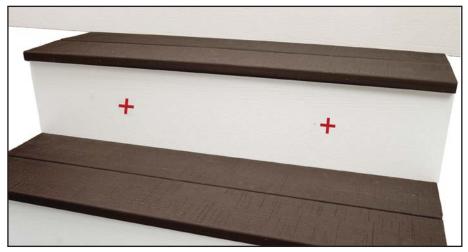
Step 5

Slide vertical post light cover onto the backer plate until fully seated. Re-install bottom screws to secure cover in place.

Recessed Stair Light (Standard / Hooded) Installation Guidelines

It is the responsibility of the installer to meet all code and safety requirements and implement the appropriate installation techniques for each situation. DekPro Manufacturing or it's distributors shall not be held liable for improper or unsafe installation.

Required Materials: Drill, 1" forstner drill bit, pencil, tape measure and eye protection.





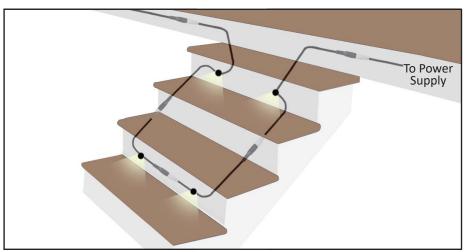


Step 2 Drill 1" diameter hole through riser for recessed light using 1" forstner drill bit.



Step 3

Feed Quick Connect wires through hole. Ensure that light orientation is correct and press light until fully seated.



Step 4 - Wiring diagram

Connect lights together. Each recessed light comes with 2 ea - 3' Quick Connect leads to allow for easy wiring. Connect to wire from power supply and then connect lights to one another.

Louvered Step Light (Flush Mount) Installation Guidelines

It is the responsibility of the installer to meet all code and safety requirements and implement the appropriate installation techniques for each situation. DekPro Manufacturing or it's distributors shall not be held liable for improper or unsafe installation.

Required Materials: Drill, 1" forstner drill bit, pencil, tape measure and eye protection.







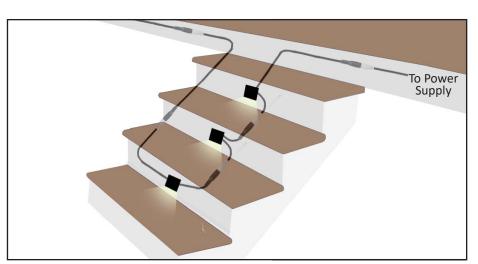
Step 2 Use 1" forstner bit to drill hole through riser to allow for wires to pass through.



Feed Quick Connect wires through hole. Level light fixture and mark screw holes. (Pre-drill if desired)



Attached light to stair riser using 2 each screws provided.



Step 5 - Wiring diagram

Connect lights together. Each Louvered light comes with 2 ea - 3' Quick Connect leads to allow for easy wiring. Connect to perimeter wire then connect lights to one another.

Strip Light (for Stairs) Installation Guidelines

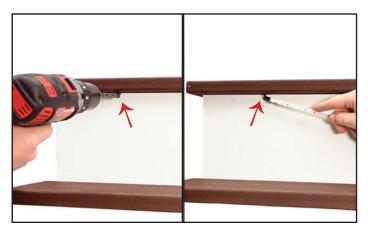
It is the responsibility of the installer to meet all code and safety requirements and implement the appropriate installation techniques for each situation. DekPro Manufacturing or it's distributors shall not be held liable for improper or unsafe installation.

Required Materials: Drill, 3/8" drill bit, pencil, tape measure and eye protection.



Step 1

Determine location and length of the strip light. If measurement is less than the standard 30" / 55", Strip light can be trimmed down in 2" increments on the nonwired end. (Must be cut on indicated cut line)



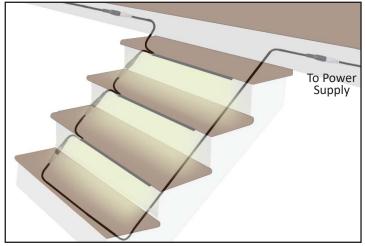


At the top of the riser board, drill a 3/8" hole to pass wiring through the riser board.



Step 3

With Strip light trimmed to length, remove backing to expose 3M adhesive. Adhere Strip light to under side of stair tread so light shines downward. Ensure the surface has been properly cleaned with denatured alcohol and dried for best results.



Step 4 - Wiring diagram

Connect lights together. Each Strip light comes with 2 Quick Connect leads to allow for easy wiring. Connect to wire from power supply and then connect lights to one another.

Solar Post Cap Installation Guidelines



Step 1 Ensure post cap light is oriented correctly in the upright position with the solar collector exposed to light.



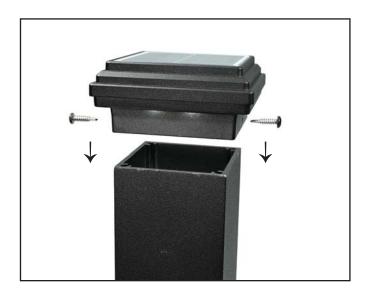
Step 2

While holding the post cap upright, turn on the LED lights via the push switch inside the bottom of the post cap.



Step 3

Test the lights by covering the solar collector to ensure lights function correctly and turn on when not exposed to light.

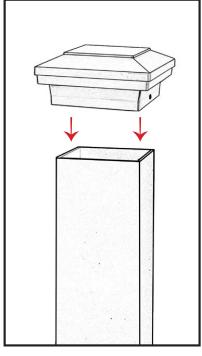


Set post cap down onto the post and attach to post using 2 ea. self-drilling screws provided.

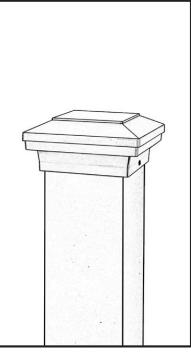
Unlit Post Cap Installation Guidelines



DekPro™ EFFEX Post Cap Installation Guide



Step 1 Test fit post cap to post to ensure that the cap is the proper size for the post.



Step 2 Fasten post cap to the post using 2 each provided screws or silicone adhesive.

Remote Dimmer Installation Guidelines

Dimmer Module Remote for Dimmer Input Connection Extendable Antenna Connects to Transformer Indicator Light Increases amount of light Power Decreases amount of light On/Off On / Off Switch Output Mode: Switch between 4 levels of light LED single colo DDEL NO:MHD-12-5A X Mode Button **Down Arrow** Dims lights to Press to decrease Up Arrow four levels. light intensity Press to increase light intensity Caution: When using dimmer, ensure all components are connected before powering transformer

Remote Programming Instructions

1. Make sure dimmer is plugged into the transformer and that the light plugged into the dimmer are on.

2. With the lights still on, unplug the transformer from the outlet.

3. Allow the lights to shut off

4. Press and hold the up and down arrow buttons on the remote.

5. While holding those buttons, plug the transformer back into the outlet.

- 6. The lights will flash quickly once.
- 7. Release the up and down arrow buttons.
- 8. Press the power button on the remote once.

9. The lights should shut off. If the lights shut off after pressing the power button press the power button a few more times to confirm that the lights turn on and off. Your remote is programmed, enjoy.

10. If the lights do not shut off after pressing the power button, repeat steps 1 - 8.

11. If after repeating steps 1 - 8 and pressing the power button on the remote does not shut off the lights, try replacing the battery and repeat steps 1 - 8.

12. If after replacing the battery and repeating steps 1 - 8 and the remote still does not turn the lights off contact DekPro Manufacturing or its distributors at 800-335-5909

Warranty



DekPro EFFEX Warranty – DekPro Manufacturing Inc.

Powder Coat Finish	10 Year Warranty against cracking or peeling.
LED's and Lights	10 Year Warranty when installed with DekPro Manufacturing brand EFFEX transformers. No warranty when used with any other power source.
Transformers	3 Year Warranty When Used Exclusively For DekPro EFFEX Lighted Products. 1 Year Warranty from date of purchase when used with non- DekPro EFFEX products.
Controllers	1 Year Warranty When Used Exclusively With DekPro EFFEX Transformers. No warranty when used with any other brand of transformer.
Warranty	Should any product fail DekPro EFFEX reserves the right to request return of the product, transportation costs pre-paid, for the purpose of inspecting the product to determine validity of the claim.
	Upon validation of a claim by DekPro Manufacturing replacement will be made including transportation costs.
	Code compliance and applicability for intended use is the responsibility of purchaser.
	EXCEPT AS OTHERWISE PROVIDED, DekPro Manufacturing MAKES NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THIS WARRANTY IS NOT TRANSFERABLE.
Limitation of Liability	DekPro Manufacturing's liability is discharged upon repair or replacement of defective product. DekPro Manufacturing will not be responsible for cost of removal and reinstallation or accidental and consequential damages. Damages resulting from misuse, abuse, alteration, negligence or accidents are not covered under this warranty.



WWW.DEKPROMFG.COM

Marketed and Distributed by:

