



INSTALLATION GUIDE

INTEGRATED SOLAR LIGHT — FENCE-MOUNT ASSEMBLY

SF Industries USA | SFSL-180-50 | Lowering Hinge & Post-Mount Hardware

ASSEMBLY	POLE	MOUNTING OPTIONS	REVISION
SF-FEN-SH10, SF-SCP-SH10, SF-SP1-SH10, SF-SP2-SH10	10 ft nominal pole (2 × 5 ft sections)	Wood post or pipe post	Rev. 01

1. PRODUCT APPLICATION

This guide covers installation of the SF Industries integrated solar light fence-mount assembly. The configuration includes one SFSL-180-50 integrated solar luminaire, two 5 ft sections of 6061 structural aluminum pipe (10 ft nominal combined pipe length), one lowering hinge, one fence-mount bracket, and the selected post-mount hardware. The supplied product illustration indicates a 12 ft height dimension; because the stated pipe sections total 10 ft, confirm whether 12 ft refers to overall installed height, fixture height, or a revised pole configuration before installation.

2. SAFETY & PRE-INSTALLATION

- Read this guide, the current SFSL-180-50 light instructions, approved assembly drawing, and the instructions supplied with the hinge and mounting hardware before starting.
- Installation must be completed by qualified personnel. Use appropriate ladders/lifts, fall protection, and a second person when handling long pole sections or raising/lowering the assembly.
- Select mounting hardware for the actual post type and outside dimensions. Do not mix hardware options or substitute fasteners.
- Inspect the luminaire, solar panel, both pipe sections, threaded ends, hinge, bracket, clamps/bolts, and all supplied hardware. Do not install damaged or deformed components.
- Confirm the supporting post is structurally sound, plumb, and capable of carrying the assembly and wind loads. The assembly is rated up to 120 mph only when installed in accordance with the installation directions; confirm rating units, site exposure, and post adequacy for the project. The pole is rated for wind speeds up to 120 mph when installed in accordance with the manufacturer's installation instructions and securely mounted to a fence post or support structure rated for wind speeds of 120 mph or greater. The supporting structure, including its foundation, concrete embedment depth, and anchoring, must be designed and installed to withstand the applicable wind loads.
- Do not drill, weld, cut, or modify the pole, hinge, bracket, or luminaire unless approved in writing by SF Industries or the responsible engineer.
- Keep hands and body clear of the lowering hinge pivot and pinch points. Support the pole before releasing any hinge lock or retention hardware.

3. COMPONENTS

COMPONENT	DESCRIPTION
Integrated solar luminaire	1 × SFSL-180-50; integrated LED, solar panel, battery, and controls.
Aluminum pole	10 ft nominal total: 2 × 5 ft sections of 6061 structural aluminum pipe; each section threaded at one end with one fully threaded aluminum coupling
Lowering hinge	1 × hinge assembly; install and secure per supplied hinge instructions.
Fence-mount bracket	1 × bracket assembly to attach to selected wood or pipe post.
Post-specific mounting hardware	Select exactly one option below to match the support post.
Assembly fasteners	Use supplied/approved hardware. Fastener sizes and torque values must come from the applicable hardware instructions.

4. SELECT THE CORRECT POST-MOUNT HARDWARE

OPTION	POST TYPE / MEASURED SIZE	INSTALLATION NOTES
A — Wood post PN: SF-SCP-SH10	Square or round wood post, 4 in. OD or larger	Use the wood-post hardware set. Confirm post is sound and large enough for the bracket and fasteners. Position hardware as shown in the approved wood-post detail.
B — Pipe post PN: SD-SCP-SH10	1.25 in. to 2 in. OD	Use the matching small-pipe hardware set. Verify actual outside diameter before fitting.
C — Pipe post PN: SF-SP1-SH10	2 in. OD to 2-3/8 in. OD	Use the matching medium-pipe hardware set. Do not use on pipe outside this range.
D — Pipe post SF-SP2-SH10	2-3/8 in. OD to 2-7/8 in. OD	Use the matching large-pipe hardware set. Verify clamp engagement and clearances.



The ranges above are the specified hardware options. Where a range shares a boundary (2 in. or 2-3/8 in.), use the hardware option identified on the product packaging or approved assembly drawing. Do not force an undersized or oversized clamp onto the post.

5. INSTALLATION PROCEDURE

- 1. Verify parts and post** — Confirm the light model, two 5 ft pipe sections, lowering hinge, fence bracket, and one correct hardware kit. Measure the post outside diameter and identify wood or pipe mounting.
- 2. Prepare the work area** — Choose a location with unobstructed sunlight and the intended light coverage. Check overhead/underground hazards and ensure there is room to safely raise and lower the assembly.
- 3. Attach fence bracket** — Position the bracket between 4 and 5ft from ground level. Attach it to the wood or pipe post using the matching hardware option and approved installation detail. Keep the bracket aligned and secure all fasteners to the specified torque.
- 4. Install the lowering hinge** — Attach the hinge to the fence bracket in the orientation shown by the supplied hinge drawing. Confirm pivot direction, locking/retention features, and required clearance. Do not proceed if the hinge hardware or orientation is unclear.
- 5. Join pole sections** — Connect the two 5 ft threaded aluminum pipe sections using the provided threaded coupling. Engage threads without cross-threading. Do not add unapproved sealant, adapters, or extensions. Confirm the completed pole is straight and secure. Use pipe wrench or pipe strap to achieve appropriate connection.
- 6. Attach pole to hinge** — Fit the pole to the hinge interface using the specified hardware. Support the pole during assembly. Verify that the hinge can move through its intended range and that all locking/retention components engage.
- 7. Mount integrated light** — Attach the SFSL-180-50 to the upper pole end using the approved mounting interface. Protect the solar panel and luminaire. Do not force or cross-thread connections.
- 8. Orient light and panel** — Aim the light toward the intended area and orient the solar panel for maximum unobstructed sunlight, following the light manufacturer's instructions. Ensure the pole, bracket, or nearby objects do not shade the panel.
- 9. Raise and secure assembly** — With a helper supporting the pole, carefully raise it to operating position. Keep hands clear of hinge pinch points. Engage all hinge locks, pins, and retention hardware before releasing support.
- 10. Recommended Fixture Height** — Total fixture height for fence mount applications should be between 18 and 22ft total height, not to exceed 22ft height for wind ratings to remain valid.
- 11. Torque Specifications** — Torque specification for all nuts and bolts is 75ft-lbs.
- 10. Final inspection** — Check post attachment, bracket alignment, pole joints, hinge lock, light connection, panel exposure, and clearance. Tighten only to specified values and confirm the assembly is stable.

6. LOWERING THE POLE FOR SERVICE

- Perform lowering only in calm, safe conditions with the area below and around the pole cleared of people and obstructions.
- Support the pole before releasing hinge locks or retention hardware. Never allow the pole to free-fall or swing uncontrolled.
- Lower the assembly slowly while keeping hands clear of the pivot and pinch points. Use a second person or suitable support equipment as needed.
- After service, raise the pole carefully and fully re-engage all hinge locks and retention components. Inspect the bracket and hardware before returning the light to service.

7. FASTENERS, TORQUE & POST REQUIREMENTS

Use the fasteners and torque values specified by the supplied post-hardware, bracket, and lowering-hinge instructions. Torque values are 75ft-lbs. If the correct hardware detail, fastener size, torque, or hinge-locking method is not provided, stop and obtain direction from SF Industries before installation.

8. SOLAR LIGHT SETUP & OPERATION

- Refer to the current SFSL-180-50 product sheet/manual for charging, remote-control, sensor, and operating-mode instructions.
- Ensure the solar panel has direct, unobstructed exposure to sunlight. Trees, buildings, fences, and other objects can reduce charging performance.
- Allow the battery to charge as directed before evaluating normal nighttime performance.
- Verify the light turns on and operates in the selected mode. Confirm the beam is aimed safely and does not create unwanted glare.

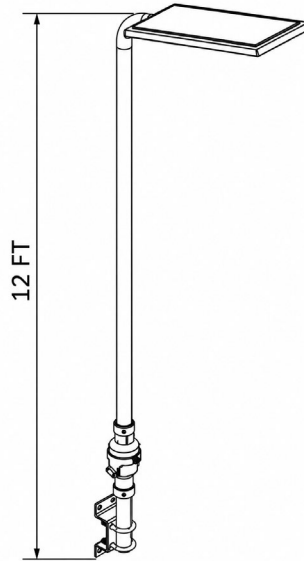


9. POST-INSTALLATION CHECKLIST

- Correct mounting hardware selected for measured wood/pipe post dimensions.
- Fence bracket securely attached and aligned.
- Lowering hinge installed in correct orientation; lock and retention hardware engage.
- Both 5 ft pipe sections fully and correctly joined; pole is straight and secure.
- Luminaire mounted securely; no cross-threading or unapproved adapters.
- Assembly raised and locked; no uncontrolled movement or interference.
- Solar panel unobstructed and oriented for sunlight.
- Light operation checked according to the current luminaire instructions.
- Installation inspected by the responsible qualified person.

10. PRODUCT REFERENCE DRAWING

The drawing below is a visual reference for the integrated solar light, pole, hinge, and post-mount arrangement. Use approved assembly drawings and the hardware-specific instructions for exact fitment, fasteners, and dimensions.



Illustrative assembly reference.

11. MAINTENANCE & INSPECTION

Periodically inspect the post, bracket, mounting hardware, hinge pivot and locks, threaded pole joint, luminaire attachment, and solar panel. Recheck after severe weather, impact, or service. Look for loose hardware, movement, corrosion, cracks, deformation, thread damage, hinge wear, or panel obstruction. Remove the assembly from service if any structural damage or unreliable hinge locking is observed; have it evaluated by qualified personnel.

12. TECHNICAL DOCUMENTS

Use this guide with the SFSL-180-50 integrated solar light specification sheet/manual, the product-specific assembly drawing, the supplied lowering-hinge instructions, and the selected wood-post or pipe-post hardware instructions. Where instructions conflict or omit a required detail, contact SF Industries before proceeding.