Apollo PV

Solar Panel Mesh

Installation Guide

PVC-coated welded wire critter guard — keep birds, rodents and debris from nesting under solar arrays.



Complete kit: mesh rolls, clips, speed washers and zip ties.

Document: Installation Guide v2.0

Product: PVC-Coated Welded Wire Critter Guard

Company: Apollo Group GmbH, Siegen, Germany

How to Install Solar Panel Mesh on Rooftop for Bird Proofing

Birds nesting under solar panels can cause corrosion, reduce panel efficiency, create noise, and leave droppings that damage equipment. Solar panel mesh provides an effective physical barrier that prevents birds from nesting while remaining almost invisible and without damaging the panels. No drilling or gluing is required.

Solar Panel Kit (typically supplied in carton)

- 1 roll of solar panel mesh
- 60 / 100 units of solar panel mesh clips (with speed washers)
- 1 wire cutter
- 1 pair of anti-static gloves
- Several corner zip ties
- Installation instruction manual

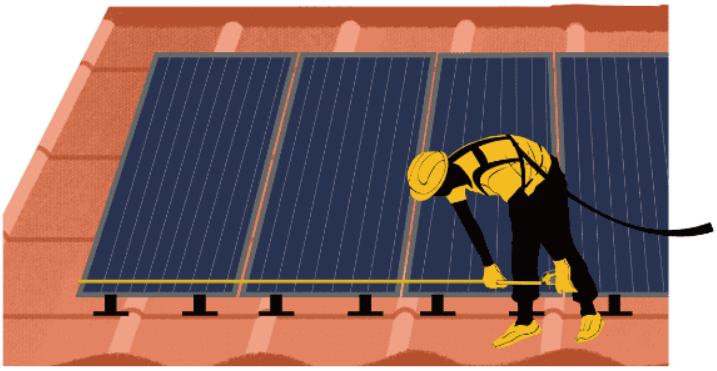
Additional recommended tools: tape measure, square wooden rod (for folding), pliers.



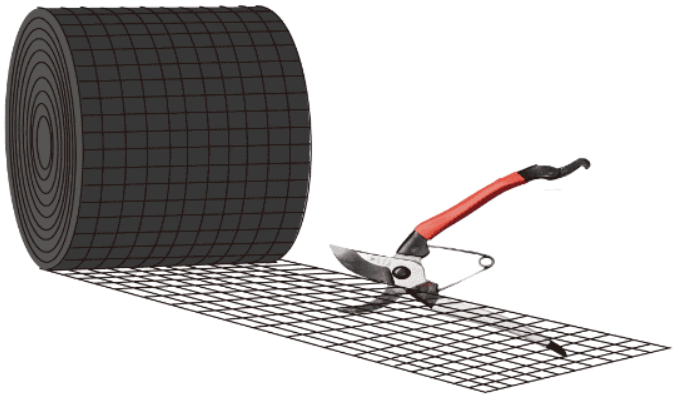
Everything in the box: mesh roll, clips, washers, gloves, cutter and zip ties.

Straight-Side Installation

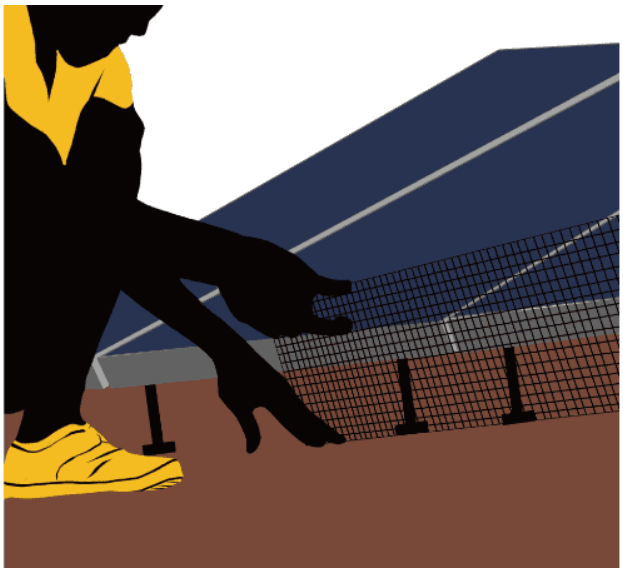
1 **Step 1 — Measure the length of the solar panel with a tape measure.**



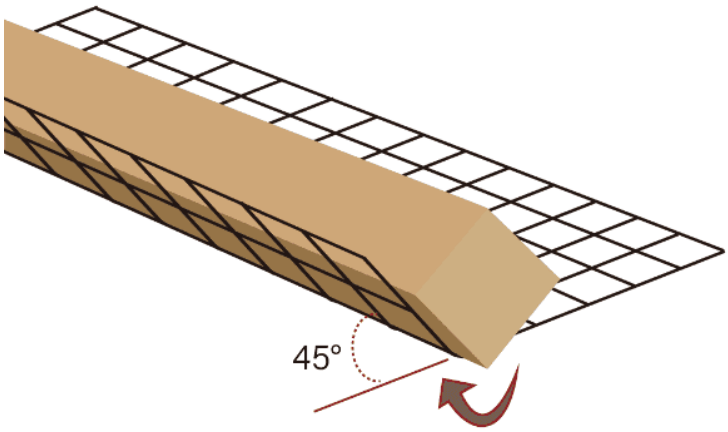
2 **Step 2 — Cut the solar panel mesh according to the panel length with a wire cutter.**



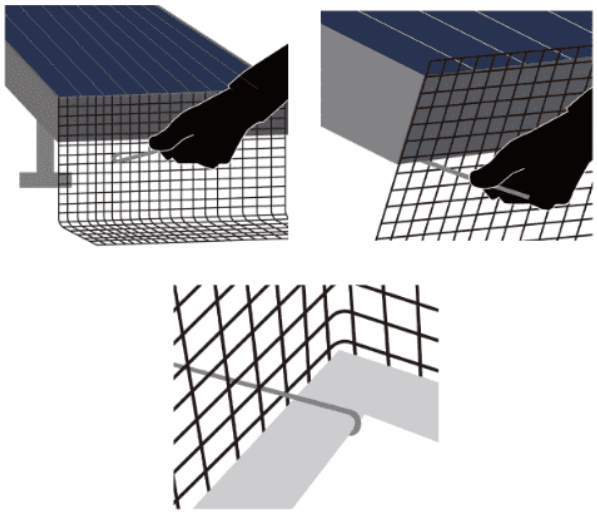
3 **Step 3 — Compare the height of the solar panel and the solar panel mesh.**



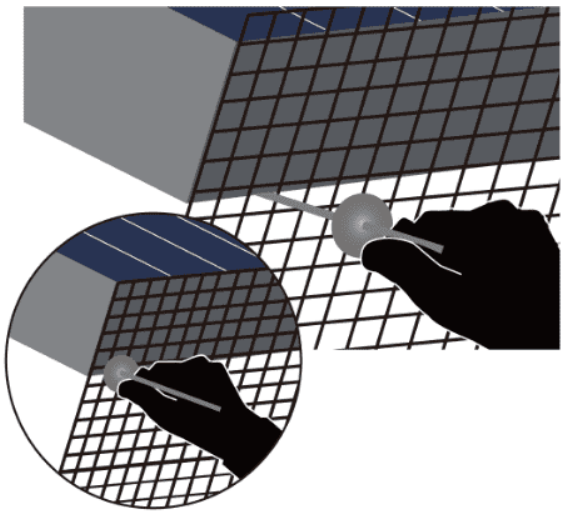
4 **Step 4 — Fold the extra height of the solar panel mesh at a 45-degree angle using a square wooden rod.**



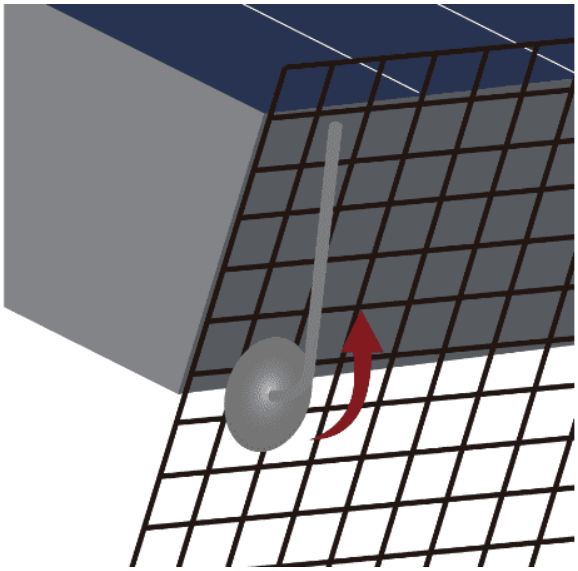
5 **Step 5 — Stick the clip hook through the mesh and panel, and hook it to the panel lip.**



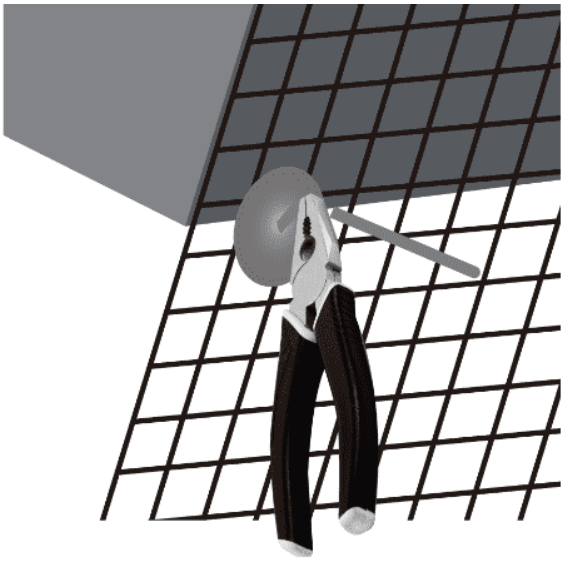
6 **Step 6 — Sleeve the speed washer through the clip rod, then tighten it against the mesh.**



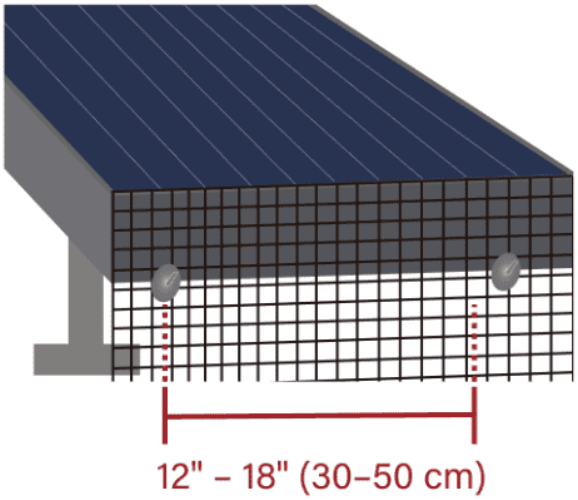
7 Step 7 — Bend the clip rod upwards with your hands.



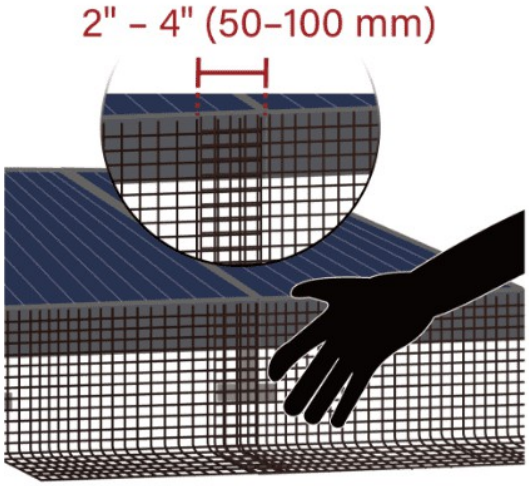
8 Step 8 — Cut off the excess portion of the clip rod with pliers.



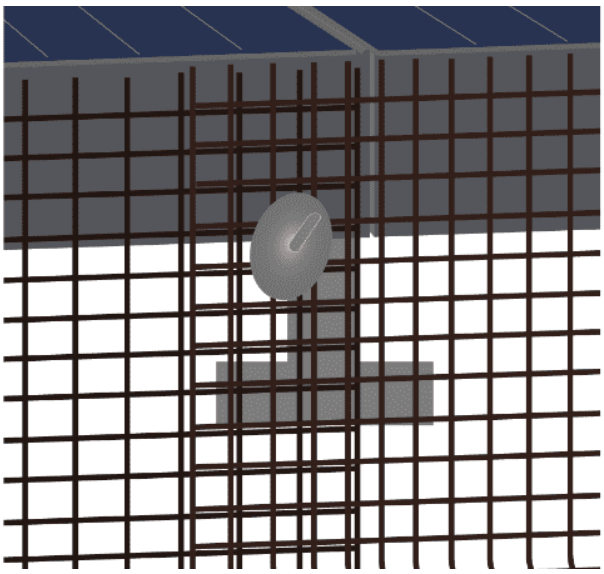
9 **Step 9 — Attach clips approximately every 12″ – 18″ (30 cm – 50 cm).**



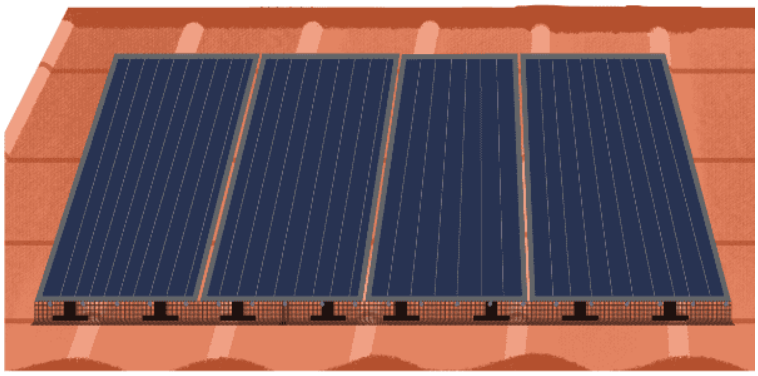
10 **Step 10 — Overlap about 2″ – 4″ (50 mm – 100 mm) when starting a new piece of mesh.**



11 **Step 11 — Add clips and secure speed washers to fix the overlapping meshes (repeat Steps 5–8).**

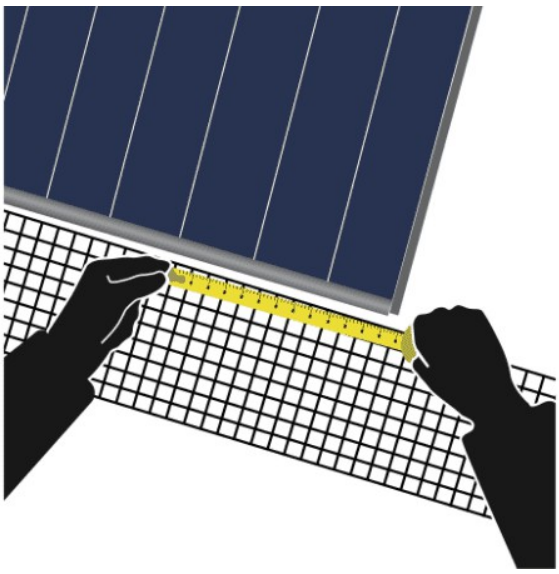


12 **Step 12 — Solar panel mesh straight-side installation is finished on the rooftop.**

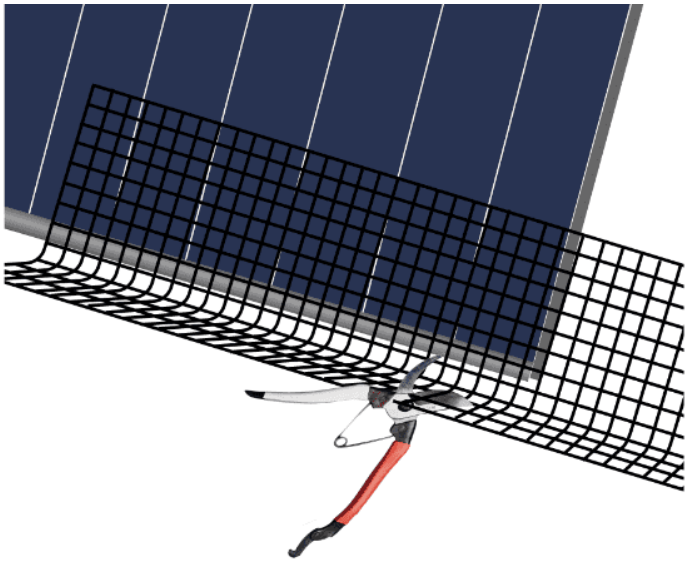


Outside-Corner Installation

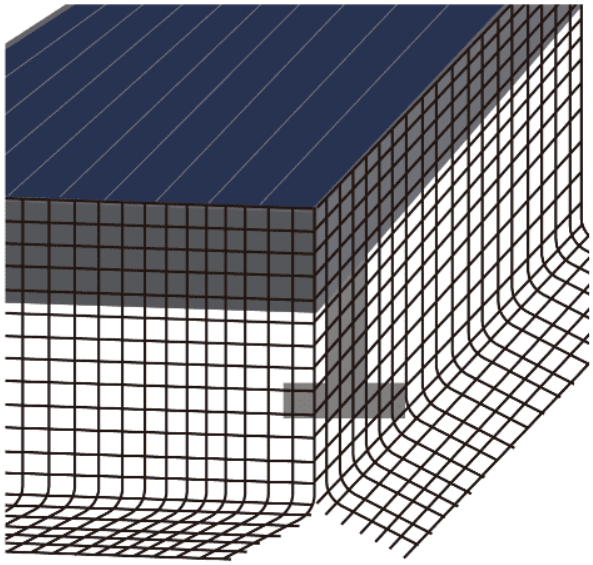
1 **Step 1 — Measure to determine where the bend will go using a tape measure.**



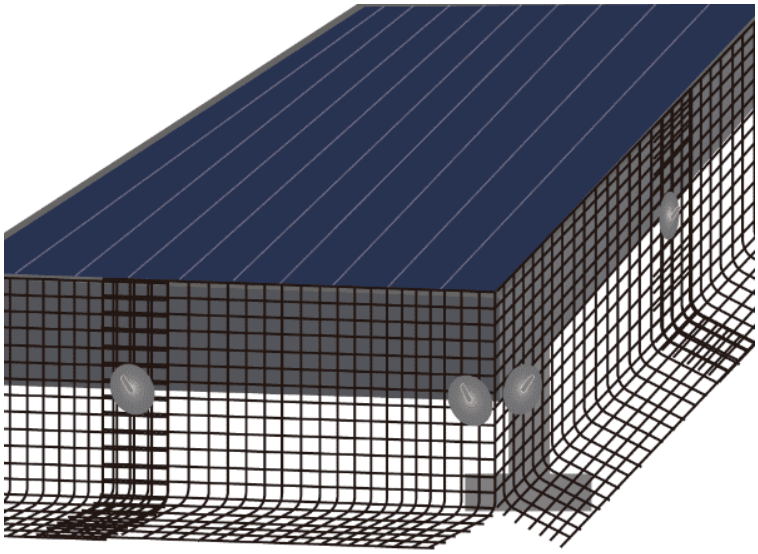
2 **Step 2 — Cut a straight slit in the mesh near the rooftop in the corner area with a wire cutter.**



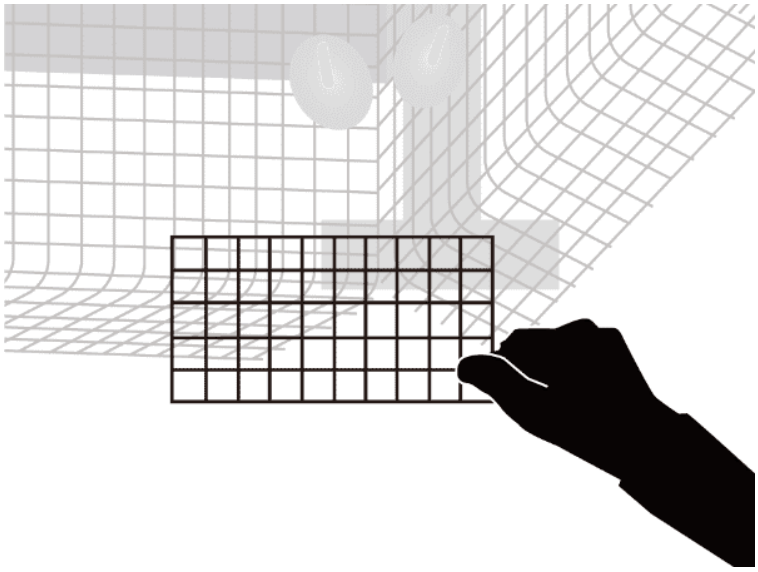
3 **Step 3 — Bend the mesh along the slit at a 90-degree angle and place it around the corner.**



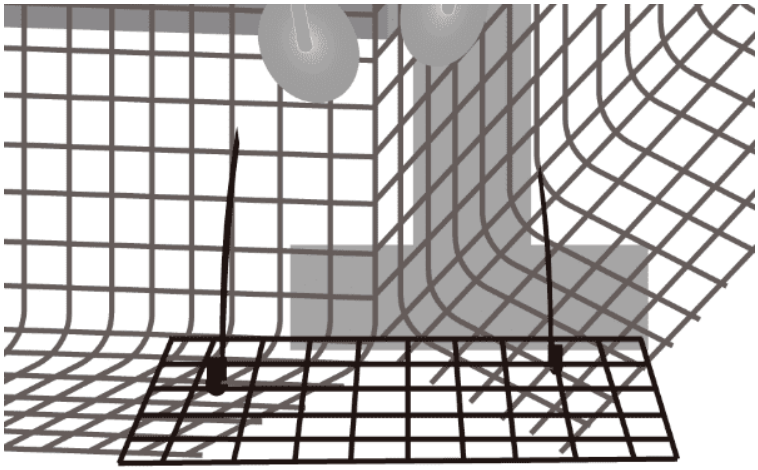
4 **Step 4 — Fasten the outside corner mesh and solar panel with clips and speed washers.**



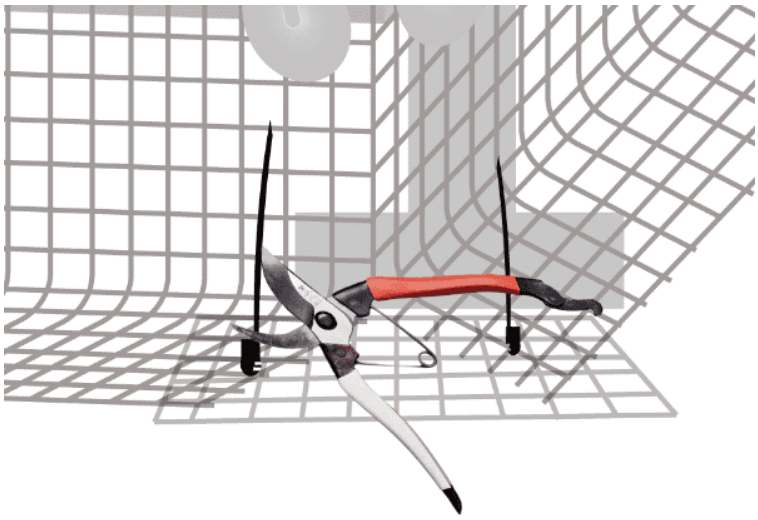
5 **Step 5 — Cut a small piece of mesh approximately 2″ × 4″ to cover the gap between the corner mesh and the rooftop.**



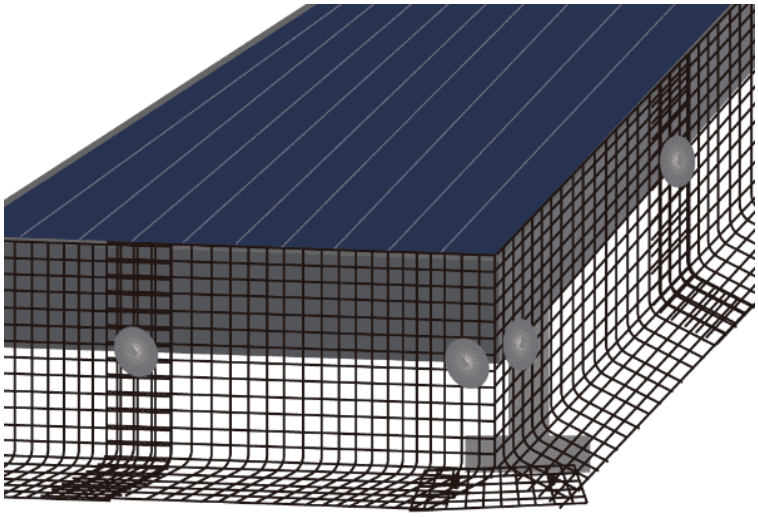
6 **Step 6 — Tie the small mesh piece and the corner mesh in place with corner zip ties.**



7 **Step 7 — Cut off the excess portion of the zip ties with a wire cutter.**

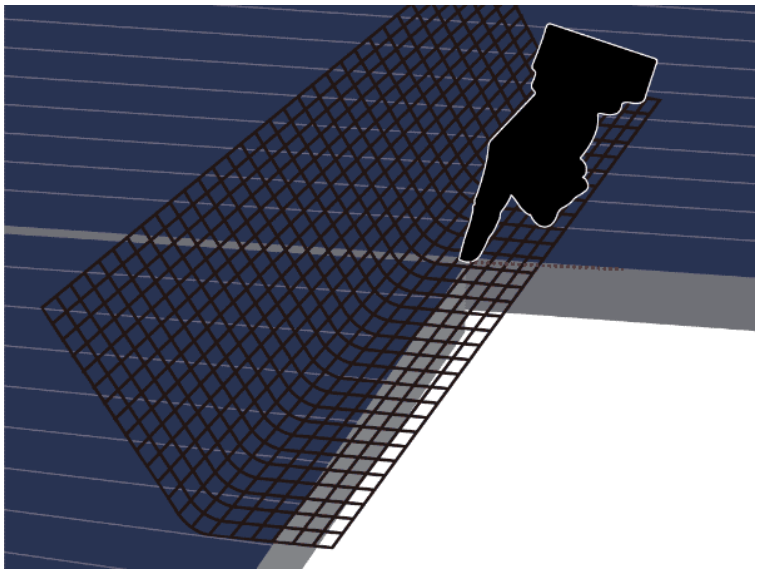


8 **Step 8 — Solar panel mesh outside-corner installation is finished.**

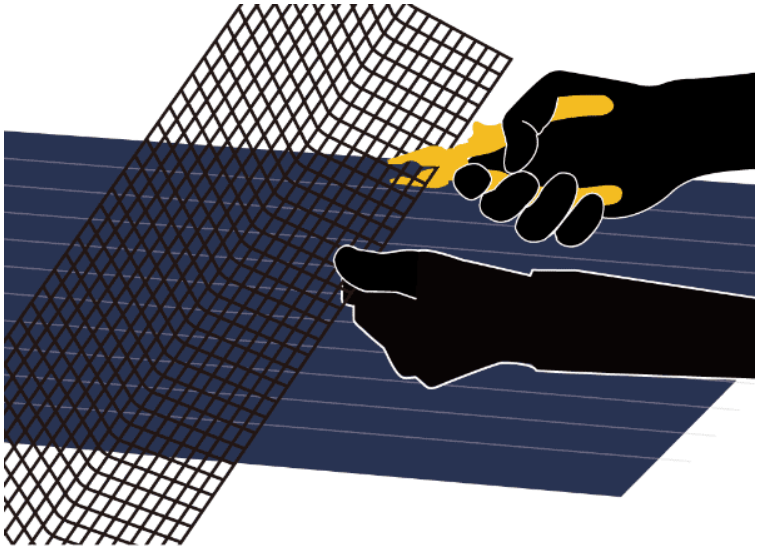


Inside-Corner Installation

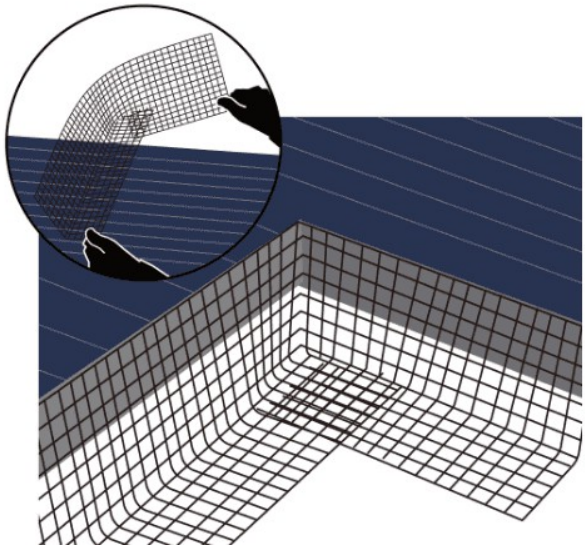
1 **Step 1 — Match the mesh and solar panel corner to determine the position of the inside corner of the mesh.**



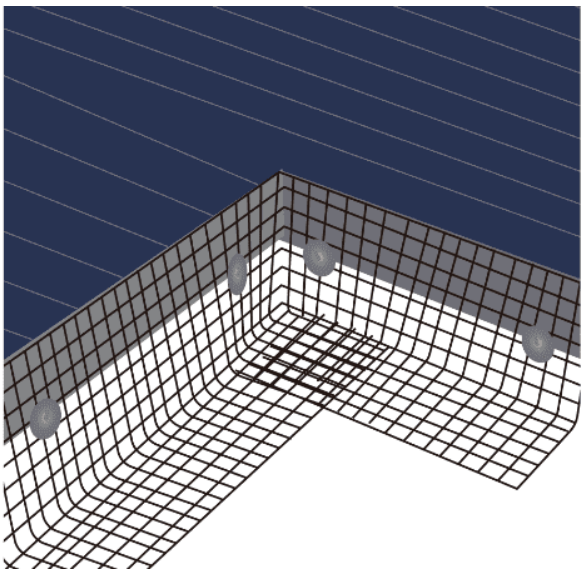
2 **Step 2 — Cut a 45-degree slit at the bottom of the solar panel mesh with pliers.**



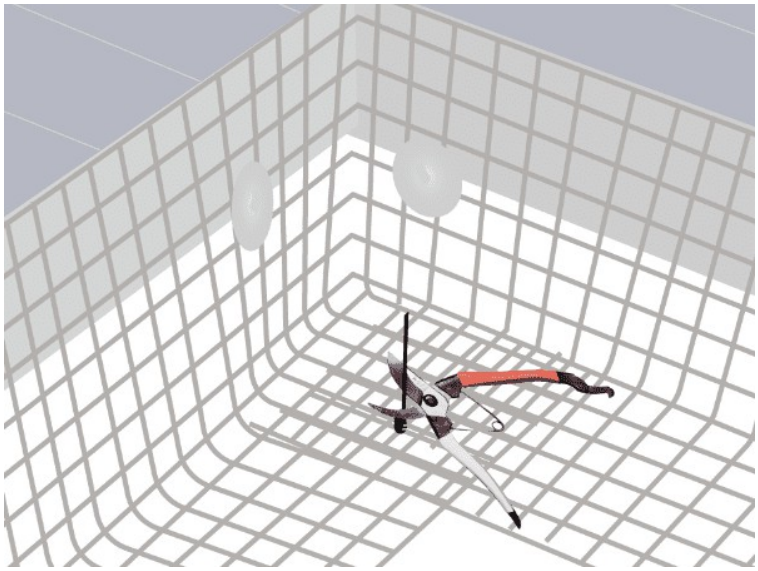
3 **Step 3 — Bend the two ends of the mesh in opposite directions so that the cut ends overlap.**



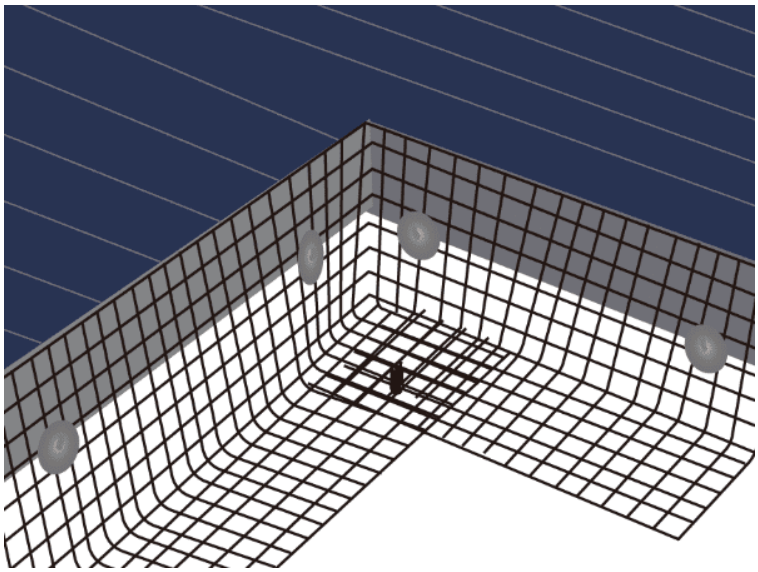
4 **Step 4 — Secure both ends of the inside-corner mesh with clips and speed washers.**



5 **Step 5 — Lock the bottom slit with zip ties, then cut off the excess portion with a wire cutter.**



6 **Step 6 — Solar panel mesh inside-corner installation is finished.**



Safety Notes

- Always wear anti-static gloves to protect both yourself and the solar panels.
- Work carefully around electrical conduits, boxes, railings, and vents – the mesh is malleable and can be cut and shaped as needed.
- Ensure clips are spaced every 12–18 inches (30–50 cm) for secure fastening.
- Proper overlap (2–4 inches / 50–100 mm) between mesh pieces prevents gaps that birds could exploit.
- The installation requires no drilling or adhesive, preserving the integrity of the solar panel frames.
- After installation, periodically inspect the mesh and clips, especially after severe weather.

Questions about sizing or volume orders? Contact Apollo Group GmbH — j.zhang@apollo-group.online · +49 271 3878100 · apollo-pv.com