

Solar Site Survey Photo Checklist

Get the right photos and field data the first time — so your plan set is accurate and your project doesn't stall.

Project: _

Address: _

Date: _

Surveyor: _

ROOF PHOTOS

- Overall roof — each plane/face visible
- Close-up of roofing material and condition
- Roof pitch (use angle finder or measurement)
- All vents, pipes, and penetrations
- Skylights (if present)
- Existing solar panels or equipment on roof
- Chimney, HVAC units, satellite dishes
- Eave and ridge details
- Shading obstructions (trees, adjacent structures)
- Roof access point / ladder set location
- Attic space (if accessible — rafters, decking)

ELECTRICAL PHOTOS

- Main service panel — cover ON (label visible)
- Main service panel — cover OFF (breakers visible)
- Main breaker rating (close-up of label)
- Service entrance conductors (if visible)
- Meter and meter base
- Utility disconnect (if present)
- Grounding electrode / ground rod
- Subpanel(s) — cover on and cover off
- Existing solar inverter or disconnect
- Panel schedule / breaker directory (if legible)
- Service conductor size (label or measurement)

BATTERY / STORAGE PHOTOS (IF APPLICABLE)

- Proposed ESS / battery location
- Wall clearances at proposed location
- Ventilation path (garage door, exterior wall, etc.)
- Distance from battery location to main panel
- Existing backup panel or critical loads panel
- Gas appliances within 3 ft of proposed location
- Flood zone / elevation concern (if applicable)

SITE CONTEXT PHOTOS

- Street view of property (from road)
- Front and rear of home (full view)
- Property overview showing roof + yard
- Shading sources — trees, neighboring buildings
- Ground mount area (if applicable)
- Trenching path to panel (ground mount / detached)
- Driveway / equipment access for install crew
- HOA signage or gate (if applicable)

MEASUREMENTS TO CAPTURE ON SITE

- Main breaker rating (amps)
- Service conductor size (AWG or kcmil)
- Bus bar rating (amps — on panel label)
- Panel-to-proposed-inverter distance (ft)
- Panel-to-proposed-battery distance (ft)
- Roof ridge height (approx.)
- Rafter spacing (if accessible)
- Conduit run path and estimated length

Common Misses & Pro Tips

TOP 10 MOST COMMON MISSES

These cause the most design delays and re-visits

- 1 Main breaker label obscured or unreadable**
Design team needs exact amperage. If label is worn, note the rating separately.
- 2 Only one angle of the roof captured**
Every plane needs its own photo. A single “overview” shot isn’t enough for accurate layout.
- 3 Panel photo taken with cover ON only**
Breaker layout, available spaces, and wire sizing all require the cover-off photo.
- 4 No measurement of service conductor size**
Conductor sizing determines interconnection method. Without it, design assumptions may be wrong.
- 5 Missing photos of obstructions close to array area**
Vents, pipes, and equipment within 3 ft of proposed array affect layout and setbacks.
- 6 Battery location not photographed or measured**
Storage requires clearance verification. “It goes in the garage” isn’t enough for permitting.
- 7 No photo of existing solar equipment**
Existing systems affect interconnection, bus bar capacity, and code compliance for additions.
- 8 Shading sources not captured from roof level**
Ground-level tree photos don’t show how shade hits the roof. Capture from roof if possible.
- 9 Subpanel existence not documented**
Undocumented subpanels can change load calculations and interconnection approach.
- 10 Ground rod / grounding not photographed**
Many AHJs require grounding documentation. Easier to capture now than re-visit later.

Need design or permitting support?

HPH Solutions delivers permit-ready solar and storage plan sets, engineering coordination, and AHJ guidance for residential installers and EPCs — nationwide.

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