

SOLAR ENERGY
ONE- & TWO-DWELLINGS AND TOWNHOUSES
PHOTOVOLTAIC DESIGN & INSTALLATIONS CHECKLIST

1. **Roof access points.** Roof access points shall be located in areas that do not require the placement of ground ladders over openings such as windows or doors, and located at strong points of building construction in locations where the access point does not conflict with overhead obstructions such as tree limbs, wires or signs. Multiple arrays shall be separated by a clear access pathway not less than 3 feet in width.[IFC 605.11.1.1]
2. **Hip roof layouts.** Panels and modules installed on *dwelling*s with hip roof layouts shall be located in a manner that provides a clear access pathway not less than 3 feet in width from the eave to the ridge on each roof slope where panels and modules are located. The access pathway shall be located at a structurally strong location on the building capable of supporting the live load of fire fighters accessing the roof.[IFC 605.11.1.2.2]
3. **Single ridge roofs.** Panels and modules installed on *dwelling*s with a single ridge shall be located in a manner that provides two, 3-foot-wide access pathways from the eave to the ridge on each roof slope where panels or modules are located. [IFC 605.11.1.2.3]
4. **Roofs with hips and valleys.** Panels and modules installed on *dwelling*s with roof hips or valleys shall not be located less than 18 inches from a hip or valley where panels or modules are to be placed on both sides of a hip or valley. Where panels are to be located on one side only of a hip or valley that is of equal length, the 18-inch clearance does not apply. [IFC 605.11.1.2.4]
5. **Allowance for smoke ventilation operations.** Panels and modules installed on *dwelling*s shall not be located less than 3 feet below the roof ridge to allow for fire department smoke ventilation operations. [IFC 605.11.1.2.5]
6. **Ground Mounted Arrays:**
 - Shall meet zoning setback and utility screening requirements
 - Footing inspection required when applicable.
 - Trench inspection required for buried cable & conduit. (18” Min. Depth)
 - Shall have a 10-foot clear, brush-free area around the array.
7. **Engineering required as follows:**
 - **Roof mounted arrays:**
 - Certifying the roof is capable of carrying the imposed load of the arrays.
 - Certifying the anchoring will withstand a 115 mph wind load.
 - **Ground mounted arrays:**
 - Certifying the anchoring will withstand a 115 mph wind load.
8. **Application and Submittal Requirements**
 - **PV Applications** www.icgov.org/solarpermit
 - **PV Worksheets** www.icgov.org/solarpermit
 - **Stamped and signed plans certifying engineering as stated above.**

A PV installer is allowed to construct the support system, mount the modules, inverters or optimizers, and connect the factory provided module wiring harness (plug and play). The remainder of the installation such as panel boards, raceways, boxes, fittings, breakers, and building wire shall be installed by a licensed electrical contractor.