



## COMMUNITY DEVELOPMENT DEPARTMENT BUILDING DIVISION

### RESIDENTIAL PHOTOVOLTAIC STANDARD NOTES

The standard notes listed below will supersede the information on plans when applicable (all Code Section Reference are 2022 CEC u.n.o.) The following notes must be reproduced onto the plans.

1. Any exposed conduit, boxes or wiring shall be painted to match the building's exterior.
2. All solar panels shall be placed no more than 4-6 inches from the roof exterior.
3. Both zoning designation and Assessor's Parcel Number (APN) must be included on the plans.
4. All equipment requiring servicing shall meet the required clearances of (110.26).
5. If a UFER cannot be confirmed, then ground rods 6 feet apart, and 8 feet minimum into the ground, must be installed with continuous bond. 250.53(A) through (H), 690.47
6. DC grounding electrode conductor. If the existing AC grounding electrode is a concrete encased electrode, the DC GEC shall be a #4 THWN-2 per 250.66(B). The GEC shall be continuous as described in 250.64(C).
7. Grounding electrode conductor from the AC side on the inverter sized according to Table 250.66 (minimum #8).
8. Gas and water bond need to be verified 250.104(A) through (D)
9. Contractor shall be present to assist City inspector on job site during inspection and fall protection shall be provided upon request by the City inspector, as needed.
10. Provide smoke alarms and carbon monoxide alarms as per CRC Sections R314 & R315.
11. The City of Tustin will not be held responsible for roof damage that may result from accessing the roof for the inspection of the PV system.
12. The equipment and system in 690.4(A) through (D) and all associated wiring and interconnections shall be installed only by qualified persons.
13. DC ground-fault protection shall be per 690.41(B)
14. Module frames and racking systems shall be grounded at UL-listed location provided by the manufacturer using UL listed grounding lugs. The removal of one panel shall not interrupt the continuity of the grounding system for the rest of the panels or racking system (690.43).
15. The sum of the ampere ratings of the over current devices in circuits supplying power to a bus bar or conductor shall not exceed the rating of the bus bar or conductor (705.12(B)(2)(3)(b))
16. A permanent plaque shall be placed at the point of interconnection stating the **MAXIMUM AC OUTPUT OPERATING CURRENT** and the **OPERATING AC VOLTAGE** (690.54).
17. Commercial projects will require a permanent plaque at main service showing the location of the main service disconnect, PV AC disconnect, and DC disconnects on the roof.
18. Provide permanent signage at all AC disconnects. "**PHOTOVOLTAIC ARRAY AC DISCONNECTS**".

- a. The markings may be placed within the main service disconnect. If the main service disconnect is operable with the service panel closed, then the marking should be placed on the outside cover.
  - b. A permanent warning label shall be applied to the distribution equipment with the following or equivalent: **WARNING INVERTER OUTPUT CONNECTION DO NOT RELOCATE THIS OVERCURRENT DEVICE.**
  - c. Where the disconnecting means are located more than 6-feet from the overcurrent device, a directory showing the location of each disconnect shall be installed at the overcurrent device location.
  - d. Red background, white lettering, minimum 3/8" letter height, all capital letters, Arial or similar font, non-bold, Reflective weather resistant material suitable for the environment.
19. Marking DC conduits: Marking is required on all interior and exterior DC conduit, raceways, enclosures, cable assemblies, and junction boxes to alert the fire service to avoid cutting them. Markings (CAUTION: **SOLAR CIRCUIT**) shall be placed every 10-feet, at turns and above and/or below penetrations, and all DC combiner and junction boxes.
- a. Marking shall be as follows: Red background, white lettering, minimum 3/8" letter height, all capital letters, Arial or similar font, nonold, Reflective weather resistant material suitable for the environment.
20. If a switch or circuit breaker is to be used as the AC disconnect and all terminals are energized when in the open position, a label is to be placed at the AC disconnect indicating:

**WARNING – ELECTRICAL SHOCK HAZARD – DO NOT TOUCH  
TERMINALS. TERMINALS ON BOTH THE LINE AND LOAD SIDES  
MAY BY ENERGIZED IN THE OPEN POSITION**

21. All conduits are required to be painted to match the existing building color.
22. Conduit that is installed in the attic or concealed shall be a minimum of 18" below the top surface of the roof to prevent fire personnel from cutting the conduit in the event of a fire.
23. Inverter output connections. The connection in a panel board shall be positioned at the opposite end from the feeder location or main circuit location. A permanent warning label shall be applied to the distribution equipment with the following or equivalent marking: 750.10(B)(2)(3)(b)

**POWER SOURCE OUTPUT CONNECTION  
DO NOT RELOCATE THIS OVERCURRENT DEVICE**