

SOLAR ROOF INSTALLATION - Inspection Checklist

Plan Review and Inspection Checklist for Photovoltaic Systems:

NOTE: This is not an all-inclusive list of items inspected. These items may or may not apply to your project. This list is to be used as a guide only.

1. Arrays are to be 5 lbs./sf or 45 lbs./attachment
2. Modules, inverters and combiners shall be listed and labeled
3. Maximum of 4 series strings per inverter
4. AC connection point shall be on load side of service disconnect.
5. Inverters and combiners shall be listed per UL 1741
6. NMC is to be stapled every 4'-6" and within 12" of boxes, cabinets, conduit or terminations.
7. Bending radius of USE-2 or PV cable should be no less than 5x the cable diameter.
8. Minimum #8 copper shall be used for the grounding conductor
9. Grounding rod shall be as close to the array as possible.
10. All stainless steel shall be bonded to aluminum
11. Adjustment factors shall be used for sunlit raceways more than 10' or 10% of length.

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12. All Bonding/grounding materials and methods shall be listed, labeled and identified in accordance with UL 2703.
13. Operating current signage should read, “System Maximum Power Current”
14. Operating voltage signage should read. “System Maximum Power Voltage”
15. PV with battery backups should be marked with, “Maximum Operating Voltage,” “equalization Voltage and polarity of grounded conductors.
16. The inverter maximum operating voltage rating shall be as high as maximum voltage of the PV system.
17. The source circuit over current protection for the PV system shall be sized per the minimum fuse rating

Related Code Sections:

- 2014 NEC Article 690
- 2012 IBC 1505.8 and 1507.17
- 2012 IRC Chapter 23 mirrors the IBC requirements
- 2012 IFC 605.11.1, 605.11.2, 605.11.3 and 605.11.4