

# PHOTOVOLTAIC SYSTEM INSTALLATION HANDOUT NOTES 2017 NATIONAL ELECTRICAL CODE

1. Provide an independent PV disconnect ahead of the inverter.
2. Equipment grounding conductors used for grounding arrays smaller than is #6 AWG. copper shall be installed in a suitable raceway. All exposed equipment grounding and bonding conductors shall be solid copper or UV rated.
3. Devices (lugs) used for grounding arrays shall be suitable for use in wet locations (tin plated copper) and attachment hardware shall be stainless steel with star washers.
4. Provide all appropriate warning labels at disconnects and equipment.
5. Plastic UV rated cable ties shall not be used to secure exposed wiring between modules. Approved clips, stainless steel cable ties, or stainless steel pipe clamps with rubber inserts are acceptable.
6. Conductors and conduits run on rooftops may require additional ambient temperature adjustments per table 310.15(B)(3)(c).
7. Residential interior PV direct current system conductors shall be identified by system to comply with NEC 2017 section 690.4 (B). Direct Current ungrounded conductors shall be Orange or Yellow. The grounded conductor shall be identified by the color Gray.
8. Metal junction boxes, raceways, or other wiring methods supplying dc circuit wiring shall be labeled designating "Photovoltaic Power Source". 690.31. (G)(3) &(4)

**Note: The 2017 NEC has many significant changes to article 690 and 705. Installers should carefully review those sections prior to installing photovoltaic systems. This is not an all inclusive list and should only be used as a guideline for reference only.**