



DEPARTMENT OF BUILDING & SAFETY

# PHOTOVOLTAIC INSTALLATION REQUIREMENTS

[www.LasVegasNevada.gov/BuildingPermits](http://www.LasVegasNevada.gov/BuildingPermits)

Phone: (702) 229-6251 Fax: (702) 382-1240

Section 110.27A of the NEC (National Electrical Code) requires live parts of the array be guarded by “permanent, substantial partitions or screens arranged so that only qualified persons have access to the space”, so fencing or mesh installed would need to meet these requirements. Reference 110.27A for all of the available options. The racking system should be designed by a licensed Nevada structural engineer (plans & calculations); the engineered design will dictate the type of footings required. Plans should clearly show the type of guarding to be provided, disconnects within sight of the equipment and setback dimensions to nearby property lines and structures along with everything typically required of any solar project submittal (ie: site plan, single line diagram, load calculations, manufacturer spec sheets, etc.).

## Marking

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. Marking should be placed on all interior and exterior DC conduit, raceways, enclosures, and cable assemblies, every 10 feet, at turns and above and/or below penetrations and all DC combiner and junction boxes.

### 1.2.1 Marking Content and Format

MARKING CONTENT: CAUTION SOLAR (or PHOTOVOLTAIC) CIRCUIT RED BACKGROUND WHITE LETTERING

MINIMUM 3/8" LETTER HEIGHT ALL CAPITAL LETTERS

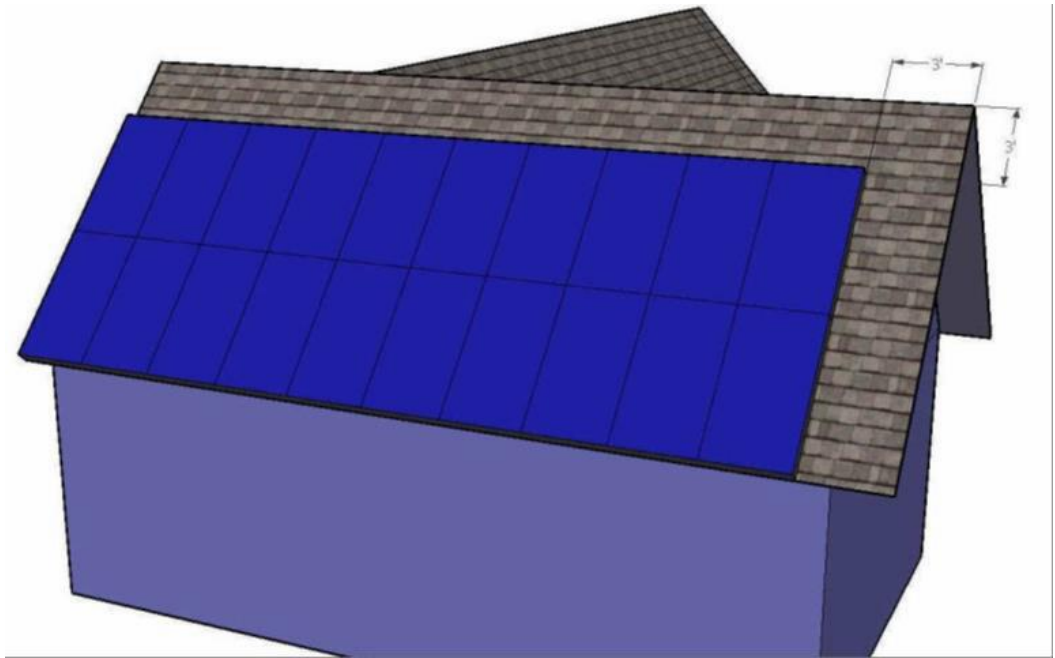
ARIAL OR SIMILAR FONT, NON-BOLD

REFLECTIVE, WEATHER RESISTANT MATERIAL SUITABLE FOR THE ENVIRONMENT (durable adhesive materials meet this requirement)

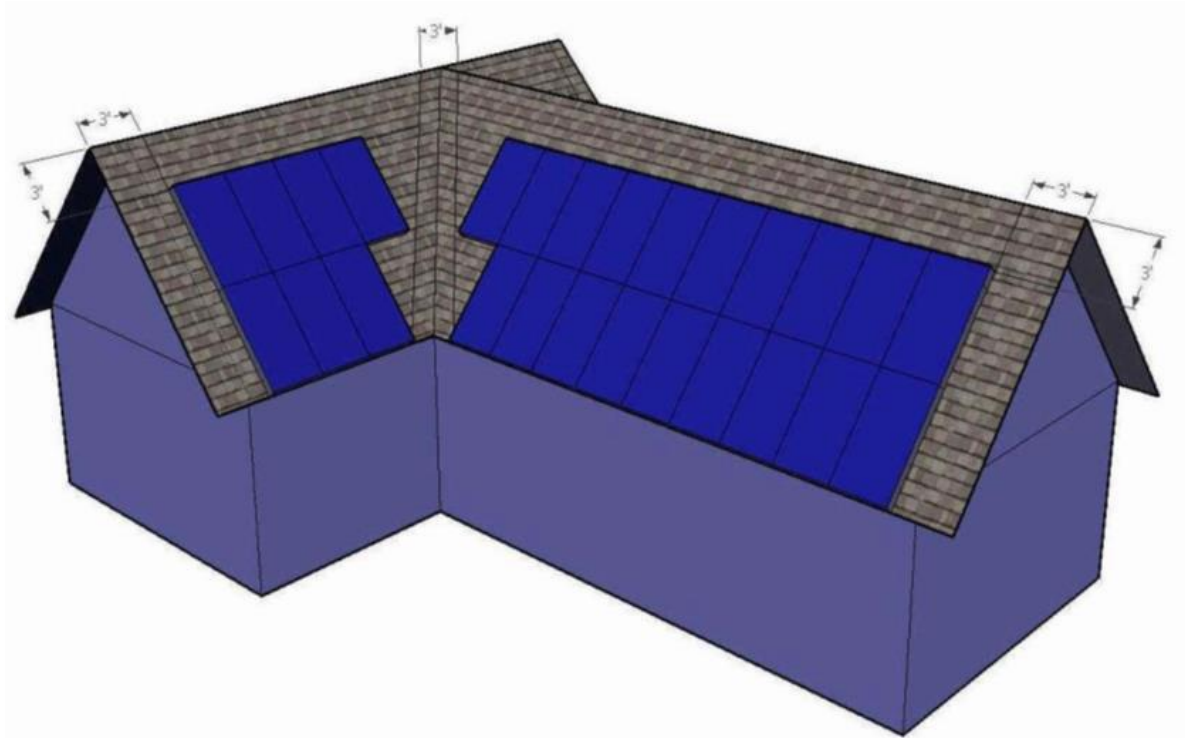
**CAUTION: SOLAR CIRCUIT**

**ROOF ACCESS:**

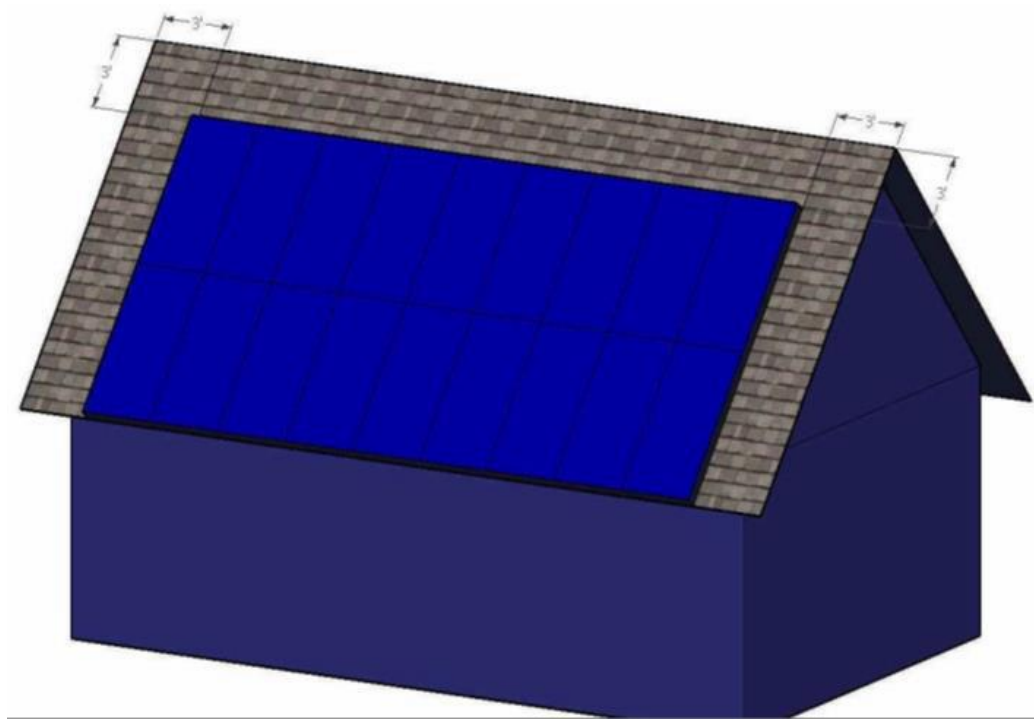
**Example 1: Cross Cable Roof**



**Example 2: Cross Gable with Valley**



**Example #3: Full Gable Roof**



**Example #4: Full Hip Roof**

