

# LAFD Bureau of Fire Prevention and Public Safety



## Fire Department Reference Requirements For Rooftop Photovoltaic (PV) Systems on One and Two Family Dwellings Based on Los Angeles Fire Department (LAFD) FPB Requirement No. 96, 12/15

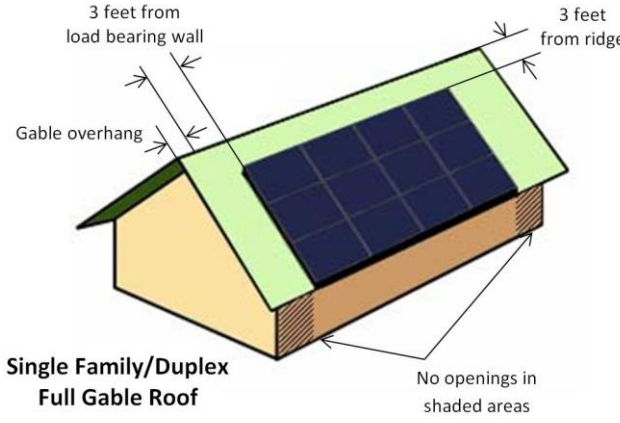
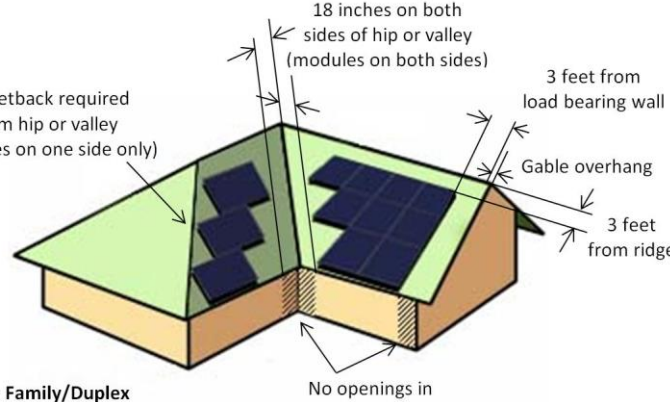
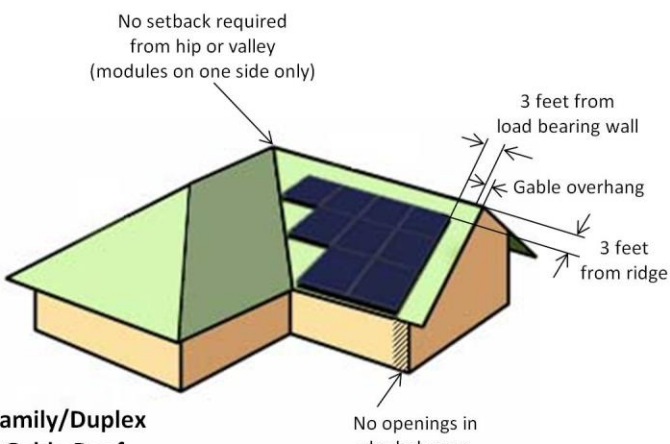
1. The main electrical meter, the photovoltaic (PV) disconnect, and the inverter shall be in the same location within sight of each other.
2. **Access Path:**
  - A. **Flat roof:** Roof slopes less than 2 units vertical in 12 units horizontal (2:12) panels/modules shall be located in a manner that provides a minimum 3-foot wide clear access pathway around the perimeter edges of the roof. The access pathway shall have a 3' clear width measured from the load bearing wall (exterior wall) to the PV panel.
  - B. **Sloped roofs:** Roof slopes more than 2 units vertical in 12 units horizontal (2:12) shall comply with the following:
    1. Panels/modules shall be located in a manner that provides 3-foot-wide clear access pathways to the ridge on both sides of each roof slope where panels/modules are located. The access pathway shall have a 3' clear width measured from the load bearing wall (exterior wall) to the PV panel (see sample diagrams on the back).
    2. The access pathway clear width shall not include any eaves or overhangs.
    3. Panels/modules shall be located no closer than 18 inches to a hip or valley if placed on both sides of the hip or valley.
    4. Where panels/modules are located on only one side of a hip or valley that is of equal length, the panels may be placed directly adjacent to the hip or valley.
    5. Panels/modules shall be located no higher than 3 feet below the ridge.  
Exception: If panels/modules are installed only on one side of the ridge, panels/modules shall be located no higher than 18-inches below the ridge.
  - C. **Exception:** Detached, nonhabitable Group U structures including, but not limited to, parking shade structures, private garages, carports, solar trellises and similar structures shall be exempt from these access path requirements.
3. **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 obstruction such as tree limbs, wires, and signs.
4. **Markings:**
  - A. **Main Service Disconnect:** The marking may be placed within the main service disconnect. The marking shall be placed on the outside cover if the main service disconnect is operable with the service panel closed.
    - a. *Verbiage:* **"SOLAR DISCONNECT"**
    - b. *Format:*
      - i. White lettering on a red background
      - ii. Minimum 3/8 inches letter height
      - iii. All letters shall be capitalized
      - iv. Arial or similar font, non-bold

- c. *Material:* Reflective, weather resistant material suitable for the environment (use UL – 969 as standard for weather rating). Durable adhesive materials meet this requirement.

**B. DC conduit, raceways, enclosures, cable assemblies, DC combiners and junction boxes:**

- a. *Placement:* Markings shall be placed on interior and exterior DC conduit, raceways, enclosures and cable assemblies every 10 feet, within 1 foot of turns or bends and within 1 foot above and below penetrations of roof/ceiling assemblies, walls or barriers, all DC combiners, and junction boxes.
- b. *Verbiage:* **“WARNING: PHOTOVOLTAIC POWER SOURCE”**
- c. *Format:* Format and type of material shall adhere to Item 4-A (b, c) above.

Deviation from the any of the requirements shown in this document shall require approval from the Los Angeles Fire Department’s Fire Prevention Bureau.

	<p><i>Diagram 1</i></p>
	<p><i>Diagram 2</i></p>
	<p><i>Diagram 3</i></p>