

Kern County Fire Department
Fire Prevention



Solar Panels (Commercial)

Fire Protection Requirements



Fire Marshal

Date: April 8, 2021

This Standard is promulgated in accordance with the 2019 California Fire Code (CFC) and Kern County Ordinance and is an official interpretation of the Kern County Fire Marshal's Office.

SYNOPSIS

This standard uses guidelines from several sources which outline solar panel installation requirements. This standard will be associated with the proper installation of photovoltaic ground mounted and roof mounted solar systems. It will be applied indefinitely and reviewed/revised as part of the new code adoption process or as otherwise necessary.

ROOF MOUNTED SOLAR REQUIREMENTS

Commercial Roof Installations

1. A minimum of 6' of clearance is required around the perimeter of the roof (Including from all ridge lines).
2. Clearance can be reduced to 4' if the longest axis of the roof is less than 250'.
3. Pathways shall be a minimum of 4' from parapets or roof edges.
4. Clearance around hatches shall be a minimum of 4'.
5. Arrays shall be no greater than 150' x 150'.
6. Perimeter clearance for group U occupancies and shade structures can be reduced to 4'.
7. Ensure that rapid shutdown PV systems are labeled in accordance with CFC 1204.5.1
8. Ensure that a diagram is provided with sections in red identifying areas of the PV system that do not shut down when the rapid shutdown switch is turned off per CFC 1204.5.1.1
9. Provide a label within 3 feet of the rapid shutdown switch for identification purposes per CFC 1204.5.3
10. Provide 6' clear perimeter around the edge of the roof. If either axis of the roof is less than 250' the clear perimeter can be reduced to 4' per CFC 1204.3.1
11. Interior pathways of 4' minimum shall be provided every 150' throughout the length of the array and in line to standpipes or ventilation hatches. 4' pathways shall be provided around roof access hatches with at least one pathway to a roof edge.
12. Provide 8' pathway on all sides of smoke or heat vents, unless gravity operated dropout smoke and heat vents occur in which case a 4' pathway on at least 1 side is required per CFC 1204.3.3