

Kern County Fire Department
Fire Prevention



Solar Panels (Ground Mounted)

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.

GROUND MOUNTED REQUIREMENTS (COMMERCIAL DEVELOPMENT)

Water Supply

When required by the fire code official, fire protection water shall be provided for ground-mounted solar systems of one MW or larger. The presence of structures, location in the wildland areas, and the size of the array will determine the amount of fire protection water.

One 10,000 gallon tank with a 4" NSM (National Standard Male) connection will be provided for fire department use. A level indicator shall be attached to the water tank. Tank and outlet location shall be accessible to emergency vehicles, near the entrance, and approved by the Kern County Fire Department.

When a fire water source is available within a reasonable distance, the fire water tank requirement may be waived. This fire water source must have a 4" NSM (National Standard Male) connection. All water sources shall be approved by the Kern County Fire Department.

Clearance/Combustibles

1. A minimum clearance of 10' is required for all weeds and combustibles around the project perimeter. All vegetation under the array shall be maintained to a height of 6" or less.
2. In SRA and Wildland areas, 30' of clearance of all combustibles shall be maintained.

Access (All roads to support emergency vehicle loads)

1. A 20' minimum road width- is required around the perimeter of the entire project for the fire department and emergency vehicles.
2. All internal roads shall be a minimum of 20' wide.