

## SolarTech Power Solutions

# Fire protection rating of solar inverters



## Overview

---

Class A is the highest fire rating a PV module can receive. Modules with this rating offer the best protection against fire hazards. They are capable of withstanding severe exposure to fire, making them suitable for use in areas where fire risk is significant.

Class A is the highest fire rating a PV module can receive. Modules with this rating offer the best protection against fire hazards. They are capable of withstanding severe exposure to fire, making them suitable for use in areas where fire risk is significant.

While properly installed systems by qualified professionals must follow current safety codes, solar fires do happen. That's why the Solar Energy Technologies Office (SETO) funded the Solar Training and Education for Professionals (STEP) program, which provides tools to more than 10,000 firefighters.

DC (direct current) faults are the primary cause of fires in Solar PV systems. If you install inverters with no DC isolation or Arc detection/Management built-in, you probably have NO fire protection or preventive management system for the biggest root cause of Solar PV fires. A DC fault that could.

In fact, PV systems are of a very high safety level when it comes to preventative fire protection as well as operational safety and security in the case of fires. Many recent analyses of fire incidents related to PV, like those from TÜV Rheinland and Fraunhofer ISE (Sepanski et al., 2015), BRE.

This is an educational presentation intended to help various stakeholders impacted by the changes in the fire performance requirements of the building codes and standards. This is not intended to create new requirements or dictate to test laboratories or authorities having jurisdiction (AHJs) how.

These classifications, often denoted as Class A, B, or C, provide insight into the fire resistance of solar panels. This information is vital for ensuring safety and compliance with building codes. In this blog, we will explore what these fire rating classes mean, why they are important, and how.

They are the International Building Code (IBC), the International Residential Code (IRC), International Fire Code (IFC), and National Fire Protection Association (NFPA) 70, which includes the National Electric Code (NEC). Every 3 years the codes are updated with the latest findings and research.

## Fire protection rating of solar inverters

---

## Contact Us

---

For catalog requests, pricing, or partnerships, please visit:  
<https://zegrzynek.pl>