2.2.3. Solar Power Generation Systems– Fire and Life Safety

2.2.3.1. The Fire and Life Safety requirements for Solar Power Generation Systems shall be as per **Table 14.2.**

Table 14.2.: Fire and Life Safety Requirements for Solar Power Generation Systems

ITEMS	REQUIREMENTS
1. FLAME SPREAD CHARACTERS	**1. FLAME SPREAD CHARACTERISTICS OF PV CELLS ON ROOF** i. The minimum requirement for Solar PV cells to be installed on roof of Lowrise buildings and Private Villas is Class B or equivalent class when tested to test standards as required by **Section 2.2.4.** of this chapter. ii. For Midrise, Highrise and Super Highrise buildings, the minimum requirement for solar PV cells to be installed on roof is Class A, when tested to test standards as per **Section 2.2.4.** of this chapter. iii. Where solar panels are installed on combustible roofs, such combustible roofs shall be separated from the solar panels, cabling and installations by non-combustible material in accordance with **Chapter 1. Section 7.1.44.** **2. FLAME SPREAD CHARACTERISTICS OF PV CELLS ON FACADE** i. The minimum requirement for Solar PV cells to be installed on building façade of any building of any occupancy shall be Class A, when tested to test criteria as per **Section 2.2.4.** of this chapter. ii. When solar panels, PV cells are installed on the façade systems, they shall not reduce the structural integrity or the fire resistance rating of the exterior walls. iii. The solar panels and PV cells installed on building envelope, shall demonstrate through large scale system tests that the building envelope is not altered in its fire resistance rating. See **Section 2.2.4.** of this chapter for fire test requirements.
2. CONSTRUCTION	**1. ACCESS** i. Solar panel installations on roof or on commercial scale as generation plant shall provide access to fire fighters around the installations. ii. Minimum of 1.2 m wide access path shall be available around the installations. iii. Solar installations on roof shall be such that access and emergency operations from first responders and fire fighters operations and maneuvering is not jeopardized. iv. Commercial installations on ground such as Solar power plants shall have 6 m clear fire access around the installations and in between arrays in full compliance with **Chapter 2. Fire Access**, taking into account the dead ends, maximum distance, turning radius etc. **2. SECURITY** i. Commercial Solar Panel installations shall be secured with fence and CCTV monitoring to prevent accidental entry of people and animals. Accidental trespassing of people and animals into such installations could result in loss of life and damage to installations.