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Department of Electrical Inspectorate  
**Office of the Chief Electrical Inspector**  
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An IS 15700 : 2018 Certified Department

No: CEI/4943/2024-B1

Date: 21-08-2024

From

The Chief Electrical Inspector.

To

The Deputy Chief Electrical Inspector,  
Thiruvananthapuram, Ernakulam, Kozhikode.  
The Electrical Inspector,  
Kollam, Kottayam, Pathanamthitta, Alappuzha, Idukki, Thrissur,  
Palakkad, Malappuram, Wayanad, Kannur, Kasaragod.

Sir,

Subject: Department of Electrical Inspectorate – Statutory provisions for installing Solar PV system at a balcony or own space in residential apartments –clarification-reg.,

Your attention is invited to the above subject. The statutory requirements that must be met while installing a PV system at a balcony or own space in residential apartments are listed below for your reference. These provisions shall be verified by the supplier before connecting Solar PV system to the grid (for installations that does not come under the purview of department).

Statutory Provisions		
1	Reg. 121(1)(i) & (ii) of CEA (MRS &ES) Regulations, 2023	Clear pathways of minimum seventy five centimeter in width with hand rails for roof access and emergency exit shall be provided for roof top system.  There shall be clear pathways, walkways between the rows or columns of solar panels which is necessary for cleaning and maintenance
2	Reg. 121(3)(ii)	The solar photovoltaic power plant shall be provided with lightning and over voltage protection by deploying required number of lightning arresters as per the relevant standards. The structure and solar panel system may affect the LPS of the building. Reassessment will be required
		Inverter unit for solar photovoltaic shall be installed in

3	Reg. 121(1)(vii)	the periphery of the building and as near as the solar panel
4	NEC P8_6.1.2	Considering personnel safety in the event of fire, the Grid-tied Inverter shall be located in close proximity to Solar PV Array on the terrace/top floor. If installed on the lower floors, inverter shall be installed close to periphery of the building and the d.c. cables connected to inverter shall be routed through the outside wall of the building and shall be clearly identified
5	Reg. 121(4)	A fire detection system and automatic fire suppression system shall comply with the relevant standards. Hence certificate from Fire Department shall be obtained.
6	General	<p>If SPV installed in the balcony/own space, it may block the airflow to the apartment and it may affect the nearby inhabitants. Hence NOC from the other flat owners &amp; flat owners association will be required.</p> <p>SPV shall not be installed in the common area without getting prior approval and sanction from Electrical inspectorate department.</p> <p>There may be a chance of falling of structural work of SPV system if it is not designed properly considering the effect of wind and other design parameters of the building. Hence the structural fitness in accordance with the building design is required.</p>

**Note:-** If SPVs are installed in the common area, which comes under the purview of Electrical inspectorate department, the above statutory provisions shall also be ensured during the inspection by the officers of Electrical Inspectorate department.

Yours faithfully,

**Chief Electrical Inspector.**