

Guidance to Support Parking and/or Charging of Electric Vehicles in Covered Car Parks.

If you operate a covered carpark and either have, or are thinking of installing, electric vehicle charging points (EVCPs) then you ought to consider the guidance set out in the Office of Zero Emissions Vehicles (OZEV) document; Covered car parks – fire safety guidance for electric vehicles.

Issued in July 2023, the guidance has ‘interim’ status, because of the limited available data on electric vehicle (EV) fires, and the likelihood that the guidance will need to change as empirical evidence is collated and as battery and charging technologies develop.

The Building etc. (Amendment) (England) Regulations 2021, which came into force 15th June 2022, require new buildings and buildings undergoing major renovation, with associated parking, to have an electric vehicle charging point (EVCP) installed. However, due to the lack of data on fires involving EVs and EVCPs, covered car parks have largely been exempted from the full requirements of the legislation, pending the outcome of further research. Nevertheless, many operators are installing EVCPs, and it is for those installations that the guidance has been prepared.

Although wide ranging in its content, the scope of application is limited to electric passenger cars and vans with lithium-ion batteries and charging points in covered car parks that physically connect to vehicles via a charging cable. The document recognises that the listed hazards arising from lithium-ion batteries may be similar across a variety of vehicle types, and that the listed mitigation measures may to a degree be applicable, but that the size and design of the batteries, the configuration of cells and the level of mechanical protection afforded them, and the

proximity of other cells and combustible materials is likely to have significant effect on the degree of risk.

The document does not replace existing regulations or the need to comply with them, nor does it directly support compliance with the functional requirements of the Building Regulations 2010 (as amended) or the Regulatory Reform (Fire Safety) Order 2005 (as amended). It does, however, provide information on:

- The statistical risks, common causes and characteristics of fires involving EVs and EVCPs
- Considerations for firefighting, the relocation of fire damaged vehicles and reignition risks.
- Considerations relating to structural fire protection, the location of EVCPs and the protection afforded to them.
- The requirement for fire risk assessment and the factors to be considered.
- Hazard and risk mitigation measures relating to a variety of hazard groups.
- Two specific case studies.

The document can be accessed at:

<https://www.gov.uk/government/publications/covered-car-parks-fire-safety-guidance-for-electric-vehicles>