



# EV Charging Regulations

September 2023



# Regulations

Approved Document S



The new Approved Document S is an extensive document that provides comprehensive guidance for both residential dwellings and other types of buildings. In regard to residential properties, here are the main guidelines to consider:

- All new and some existing residential properties must comply: All new residential buildings, as well as those undergoing major renovation, must have EV charging points installed for associated parking spaces. Shared car parks should include electric vehicle charging stations for every dwelling that the car park serves.
- 7kW charging points: The charging points should be 7kW untethered EV chargers, which will provide approximately 30 miles of range per hour of charge.
- Cable routes: Associated parking spaces may also be required to have cable routes to accommodate future charging stations.
- Cap on installation cost: To prevent the installation of EV charging points from becoming prohibitively expensive, the cost of installation is capped at an average of £3,600 per point. If it is not possible to install the charging stations within the £3,600 price cap, cable routes must be installed in the associated parking spaces.
- Grid capacity: Prior to installing EV charging points, it's important to check that the capacity of the local grid is adequate. For a single home, this is unlikely to be an issue, but for larger developments, upgrades of the local grid may be necessary. In this case, developers may opt to install a mix of 7kW and 22kW charging points, the latter of which require a three-phase supply.
- Position of chargers: The position of the EV charging stations must be carefully planned. If the parking spaces are too far from the power grid, it can negatively impact the efficiency of the charging point. In residential applications, it's generally recommended that the charging point is no more than 15 metres from the power grid.

## Summary

The cost of installation, which is capped by Part S at an average of £3,600 per point (or no more than 7% of the developments budget) is perhaps the most significant consideration. To install the EV chargers, checks will be needed to see whether the capabilities of the local grid are adequate, or if upgrades are needed. There are other exceptions to cost around covered parking and cost of connections, but the core principle is that provision of EV charging is a must.

Location Type	Charger Requirements
<p><b>New residential buildings (S1)</b></p>	<ul style="list-style-type: none"> <li>a. The number of associated parking spaces.</li> <li>b. The number of dwellings that the car park serves.</li> <li>c. If more than 10 spaces additional to above, spaces to be cable ready</li> </ul>
<p><b>Material change of use and major renovations for residential buildings (S2,3)</b></p> <p><i>Where a residential building undergoing major renovation will have more than 10 associated parking spaces after the major renovation is complete</i></p>	<ul style="list-style-type: none"> <li>a. at least one associated parking space for the use of each dwelling must have access to an electric vehicle charge point;</li> <li>b. cable routes for electric vehicle charge points must be installed in all additional associated parking spaces.</li> </ul>
<p><b>New buildings other than residential or mixed-use buildings (S4)</b></p> <p><i>Where a new building which is not a residential building or a mixed-use building has more than 10 parking spaces</i></p>	<ul style="list-style-type: none"> <li>a. one of those parking spaces must have access to one electric vehicle charge point; and</li> <li>b. cable routes for electric vehicle charge points must be installed in a minimum of one fifth of the total number of remaining parking spaces</li> </ul>
<p><b>Major renovations of buildings which are not residential or mixed-use buildings (S5)</b></p> <p><i>Where a building undergoing major renovation, which is not a residential building or a mixed-use building, will have more than 10 parking spaces after the major renovation is completed</i></p>	<ul style="list-style-type: none"> <li>a. one of those parking spaces must have access to one electric vehicle charge point; and</li> <li>b. cable routes for electric vehicle charge points must be installed in a minimum of one fifth of the total number of remaining parking spaces.</li> </ul>
<p><b>Mixed-use buildings (S6)</b></p>	<ul style="list-style-type: none"> <li>a. The requirements of S1 apply in respect of the part of the new mixed-use building that contains one or more dwellings and the associated parking spaces that are assigned to those dwellings.</li> <li>b. The requirements of S3 apply in respect of the part of the mixed-use building that is undergoing major renovation that contains one or more dwellings and the associated parking spaces that are assigned to those dwellings.</li> <li>c. The requirements of paragraph S4 apply in respect of the part of the new mixed-use building that contains one or more new premises that are not dwellings and the parking spaces that are assigned to those premises.</li> <li>d. The requirements of paragraph S5 apply in respect of the part of the mixed-use building that is undergoing major renovation that contains one or more premises that are not dwellings and the parking spaces that are assigned to those premises</li> </ul>

# Regulations

Smart Charge Points  
Regulations 2021



The regulations ensure charge points have smart functionality, allowing the charging of an electric vehicle when there is less demand on the grid, or when more renewable electricity is available. The regulations also ensure that charge points meet certain device-level requirements, enabling a minimum level of access, security and information for consumers here are the main guidelines to consider:

### Smart functionality

Including the ability to send and receive information, the ability to respond to signals to increase the rate or time at which electricity flows through the charge point, demand side response services and a user interface

### Electricity supplier interoperability

Allowing the charge point to retain smart functionality even if the owner switches electricity supplier. Continued charging even if the charge point ceases to be connected to a communications network

### Safety

Provisions, preventing the user carrying out an operation which could risk the health or safety of a person

### Randomised Delay

Allow for a randomised delay function that will start the charge session between 1 – 600 seconds

### Measuring system

To measure or calculate the electricity imported or exported and the time the charging lasts, with visibility to the owner of this information

### Cyber security

Security requirements consistent with the existing cyber security standard ETSI EN 303 645

### Off Peak Default

Incorporate pre-set, off peak default charging hours and allow the owner to accept, remove or change these upon first use and subsequently

### Penalties

Penalties apply for breach of regulations at point of sale and failure to document

## Documentation

*A full outline of device-level requirements can be found in the regulations*

*Assurance that the charge point is compliant must be made available through provision of a statement of compliance and technical file*

*A record of all sales for 10 years from the date at which the legislation comes into force.*