

Warrington Borough Council

Installation of Electric Vehicle Charge (EVC) Points

January 2023

This document supports the implementation of the Council's Electric Vehicle Strategy approved 9th January 2023. The strategy document can be found at [Electric vehicles | warrington.gov.uk](https://www.warrington.gov.uk/electric-vehicles).

This document is intended to provide additional information for developers on Warrington's approach to Electric Vehicle Charge (EVC) Points and is to be considered as an interim policy and specification document bringing up to date the Council's approach to EVCs as detailed in the Warrington Borough Council Supplementary Planning Document *Standards for Parking in New Development* (March 2015) and the Warrington Borough Council Design Guide Note *DGN1: Parking & Servicing* (September 2015).

The document recognises both Part S of the UK Building Regulations dealing with EVCs and the Council's aspirations detailed in Warrington's Fourth Local Transport Plan (December 2019).

Specification for Electric Vehicle Chargepoints for residential and non-residential developments

All new homes with off-street parking and those undergoing major renovation must now provide EV charging facilities for residents. In addition, EV charging facilities must be provided for new non-residential buildings, buildings undergoing material change of use, non-residential buildings undergoing major renovation and mixed-use buildings undergoing relevant building work.

Please refer to part S of the UK Building Regulations for further guidance - [Approved Document S: Infrastructure for the charging of electric vehicles \(publishing.service.gov.uk\)](https://www.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/824222/Approved_Document_S_-_Infrastructure_for_the_charging_of_electric_vehicles.pdf)

Warrington Standards

Recognising our climate emergency plans and net zero ambitions for the Borough our expectations are:

Residential

- Every new home (including those created from a change of use) with associated parking must have an EV charge point.



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- For residential developments undergoing a major renovation where there are 10 or fewer parking spaces there must be chargepoint provision for at least 25% of the dwellings with associated parking, along with cable routes in all spaces without chargepoints.
- Residential buildings undergoing a major renovation which will have more than 10 parking spaces must have at least one EV charge point per dwelling with associated parking, along with cable routes in all spaces without chargepoints.

Non Residential

- All new non-residential developments with any parking should have a minimum of 2 EV Charge point spaces.
- All new non-residential developments with 40 parking spaces or less must have a minimum of two EV chargepoint space and cable routes for all spaces to become EV chargepoint spaces in the future.
- All new non-residential developments with more than 40 parking spaces must have a minimum of 5% of spaces overall with charge points and cable routes for all spaces to become EV chargepoint spaces in the futures.
- For non-residential developments undergoing a major renovation with 40 parking spaces or less must have a minimum of two EV chargepoint spaces and cable routes for all spaces to become EV chargepoint spaces in the future.
- All non-residential buildings undergoing a major renovation with more than 40 parking spaces must have a minimum of 5% of spaces overall with charge points and cable routes for all spaces to become EV chargepoint spaces in the futures.
- For large non-residential developments the chargepoints shall be spread across the car park where there are several main entrance points (e.g. retail park or office development with multiple buildings). Where parking spaces are dedicated to specific buildings the chargepoints shall be spread proportionately by building.
- All new private EV chargers must have smart charging capability.
- All chargepoints shall provide for two vehicles to charge at once (i.e. two sockets) unless otherwise agreed with WBC (e.g. where there is only one chargepoint)
- Charging infrastructure shall use the Open Charge Point Protocol to promote an accessible charging network across Warrington.
- At non-residential locations where many short duration visitors can be reasonably expected (visitors up to one hour in duration) a proportion of rapid chargepoints shall be considered and agreed with WBC. As a guide a minimum of 1 chargepoint or 10%, whichever is greater, shall be required.



The remainder of this guidance document provides further detail on requirements for active and passive EVCI (Electric Vehicle Chargepoint Infrastructure) installation.

Planning permission and EVCI

Planning Permission is not required for EVCI installation at existing residential developments subject to specific requirements being achieved. These are set out in Schedule 2, Part 2, Classes D and E of The Town and Country Planning (General Permitted Development) (England) Order 2015 (as amended).

Installing an electrical charging outlet

Planning permission is not required for the installation of a wall mounted electrical outlet for recharging of electric vehicles as long as the area is lawfully used for off–street parking.

For installation to be classed as permitted development, the electrical outlet (and its casing) must not:

- Exceed 0.2 cubic metres
- Face onto and be within two metres of a highway
- Be within a site designated as a scheduled monument
- Be within the curtilage of a listed building.

Installing an upstand with a mounted electrical charging outlet

Planning permission is not required for the installation of an upstand with an electrical outlet mounted on it for recharging electric vehicles, as long as the area is lawfully used for off–street parking.

For installation to be classed as permitted development, the electrical upstand and the outlet must not:

- Exceed 2.3 metres in height from the level of the surface used for the parking of vehicles. This limit is 1.6 metres where in the curtilage of a dwellinghouse or block of flats
- Be within two metres of a highway
- Be within a site designated as a scheduled monument
- Be within the curtilage of a listed building
- Result in more than one upstand being provided for each parking space.



For Class D and E, when the electrical outlet is no longer required as a charging point for electric vehicles, the wall (on which the outlet was mounted) or the land (on which the upstand was placed) must be returned to its previous condition (prior to the installation being carried out) as soon as possible.

As planning regulations are updated they will supersede the information set out above and, in all cases will take precedence.

Standards for Installation of Chargepoints and Cable Routes

Where a Charge Point is to be provided for a dwelling or other use with - off street parking the specification must comply with Part S of the UK Building Regulations and any updates to it. The currently includes that:

- Be designed and installed as described in BS EN 61851.
- Have a minimum nominal rated output of 7kW.
- Be fitted with a universal socket (also known as an untethered electric vehicle charge point). Alternatively, in exceptional circumstances, such as for a self-build property, if the vehicle requirements are already known, a tethered electric vehicle charge point may be acceptable.
- Be fitted with an indicator to show the equipment's charging status that uses lights, or a visual display.
- Be a minimum of a Mode 3 specialised system for electric vehicle charging running from a dedicated circuit, or equivalent, as defined in BS EN IEC 61851-1.
- Comply with the requirements of BS 7671.
- Comply with the requirements in the IET's Code of Practice: Electric Vehicle Charging Equipment Installation. Dedicated EV charge point - Fast up to 7 kW allowing Charging Mode 3.

Part S also includes detailed requirements for cable routing and safeguarding future connection locations that chargepoints shall also comply with.

Any deviation from these standards must be agreed with WBC prior to installation.

All electric vehicle chargepoints must be positioned to allow easy access for a legally parked vehicle. Chargepoints must also be designed where possible for inclusivity, As per PAS 1899:2022 Electric vehicles – Accessible charging – Specification the principles of this should be adopted for residential and commercial chargepoints.



NOTE if provision is to be provided within a garage, the dimensions must meet or exceed those for the garage to be considered as a parking space as stated in 'Warrington Borough Council Standards for Parking in New Developments SPD'.

Where on-street provision is required the approach to this must be agreed with WBC, consistent with its position that WBC cannot permit this as it would breach the Highways Act 1980, constituting a hazard to other users.

Please note that a 13 Amp AC 3 pin domestic socket does not meet the required standard. 'This type of Charge Point will usually charge an EV from flat to 100% in 8-12 hours [24kWh traction battery] and is not recommended because the UK household plug and socket connection (BS1363-1) was not designed for continuous loads of 10-13 Amps.'

Infrastructure to be installed in compliance with the BS 7671 Wiring Regulations and the IET Code of Practice for Electric Vehicle Charging Equipment Installation (4th Edition or latest version available at time of installation), which is the definitive guide to installing and maintaining charging equipment for electric vehicles in accordance with UK best practice as set out by the IET.

Passive provision

Where passive provision is to be provided the following specification per passive parking space is required:

- Distribution board – available capacity for one Mode 3 charging connection
- Identification of the best location for a Charge Point to be installed at a later date and provision of any necessary trunking/ducting to enable cables to be run to the specified position.

NOTE: if provision is to be provided within a garage, the dimensions must meet or exceed those for the garage to be considered as a parking space as stated in 'Warrington Borough Council Standards for Parking in New Developments SPD'

- Details of passive provision to be included within household pack or building occupancy information for first occupant – To include location of proposed Charge Point, trunking/ducting provided, and details of distribution board location and capacity

The Electric Vehicles Smart Chargepoints Regulations

Smart electric vehicle chargepoints can help manage the increase in electricity demand from the transition to electric vehicles through techniques such as load balancing, avoiding charging at peak times, or charging when more renewable electricity is available.



Continual improvements to chargepoint functionality has led to a requirement to specify device-level requirements, including minimum level of access, security and information for consumers. For the installation of private chargepoints please also refer to 'The Electric Vehicles (Smart Chargepoints) Regulations' 30th June 2022 which sets out the following mandatory requirements;

Function	Chargepoint Requirement
Smart Functionality	Able to send and receive data and increase/decrease rate of electricity and shift time at which electricity flows. Must support Demand Side Response services (Grid Balancing).
Personalised Default Setting	User can set default charging hours with a pre-set charging schedule that does not charge EVs at peak times.
Cyber and Data Security	Basic security measures for resilience to cyber-attack and robust against physical damage.
Randomised Delay Function	Up to 10mins randomised delay between information received and any adjustment of rate of electricity flowing through it. Ability for user to override delay.
Assurance	Any person / organisation selling a CP must provide a statement of conformity and a technical file , at the request of the regulator.
Supplier Interoperability	CPs must not be designed in a way that means they lose functionality when a consumer switches supplier.
Monitoring and Recording Energy Usage	A CP must measure or calculate the electricity consumed and/or exported, the time the charging event lasts and provide a method for the consumer to view this information.
Safety	CPs should operate in a way that prioritises safety smart charging behavior.

Please note that the security requirements set out in Schedule 1 of the regulations, which came into force on 30th December 2022.

