



Recommended development control plan for apartment buildings – Electric Vehicle Charging Equipment

Version 1.0

Foreword

This document is intended to be read by Local Governments all over Australia. There are different laws, bylaws, terminology and processes in every jurisdiction. The below provisions are designed to be additional requirements that build on the minimum requirements of the National Construction Code (NCC) and do not conflict with it. Local councils are free to incorporate all, parts of, or more ambitious versions of the provisions into their own development management processes.

This document is subject to modification based on input over time.

Objectives

- (1) Enable residents, visitors and contracted car share companies of apartment buildings to charge their electric vehicles.
- (2) Provide the electrical infrastructure required to facilitate future electric vehicle charging equipment in allocated parking spaces.

Provisions

Note: Section J9D4 'Facilities for electric vehicle charging equipment' in NCC 2022 Volume One - Building Code of Australia contains details for provision and design of distribution boards to support electric vehicle charging in car parks.

- (1) Where the car park associated with a multi-residential development has **shared** parking spaces, a number of these parking spaces shall have electric vehicle charging equipment installed.
 - (a) The number of shared parking spaces for which electric vehicle charging equipment shall be installed will be, at minimum, the lesser of:
 - 10% of the total number of all parking spaces in the development, or
 - The total number of shared parking spaces.

Note: Numbers are to be rounded to the nearest whole number.

(b) Each parking space for which electric vehicle charging equipment is required shall be supplied by electric vehicle charging equipment with a minimum rated power output of 7kW (32A single phase).

(c) Electric vehicle charging equipment installed may include a combination of electric vehicle chargers of different power levels, at the discretion of the developer, subject to the minimum power level noted above.

(d) There is no requirement for the EV charging equipment required by this advice to contribute to the building's maximum demand.

Note; Guidance on implementing this arrangement can be found here

<https://electricvehiclecouncil.com.au/guidelines/determining-maximum-demand-for-an-apartment-complex-with-ev-chargers/>

(e) Electric vehicle charging equipment shall be compliant with Australian Standards, marked with Regulatory Compliance Mark (RCM) markings, and shall be equipped with OCPP 1.6J (or higher) communications capability.

Yes No

- (2) If EV Distribution Board (DB) requirements of NCC are being followed, spatial allowance for cable tray of a size designed and calculated to be sufficient for power and communications shall be left from the EV DB to within 5m of all parking bays allocated for in the EV DB on that storey.

Yes No

- (3) Cable tray of a size designed and calculated to be sufficient shall be installed from the EV DB to within 5m of all parking bays allocated for in the EV DB on that storey.

Yes No

- (4) Electric vehicle charging equipment installed shall include a billing mechanism for residents and visitors using the electric vehicle charging equipment. The developer defines for the owners corporation (OC) the means by which sub-billing or cost allocation may be achieved by the incoming OC when they take over operation of the site. These means shall not constitute vendor lock-in – i.e. there must be a clear pathway for the OC to make alternative billing arrangements without a punitive exit clause from a service provider or, the financial implications associated with triggering the exit clause shall be made clear to the OC up front.

Yes No

- (5) Demonstrate capability of tracking interval data of building electrical consumer mains. Note; this could be as simple as a smart meter.

Yes No

- (6) In keeping with the best available evidence, the inclusion of electrical equipment for EV charging creates no special requirements relating to fire safety, and in particular creates no requirement for the car parking environment to be treated as a 'special hazard'.
- (7) All works will be undertaken by appropriately licenced persons and in keeping with relevant standards and regulations

Examples

- (1) A multi residential apartment complex has 100 car spaces, 8 of which are shared car spaces.

The number of shared car spaces to receive Electric Vehicle Charging equipment is 8.

- (2) A multi residential apartment complex has 100 car spaces, 12 of which are shared car spaces.

The number of shared car spaces to receive Electric Vehicle Charging equipment is 10.

- (3) A multi residential apartment complex has 112 car spaces, 12 of which are shared car spaces.

The number of shared car spaces to receive Electric Vehicle Charging equipment is 11.