

# Automated Vehicle Parking Systems

New building work proposals are increasingly including car parks with one or more Automated Vehicle Parking Systems (AVPS) – mechanical devices that are generally powered by electric motors or hydraulic pumps that move vehicles into storage positions. AVPS may also be referred to as car stackers.

The National Construction Code (NCC), car park buildings Deemed-to-Satisfy provisions do not distinguish between the risk of vehicles stowed via AVPS in either a vertical, horizontal or a combination storage arrangement. In this context, an AVPS that stores vehicles in a vertical array is outside the scope of clause E1D4<sup>1</sup> irrespective of the number of vehicles stored.

Queensland Fire and Rescue (QFR) consider any proposal to install one or more AVPS in a car park to be a performance solution and should be referred as such.

This position is congruent with the Australasian Fire and Emergency Services Authorities Council Guideline entitled 'Fire Safety Requirements for Automated Vehicle Parking Systems'. This document references Appendix ZX5 of AS 5124, which details considerations for design of AVPSs with regards to operational requirements.

For further information, see [Guide to the Referral of Performance Solutions](#), QFR Position Statement 5.8.

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<sup>1</sup> NCC 2022 Reference E1D4