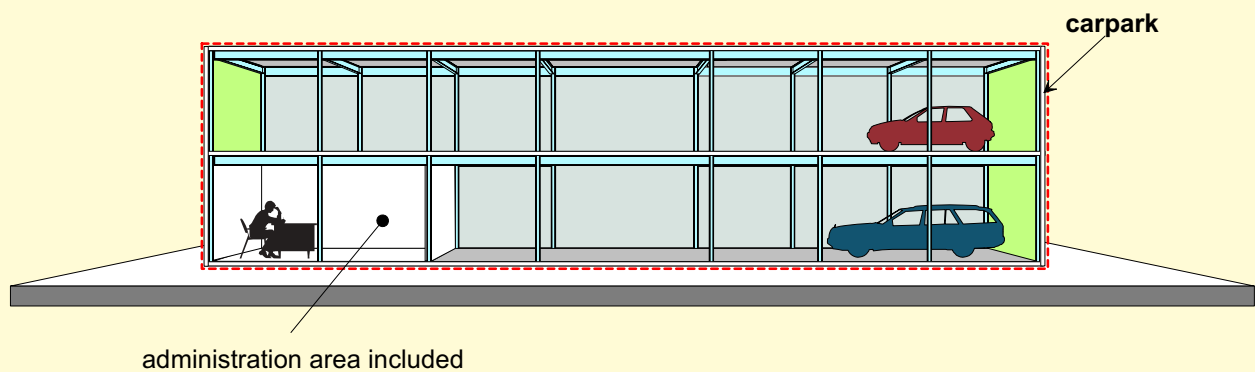


What is a Carpark?

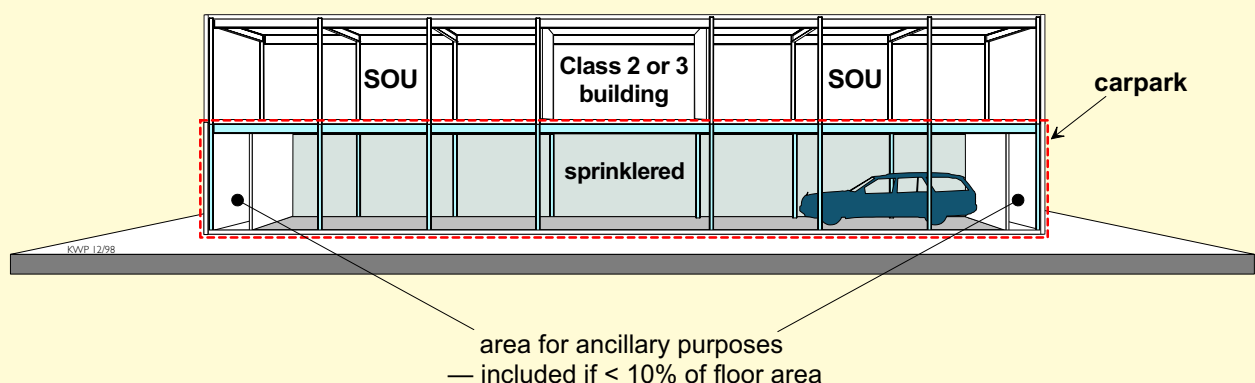


The BCA (Clause A1.1) defines a carpark as a building that is used for the parking of motor vehicles but is neither a private garage nor used for the servicing of vehicles, other than washing, cleaning or polishing.

If the advantages offered for open-deck and sprinklered carpark are to be realised, the carpark must be primarily for the parking of cars but may include an administration area associated with the functioning of the carpark.



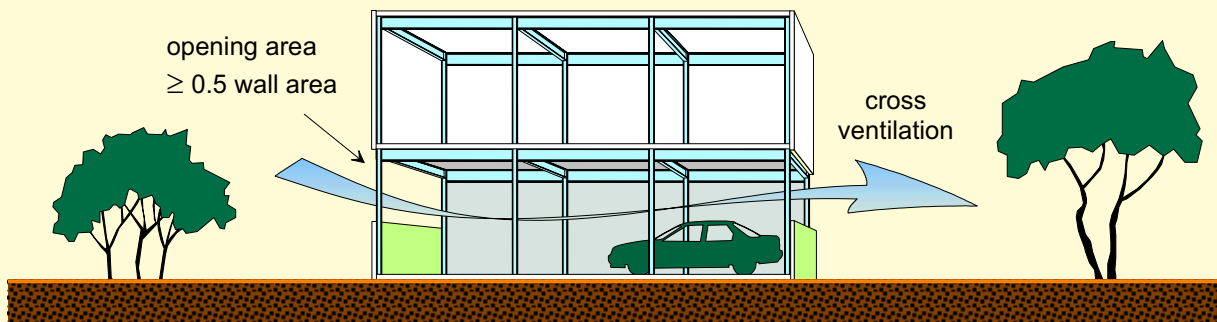
If the carpark is sprinklered and provides carparking for separate sole-occupancy units (SOU's) in a Class 2 or 3 building, then 10% of each carparking area can be used for purposes ancillary to the sole-occupancy units (BCA Specification C1.1, Clauses 3.9, 4.2, 5.2).



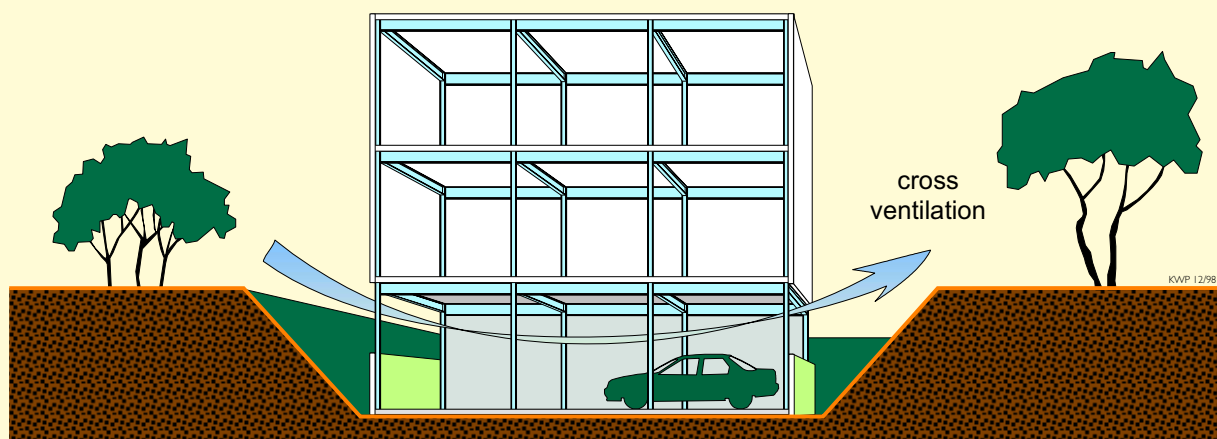
With the exception of those shown above, a carpark must not include any area of another classification, or other part of a Class 7 building not used for carparking; and a building or part of a building specifically intended for the parking of trucks, buses, vans and the like.

What is Open-Deck?

The BCA defines an open-deck carpark as a carpark which is cross ventilated in at least 2 approximately opposite sides. The sides that provide ventilation must be at least 1/6 of the area of any other side and the opening must be at least 1/2 of the wall area (see BCA Clause A1.1).



Underground car parks are usually closed car parks. However, an underground carpark can be constructed as open-deck in an excavated ground situation, as shown below. The excavation detail surrounding the carpark to provide the necessary cross ventilation may need to be discussed with the relevant approval authority.



ECONOMICAL CARPARKS

A Guide to Fire Safety



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Abbreviations used:

- ESA/M** = The ratio of exposed surface area to mass per unit length (see Appendix A for ESA/M of steel sections).
- FRL** = Fire-resistance level—the grading periods in minutes determined in accordance with BCA Specification A2.3 for the following criteria -
- (a) *structural adequacy*; and
 - (b) *integrity*; and
 - (c) *insulation*,
- and expressed in that order.
Note: A dash means that there is no requirement for that criteria. For example, -/- means there is no requirement for an FRL.
- FSF** = Fire-source feature— means-
- (a) the far boundary of a road adjoining the allotment; or
 - (b) a side or rear boundary of the allotment; or
 - (c) and external wall of another building on the allotment which is not a Class 10 building.

Definition: **Bare steel** — steel members which have no fire-protective coating.

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