



## POSITION STATEMENT SUMMARY

# Fire sprinklers in Class 2 and 3 buildings

### Position

Effective 30 August 2024, the following is a position of Fire and Rescue NSW (FRNSW):

FRNSW recommend the installation of an automatic fire sprinkler system in any Class 2 or 3 building, even when not required by the *National Construction Code* (NCC) (e.g. Class 2 or 3 buildings less than four storeys), as it provides superior life safety benefits to occupants in the event of fire.

For any applicable Class 2 or 3 building, a required fire sprinkler system must:

- be installed throughout the **whole** building [E1D4 (a), E1D5 and E1D6]
- comply with both Specification 17 **and** Specification 18 as applicable [E1D4 (b)].

The standard of performance for the fire sprinkler system installed must be clearly identified on the fire safety schedule, including the standard being applied under Specification 17 and/or Specification 18.

It is noted that an FPAA101D or FPAA101H fire sprinkler system cannot be installed when the Class 7a part (except when open-deck) accommodates more than 40 vehicles. [S17C2 (c)(ii)]

This provision does not specify the number of vehicles within a fire compartment, therefore if the Class 7a part accommodates more than 40 vehicles, an AS 2118 sprinkler system is to be installed.

#### Requirements under Specification 18

Specification 18 of the NCC outlines the design and installation requirements for an automatic fire sprinkler system in a Class 2 and 3 building with an effective height of not more than 25 m and a rise in storeys of 4 or more [S18C3]. These requirements are in addition to Specification 17 requirements when the sprinkler system complies with S17C2 (b), and S17C2 (c) if also containing Class 5, 6, 7, 8, 9a or 9b parts.

However, the permitted concessions under S18C4 of the NCC only apply to Class 2 and 3 buildings (i.e. these concessions don't apply to any Class 2 or 3 building that also contains Class 5, 6, 7, 8, 9a or 9b parts).

Refer to FRNSW position [Application of fire sprinkler concessions under Specification 18 of the NCC](#).

Reference must be made to the FRNSW website to ensure this position is current at the time of use, and this position has not been superseded or revoked.

### Summary

This position statement supersedes the previous position last updated 4 July 2018. Reference to the Deputy State Coroner's recommendation for a 'fit-for-purpose' fire sprinkler system is obsolete.

The position recommends a fire sprinkler system be installed in all Class 2 and 3 buildings, regardless of whether being required by the NCC or not, due to the superior life safety benefits to occupants in the event of fire, particularly for sleeping occupants.

The position clarifies that a fire sprinkler system required by the NCC to be installed within a Class 2 or 3 building must be installed throughout the whole building, and comply with both Specification 17 and Specification 18 (as applicable).

#### Fire and Rescue NSW

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It is essential to identify the correct standard of performance in the application of the fire sprinkler system under the NCC. This standard of performance must be identified on the fire safety schedule.

The position identifies that under E1D5 and E1D6 the provision of a fire sprinkler system applies to the whole building and does not relate to the number of vehicles accommodated within a fire compartment for Class 7a carpark parts (i.e. E1D9). In addition, the NCC does not allow an FPAA101D or FPAA101H fire sprinkler system to be installed when the Class 7a carpark parts of a building (except open-deck) accommodates more than 40 vehicles.

**Note:** The carpark cannot incorporate fire separation to accommodate less than 40 vehicles per fire compartment in order to:

- a) allow installation of an FPAA101D or FPAA101H system in lieu of the required AS 2118 sprinkler system; or
- b) not require installation of any fire sprinkler system due to the fire compartment not accommodating more than 40 vehicles.

The position also clarifies interpretation of S18C4 of the NCC, where the permitted concessions only apply to Class 2 and 3 buildings that are not inclusive of any Class 5, 6, 7, 8, 9a or 9b parts. Reference is made to the FRNSW position statement [Application of fire sprinkler concessions under Specification 18 of the NCC](#).

This position statement has been authorised for release by Chief Superintendent Fire Safety, FRNSW.

## Contact us

For further information contact the Fire Safety Branch on (02) 9742 7434 or email [firesafety@fire.nsw.gov.au](mailto:firesafety@fire.nsw.gov.au).