POSITION STATEMENT SUMMARY

Dry fire hydrant system

Position

Effective 4 June 2024, the following is a position of Fire and Rescue NSW (FRNSW):

FRNSW endorse the guideline *Design, Installation and Maintenance Requirements for Dry Hydrants* as published by the Australasian Fire and Emergency Service Authorities Council, as guidance to practitioners who design, install and maintain an internal dry fire hydrant system within any building.

The following must be considered when an internal dry fire hydrant system is being installed:

- The system can only be installed in a Class 2 or Class 3 building only; the *National Construction Code* (NCC) does not allow dry fire hydrants to be installed in multiple Classification buildings (i.e. a single or united building cannot have both a wet and dry fire hydrant system installed).
- The system necessitates different design considerations to a wet fire hydrant system; a dry hydrant system is not a wet system emptied of water thus may have other non-compliances to AS 2419.1.
- The system performance depends on the sprinkler system installed and any corresponding concession that is permitted under the NCC.
- The system design may apply any fire hydrant flow concession across the number of hydrants required to flow, as determined by AS 2419.1 (e.g. 1 = 6 L/s, 2 = 12 L/s etc.).
- The system can comprise internal hydrants only; dry external attack fire hydrants are not permitted in the system's design.
- The system must be left dry post any commissioning or testing; any dry fire hydrant system containing residual water due to improper drainage may be identified as being non-compliant.
- The system may only comprise a *street fire hydrant* if the hydrant is within 60 m and is fully accessible; if the street fire hydrant is not fully accessible then a feed hydrant must be installed and located as part of the fire brigade booster assembly.

Note: an internal dry fire hydrant system cannot be installed if the statement of available pressure and flow from the water network utility operator shows insufficient performance for the design; the internal dry fire hydrant system cannot incorporate tanks and/or pumps into the design.

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must be made to the FRNSW website to ensure this position is current at the time of use, and this position has not been superseded or revoked.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 on 29 April 2024.

This position statement directs building proponents to the AFAC technical guideline as appropriate guidance for the design, installation, and maintenance of an internal dry fire hydrant system. This technical guideline addresses identified gaps in technical detail relating to dry hydrants between the normative requirements of the NCC, AS 2419.1:2021 and AS 1851:2012.

The position outlines several considerations relating to interpretation of the normative requirements, and varied assumptions that can be made in the absence of clear guidance by those requirements.

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FRNSW has applied its interpretation to NCC performance requirement E1P3 where the fire hydrant system must “facilitate the needs of the fire brigade”.

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.