

## Title

Determining fire hydrant coverage under AS 2419.1—2021 *Fire hydrant installations, Part: System design, installation and commissioning* based on Fire Rescue Victoria's (FRV) practical application of fire hydrant system use.

## Context

This bulletin communicates FRV's position on the use of AS 2419.1:2021, relating to the following fire hydrant system design and installation settings.

- i. The location and coverage achieved from external feed fire hydrants provided under Clause 3.5.3.2;
- ii. The location and coverage achieved from external attack hydrants provided under Clause 3.5.3.3;
- iii. The location and coverage achieved from external attack/feed hydrants provided under Clause 3.5.3.4; and
- iv. The location and coverage achieved from internal hydrants provided under Clause 3.6.1; and

This bulletin also provides practical advice in relation to firefighters and fire brigade pumping appliances being provided reasonable and appropriate access to fire hydrant system infrastructure.

## Position

Determining compliance with the fire hydrant location and coverage requirements of AS 2419.1:2021 involves aligning the standard's prescriptive requirements against FRV's operational expectations and limitations, particularly in those circumstances where a Regulation 129 report and consent is sought.

To support industry in the design and assessment of fire hydrant systems, FRV has prepared the following advice regarding fire hydrant location and coverage.

### Firefighting hose lengths

FRV's operational firefighting response, equipment and training, currently and historically, is based upon 30 metre lengths of hose.

### Firefighting hose streams

Firefighting nozzles yield a single, straight line water stream of 10 metres. This distinction is provided within the following diagrams, which are sourced from Clause 3.2.2.2 of AS 2419.1-2005.

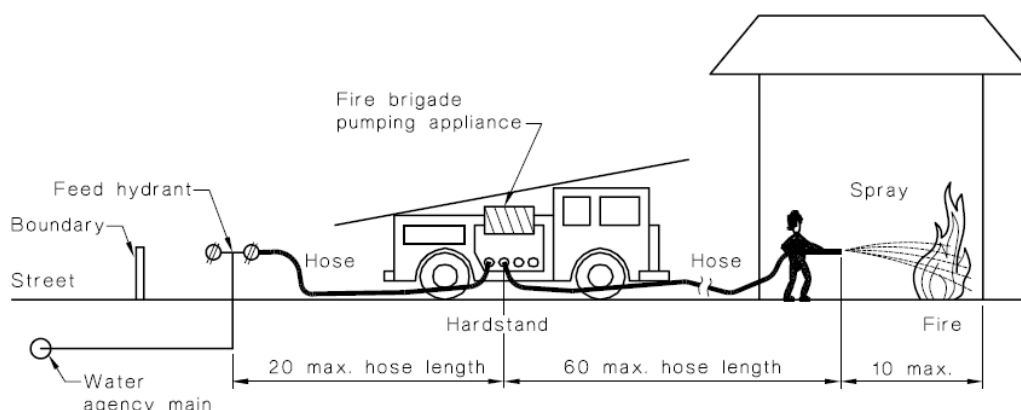


Diagram 1 – Figure 3.2.2.2 (b) On-site fire hydrant used as feed hydrant ©Standards Australia 2005.

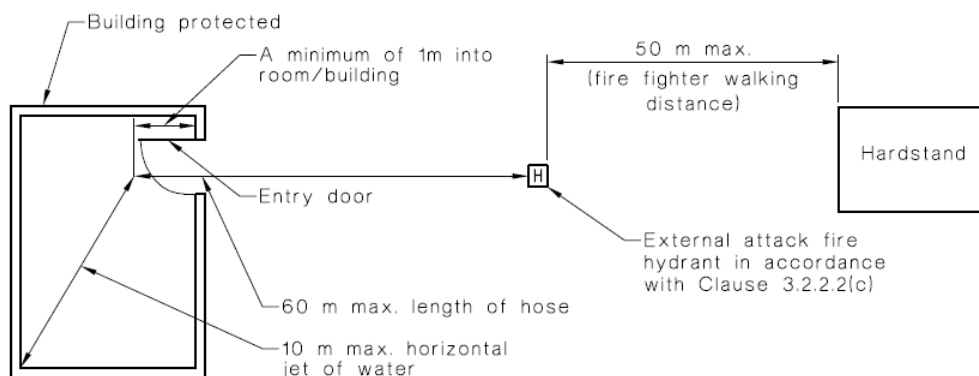


Diagram 2 – Figure 3.2.2.2 (f) External attack fire hydrant ©Standards Australia 2005.

### **IMPORTANT NOTE:**

A firefighting hose stream cannot be measured bending around a corner.

### ***Practical Application of AS2419.1-2021***

To meet the Fire Rescue Commissioner operational requirements, it is expected that—

- In relation to the application of Clauses 3.5.3.2, 3.5.3.3 and 3.5.3.4, the 70 metre measurement is to be interpreted on the basis of a 10 metre straight line hose stream issuing from a nozzle at the end of 60 metre length of hose that is laid on the ground, with a minimum of 1 metre of hose extending into any room served.
- In relation to the application of Clauses 3.5.3.3 and 3.6.1, the 40 metre measurement is to be interpreted on the basis of a 10 metre straight line hose stream issuing from a nozzle at the end of a 30 metre length of hose that is laid on the ground, with a minimum of 1 metre of hose extending into any room served.
- In relation to the application of Clause 3.6.3, the coverage achieved from the installation of an additional fire hydrant is limited to 30 metres, being the length of hose. The assessment of coverage from this additional fire hydrant does not consider the 10 metre straight line hose stream issuing from the end of the nozzle.

### ***Practical access to fire hydrant systems***

To connect to external fire hydrants and fire brigade booster connections, firefighters and firefighting pumper appliances need to be provided with clear and unobstructed access, using appropriately loadbearing and all-weather road networks and hardstand areas, so that firefighters can safely conduct pumping and water delivery activities alongside their responding appliance.

A greater level of guidance is provided in Appendix H of AS 2419.1—2021.

## **Authorised**

Director, Built Environment  
24 November 2025