

## Pumpset configurations

AS 2419.1:2021, Clause 6.4.2, indicates the number of on-site pumpsets required to achieve the hydrant flow and pressure requirements of the Standard.

Clause 6.4.2 states, Where a building has an effective height not more than 25 m and the reticulated water supply is capable of delivering the required pressure and flow for the feed hydrants of the fire brigade booster in accordance with Table 2.2.6(A), one half-duty fire hydrant pumpset may be provided.

Queensland Fire and Rescue (QFR) interpret that a reticulated water supply is a network of pipes provided solely by a water utility that will supply uninterrupted water at a positive pressure.

Where the reticulated water supply is connected to, and directly supplies, the hydrant system but has insufficient capacity to maintain an effective firefighting system, consideration to the installation of one pumpset may be appropriate. Generally, this is where the reticulated water supply is adequate in volume but lacks the required pressure to meet the standard.

If connected to a reticulated water supply and the only on-site pumpset fails, a safety measure is that the reticulated water supply should provide a spray/jet of water, sufficient to allow firefighters to exit to a point of safety.

Where fire hydrant systems/pumpsets are connected to, and draw water from, an on-site water storage tank or break tank, QFR interprets these as being not connected to a reticulated water supply.

Alternatively, a performance solution assessed against the performance requirements of the National Construction Code may be considered.