

Hydrant and water supply requirements for developments within the standard QFES response area

National Construction Code, clause E1D2 (1)¹ requires a fire hydrant system must be provided to serve a building–

- (i) having a total floor area greater than 500 m²; and/ (a) having a total *floor area* greater than 500 m² and
- (ii) where a fire brigade station is–/(b) where a *fire brigade* is-
 - (i) no more than 50 km from the building as measured along roads; and
 - (ii) equipped with equipment capable of utilising a fire hydrant.

QFES interprets 'a fire brigade station is equipped with equipment capable of utilising a fire hydrant' to mean the fire brigade station is staffed by:

1. QFES permanent fire-fighters, or
2. QFES Auxiliary fire-fighters, or
3. A combination of 1 and 2, or
4. Rural fire officers whose appliance is:
 - i. Capable of connecting to hydrant system infrastructure required to protect the building; and
 - ii. Able to provide the flows and pressures required, as per Tables 2.2.5 and 2.2.6 of AS 2419.1 – 2021, for the building to be protected.

Where a fire hydrant system is required to be installed to serve a building with a total floor area greater than 500 m² and where a fire brigade is available to attend as determined by the QFES interpretation above, then the water supply requirements for hydrant systems should meet AS 2419.1 – 2021.

If an existing bore is proposed for the water supply, QFES recommends the bore water be fed to a storage tank fitted with dual booster pumps and a large bore suction connection from the tank.

Alternatively, consideration could be given to adopting a performance solution approach.

¹ NCC 2019 clause E1.3(a)