

Fire hydrant test facilities

Under the *Planning Regulation 2017*, Schedule 9, Part 2, QFES has a referral jurisdiction for the suitability of test facilities for internal hydrants for proposed building work.

AS 2419.1 – 2005, Clause 8.5.10 describes the provision of a suitable test facility (connection) and a suitable means of disposing of test water (drainage).

The National Construction Code (NCC) clause C3.9 does not permit fire-isolated exits to be penetrated by any pipes that are not water supply pipes for fire services. While QFES has observed wastewater pipes installed in fire isolated exits it is not within QFES referral jurisdiction.

PVC pipes used as permanent drainage within fire-isolated stairs have been witnessed by QFES to initially deform, then shatter under further pressure and flow testing. This has resulted in bolts from brackets and shards of PVC becoming projectiles within the fire stair (see photos below). Due to the hazard of bursting pipes, WH&S requirements and to reduce the risk of injury occurring, QFES objects to the use of PVC test drainage pipes in fire-isolated stairwells.

QFES supports the use of fire hydrant test water drainage in all situations which meet the requirements of AS 2419.1 – 2005, Clause 8.2.1 or AS 2419.1:2017, Clause 9.3.1.

The number of test facilities/inlets provided should enable the number of fire hydrants required to flow to be tested (I.E. 20 L/s flow = 2 inlets).

QFES support AS 2419.1:2017, Clause 8.10, a permanent test facility should be provided for each pressure zone and/or tower of a united/building, water from testing may be discharged into the building's drainage system or surrounding area's drainage system if it is safe to do so.

Where a permanently fixed test drain is installed, this should be installed in accordance with the NCC (Plumbing Code of Australia) and AS/NZS 3500 and be sized and have a pressure rating appropriate to the pressures and flows the test drain will be subjected to.

Note 1 No PVC should be in fire exits. No PVC should penetrate a fire wall, ceiling or floor required to have a FRL. Other materials installed must comply with NCC 2019 Specification C3.15.

Note 2 Where practicable, a closed loop flow testing arrangement, incorporating a permanent or temporary/portable on-site tank should be provided.

Note 3 An example of a test drain is a connection into a downpipe or dedicated pipe, draining to a re-use tank.

