Interactive water features

Plumbing Advisory Note – August 2020

Water play features, spray parks, or splash pads are examples of Interactive water features (IWFs).

IWFs have grown in popularity in recent years and now feature in many parks and playgrounds across South Australia.

The Department for Health and Wellbeing has produced a detailed fact sheet providing guidance on how IWFs are designed, managed and maintained so that they can be safely enjoyed. Refer to sahealth.sa.gov.au for a copy of the fact sheet.

The Office of the Technical Regulator (OTR) regulates the installation of pipework connected to the IWF, including the installation of the backflow prevention devices.



Typical hand-pump IWF

Legislative requirements

The National Construction Code Volume Three, part B1 sets out the requirements for the installation of cold water services.

AS/NZS 3500.1 is the 'deemed to satisfy' standard which contains sections on installing cold water services, including backflow prevention devices.

Plumbing Installations

All plumbing installations must be carried out by an appropriately licensed plumber. The work must be booked in for auditing with the OTR or Local Government

Where an IWF is connected from a Network Utilities Drinking Water Supply, a Hydraulic design submission form must be submitted to the OTR for assessment. The form is available from sa.gov.au

IWF appliances are recognised as end of line equipment requiring a backflow device to protect the drinking water system. All plumbing pipework and equipment supplying water to these water features must be WaterMarked.

A warning or prohibition sign complaint with AS/NZS 3500.1 Clause 9.7.2 must be installed at every outlet of an IWF.





Backflow Prevention

A high hazard Reduced Pressure Zone Backflow device (RPZD) must be installed on the dedicated water supply branch to the IWF to protect the on-site plumbing drinking water system from contamination.

There must be no branches connected to the pipework between the testable backflow prevention device and the IWF.

Comissioning

Testable backflow prevention devices must be commissioned by an appropriately licensed plumber.

Within 7 days of completing the installation:

- a certificate of compliance must be submitted
- the owner/occupier of the facility and the OTR must be sent a copy of the commission, inspection and maintenance report.

Periodic testing

All testable devices must be retested annually. The test results must forwarded to the owner and the OTR within 7 days of completing the retest.

Tank supplied IWFs

Tanks supplying water to IWFs must only be installed above ground and must comply with AS/NZS 3500.1 Section 8.

Summary

- Submit a hydraulic design for the IWFs including backflow prevention and signage details.
- Book an audit with the OTR when the work is completed.
- Issue a certificate of compliance to the owner of the property.
- Electronically submit the commissioning, inspection and maintenance report for the backflow prevention device.



Not approved — A below ground sump supplying an IWF

