



Testing and notification requirements for sanitary plumbing and sanitary drainage plumbing installations

This industry bulletin has been issued to remind the Western Australian plumbing industry of the requirement to test sanitary plumbing and sanitary drainage plumbing installations, and in the case of sanitary drainage plumbing work the requirement to notify the Plumbers Licensing Board (the Board) when the work has been completed.

Testing requirements

In accordance with the Plumbing Standards all new, repaired or replaced sanitary plumbing and sanitary drainage installations shall be tested by hydrostatic, air pressure or vacuum testing to demonstrate that they are watertight. Testing shall be conducted prior to the placement of the trench fill (backfill).

Section 15 of AS/NZS 3500.2:2018 provides the requirement and methods for testing.

In considering the most appropriate test medium water restrictions may apply in some areas. Plumbers are encouraged to use non-drinking water or the air test or vacuum test.

Hydrostatic (water) test procedure

The sanitary plumbing and sanitary drainage shall be filled with water:

- (a) in the case of sanitary drainage, to a height of not less than 1m above the soffit level at the highest point of the section being tested;
- (b) in the case of sanitary plumbing, to the spill level of the highest fixture or to the flood level of the lowest sanitary fixture, whichever is higher; and
- (c) in either case, not exceeding 3m at the lowest point of the test section.

The pressure shall be maintained without leakage for at least 15 minutes. The source of any leak shall then be ascertained and any defects repaired. The section under test shall then be retested.

Air or vacuum test procedure

All sanitary and drainage inlets, outlets and access openings shall be capped and sealed. If air is being used the air shall be introduced slowly into the section being tested. An initial test pressure of approximately 15kPa shall be applied to the section being tested. When approximately 15kPa has been reached, the air or vacuum pump and supply valve shall be shut off. Allow the air pressure or vacuum to stabilise for a minimum of three minutes while checking for leaks. After the pressure has stabilised, commence the test by allowing the air pressure or vacuum to fall to 10kPa and then begin recording the time and drop over the minimum test duration specified in Table 15.3.2 from the Standards.

Maximum pressure drop permitted

The section of sanitary plumbing or sanitary drainage being tested shall not have a drop in pressure greater than 3kPa over the minimum test duration specified in the table below.

AS/NZS 3500.2:2018: TABLE 15.3.2 – Air pressure and vacuum air testing acceptance times for 3kPa pressure change

Pipe size	Test length (metres)					
	50	100	150	200	250	300
DN						
Minimum test duration (minutes)						
100	2	2	2	2	3	3
150	3	3	3	6	6	6
225	4	5	8	10	13	15
300	6	9	14	18	23	29

Notification requirements

Notification is required on completion of sanitary drainage work performed during any seven day period (Monday to Sunday) and details of the work must be submitted to the Board by 4.30pm on Wednesday of the week following completion. Visit Building and Energy's website for further details on requirements and notification methods.

www.commerce.wa.gov.au/building-and-energy/drainage-plumbing-work-notifications

Inspections

For inspection purposes a Building and Energy plumbing inspector may conduct a test of a sanitary plumbing or a sanitary drainage plumbing installation. Most drainage inspections will arise from notifications made by, or on behalf of, the licensed plumbing contractor responsible for the work. A drainage inspection can also arise from a notice of intention or certificate of compliance submitted by the licensed plumbing contractor or a compliance audit being conducted with the licensed plumbing contractor responsible for the work.

Disclaimer – The information contained in this fact sheet is provided as general information and a guide only. It should not be relied upon as legal advice or as an accurate statement of the relevant legislation provisions. If you are uncertain as to your legal obligations, you should obtain independent legal advice.

Building and Energy | Department of Mines, Industry Regulation and Safety

1300 489 099

8.30am – 4.30pm

Level 1 Mason Bird Building
303 Sevenoaks Street (entrance Grose Avenue)
Cannington Western Australia 6107

M: Locked Bag 100, East Perth WA 6892

W: www.dmirs.wa.gov.au/building-and-energy

E: be.info@dmirs.wa.gov.au

Regional Offices

Goldfields/Esperance	(08) 9021 9494
Great Southern	(08) 9842 8366
Kimberley	(08) 9191 8400
Mid-West	(08) 9920 9800
North-West	(08) 9185 0900
South-West	(08) 9722 2888

National Relay Service: 13 36 77

Translating and Interpreting Service (TIS): 13 14 50

This publication is available in other formats on request to assist people with special needs.