



NEW PLUMBING STANDARDS APPLY FROM 1 JULY 2007

The 2003 edition of the Australian/New Zealand Standard 3500 (AS/NZS 3500:2003) applies to all plumbing work carried out in Western Australia after 12:00 am Sunday, 1 July 2007.

In order to call up AS/NZS 3500:2003 and modify it to suit Western Australian plumbing conditions the Board has recently made changes to the Water Services Licensing (Plumbers Licensing and Plumbing Standards) Regulations 2000 (the Regulations).

The modifications to parts 1, 2 and 4 of AS/NZS 3500:2003 are detailed in the tables below.

Part 1 Water Services Section 3: Sizing of Water Services

Flow Requirements – 3.2.1 Water flow rates at outlets

“The maximum flow rate from a shower, basin, and kitchen sink or laundry trough outlet shall not exceed 9 L/min.”

is deleted.

Pipe size limitations – 3.5.2 Branch offtakes

This clause is deleted.

Part 2 Sanitary Plumbing and Drainage Section 3: Drainage Design

3.2 Location of drains

“that building” is deleted and “buildings on that property” is inserted instead.

Venting of Drains – 3.9.2.2 Downstream vent

This clause is replaced by –

“3.9.2.2 Downstream (boundary trap) vent

Where, on any drain, a boundary trap vent is required by Clause 3.9.1(a), it shall be installed so that —

(a) the vent is connected not more than 10 m from the boundary trap riser and no other fixture is connected between the vent and the boundary trap riser;

(b) if the vent is unsupported, it terminates between a minimum of 150 mm and a maximum of 250 mm above ground or adopted flood level using one of the following methods:

(i) one 88° bend and a flat grate with invert level not less than 150 mm above ground or adopted flood level;

(ii) an air admittance valve not less than 150 mm above ground or adopted flood level installed in accordance with Clause 6.9; and

(c) the vent is sized in accordance with Clause 3.9.3.1 so that the fixture unit loading on the main drain determines the size of the vent with the minimum size being not less than DN 50.”

Venting of Drains - 3.9.2.4 High level vent

“3.9.2.4 High level vent

Where a boundary trap vent is not installed as a low level vent it shall terminate in accordance with Clause 6.8.4, and where an air admittance valve is used it shall be installed in accordance with Clause 6.9.”

is inserted after Clause 3.9.2.3.

3.18 Vacuum systems

Paragraphs (c) to (e) are replaced by –

“(c) The inspection shaft shall be a sweep or 45° junction installed in the graded drain with the branch of the junction extended vertically upwards to surface level.

(d) The junction to the inspection shaft shall be against the grade of the drain so that any rodding of the line is in the direction away from the chamber.

(e) Where more than one drain is connected to a vacuum chamber, the spill level of both overflow gullies of the drains shall be installed level with each other wherever possible.

(f) A DN 100 vent pipe shall be provided on each drain connected to a vacuum chamber.

(g) A vacuum sewer system vent can be located on the main drain as close as possible to the inspection shaft riser but can also be connected further upstream as long as no other fixture is connected between the inspection shaft riser and the vent connection.

(h) A vacuum sewer system vent can terminate between a minimum of 150 mm and a maximum of 250 mm above ground or adopted flood level using one of the following methods:

(i) one 88° bend and a flat grate with invert level not less than 150mm above ground or adopted flood level;

(ii) two 88° bends and a flat grate or vent cowl so that there is not less than 150 mm between the flat grate or vent cowl and the ground or adopted flood level;

(iii) an air admittance valve not less than 150mm above ground or adopted flood level installed in accordance with Clause 6.9

(i) Where a vacuum sewer system vent is installed as a low level vent it shall terminate in accordance with Clause 3.9.2.3.

and

(j) Where a vacuum sewer system vent is not installed as a low level vent it shall terminate in accordance with Clause 6.8.4, and where an air admittance valve is used it shall be installed in accordance with Clause 6.9. ”



Part 2 Sanitary Plumbing and Drainage
Section 4: Drainage System

Inspection shafts and boundary traps – 4.4.1 General

“In this clause a “boundary trap area” is an area in which boundary traps are required by the water services provider.”

is inserted at the end of the clause.

Gullies – 4.6.1 General

“All fixtures and appliances connected to overflow relief gullies or disconnecter gullies shall be fitted with a trap or self-sealing device installed in accordance with Clause 6.4.”

is inserted after paragraph (b).

Gullies – 4.6.2 Installation

At paragraph (d) “surcharge.” is deleted and “surcharge being a grating that is of a loose, lightweight, domed pop-out type; and” is inserted instead.

“(e) have the height of the gully riser not more than 600 mm measured from the top of the water seal to the grate of the gully.”

is inserted at the end.

**Table 4.3 –
Point of measurement on fixtures for height above overflow gully**

The first item is deleted.

In the second item “or shower” is deleted.

The third item is deleted.

In the last item “Top surface level of the fixture outlet” is deleted and “Overflow level of the fixture” is inserted instead.

To view a copy of the updated Regulations go to the Plumbers Licensing Board Web site www.plumbers.wa.gov.au .

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IMPORTANT

While the modifications to the plumbing standards are detailed above, it is recommended that a full copy of the Regulations are obtained and read in conjunction with parts 1, 2 and 4 of AS/NZS 3500:2003.

**Table 4.4 –
Discharge to floor waste gullies**

In the item “Bidet” “1.2” and “2.5” are deleted in the second and third columns and “Not permitted” is inserted instead.

Inspection openings – 4.7.1 Location

Paragraphs (a) to (h) are replaced by –

“(a) at the downstream end of any branch drain that exits a building, adjacent to the junction into the main drain;

(b) at the upstream and downstream ends of all branch drains and main drains that are external to a building;

(c) at every change of horizontal direction greater than 45°;

(d) at intervals of not more than 30 m;

(e) at the connection to the water services provider’s sewer if not provided by the water services provider;

(f) at the downstream end of any drain that passes under a building, except where waste fixtures only are concerned;

(g) where any new section of drain is connected to an existing drain; and

(h) at the upper bend of a jump-up or rising shaft.”

Part 2 Sanitary Plumbing and Drainage
Section 6: General design requirements for sanitary plumbing systems

Trapping of fixtures and appliances - 6.4.3 Location of traps and self-sealing devices

“Traps and self-sealing devices shall be connected as close as possible to the outlet of the fixture or appliance being served.” is deleted and “Fixture traps and self-sealing devices shall be connected as close as possible to the fixture outlet.” is inserted instead.

“300 mm for urinals and” is inserted before “600 mm”

Part 4 Heated Water Services
Section 5: Installation of Water Heaters

**Table 5.1
Valves-Requirements for valves and other fittings**

In the item “Expansion control valve (Australia)” “ * ” is deleted in the second, third and fourth columns and “Yes” is inserted instead.

If you have any questions regarding the Standards, or modifications to them, please contact the Board’s Technical Advice Line on 1300 360 897, or email plumbers@docep.wa.gov.au.