

WA variations to AS/NZS 3500 Plumbing and Drainage

The following modifications are made to AS/NZS 3500.1:2015 Water services:

Clause number in AS/NZS 3500.1:2015	Western Australian Modification
Clause 3.5.2	Clause 3.5.2(a) is deleted.

The following modifications are made to AS/NZS 3500.2:2003 Sanitary plumbing and drainage:

Clause number in AS/NZS 3500.2:2015	Western Australian Modification
Clause 3.2	Delete "that building." and insert: buildings on that property.
Clause 3.9.2.2	Delete the clause and insert: 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 — <ul style="list-style-type: none">(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:<ul style="list-style-type: none">i. one 88° bend and a flat grate with invert level not less than 150 mm 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 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."

Clause number in AS/NZS 3500.2:2015	Western Australian Modification
Clause 3.18	<p>Delete paragraphs (b) to (d) and insert:</p> <ul style="list-style-type: none"> (b) 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. (c) 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. (d) 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. (e) A DN 100 vent pipe shall be provided on each drain connected to a vacuum chamber. (f) 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. (g) 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: <ul style="list-style-type: none"> i. one 88° bend and a flat grate with invert level not less than 150 mm 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 150 mm above ground or adopted flood level installed in accordance with Clause 6.9; and (h) Where a vacuum sewer system vent is installed as a low level vent it shall terminate in accordance with Clause 3.9.2.3. (i) 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.
Clause 4.6.2	<p>Delete paragraph (b) and insert:</p> <ul style="list-style-type: none"> (b) have each gully riser provided with a grating or cover of a loose, pop-out type to relieve surcharge and allow adequate ventilation to the gully riser; and <p>In paragraph (c)(ii) delete “product.” and insert: product; and</p> <p>At the end of the clause insert:</p> <ul style="list-style-type: none"> (d) 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.
Table 4.3	<p>Delete the 1st item.</p> <p>In the 2nd item delete “or shower”.</p> <p>Delete the 3rd item.</p> <p>In the last item delete “Top surface level or the fixture outlet” and insert: Overflow level of the fixture.</p>

Clause number in AS/NZS 3500.2:2015	Western Australian Modification
Clause 4.7.1	Delete paragraphs (a) to (h) and insert: <ul style="list-style-type: none"> (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.
Clause 6.4.3	Before "600 mm" insert: 300 mm for urinals and

The following modifications are made to AS/NZS 3500.4:2003 Heated water services:

Clause number in AS/NZS 3500.4:2015	Western Australian Modification
Table 5.1	In the item relating to Expansion control valve (Australia) in the 3 rd and 4 th columns delete "*" and insert: Yes

The following modifications are made to AS/NZS 3500.5:2015 2012 Housing installations:

Clause number in AS/NZS 3500.5:2012	Western Australian Modification
Clause 2.5.6.2	Delete paragraph (a).
Table 3.20.1	In the item relating to Expansion control valve (Australia) in the 3 rd and 4 th columns delete "*" and insert: Yes
Clause 4.10	Delete "that building" and insert: Buildings on that property.

Clause number in AS/NZS 3500.5:2012	Western Australian Modification
Clause 4.21.1	<p>Delete paragraphs (a) to (h) and insert:</p> <ul style="list-style-type: none"> (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 30m; (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.
Clause 4.34.2.2	<p>Delete the clause and insert</p> <p>4.34.2.2 Downstream (boundary trap) vent</p> <p>Where, on any drain, a boundary trap vent is required by Clause 3.9.1(a), it shall be installed so that —</p> <ul style="list-style-type: none"> (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: <ul style="list-style-type: none"> i. one 88° bend and a flat grate with invert level not less than 150 mm 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 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.”
Clause 4.36.2	<p>Delete paragraph (b) and insert:</p> <ul style="list-style-type: none"> (b) have each gully riser provided with a grating or cover of a loose, pop-out type to relieve surcharge and allow adequate ventilation to the gully riser; and <p>In paragraph (c)(ii) delete “product.” and insert: product; and</p> <p>At the end of the clause insert:</p> <ul style="list-style-type: none"> (d) 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.

Clause number in AS/NZS 3500.5:2012	Western Australian Modification
Table 4.36.6.6	<p>Delete the 1st item.</p> <p>In the 2nd item delete “or shower”.</p> <p>Delete the 3rd item.</p> <p>In the last item delete “Top surface level of the fixture outlet” and insert: Overflow level of the fixture</p>
Clause 4.37.1.7	<p>Delete paragraph (c) and insert:</p> <p>(c) connected as close as possible to the fixture outlet.</p> <p>Before “600 mm” insert: 300 mm for urinals and</p>
Clause 4.38	<p>Delete paragraphs (b) to (d) and insert:</p> <p>(b) The inspection shaft shall be a sweep or 45^o junction installed in the graded drain with the branch of the junction extended vertically upwards to surface level.</p> <p>(c) 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.</p> <p>(d) 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.</p> <p>(e) A DN 100 vent pipe shall be provided on each drain connected to a vacuum chamber.</p> <p>(f) 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.</p> <p>(g) 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:</p> <ol style="list-style-type: none"> i. one 88^o bend and a flat grate with invert level not less than 150 mm above ground or adopted flood level; ii. two 88^o 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 150 mm above ground or adopted flood level installed in accordance with Clause 6.9; and <p>(h) Where a vacuum sewer system vent is installed as a low level vent it shall terminate in accordance with Clause 3.9.2.3.</p> <p>(i) 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.</p>

Changes to Regulation 50-53

In addition to the variations in regulation 49, there are a number of further regulations that licensed plumbers should be aware of in relation to the standard of plumbing work that must be achieved.

Regulation	Content
50. Compliance with plumbing standards and standard of work	<p>A person must ensure that plumbing work for which the person is a responsible person:</p> <ul style="list-style-type: none"> (a) Complies with the plumbing standards that apply to the plumbing work; and (b) Is carried out in a tradesman like manner. <p>Penalty: a fine of \$5 000</p>
51. Connecting unsafe plumbing work	<p>(1) A person who is a responsible person for plumbing work must ensure that plumbing is not connected to a water supply system, a sewerage system or an apparatus for the treatment of sewerage, unless the plumbing complies with the plumbing standards that apply to the plumbing.</p> <p>Penalty: a fine of \$5 000</p> <p>(2) A person does not commit an offence under subregulation (1) if the person proves that he or she did not know that the plumbing did not comply with the plumbing standards.</p> <p>(3) A prosecution of an offence under subregulation (1) cannot be commenced without the approval of the Board.</p> <p>(4) The Board cannot give approval under subregulation (3) unless the Board is satisfied that connecting the plumbing was unsafe or gave rise to a dangerous situation.</p>
52. Specifications not to be exceeded	<p>(1) A person who installs a pipe, fixture or fitting as part of plumbing work for which the person is a responsible person must ensure that:</p> <ul style="list-style-type: none"> (a) the installation specifications specified by the manufacturer of the pipe, fixture or fitting are complied with; and (b) the operating conditions specified by the manufacturer of the pipe, fixture or fitting will not be exceeded. <p>Penalty: a fine of \$5 000</p> <p>(2) Subregulation (1) doesn't apply if the manufacturers specifications for installation or operating conditions are inconsistent with the plumbing standards that apply to the plumbing.</p>

Regulation	Content
53. Liquid waste from airconditioners	<p>(1) In this regulation:</p> <p>airconditioning waste means liquids that drain out of an airconditioning unit.</p> <p>(2) A person who is a responsible person for drainage plumbing work that involves or would result in the discharge of airconditioning waste into the sewer must ensure that the work is carried out in accordance with the requirements of AS/NZS 3500.2003 (Sanitary plumbing and drainage) clause 11.20.</p>