



AUSTRALIAN NATIONAL TESTING
LABORATORIES PTY. LTD.

Waterless Urinal with Integral self-Sealing Device According to ATS5200.469-2005

Report # 3679.11

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1 Introduction

Australian National Testing Laboratories (ANTL) was commissioned to carry out testing PVC urinal waste connection as per ATS5200.469-2005

2 Test Material Setup Descriptions

Details of the items under test are listed below.

2.1 *Pipe Description*

Name of Manufacturer:	None Marked
Model Number:	No Markings
Type:	PVC White Urinal
Markings:	No Markings

2.2 Photograph of Tested Item.



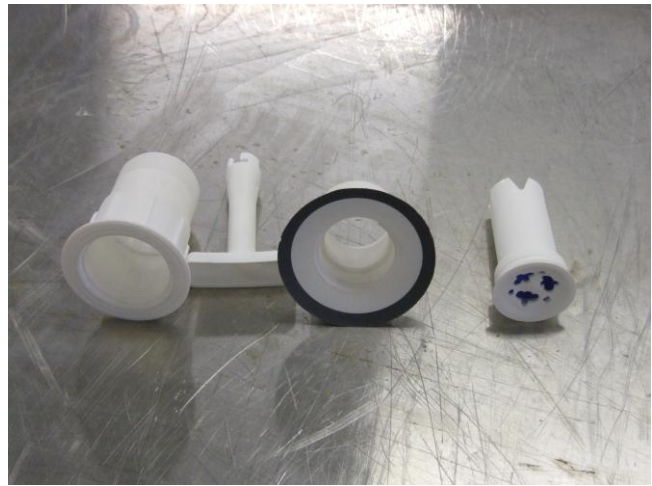
Pic: 1



Pic:2



Pic: 3



Pic: 4



Pic: 5



3 Instrumentation

The table below shows the instrumentation used to carry out the test. The instrumentation accuracy and calibration is listed below.

Parameter	Instrument Make	Instrument Model
Torque	Norbar	NB-50
Time	Cole Palmer	ER-081



4 Test Procedure

4.1 Marking - *ATS5200.469, clause 6*

Waterless urinals shall be marked with the following:

- (a) Manufacturer's name, brand or trademark.
- (b) Watermark.
- (c) Licence number.
- (d) Batch identification.
- (e) Model number.
- (f) The number of this Technical Specification, i.e., ATS 5200.469.

4.2 Waste Outlet and Grating- *ATS5200.469, clause 8.1*

The urinal shall incorporate an integral waste and grating that provides free flow of urine into the mechanical sealing device. The grating shall prevent the intrusion of foreign articles, e.g., cigarettes or deodorizing tablets.

4.3 Sealing Device- *ATS5200.469, clause 8.2*

The sealing device shall be an integral part of the fixture and capable of complying with the performance requirements of Clause 9. The design of the urinal shall be such as to enable disassembly for easy replacement or cleaning of the sealing device in situ.

4.4 Sealing Device Free Passage *ATS5200.469, clause 8.3*

The design of the device shall be such to allow free passage of urine and shall not build up to an extent to be above the level of the seal.

4.5 Outlet Connection *ATS5200.469, clause 8.4*

The outlet of the urinal shall be designed for connection to the sanitary drainage system.

4.6 Structural Strength and Integrity- *ATS5200.469, clause 9.1*

Wall-hung urinals shall comply with the load test of AS/NZS 3982



4.7 Sanitary Performance - *ATS5200.469, clause 9.2*

Urinals shall comply with the requirements of ANSI Z124.9, Odour Evaluation Test.

4.8 Waste Seal - *ATS5200.469, clause 9.3*

The valve shall retain seal under a backpressure equivalent to 70 mm +5,-0 water column for 10s.

4.9 Resistance to Environmental Agents - *ATS5200.469, clause 9.4*

Where urinals have a diaphragm type sealing mechanism shall be exposed to the test solutions identified below, each for 3000 cycles.

A cycle comprises 10s exposure to the solution, followed by 10s draining.

Each test solution with the exception of (a) consist of the listed ingredients mixed with water at ambient temperature, the ingredients being 5% (+1,-0%) of the total volume of the test solution as follows:

- a) Urea 6% (urine), analar grade.
- b) Household detergent "Teepol" Gold D6515 (5% solution/deionised water) or equivalent.
- c) Crushed cigarettes.

At the completion of the above test the device shall be tested for seal integrity in accordance with Clause 9.3



5 Test Results

5.1 **Marking** - *ATS5200.469, clause 6*

Waterless urinals shall be marked with the following:

- a) Manufacturer's name, brand or trademark.
- b) Watermark.
- c) Licence number.
- d) Batch identification.
- e) Model number.
- f) The number of this Technical Specification, i.e., ATS 5200.469.

Fail

5.2 **Waste Outlet and Grating**- *ATS5200.469, clause 8.1*

The urinal shall incorporate an integral waste and grating that provides free flow of urine into the mechanical sealing device. The grating shall prevent the intrusion of foreign articles, e.g., cigarettes or deodorizing tablets. (Pic: 5)

Pass

5.3 **Sealing Device**- *ATS5200.469, clause 8.2*

The sealing device shall be an integral part of the fixture and capable of complying with the performance requirements of Clause 9. The design of the urinal shall be such as to enable disassembly for easy replacement or cleaning of the sealing device in situ. (Pic: 5)

Pass

5.4 Sealing Device Free Passage *ATS5200.469, clause 8.3*

The design of the device shall be such to allow free passage of urine and shall not build up to an extent to be above the level of the seal.

Pass

5.5 Outlet Connection *ATS5200.469, clause 8.4*

The outlet of the urinal shall be designed for connection to the sanitary drainage system. (Pic: 3) (40mm)

Pass

5.6 Structural Strength and Integrity *ATS5200.469, clause 9.1*

Wall-hung urinals shall comply with the load test of AS/NZS 3982

Load Applied	Time	Result
30kg	120 secs	Pass No sign of fracture, leakage,

5.7 Sanitary Performance *ATS5200.469, clause 9.2*

Urinals shall comply with the requirements of ANSI Z124.9, Odour Evaluation Test.

Date	Urinal	Evaluations	Result
28.11.2011 To 23.01.2012	Waterless	56	Pass

5.8 Waste Seal- *ATS5200.469, clause 9.3*

The valve shall retain seal under a backpressure equivalent to 70 mm +5,-0 water column for 10s.

Backpressure Equivalent	Time	Result
70mm	10 secs	Pass

5.9 Resistance to Environmental Agents - *ATS5200.469, clause 9.4*

Where urinals have a diaphragm type sealing mechanism shall be exposed to the test solutions identified below, each for 3000 cycles.

A cycle comprises 10s exposure to the solution, followed by 10s draining.

Each test solution with the exception of (a) consist of the listed ingredients mixed with water at ambient temperature, the ingredients being 5% (+1,-0%) of the total volume of the test solution as follows:

- a) Urea 6% (urine), analar grade.
- b) Household detergent “Teepol” Gold D6515 (5% solution/deionised water) or equivalent.
- c) Crushed cigarettes.

At the completion of the above test the device shall be tested for seal integrity in accordance with Clause 9.3

Test	Number of Cycles	Time	Result
Urea	3000	10 secs	Pass
Teepol	3000	10 secs	Pass
Crushed Cigarettes	3000	10 secs	Pass



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6 Conclusion

Australian Testing National Laboratories Pty Ltd (ANTL) has tested the waste outlet valve in accordance with ATS5200.469.

The results of this test are presented in Section 5 of this report.