



AUSTRALIAN NATIONAL TESTING
LABORATORIES PTY. LTD.

Waste Pipe Connection Outlets

Test Report # 3506.11

Customer Name: Enswico AG

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Switzerland.

Date: 01/07/2011

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APPROVED SIGNATORY
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1 Introduction

Australian National Testing Laboratory (ANTL) was commissioned to carry out testing PVC urinal waste connection as per ATS5200.040 clause 9.1, 9.2, 9.3, and 9.4.

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
Markings:	No Markings

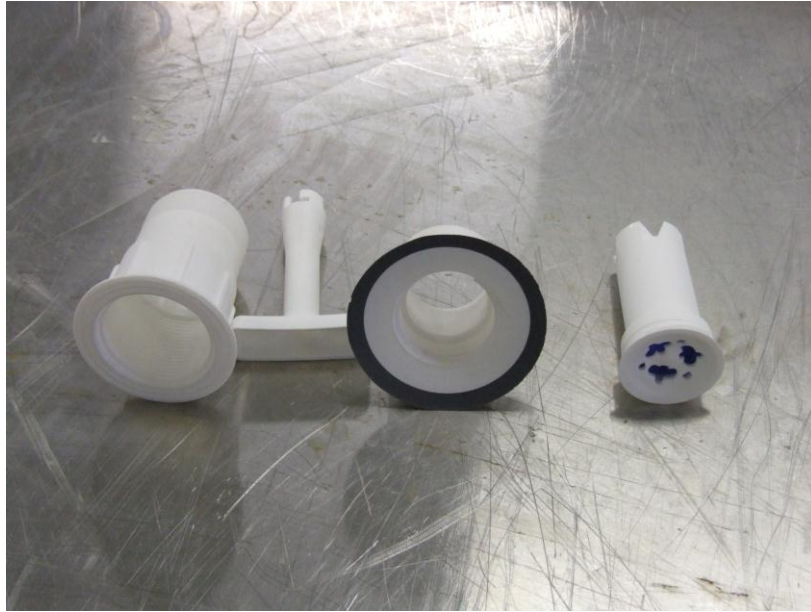


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2.2 Photograph of Tested Item.



Pic 1:



Pic 2:



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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



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4 Test Procedure

4.1 Load Test- *ATS520.040, clause 9.1*

Waste outlets that are subject to live loads when tested in accordance with AS2888.6, the grating shall withstand a force of $1.0+0.1 - 0.0$ kN for a minimum of 10 s without cracking bending or otherwise being rendered unserviceable.

4.2 Thread Tightening Torque Test- *ATS520.040, clause 9.2*

When tested in accordance with AS 2888.8, the threaded component shall be capable of being tightened without damage when a torque, as specified in AS2888.1, is applied.

4.3 Thermal Cycling Test- *ATS520.040, clause 9.3*

When tested in accordance with AS 2888.8 with components tightened to a torque of $10 \text{ Nm} +2-0 \text{ Nm}$, the fitting shall not crack or permanently distort and the surface finish shall not split, flake or peel.

4.4 Seal Test- *ATS520.040, clause 9.4*

For waste outlets that incorporate an integral plug system, when tested in accordance with AS2888.7, the plug system shall withstand a hydrostatic head of $1.00 +0.01-0\text{m}$ for $5 +5-0\text{min}$ without leaking or becoming inoperable.



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5 Test Results

5.1 Load Test- *ATS520.040, clause 9.1*

Waste outlets that are subject to live loads when tested in accordance with AS2888.6, the grating shall withstand a force of 1.0+0.1 – 0.0 kN for a minimum of 10 s without cracking bending or otherwise being rendered unserviceable.

Load Applied	Time	Result
105kg	15 secs	No Failure

At the end of the load period the fitting was inspected and found to contain no cracks or other damage.

5.2 Thread Tightening Torque Test- *ATS520.040, clause 9.2*

When tested in accordance with AS 2888.1, the threaded component shall be capable of being tightened without damage when a torque, as specified in AS2888.1, is applied.

Torque Applied	Time	Results
10.5 Nm	10 secs	No Failure



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5.3 Thermal Cycling Test- *ATS520.040, clause 9.3*

When tested in accordance with AS 2888.8 with components tightened to a torque of 10 Nm +2-0 Nm, the fitting shall not crack or permanently distort and the surface finish shall not split, flake or peel.

Number of Cycles	Temperatures	Torque Used
1000	80 deg / 20 deg	10.5 Nm

At the end of the thermal cycling period the fitting was inspected and found to contain no cracks or other damage.

5.4 Seal Test- *ATS520.040, clause 9.4*

For waste outlets that incorporate an integral plug system, when tested in accordance with AS2888.7, the plug system shall withstand a hydrostatic head of 1.00 +0.01-0m for 5 +5-0min without leaking or becoming inoperable.

Not Applicable for this type of outlet.



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6 Conclusion

Australian Testing National Laboratories Pty Ltd (ANTL) has tested the waste outlet valve in accordance with ATS5200.040.

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



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