



# **WMTS-051:2016**

## **Bidet douche seats**

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**WaterMark Technical Specification**

**2016**



**ABCB**





**WMTS-051:2016**

**Bidet douche seats**

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**WaterMark Technical Specification**

Document formerly known as:-

ATS 5200.051 – 2005 Technical Specification for Plumbing and Drainage Products  
Bidet douche seats

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**2016**

## **IMPORTANT NOTICE AND DISCLAIMER**

On 25 February 2013 management and administration of the WaterMark Certification Scheme transferred to the Australian Building Codes Board (ABCB). From this date all new technical specifications will be named WaterMark Technical Specifications (WMTS). Within two years all existing ATS will be renamed WMTS. During this initial period both terms may be used and accepted. All new and recertified Certificates of Conformity will reference WMTS. Certificates of Conformity that currently reference ATS will be re-issued referencing the equivalent WMTS during this initial period. The WaterMark Schedule of Specifications lists all current WMTS and, where appropriate, the former ATS name.

This Technical Specification supersedes Standards Australia ATS 5200.051 – 2005.

The rebranding of this Technical Specification has included additional information about the transition as well as changes to specific details including replacing references to Standards Australia and the National Plumbing Regulators Forum (NPRF) with the ABCB, changing the term Australian Technical Specification (ATS) to WaterMark Technical Specification (WMTS), replacing references to technical committees WS-014 and WS-031 with the WaterMark Technical Advisory Committee (WMTAC).

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The ABCB welcomes suggestions for improvement in the WMTS, and encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact the ABCB via phone on 1300 134 631, email at [watermark@abcb.gov.au](mailto:watermark@abcb.gov.au) or write to the WaterMark Administering Body, ABCB, GPO Box 9839, Canberra ACT 2601.

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## PREFACE

WaterMark Technical Specification WMTS-051: 2016 Technical Specification for plumbing and drainage products, Bidet douche seats was originally prepared by the Joint Standards Australia/Standards New Zealand Committee WS-031, Technical Procedures for Plumbing and Drainage Products Certification.

The objective of this Technical Specification is to enable product certification in accordance with the requirements of the Plumbing Code of Australia (PCA).

The word 'VOID' set against a clause indicates that the clause is not used in this Technical Specification. The inclusion of this word allows a common use clause numbering system for the WaterMark Technical Specifications.

The term 'normative' has been used in this Technical Specification to define the application of the appendices to which they apply. A 'normative' appendix is an integral part of a Technical Specification.

The test protocol and information in this Technical Specification was arranged by committee members to meet the authorization requirements given in the PCA.

The WaterMark Schedule of Specifications and List of Exempt Products are dynamic lists and change on a regular basis. Based on this function, these lists have been removed from the WaterMark Certification Scheme document known as Technical Specification for Plumbing and Drainage Products and are now located on the ABCB website ([www.abcb.gov.au](http://www.abcb.gov.au)). These lists will be version controlled with appropriate historic references.

## **ACKNOWLEDGEMENTS**

Australian Technical Specification ATS 5200.051 – 2005, on which this technical specification is based, was prepared by Standards Australia Committee WS-031, Technical Procedures for Plumbing and Drainage Products Certification. It was approved on behalf of the Council of Standards Australia on 19 August 2005.

The following organisations were represented on Committee WS-031 in the preparation of Australian Technical Specification ATS 5200.051 – 2005.

- AUSTAP
- Australian Electrical and Electronic Manufacturers Association
- Australian Industry Group
- Australian Stainless Steel Development Association
- Building Officials Institute of New Zealand
- Building Research Association of New Zealand Inc
- Certification Interests (Australia)
- Consumer Electronics Suppliers Association
- Copper Development Centre—Australia
- Master Plumbers, Gasfitters and Drainlayers New Zealand
- National Fire Industry Association
- Plastics Industry Pipe Association of Australia
- Plumbing Industry Commission
- South Australian Water Corporation
- Water Services Association of Australia

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## **1 SCOPE**

This Technical Specification sets out requirements for douche seats using water dispensed by a douche spray for the purposes of personal hygiene. It applies specifically to douche seats that are self-contained for installation on water closet (WC) pans (toilets) and direct connection to the water supply.

Bidet douche seats are intended for use in conjunction with commercially available WC pans situated in any domestic, commercial, industrial or health care application.

*NOTE: Where the product includes components or accessories they may be subject to other regulatory requirements e.g., electrical safety (See AS 3350.2.84) and Electromagnetic compatibility (EMC).*

## **2 APPLICATION**

This Technical Specification will be referenced on the WaterMark Certification Scheme Schedule of Specifications.

Appendix A sets out the means by which compliance with this Technical Specification is demonstrated by a manufacturer for the purpose of product certification.

## **3 REFERENCED DOCUMENTS**

The following documents are referred to in this Technical Specification:

AS

- 2845 Water supply—Backflow prevention devices
- 2845.1 Part 1: Materials, design and performance requirements
- 3350 Safety of household and similar appliances
- 3350.2.84 Part 2.84: Particular requirements for toilets

AS/NZS

- 3500 Plumbing and drainage (Series)
- 4020 Testing of products for use in contact with drinking water

## **4 DEFINITIONS**

For the purpose of this Technical Specification, the definitions given in AS/NZS 3500.0 apply.



## 5 VOID

## 6 MARKING

Each douche seat shall be permanently and legibly marked with the following:

- (a) Manufacturer's name, brand or trademark.
- (b) A label as follows:

'THIS DOUCHE SEAT IS SUPPLIED WITH A BACKFLOW PROTECTION DEVICE COMPLYING WITH AS/NZS 3500.1. NO FURTHER BACKFLOW PREVENTION IS REQUIRED FOR CONNECTION TO THE WATER SUPPLY.'

- (c) WaterMark.
- (d) Licence number.
- (e) The number of this Technical Specification, i.e., WMTS-051.

*NOTE: The number of the Technical Specification may be an abbreviated form i.e., S051 where space is limited.*

## 7 PACKAGING

The douche seat and components shall be packaged so as to avoid damage during transportation and handling.

## 8 DESIGN

### 8.1 End connections

End connections for connection to metallic or plastics piping systems shall comply with the requirements of the Australian Standard or Technical Specification relevant to the piping system.

### 8.2 Integral plumbing components, accessories or fittings

Where the product includes integral plumbing components, accessories or fittings that require certification as specified in the Plumbing Code of Australia, these shall comply with the applicable requirements of the specification for that product as listed on the WaterMark Schedule of Specifications.

### 8.3 Backflow prevention

The douche seat shall be supplied with a low hazard mechanical backflow prevention device complying with AS/NZS 2845.1.

## 9 PERFORMANCE REQUIREMENTS AND TEST METHODS

### 9.1 Products in contact with drinking water

Products up to and including the backflow prevention device shall comply with AS/NZS 4020. Products shall be tested as end-of-line devices.

### 9.2 Assembly hydrostatic strength test

When tested in accordance with Appendix B, components subject to permanent hydrostatic pressure shall not leak or show signs of distortion, splitting, cracking, breakage or other failure when tested at twice the maximum operating pressure at the maximum operating temperature.

## 10 VOID

## 11 PRODUCT DOCUMENTATION

### 11.1 Product data

Product data shall be available that identifies the following critical product characteristics as a minimum—

- (a) Maximum allowable operating pressure and temperature.
- (b) Minimum operating pressure.

### 11.2 Installation and maintenance instructions

#### 11.2.1 *Installation instructions*

Full installation instructions shall be provided with the device including the following:

- (a) Requirements specified in AS/NZS 3500.
- (b) Detailed step-by-step instructions.
- (c) Details of any special tools or training that may be required to install the product.
- (d) Commissioning procedures and adjustments required.
- (e) Troubleshooting guide.
- (f) Contact details for after-sales service.

#### 11.2.2 *Operating and maintenance instructions*

Operating and maintenance instructions shall be provided, which shall include—

- (a) any regular maintenance requirements;

- (b) spare parts information;
- (c) troubleshooting guide; and
- (d) contact details for after-sales service.

## **Appendix A MEANS FOR DEMONSTRATING COMPLIANCE WITH THIS TECHNICAL SPECIFICATION**

(Normative)

### **A.1 SCOPE**

This Appendix sets out the means by which compliance with this Technical Specification is to be demonstrated by a manufacturer under the WaterMark Certification Scheme.

### **A.2 RELEVANCE**

The long-term performance of plumbing systems is critical to the durability of building infrastructure, protection of public health and safety, and protection of the environment.

### **A.3 PRODUCT CERTIFICATION**

The purpose of product certification is to provide independent assurance of the claim by the manufacturer that products comply with this Technical Specification.

The certification scheme serves to indicate that the products consistently conform to the requirements of this Technical Specification.

The sampling and testing plan, as detailed in Paragraph A5 and Table A1, shall be used by the WaterMark Conformity Assessment Body. Where a batch release testing program is required it shall be carried out by the manufacturer as detailed in Paragraph A5 and Table A2.

### **A.4 DEFINITIONS**

#### **A.4.1 Batch release test**

A test performed by the manufacturer on a batch of components, which has to be satisfactorily completed before the batch can be released.

#### **A.4.2 Production batch**

Clearly identifiable collection of units, manufactured consecutively or continuously under the same conditions, using material or compound to the same specification.

#### **A.4.3 Sample**

One or more units of product drawn from a batch, selected at random without regard to quality.

*NOTE: The number of units of product in the sample is the sample size.*

#### **A.4.4 Sampling plan**

A specific plan that indicates the number of units of components or assemblies to be inspected.

#### **A.4.5 Type test batch**

Schedule of units of the same type, identical dimensional characteristics, all the same nominal diameter and wall thickness, from the same compound. The batch is defined by the manufacturer.

#### **A.4.6 Type testing (TT)**

Testing performed to demonstrate that the material, component, joint or assembly is capable of conforming to the requirements given in the Technical Specification.

### **A.5 TESTING**

#### **A.5.1 Type testing**

Table A1 sets out the requirements for type testing and frequency of re-verification.

#### **A.5.2 Batch release testing**

Table A2 sets out the minimum sampling and testing frequency plan for a manufacturer to demonstrate compliance of product(s) to this Technical Specification on an ongoing basis. However, where the manufacturer can demonstrate adequate process control to the WaterMark Conformity Assessment Body, the frequency of the sampling and testing nominated by the manufacturer's quality plan and/or documented procedures shall take precedence for the purposes of WaterMark product certification.

#### **A.5.3 Retesting**

In the event of a batch release test failure, the products within the batch may be retested at a frequency agreed to with the WaterMark Conformity Assessment Body and only those batches found to comply may be claimed and/or marked as complying with this Technical Specification.

**Table A1—TYPE TESTS**

| <b>Characteristic</b> | <b>Clause</b> | <b>Requirement</b>   | <b>Test method</b>                           | <b>Frequency</b>   |
|-----------------------|---------------|--|--|--|
| Marking               | 6             | Labelling/markings   | Review of documentation/physical examination | At any change in design/specification  |
| Packaging             | 7             | Protection of transit damage   |  |  |
| Design                | 8.1           | End connections  | Relevant Standard                            | At any change in the design  |
|                       | 8.2           | Integral components  | Relevant Standard                            |  |
|                       | 8.3           | Backflow prevention  | AS/NZS 3500.1                                |  |
| Performance           | 9.1           | Products in contact with drinking water                                  | AS/NZS 4020                                  | At any change in materials, formulation or design or every five years, whichever occurs first                    |
|                       | 9.2           | Assembly hydraulic strength test   | Appendix B                                   | At any change in design  |
| Product documentation | 11            | Product data and installation and operating and maintenance instructions | Documentation review                         | At any change factors that require a change in documentation, e.g. amendments to AS/NZS 3500 series of Standards |

**Table A2—BATCH RELEASE TESTS**

| <b>Characteristic</b> | <b>Clause</b> | <b>Requirement</b>               | <b>Test method</b> | <b>Frequency</b> |
|-----------------------|---------------|----------------------------------|--------------------|------------------|
| Marking               | 6             | Marking                          | Visual examination | 100%             |
| Design                | 8.1           | End connections                  | Relevant Standard  | Once per batch   |
| Performance           | 9.2           | Assembly hydraulic strength test | Appendix B         | Once per batch   |

## Appendix B ASSEMBLY HYDROSTATIC STRENGTH TEST

(Normative)

### B.1 SCOPE

This Appendix sets out the method for determining the ability of components subject to permanent hydrostatic pressure to withstand hydrostatic pressure without leakage or permanent distortion.

### B.2 PRINCIPLE

The components subject to permanent hydrostatic pressure within the assembly are subjected to a hydrostatic pressure for a period of time at a determined temperature and inspected for leakage and permanent distortion.

### B.3 APPARATUS

The following is required:

- (a) Water supply sufficient to maintain the required pressure and temperature.
- (b) Pressure gauge.

### B.4 PROCEDURE

The procedure shall be as follows:

- (a) Connect the supply water to the assembly and purge all the air from the device.
- (b) Circulate water at the required temperature through the components subject to permanent hydrostatic pressure for a period of no less than 15 min.
- (c) Slowly increase the pressure until it reaches the test pressure.
- (d) Maintain this pressure for 60 +5, -0 min.
- (e) Release the pressure.
- (f) Record the test pressure, temperature and duration at this pressure.
- (g) Inspect the device for any leaks or permanent distortion.

### B.5 TEST REPORT

The following shall be reported:

- (a) Manufacturer, model, type and size of device.
- (b) Any leakage or structural damage.
- (c) Reference to this test method, i.e. WMTS-051, Appendix B.

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