

Australian/New Zealand Standard

Baths for ablutionary purposes

AS/NZS 2023:1995

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee WS/3, Sanitary Plumbing Fixtures and Committee WS/29, Plumbing Equipment—Composite Materials. It was approved on behalf of the Council of Standards Australia on 5 May 1995 and on behalf of the Council of Standards New Zealand on 19 June 1995. It was published on 5 August 1995.

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee WS/3 on Sanitary Plumbing Fixtures to supersede AS 2023—1989. It includes requirements for baths made from cast iron vitreous enamel, pressed steel vitreous enamel, stainless steel, vitreous china, plastic and composite materials.

The objective of this Standard is to provide manufacturers with specific requirements for health, hygiene and durable quality.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

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STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard

Baths for ablutionary purposes

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE This Standard specifies requirements for baths for ablutionary purposes, including built-in, inset, island, and freestanding styles. Only critical dimensions are specified.

This Standard does not apply to spa baths and baths specifically designed for medical applications.

1.2 APPLICATION Baths shall comply with Section 1 and with Sections 2 to 6 as follows:

Section 2 Cast iron vitreous enamelled baths

Section 3 Pressed steel vitreous enamelled baths

Section 4 Vitreous china baths

Section 5 Stainless steel baths

Section 6 Plastic and composite materials baths

1.3 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS

1080 Methods of testing timber

1080.1 Part 1: Moisture content

1225 Clay building bricks

1234 Recommendations for coordinated preferred dimensions in building

1449 Wrought alloy steels—Stainless and heat-resisting steel plate, sheet and strip

1589 Copper and copper alloy waste fittings

1595 Cold-rolled unalloyed low carbon steel sheet and strip

1650 Hot-dipped galvanized coatings on ferrous articles

1718 Water supply—Copper alloy screw-down pattern taps—Specified by dimensions

1830 Iron castings—Grey cast iron

1976 Vitreous china for use in sanitary appliances

2105 Inorganic zinc silicate paint

2219 Methods of test for vitreous enamel coatings

2219.1.5 Method 1.5: Chemical tests—Determination of resistance of vitreous enamel coatings to citric acid at room temperature

2733 Concrete masonry units

2887 Plastics waste fittings

AS

3500 National Plumbing and Drainage Code

3500.0 Part 0: Glossary of terms

3558 Methods of testing plastics and composite materials sanitary plumbing fixtures

3558.2 Method 2: Determination of chemical and stain resistance

3558.3 Method 3: Determination of colourfastness

3558.4 Method 4: Determination of resistance to surface scratching

3558.6 Method 6: Visual examination of surface finish for defects

3558.11 Method 11: Determination of impact resistance of baths for ablutionary purposes

3558.12 Method 12: Determination of resistance to thermal shock of baths for ablutionary purposes

3718 Water supply—Metal bodied taps—Specified by performance

NZS

366 Clay building bricks

3331 Vitreous china sanitary ware

ISO

105-AO1 Textiles—Tests for colourfastness

Part AO1: General principles of testing

1.4 DEFINITIONS For the purpose of this Standard, the definitions given in AS 3500.0 and those below apply.

1.4.1 Blister—a bubble formed during fusion of vitreous enamel or plastics and composite material which remains after solidification.

1.4.2 Built-in bath—a bath designed with a tiling flange or bead or integral upstand to be installed abutting a wall.

1.4.3 Chipping—removal of the enamel or plastic and composite coating of a bath by impact.

1.4.4 Clickers—sharp raised black marks.

1.4.5 Crazing—a crack in the entire thickness of the enamel coating or finished surface of a plastic and composite material.

1.4.6 Dimples—slight depressions of the finished surface.

1.4.7 Freestanding bath—a bath designed with frame or legs or other support for independent installations. The bath may have an integral full height surround.

1.4.8 Inset bath—a bath designed with an integral rim, capable of being sealed to a floor or bench.

1.4.9 Island bath—a bath designed with a supporting rim and a surround for installation in a frame not abutting a wall.

1.4.10 Lift—an area of the base from which the enamel or plastics and composite has lifted.

1.4.11 Lumps—raised portions of the finished surface.

1.4.12 Peeling—spontaneous detachment of pieces of enamel or plastic and composite from the base material.

1.4.13 Pinhole—a hole that extends through the enamel to the metal base or in the finished surface of a plastic and composite material.

1.4.14 Rim—an integral flange around the top of the bath.

1.4.15 Scale—raised piece of foreign matter on a finished surface.

1.4.16 Scratching—a scratch penetrating the finished surface of a bath.

1.4.17 Sealing surface—an area of contact between the integral rim and appropriate surface capable of being sealed in an approved manner.

1.4.18 Specks—particles of foreign matter producing a different colour on a surface.

1.4.19 Tiling flange or bead—an upstand or roll on one or more sides of the bath or shower bath for flashing purposes.

1.4.20 Universal bath—a bath suitable for built-in, inset or island installation.

1.5 DESIGN

1.5.1 Preferred dimension Modular dimensions are preferred for length and width as shown in AS 1234.

1.5.2 Corner radii The inside corners of the bath at the junction of the sides with each other and the bottom shall be curved with a radius of not less than 5 mm. Any other internal radii shall be not less than 3 mm.

1.5.3 Drainage The bottom of the bath shall have a continuous fall to the waste outlet hole.

Soap recesses and steps, where provided and rims of baths shall have a continuous fall to the inside of the bath except the outside rim of an inset bath. Textured and profile surfaces are permitted. However, where textured or profiled surfaces are incorporated, drainage shall be unaffected.

For the safety of users, baths should be as flat-bottomed as possible. Baths shall have a minimum area of 250 mm wide × 500 mm long in which the slope shall not exceed 1 in 30.

1.5.4 Flashings Flashings shall comply with the following requirements (see Figure 1):

- (a) A built-in bath shall be provided with an integral tiling flange or bead not less than 10 mm in height.
- (b) An inset bath shall have an integral rim capable of being sealed to the surface. The sealing rim shall be at least 30 mm wide with a surface of not less than 5 mm. Where a gasket is required to effect the seal, it shall be non-absorbent, and shall have a design life of not less than that of the bath. The tolerance of the sealing surface shall be ± 2 mm where a gasket is not provided, or sufficient to provide a waterproof seal where a gasket is supplied.

1.5.5 Handgrips Handgrips fitted to baths shall be manufactured from stainless steel, chromium-coated brass, nickel-coated brass, enamelled steel, cast iron, plastic, or other corrosion-resistant materials. Handgrips shall be fitted so as to provide a watertight seal at the surface of the bath, and they and the bath shall be capable of withstanding a steady force of $2.0 + 0.1, -0$ kN applied in any direction for a period of $60 + 5, -0$ s as set out in Paragraph A10 of Appendix A without breaking or pulling out.

1.5.6 Rigidity Baths shall be designed to comply with the tests prescribed in Appendix A with the deflection limits set out in Table A1.

1.5.7 Waste outlet The waste outlet hole shall be capable of accommodating a standard waste outlet fitting of DN 40 or DN 50 complying with AS 1589 or AS 2887 so that when installed, the fitting is below the level of the bottom of the bath (not including the recess). If such a fitting is not supplied with the product, then the surround of the outlet hole shall be recessed.

1.5.8 Holes for installation of taps Tap holes shall comply with AS 1718 and AS 3718.