Australian Standard®

Vitreous china used in sanitary appliances

This Australian Standard was prepared by Committee WS/3, Sanitary Plumbing Fixtures. It was approved on behalf of the Council of Standards Australia on 12 March 1992 and published on 15 May 1992.

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Australian Consumers Association

Board of Works, Melbourne

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OF AS 1976—1992 Vitreous china used in sanitary appliances

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PREFACE

This Standard was prepared by the Standards Australia Committee on Sanitary Plumbing Fixtures to supersede AS 1976—1976. The Standard deals with the quality of vitreous china and details the tests by which that quality may be assessed. Requirements for non–vitreous china used in sanitary appliances are given in AS 4023.

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AS 1976—1992

STANDARDS AUSTRALIA

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Australian Standard Vitreous china used in sanitary appliances

1 SCOPE This Standard specifies the quality of vitreous china for use in sanitary appliances, and details the tests by which that quality shall be assessed.

- **2 DEFINITIONS** For the purpose of this Standard, the definitions below apply.
- **2.1 Blister**—a raised projection of the surface having a height or width greater than 1 mm.
- **2.2 Crazing**—cracks in the glaze.
- **2.3 Discolouration**—a coloured spot over 6 mm maximum dimension, or a concentrated number of specks or spots that give the effect of a change in colour.
- **2.4 Finish**—the texture and condition of a surface other than its colour.
- 2.5 Fire crack—a visible area crack in the body not covered with glaze in the visible area.
- 2.6 Grouping—a number of spots, blisters, pinholes, or specks within any pottery square.
- **2.7 Pinhole**—a hole in the glazed surface not greater than 0.5 mm.
- **2.8 Polishing mark**—a spot, not greater than 10 mm maximum dimension, where a minor blemish has been ground off and the surface polished.
- **2.9 Pottery square**—a square of side 50 mm, i.e. an area of 2500 mm².
- **2.10 Speck**—an area of contrasting colour less than 1 mm maximum dimension. Specks less than 0.3 mm maximum dimension do not constitute a defect unless sufficient in number to form a discolouration.
- **2.11 Spot**—an area of contrasting colour greater than 1 mm maximum dimension.
- **2.12 Visible surface**—the surface that is readily visible, after installation of an appliance, to an observer in a normal standing position.
- **2.13 Vitreous china**—a ceramic material made from a mixture of clays and other materials, with a mean water absorption of not greater than 0.5 percent.
- **2.14 Wavy finish**—a defect in the finish that has the appearance of numerous runs in the glaze; an irregular or mottled finish.
- **2.15** Normative—an appendix which is essential to the understanding or implementation of the Standard.
- **3 GLAZING** The glaze shall be thoroughly fused to the body.
- **4 SURFACE QUALITY** When viewed from a distance of between 500 mm and 600 mm with a surface illumination of not less than 300 lx, the surface defects shall not be in excess of those given in Table 1.

TABLE 1 MAXIMUM NUMBER OF BLEMISHES OR DEFECTS

Wavy finish	None
Warpage	Not noticeably warped
Discolouration	None
Spots, blisters, or pinholes	A total of not more than three, and no grouping
Bubbles or specks	A total of not more than five, and not more than three in one
	pottery square
Polishing marks	Only one; none permitted for coloured appliances
Dull or eggshell finish	Not permitted
Fire cracks	Not permitted

5 TESTS

- **5.1 Application of tests** Each of the tests listed in Clauses 5.2 to 5.4 shall be carried out on an appliance of current production, selected as it is drawn from the exit kiln and the results recorded.
- **5.2 Water absorption** The test for water absorption shall be carried out at least once every week in accordance with Appendix A. None of the individual values of water absorption shall exceed 0.75 percent and the arithmetic mean of the values shall not exceed 0.50 percent.