

STANDARDS AUSTRALIA

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RECONFIRMATION

OF

AS 3558.21—1999

**Methods of testing plastics and composite materials sanitary plumbing fixtures  
Method 21: Determination of thermal expansion under load of sinks**

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**RECONFIRMATION NOTICE**

Technical Committee WS-003 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

Certain documents referenced in the publication may have been amended since the original date of publication. Users are advised to ensure that they are using the latest versions of such documents as appropriate, unless advised otherwise in this Reconfirmation Notice.

Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 30 September 2016.

The following are represented on Technical Committee WS-003:

Association of Accredited Certification Bodies  
Australian Chamber of Commerce and Industry  
CSIRO  
Department of Agriculture and Water Resources (Australian Government)  
Plastics New Zealand  
Plumbing Distributors Association of New Zealand  
Plumbing Products Industry Group  
Testing Interests (Australia)

## NOTES

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# Methods of testing plastics and composite materials sanitary plumbing fixtures

## Method 21: Determination of thermal expansion under load of sinks

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### 1 SCOPE

This Standard sets out a method for determining the limits of thermal expansion under load of plastics sinks.

### 2 PRINCIPLE

The sink is mounted in accordance with the manufacturer's installation instructions. Marks are scribed on the sink at room temperature and measurements are taken. Hot water is run into the sink and the measurements are retaken.

### 3 APPARATUS

The following apparatus is required.

- (a) Scriber.
- (b) Temperature gauge.
- (c) Measuring tape.

### 4 PROCEDURE

The procedure shall be as follows:

- (a) Mount the sink in accordance with the manufacturer's instructions supplied with the trough.
- (b) Scribe marks (AA', BB', CC', and DD') on the flange of the sink, as shown in Figure 1(a) and record the distances AC and BD at room temperature.
- (c) Run hot water at  $95 \pm 2^\circ\text{C}$  into the sink through an inlet pipe discharging at a rate of  $15.0 \pm 2$  L/min until the sink contains water to a depth of at least two-thirds of the spill level (see Figure 1(b)).
- (d) Measure the water temperature at a water depth of between 10 mm and 50 mm. When the water temperature is in the range of  $80^\circ\text{C}$  to  $85^\circ\text{C}$ , measure the distance between the opposite pairs of scribed marks.