

STANDARDS AUSTRALIA

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**RECONFIRMATION**

**OF**

**AS 1580.108.2—2004**

**Paints and related materials—Methods of test  
Method 108.2: Dry film thickness—Paint inspection gauge**

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**RECONFIRMATION NOTICE**

Technical Committee CH-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 26 August 2019.

The following are represented on Technical Committee CH-003:

Australasian Corrosion Association  
Australian Institute of Building  
Australian Paint Manufacturers Federation  
Australian Wall and Ceiling Association  
Engineering New Zealand  
Master Painters Australia  
Master Painters New Zealand Association  
National Association of Testing Authorities Australia  
National Painting and Decorating Institute  
Surface Coatings Association Australia

## NOTES

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## Paints and related materials—Methods of test

### Method 108.2: Dry film thickness—Paint inspection gauge

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#### METHOD

##### 1 SCOPE

This Standard applies to paint coatings or coating systems applied to a rigid substrate. This method is also applicable to determination of the thickness of individual coats in a multicoat system where there is a visually discernible difference between coats. The method is not applicable for soft, friable or ductile substrates that may deform under the test gauge cutting tip. The determination may be carried out in either laboratory or field.

NOTE: This is a destructive test method.

##### 2 PRINCIPLE

The thickness is determined by scoring the paint film with the appropriate cutting tip of the gauge and measuring the paint film thickness with the gauging microscope. The procedure is repeated as specified.

##### 3 OCCUPATIONAL HEALTH AND SAFETY

Exercise care when handling sharp cutting tools.

##### 4 APPARATUS

###### 4.1 Paint inspection gauge

Consisting of a microscope, typically of 50× magnification, fitted with a calibrated graticule and an appropriate tungsten carbide cutting tip whose angle,  $\theta$ , is known.

NOTE: Paint inspection gauges are supplied with a number of cutting tips of different angles and the tip chosen for the test should be carefully noted.

###### 4.2 Felt-tip marker

Of colour contrasting with that of the top coat of the system being tested.

##### 5 PROCEDURE

The procedure is as follows:

- (a) Select the cutting tip appropriate for the expected film thickness.
- (b) Make a straight line mark approximately 25 mm long, on the coating in the area where the thickness is to be determined, using the felt-tip marker.
- (c) Make the test panel secure, if appropriate.
- (d) Hold the cutting tip assembly of the paint inspection gauge with the cutting tip about 25 mm away from, but directed at right angles to, the line mark left by the felt-tip marker.