

# Australian Standard™

AS 1580.410.1

## Paints and related materials—Methods of test

### Method 410.1: Cold check cycling

#### METHOD

##### 1 SCOPE

This Method sets out a test for assessing the resistance of a paint system to extremes of temperature and humidity when both the oven and the freezer are at humidity under 5% RH.

##### 2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

- 1580 Paints and related materials—Methods of test
- 1580.101.1 Method 101.1: Conditions of test—Temperature, humidity and airflow control
- 1580.101.4 Method 101.4: Conditions of test—Temperature control
- 1580.104.1 Method 104.1: Recommended materials for test panels
- 1580.107.3 Method 107.3: Determination of wet film thickness by gauge

##### 3 PRINCIPLE

Panels are cycled through hot dry conditions; to cold conditions; routine laboratory conditions. Condensation occurs at the interface of cold with ambient.

##### 4 APPARATUS

###### 4.1 Oven

Oven maintained at  $60 \pm 2^\circ\text{C}$ .

###### 4.2 Freezer

Freezer maintained at  $-10 \pm 2^\circ\text{C}$ .

###### 4.3 Timer

An electronic or mechanical timing device accurate to at least 0.1% over a 5 min period.

###### 4.4 Other

Marker pen.

Panel rack.

##### 5 TEST PANELS

###### 5.1 General

Timber (solid, veneer, or medium density fibreboard—MDF) test panel 16 mm thickness minimum or metal panels as per AS 1580.104.1 (nominal size  $200 \times 300$  mm) coated to specification.