

STANDARDS AUSTRALIA

RECONFIRMATION

OF

AS 2362.13—2002

Fire detection, warning, control and intercom systems—Methods of test

Method 13: Corrosion test

RECONFIRMATION NOTICE

Technical Committee FP-002 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 16 June 2016.

The following are represented on Technical Committee FP-002:

Association of Hydraulic Services Consultants Australia
Australasian Fire and Emergency Service Authorities Council
Australian Building Codes Board
Australian Chamber of Commerce and Industry
Australian Industry Group
Australian Institute of Building Surveyors
CSIRO
Deafness Forum of Australia
Department of Human Services (VIC)
Engineers Australia
Fire Protection Association Australia
National Electrical and Communications Association
National Fire Industry Association
Property Council of Australia
Society of Fire Safety

NOTES

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Method 13: Corrosion test

1 SCOPE

This Standard sets out the method for subjecting an actuating device to a corrosive atmosphere. (See performance requirements in the appropriate device Standard.)

2 PRINCIPLE

An actuating device is exposed to a specified corrosive atmosphere. The actuating device is subsequently checked for changes in sensitivity and insulation resistance.

3 APPARATUS

A corrosion apparatus which consists of an exposure chamber made from suitable impervious material (e.g. glass) containing appropriately sealed holes for gas inlet, gas outlet and fan shaft, etc. as required. The dimensions of the chamber shall be appropriate to the apparatus under test but are not critical, provided the gas concentrations are maintained as specified.

The gas supply to the chamber shall be from compressed gas cylinders of commercial grade SO₂ and CO₂. The gas supply lines shall include valves to control flow. Gas shall be supplied through flowmeters and a suitable timing device shall be used to measure gas volume.

A platform made of suitable plastic material such as PVC shall be used in the chamber to support the actuating device at a distance of 30 ± 5 mm above the water level. A fan shall provide air movement in the chamber.

4 PROCEDURE

The procedure shall be as follows:

- (a) Connect leads of approximately 100 mm length to each terminal and mount the actuating device in its normal orientation inside the exposure chamber.
NOTE: The leads are intended for subsequent testing, and their ends may be sealed to prevent deterioration.
- (b) A small amount of water (approximately 10 mL/0.003 m³ of chamber volume) is to be maintained in the bottom of the chamber for humidifying the atmosphere.
- (c) Expose the actuating device to a moist carbon dioxide-sulfur dioxide-air mixture in the closed chamber for a period of 240 h at temperature $23 \pm 5^\circ\text{C}$ as follows:
 - (i) On the first through fourth and seventh through tenth days, an amount of carbon dioxide equivalent to $1.0 \pm 0.1\%$ of the chamber volume plus an amount of sulfur dioxide equivalent to $0.5 \pm 0.05\%$ of the chamber volume is to be introduced. Prior to each introduction of new gas-air mixture, the chamber shall be thoroughly purged and the water level checked.