

STANDARDS AUSTRALIA

RECONFIRMATION

OF

AS 2362.2—2002

Fire detection, warning, control and intercom systems—Methods of test
Method 2: Heat sensitivity testing of Type E heat detectors

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
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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

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

Method 2: Heat sensitivity testing of Type E heat detectors

1 SCOPE

This Standard sets out the method for determining the alarm state temperature of a Type E heat detector. (See performance requirement in the appropriate device Standard.)

2 PRINCIPLE

The detector is immersed in warm water or oil, which is heated at a controlled rate until the detector enters an alarm state. The temperature of the liquid at that time is recorded.

3 APPARATUS

The following apparatus is required:

- (a) A bath containing water or oil (see Clause 4(b)).
- (b) A heat source capable of heating the liquid in the bath at a controlled rate not exceeding 0.5 K per minute.
- (c) A means of agitating the liquid in the bath.
- (d) A thermometer with an accuracy of $\pm 0.5^{\circ}\text{C}$.
- (e) Suitable monitoring equipment capable of indicating an alarm state of the detector.

4 PROCEDURE

The procedure shall be as follows:

- (a) Connect the detector to the monitoring equipment.
 - (i) For detectors with alarm state temperature ratings of 80°C or lower, completely immerse the sensing element of the detector in a bath of water.
 - (ii) For detectors with alarm state temperature ratings in excess of 80°C , completely immerse the sensing element of the detector in a bath of oil having a flashpoint exceeding the test temperature of the detector.
- (b) Place the thermometer in the bath so that the sensing element of the thermometer is held level with the sensing element of the detector.
- (c) While agitating the liquid in the bath, raise the temperature of the liquid at a convenient rate to a point not less than 15% below the temperature rating of the detector in degrees Celsius.
- (d) Continue to heat the liquid in the bath at a rate not exceeding 0.5 K per minute until the detector enters an alarm state, or until a temperature 10% above the rated temperature of the detector, in degrees Celsius is reached.