

Australian Standard™

**Fire tests—Full-scale room test for
surface products**

This Australian Standard was prepared by Committee FP-018, Fire Safety. It was approved on behalf of the Council of Standards Australia on 28 March 2003 and published on 16 May 2003.

The following are represented on Committee FP-018:

Australasian Fire Authorities Council
Australian Building Codes Board
Australian Chamber of Commerce and Industry
Australian Institute of Building
Australian Wool Testing Authority
Building Research Association of New Zealand
Bureau of Steel Manufacturers of Australia
CSIRO Building Construction and Engineering
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surface products**

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee FP-018, Fire Safety. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

This Standard is identical with and has been reproduced from ISO 9705:1993, *Fire tests—Full-scale room test for surface products*.

Statements expressed in mandatory terms in notes to tables, figures or clauses are deemed to be requirements of this Standard.

As this Standard is reproduced from an international Standard, the following applies:

- (a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.
- (b) In the source text ‘this International Standard’ should read ‘this Australian Standard’.
- (c) A full point substitutes for a comma when referring to a decimal marker.

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NOTES

INTRODUCTION

This method is intended to describe the fire behaviour of a product under controlled laboratory conditions.

The test method may be used as part of a fire hazard assessment which takes into account all of the factors which are pertinent to an assessment of the fire hazard of a particular end use.

NOTES

AUSTRALIAN STANDARD

Fire tests — Full-scale room test for surface products

WARNING — So that suitable precautions can be taken to safeguard health, the attention of all concerned in fire tests is drawn to the possibility that toxic or harmful gases can be evolved during combustion of test specimens.

The test procedures involve high temperatures and combustion processes from ignition to a fully developed room fire. Therefore, hazards can exist for burns, ignition of extraneous objects or clothing. The operators should use protective clothing, helmet, face-shield and equipment for avoiding exposure to toxic gases.

Means for extinguishing a fully developed fire should be available.

1 Scope

This International Standard specifies a test method that simulates a fire that under well ventilated conditions starts in a corner of a small room with a single open doorway.

The method is intended to evaluate the contribution to fire growth provided by a surface product using a specified ignition source.

A standard ignition source is specified, but other alternatives are allowed. It should, however, be noted that the type, position and heat output of the ignition source will considerably influence the fire growth.

The method is especially suitable for products that for some reason cannot be tested in a small laboratory scale, for example thermoplastic materials, the effect of an insulating substrate, joints, surfaces with great irregularity.

The method is not intended to evaluate the fire resistance of a product.

A test performed in accordance with the method specified in this International Standard provides data for the early stages of a fire from ignition up to flashover.

2 Normative reference

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 3261:1975, *Fire tests — Vocabulary*.

3 Definitions

For the purposes of this International Standard, the definitions given in ISO 3261 and the following definitions apply.

3.1 assembly: Fabrication of materials and/or composites, for example, sandwich panels.

NOTE 1 An assembly may include an air gap.

3.2 composite: Combination of materials which are generally recognized in building construction as discrete entities, for example, coated or laminated materials.