

Australian Standard<sup>®</sup>

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**Methods for fire tests on building  
materials, components and  
structures**

**Part 2: Test for flammability of  
materials**

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This Australian Standard was prepared by Committee BD/18, Fire Tests—Building Materials, Components, Structures. It was approved on behalf of the Council of Standards Australia on 11 January 1993 and published on 13 April 1993.

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The following interests are represented on Committee BD/18:

Australian Assembly of Fire Authorities  
Australian–British Chamber of Commerce  
Australian Chamber of Commerce and Industry  
Australian Fire Protection Association  
Australian Institute of Building  
Australian Uniform Building Regulations Coordinating Council  
Australian Wool Testing Authority  
Bureau of Steel Manufacturers of Australia  
Cement and Concrete Association of Australia  
Commonwealth Fire Board  
CSIRO, Division of Building Construction and Engineering  
Fire Protection Industry Association of Australia  
Forestry Commission of New South Wales  
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## PREFACE

This Standard was prepared by the Standards Australia Committee on Fire Tests— Building Materials, Components, Structures to supersede AS 1530.2—1973, *Fire tests on building materials and structures, Part 2: Test for flammability of materials*.

The major changes in this edition of the Standard are as follows:

- (a) The inclusion of a statistical evaluation of the results and provision for additional testing.
- (b) A change to the formula for calculating the speed factor so that flammability indices form a continuous range.
- (c) A section has been added giving details to be included in the test report.

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## STANDARDS AUSTRALIA

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**Part 2: Test for flammability of materials**

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## SECTION 1 SCOPE AND GENERAL

**1.1 SCOPE** This method applies to the testing of thin sheet or woven material which is sufficiently pliable to be inserted into the test apparatus by hand without special softening treatment, so that it may be graded according to a flammability index. The test is unsuitable for materials which melt readily or shrink away from an igniting flame.

**1.2 REFERENCED DOCUMENTS** The following documents are referred to in this Standard.

AS

2484 Fire—Glossary of terms

2484.1 Part 1: Fire tests

BS

4937 International thermocouple reference tables

4937.4 Nickel-chromium/nickel-aluminium thermocouples. Type K

**1.3 DEFINITIONS** For the purpose of this Standard, the definitions given in AS 2484.1 shall apply.

**1.4 PRINCIPLE** The specimen is mounted vertically on a frame and a flame applied to its base. The maximum height reached by the flame in a predetermined time or the time taken for the tip of the flame to reach a predetermined height is recorded together with the air temperature in a flue mounted above the specimen. From these measurements, the flammability index of the material is determined.

**1.5 APPLICATION TO FIRE HAZARD ASSESSMENT** The test results relate only to the behaviour of the test specimens of the material under the particular conditions of the test, and are not intended to be the sole criteria for assessing the potential fire hazard of the material in use.