

Australian/New Zealand Standard™

**Method of test for heat and smoke
release rates for materials and products
using an oxygen consumption
calorimeter**



AS/NZS 3837:1998

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee FP-018, Fire Safety. It was approved on behalf of the Council of Standards Australia on 24 July 1998 and on behalf of the Council of Standards New Zealand on 17 July 1998.

This Standard was published on 5 November 1998.

The following are represented on Committee FP-018:

Australasian Fire and Emergency Service Authorities Council
Australian Building Codes Board
Australian Industry Group
AWTA Textile Testing
BRANZ
Bureau of Steel Manufacturers of Australia
CSIRO Manufacturing & Materials Technology
Department of Building and Housing (New Zealand)
Engineers Australia
Fire Protection Association Australia
Insulated Panel Council Australasia
Insurance Council of Australia Limited
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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee BD/18, Fire Safety.

This Standard incorporates Amendment No. 1 (June 2012). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

A1 | Amendment No. 1 was raised to address significant differences observed between group number achieved by applying empirical correlations to predict the time to flashover using AS 3837 test results and measured results achieved in AS ISO 9705.

This Standard is based on ISO 5660-1:1993, *Fire tests—Reaction to fire—Rate of heat release from building products*, except that the ISO test method excludes smoke measurement, and the test method and test apparatus are based on ASTM E 1354, *Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter*.

It is envisaged that in the future, applications Standards for specific materials will be prepared by appropriate committees. These applications Standards will call up this test method and will set parameters such as irradiance levels and specimen construction or any other relevant parameters.

Specifications for particular materials and products will need to state the irradiance level and specimen construction for each acceptance level.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the appendix to which they apply. A ‘normative’ appendix is an integral part of a Standard, whereas an ‘informative’ appendix is only for information and guidance.

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