



Determination of fire hazard properties

Part 1: Wall and ceiling linings



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- Australasian Fire and Emergency Service Authorities Council
 - Australian Building Codes Board
 - Australian Industry Group
 - Australian Institute of Building
 - AWTA Textile Testing
 - Building Research Association of New Zealand
 - Bureau of Steel Manufacturers of Australia
 - CSIRO
 - Engineers Australia
 - Fire Protection Association Australia
 - Fire Protection Association New Zealand
 - Forest and Wood Products Australia
 - Insulated Panel Council Australasia
 - Insulation Australasia
 - Insurance Council of Australia
 - Plastics and Chemicals Industries Association
 - Society of Fire Protection Engineers
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Australian Standard®

Determination of fire hazard properties

Part 1: Wall and ceiling linings

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PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee FP-018, Fire Safety.

The objective of this Standard is to provide means for the determination of group number, smoke growth rate index (SMOGR_{RC}) and, where required, average specific extinction area (ASEA) as required by the NCC.

Research and development

The following specific issues have been identified for particular development and, subject to resolution, will be included in future editions:

- (a) BCA specification A2.4.
- (b) Possibly change ASEA to smoke production rate (SPR).
- (c) Unusual products and systems.
- (d) Fixings.

The term 'informative' has been used in this Standard to define the application of the appendix to which it applies. An 'informative' appendix is only for information and guidance only.

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STANDARDS AUSTRALIA

Australian Standard**Determination of fire hazard properties****Part 1: Wall and ceiling linings****1 SCOPE**

This Standard sets out procedures for the assessment of internal wall and ceiling linings according to—

- (a) their tendency to ignite;
- (b) their tendency to release heat once ignition has occurred;
- (c) their tendency to cause flashover;
- (d) their tendency to release smoke; and
- (e) their contribution to fire growth,

and allows for determination of group number, smoke growth rate index (SMOGR_{RC}) and, where required, average specific extinction area (ASEA).

2 NORMATIVE REFERENCES

The following are the normative documents referenced in this Standard:

NOTE: Documents referenced for informative purposes are listed in the Bibliography.

AS

- 2484 Fire—Glossary of terms
- 2484.1 Part 1: Fire tests

AS/NZS

- 3837 Method of test for heat and smoke release rates for materials and products using an oxygen consumption calorimeter

AS ISO

- 9705—2003 Fire tests—Full-scale room test for surface products

ISO

- 5660 Reaction-to-fire-tests—Heat release, smoke production and mass loss rate
- 5660-1 Part 1: Heat release rate (cone calorimeter method) and smoke production rate (dynamic measurement)

- 13943 Fire safety—Vocabulary

ABCB

- NCC National Construction Code

3 DEFINITIONS

For the purposes of this Standard, the definitions in ISO 13943, AS 2484.1 and those below apply.

3.1 Average specific extinction area (ASEA)

A measure of smoke obscuration determined in accordance with ISO 5660-1 or AS/NZS 3837, as appropriate to the test undertaken and expressed in square metres per kilogram (m²/kg).