AS 1530.4—1985
UDC 699.81:620.1

1990 ED.

Australian Standard®
1530.4—1985

METHODS FOR FIRE TESTS ON BUILDING MATERIALS, COMPONENTS AND STRUCTURES

Part 4—FIRE-RESISTANCE TESTS OF ELEMENTS OF BUILDING CONSTRUCTION

1530 Methods for fire tests on building materials, components and structures
Part 4—1990 Fire-resistance test of elements of building construction
(In Update Services 10–16, 30, 44A, 44C, 55) A4 27pp F

Sets out test procedures and criteria for the determination of fire resistance of elements of building construction. Follows the basic principles and provisions of ISO 834—Fire-resistance tests—Elements of building construction.

Committee BD/18: Supersedes AS 1530.4—1985: Publication date 1990-01-19: ISBN 0 7262 5963 2.

PUBLISHED BY THE STANDARDS ASSOCIATION OF AUSTRALIA, STANDARDS HOUSE, 80 ARTHUR STREET, NORTH SYDNEY, NSW
Incorporated by Royal Charter

currently in preview, click buy full ver

This Australian standard was prepared by Committee BD/18, Fire Tests on Building Materials, Components and Structures. It was approved on behalf of the Council of the Standards Association of Australia on 14 February 1985 and published on 10 May 1985.

The following interests are represented on Committee BD/18:

Association of Consulting Engineers, Australia
Australian British Trade Association
Australian Fire Protection Association Limited
Australian Institute of Building
Australian Uniform Building Regulations Coordinating Council
Board of Fire Commissioners, New South Wales
Bureau of Steel Manufacturers of Australia
Cement and Concrete Association of Australia
Commonwealth Fire Board
Confederation of Australian Industry
CSIRO, Division of Building Research
Department of Local Government and Lands, New South Wales
Experimental Building Station
Insurance Council of Australia
Metropolitan Fire Brigades Board, Victoria
Plastics Institute of Australia Incorporated
Royal Australian Institute of Architects

Review of Australian Standards. To keep abreast of progress in industry, Australian standards are subject to periodic review and are kept up-to-date by the issue of amendments or new editions as necessary. It is important therefore that standards users ensure that they are in possession of the latest edition, and any amendments thereto.

Full details of all SAA publications will be found in the Catalogue of SAA Publications; this information is supplemented each month by SAA's journal 'The Australian Standard', which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn standards.

Suggestions for improvements to Australian standards, addressed to the head office of the Association, are welcomed. Notification of any inaccuracy or ambiguity found in an Australian standard should be made without delay in order that the matter may be investigated and appropriate action taken.

First published (included in AS A30) 1935
Revised 1959
Reprinted in metric units and
issued as AS 1530, Part 4 1975
Reprinted 1977
Second edition 1985

This standard was issued in draft form for comment as DR 79152.

ISBN 0 7262 3709 4

currently in preview, click buy full ver

PREFACE

This edition of this standard was prepared by the Association's Committee on Fire Tests on Building Materials and Structures, to supersede AS 1530, Methods for Fire Tests on Building Materials and Structures, Part 4—1975, Fire-resistance Test on Structures.

This standard represents a further development of the philosophy and procedures adopted in the previous edition. The test method also follows the basic principles and provisions contained in ISO 834, Fire-resistance tests—Elements of Building Construction. Relatively minor departures from the ISO recommendations have been made only where specific performance requirements for elements of building construction have been traditionally acceptable in Australia. The inclusion of particular sections dealing with specific elements of construction will assist in the application of the test method and, although the tests may now appear more stringent, this edition does not introduce any significant modifications to the current fire-resistance testing practice.

©Copyright — STANDARDS ASSOCIATION OF AUSTRALIA 1985
Users of standards are reminded that copyright subsists in all SAA publications. No part of this publication may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing of the Standards Association of Australia.

rrently in preview, click buy full ver

CONTENTS

currently in preview, click buy full ver

Page

currently in preview, click buy full ver

STANDARDS ASSOCIATION OF AUSTRALIA

Australian Standard

METHODS FOR FIRE TESTS ON BUILDING MATERIALS, COMPONENTS AND STRUCTURES

PART 4—FIRE-RESISTANCE TESTS OF ELEMENTS OF BUILDING CONSTRUCTION

SECTION 1. SCOPE AND GENERAL

1.1 SCOPE. This standard applies to heating conditions, test procedures, and criteria for the determination of fire resistance of an element of building construction. In most cases a single test, carried out in accordance with this standard, establishes the fire resistance for the element of construction concerned.

NOTE: The standard also gives methods for the determination of—

(a) resistance to incipient spread of fire in ceiling systems; and

(b) radiant heat flux emitted from doorsets, shutter assemblies, damper assemblies and glazing.

1.2 APPLICATION. Each test shall be performed in accordance with the general requirements of Section 2 and with the following Sections, as appropriate:

(a) Section 3— Walls and partitions.

(b) Section 4— Floors, roofs, floor/ceiling systems and roof/ceiling systems.

(c) Section 5— Columns.

(d) Section 6— Beams, girders and trusses.

(e) Section 7— Doorsets, shutter assemblies and damper assemblies.

(f) Section 8— Glazing.

(g) Section 9— Air ducts.

(h) Section 10—Elements penetrated by services.

The requirements in Sections 3 to 10, shall take precedence over the general requirements of Section 2.

1.3 REFERENCED DOCUMENTS. The following standards are referred to in this standard:

AS 1080	Methods of Test for Timber Part 1—Moisture Content
AS 1530	Methods for Fire Tests on Building Materials and Structures Part 1—Combustibility Test for Materials
AS 1668	SAA Mechanical Ventilation and Airconditioning Code Part 1—Fire Precautions in Buildings with Air-handling Systems
AS 1682	Fire Dampers
AS 1735	SAA Lift Code
AS 1905	SAA Fire Door Code Part 1—Fire Resistant Doorsets Part 2—Fire Resistant Roller Shutters
ANSI MC96.1	Temperature Measurement Thermocouples
BS 4937	International Thermocouple Reference Tables Part 4—Nickel-chromium/nickel-aluminium Thermocouples. Type K.
DIN 43710	Measurement and Control, Electrical Temperature Sensors, Reference Tables and Materials of Thermocouples

1.4 DEFINITIONS. For the purpose of this standard, the following definitions apply:

1.4.1 Applicant—a company, corporation, organization, association, partnership, individual or manufacturer's registered agent that submits an element of building construction to a testing laboratory for the purpose of fire-resistance testing in accordance with this standard.

1.4.2 Combustible—deemed combustible when tested in accordance with AS 1530, Part 1.

1.4.3 Damper assembly—a complete assembly defined as 'fire damper' in AS 1682.

COPYRIGHT

currently in preview, click buy full vers