

Australian Standard[®]

Electromagnetic door holders

This Australian Standard was prepared by Committee FP/11, Gaseous Fire Extinguishing Systems. It was approved on behalf of the Council of Standards Australia on 26 November 1993 and published on 14 February 1994.

The following interests are represented on Committee FP/11:

Australian Chamber of Commerce and Industry
Australian Fire Authorities Council
Australian Fire Protection Association
Commonwealth Fire Board
Department of Arts and Administrative Services — Australian Construction Services
Fire Protection Industry Association of Australia
Insurance Council of Australia
Telecom Australia

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 Australian Standards and related publications will be found in the Standards Australia Catalogue of Publications; this information is supplemented each month by the magazine '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which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.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 Standards Australia, 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.

This Standard was issued in draft form for comment as DR 92207.

AS 4178—1994

Australian Standard[®]

Electromagnetic door holders

First published as AS 4178—1994.

PUBLISHED BY STANDARDS AUSTRALIA
(STANDARDS ASSOCIATION OF AUSTRALIA)
1 THE CRESCENT, HOMEBUSH, NSW 2140

ISBN 0 7262 8789 X

PREFACE

This Standard was prepared by the Standards Australia Committee on Gaseous Fire Extinguishing Systems, as a separate Standard from that covering the system's electrical components because the door holders are used in many areas which may or may not be serviced by a gaseous fire extinguishing system.

CONTENTS

SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE	3
1.2 APPLICATION	3
1.3 REFERENCED DOCUMENTS	3
1.4 DEFINITIONS	3
SECTION 2 DESIGN REQUIREMENTS	
2.1 GENERAL	4
2.2 CONSTRUCTION	4
SECTION 3 PERFORMANCE REQUIREMENTS	
3.1 GENERAL	5
3.2 INSULATION RESISTANCE	5
3.3 HOLDING FORCE	5
3.4 ENDURANCE TEST (CYCLIC LOAD)	5
3.5 RESIDUAL MAGNETISM	6
3.6 LOW TEMPERATURE AND HEAT	6
3.7 CORROSION	6
3.8 IMPACT	6
3.9 WEATHERING	6
3.10 STRENGTH OF SCREW THREADS AND FIXINGS	6
SECTION 4 ASSESSMENT FOR COMPLIANCE	
4.1 TEST SCHEDULE AND CRITERIA OF ACCEPTANCE	7

© Copyright — STANDARDS AUSTRALIA

Users of Standards are reminded that copyright subsists in all Standards Australia publications and software. Except where the Copyright Act allows and except where provided for below no publications or software produced by Standards Australia may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from Standards Australia. Permission may be conditional on an appropriate royalty payment. Requests for permission and information on commercial software royalties should be directed to the head office of Standards Australia.

Standards Australia will permit up to 10 percent of the technical content pages of a Standard to be copied for use exclusively in-house by purchasers of the Standard without payment of a royalty or advice to Standards Australia.

Standards Australia will also permit the inclusion of its copyright material in computer software programs for no royalty payment provided such programs are used exclusively in-house by the creators of the programs.

Care should be taken to ensure that material used is from the current edition of the Standard and that it is updated whenever the Standard is amended or revised. The number and date of the Standard should therefore be clearly identified.

The use of material in print form or in computer software programs to be used commercially, with or without payment, or in commercial contracts is subject to the payment of a royalty. This policy may be varied by Standards Australia at any time.

STANDARDS AUSTRALIA

Australian Standard

Electromagnetic door holders

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE This Standard specifies design, performance and testing of electromagnetic door holders.

1.2 APPLICATION This Standard applies to electromagnetic door holders, intended for general use but does not cover the installation of electromagnetic door holders. Electromagnetic door holders should be installed in accordance with the requirements of both the door and holder manufacturers. Ancillary devices, such as push-button releases, are permissible, provided they do not detract from this Standard.

Electromagnetic door holders shall be referred to as 'door holders' or 'the door holder' in this Standard.

1.3 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS

- | | |
|---------|--|
| 1939 | Degrees of protection provided by enclosures for electrical equipment (IP Code) |
| 2362 | Automatic fire detection and alarm systems—Methods of test for actuating devices |
| 2362.5 | Part 5: Insulation resistance test |
| 2362.10 | Part 10: Low temperature test |
| 2362.11 | Part 11: Damp heat test |
| 2362.12 | Part 12: Dry heat test |
| 2362.13 | Part 13: Corrosion test |
| 2362.16 | Part 16: Impact test |
| 2362.23 | Part 23: Weathering test |
| 2484 | Fire—Glossary of terms |
| 2484.2 | Part 2: Fire protection and firefighting equipment |
| 3100 | Approved test specification—General requirements for electrical equipment |

1.4 DEFINITIONS For the purpose of this Standard, the definitions given in AS 2484.2 and those below apply.

1.4.1 Keeper plate—a plate attracted by the energized coil of an electromagnet and, when in contact with the magnet, resists separation from the magnet.