

AS 2381.2—1993

Australian Standard[®]

**Electrical equipment for
explosive atmospheres—
Selection, installation and
maintenance**

Part 2: Flameproof enclosure d

This Australian Standard was prepared by Committee EL/14, Electrical Equipment in Hazardous Areas. It was approved on behalf of the Council of Standards Australia on 10 December 1992 and published on 15 March 1993.

The following interests are represented on Committee EL/14:

Australian Chamber of Commerce and Industry
Australian Electrical and Electronic Manufacturers Association
Australian Institute of Petroleum
Department of Mineral Resources, N.S.W.
Department of Resource Industries, Qld
Electrical Contractors Association of Australia
Electricity Supply Associations of Australia
Institute of Instrumentation and Control
Insurance Council of Australia
The WorkCover Authority, N.S.W.
Regulatory authorities (electrical)
Testing interests

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which subscribing members receive, and which gives details of new publications, new editions and amendments, and of withdrawn Standards.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.

AS 2381.2—1993

Australian Standard®

**Electrical equipment for
explosive atmospheres—
Selection, installation and
maintenance**

Part 2: Flameproof enclosure d

First published as AS 1076.3—1977.
Revised and redesignated AS 2381.2—1993.

Incorporating:
Amdt 1—1995

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

ISBN 0 7262 8029 1

PREFACE

This Standard was prepared by the Standards Australia Committee on Electrical Equipment in Hazardous Areas, to supersede AS 1076, Part 3—1977, *Code of practice for the selection, installation and maintenance of electrical apparatus and associated equipment for use in explosive atmospheres*, Part 3: *Apparatus with type of protection d—Flameproof enclosure*.

This is Part 2 of a series of Standards covering the selection, installation and maintenance of electrical equipment for use in areas where flammable materials are generated, processed, handled or stored, and which therefore are potentially explosive.

Each part details requirements appropriate to one of the types of protection techniques used to achieve electrical safety. Part 1 of this series details general requirements pertaining to all types of protection techniques and therefore must be read in conjunction with this Part.

Other Standards in this series are as follows:

- Part 1: *General requirements*
- Part 6: *Increased safety e*
- Part 7: *Intrinsic safety i*
- Part 10: *Class II hazardous areas*

Other parts of this Standard, dealing with the techniques of

- Encapsulation m
- Pressurization p
- Sand filled q
- Special protection s
- Non-sparking n

are in the course of preparation.

The requirements specified in this Standard are supplementary but not alternative to any requirements which would apply to installations in non-hazardous areas (see AS 3000).

In its terminology, definitions and general treatment of the subject, this Part takes into account BS 5345, *Selection, installation and maintenance of electrical apparatus for use in potentially explosive atmospheres (other than mining or explosive processing and manufacture)*, Part 3: *Installation and maintenance requirements for electrical apparatus with type of protection d, Flameproof enclosure*. Acknowledgment is made of this assistance.

Some of the more significant changes in this edition are as follows:

- (a) A thorough editorial re-arrangement to improve the grouping of related clauses.
- (b) Definitions and terminology have been revised to align with other Australian and international Standards.
- (c) Requirements which relate to the installation of equipment and wiring have been substantially revised and are now presented in the mandatory form.

This Standard is intended to apply to installations, or alterations or additions thereto, made or carried out after the date of publication, but it is recommended that it should not be applied on a mandatory basis before 13 September 1993. However, if work on an installation is commenced before publication of this edition, the Authority may grant permission for the installation to be carried out in accordance with AS 1076.3—1977.

Application of different typefaces Three different typefaces are used in this Standard, each of these having a specific purpose, as follows:

- (a) Bold type **Opening statements which follow a Clause or Sub-clause heading and define a fundamental principle.**

- (b) Normal type These are mandatory requirements which form the substance of a clause in that they indicate certain methods which satisfy the essential requirements.
- (c) Reduced normal type These are explanatory notes which may give advice. They are preceded by 'NOTE'.

© 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.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
 - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-