

Australian/New Zealand Standard™

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

Part 2: Flameproof enclosure ‘d’



AS/NZS 2381.2:2006

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-014, Electrical Equipment in Hazardous Areas. It was approved on behalf of the Council of Standards Australia on 16 May 2006 and on behalf of the Council of Standards New Zealand on 26 May 2006.
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Australian/New Zealand Standard™

Electrical equipment for explosive atmospheres—Selection, installation and maintenance

Part 2: Flameproof enclosure ‘d’

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PREFACE

This Standard was prepared by the Standards Australia Committee on Electrical Equipment in Hazardous Areas, to supersede AS 2381.2—1993, *Electrical equipment for explosive atmospheres - Selection, installation and maintenance - Flameproof enclosure 'd'*. This is Part 2 of the AS/NZS 2381 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.

This Standard incorporates Amendment No. 1 (September 2006). 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.

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'

This edition of the Standard should be considered a transitional edition pending future publication of AS/NZS 60079.14. AS/NZS 60079.14 will be based on IEC 60079-14 and is intended to supersede all Parts of the AS/NZS 2381 series. Changes in this edition have been constrained to essential items as an interim step, pending these future changes.

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/NZS 3000).

The significant changes in this edition include—

- (a) update of references to new Standards and in particular to the AS/NZS 60079 series; and
- (b) alignment of cable gland requirements and other items to IEC Standards.

This Standard is intended to apply to installations, or alterations or additions thereto, made or carried out after the date of publication.

The terms 'normative' and 'informative' are used 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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Australian/New Zealand Standard**Electrical equipment for explosive atmospheres—Selection, installation and maintenance****Part 2: Flameproof enclosure ‘d’****1.1 SCOPE**

This Standard sets out requirements for the selection, installation and maintenance of flameproof enclosures, type of protection ‘d’.

This Standard shall be read in conjunction with AS/NZS 2381.1, which describes the fundamental considerations which affect the selection, installation and maintenance requirements of all electrical equipment used in hazardous areas.

NOTES:

- 1 Requirements for the design and construction of flameproof electrical equipment are given in AS/NZS 60079.1.
- 2 While this Standard may be applied to coal mining installations additional requirements may be contained in State mining regulations.

1.2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS	
1828	Electrical equipment for explosive atmospheres—Cable glands (superseded by AS/NZS 60079.1)
2052	Metallic conduits and fittings
2380	Electrical equipment for explosive atmospheres—Explosion-protection techniques
2380.2	Part 2: Flameproof enclosures ‘d’ (superseded by AS/NZS 60079.1)
60529	Degrees of protection provided by enclosures (IP Code)
AS/NZS	
2381	Electrical equipment for explosive atmospheres—Selection, installation and maintenance
2381.1	Part 1: General requirements
2430	Classification of hazardous areas
2430.3	Part 3: Examples of area classification
2480	Electrical equipment for explosive atmospheres—Flameproof enclosure—Type of protection ‘d’
3000	Electrical installations (known as the Australian/New Zealand Wiring Rules)
3760	In-service safety inspection and testing of electrical equipment
3800	Electrical equipment for explosive atmospheres—Repair and overhaul