AS/NZS 1841.1:2007

Australian/New Zealand Standard™

# Portable fire extinguishers

# Part 1: General requirements


This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee FP-003, Fire Extinguishers. It was approved on behalf of the Council of Standards Australia on 10 June 2007 and on behalf of the Council of Standards New Zealand on 6 July 2007.
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The following are represented on Committee FP-003:

Association of Accredited Certification Bodies
Australasian Fire Authorities Council
Australian Building Codes Board
Australian Competition and Consumer Commission
Certification Interests (Australia)
Fire Protection Association Australia
Fire Protection Association New Zealand
Institution of Fire Engineers
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We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia or Standards New Zealand at the address shown on the back cover.

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# Part 1: General requirements

Originated in Australia in part as part of AS A31—1937.
Final Australian edition AS 1841.1—1992.
Originated in New Zealand in part as part of NZSS 1241-44:1962.
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# PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee FP-003, Fire Extinguishers, to supersede AS/NZS 1841.1:2007.

This Standard is part of the following series on portable fire extinguishers:

| AS/NZS | | |
|---|---|---|
| 1841 | Portable fire extinguishers | |
| 1841.1 | Part 1: | General requirements (this Standard) |
| 1841.2 | Part 2: | Specific requirements for water type extinguishers |
| 1841.3 | Part 3: | Specific requirements for wet chemical type extinguishers |
| 1841.4 | Part 4: | Specific requirements for foam type extinguishers |
| 1841.5 | Part 5: | Specific requirements for powder type extinguishers |
| 1841.6 | Part 6: | Specific requirements for carbon dioxide type extinguishers |
| 1841.7 | Part 7: | Specific requirements for vaporizing liquid type extinguishers |
| 1841.8 | Part 8: | Specific requirements for non-rechargeable type extinguishers |

The objective of this Standard is to provide general requirements for portable fire extinguishers other than aerosol type, the requirements for which are specified in AS/NZS 4353, *Portable fire extinguishers—Aerosol type*.

The objective of this revision is to bring the Standard up to date with current practices.

Requirements for the selection and location of portable fire extinguishers in Australia are set out in AS 2444, *Portable fire extinguishers and fire blankets—Selection and location.*

Provisions for the maintenance of fire extinguishers are set out in AS 1851, *Maintenance of fire protection systems and equipment*, for Australia and NZS 4503, *Hand-operated fire-fighting equipment*, for New Zealand.

The main differences between this Standard and the 1997 edition are as follows:

(a) The inclusion of a filling tolerance on liquid level indication.

(b) The inclusion of a filling tolerance on the extinguishant charge.

(c) Inclusion of an alternative method for determining the effective discharge time of an extinguisher.

(d) Inclusion of an alternative method for the discharge testing of carbon dioxide extinguishers after the high temperature component material test, and some clarification of the labelling requirements.

Statements expressed in mandatory terms in notes to tables are deemed to be requirements of this Standard.

The term ‘normative’ has been used in this Standard to define the application of the appendix to which it applies. A ‘normative’ appendix is an integral part of a Standard.

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# Australian/New Zealand Standard
# Portable fire extinguishers

## Part 1: General requirements

## SECTION 1 SCOPE AND GENERAL

### 1.1 SCOPE

This Standard specifies requirements for portable fire extinguishers. It covers materials, methods of manufacture and performance of the extinguisher and any associated compressed gas container, instructions and markings.

NOTES:

1 Specific requirements for individual types of fire extinguishers are given in AS/NZS 1841.2, AS/NZS 1841.3, AS/NZS 1841.4, AS/NZS 1841.5, AS/NZS 1841.6, AS/NZS 1841.7 and AS/NZS 1841.8

2 A portable fire extinguisher is generally referred to in this Standard as 'an extinguisher' or 'the extinguisher' and typical components used in portable fire extinguishers are illustrated in Figure 1.1.

3 Manufacturers making a statement of compliance with this Australian/New Zealand Standard on a product, or on packaging or promotional material related to that product, should ensure that such compliance is capable of being verified.

### 1.2 NEW DESIGNS AND INNOVATIONS

Any material, design, method of assembly or procedure that does not comply with the specific requirements of this Standard may be used provided the following criteria are met:

(a) The portable fire extinguisher complies with the performance and test requirements of the Standard.

(b) A certifying body having JAS-ANZ registration for product certification to Australian/New Zealand Standard AS/NZS 1841 attests in writing that it is no less safe than a portable fire extinguisher manufactured in accordance with the specific requirements of this Standard. The relative safety of the portable fire extinguishers is determined with regard to the purpose of the extinguishers, any instructions and warnings relating to the use of the extinguishers, and what might reasonably be expected to be done with or in relation to the extinguishers.

### 1.3 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

| | |
|---|---|
| AS | |
| 1777 | Aluminium cylinders for compressed gases—Seamless—0.1 kg to 130 kg |
| 1851 | Maintenance of fire protection systems and equipment |
| 2030 | The verification, filling, inspection, testing and maintenance of cylinders for the storage and transport of compressed gases |
| 2030.1 | Part 1: Cylinders for compressed gases other than acetylene |