

Australian Standard<sup>®</sup>

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**Automatic fire sprinkler systems**

**Part 8: Minor modifications**

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This Australian Standard was prepared by Committee FP/4, Automatic Sprinkler Installations. It was approved on behalf of the Council of Standards Australia on 3 October 1997 and published on 5 December 1997.

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The following interests are represented on Committee FP/4:

Association of Consulting Engineers, Australia  
Australian Building Codes Board  
Australian Chamber of Commerce and Industry  
Australian Chamber of Manufactures  
Australian Fire Authorities Council  
Commonwealth Fire Board  
Department of Defence (Australia)  
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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee FP/4, Automatic Sprinkler Installations.

This Standard is the result of a consensus among representatives on the Joint Committee to produce it as an Australian Standard.

The objective of this Standard is to provide requirements to apply when an existing sprinkler system of light or ordinary hazard classification is to be subjected to minor modifications such as the removal, alteration or addition of sprinklers, or the modification or addition of ranges and distribution pipes of limited size.

Product and installation Standards are kept separate. The AS 2118 series, *Automatic fire sprinkler systems*, and the related series AS 4118, *Fire sprinkler systems*, comprise the following:

### AS

- 2118 Automatic fire sprinkler systems
  - Part 1: Standard
  - Part 2: Wall wetting sprinklers (Drenchers)
  - Part 3: Deluge
  - Part 4: Residential
  - Part 5: Domestic
  - Part 6: Combined sprinkler and hydrant
  - Part 8: Minor modifications
  - Part 9: Piping support and installation
  - Part 10: Approval documentation
- 4118 Fire sprinkler systems
  - Part 1.1: Components —Sprinklers and sprayers
  - Part 1.2: Components —Alarm valves (wet)
  - Part 1.3: Components —Water motor alarms
  - Part 1.4: Components —Flow monitors
  - Part 1.5: Components —Deluge and pre-action valves
  - Part 1.6: Components —Stop valves and non-return valves
  - Part 1.7: Components —Alarm valves (dry)
  - Part 2.1: Piping —General

Most fire sprinkler systems will undergo minor modifications, especially ordinary hazard systems installed in shopping centres and multistoried office blocks where ongoing changes in tenancy require that changes in the location of walls, partitions, lights, or to the decor require the relocation, addition or deletion of sprinkler heads. It would be uneconomical for the installation design drawings and hydraulic calculations to be fully revised when minor modifications can be done effectively by site personnel possessing a knowledge of the original system design criteria and of the requirements and limitations as set out in this Standard.

This Standard assumes that any existing system intended to be modified, as distinct from the proposed modification, fully complies with the requirements of the Standard to which it was originally designed and installed. In circumstances where the original system does not comply with the appropriate design and installation Standard, the areas which do not comply together with the proposed modifications should be approved by the appropriate regulatory authority prior to commencement of the proposed modification work.

## CONTENTS

	<i>Page</i>
SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE . . . . .	4
1.2 NEW DESIGNS AND INNOVATIONS . . . . .	4
1.3 REFERENCED DOCUMENTS . . . . .	4
1.4 DEFINITIONS . . . . .	4
SECTION 2 GENERAL REQUIREMENTS	
2.1 PERSONNEL . . . . .	5
2.2 SPRINKLERS . . . . .	5
2.3 PIPE AND FITTINGS . . . . .	5
2.4 PIPE SIZING . . . . .	5
2.5 PIPE SUPPORT . . . . .	5
2.6 BLOCK PLAN . . . . .	5
SECTION 3 PARTICULAR REQUIREMENTS	
3.1 LIGHT HAZARD CLASS SYSTEMS . . . . .	6
3.2 ORDINARY HAZARD CLASS SYSTEMS . . . . .	6
3.3 GRIDDED SYSTEMS . . . . .	7
SECTION 4 PRECAUTIONS TO BE TAKEN WHEN A SYSTEM IS RENDERED INOPERATIVE	
4.1 PRECAUTIONS . . . . .	8
4.2 ADDITIONAL REQUIREMENTS . . . . .	8

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**Australian Standard**

**Automatic fire sprinkler systems**

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**Part 8: Minor modifications**

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SECTION 1 SCOPE AND GENERAL

**1.1 SCOPE** This Standard sets out the requirements and limitations pertaining to minor modifications which may be required to existing light hazard and ordinary hazard automatic sprinkler systems only. Modifications to high hazard, wall-wetting college, residential and domestic systems are subject to design analysis before work commences and are not covered by this Standard.

**1.2 NEW DESIGNS AND INNOVATIONS** Any alternative materials, designs, methods of assembly and procedures that do not comply with the specific requirements of this Standard or are not mentioned in it but give equivalent results to those specified, are not necessarily prohibited. The specified approval remains the prerogative of the regulatory authority.

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

AS	
1851	Maintenance of fire protection equipment
1851.3	Part 3: Automatic fire sprinkler systems
2118	Automatic fire sprinkler systems
2118.1	Part 1: Standard
2118.9	Part 9: Piping support and installation
2118.10	Part 10: Approval documentation
2484	Fire—Glossary of terms
2484.1	Part 1: Fire tests
2484.2	Part 2: Fire protection and firefighting equipment
3500	National Plumbing and Drainage Code
3500.0	Part 0: Glossary of terms
4118	Fire sprinkler systems
4118.1.1	Part 1.1: Sprinklers and sprayers
4118.2.1	Part 2.1: Piping—General

**1.4 DEFINITIONS** For the purpose of this Standard, the definitions given in AS 2118.1, AS 2484.1, AS 2484.2, AS 3500.0 and that below apply.

**1.4.1 Minor modification**—any change to an existing sprinkler system involving the modification of range pipes (including arm pieces and droppers) or the installation of additional sprinklers requiring a distribution pipe no larger than specified in Section 3 of this Standard.