

Australian Standard[®]

Fire sprinkler systems

**Part 1.1: Components—
Sprinklers and exchangers**

This Australian Standard was prepared by Committee FP/4, Automatic Sprinkler Installations. It was approved on behalf of the Council of Standards Australia on 6 February 1996 and published on 5 June 1996.

The following interests are represented on Committee FP/4:

Asset Services
Australian Building Codes Board
Australian Chamber of Commerce and Industry
Australian Chamber of Manufactures
Australian Fire Authorities Council
Australian Fire Protection Association
Australian Water and Sewerage Authorities
Commonwealth Fire Board
CSIRO—Division of Building, Construction and Engineering
Department of Defence
Fire Protection Industry Association
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This Standard was issued in draft form for comment as DR 92183.

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PREFACE

This Australian Standard was prepared by the Joint Australia/New Zealand Standards Committee FP/4 on Automatic Sprinkler Installations, to supersede in part AS 2118—1982, *Automatic fire sprinkler systems*, and is the result of a consensus among representatives on the Joint Committee to produce it as an Australian Standard.

The revisions to AS 2118 include Standards Australia's requirements to keep product and installation Standards separate. When complete the series will comprise:

AS

- 2118 Automatic fire sprinkler systems
 - 2118.1 Part 1: Standard
 - 2118.2 Part 2: Wall wetting sprinklers (Drenchers)
 - 2118.3 Part 3: Deluge
 - 2118.4 Part 4: Residential
 - 2118.5 Part 5: Domestic
 - 2118.6 Part 6: Combined sprinkler and hydrant
 - 2118.8 Part 8: Minor modifications to installed systems
 - 2118.9 Part 9: Piping support and installation
 - 2118.10 Part 10: Approval documentation
- 4118 Fire sprinkler systems
 - 4118.1.1 Part 1.1: Components—Sprinklers and sprayers
 - 4118.1.2 Part 1.2: Components—Alarm valves (wet)
 - 4118.1.3 Part 1.3: Components—Water motor alarms
 - 4118.1.4 Part 1.4: Components—Valve monitors
 - 4118.1.5 Part 1.5: Components—Deluge and pre-action valves
 - 4118.1.6 Part 1.6: Components—Stop valves and non-return valves
 - 4118.1.7 Part 1.7: Components—Alarm valves (dry)
 - 4118.1.8 Part 1.8: Components—Pressure-reducing valves
 - 4118.2.1 Part 2.1: Piping—General

The term 'informative' has been used in this Standard to define the application of the appendix to which it applies. An 'informative' appendix is only for information and guidance.

This Standard is based on, but not equivalent to ISO 6182.1:1993, which it is anticipated will replace this Standard at a later date. The assistance obtained from ISO is hereby acknowledged.

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STANDARDS AUSTRALIA

Australian Standard
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Part 1.1: Components—Sprinklers and sprayers

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE This Standard specifies the performance and testing of metallic element and frangible glass bulb sprinklers and sprayers, as listed in Table 1.1.

NOTE: Sprinklers and sprayers will be referred to throughout this text as sprinklers.

Whilst this Standard recognizes that there are sprinklers other than those listed in Table 1.1, the acceptance of these sprinklers is dependent on their documented approval and listing by a recognized authority.

Full testing procedures for sprinklers not listed in Table 1.1 are not necessarily included in this Standard.

TABLE 1.1
SPRINKLERS BY NOMINAL SIZE, DEFLECTOR
TYPE AND K FACTOR

Nominal size mm	Nominal thread size, mm	Deflector	K factor
10	10	SP SU	5.7 ±0.3
15	15	SP SU CU/P WU/P	8.0 ±0.4
20	20	SP SU CU/P WH	11.5 ±0.6

1.2 NEW DESIGNS AND INNOVATIONS Any alternative materials, designs, methods of assembly, procedures and similar that do not comply with the specific requirements of this Standard, or are not mentioned in it, but that give equivalent results to those specified, are not necessarily prohibited. Advice on such matters can be sought from Standards Australia, but the specified approval remains the prerogative of the regulatory authority.

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

- AS
2118 Automatic fire sprinkler systems
2118.1 Part 1: Standard