Australian Standard®

Fire sprinkler systems

Part 1.1: Components—Sprinklers and sprayers

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

Institution of Engineers, Australia

Insurance Council of Australia

Master Plumbers and Mechanical Services Association of Victoria

Melbourne Water

New Zealand Fire Equipment Association

Telstra

Testing Interests

The Association of Consulting Engineers, Australia

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AS 4118.1.1—1996

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Part 1.1: Components—Sprinklers and sprayers

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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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Originated as part of AS CA16—1939 (endorsement of Seventh Edition of FOC Rules).
Previous edition AS 2118 —1982.
Revised and redesignated in part as AS 4118.1.1— 1996.

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