Australian Standard®

Fire sprinkler systems

Part 1.5: Components—Deluge and pre-action valves

This Australian Standard was prepared by Committee FP/4, Components—Deluge and Pre-action Valves. It was approved on behalf of the Council of Standards Australia on 10 November 1995 and published on 5 January 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 of Australia

Institution of Engineers, Australia

Insurance Council of Australia

Master Plumbers and Mechanical Services Association of Victoria

Melbourne Water

New Zealand Fire Equipment Association

Telstra, Australia

The Association of Consulting Engineers, Australia

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee FP/4 on Automatic Sprinkler Installations, to supersede in part AS 2118—1988, *SAA Code for Automatic Fire Sprinkler Systems*.

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

The revisions to AS 2118 have included Standards Australia's requirements to keep product and installation Standards separate. When complete the series will 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 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—Valve 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 1.8: Components—Pressure reducing valves
- Part 1.9: Components—Accelerators and exhausters

- Part 2.1: Piping—General

ISO 6182 has been drawn on for the development of this Standard and the assistance received is hereby acknowledged.

The terms 'normative' and 'informative' have been used in this Standard 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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STANDARDS AUSTRALIA

Australian Standard

Fire sprinkler systems

Part 1.5: Components—Deluge and pre-action valves

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE This Standard specifies the construction, performance and testing requirements for deluge valves used in deluge and pre-action fire sprinkler systems.

1.2 NEW DESIGNS AND INNOVATIONS Any alternative materials, designs, methods of assembly and procedures that do not comply with 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 DEEMED TO SATISFY Any deluge or pre-action valve that has been listed and approved by an internationally recognized test and approval body such as—

(a) Factory Mutual (FM);

(b) Underwriters Laboratories (UL);

(c) Loss Prevention Council (LPC);

or has been listed by Scientific Services Laboratory (SSL) in the—

SSL Register of Accredited Products
Fire Protection Equipment

shall be deemed to satisfy the requirements of this Standard.

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

AS
1683 Methods of test for elastomers
1683.11 Part 11: Tension testing of vulcanized rubber

2118 Automatic fire sprinkler systems
2118.1 Part 1: Standard

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

4118.1.3 Part 1.3: Water motor alarms

ISO
188 Rubber, vulcanized—Accelerated ageing or heat resistance tests