Australian Standard®

Automatic fire sprinkler systems

Part 1: Standard

This Australian Standard was prepared by Committee FP/4, Automatic Sprinkler Installations. It was approved on behalf of the Council of Standards Australia on 30 March 1995 and published on 5 July 1995.

The following interests are represented on Committee FP/4:

Asset Services—Department of Administrative 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
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
Telecom Australia
Testing Interests
The Association of Consulting Engineers, Australia

This Standard was issued in draft form for comment as DR 92188.

Australian Standard®

Automatic fire sprinkler systems

Part 1: Standard

PUBLISHED BY STANDARDS AUSTRALIA
(STANDARDS ASSOCIATION OF AUSTRALIA)
1 THE CRESCENT, HOMEBUSH, NSW 2140
ISBN 0 7262 9790 9

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*, 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 have included Standards Australia's requirements to keep product and installation Standards separate. When complete the series will comprise:

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

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.

CONTENTS

Page

Page

Originated as part of CA16—1939 (endorsement of Seventh Edition of FOC Rules).
Previous edition AS 2118—1982.
Revised and redesignated in part as AS 2118.1—1995.

STANDARDS AUSTRALIA

Australian Standard

Automatic fire sprinkler systems

Part 1: Standard

SECTION 1 SCOPE, DEFINITIONS, CLASSIFICATION AND DESIGN DATA

1.1 SCOPE This Standard specifies requirements for the installation of standard sprinkler systems in buildings.

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 the equivalent results to those specified, are not necessarily prohibited. The Committee on Automatic Sprinkler Installations can act in an advisory capacity concerning equivalent suitability, but any required approval remains the prerogative of the regulatory authority.

1.3 REFERENCED DOCUMENTS A list of referenced documents is given in Appendix A.

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

1.4.1 Alarm valve—a non-return valve which allows the water to enter the installation and operate alarms when the installation pressure falls below the water supply pressure.

1.4.2 Approved—approved by the regulatory authority.

1.4.3 Assumed area of operation—the area, i.e. the number of sprinklers likely to operate, in a sprinklered building which is considered may be involved in a fire. The assumed area of operation is different in each hazard class.

1.4.4 Regulatory authority—a Minister of the Crown, a government department, or other public authority having power to issue regulations, orders, or other instructions in respect of any subject covered by this Standard.

NOTE: Where adoption of this Standard is not a requirement of a regulatory authority but is a requirement of a body such as a relevant insurance company or association, then that body, or their nominees such as the Insurance Council of Australia, may perform the functions of the regulatory authority for the purposes of this Standard.

1.4.5 Authorized inspector—an inspector appointed by the regulatory authority.

1.4.6 Building owner—the owner of a building or his authorized representative.

1.4.7 Fire and draught stop—a partition or bulkhead extending from end to end and top to bottom of a concealed space, installed to delay the spread of fire and constructed from imperforate materials which are non-shatterable under fire conditions.

NOTES:

1 Examples of acceptable fire and draught stops include the following:

(a) Structural features such as a reinforced beam or steel joist extending to or through the ceiling, and a brick wall extended up through the ceiling to the floor above.

(b) A purpose-built partition mounted on wood or steel framework, constructed of 10 mm gypsum board, 0.6 mm sheet steel or 7 mm high-density tempered hardboard.