



Share your feedback
about this standard.
Scan the QR code on your
phone or click/ enter the
link to take the survey
feedback.standards.org.au/2419.1:2017

AS 2419.1:2017

AS 2419.1:2017



Fire hydrant installations

Part 1: System design, installation and commissioning



This Australian Standard® was prepared by Committee FP-009, Fire Hydrant Installations. It was approved on behalf of the Council of Standards Australia on 29 September 2017. This Standard was published on 6 November 2017.

The following are represented on Committee FP-009:

- Association of Accredited Certification Bodies
 - Association of Hydraulic Services Consultants Australia
 - Australasian Fire and Emergency Service Authorities Council
 - Australian Building Codes Board
 - Australian Chamber of Commerce and Industry
 - Australian Fire Safety Practitioner's Accreditation Board
 - Australian Industry Group
 - Australian Institute of Building Surveyors
 - Australian Stainless Steel Development Association
 - Australian Steel Institute
 - Copper Development Centre Australia
 - Department of Defence, Australia
 - Engineers Australia
 - Fire Protection Association Australia
 - Insurance Council of Australia
 - Plastics Industry Pipe Association of Australia
 - Property Council of Australia
 - Water Services Association of Australia
-

This Standard was issued in draft form for comment as DR AS 2419.1:2016.

Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

Keeping Standards up-to-date

Australian Standards® are living documents that reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued.

Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments that may have been published since the Standard was published.

Detailed information about Australian Standards, drafts, amendments and new projects can be found by visiting **www.standards.org.au**

Standards Australia welcomes suggestions for improvements, and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at **mail@standards.org.au**, or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

AS 2419.1:2017

Australian Standard[®]

Fire hydrant installations

Part 1: System design, installation and commissioning

Originated as AS 2419—1980.

Revised and redesignated AS 2419.1—1988.

Fourth edition 2005.

Fifth edition 2017.

COPYRIGHT

© Standards Australia Limited

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher, unless otherwise permitted under the Copyright Act 1968.

ISBN 978 1 7635 935 5

PREFACE

This Standard was prepared by the Standards Australia Committee FP-009, Fire Hydrant Installations, to supersede AS 2419.1—2005.

This Standard is part of a series on fire hydrant installation, which is comprised of the following parts:

AS

2419 Fire hydrant installations

2419.1 Part 1: System design, installation and commissioning (this Standard)

2419.2 Part 2: Fire hydrant valves

2419.3 Part 3: Fire brigade booster connections

The objective of this Standard is to specify minimum requirements for the design, installation and commissioning of fire hydrant systems which—

- (a) will augment the efficient extinguishment of fire within the boundaries of the site;
- (b) can be utilized to minimize fire spread within or between one property or building and another;
- (c) can be used by trained firefighting personnel; and
- (d) have inlet and outlet connections suitable for use with the local fire brigade's firefighting equipment.

The objective of this edition is to incorporate changes that reflect current practice, and to restructure, refine and expand the content of the Standard to clarify the intent of the normative provisions.

The changes in this revision include the following:

- (i) A restructure of the document and content to make it easier to use and to improve its readability.
- (ii) Inclusion of informative appendices to clarify the intent of sections and clauses.
- (iii) Inclusion of new technologies and industry best practices to enable competitive and cost-effective design and water conservation.
- (iv) The separation of the previous Section 8, 'Pipework and valves', into two sections.
- (v) Acknowledgment of the life safety benefits of installed sprinkler systems.
- (vi) The introduction of a range of provisions for high rise buildings based on internationally applied Standards.

Statements expressed in mandatory terms in notes to tables are deemed to be requirements of this Standard.

Notes to the text contain information and guidance. They are not an integral part of the Standard.

Illustrations in this Standard are purely diagrammatic and are intended to show functional requirements only, not methods of construction.

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

	<i>Page</i>
FOREWORD.....	6
 SECTION 1 SCOPE AND GENERAL	
1.1 SCOPE.....	7
1.2 NORMATIVE REFERENCES	7
1.3 DEFINITIONS.....	9
1.4 CLASSIFICATION OF FIRE HYDRANTS.....	15
 SECTION 2 SYSTEM PERFORMANCE AND DESIGN	
2.1 GENERAL.....	17
2.2 SYSTEM PERFORMANCE.....	17
2.3 HYDRAULIC DESIGN PARAMETERS	24
 SECTION 3 HYDRANT LOCATION, COVERAGE AND RELATED PROVISIONS	
3.1 GENERAL.....	26
3.2 FIRE HYDRANTS	26
3.3 HARDSTAND AREAS	27
3.4 LOCATION OF FIRE HYDRANTS	27
3.5 EXTERNAL FIRE HYDRANTS.....	28
3.6 INTERNAL FIRE HYDRANTS.....	32
3.7 FIRE COMPARTMENTS	33
3.8 ROOFTOP PLANT ROOMS.....	33
3.9 OPEN YARD PROTECTION.....	33
3.10 MARINAS.....	33
3.11 METHOD OF MEASUREMENT AND LIMITATIONS	34
 SECTION 4 WATER SOURCES AND SUPPLY	
4.1 WATER SOURCES.....	36
4.2 WATER SUPPLY.....	37
4.3 CONNECTIONS TO WATER SOURCES OR SUPPLIES	42
4.4 FIXED SUCTION	44
 SECTION 5 WATER STORAGE TANKS	
5.1 GENERAL.....	45
5.2 TANK CONSTRUCTION	45
5.3 TANK ACCESSORIES	46
 SECTION 6 PUMPSETS	
6.1 GENERAL.....	49
6.2 WHEN A PUMPSET IS REQUIRED	49
6.3 PUMPSET DESIGN CRITERIA	49
6.4 FIRE HYDRANT PUMPSET(S)—CONFIGURATION	50
6.5 HIGH-RISE BUILDING PUMPS.....	51
6.6 AUTOMATIC INFLOW WATER SUPPLY PUMPSET(S)	53
6.7 FIXED ON-SITE PUMPSET(S) IN PARALLEL WITH THE FIRE BRIGADE BOOSTER ASSEMBLY	53
6.8 FIXED ON-SITE PUMPSET(S) IN SERIES WITH THE FIRE BRIGADE BOOSTER ASSEMBLY	53
6.9 PUMP CONTROL.....	54

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- Looking for additional Standards? Visit Intertek Inform Infostore
 - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-