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ANSI/CAN/UL/ULC 2443:2025

STANDARD FOR SAFETY

Flexible Sprinkler Hose with Fittings for Fire Protection Service

Approved American National Standard
ANSI
ANSI/UL 2443-2025

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UL Standard for Safety for Flexible Sprinkler Hose with Fittings for Fire Protection Service, ANSI/CAN/UL/ULC 2443

Fifth Edition, Dated August 26, 2024

Summary of Topics

This revision of ANSI/CAN/UL/ULC 2443 dated August 4, 2025 includes the following changes:

Flexible Hose Assemblies up to 12 feet (3.6 m) in Length: 4.2, 6.5, 6.5A, 6.6, Table 6.2, 20.3;

Editorial and Clarification of Requirements: Table 6.1, 6.8, 12.3, 25.1 (o1) and (q);

Marking of Bracket Assembly: 24.2A

Text that has been changed in any manner or impacted by ULSE's electronic publishing system is marked with a vertical line in the margin.

The new and revised requirements are substantially in accordance with Proposal(s) on this subject dated April 25, 2025.

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ANSI/UL 2443-2025

AUGUST 26, 2024
(Title Page Reprinted: August 4, 2025)

ANSI/CAN/UL/ULC 2443:2025

Standard for Flexible Sprinkler Hose with Fittings for Fire Protection Service

First Edition – November, 2004
Second Edition – May, 2010
Third Edition – August, 2015
Fourth Edition – September, 2023

Fifth Edition

August 26, 2024

This ANSI/CAN/UL/ULC Standard for Safety consists of the Fifth Edition including revisions through August 4, 2025.

The most recent designation of ANSI/UL 2443 as an American National Standard (ANSI) occurred on August 4, 2025. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page, Preface or SCC Foreword.

This Standard has been designated as a National Standard of Canada (NSC) on August 4, 2025.

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Preface

This is the Fifth Edition of ANSI/CAN/UL/ULC 2443, Standard for Flexible Sprinkler Hose with Fittings for Fire Protection Service.

ULSE is accredited by the American National Standards Institute (ANSI) and the Standards Council of Canada (SCC) as a Standards Development Organization (SDO). ULC Standards is accredited by the Standards Council of Canada (SCC) as a Standards Development Organization (SDO).

This Standard has been developed in compliance with the requirements of ANSI and SCC for accreditation of a Standards Development Organization.

This ANSI/CAN/UL/ULC 2443 Standard is under continuous maintenance, whereby each revision is approved in compliance with the requirements of ANSI and SCC for accreditation of a Standards Development Organization. In the event that no revisions are issued for a period of four years from the date of publication, action to revise, reaffirm, or withdraw the standard shall be initiated.

In Canada, there are two official languages, English and French. All safety warnings must be in French and English. Attention is drawn to the possibility that some Canadian authorities may require additional markings and/or installation instructions to be in both official languages.

This Fifth Edition joint American National Standard and National Standard of Canada is based on, and now supersedes, the Fourth Edition of UL 2443.

Requests for interpretation of this Standard should be sent to ULC Standards. The requests should be worded in such a manner as to permit a “yes” or “no” answer based on the literal text of the requirement concerned.

Comments or proposals for revisions on any part of the Standard may be submitted at any time. Proposals should be submitted via a Proposal Request in the Collaborative Standards Development System (CSDS) at https://csds.ul.com.

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This Edition of the Standard has been formally approved by the Technical Committee (TC) on Sprinkler Equipment For Fire Protection, TC 199.

This list represents the TC 199 membership when the final text in this Standard was balloted. Since that time, changes in the membership may have occurred.

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International Classification for Standards (ICS): 13.220.01;13.220.20

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This Standard is intended to be used for conformity assessment.

The intended primary application of this Standard is stated in its scope. It is important to note that it remains the responsibility of the user of the standard to judge its suitability for this particular application.

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INTRODUCTION

1 Scope

1.1 This Standard covers flexible sprinkler hose with fittings intended for direct connection to fire sprinklers in installations requiring a flexible attachment to the sprinkler system piping such as clean rooms, suspended ceilings, and exhaust ducts.

1.2 The products covered by this Standard are intended for use in sprinkler systems installed in accordance with the Standard for Installation of Sprinkler Systems, NFPA 13; Standard for the Installation of Sprinkler Systems in Residential Occupancies Up to Four Stories in Height, NFPA 13R; and Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Mobile Homes, NFPA 13D.

2 Components

2.1 Except as indicated in 2.2, a component of a product covered by this Standard shall comply with the requirements for that component.

2.2 A component is not required to comply with a specific requirement that:

a) Involves a feature or characteristic not required in the application of the component in the product covered by this Standard; or

b) Is superseded by a requirement in this Standard.

2.3 A component shall be used in accordance with its rating established for the intended conditions of use.

2.4 Specific components are incomplete in construction features or restricted in performance capabilities. Such components are intended for use only under limited conditions, such as certain temperatures not exceeding specified limits, and shall be used only under those specific conditions.

3 Units of Measurement

3.1 Where values of measurement are specified in both SI and U.S. Customary units, it is the responsibility of the user of this Standard to determine the unit of measurement appropriate for the user's needs.

4 Referenced Publications

4.1 Any undated reference to a code or standard appearing in the requirements of this Standard shall be interpreted as referring to the latest edition of that code or standard.

4.2 The following publications are referenced in this Standard:

ASME B1.20.1, *Pipe Threads, General Purpose (Inch)*

ASTM A53/A53M, *Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless*

ASTM A90/A90M, *Standard Test Method for Weight [Mass] of Coating on Iron and Steel Articles with Zinc or Zinc-Alloy Coatings*

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ASTM A653/A653M, *Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process*

ASTM B117, *Standard Practice for Operating Salt Spray (Fog) Apparatus*

ASTM B568, *Standard Test Method for Measurement of Coating Thickness by X-Ray Spectrometry*

ASTM C635/C635M, *Standard Specification for Manufacture, Performance, and Testing of Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings*

ASTM C636/C636M, *Standard Practice for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-In Panels*

AWWA C606, *Grooved and Shouldered Joints*

NFPA 13, *Installation of Sprinkler Systems*

NFPA 13D, *Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes*

NFPA 13R, *Installation of Sprinkler Systems in Low-Rise Residential Occupancies*

UL 157, *Gaskets and Seals*

UL 203, *Pipe Hanger Equipment for Fire Protection Service*

UL 213, *Rubber Gasketed Fittings for Fire Protection Service*

UL 969, *Marking and Labeling Systems*

UL 1821, *Thermoplastic Sprinkler Pipe and Fittings for Fire Protection Service*

5 Glossary

5.1 For the purpose of this Standard the following definitions apply:

5.2 BEND – A 90° change in direction of the flexible sprinkler hose.

5.3 FLEXIBLE HOSE WITH FITTINGS HAVING HIGH FLEXIBILITY – This type of hose with fittings is intended to be used in applications where frequent movement between the two ends of the hose is expected after installation.

5.4 FLEXIBLE HOSE WITH FITTINGS HAVING LIMITED FLEXIBILITY – This type of hose with fittings is intended to be used in applications where little or no movement between the two ends is expected after installation.

5.5 MINIMUM BEND RADIUS – The least distance permitted by the manufacturer as measured from the focal point to the centerline of the hose. See Figure 5.1.

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