UL 1626

STANDARD FOR SAFETY

Residential Sprinklers for Fire-Protection Service

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UL Standard for Safety for Residential Sprinklers for Fire-Protection Service, UL 1626

Fourth Edition, Dated March 14, 2008

Summary of Topics

These revisions to ANSI/UL 1626 are being issued to include changes in the following requirements:

Corrosion Resistant Residential Sprinklers

The new and revised requirements are substantially in accordance with Proposal(s) on this subject dated May 11, 2018 and September 21, 2018.

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

In the revisions dated November 9, 2018 pages 4A and 4B have been intentionally deleted from the Standard due to the deletion or relocation of text.

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March 14, 2008

This ANSI/UL Standard for Safety consists of the Fourth Edition including revisions through November 9, 2018.

The most recent designation of ANSI/UL 1626 as an American National Standard (ANSI) occurred on November 9, 2018. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, and Title Page.

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

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INTRODUCTION

1 Scope

1.1 These requirements cover residential sprinklers intended for installation on sprinkler systems for fire-protection service. Requirements for the installation and use of residential sprinklers are included in the Standards for the Installation of Sprinkler Systems, NFPA 13, and Installation of Sprinkler Systems in One- and Two-Family Dwellings and Mobile Homes, NFPA 13D, and Residential Occupancies up to and Including Four Stories in Height Sprinkler Systems, NFPA 13R.

1.2 The requirements in this standard are not intended to restrict the application of representative fire and other tests for special sprinklers, as referenced in Standard for the Installation of Sprinkler Systems, NFPA 13, that are intended to provide protection for specific fire hazards.

1.3 A product that contains features, characteristics, components, materials, or systems new or different from those covered by the requirements in this standard, and that involves a risk of fire or of electric shock or injury to persons shall be evaluated using appropriate additional component and end-product requirements to maintain the level of safety as originally anticipated by the intent of this standard. A product whose features, characteristics, components, materials, or systems conflict with specific requirements or provisions of this standard does not comply with this standard. Revision of requirements shall be proposed and adopted in conformance with the methods employed for development, revision, and implementation of this standard.

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.

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3 Units of Measurement

3.1 Values stated without parentheses are the requirement. Values in parentheses are explanatory or approximate information.

4 Undated References

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.

5 Glossary

5.1 General

5.1.1 For the purpose of this standard the following definitions apply.

5.1.2 DISCHARGE COEFFICIENT *"K"* – Coefficient of discharge in the formula,

$$Q = K\sqrt{p}$$

where:

Q is the flow in gallons per minute, and p is the pressure in psig. In SI units:

Q is the flow in liters per minute; and

P is the pressure in bar

5.1.3 HEAT RESPONSIVE ELEMENT – That portion of a sprinkler that breaks, melts, or otherwise functions to initiate the automatic operation of the sprinkler when exposed to sufficient heat.

5.1.4 HEPTANE – Commercial grade heptane having the following characteristics:

a) Minimum Initial Boiling Point of 190°F (88°C);

b) Maximum Dry Point of 212°F (100°C); and

c) Specific Gravity (60°F/60°F) (15.6°C/15.6°C) of 0.68 – 0.73.

5.1.5 OPERATING TEMPERATURE – The temperature at which the heat responsive element of a sprinkler operates when subjected to a 1°F (0.5°C) per minute temperature rise while immersed in a liquid bath.

5.1.6 ORIFICE – The opening that controls the amount of water discharged from a sprinkler at a given pressure.

5.1.7 RESIDENTIAL SPRINKLER – A sprinkler intended to be installed in residential occupancies and that opens automatically by operation of a heat-responsive releasing mechanism that maintains the discharge orifice closed. Upon operating at a specified temperature, a discharge of water is distributed in a specific pattern and quantity over a designated area.

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