NATIONAL
STANDARD
OF CANADA

CAN/ULC-S508-02
(Reaffirmed 2013)

STANDARD FOR THE RATING AND FIRE TESTING OF FIRE EXTINGUISHERS

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Customer Service: 1-866-937-3852

CORPORATE HEADQUARTERS
Underwriters Laboratories of Canada
7 Underwriters Road
Toronto, Ontario M1R 3A9
Telephone: (416) 757-3611
Fax: (416) 757-9540

REGIONAL OFFICES

PACIFIC OFFICE
13775 Commerce Parkway, Suite 130
Richmond, British Columbia V6V 2V4
Telephone: (604) 214-9555
Fax: (604) 214-9550

EASTERN OFFICE
6505, Rte Transcanadienne, Suite 330
St-Laurent, Québec H4T 1S3
Telephone: (514) 363-5941
Fax: (514) 363-7014

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Standards Council of Canada
270 Albert Street
Suite 200
Ottawa, Ontario
K1P 6N7
Telephone: (613) 238-3222

For further information on ULC standards, please contact:

ULC STANDARDS
171 Nepean Street, Suite 400
Ottawa, Ontario K2P 0B4
Telephone: (613) 755-2729
Fax: (613) 231-5977

E-mail: customerservice@ulc.ca
Web site: www.ulc.ca

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Copies of this National Standard of Canada may be ordered from ULC Standards.

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ULC Standards
CAN/ULC-S508
Fourth Edition

Underwriters Laboratories Inc.
ANSI/UL 711
Seventh Edition

Standard for Rating and Fire Testing of Fire Extinguishers

AUGUST 14, 2002

(Title Reprinted on December 18, 2013)

This common standard has been jointly revised on December 18, 2013 to reaffirm ANSI and SCC approval and to include editorial type updates. For this purpose, ULC Standards and UL are issuing reaffirmed pages dated December 18, 2013.

ANSI/UL 711-2013

Approved by

Standards Council of Canada
Conseil canadien des normes

Commitment for Amendments

This Standard is issued jointly by Underwriters Laboratories Inc. (UL) and ULC Standards. Amendments to this Standard will be made only after processing according to the Standards writing procedures by UL and ULC Standards.

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This ANSI/UL Standard for Safety consists of the Seventh Edition.

The most recent designation of ANSI/UL 711 as an American National Standard (ANSI) occurred on December 18, 2013. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page (front and back), or the Preface.

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 http://csds.ul.com.

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ULC Preamble

International Classification for Standards (ICS): 13.220.10; 19.040

Attention is drawn to the possibility that some of the elements of this Canadian standard may be the subject of patents rights. ULC Standards shall not be held responsible for identifying any or all such patents rights.

This Standard is intended to be used for conformity assessment.

The Reaffirmation of the Fourth Edition of this ULC Standard was based on, and superseded, the Forth Edition of CAN/ULC-S508 including Amendments 1, 2, and 3.

The initiation of the review of this Standard will commence within 5 years of the date of publication, unless the Standard is identified as fitting within a stabilized category, whereby the review will commence within the appropriate time frame set out by ULC Standards.

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CONTENTS

ULC Preamble 5

Preface 8

A INTRODUCTION 9
1 Scope 9
2 Units of Measurement 9
3 Reference Publications 9
4 Glossary 9
5 Ratings 10
B PERFORMANCE 11
6 General 11
7 Class A extinguishers 11
8 Class B extinguishers 16
9 Class C extinguishers 18
10 Class D extinguishers and agents 20
11 Class K extinguishers 25
C TABLES 26
D FIGURES 29

ANNEX A (NORMATIVE)

A1 Reference Standards A1

Preface

This is the common UL and ULC Standard for Rating and Fire Testing of Fire Extinguishers. It is the fourth edition of CAN/ULC-S508, including Amendment 3, and the seventh edition of ANSI/UL 711.

This Joint Standard was prepared by Underwriters Laboratories Inc., ULC Standards, and the UL/ULC Extinguisher Technical Harmonization Committee. The efforts and support of the Harmonization Technical Committee are gratefully acknowledged.

Only metric SI units of measurement are used in this Standard. If a value for measurement is followed by a value in other units in parentheses, the second value may be approximate. The first stated value is the requirement.

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.

Note: Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.

Level of harmonization

This Standard is published as an identical standard between UL and ULC Standards. An identical standard is a standard that is the same in technical content except for conflicts in Codes and Governmental Regulations. Presentation shall be word for word except for editorial changes.

Interpretations

The interpretation by the SDO of an identical or equivalent standard shall be based on the literal text to determine compliance with the standard in accordance with the procedural rules of the SDO. If more than one interpretation of the literal text has been identified, a revision shall be proposed as soon as possible to each of the SDOs to more accurately reflect the intent.

UL Effective Date

A UL effective date is established by Underwriters Laboratories Inc. and is not part of the ANSI approved standard.

A INTRODUCTION

1 Scope

1.1 These requirements cover rating, and performance during fire tests, of fire extinguishers intended for use in attacking Class A, B, C, D, and K fires as defined herein. These requirements also cover performance during fire tests of fire extinguishing agents for application on Class D fires. The ultimate rating of an extinguisher or the prescribed use of an extinguisher or fire extinguishing agent is based on its fire-extinguishing potential as determined by fire tests and presupposes installation and use in accordance in the United States with the Standard for Portable Fire Extinguishers, NFPA 10, and with the National Fire Code of Canada.

1.2 Fire extinguishers, fire extinguishing agents, or both shall also comply with the requirements for construction and performance as applicable to specific types, designs, sizes, and arrangements. Such additional requirements include UL8/CAN/ULC-S554, UL154/ CAN/ULC S503, UL299/ CAN/ULC S504, UL 626/ CAN/ULC S507, and UL2129/ CAN/ULC S566 and are not within the scope of these requirements.

2 Units of Measurement

2.1 The metric unit shall be designated as the official unit for purposes of this standard. Where values of measurement are specified in both SI and English units, either unit is used. In cases of dispute, the metric unit shall be used.

3 Reference Publications

3.1 See Annex A for a list of publications referenced in this standard. 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. When the latest edition of a standard is not applicable, the appropriate edition is indicated accordingly in Annex A.

4 Glossary

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

4.2 AFFF – Aqueous film-forming foam.

4.3 AUTOIGNITION TEMPERATURE – The temperature at which the test fuel ignites automatically.

4.4 CONTROL – A reduction in fire intensity of approximately 90 percent.

4.5 EFFECTIVE DISCHARGE – The time of discharge of extinguishing agent from the extinguisher until gas point.

4.6 FFFP – Film-forming fluoroprotein.

4.7 GAS POINT – The point in time when the discharge changes from the extinguishing agent alone to a gas and extinguishing agent combination.

4.8 LETTER DESIGNATIONS – The letter designates the general class of fire for which the extinguisher or agent is acceptable: