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ULC/ORD-C263.1-99 (R2018)

SPRINKLER-PROTECTED WINDOW SYSTEMS

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FOREWORD

Certification organizations are periodically requested to promptly provide certification services for devices, constructions, materials and systems where Canadian recognized Standards do not currently exist or are not entirely applicable. Accordingly, the certification organization utilizes its experience, existing specifications and requirements in related areas, together with assistance from its advisory councils to develop and prepare Other Recognized Documents (ORDs) for use in conducting the necessary tests and evaluation investigation.

Underwriters Laboratories of Canada has prepared many ORDs in response to requests from, and in conjunction with, industry, code writing bodies, regulatory agencies and others prior to promulgating a certification program. In many instances such documents have become published ULC Standards and subsequently National Standards of Canada. It is the intention of Underwriters Laboratories of Canada to continue this practice, as appropriate.

Comments on the content of this ORD should be directed to the Head Office of Underwriters Laboratories of Canada, 7 Underwriters Road, Toronto, Ontario, Canada, M1R 3A9.

NOTE: These Other Recognized Documents are accepted under the National Standards System of Canada. Reference may be made to the Document ″Guidelines for the Development and Maintenance of Other Recognized Documents (ORDs)″, published by the Standards Council of Canada located at 55 Metcalfe Street, Suite 600, Ottawa, Ontario, Canada, K1P 6L5.

SPRINKLER-PROTECTED WINDOW SYSTEMS

PREFACE

This is the First Edition of the Other Recognized Document for Sprinkler-Protected Window Systems.

Only metric SI units of measurement are used in this ORD. 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.

This First Edition ORD has now been Reaffirmed.

Attention is drawn to the possibility that some of the elements of this ORD may be the subject of patent rights. Neither Underwriters Laboratories of Canada, nor ULC Standards, shall be held responsible for identifying any or all such patent rights.

Requests for interpretation of this ORD should be sent to the ULC Mark Program Owner of Underwriters Laboratories of Canada. 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.

ORDs are valid for use by Certification Bodies for certifications for up to 5 years from date of initial validation, or revalidation, unless superseded or withdrawn.

This ORD is intended to be used for conformity assessment.

REFERENCE PUBLICATIONS

The documents shown below are referenced in the text of this document. Unless otherwise stated elsewhere in this document such reference shall be considered to indicate the edition and/or revisions of the document available at the date on which this document was published.

Published by the Underwriters' Laboratories of Canada
7 Crouse Road, Scarborough, Ontario M1R 3A9, Canada, Tel: (416) 757-3611

CAN/ULC-S101-M89	Standard Method of Fire Endurance Tests of Building Construction and Materials

1. SCOPE

1.1 This test method enables an assessment of the performance, under controlled fire exposure conditions, of a sprinkler protected window system.

1.2 The fire exposure used for the test is such that the temperature measured in the test room, under non-sprinklered conditions, follows the standard time-temperature curve defined in of CAN/ULC-S101, Standard Method of Fire Endurance Tests of Building Construction and Materials.

2. GLOSSARY

NOTE: Terms used in this Standard that are in *italic* print are defined as follows:

ACTUATION - Activation of the fused temperature dependent solder or expansion of encapsulated liquid for the release of orifice seals to initiate water flow.

AUTOMATIC SPRINKLER - A device which is automatically activated by the sensing of heat to distribute water or water based extinguishing agents in the fire area.

DEFLECTOR - An attachment to a sprinkler that diverts the water flow into a spray pattern.

FIRE RESISTANCE RATING - The time in hours or fraction thereof that a material or assembly of materials will withstand the passage of flame and the transmission of heat when exposed to fire under specified conditions of test and performance criteria, or as determined by extension or interpretation of information derived therefrom as prescribed by Regulatory Authorities.

K FACTOR - The orifice discharge coefficient of a sprinkler.

TEST SPECIMEN - A sample representative of the system under test.

THROUGH-OPENING - Is defined, for purposes of this Standard, as through-holes in the assembly that can be seem from the unexposed side when looking perpendicular to the plane of the assembly at the location of the suspected opening.

WINDOW SYSTEM - A sample consisting of a window frame and glazing forming a complete unit.

3. SIGNIFICANCE

3.1 This test method determines the performance of a sprinkler-protected window system under controlled fire exposure conditions by evaluating such factors as sprinkler *actuation* time, the temperatures of both the glazing and frame, and the time period during which the glazing assembly maintains its integrity.

4. TEST FACILITY

4.1 The dimensions of the test room shall be a minimum of 3.3 m in width, 3.3 m in depth and a maximum of 3.3 m in height above the floor. See Figure 1.