CAN/ULC-S646-10-R2021
(Reaffirmed 2021)

STANDARD FOR EXHAUST HOODS AND RELATED CONTROLS FOR COMMERCIAL AND INSTITUTIONAL COOKING EQUIPMENT

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

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Standard for Exhaust Hoods and Related Controls for Commercial and Institutional Cooking Equipment, CAN/ULC-S646

Third Edition, Dated July 1, 2010

Summary of Topics

This revision of CAN/ULC-S646 dated April 15, 2021 is being issued to update the title page to reflect the reaffirmation of this Third Edition National Standard of Canada. No changes in requirements are involved.

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.

The requirements are substantially in accordance with Proposal(s) on this subject dated December 3, 2020.

PLEASE NOTE THAT CERTAIN CODES MAY REFER TO A SUPERSEDED VERSION OF THIS STANDARD. IN THOSE INSTANCES, THE RELEVANT VERSIONS ARE AVAILABLE FOR PURCHASE.

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STANDARD FOR EXHAUST HOODS AND RELATED CONTROLS FOR COMMERCIAL AND INSTITUTIONAL COOKING EQUIPMENT

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PREFACE

This is the Third Edition of the Standard for Exhaust Hoods and Related Controls for Commercial and Institutional Cooking Equipment, CAN/ULC-S646.

This Edition of the Standard was developed by the ULC Standards Task Group on Exhaust Hoods and has been formally approved by the ULC Standards Committee on Kitchen Exhaust Equipment and Systems.

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

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. Attention is drawn to the possibility that some Canadian authorities may require markings and/or installation instructions to be in both official languages.

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

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.

This CAN/ULC-S646 Standard is under continuous maintenance, whereby each revision is approved in compliance with the requirements of 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.

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 On-Line Collaborative Standards Development System (CSDS) at https://csds.ul.com/canada.

This Standard is intended to be used for conformity assessment.

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1 SCOPE

1.1 These requirements cover *exhaust hoods* for commercial and institutional kitchens and are intended for placement over restaurant type cooking equipment, such as ranges, broilers, deep fat fryers, grills, etc., during normal cooking operations. They may be of the shelf, canopy, island, double island or equipment mounted styles and may be known as *grease extractor type hood*, or *filter type hood*s. They may include provisions for the introduction of *make-up air* to the kitchen. They may include provisions to limit exhaust temperatures to 190 °C.

1.2 *Exhaust hoods* covered by these requirements are intended for installation in accordance with ULC-S650, Standard for the Installation and Performance of Ventilation and Fire Suppression Systems for Commercial and Institutional Cooking Equipment.

1.3 *Exhaust hoods* covered by these requirements are intended for placement over electric, gaseous-fuel or solid-fuel burning appliances. These requirements cover equipment rated not over 600 V and intended for installation under the requirements of CAN/CSA-C22.1, Canadian Electrical Code, Part I.

1.4 These requirements do not cover fire-extinguishing systems.

2 REFERENCE PUBLICATIONS

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

Documents Published by the American Society for Testing and Materials (ASTM)
100 Barr Harbour Drive, PO Box C700, West Conshohocken, PA 19428-2959 U.S.A.
Telephone: (610) 832-9585
www.astm.org

• ASTM A 313 / A 313M-03, Specification for Stainless Steel Spring Wire

• ASTM D 412-06 REV A, Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers Tension

• ASTM D 573-04, Test Method for Rubber Deterioration in an Air Oven

• ASTM D 3183-02, Practice for Rubber – Preparation of Pieces for Test Purposes from Products

• ASTM D 3767-03, Practice for Rubber Measurement of Dimensions

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Telephone: (416) 747-4077 or 1-800-463-6727
www.csa.ca

• CAN/CSA-C22.1-06, Canadian Electrical Code, Part I

• CAN/CSA-C22.2 No. 0-M91 (R2001), General Requirements Canadian Electrical Code, Part II

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