NATIONAL STANDARD OF CANADA

CAN/ULC-S142:2016

STANDARD METHOD OF FIRE TEST FOR HEAT AND VISIBLE SMOKE RELEASE FOR DISCRETE PRODUCTS

Prepared and Published by:



Approved by:



This is a preview. Click here to purchase the full publication.

Underwriters Laboratories of Canada (ULC) was established in 1920 by letters patent issued by the Canadian Government. It maintains and operates laboratories and certification services for the examination, testing and certification of appliances, equipment, materials, constructions and systems to determine their relation to life, fire and property hazards as well providing inspection services.

Underwriters Laboratories of Canada is accredited by the Standards Council of Canada as a Certification Organization, a Testing Organization, and an Inspection Body under the National Standards System of Canada.

ULC Standards develops and publishes standards and other related publications for building construction, security and burglar protection. environmental safety, electrical equipment, fire protection equipment, gas and oil equipment, thermal insulation products, materials and systems, energy use in the built environment and electrical utility safety.

ULC Standards is a not-for-profit organization and is accredited by the Standards Council of Canada as a Standards Development Organization.

National Standards of Canada developed by ULC Standards conform to the criteria and procedures established by the Standards Council of Canada. Such standards are prepared using the consensus principle by individuals who provide a balanced representation of interests relevant to the subject area on a national basis.

ULC is represented across Canada as well as many countries worldwide. For further information on ULC services, please contact:

Customer Service: 1-866-937-3852

National Standard of Canada

A National Standard of Canada is a standard developed by an SCCaccredited Standards Development Organization (SDO), and approved by the Standards Council of Canada (SCC), in accordance with SCC's: Requirements and Guidance-Accreditation for Standards Development Organizations, and Requirements and Guidance-Approval of National Standards of Canada Designation. More information on National Standard requirements can be found at www.scc.ca.

An SCC-approved standard reflects the consensus of a number of experts whose collective interests provide, to the greatest practicable extent, a balance of representation of affected stakeholders. National Standards of Canada are intended to make a significant and timely contribution to the Canadian interest.

SCC is a Crown corporation within the portfolio of Industry Canada. With the goal of enhancing Canada's economic competitiveness and social well-being, SCC leads and facilitates the development and use of national and international standards. SCC also coordinates Canadian participation in standards development, and identifies strategies to advance Canadian standardization efforts. Accreditation services ar provided by SCC to various customers, including product certifiers, testing laboratories, and standards development organizations. A lis of SCC programs and accredited bodies is publicly available at www.scc.ca.

Users should always obtain the latest edition of a National Standard of Canada from the standards development organization responsible f its publication, as these documents are subject to periodic review.

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

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

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.

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

CETTE NORME NATIONALE DU CANADA EST DISPONIBLE EN VERSIONS FRANÇAISE ET ANGLAISE

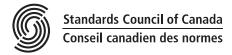
STANDARD METHOD OF FIRE TEST FOR HEAT AND VISIBLE SMOKE RELEASE FOR DISCRETE PRODUCTS

ICS 13.220.40; 91.140.50; 91.140.60

Prepared and Published by:



Approved by:



FIRST EDITIONSEPTEMBER 2016

Copyright © 2016

ULC Standards

All rights reserved. No part of this publication may be reproduced in any form, in an electronic retrieval system or otherwise, without prior permission.



TABLE OF CONTENTS

ULC STANDARDS COMMITTEE ON FIRE TESTS	
ULC STANDARDS TASK GROUP ON COMBUSTIBILITY	
PREFACE	
1 SCOPE	1
2 REFERENCE PUBLICATIONS	
3 APPARATUS	2
3.1 GENERAL 3.2 IGNITION SOURCE 3.3 TEST FRAME ENCLOSURE AND BURNER 3.4 HOOD AND EXHAUST DUCT 3.5 GAS COLLECTION SYSTEM 3.5.1 General 3.5.2 Oxygen Measurement 3.6 OPTICAL DENSITY 3.7 THERMOCOUPLES 3.8 DIGITAL DATA COLLECTION 4 PRETEST CALIBRATION	
4.1 GENERAL 4.2 OXYGEN ANALYZER 4.3 HEAT RELEASE RATE 4.4 PHOTOMETER SYSTEM	
5 TEST SPECIMENS	
6 TEST PROCEDURE	
6.1 INITIAL PREPARATION	5
7 CALCULATIONS FOR HEAT RELEASE MEASUREMENTS	
7.1 RATE OF HEAT RELEASE	
8 CALCULATIONS	10
9 CONDITIONS OF ACCEPTANCE	11
10 TEST REPORT	11
EIGURES	10