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ULC/ORD-C2996:2017

IN-GROUND BOXES



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IN-GROUND BOXES

ICS 29.120.10

Prepared and Published by:



FIRST EDITION**MARCH 2017**

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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.

IN-GROUND BOXES

PREFACE

This is the First Edition of the Other Recognized Document for In-Ground Boxes, ULC/ORD-C2996.

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.

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.

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1 SCOPE

1.1 These requirements cover in-ground boxes with integral electrical enclosure(s) for housing wiring devices connected to a branch circuit. The unit is intended to be installed outdoors and in the ground. The unit provides access to one or more receptacle outlets and is intended to be installed in accordance with NFPA 70, National Electrical Code, CSA C22.1, Canadian Electrical Code, Part I, Safety Standard for Electrical Installations and CSA C22.2, Canadian Electrical Code, Part II - General Requirements.

1.2 This outline does not cover in-ground boxes for use in hazardous locations as defined in the NFPA 70, National Electrical Code and CSA C22.1, Canadian Electrical Code, Part I, Safety Standard for Electrical Installations.

2 REFERENCE PUBLICATIONS

Products covered by this outline shall comply with the reference installation codes and standard as appropriate for the country where the product is to be used. When the product is intended for use in more than one country, the product shall comply with the installation codes and standards for all countries where it is intended to be used.

Where reference is made to any Standard, such reference shall be considered to refer to the latest edition and revisions thereto available at the time of printing, unless otherwise specified.

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

- ASTM D412-15, Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers-Tension
- ASTM D471-16, Standard Test Method for Rubber Property - Effect of Liquids
- ASTM D543-14, Standard Practices for Evaluating the Resistance of Plastics to Chemical Reagents
- ASTM D570-98 (R 2010), Standard Test Method for Water Absorption of Plastics
- ASTM D2444-99 (R 2010), Standard Test Method for Determination of the Impact Resistance of Thermoplastic Pipe and Fittings by Means of a Tup (Falling Weight)
- ASTM G151-10, Standard Practice for Exposing Nonmetallic Materials in Accelerated Test Devices that Use Laboratory Light Sources
- ASTM G154-16, Standard Practice for Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials
- ASTM G155-13, Standard Practice for Operating Xenon Arc Light Apparatus for Exposure of Non-Metallic Materials

Documents Published by CSA Group
5060 Spectrum Way, Suite 100, Mississauga, Ontario L4W 5N6 Canada
Telephone: 1-800-463-6727, Fax: (416) 747-2473 www.csa.ca

- CSA C22.1-15, Canadian Electrical Code, Part I, Safety Standard for Electrical Installations

- CAN/CSA C22.2 No. 0-10 (R 2015), Canadian Electrical Code, Part II - General Requirements
 - CSA C22.2 No. 18.2-06 (R 2016), Nonmetallic outlet boxes
 - CSA C22.2 No. 94.1-15, Enclosures for electrical equipment, environmental considerations
 - CSA C22.2 No. 94.2-15, Enclosures for electrical equipment, nonenvironmental considerations
-

Documents Published by the National Fire Protection Association
1 Batterymarch Park, Quincy, MA 02269-9101 U.S.A.
Telephone: (617) 770-3000, Fax: (617) 770-0700
www.nfpa.org

- NFPA 70-2017, National Electrical Code
-

Document Published by the Society of Cable Telecommunications Engineers (SCTE)
140 Philips Road, Exton, PA 19341-1318 U.S.A.
Telephone: (610) 524-5040, Fax: (610) 363-6888
www.scte.org

- ANSI/SCTE 77-2010, Specification for Underground Enclosure Integrity
-

Documents Published by Underwriters Laboratories Inc.
333 Pfingsten Road, Northbrook, IL 60062-2096 U.S.A.
Telephone: 1-847-272-8800, Fax: 1-847-272-8129 www.ul.com

- UL 50:2015, Standard for Enclosures for Electrical Equipment, Non-Environmental Considerations
 - UL 50E:2015, Standard for Enclosures for Electrical Equipment, Environmental Considerations
 - UL 410:2016, UL Standard for Slip Resistance of Floor Surface Materials
 - UL 514C:2014, Standard for Nonmetallic Outlet Boxes, Flush-Device Boxes, and Covers
 - UL 746A:2016, Standard for Polymeric Materials – Short Term Property Evaluations
 - UL 969:2014, Standard for Marking and Labeling Systems
-

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Office of the Director, Administrative Services Division
Room 0168, South Building, US Department of Agriculture, Washington D.C. 20250-1500, U.S.A.
Telephone: 1-800-414-1226
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- RUS 7 CFR 1755.910, Specification for Outside Plant Housings and Serving Area Interface Systems

3 GLOSSARY

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