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DOCUMENT

ULC/ORD-C142.15-14

PRECAST CONCRETE TANKS

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PRECAST CONCRETE TANKS

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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 CAN-P-3, ″General Requirements for Bodies Operating Product Certification Systems”; and CAN-P-1500, “Additional Requirements for Accreditation of Certification Bodies″, published by the Standards Council of Canada located at 270 Albert Street, Suite 200, Ottawa, Ontario, CANADA, KIP 6N7.

PRECAST CONCRETE TANKS

PREFACE

This is the Second Edition of the Other Recognized Document Precast Concrete Tanks, ULC/ORD-C142.15.

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.

Appendices A, B and C, identified as normative, form a mandatory part of this ORD.

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 Second Edition ORD is based on, and now supersedes, the First Edition.

Attention is drawn to the possibility that some of the elements of this ORD 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 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.

This ORD is intended to be used for conformity assessment.

1 SCOPE

1.1 The requirements of this ORD apply to stationary aboveground and underground precast concrete tanks, and underground vaults.

1.2 The requirements of this ORD apply to:

A Tanks intended for use as primary containment for liquids that are non-destructive to concrete, such as water contaminated with oil, waste water, or similar products; and

B Tanks and vaults intended for use as secondary containment for flammable liquids and/or combustible liquids.

1.3 This ORD is a companion document to Standard CAN/ULC-S656, Standard for Oil-Water Separators. (See Subsection 4.17.2, Oil-Water Separator Application.)

1.4 This ORD is a reference document for other Standards and ORDs applicable to the manufacturing of precast concrete tanks, such as ULC-S655, Aboveground Protected Tanks Assemblies for Flammable and Combustible Liquids, and ULC/ORD-C142.20, Secondary Containments for Aboveground Flammable and Combustible Liquid Storage Tanks.

1.5 The requirements of this ORD apply to below-grade vaults intended for the secondary containment of flammable liquids and/or combustible liquids in an aboveground tank.

1.6 Precast concrete tanks are intended primarily for installation and use in accordance with, but not limited to, the following:

A The Canadian Environmental Protection Act;

B The National Fire Code of Canada;

C The National Building Code of Canada; and

D Manufacturer's installation requirements.

2 REFERENCE PUBLICATIONS

The documents shown below are referenced in the text of this ULC Other Recognized Document (ORD). Unless otherwise stated elsewhere in this ORD, such reference shall be considered to indicate the edition and/or revisions of the documents available at the date on which this ULC ORD is published.

Documents Published by the American Society for Testing and Materials (ASTM)
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www.astm.org

• ASTM A36/A36M-11,Standard Specification for Carbon Structural Steel

• ASTM C39 REV A (2012),Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens

• ASTM E96-12,Standard Test Methods for Water Vapor Transmission of Materials