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# ANSI/CAN/UL/ULC 2258:2018

# STANDARD FOR SAFETY

## Aboveground Nonmetallic Tanks for Fuel Oil and Other Combustible Liquids

Approved American National Standard
ANSI
ANSI/UL 2258-2019

Standards Council of Canada
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UL Standard for Safety for Aboveground Nonmetallic Tanks for Fuel Oil and Other Combustible Liquids, ANSI/CAN/UL/ULC 2258:2018

First Edition, Dated May 17, 2018

***Summary of Topics***

***This revision of UL/ULC 2258 has been issued as part of the project to support the National Research Council of Canada program to address Climate Change Adaptation in Canadian Codes and Standards.***

The new and revised requirements are substantially in accordance with Proposal(s) on this subject dated August 24, 2018.

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**MAY 17, 2018**
(Title Page Reprinted: March 12, 2019)

**ANSI/UL 2258-2019**



# ANSI/CAN/UL/ULC 2258:2018

## Standard for Aboveground Nonmetallic Tanks for Fuel Oil and Other Combustible Liquids

**First Edition**

**May 17, 2018**

This ANSI/CAN/UL/ULC Safety Standard consists of the First Edition including revisions through March 12, 2019.

The most recent designation of ANSI/UL 2258 as an American National Standard (ANSI) occurred on March 12, 2019. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page, Preface or SCC Foreword.

This standard has been designated as a National Standard of Canada (NSC) on March 12, 2019.

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# Preface

This is the First Edition of the ANSI/CAN/UL/ULC 2258, Standard for Aboveground Nonmetallic Tanks for Fuel Oil and Other Combustible Liquids, including revisions through March 12, 2019.

UL is accredited by the American National Standards Institute (ANSI) and the Standards Council of Canada (SCC) as a Standards Development Organization (SDO).

This Standard has been developed in compliance with the requirements of ANSI and SCC for accreditation of a Standards Development Organization. ULC Standards is accredited by the Standards Council of Canada (SCC) as a Standards Development Organization (SDO).

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.

Appendix A, identified as Normative, forms a mandatory part of this Standard.

Appendices B and C, identified as Informative, are for information purposes only.

This ANSI/CAN/UL/ULC 2258 Standard for Safety is under continuous maintenance, whereby each revision approved in compliance with the requirements of ANSI and 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.

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 Joint American National Standard and National Standard of Canada is based on, and now supersedes, the Outline of Investigation, Issue 4 of Subject 2258 and the First Edition of CAN/ULC-S670-14.

Comments or proposals for revisions on any part of the Standard may be submitted to UL at any time. Proposals should be submitted via a Proposal Request in UL's On-Line Collaborative Standards Development System (CSDS) at http://csds.ul.com.

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.

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This Edition of the Standard has been formally approved by the Joint UL/ULC Technical Committee (TC) on Combustible Liquid Tanks and Accessories, TC 2258.

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This list represents the TC 2258 membership when the final text in this standard was balloted. Since that time, changes in the membership may have occurred.

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This Standard is intended to be used for conformity assessment.

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.

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## 1 SCOPE

1.1 This Standard covers the minimum requirements for nonmetallic or composite primary tanks, secondary tanks, and open or closed secondary containments from 227 to 2500 L (60 to 660 US gal) primary tank capacity intended primarily for the storage and supply of heating fuel for oil burning equipment, or alternately for the storage of diesel fuels for compression ignition engines and motor oils (new and used) for automotive service stations, in aboveground applications.

In addition to this Standard's traditional safety requirements that primarily evaluate structural integrity, material compatibility, and mitigate fire and environmental hazards from loss of liquid containment under expected normal conditions; optional construction and/or performance requirements, and associated ratings intended to address more severe conditions associated with the effects of Climate Change are included in Appendix C.

1.2 Each tank type is permitted to be fabricated in a combination of various shapes (cylindrical, rectangular or obround), orientations (horizontal, vertical) and may have integral options (tank supports or accessories) as covered in this Standard.

1.3 These shop built tanks are completely fabricated, inspected, and tested for leakage before shipment from the factory as completely assembled vessels except for options intended for field assembly in accordance with the manufacturer's instructions.

1.4 These tanks are intended for stationary installation and use in accordance with, but not limited to, any of the following documents as appropriate for each country below. These tanks are not intended for the transportation of fuel, nor are they intended to be transported while containing liquids.

A For the United States; ANSI/NFPA 31, Standard for the Installation of Oil-Burning Equipment; ANSI/NFPA 30, Flammable and Combustible Liquids Code; NFPA 30A, Code for Fuel Dispensing Facilities and Repair Garages; and the International Fire Code published by the International Code Council.

B For Canada; the National Fire Code of Canada; CSA B139, Installation Code for Oil Burning Equipment; Regulations of the appropriate authority having jurisdiction; and CCME Environmental Code of Practice for Aboveground and Underground Storage Tank System Containing Petroleum and Allied Petroleum Products.

1.5 These requirements do not apply to steel tanks covered by the following standards:

A UL 80, Standard for Steel Tanks for Oil-Burner Fuels;

B CAN/ULC-S602, Standard for Aboveground Steel Tanks for Fuel Oil and Lubricating Oil;

C UL 142, Standard for Steel Aboveground Tanks for Flammable and Combustible Liquids;

D CAN/ULC-S601, Standard for Shop Fabricated Steel Aboveground Tanks for Flammable and Combustible Liquids;

E UL 58, Standard for Steel Underground Tanks for Flammable and Combustible Liquids; or

F CAN/ULC-S603, Standard for Steel Underground Tanks for Flammable and Combustible Liquids.

1.6 These requirements do not apply to nonmetallic tanks covered by the following standards:

A UL 1316, Standard for Glass-Fiber-Reinforced Plastic Underground Storage Tanks for Petroleum Products, Alcohols, and Alcohol-Gasoline Mixtures, and CAN/ULC S615, Standard for Fibre Reinforced Plastic Underground Tanks for Flammable and Combustible Liquid; or

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B UL 1746, Standard for External Corrosion Protection Systems for Steel Underground Storage Tanks, and CAN/ULC-S603.1, Standard for External Corrosion Protection Systems for Steel Underground Tanks for Flammable and Combustible Liquids.

1.7 These requirements do not cover storage of waste oils or other combustible liquids with different fire, physical or material compatibility properties with respect to the intended liquids in Clause 1.1 but do cover 100 % biodiesel and biodiesel blends up to 100 %. These requirements do not cover storage of flammable liquids.

1.8 Except for optional Climate Change Adaptation requirements in Appendix C, these requirements do not cover special evaluations for resistance to, or use after, earthquakes, floods, high wind events, or other natural disasters. These requirements do not cover resistance to vehicle impact.

NOTE: See the Note at the beginning of Appendix C for further information on the terms “Adaptation” and “Mitigation”, as they pertain to Climate Change.

## 2 UNITS OF MEASURMENT

2.1 Values stated without parentheses are the requirement. Values in parentheses are explanatory or approximate information.

## 3 REFERENCE PUBLICATIONS

3.1 Refer to Appendix for a list of publications referenced in this Standard. Any undated reference to a code or standard appearing in the requirements of this Standard shall be interpreted as referring to the latest edition of that code or standard. When the latest edition of a Standard is not applicable, the appropriate edition is indicated accordingly in Appendix .

## 4 COMPONENTS

4.1 Except as indicated in Clause 4.2, a component of a product covered by this Standard shall comply with the requirements for that component.

4.2 A component is not required to comply with a specific requirement that:

A Involves a feature or characteristic not required in the application of the component in a product covered by this Standard; or

B Is superseded by a requirement in this Standard.

4.3 A component shall be used in accordance with its rating established for the intended conditions of use.

4.4 Specific components are incomplete in construction features or restricted in performance capabilities. Such components are intended for use only under limited conditions, such as certain temperatures not exceeding specified limits, and shall be used only under those specific conditions.

## 5 GLOSSARY

5.1 Terms used in this Standard are defined in Clauses 5.2 through 5.31.

5.2 ABOVEGROUND TANK (also known as ABOVEGROUND STORAGE TANK or AST) – A storage tank that is intended for installation above grade, at grade or below grade without backfill.

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