

# Installation code for oil-burning equipment



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# Preface

This is the eighth edition of CSA B139, *Installation code for oil-burning equipment*. It supersedes the previous editions published in 2004, 2000, 1991, 1976, 1971, 1962, and 1957.

Changes in this edition include the following:

- (a) The Scope has been reworded for clarity ([Clause 1](#)).
- (b) Additional definitions have been incorporated ([Clause 3](#)).
- (c) Information dealing with engines has been added to [Clauses 7.13 to 7.15](#) and [Annex H](#).
- (d) [Figures 9](#) and [10](#) have been updated.
- (e) [Annex A](#) now reproduces the text of CSA B139-04 on replacement burners where the replacement burner is not certified to be used with the appliance, as well as the text of CSA B140.2.3 (withdrawn).
- (f) [Annex F](#) has been added.
- (g) [Annex G](#) has been added to provide guidance on some aspects of tank filling operations.

This Code was prepared by the Technical Committee on the Installation Code for Oil-Burning Equipment, under the jurisdiction of the Steering Committee on Fire Safety and Fuel Burning Equipment.

August 2009

## Notes:

- (1)** Use of the singular does not exclude the plural (and vice versa) when the sense allows.
- (2)** Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.
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# B139-09

## ***Installation code for oil-burning equipment***

### **1 Scope**

#### **1.1**

This Code applies to the installation of appliances, equipment, components, and accessories where oil is used for fuel purposes in applications that include

- (a) space heating;
- (b) service water heating;
- (c) power generation; and
- (d) process application.

#### **1.2**

This Code provides minimum requirements for installing or altering all stationary and portable oil-burning equipment, including

- (a) furnaces;
- (b) process furnaces;
- (c) boilers;
- (d) water heaters;
- (e) vehicle heaters;
- (f) construction heaters; and
- (g) internal combustion engines when used for power applications in buildings.

**Note:** For installation of internal combustion engines for emergency power applications, see also CAN/CSA-C282 and CSA Z32. Both these Standards refer to CSA B139 for installation of accessories such as fuel tanks and piping.

#### **1.3**

This Code provides minimum requirements for installing or altering ancillary equipment, including

- (a) piping and tubing systems supplying fuel oil-burning equipment;
- (b) pumps;
- (c) control devices;
- (d) venting systems;
- (e) accessories;
- (f) heat distribution systems that affect the proper operation of the oil-burning equipment;
- (g) central oil distribution systems; and
- (h) above-ground storage tanks that have a maximum individual capacity of 2500 L (550 gal) and a maximum aggregate capacity of 5000 L (1100 gal).

**Note:** Underground fuel oil tank installations of any size and above-ground installations over 2500 L (550 gal) are covered by the National Fire Code of Canada (NFCC) and the CCME Environmental Code. Storage tank installations might also be governed by requirements of the authority having jurisdiction.

#### **1.4**

This Code provides requirements for the maintenance of the most commonly used types of oil-burning equipment.

#### **1.5**

This Code provides recommended precautions for filling tanks (see [Annex G](#)).