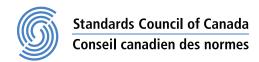


CSA C657:15
National Standard of Canada
(reaffirmed 2020)



# **Energy performance standard for commercial refrigeration equipment**





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# Energy performance standard for commercial refrigeration equipment



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# **Preface**

This is the fourth edition of CSA C657, Energy performance standard for commercial refrigeration equipment. It supersedes the previous editions, published in 2012 and in 2004 under the title Energy performance standard for refrigerated display cabinets (merchandisers), and published in 1995 under the title Energy Performance Standard for Commercial Refrigerated Display Cabinets and Merchandisers.

This edition has been revised to

- a) merge this Standard with CAN/CSA-C827, Energy performance of food service refrigerators and freezers:
- b) harmonize this Standard with ANSI/AHRI 1200/1201, Performance Rating of Commercial Refrigerated Display Merchandisers and Storage Cabinets;
- c) make use of the test method specified in ANSI/ASHRAE 72, *Method of Testing Commercial Refrigerators and Freezers*, and harmonize its performance levels with those of the U.S. Department of Energy; and
- d) include two different test procedures: Test procedure "A" and Test procedure "B", to be used in conjunction with its respective maximum energy consumption limits.

This Standard is considered suitable for use for conformity assessment within the stated scope of the Standard.

This Standard was prepared by the Subcommittee on Refrigerated Display Cabinets, under the jurisdiction of the Technical Committee on Heating, Ventilation, Air-Conditioning, and Refrigeration and the Strategic Steering Committee on Performance, Energy Efficiency, and Renewables, and has been formally approved by the Technical Committee.

This Standard has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard of Canada by CSA Group.

#### Notes:

- 1) Use of the singular does not exclude the plural (and vice versa) when the sense allows.
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Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization and are available on the Current Standards Activities page at standardsactivities.csa.ca.

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- 5) This Standard is subject to review within five years from the date of publication. Suggestions for its improvement will be referred to the appropriate committee. To submit a proposal for change, please send the following information to <a href="mailto:inquiries@csagroup.org">inquiries@csagroup.org</a> and include "Proposal for change" in the subject line:
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  - b) relevant clause, table, and/or figure number;
  - c) wording of the proposed change; and
  - d) rationale for the change.

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# CSA C657:15

# Energy performance standard for commercial refrigeration equipment

### 1 Scope

#### 1.1

This Standard specifies methods for measuring the volume, energy consumption, and total display area (TDA) of electrically operated commercial refrigeration equipment.

### 1.2

This Standard applies to commercial refrigerator, refrigerator-freezer, and freezer cabinets and merchandisers that are intended for displaying, storing, or holding food products including canned and bottled beverages, ice intended for human consumption, and other perishable merchandise (e.g., cut flowers).

#### 1.3

This Standard applies to

- a) both permanently connected and cord-connected equipment;
- b) cabinets equipped with or designed to work with electrically driven system;
- c) refrigeration equipment designed for storage temperatures either above or below freezing temperatures, or both in separate compartments;
- d) open and closed cabinets of self-contained and remote type;
- e) commercial refrigerated storage cabinets; and

**Note:** Example of products include

- a) reach-in cabinets;
- b) roll-in or roll-through cabinets;
- c) pass-through cabinets;
- d) reach-in wine coolers;
- e) fish or poultry files;
- f) ice cream cabinets;
- g) milk or beverage cabinets;
- h) *meat cases;*
- i) cheese cases;
- j) worktop tables;
- k) undercounter cabinets;
- chef base or griddle stand; and
- m) cabinets with drawers.
- f) closed refrigerated cabinets, regardless of the material used for the door(s) of such cabinets, provided that the closed cabinets are designed for holding and storing.

#### 1.4

This Standard does not apply to

 walk-in refrigerators and freezers, water coolers, refrigerated vending machines, or ice-making machines;