C22.2 No. 51-M89,
Armoured Cable;

C22.2 No. 55-M1986,
Special-Use Switches;

C22.2 No. 56-1977,
Flexible Metal Conduit and Liquid-Tight Flexible Metal Conduit;

C22.2 No. 61-M1985,
Household Electric Ranges;

C22.2 No. 65-M1988,
Wire Connectors;

C22.2 No. 66-1988,
Specialty Transformers;

C22.2 No. 74-M92,
Equipment for Use With Electrical Discharge Lamp;

C22.2 No. 75-M1983,
Thermoplastic-Insulated Wires and Cables;

C22.2 No. 77-1988,
Motors with Inherent Overheating Protection;

C22.2 No. 83-M1985,
Electrical Metallic Tubing;

C22.2 No. 96-M92,
Portable Power Cables;

C22.2 No. 100-M1985,
Motors and Generators;

C22.2 No. 107.1-M91,
Commercial and Industrial Power Supplies;

C22.2 No. 111-M1986,
General Use Switches;

C22.2 No. 139-1982,
Electrically-Operated Valves;

C22.2 No. 140.2-M91,
Hermetic Refrigerant Motor-Compressors;

C22.2 No. 140.3-M1987,
Refrigerant-Containing Components for Use in Electrical Equipment;

C22.2 No. 153-M1981,
Quick Connect Terminals;

C22.2 No. 158-1987,
Terminal Blocks;

C22.2 No. 177-1981,
Clock-Operated Switches;

C22.2 No. 190-M1985,
Capacitors for Power Factor Correction;

C22.2 No. 199-M89,
Combustion Safety Controls and Solid State Igniters for Gas- and Oil-Burning Equipment;

C22.2 No. 209-M1985,
Thermal Cutoffs;

C22.2 No. 223-M91,
Power Supplies with Extra-Low-Voltage Class Outputs;

C22.2 No. 234-M90,
Safety of Component Power Supplies;

Z240 RV Series-M86,
Recreational Vehicles.

A2 Other Standards

ANSI MC96.1-1982,
Temperature Measurement Thermocouples;

ANSI Z21.1-1990,
Household Cooking Gas Appliances;

ANSI Z21.57-1990,
Recreational Vehicle Cooking Gas Appliances;

ANSI Z97.1-1984,
Safety Performance Specifications and Methods of Test for Glazing Materials Used in Buildings;

ANSI/ASHRAE 15-1989,
Safety Code for Mechanical Refrigeration;

ANSI/ASHRAE 34-1992,
Number Designation and Safety Classification of Refrigerants;

ANSI/NEMA WD6-1988,
Wiring Devices – Dimensional Requirements;

ANSI/NFPA No. 70-1993,
National Electrical Code;

ANSI/SAE J513-1990,
Refrigeration Tube Fittings;

ASME,
Unfired Pressure Vessel Code;

ASTM E162-1990,
Standard Test Method for Surface Flammability of Materials Using A Radiant Heat Energy Source; BOCA, National Mechanical Code;

CAN3-C235-83, *Preferred Voltage Levels for AC Systems, 0 to 50,000 V*;

CAN/CGA-B149.1-M86, *Natural Gas Installation Code*;

CAN/CGA-B149.2-M86, *Propane Installation Code*;

CAN/ULC-S102-M88, *Surface Burning Characteristics of Building Materials and Assemblies*;

CSA B52-92,
Mechanical Refrigeration Code;

IEC 417,
Graphical Symbols for Use on Equipment;

The Standard Mechanical Code;

The Uniform Mechanical Code.

Abbreviations

ANSI - American National Standards Institute

ASHRAE - American Society of Heating, Refrigerating, Air-Conditioning Engineers

ASME - American Society of Mechanical Engineers

ASTM - American Society for Testing and Materials

BOCA - Building Officials and Code Administrators International

CFR - Code of Federal Regulations

CGA - Canadian Gas Association

IEC - International Electrotechnical Commission

NEMA - National Electrical Manufacturers Association

NFPA - National Fire Protection Association

SAE - Society of Automotive Engineers

ULC - Underwriters' Laboratories of Canada

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Appendix B

Marking Translations

This Appendix is provided for information only.

French Translation, Clause 11.1.4:

1. Si vous branchez cet appareil à un circuit protégé par des fusibles, utilisez un fusible à retardement.

French Translation, Clause 11.1.5:

2. ATTENTION: Pour réduire les risques d'incendie, utilisez un fusible de rechange de même type. Confier le remplacement à un technicien qualifié.

French Translation, Clause 11.1.9:

3. Installation non encastrée seulement.

French Translation, Clause 11.1.15:

4. ATTENTION: Pour empêcher qu'un enfant soit piégé, placez hors de la portée des enfants et loin du congélateur (ou du réfrigérateur).

French Translation, Clause 11.1.17:

5. ATTENTION: Utilisez des conducteurs en cuivre seulement.

French Translation, Clause 11.1.17:

6. ATTENTION: Utilisez des conducteurs en cuivre ou en aluminium.

French Translation, Clause 11.1.17:

7. ATTENTION: Utilisez des conducteurs en cuivre ou en aluminium avec recouvrement cuivré.

French Translation, Clause 11.1.17:

8. ATTENTION: Utilisez des conducteurs en cuivre, en aluminium avec recouvrement cuivré, ou en aluminium.

French Translation, Clause 11.1.18:

9. ATTENTION: N'UTILISEZ PAS DE PROLONGATEUR.

French Translation, Clause 11.1.19:

10. ATTENTION: Danger de choc électrique. Plus d'une source d'alimentation. Débranchez toutes les sources d'alimentation avant d'effectuer le service.

French Translation, Clause 11.1.23:

11. Remplacez par des ampoules 250 volts seulement.

General Instruction No. 3
C22.2 No. 63-93
UL 250
October 1994

CSA Standard C22.2 No. 63-93, *Household Refrigerators and Freezers,* was published in November 1993; it consisted of **94 pages**, each dated **November 1993.**

Errata in the form of replacement pages were published in February 1994 (see General Instruction No. 2).*

**If you do not have General Instruction No. 2, please contact CSA, Information Product Sales.*

An amendment to Clause 4.8.1.5 and the addition of Clause 4.8.1.5A have been formally approved and are incorporated (and identified by a vertical line in the margin) in the attached replacement pages.

CSA Standard C22.2 No. 63-93 now consists of the following pages:

3–18 and **23–92** dated **November 1993;**
93 and **94** dated **February 1994;** and
19–22 dated **October 1994.**

These replacement pages are to be inserted into your copy of the Standard; the pages replaced should be kept for reference.

4.6.6 The mounting location of the accessory shall be indicated on the refrigerator.

Exception: If the mounting location is fixed due to the function of the accessory and arrangement of the refrigerator, and instructions are provided covering the installation and location for the accessory, the mounting location of the accessory need not be indicated on the refrigerator.

4.6.7 As part of the investigation, accessories are to be trial-installed as necessary to determine that their installation is acceptable and that the instructions are detailed and correct.

4.7 Latch-release mechanism

4.7.1 Except as indicated in Clause 4.7.7, a door or lid permitting entry into a refrigerated storage space that has a minor dimension of 203.2 mm (8 inches) or more and a volume of 0.06 m^3 (2 cubic feet) or more, with any arrangement or removal of shelving, shall be constructed so that it will open easily from the inside by a force applied outwardly to the door or to a release actuator. See door latch release test, Clause 8.28.[a]

4.7.2 With reference to Clause 4.7.1, shelving is defined as any shelf, basket, drawer, or baffle that can be removed from the refrigerator without the use of tools.[a]

4.7.3 Interior latch-release actuators shall function with the refrigerator in its intended operating position and shall be operable from all spaces that are directly accessible when the door(s) is opened.[a]

4.7.4 A magnetic door gasket is considered a door-latching device.

4.7.5 A latch-release device shall not depend on an electrical source for operation.[a]

4.7.6 A latch-release device shall be constructed so that cleaning or defrosting in accordance with the manufacturer's recommendations, or normal condensation will not affect compliance with the door latch release test, Clause 8.28.[a]

4.7.7 A key-lock that cannot be released from the inside is acceptable if the construction complies with all the conditions specified in Items (a) — (d):

a) the refrigerator complies with the requirements of Clauses 4.7.1, 4.7.3, 4.7.5, and 4.7.6 in the unlocked position;

b) the lock is of the nonself-engaging type;

c) the key slot is spring loaded or equivalent so that the key must be manually held in the lock in any position of the lock; and

d) the key is permanently marked as indicated in Clause 11.1.15.

[a] 16 CFR 1750

4.8 Polymeric materials — application

4.8.1 General

4.8.1.1 The requirements in Clauses 4.8.1.2 — 4.8.1.7, apply to polymeric materials for use in household refrigerators and freezers. These requirements do not apply to control knobs, buttons, insulating bushings, resilient mounts, clamps, wiring straps, seals including door gaskets, door handles, coated metal, food storage components such as shelves, pans, and trays or other small nonfunctional parts. As a guide, small nonfunctional parts may be considered those having an area of less than 0.093 m^2 (1 square foot) and that do not provide direct or indirect support of live parts.

4.8.1.2 Among the factors that are taken into consideration when judging the acceptability of a polymeric material are (1) flame resistance, (2) mechanical strength, (3) resistance to impact, (4) moisture absorptive properties, and (5) resistance to distortion at temperatures to which the material may be subjected under conditions of normal or abnormal usage. All of these factors are considered with respect to aging.

4.8.1.3 Polymeric materials used in areas where the effects of an adjacent lamp may result in distortion shall comply with the requirements in the distortion test, Clause 9.16.

4.8.1.4 Polymeric materials shall be isolated from ignition sources. Ignition sources within the unit are considered to be line-voltage wiring and any electrical components, such as coil windings, splices, open type switches, or arcing parts not enclosed in metal or a polymeric material that has been evaluated as an enclosure. Metal not less than 0.13 mm (0.005 inch) thick, fiberglass not less than 12.7 mm (0.5 inch) thick, or a polymeric material classed as 94-5V or 0.17-5V or as an electrical enclosure, are acceptable barriers for isolation of ignition sources.

Exception No. 1: Impedance protected motors employing open-coil construction need not be isolated as indicated above if they comply with the burnout test — impedance protected motors, Clause 9.13.

Exception No. 2: Wiring need not be isolated as indicated above if it is separated from 94HBF, 94HB, 0.17HBF, or 0.17HB materials by positive clamping and routing at a minimum of 6.4 mm (1/4 inch). Wiring need not be isolated from 94-5V, 94V-0, 94V-1, 94V-2, 94HF-1, 94HF-2, 0.17-5V, 0.17V-0, 0.17V-1, 0.17V-2, 0.17HF-1, or 0.17HF-2 materials.

Exception No. 3: Wiring need not be isolated if it complies with the VW-1 flame test described in the Reference Standard for Electrical Wires, Cables, and Flexible Cords, UL 1581, or FT1 flame test described in Test Methods for Electrical Wires and Cables, CSA Standard C22.2 No. 0.3.

Exception No. 4: Wiring need not be isolated from 94HB, 94HBF, 0.17HB, or 0.17HBF materials if the part is additionally evaluated under conditions of the electrical disturbance test, Clause 9.14, or hot wire ignition test, Clause 9.12.

4.8.1.5 Thermal insulation located between an outer metal cabinet or door and inner liner of a refrigerator need not be tested for flammability if (1) all entrance and exit holes for wiring located within this volume are sealed, and (2) either the securement of the outer cabinet surfaces is inherent in the construction or the maximum spacing between screws, spot welds, or other securement means on the outer metal cabinet does not exceed 152.4 mm (6 inches).

4.8.1.5 revised October 1, 1994

4.8.1.5A Thermal insulation located between a non-metallic outer cabinet or door and an inner liner of a refrigerator need not be tested for flammability if (1) all entrance and exit holes for wiring located within this volume are sealed, (2) either the securement of the outer cabinet surfaces is inherent in the construction, or the maximum spacing between screws or other securement means on the outer cabinet does not exceed 152.4 mm (6 inches), (3) ignition sources (including line voltage wiring) are isolated as described in Clauses 4.8.1.4, 4.8.1.6 and 4.8.1.7, and (4) the radiant panel or Flame Spread Test, Clause 9.9, is conducted on the cabinet and/or door materials.

4.8.1.5A added October 1, 1994

4.8.1.6 The tests that may be conducted are identified in Table 4.2. Table 4.3 specifies the tests applicable to the polymeric part being evaluated.

4.8.1.7 A lampholder or switch that controls only a light, or fan motor, ice maker, dispenser auger motor, anti-condensate heater, or similar load located within the confines of a food storage compartment, may be mounted on a polymeric part provided that:

a) wiring is separated or isolated from the polymeric material (see Clause 4.8.1.4);

b) leads are integral to the component or are provided with insulated terminations; and

c) the switch or lampholder has no uninsulated live parts after insulated terminals are connected as judged by the requirements of assembly, Clause 4.5.

Table 4.2 — Test summary

1	Electrical Enclosure Flammability, Clause 9.1
2	Vertical Burning Test - 94-5VA, 94-5VB, 0.17-5VA, and 0.17-5VB Materials, Clause 9.2
3	Vertical Burning Test - 94V-0, 94V-1, 94V-2, 0.17V-0, 0.17V-1, or 0.17V-2 Materials, Clause 9.3
4	Horizontal Burning Test - 94HB or 0.17HB Materials, Clause 9.4
5	Horizontal Burning Test - 94HBF, 94HF-1, 94HF-2, 0.17HBF, 0.17HF-1, or 0.17HF-2 Foamed Materials, Clause 9.5
6	Mold Stress-Relief Test, Clause 9.6
7	Fastener Strength Test, Clause 9.7
8	Adhesive Test, Clause 9.8
9	Flame Spread Test[a], Clause 9.9
10	Volume Resistivity Test, Clause 9.10
11	High Current Arc Ignition Test, Clause 9.11
12	Hot Wire Ignition Test, Clause 9.12
13	Electrical Disturbance Test, Clause 9.14
14	Impact Test, Clause 8.30

[a]As an alternate, the radiant panel method in the Test Method for Surface Flammability of Materials Using a Radiant Heat Energy Source, ASTM E162-1990 can be employed.