



New Standards & Editions

C22.1-02, 19th edition

Canadian Electrical Code, Part I (19th edition), Safety Standard for Electrical Installations \$80

The new, 19th edition of the *Canadian Electrical Code* is now available – in three convenient formats: **spiral-bound** (\$80), **looseleaf-with-binder** (\$90), and **PDF** (\$80).

The object of this Code is to establish safety standards for the installation and maintenance of electrical equipment. In its preparation, consideration has been given to the prevention of fire and shock hazards, as well as proper maintenance and operation.

Compliance with the requirements of this Code and proper maintenance will ensure an essentially safe installation.

This Code is not intended as a design specification nor an instruction manual for untrained persons.

This Code covers all electrical work and electrical equipment operating or intended to operate at all voltages in electrical installations for buildings, structures, and premises, including factory-built relocatable and non-relocatable structures, and self-propelled marine vessels stationary for periods exceeding five months and connected to a shore supply of electricity continuously or from time to time, with the following exceptions:

- installations or equipment employed by an electric, a communication, or a community antenna distribution system utility in the exercise of its function as a utility, and located outdoors or in buildings or sections of buildings used for that purpose
- equipment and facilities that are used in the operation of an electric railway and that are supplied exclusively from circuits that supply the motive power
- installations or equipment used for railway signalling and railway communication purposes located outdoors or in buildings or sections of buildings used exclusively for such installations
- aircraft
- electrical systems in ships which are regulated under Transport Canada, Marine Safety, Ship Electrical Standards.

For mine and quarry applications, see also CSA's standard CAN/CSA-M421.

Proposed New Projects

For more information about the proposed development of the following new edition, contact John O'Neill at 416-747-4042 or john.oneill@csa.ca:

- **C227.2, 4th edition**
Three-Phase, Live-Front Pad-Mounted Distribution Transformers

For more information about the proposed development of the following new edition, contact Denis Vaz at 416-747-2519 or denis.vaz@csa.ca:

- **C22.2 No. 96.1, 1st edition**
Mine Power Feeder Cables

Drafts

Please note: Public comments about the following draft standards and proposed amendments are due by April 15, 2002.

To receive copies, or to offer comments, contact Annie Pereira at 416-747-4094 or annie.pereira@csa.ca:

- **C22.2 No. 18.4, 1st edition**
Conduit and Cable Support Hardware
- **C22.2 No. 84-95, proposed amendments**
Incandescent Lamps
Proposed amendment to Clause 1.1 and Figures 2 and 4.
- **C22.2 No. 112-97, proposed amendments**
Electric Clothes Dryers
Proposed amendments to various clauses.
- **C22.2 No. 179-00, proposed amendments**
Airport Series Lighting Cables
Proposed amendments to Clauses 1.1, 6.4.1.2, and 6.6.4.2, and the proposed deletion of Clause 6.4.2.2.
- **C199, 3rd edition**
Three-Phase Network Distribution Transformers
- **C301.1, 2nd edition**
Single-Phase Submersible Distribution Transformers
- **C301.2, 2nd edition**
Three-Phase Submersible Distribution Transformers



Proposed Adoption of Standards

Note: Public comments about proposed adoptions listed in this issue are due by April 15, 2002.

For more information about the proposed adoption of the following IEC standards, or to offer comments, contact David Hulford at 416-747-2740 or david.hulford@csa.ca:

- **IEC 60691-am1 (1995)**
Thermal-links—Requirements and Application Guide (Amendment 1)
- **IEC 60691-am2 (2000)**
Thermal-links—Requirements and Application Guide (Amendment 2)
- **IEC 60730-2-4-am2 (2001)**
Automatic Electrical Controls for Household and Similar Use—Part 2: Particular Requirements for Thermal Motor Protectors for Motor Compressors of Hermetic and Semi-hermetic Type (Amendment 2)

For more information about the proposed adoption of the following electromagnetic compatibility (EMC) standards, contact John O'Neill at 416-747-4042 or john.oneill@csa.ca:

- **CISPR 16-1 (1999)**
Specification for Radio Disturbance and Immunity Measuring Apparatus and Methods—Part 1: Radio Disturbance and Immunity Measuring Apparatus
- **CISPR 16-2 (1999)**
Specification for Radio Disturbance and Immunity Measuring Apparatus and Methods—Part 2: Methods of Measurement of Disturbances and Immunity

For more information about the proposed adoption of the following IEC standards, contact John O'Neill at 416-747-4042 or john.oneill@csa.ca:

- **IEC 60871-1 (1997)**
Shunt Capacitors for A.C. Power Systems Having a Rated Voltage Above 600V—Part 1: General Performance, Testing and Rating Safety Requirements—Guide for Installation and Operation
- **IEC 60871-2 (1999)**
Shunt Capacitors for A.C. Power Systems Having a Rated Voltage Above 600V—Part 2: Endurance Testing

Proposed Withdrawal of Standards

For more information about the proposed withdrawal of the following standards, contact Michael Henville at 416-747-2227 or michael.henville@csa.ca:

- **C22.2 No. 59.1-M1987 (R1997)**
Fuses (Both Plug and Cartridge-Enclosed Types)
- **C22.2 No. 59.2-M1986 (R1997)**
Supplemental Fuses
- **C22.2 No. 59.3-M90 (R1997)**
DC Rated Fuses

Reaffirmed Standards

CAN/CSA-C22.2 No. 71.2-M89 (R2001)
Electric Bench Tools

C22.2 No. 152-M1984 (R2001)
Combustible Gas Detection Instruments

CAN/CSA-C22.2 No. 243-96 (R2001)
Vacuum Cleaners, Blower Cleaners and Household Floor Finishing Machines

CAN/CSA-C22.2 No. 1010.1B-97 (R2001)
Amendment 2 to CAN/CSA-C22.2 No. 1010.1-92, "Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use, Part 1: General Requirements" (Adopted Amendment 2:1995 to IEC 1010-1 (1990))



Informs Notices (Bulletins from CSA Certification and Testing)

Date	Subject	Title
December 10, 2001	Publication of CSA standard CAN/CSA-E60335-2-82-01, <i>Safety of Household and Similar Electrical Appliances—Part 2-82: Particular Requirements for Service Machines and Amusement Machines.</i>	Audio and Video Equipment No. 14
December 21, 2001	Publication of tri-national standards for fuses, CSA C22.2 No. 248 Series. (Supplements Informs "Fuses No. 6A.")	Fuses No. 6B
December 31, 2001	Withdrawal of Technical Information Letter (TIL) No. A-27, covering interim certification requirements for metal cable tray systems.	Cable Tray Systems No. 5

Certification Notices

Please note: ▶ Notices marked with an arrowhead are new in this issue.

Effective Date	Subject	Title
March 1, 2002	Interim certification requirements for flexible light cable systems.	Lighting Products No. 37
▶ April 16, 2002	Amendment to the second edition of UL 1786, <i>Nightlights</i> .	Lighting Products No. 38
June 1, 2002	Publication of CAN/CSA-C22.2 No. 745-1 and CAN/CSA-C22.2 No. 745-2 (<i>Portable Electric Tools</i>), and CAN/CSA-C22.2 No. 745-3 and CAN/CSA-C22.2 No. 745-4 (<i>Portable Battery-Operated Tools</i>).	Electrical Tools No. 6
▶ August 1, 2002	Publication of TIL No. A-28, regarding interim certification requirements for non-metallic outlet boxes in ceiling installations.	Wiring Devices No. 21



Status of CSA Standards Projects

TYPE: ns new standard; ne new edition; spec special publication; p preliminary standard.

STATUS: 1 The project is under initial evaluation.

2 The technical content is being drafted.

3 The draft is undergoing an internal quality audit by CSA.

4 The publication is being processed for formal letter-ballot approval.

5 The approved publication will be for sale within 2–3 months.

H The publication is on hold.

C The publication has been cancelled. It will be removed from the next status report.

SUBJECT	NUMBER	TYPE	STATUS
Wiring Products			
Metal Outlet Boxes	C22.2 No. 18.1	ns	3
Conduit and Cable Fittings	C22.2 No. 18.3	ns	3
Conduit and Cable Support Hardware	C22.2 No. 18.4	ns	3
Wire-Positioning Devices	C22.2 No. 18.5	ns	4
Lampholders	C22.2 No. 43	ne	1
Flexible Cords and Cables	C22.2 No. 49	ne	1
Non-metallic Surface Raceways	C22.2 No. 62.1	ns	3
Wire Connectors	C22.2 No. 65	ne	3
Thermoplastic-Insulated Wires and Cables (Tri-national standard)	C22.2 No. 75	ne	4
Portable Power Cables	C22.2 No. 96	ne	2
Mine Power Feeder Cables	C22.2 No. 96.1	ns	2
Metal Cable Tray Systems	C22.2 No. 126.1	ne	3
Non-metallic Cable Tray Systems	C22.2 No. 126.2	ns	3
Neutral Supported Cable	C22.2 No. 129	ne	2
Heat Tracing Cable Systems for Ordinary and Hazardous Locations	C22.2 No. 130	ne	3
Plugs, Receptacles and Cable Connectors of the Pin and Sleeve Type	C22.2 No. 182.1	ne	4
Communications Cables	C22.2 No. 214	ne	5
Liquid-Tight Flexible Nonmetallic Conduit	C22.2 No. 227.2.1	ns	3
Flexible Non-metallic Tubing	C22.2 No. 227.3	ne	2
Industrial Products			
Adhesive Labels	C22.2 No. 0.15	ne	5
Enclosed Switches	C22.2 No. 4	ne	3
Moulded Circuit Breakers	C22.2 No. 5	ne	4
Industrial Control Equipment	C22.2 No.14	ne	2
Panelboards and Enclosed Panelboards	C22.2 No. 29	ne	3
Switchgear Assemblies	C22.2 No. 31	ne	4
Battery Chargers	C22.2 No. 107.2	ne	4
Safety of Uninterruptible Power Supplies (UPS)–Part 1	C22.2 No. 107.3	ns	3
Ground Fault Circuit Interrupters	C22.2 No. 144	ne	1
Switchboards	C22.2 No. 244	ns	1
Neon and Cold Cathode Supplies	C22.2 No. 255	ns	2
Electrical Apparatus for Explosive Gas Atmospheres—			
— Part 0: General Requirements	E60079-0	ne	5
— Part 1: Construction and Verification Test of Flameproof Enclosures of Electrical Apparatus	E60079-1	ne	5
— Part 2: Electrical Apparatus—Type of Protection "P"	E60079-2	ne	5
— Part 5: Powder Filling "Q"	E60079-5	ne	5
— Part 6: Oil Immersion "O"	E60079-6	ne	5
— Part 11: Intrinsic Safety "I"	E60079-11	ne	5



Status of CSA Standards Projects (cont'd)

SUBJECT	NUMBER	TYPE	STATUS
Industrial Products (cont'd)			
Electrical Apparatus for Explosive Gas Atmospheres— — Part 14: Electrical Installations in Explosive Gas Atmospheres (Other Than Mines)	E60079-14	ne	5
— Part 15: Electrical Apparatus with Type of Protection "N"	E60079-15	ne	5
Arc Welding Equipment—Part 7: Torches	E60974-7	ns	5
Electrical Apparatus for Use in the Presence of Combustible Dust— Part 1: Electrical Apparatus Protected by Enclosures—Section 1: Specifications for Apparatus	E61241-1-1	ne	5
Consumer and Commercial Products			
Landscape Lighting	C22.2 No. 9.1	ns	H
Portable Luminaires	C22.2 No. 9.12	ne	1
Christmas Tree and other Decorative Lighting Outfits	C22.2 No. 37	ne	1
Unit Equipment for Emergency Lighting	C22.2 No. 141	ne	3
Central System for Unit Equipment for Emergency Lighting	C22.2 No. 141.1	ns	2
Electrostatic Air Cleaners	C22.2 No. 187	ne	2
Radiant Space Heating Panels, Panel Sets, and Systems	C22.2 No. 217	ne	H
Direct Plug-in Portable Luminaires	C22.2 No. 256	ns	3
Safety of Household and Similar Electrical Appliances—Part 1: General Requirements	E60335-1/4E	ne	2
Luminaires—Part 1: General Requirements and Tests	E60598-1	ne	5
Luminaires—Part 2: Particular Requirements—Section 5: Floodlights	E60598-2-5	ne	5
Automatic Electrical Controls for Household and Similar Use — — Part 1: General Requirements	E60730-1/3E	ne	3
— Part 2: Electrically Operated Water Valves, Including Mechanical Requirements	E60730-2-8	ne	5
— Part 2: Temperature Sensing Controls	E60730-2-9	ne	5
CE Code, Part III – Outside Wiring			
Overhead Systems	C22.3 No. 1	ne	5
Electrical Engineering			
Single-Phase and Three-Phase Distribution Transformers, Types ONAN and LNaN	C2	ne	3
Pole-Mounted, Single-Phase, Distribution Transformers for Electric Utilities	C2.2	ns	3
Three-Phase Network Transformers	C199	ne	3
Low-Profile, Single-Phase, Pad-mounted Distribution Transformer with Separable Insulated High-Voltage Connectors	C227.3	ne	3
Three-Phase, Pad-mounted Distribution Transformers with Separable Insulated Connectors	C227.4	ne	3
Three-Phase, Live-Front Pad-mounted Distribution Transformers	C227.5	ns	2
Single-Phase, Submersible Distribution Transformers, Type ONAN	C301.1	ne	3
Three-Phase, Submersible Distribution Transformers, Type ONAN	C301.2	ne	3
Aluminium-Magnesium-Silicon Alloy Wire for Overhead Line Conductors	IEC 60104	ns	3
Zinc-coated Steel Wires for Overhead Line Conductors	IEC 60888	ns	3
Hard-drawn Aluminium Wire for Overhead Line Conductors	IEC 60889	ns	3
Round Wire Concentric Lay Overhead Electrical Stranded Conductors	IEC 61089	ns	3
Aluminum-clad Steel Wires for Electrical Purposes	IEC 61232	ns	3



Status of CSA Standards Projects (cont'd)

SUBJECT	NUMBER	TYPE	STATUS
Electromagnetic Compatibility			
Electromagnetic Compatibility (EMC)–Part 4: Testing and Measurement Techniques–Section 8: Power Frequency Magnetic Field Immunity Test–Basic EMC Publication	61000-4-8	ns	3
Electromagnetic Compatibility (EMC)–Part 4: Testing and Measurement Techniques–Section 9: Pulse Magnetic Field Immunity Test–Basic EMC Publication	61000-4-9	ns	3
Electromagnetic Compatibility (EMC)–Part 4-16: Testing and Measurement Techniques–Test for Immunity to Conducted, Common Mode Disturbances in the Frequency Range 0 Hz to 150 Hz	61000-4-16	ns	3
Electromagnetic Compatibility (EMC)–Part 4-17: Testing and Measurement Techniques–Ripple on D.C. Input Power Port Immunity Test	61000-4-17	ns	3
Information Technology Equipment–Radio Disturbance Characteristics–Limits and Methods of Measurement	CISPR 22	ne	3