

*The
Canadian Electrical
Code (Saskatchewan
Amendments)
Regulations, 1999*

Repealed

by Chapter E-6.3 Reg 8 (effective June 24, 2003).

Formerly

Chapter E-6.3 Reg 6 (effective March 18, 1999).

NOTE:

This consolidation is not official. Amendments have been incorporated for convenience of reference and the original statutes and regulations should be consulted for all purposes of interpretation and application of the law. In order to preserve the integrity of the original statutes and regulations, errors that may have appeared are reproduced in this consolidation.

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- 1 Title
- 2 *Canadian Electrical Code* amended
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Appendix

CHAPTER E-6.3 REG 6

The Electrical Inspection Act, 1993

Title

1 These regulations may be cited as *The Canadian Electrical Code (Saskatchewan Amendments) Regulations, 1999*.

Canadian Electrical Code amended

2 Part I of the latest prescribed edition of the *Canadian Electrical Code*, being Canadian Standards Association standard C22.1-1998, is amended in the manner set forth in the Appendix.

19 Mar 99 cE-6.3 Reg 6 s2.

R.R.S. c.E-6.3 Reg 3 repealed

3 *The Canadian Electrical Code (Saskatchewan Amendments) Regulations, 1995* are repealed.

19 Mar 99 cE-6.3 Reg 6 s3.

Appendix

PREFACE AND SCOPE

The Canadian Electrical Code, Eighteenth Edition, as supplemented and amended by these requirements, issued under section 5 of *The Electrical Inspection Act, 1993*, shall govern the workmanship and all other matters whatever pertaining to electrical equipment and the installation of electrical equipment in or upon any land, buildings, structures and premises. It contains supplementary and amendatory requirements which by their inclusion herein are adopted as requirements under section 5 of *The Electrical Inspection Act, 1993*.

Section 0: Definitions

Section 0 is supplemented by the following:

Temporary Wiring means a wiring installation to be utilized for a period not exceeding 90 days, unless otherwise stipulated.

Section 2: General Rules

2-014 Plans and Specifications

Rule 2-014 is deleted and the following substituted:

(1) One copy of plans and specifications (or in greater number if required by the inspection department) as required by section 19 of the Act shall be submitted to the inspection department for examination and review prior to construction for:

- (a) Wiring installations of public buildings, industrial establishments, factories, and other buildings in which public safety is involved; or
- (b) Large light and power installations and the installation of apparatus such as generators, transformers, switch boards or large storage batteries; or

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- (c) Wiring installations where ampacities exceed 200 A or voltages exceed 300 V, and in hazardous locations, other than a service station or oil well that has an ampacity equal to or less than 200 A or a voltage equal to or less than 300 V; or
 - (d) Such other electrical installations as may be prescribed by the inspection department.
- (2) Plans for low voltage installations shall contain the following:
- (a) Calculated loads;
 - (b) Main and feeder sizes;
 - (c) Maximum short circuit current available at each point of application of protective devices in installations exceeding 600 A; and
 - (d) A schematic (one-line diagram) indicating all voltages of the proposed installation.
- (3) Plans for high voltage installations containing the following must be submitted, and a report obtained from the inspection department, before a service connection is authorized:
- (a) Schematic (one-line diagram) complete with:
 - (i) All voltages of proposed installation;
 - (ii) Transformer bank capacity;
 - (iii) Primary and secondary protective and switching devices and short circuit ratings;
 - (b) Site plan;
 - (c) Electrical arrangement complete with:
 - (i) Plan, elevation and profile views of the electrical and physical arrangement of the equipment;
 - (ii) Dimensions to clearly indicate the electrical, physical, and work clearances and relative locations of the equipment;
 - (iii) Fencing arrangement;
 - (iv) Grounding details;
 - (v) Provisions for metering equipment;
 - (vi) Copy of electrical specifications.
- (4) Unless requested by the submitter, only those plans with main services of 600 A or voltages 300 V and above will be reviewed and a written report prepared and returned.
- (5) All plans must comply with the requirements of *The Engineering and Geoscience Professions Act*.

2-023 Removal of Substandard Equipment

Rule 2-023 is added.

All dead or unused conductors and equipment which do not conform to present requirements shall either be removed from the building, where exposed, or otherwise rendered useless for electrical purposes, to the satisfaction of the Inspector.

2-033 Lightning Protection

Rule 2-033 is added.

Installation of systems for the protection of buildings and other structures from lightning damage shall comply with CAN/CSA B72-M 87 Installation Code for Lightning Protection Systems.

2-035 Oil and Gas Field Installations

Rule 2-035 is added.

Installations for oil and gas fields must comply with the *Code for Electrical Installations at Oil and Gas Facilities 1998* published by SaskPower and dated November 1, 1998.

2-202(4) Cables Awaiting Utilization Equipment

Subrule 2-202(4) is added.

(4) Where utilization equipment is not available for connection, the circuits shall be terminated in a junction box complete with cover.

Section 4: Conductors

4-028 Identification of Insulated Neutral Conductors up to and including No. 2 AWG Copper and Aluminum

Subrule 4-028(4) is added.

(4) For multi conductor Teck Cable the insulated neutral conductor shall be permitted to be permanently marked as the identified conductor by painting or other suitable means at every point where the separate conductors have been rendered accessible and visible by removal of the outer covering of the cable. The painting or other suitable means of marking the identified conductor shall not be permitted to obscure the manufacturers numbering of the conductors.

Section 6: Services and Service Equipment

6-111 Renewal of Services

Rule 6-111 is added.

(1) Where a building is relocated, or where additional loading exceeds the capacity of the service in an existing structure, a new service entrance of adequate capacity shall be installed to replace the substandard service.

(2) Where a permit is required for connection or re-connection of an electric service, the electrical service shall be made to comply with the requirements of the current Canadian Electrical Code.

(3) Notwithstanding Subrule (2), if the permit for connection or re-connection is required as the result of an accident or an act of God, the service will be permitted to be repaired to its existing standard.

6-113 Customer-Owned Poles

Rule 6-113 is added.

- (1) Additional poles required for support of overhead conductors shall be:
 - (a) 7.5 m or more in length with a minimum top diameter of 125 mm; and
 - (b) Set into the ground at least 1.5 m; and
 - (c) Treated for prevention of rot; and
 - (d) Guyed at corners and deadends.
- (2) Installation or addition of overhead conductors shall be made only if the pole is capable of withstanding the resultant directional stresses.

6-206 Consumers Service Equipment Location

Paragraph (e) of Subrule 6-206(1) is deleted and the following substituted therefor:

- (e) Within 6 m of the point where the service conductors enter the building provided such conductors are in rigid conduit, EMT, metal armour, or metal sheathing. If over 6 m, the service equipment shall be as close as practicable to the point where the conductors enter the building, and the conductors must be run in threaded metal (steel) conduit for the entire length.
- (f) Not recessed in walls containing thermal insulation.

6-312 Condensation in Service Conduit

Subrule 6-312(1) is deleted and the following substituted therefor:

- (1) Where condensation is likely to occur due to changes in temperature, consumer's service raceway or the equivalent shall be effectively drained outdoors and sealed with an electrically approved duct sealant.

Section 26: Installation of Electrical Equipment

26-701 Receptacles

Rule 26-701 is added.

A maximum of 4 wires and a ground may be connected to a duplex receptacle.

26-702 Receptacles in Residential Occupancies

Subrule 26-702(19) is deleted and the following substituted therefor:

- (19) All receptacles installed outdoors of single-family dwellings and located within 2.5 m of ground or grade level or raised platforms with access to ground shall be protected by a ground fault interrupter of Class A Type.

Subrule 26-702(25) is added as follows:

(25) Where receptacles are required for outdoor wheel chair lifts they must be a single locking receptacle connected to a separate circuit and must not be ground fault protected.

26-954 Deep Well Submersible Pumps Installed in Wells

Paragraph 26-954(e) is added.

(e) Metal well casing shall be bonded to the equipment grounding means.

Electrically Driven Pivot Irrigation Machines

Rules 26-1100 through 26-1110 are added to Section 26 as follows:

26-1100 General

Rules 26-1102 to 26-1110 apply to pivot type multi-motor irrigation machines which revolve around a central pivot and employ alignment switches or similar devices to control individual motors.

26-1102 Several Motors on One Branch Circuit

(1) Several motors, each not exceeding 2 H.P. rating, may be used on an irrigation machine circuit protected at not more than 30 amperes at 600 volts or less, provided all of the following conditions are met:

- (a) The full-load rating of any motor in the circuit shall not exceed 6 amperes.
- (b) Each motor in the circuit shall have individual running overload protection in accordance with Section 28.
- (c) Taps to individual motors shall not be smaller than 14 AWG copper and not more than 7.5 m in length.

(2) Individual branch-circuit short-circuit protection for motors and motor controllers shall not be required where the requirements of subrule (1) are met.

26-1104 Disconnecting Means

The main disconnecting means for a machine shall be located at the point of connection of electrical power to the machine, be readily accessible and capable of being locked in the open position, and have the same horsepower and current ratings as required for the main controller.

26-1106 Interconnecting Wiring

(1) Wiring to interconnect the unit collector rings, control panels and motors may be multi-conductor, jacketed cables suitable for outdoor use, suitable for hard usage according to Table 11, and have a grounding conductor.

(2) Cables may be supported along water pipe sections between towers.

(3) Supporting of cables shall be at intervals not exceeding 1.2 m and within 300 mm of terminal fittings by means of straps, hangers or similar fittings.

- (4) Where routing of cables is such that additional strain might be imposed on terminal fittings, supplemental strain relief shall be provided.
- (5) Protection by location, or by supplemental means shall be provided for cables subject to mechanical damage such as at tower drive motors.

26-1108 Lightning Protection

If an irrigation machine has a stationary point, a driven ground rod shall be connected, with minimum #6 AWG copper conductor to the machinery at the stationary point for lightning protection.

26-1110 Ground Fault Protection

Connection and re-connection of new and existing irrigation equipment must meet the requirements of the current CEC Part 2 standards with respect to ground fault protection.

Section 30: Installation of Lighting Equipment

30-302 Supports

Subrule 30-302(6) is added:

- (6) Lighting fixtures installed in or on suspended ceilings shall be provided with supplementary means of support unless written confirmation is submitted to the effect that the suspended ceiling has been designed to support the additional weight of the fixtures.

30-326 Switches

Subrule 30-326(3) is deleted and the following substituted therefor:

- (3) Switches (including wall switches) controlling lampholders or luminaires covered by Subrules (1) and (2) shall, where practicable, be located at least 1 m but in no case less than 500 mm from a bathtub or shower stall, this distance being measured horizontally between the switch and the bathtub or shower stall, without piercing a wall, partition, or similar obstacle.

Section 32: Fire Alarm Systems and Fire Pumps

32-110 Installation of Smoke Alarm Devices in Dwelling Units

Paragraph 32-110(e) is added:

- (e) New construction of residential units shall be pre-wired at the time of construction to accommodate smoke alarms as required by the National Building Code plus one location in the basement, to be terminated in a junction box c/w cover plate and labelled.

**Section 68: Swimming Pools, Therapeutic Pools
and Hydromassage Bathtubs**

68-300 Protection

Rule 68-300 is deleted and the following substituted therefor:

Electrical equipment forming an integral part of a hydromassage bathtub shall be protected by a ground fault circuit interrupter of the Class A Type and fed by a dedicated circuit serving no other equipment.

68-401 Protection

Rule 68-401 is added:

All spas and hot tubs and their associated electrical equipment shall be protected by a ground fault circuit interrupter of the Class A Type.

19 Mar 99 cE-6.3 Reg 6.

