

# **Bylaw No. 3655**

## **The Electric Equipment Bylaw, 1958**

**Codified to Bylaw No. 9634  
(August 26, 2019)**

## **BYLAW NO. 3655**

A bylaw of The City of Saskatoon regulating and controlling the installation of electrical equipment in the City of Saskatoon.

The Council of the City of Saskatoon enacts as follows:

1. (1) No person shall install, alter or repair any electric wiring or apparatus, or use electric current for illumination, decoration, power, heating, wireless receiving or wireless transmitting stations, except in accordance with the provisions of *The Electrical Inspection Act, 1993*, the regulations issued thereunder and the provisions of this bylaw.
- (2) No person shall install, alter or repair any electric wiring or apparatus for fee or reward unless the person holds a contractor's interim permit or license under *The Electrical Licensing Act, 1993*.
- (3) In this bylaw, the word "fuse" shall include other approved overload protective devices.
2. (1) All electrical installations shall be made in accordance with the latest authorized edition of the Canadian Electrical Code, and any additions or amendments issued from time to time by the SaskPower Electrical Inspections Department of the Department of Labour (Province). Rules or instructions of the SaskPower Electrical Inspections Department governing special installations such as elevators, garages, theatres and other similar buildings shall be read in conjunction with general sections of the Code covering the classifications of wiring specified.
- (2) The following sections of this bylaw are to be read in conjunction with the Code and the rules of the SaskPower Electrical Inspections Department and are to be considered as amplifications of the Code or rules as the case may be.
- (3) Any building in which more than thirty-three percent (33%) of the entire wiring installation (measured in lineal feet) is to be altered shall be completely rewired in accordance with the requirements of the Code. Minor alterations or additions may be made in accordance with existing wiring methods providing approved material (as hereinafter defined) is used.
4. (1) Only material and fittings which have been approved by an authority recognized by the SaskPower Electrical Inspections Department for the authorized service requirements shall be used. Material which is below the standard of the sample, on which approval has been granted, shall be rejected.

- (2) Lists of approved fittings and material on file at the SaskPower Electrical Inspections Department shall govern in all cases.
  - (3) Poorly executed or badly arranged work shall not be accepted.
5.
  - (1) The inspectors of the SaskPower Electrical Inspections Department shall have power to inspect any electrical installation previous to and after its completion, and during reasonable hours to enter all public and private buildings for the purpose of such inspection. It shall be competent for them or either of them to remove or have removed any existing obstructions which may prevent a perfect inspection of the current carrying conductors.
  - (2) Reinspection shall be made periodically by the said inspectors as may be deemed necessary.
6. All new installations of every description must be fully completed and approved before connection will be made to the distribution system of the department. In the case of alterations to existing wiring, no current must be used prior to approval of the inspector.
7.
  - (1) Where electric service is desired during the course of building construction or other similar reasons a temporary service shall be installed. This service shall be separate from any wiring or electrical devices being installed in the building being constructed. Such temporary service must be installed in a weather proof cover satisfactory to the Director of Saskatoon Light & Power and must comply in every respect to the regulations of the SaskPower Electrical Inspections Department. Such service shall be known as Construction Service.
  - (2) In such cases where electrical energy is required to operate heating devices in a partially constructed building, the Director of Saskatoon Light & Power may authorize the use of one circuit of the regular electrical installation of the building for this purpose subject to the approval of the SaskPower Electrical Inspections Department. Such service to be provided between the dates of the first day of October and the following fifteenth day of April only.
8. Certificates of Inspection shall be issued in the form prescribed by the SaskPower Electrical Inspections Department, and no person shall connect any electrical installation until a connection permit or temporary connection permit has been issued by the authorized inspector.

9. The Director of Saskatoon Light & Power, or the Fire Chief, or their authorized agents, are hereby empowered to inspect or reinspect all overhead, underground and interior wires and apparatus conducting current for light, heat, power, telephone, telegraph or for any other purpose. Should such conductor or apparatus be found not in conformity with the regulations of this or other bylaws of this City, the person or persons owning, using or operating them shall be notified to correct these conditions within a period of fifteen (15) days. Where conductors or apparatus be found in such condition as to be dangerous to life or property, a period not exceeding forty-eight (48) hours will be allowed to place them in a safe condition. Any person or persons so notified must comply with the notice within the above mentioned periods. Where electric service is being given such service shall terminate if conditions are not corrected within the period of the notice.
10.
  - (1) No person shall cut, damage or interfere with any electrical wiring after the wiring has been inspected or put any pipe or metal work in contact with any electrical wires or leave same in contact therewith.
  - (2) Circuits fused for the carrying capacity of the wire shall not be tampered with by the insertion of fuses of unauthorized size or other devices.
  - (3) Any person infringing any of the provisions of this clause shall be liable to a penalty not exceeding one hundred dollars (\$100.00).

#### WIRING IN CONDUIT

11. The following wiring shall be enclosed in approved iron conduit or approval metal jacketed cable:
  - (a) Wiring in all buildings situated within the first and second class fire limits, but exclusive of private residences where flexible steel conduit may be used.
  - (b) Wiring in all theatres, hotels, schools, banks, churches, office buildings and all other similar buildings, apartment blocks of any description, flats, hospitals and railway stations.
  - (c) Wiring in all warehouses, stores, laundries or business premises of any description not otherwise described, constructed of more than one storey in height, excluding basement.
  - (d) All wiring carrying a potential of 150 volts above that of ground.
  - (e) All wiring in buildings of metal lath or metal ceiling interior construction.

12. Flexible steel conduit may be used only as restricted by and in conformity with the regulations of the SaskPower Electrical Inspections Department. Installations of flexible steel conduit must be fitted with approved fittings, be electrically continuous throughout and properly fastened to the supporting surfaces. Where moisture is present flexible steel conduit will not be allowed.
13. (Repealed by Bylaw No. 6631 - August 12, 1985.)
14. All buildings of two storeys shall have at least two circuits which must be fused independently.
15. All buildings having four circuits or over and all apartment blocks must be fitted with approved panels.
  - (a) Such panels shall be complete without additions of a type approved by the SaskPower Electrical Inspections Department or where constructed locally will be subject to the approval of the competent inspection authority.

NOTE: (Allowance shall be made for possible future circuit requirements as all extensions must be made by an approval panel.)

- (b) All distributing panels shall be protected by means of fuses located either on panel itself or at the other end of mains feeding such individual panel.
  - (c) All panel boards shall have circuits named or numbered to correspond with rooms fed thereby.
  - (d) All installations wired for a three wire supply shall be well balanced.
16. (1) In all cases where four or more meters are connected to one service, approved dead front metering panels or outside operated switches shall be used. In office buildings or under similar conditions dead front metering panels shall be installed.
  - (2) Excepting single panel installations all metering panels must be protected by means of a double or triple pole knife switch and fuses or other approved overload circuit breakers mounted either on the panel itself or on main control panel separately located.

## GENERAL RULES

### CORD PENDANTS

17. Cord pendants shall not be hung within reach of water or metal fixtures.

### WIRING IN BATHROOMS, ETC.

18. In bathrooms, washrooms and over sinks or other plumbing fixtures, cutouts, switches or lights must be placed so as to be out of reach of persons using the plumbing fixtures. Bathroom lights shall be controlled by a flush switch placed adjoining the entrance. Key sockets and plug outlets shall not be allowed in bathrooms.

### WIRING IN BASEMENTS

19. No exposed terminals shall be allowed in basements above earth or concrete floors or those subjected to the effects of moisture. All lights in such locations shall be controlled by switches, not key sockets, and shall be of an approved flush or pull type if intended for operation from floor level. All sockets in above situations shall also be of an approved water-proof type.

### OUTSIDE WIRING

20. All wiring or fixtures erected outside and exposed to the weather must be of thoroughly waterproof construction.

### WIRING IN SPECIAL BUILDINGS

21. In wiring all buildings exposed to extreme variations of temperature, special precautions must be taken so as to prevent leakage or grounding of the conductors.

### GROUNDING

22. (1) In all buildings connected to the City water system, one secondary wire of the lighting service must be grounded to the water service pipe on the service side of water meter and through an efficient grounding clamp.  
(2) All iron conduit, motor starting switch cases or similar appliances must be grounded. The ground wire provided shall not be less than No. 8 B & S. and must be insulated and wired in accordance with the class of wiring installed.

## METER WIRING PARTICULARS

23. (1) In all installations provision must be made for the installation of the meter or meters in an easily accessible position, not to be afterwards obstructed, neither must the location be in the vicinity of any easily ignited material or more than eight feet above floor level. In the case of private houses all meters must be installed on the ground floor, either in the kitchen or rear hall entrance, but not over stairways. When not otherwise provided a substantial board must be fitted for the mounting of said meter, this board to be either embedded in the plaster or screwed to the face of the wall so as to provide a flat vertical surface for this purpose. Meters will be allowed in basements if locations are approved by the SaskPower Electrical Inspections Department.
- (2) Meter loops must be provided extending for a distance of two feet in the case of poly phase power meters and not less than eighteen inches for single phase meters. Meter loops on both wires shall be provided in case of single phase meters. All meters must be properly fused on both line and load sides.
- (3) All meter loops must be numbered in conformity with circuits controlled.
- (4) Outside meters shall be installed as close as possible to the rear entrance or at such location where they are easily accessible, approved by the Director of Saskatoon Light & Power.
- (5) Outside meters shall be installed at a height above ground not more than seven feet or less than five feet.
- (6) Outside meters shall be the socket type.
- (7) If socket meters are installed inside of the building approved overload protection and approved disconnect devices must be installed in the supply side of the meter.

## MAIN SWITCH AND FUSES

24. (1) An approved main switch complete with approved over current protection must be provided on all installations, same must be installed in an easily accessible location, not to be afterwards obstructed, and must be totally enclosed in an iron case arranged with a device for outside control and means provided so that same may be sealed.

- (2) Where more than one meter is supplied from the same service and excepting where metering panels are provided, each meter must be supplied through a separate switch and cutout enclosed as previously stated, and of proper capacity.

### SERVICE TO MAIN SWITCH

25. In all cases whether for light or power services supplied from overhead lines the mains must be run in approved iron conduit, copper jacket, or busway from the cutout cabinet and terminating in an approved service fitting outside.
26. (1) In all buildings except residences it shall be necessary to provide three substantial half inch iron eye bolts threaded at one end and fitted with washers and nuts and installed so as to pass completely through the walls of the building. In the case of residences 3/8 eye bolts may be used. These bolts shall be fitted with one and one-half inch open eye and they shall be installed with a spacing between centres of not less than eight inches and in a straight line.
- (2) An approved galvanized iron bracket with three insulators may be substituted for the above attachment but in all cases at least three 3/8 inch bolts through the wall will be used to attach the bracket.
27. (1) All services to public buildings, business or apartment blocks shall be attached at a height of at least fifteen feet above normal ground level. Services to residences shall be attached at a minimum height of eleven feet above ground level. Services to residences shall be attached at a minimum height of eleven feet above ground level. In all cases where the above minimum heights are not available on the wall of the building an approved wooden mast of four inches by six inches dimension or a rigid iron pipe of 2 1/2 inches in diameter shall be securely attached to the building. Attachment will not be made to the roof or eave of any building.
- (2) All service entrances must be at rear of the building unless otherwise approved or specified by the Director of Saskatoon Light & Power.



DOMESTIC LIGHT AND  
POWER COMBINATION SERVICES  
POWER WIRING

PORTABLE POWER WIRING

28. All leads used for portable power work, such as in the case of portable wood saws, etc., or otherwise where exposed to mechanical injury, must be protected by means of metal armouring or by the use of four-ply rubber hose. In the case of armoured cables these must be properly grounded. Where the meter is in a fixed position, overhead wiring may be run on insulators of approved pattern.

MAIN SWITCH

29. An approved main switch, complete with approved over current protection, must be provided on all installations, same must be totally enclosed in an iron case, arranged with a device for outside control and means provided for sealing of same by Saskatoon Light & Power.

MOTOR STARTERS

30. (1) Motor starting switch gear must be installed as close to the motor controlled as can be conveniently arranged, and same must not be out of sight of said motor.
- (2) For all motors in excess of 15 H.P. approved starting current limiting devices shall be installed to reduce voltage fluctuations on starting. Exceptions to this may be approved by the Director of Saskatoon Light & Power in cases where the capacity of the supply lines and transformers are such that voltage will not be adversely affected.

SWITCHGEAR GENERAL

31. All switchgear of any description must be totally enclosed in order to avoid accidental contact with live parts of same, the only exception to this rule being in cases where such switchgear is located in a portion of a building not accessible to other than authorized persons familiar with the nature of such apparatus.

POWER CIRCUITS

32. Heating appliances of 1200 watts or less may be grouped on a special circuit if protected by approved over current protection of not more than 15 amperes. Heating appliances of greater capacity than 1200 watts shall be supplied by separate branch circuits.

ELECTRIC SIGNS

33. Electric signs must be erected in accordance with The City of Saskatoon Zoning Bylaw.

PARTICULARS RELATIVE TO  
NATURE OF ELECTRICITY SUPPLY

LIGHTING

34. All lighting circuits to be installed at 115 volts. Where three wire service is provided circuit loadings must be properly balanced.

Commercial & Domestic Combination  
Light & Power

Service will be given at 115 - 230 volt three wire or 115 volt 2 wire as required by the Code.

Commercial Power

Commercial power shall be provided at the following voltages:

Single Phase	-	230 volts
Two Phase	-	230 volts
Three Phase	-	230 volts three wire.

Industrial and commercial primary power may be provided at 2300 volts, 4160 volts or 14,400 volts. All of the above voltages are nominal and may vary from 3% below to 7% above the figures stated.

No new 2 phase service will be provided unless approved by the Director of Saskatoon Light & Power.

No three phase 4 wire Y connected service will be supplied or the use of this circuit permitted except at 4160 primary voltage when this voltage becomes available.

Motors will be served at the following voltages:

Up to 1/2 H.P.	115 volts -	60 cycles single phase
1/2 H.P. to 3 H.P.	230 volts -	60 cycles single phase
Over 3 H.P.	230 volts -	60 cycles three phase or two phase in existing installations.

In all single phase three wire circuits or poly phase circuits the loadings must be properly balanced.

### METER INSTALLATION FEES

35. The undermentioned fees shall be payable to the City of Saskatoon and shall apply to:

#### Metered Services

New applications, transfers, reconnection after temporary disconnection and changing location of meter.

#### Line Service Charges

- (a) Changing location of service per trip.
- (b) Cutting off service.
- (c) Reconnecting service.
- (d) Reconnecting after temporary disconnection.
- (e) Changing of service.

Light and Power below 15 K.W.	\$1.50
Light and Power below 15 to 50 K.W.	2.50
Light and Power over 50 K.W.	3.50

Charge for trouble calls during working hours \$2.00 per trip. Trouble calls on overtime will be charged at actual cost.

### NON-LIABILITY FOR ACCIDENTS

36. These bylaws shall not be construed to relieve from or lessen the responsibility of any person owning, operating, controlling, installing or using any electrical equipment for damages in respect of any person injured or any property destroyed by any defects therein, nor shall the City or the SaskPower Electrical Inspections Department be held as assuming any such liability by reason of any inspection made as authorized herein or any certificate issued hereunder.
37. Electrical energy shall be utilized only on the property upon which it is purchased, and no person shall install circuits which cross any street, lane, boulevard, sidewalk, or property boundary, except:
- (a) in the case of building construction, portable conductors of an approved type may, for the period of the construction only, cross a property boundary to provide temporary construction power from an immediately adjacent property; and,

- (b) where a property owner has received approval from the Council of The City of Saskatoon to carry out improvements on a public boulevard, and electrical energy is required for landscape decorative facilities, including, low level lighting, water fountain pumps, irrigation control circuits, or similar devices. In any event, such electrical circuits may only cross a property boundary to an adjacent boulevard if:
  - (i) the voltage of the circuit does not exceed 130 volts to ground, and the electric circuit is protected by a ground fault circuit interrupter device; and,
  - (ii) the circuit conductors do not interfere with any utility use of the boulevard; and,
  - (iii) the electrical circuit installation, and its use, are approved by the Director of Saskatoon Light & Power.
- 38. Lamp cords or extension cords shall be used strictly in accordance with the regulations stipulated in the Code and shall not pass through walls, windows or doors.
- 39. No extension cord or other electrical conductor shall be placed in such a position which will cause it to create a hazard.
- 40. All electrical appliances and equipment must have the approval of the Canadian Standards Association.
- 41. The City shall not be responsible for damage to equipment and appliances resulting from over-currents and consumers shall provide suitable protection against short circuit, over voltage, under voltage, phase failure or any abnormal condition incidental to the operation of an electric distribution system.
- 42. Any consumer wishing to install an underground service will provide a pole at the back of the consumer's property from which the overhead lines may be taken underground. Consumer's underground service conductors shall not be run up the City's poles because of the hazard they will create.
- 43. No one except Saskatoon Light & Power shall attach anything to electric light and power or street lamp poles. This includes such items as clothes lines, antennae, posters, signs, etc. However, the City may enter into agreements with other public utilities to permit the use of the City's poles by such utilities. The City may grant permission to make temporary attachments to steel poles.

44. All residential consumers who have a connected load exceeding 8 K.W. shall install an approved current limiting device which will not permit the demand to exceed 8 K.W.
45. No residential consumer shall install or use equipment such as welders or large motors which will cause undue voltage fluctuation.
46. In cases of consumers load having a power factor below 90 percent the Director of Saskatoon Light & Power may order the consumer to install equipment to improve the power factor to a degree satisfactory to the Director of Saskatoon Light & Power.
47. The City shall adopt standard recognized practices and materials for the purpose of maintaining continuity of electric service but in no case shall the City be held responsible for damages resulting from cessation of electrical energy.
48. Bylaw No. 2005 and all amendments thereto are hereby repealed.
49. This bylaw shall come into force and take effect on the day of the final passing thereof.

Read a first time this 3rd day of February A.D. 1958.

Read a second time this 3rd day of February A.D. 1958.

Read a third time and passed this 3rd day of February A.D. 1958.

"Lillie F. Bowman"  
Deputy Mayor

"L.A. Kreutzweiser"  
City Clerk

(SEAL)