THE WINNIPEG ELECTRICAL BY-LAW

By-law No. ??/2012

including
ELECTRICAL TECHNICAL INTERPRETATIONS
2012

A publication issued by

The City of Winnipeg

PLANNING, PROPERTY AND DEVELOPMENT DEPARTMENT

Development and Inspections Division

An electronic copy of this publication is also available under “Related By-laws” on the City of Winnipeg Electrical Info Centre at:

www.winnipeg.ca/ppd/electrical_info.stm

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This publication is produced by:

THE CITY OF WINNIPEG, DEVELOPMENT AND INSPECTIONS DIVISION

It forms a compilation of the following documents:

- The Winnipeg Electrical By-law No. ??/2012

- The City of Winnipeg Electrical Technical Interpretations

THE 2012 CANADIAN ELECTRICAL CODE, PART I, 22nd EDITION

The Twenty-second Edition of the Canadian Electrical Code Part I, CSA Standard C22.1-12 has been adopted, with specific amendments, by City of Winnipeg By-law (effective August 1, 2012) and is known as:

THE WINNIPEG ELECTRICAL BY-LAW NO. ??/2012

The amendments are reprinted in this publication.

In addition to a copy of the City of Winnipeg By-law, this publication contains technical interpretations for use in the application of the Code.

The spiral-bound 22nd Edition of the Canadian Electrical Code, Part I, the Canadian Electrical Code Handbook and the Canadian Electrical Code on CD Rom are available from the Manitoba Electrical League Inc. at 104 – 1780 Wellington Avenue in Winnipeg, Manitoba.

THE MANITOBA BUILDING CODE

Code users should be aware that in addition to the electrical requirements of the Winnipeg Electrical By-law, the Manitoba Building Code specifies minimum standards for electrical facilities in buildings including emergency lighting, emergency power and fire alarm systems.

The Manitoba Building Code references other publications of which electrical installers should be aware:

1. ULC Standard CAN/ULC-S524
   "Installation of Fire Alarm Systems"

2. ULC Standard CAN/ULC-S537
   "Verification of Fire Alarm Systems"

   The above ULC Standards are available from Underwriters' Laboratories of Canada, 7 Underwriters Road, Toronto, Ontario, M1R 3A9 or at www.ul.com/canada/eng/pages.

3. CSA Standard CAN/CSA-C282
   "Emergency Electrical Power Supply for Buildings"

4. CSA Standard CAN/CSA-Z32
   "Electrical Safety and Essential Electrical Systems in Health Care Facilities"

   The above CSA Standards are available from Canadian Standards Association, Standard Sales, 5060 Spectrum Way, Suite 100, Mississauga, Ontario, L4W 5N6 or at www.csa.ca .

ELECTRICAL INFORMATION CENTRE

The following brochures and forms, produced by The City of Winnipeg, are available from the City Permits Office at Unit 31 – 30 Fort Street or on-line from our Electrical Info Centre at:
www.winnipeg.ca/ppd/electrical_info.stm:

Informational Brochures

- Electromagnetic Lock Installations
- Woodworking Shops
- Electrical Plan Req'mts for New Construction
- Emergency Lighting and Exit Signs
- High Voltage Installations
- Life Safety Tests
- Electrical Requirements in the Building Code
- Flooded Buildings
- Commercial Building Permit Process
- Homeowners' Guides for:
  - Electrical Installations
  - Basement Development
  - Swimming Pools
  - Detached Garages
  - Electrical & Plumbing Permits
  - Decks

Downloadable Forms

- Electromagnetic Locks Checklist
- Schedule 'A' for Fire Alarm Monitoring
- Building Design Summary
- Professional Designer's Certificate/Owner Statement
- Request for Code Deviation Form
- Fire Alarm Verifications
- Electrical Permit Applications Forms for:
  - Commercial
  - Housing
  - Signs
- Worksheets for Apartment Bldg Calculations:
  - Service Calculations
  - Suite Calculations

THE CITY OF WINNIPEG

THE WINNIPEG ELECTRICAL BY-LAW NO. ??/2012

A By-law of THE CITY OF WINNIPEG adopting and varying the 2012 Canadian Electrical Code.

THE CITY OF WINNIPEG, in Council assembled, enacts as follows:

Title

1 This By-law shall be referred to as **the Winnipeg Electrical By-law**.

Definitions

2 In this By-law:

"Code" means the *2012 Canadian Electrical Code, Part I, Twenty-second Edition, C22.1-12, Safety Standard for Electrical Installations* adopted by this By-law or a subsequent and similar Code adopted by this By-law.

"Designated employee" means the Manager of Development and Inspections of the Planning, Property and Development Department of the City of Winnipeg and any employee of the City to whom he or she has delegated authority to administer or enforce all or part of this By-law.

Adoption of Canadian Electrical Code

3(1) Except as varied by this By-law, the *2012 Canadian Electrical Code, Part I, Twenty-second Edition, C22.1-12, Safety Standard for Electrical Installations* published by the Canadian Standards Association is hereby adopted as part of this By-law, and a violation or contravention of the Code is a violation or contravention of this By-law.

3(2) Where in this By-law reference is made to a Rule or Section number, the reference shall be understood to mean that rule or section in the Code.

3(3) In the event of any conflict, explicit or implied, between the provisions set out in the Code and the provisions set out in this By-law, the provisions set out in this By-law shall prevail.

Application

4 No person shall install electrical wiring or electrical apparatus and no person shall use electrical current except as provided in this By-law.

Authority

5(1) Designated employees are authorized to conduct inspections and take steps to administer and enforce this By-law or remedy a contravention of this By-law in accordance with *The City of Winnipeg Charter* and, for those purposes, have the powers of a "designated employee" under *The City of Winnipeg Charter*.

5(2) The details of any construction which are not specifically dealt within this By-law shall be performed to the satisfaction of a designated employee, which authority shall be reasonably exercised by the designated employee.

5(3) Designated employees are hereby authorized to determine whether equipment, techniques, conditions, circumstances and all other matters meet the standards and requirements of this By-law or are otherwise acceptable and, where in this By-law such terms as "proper", "adequate", "sufficient", "ample", "suitable", "substantial", "secure", "necessary", "dangerous" and the like or derivatives thereof, are used, they mean "proper", "adequate", "sufficient", "ample", "suitable", "substantial", "secure", "necessary", "dangerous" to the satisfaction or in the reasonable opinion of the designated employee, and such terms as "where practicable", "where required", "as far as possible" have a like significance.

5(4) In exercising their discretion to determine the acceptability or satisfactory nature of equipment, techniques, conditions, circumstances and all other matters under this By-law and whether or not they are "proper", "adequate", "sufficient", "ample", "suitable", "substantial", "secure", "necessary", "dangerous" and the like, designated employees shall act reasonably and with the objective of ensuring and promoting the safe and efficient use of electricity.

Authority to conduct certain Electrical Inspections

6 Electrical inspections of one and two family dwellings, row housing and related structures and equipment may be carried out by inspectors who are employed by the City of Winnipeg and who

(a) hold an electrician's journeyperson Licence; or

(b) have successfully completed an inspection training program provided by

(i) the City of Winnipeg;
(ii) an educational institution approved by the Manager of Development and Inspections; or
(iii) a building code development, training and certification organization with a course content approved for the purpose of this section by the Manager of Development and Inspections.

Variations to the Code

7 The Code is varied by the provisions of Schedule "A" to this By-law, which is hereby incorporated into and forms part of this by-law.

Repeal of By-law No. 74/2009

8 The Winnipeg Electrical By-Law No. 74/2009 is hereby repealed.

Coming into effect

9 This By-law comes into effect on August 1, 2012 and applies to all permit applications made on or after that date.

DONE AND PASSED in Council assembled, this ?? day of July, 2012.

_____
Mayor

_____
City Clerk

Approved as to content:

_____
Director of Planning, Property and Development

Certified as to form:

_____
Director of Legal Services Department

SCHEDULE "A" TO WINNIPEG ELECTRICAL BY-LAW NO. ??/2012

The 2012 Canadian Electrical Code, Part I, Twenty-second Edition, C22.1-12, Safety Standard for Electrical Installations, published by the Canadian Standards Association is hereby varied as follows:

Variations to Section 0 of the Code

OBJECT, SCOPE AND DEFINITIONS

Definitions

Section 0 is varied by:

(a) striking out the following definitions:

Acceptable
Approved
Electrical Contractor
Inspection Department

(b) adding the following definitions in alphabetical order:

Acceptable *means acceptable to a designated employee.*

Accredited Field Evaluation Agency *means an agency that has been accredited by the Standards Council of Canada, in accordance with specific criteria, procedures and requirements, to operate on a continuing basis as a special inspection body for electrical equipment.*

Approved*, when used with reference to any electrical equipment means:*

(a) that the equipment has been certified by an accredited certification organization as

(i) meeting CSA standards; or,
(ii) where CSA Standards do not exist or are not applicable, other recognized standards; or

(b) alternatively, that the equipment:

(i) has been approved by the Minister of Labour of the Province of Manitoba or an accredited field evaluation agency after examining the equipment or a sample and finding that it conforms to the applicable standards for the equipment and presents no undue hazard to persons or property; and

(ii) is acceptable to the designated employee.;

SCHEDULE "A" TO WINNIPEG ELECTRICAL BY-LAW NO. ??/2012

City *means the City of Winnipeg.*

Construction *means the installation of electrical equipment in or about any building or premises and includes all electrical equipment installed;*

Designated employee *means the Manager of Development and Inspections of the Planning, Property and Development Department of the City of Winnipeg and any employee of the City to whom he or she has delegated authority to administer or enforce all or part of this Code;*

Electrical contractor *means an individual to whom an Electrical Contractor's Licence has been issued.*

Examining Committee *means the committee established pursuant to Rule 2-008(6).*

Inspection Department *means the Electrical Section of the Commercial Inspections Branch and the Housing Inspections Branch of the Development and Inspections Division of the Planning, Property and Development Department of the City of Winnipeg.*

Licence *means an electrical contractor's licence as provided for in this Code.*

Owner *means a person or the agent, servant or employee of a person who owns, manages or is in possession of land or a building to which this By-law applies, or who is in receipt of the whole or a part of any rents or profits therefrom, whether the rents and profits are received on the person's own account, or as agent or trustee for another person.*

Person *includes an individual, corporation, partnership, firm or entity.*

Professional Engineer *means a professional engineer who is a member of the Association of Professional Engineers and Geoscientists of Manitoba and who is entitled to practice in the Province of Manitoba.*

Structure *means anything constructed or erected with a fixed location on or in the ground or attached to something having a fixed location on the ground and includes but is not limited to buildings, walls, fences, signs, billboards, poster panels, light standards, and swimming pools.*

SCHEDULE "A" TO WINNIPEG ELECTRICAL BY-LAW NO. ??/2012

Variations to Section 2 of the Code

GENERAL RULES

Administrative

Section 2 is varied by striking out Rules 2-000 to 2-032 and substituting the following:

ADMINISTRATIVE

2-000 Duty of owner regarding design and inspection

(1) The owner must ensure that a Professional Engineer entitled to practice in the Province of Manitoba and skilled in the application of this Code to the design and construction of the structure represented in the plans, drawings and related documents has signed and sealed plans, drawings, specifications and a certificate submitted as part of an application for a building permit or an electrical permit, and has reviewed the electrical installation and provided certification required by the designated employee that the installation has been installed in accordance with this Code and the applicable by-laws, on the following types of electrical installations:

- *(a) High Voltage;*
- *(b) Buildings referred to in Sentence 1.3.3.2.(1) of the Manitoba Building Code;*
- *(c) Buildings where the electrical service requirements exceed 750 KVA;*
- *(d) Power factor correction of electrical installations, other than individual motor applications; and*
- *(e) Any other type of installation where the designated employee requires it under Subrule 2-002(1).*

(2) The owner must immediately advise the designated employee if the Professional Engineer who has signed and sealed drawings, specifications and the certificate submitted as part of an application for a Building Permit will not review and certify the construction or installation of the electrical installations referred to in the drawings, specifications and certificate.

(3) The owner must ensure that the construction or installation of the electrical installations does not deviate from the requirements of the conditions of the permit, including the plans, drawings and other documents accepted as part of a building permit, without first obtaining from the designated employee permission to do so, except for minor changes which conform to this Code. Where, in the reasonable opinion of the designated employee, deviations from the conditions of the permit are substantial and require an additional review of the plans, drawings or other documents, he or she shall treat the proposed deviations as a new application and the process associated with a new application, including the payment of fees, must then be followed.

(4) When completed construction or installation of electrical installations is not in compliance with this Code or an applicable by-law, the owner must, at his or her expense, rectify the non-compliance within a reasonable period of time.

SCHEDULE "A" TO WINNIPEG ELECTRICAL BY-LAW NO. ??/2012

2-002 Engineer's Responsibility

(1) Where, in the reasonable opinion of a designated employee, the character of the proposed construction requires technical knowledge for the preparation of drawings and specifications, as provided in Subrule 2-000(1), the drawings and specifications shall be prepared, signed and sealed by a Professional Engineer and the construction reviewed by a Professional Engineer or a suitably qualified person reporting to the Professional Engineer.

(2) Where Subrule 2-000(1) applies, a designated employee shall not issue a Building Permit or, where a Building Permit is not required, an Electrical Permit, until the responsible Professional Engineer has submitted plans, drawings and specifications for the construction or installation of the electrical installations and a certificate required by the designated employee under Subrule 2-032(5) concerning the compliance of the plans and drawings with this Code and applicable by-laws containing the following statement:

I hereby certify that I have complied with all applicable legislation and professional codes in affixing my seal to the plans, drawings and related documents which are being submitted as part of this application for a permit under the Winnipeg Building By-law or the Winnipeg Electrical By-law.

By affixing my seal, I am representing that:

- **I am fully aware of the provisions of the Manitoba Building Code and the Winnipeg Electrical By-law that are applicable to these plans and drawings;**
- **I have applied a professional standard of care to ensure compliance of these plans and drawings with the applicable provisions of the Manitoba Building Code and the Winnipeg Electrical By-law.**

(3) Before an interim or final Building Occupancy Permit is issued or, where a Building Occupancy Permit is not required, upon completion of the construction, the responsible Professional Engineer shall submit a certificate required by the designated employee under 2-032(5) concerning the compliance of the construction or installation of the electrical installations with this Code.

(4) The plans, specifications and certificates referred to in this Rule are not valid unless they have been signed and sealed by a Professional Engineer.

(5) No person may sign and seal all the documents referred to in this Rule unless he or she is a member in good standing of the Association of Professional Engineers and Geoscientists of Manitoba and is skilled in the application of this Code to the construction or installation of the electrical installations referred to in the documents.

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2-004 Electrical Permit

(1) Subject to Subrule (2), no person shall commence electrical construction or permit commencement of electrical construction until an electrical permit for the construction has been issued by the designated employee and no construction, connection, reconnection, alteration, repair or extension of any electrical installation may take place prior to an electrical permit being issued by the Designated employee for that construction.

(2) Not withstanding Subrule (1), no permit is required if

(a) the electrical construction is within the category that is authorized to be done by the holder of a Voice Data Video Licence; and
(b) the electrical construction takes place in a single-family detached house;

(3) A Designated employee shall issue an electrical permit only

(a) to a person who holds an Electrical Contractor's Licence authorizing him or her to carry on his occupation, trade or business in the City of Winnipeg; or
(b) to an individual to do construction on a single dwelling owned by him or her and occupied by him or her as his domestic domicile provided that he or she has satisfied a designated employee that he or she is competent to perform such construction; or
(c) to an individual to do construction on a single dwelling owned by him or her which will be occupied by him or her upon completion as his or her domestic domicile provided that he or she has satisfied a designated employee that he or she is competent to perform such construction.

(4) The designated employee may reject the application if the applicant for a permit

(a) fails within a reasonable period of time to provide information required to process the application or fails to respond to communication from the City, or
(b) otherwise appears to have abandoned the application,

The designated employee may give the applicant notice of a decision to reject an application by sending the notice to the applicant at the address provided by the applicant in the application.

(5) A permit automatically expires and is thereafter null and void if the construction or other work authorized by the permit

(a) subject to Subrule (6), is not initiated within 6 months after the permit is issued;
(b) subject to Subrule (6), is not completed within
(i) three years after the date the permit is issued; or
(ii) a greater length of time as determined to be reasonable by the designated employee in the case of extraordinarily large construction projects; and
(c) complies with the conditions imposed on the permit or a provision of the Code.

SCHEDULE "A" TO WINNIPEG ELECTRICAL BY-LAW NO. ??/2012

(6) Upon application by the owner, a designated employee may grant an extension to the date by which construction or other work must be initiated or completed. The extension may extend the time period for initiation or completion by no more than the time period set out in Subrule (5) for the initiation or completion, as the case may be, of the construction or other work authorized by the permit. In order to qualify for the extension, the owner must

(a) submit, and undertake to implement, a work plan which sets reasonable and measurable targets for stages of construction or other work to be completed; and
(b) provide a deposit in an amount equal to the cost of the permit which must be refunded, without interest, if the construction or other work is initiated or completed within the extended time period.

(7) A designated employee may revoke a permit by giving notice to the owner at the address provided by the owner in the permit application if

(a) the construction or other work authorized by the permit is not proceeding reasonably to completion after being initiated; or
(b) the owner does not meet the targets set out in the work plan referred to in Item (6)(a) for stages of construction or other work to be completed.

(8) Where a designated employee has revoked a permit under Subrule (7) and the same owner applies for a new permit in respect of substantially the same construction project, the designated employee may require that the owner provide a deposit in an amount equal to the cost of the permit before issuing the permit. The deposit must be refunded, without interest, if the owner complies with Subrule (5) in respect of the construction or other work for which the permit is issued.

(9) A permit is void and all rights under the permit are terminated if the negotiable instrument used for payment of the permit fee is returned for any reason.

(10) All construction being carried out under an electrical permit issued prior to the effective date of this By-law shall:

(a) be completed in accordance with the previous By-law requirements and any special conditions described on the electrical permit and approved plans; and
(b) proceed at a satisfactory rate in the reasonable opinion of a designated employee.

(11) If the requirements set out in Subrule (6) are not met, a designated employee may cancel the electrical permit, in which case,

(a) a new electrical permit shall be obtained before construction may be continued and
(b) all construction undertaken under the authority of the new permit shall comply with the provisions of this Bylaw.

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2-006 Annual Electrical Permit

(1) Notwithstanding Rule 2-004, a designated employee may issue an Annual Electrical Permit to an individual holding an Electrical Contractor's Licence "A" or "B" and the Permit must specify the particular site or sites to which it applies.

(2) Notwithstanding Subrule 2-004(1), construction, connection, re-connection, alteration, repair or extension of an electrical installation may take place under the supervision and responsibility of the holder of an Annual Electrical Permit without the necessity of a permit being issued for the specific construction, connection, re-connection, alteration, repair or extension of an electrical installation.

(3) The designated employee may issue an Annual Electrical Permit subject to reasonable terms or conditions.

(4) An Annual Electrical Permit expires on the thirty-first day of December of the year in which it was issued.

(5) The designated employee may suspend, withdraw or refuse to re-issue an Annual Electrical Permit where

(a) the permit holder has failed to comply with the applicable codes and by-laws or the terms and conditions of the Annual Electrical Permit;

(b) the permit holder has failed to remit the permit fees applicable to the construction, connection, re-connection, alteration, repair or extension of an electrical installation that has taken place under the authority of the Annual Electrical Permit within the time set out in the Planning, Development and Building Fees By-law.

2-008 Electrical Contractor's Licences

(1) Except for a homeowner who has obtained a permit under Items (b) or (c) of Subrule 2-004(3), and subject to Subrule 2-004(3), no person may place, install, maintain, repair or replace any electrical equipment in the City of Winnipeg unless the person is operating under the authority of an Electrical Contractor's Licence issued under this By-law.

(2) An Electrical Contractor's Licence may only be issued to an individual; in order for a corporation, partnership, governmental department or some other legal entity to operate as an Electrical Contractor, an employee or officer of the entity shall obtain for an Electrical Contractor's Licence on behalf of the entity.

(3) An individual applying for a licence, whether on his or her own behalf or on behalf of a legal entity, shall satisfy the licensing requirements and pay the established licensing and examination fees before being issued a licence.

SCHEDULE "A" TO WINNIPEG ELECTRICAL BY-LAW NO. ??/2012

(4) The holder of a licence, or an agent authorized in writing to do so on behalf of the licence holder, is eligible to obtain permits to perform electrical construction within the scope of the licence as follows:

(a) The holder of an Electrical Contractor's Licence "A" or his/her agent may obtain permits for any electrical construction governed by City of Winnipeg By-laws and The Electricians' Licence Act; and

(b) The holder of an Electrical Contractor's Licence "B" or his/her agent may obtain permits to install and maintain electrical installations in premises owned, leased or managed by the corporation, firm, company or government department on behalf of whom the Licence is held as permitted by City of Winnipeg By-laws and The Electricians' Licence Act; and

(c) The holder of an Electrical Contractor's Licence "C" or his/her agent may obtain permits for limited electrical construction as authorized by this By-law and the Limited Specialized Trade Electrician's Licence issued under The Electricians' Licence Act.

(5) In order to obtain a licence, an individual shall meet the following requirements:

(a) To qualify for an Electrical Contractor's Licence "A" the applicant shall:

(i) hold a valid, current Journeyperson Electrician's Licence as required by The Electricians' Licence Act; and

(ii) have passed an examination set out by the Examining Committee.

(b) To qualify for an Electrical Contractor's Licence "B", the applicant shall:

(i) hold a valid, current Journeyperson Electrician's Licence as required by The Electricians' Licence Act; and

(ii) have passed an examination set out by the Examining Committee.

(c) To qualify for an Electrical Contractor's Licence "C", the applicant shall:

(i) hold a limited specialized trade electrician's Licence, issued under The Electricians' Licence Act; and

(ii) have passed an examination set out by the Examining Committee.

(6) An Examining Committee, consisting of the designated employee and any other person whom the designated employee may appoint, is hereby established with responsibility to:

(a) prescribe the subjects on which candidates for the Electrical Contractor's Licence shall be examined;

(b) prepare, organize and conduct or supervise the examination of the candidates; and

(c) report on the results of the examinations to the designated employee.

(7) Where an applicant fails to pass an examination set out by the Examining Committee on two successive occasions, he or she must complete a training course acceptable to the designated employee before being eligible to apply again for a licence.

SCHEDULE "A" TO WINNIPEG ELECTRICAL BY-LAW NO. ??/2012

(8) Every licence holder is responsible for construction carried out under the authority of a permit issued to him or her and, where an individual holds a licence on behalf of a corporation, partnership, governmental department or some other legal entity, the licence holder is responsible and may be prosecuted under this By-law for the activities of all individuals operating under that licence, even if the licence holder is no longer employed or retained by the corporation, partnership, governmental department or other legal entity.

(9) *Where it appears that a licence holder may have violated any provisions of this By-law or that construction carried on under the authority of a licence holder fails to meet the standards and requirements set out in this Code, the designated employee may hold a hearing to investigate the matter and may revoke or suspend any licence as a result of the hearing.*

(10) Notwithstanding Subrule (9), the designated employee may immediately suspend a licence for a period of up to 30 days where it appears that the licence holder has violated this Bylaw in a way that endangers the life or health of an individual or endangers property but the designated employee must reinstate the licence after 30 days unless a hearing to investigate the matter provides justification to further suspend or to revoke the licence.

(11) Licences may not be transferred, sold or assigned.

(12) A licence may be issued for multiple years and terminates on December 31 of the year of its expiration.

(13) Electrical contractor's licences, terms and fees, including administrative fees for licences that are renewed after their expiry date, are set out in the City of Winnipeg Fees and Charges Schedule.

(14) Where an individual is unlicenced for more than 12 months, he or she must re-qualify for a licence under Subrule (5).

2-010 Electrical Permit Fees

The electrical permit fees are set out in the City of Winnipeg Fees and Charges Schedule.

2-012 Special Requirements

Requirements and standards in this Code that apply to particular types of installations are in addition to general requirements and standards in this Code and, in the event of a conflict between them, the requirements and standards that apply to particular types of installations shall prevail.

2-014 Inspection and Availability of work for inspection

(1) An electrical contractor is responsible for notifying the inspection department when construction is ready for inspection and shall do so at such time or times as will permit inspection being made before any construction or portion thereof is concealed.

(2) No electrical construction may be rendered inaccessible by lathing, boarding, or other building construction until it has been inspected and approved by a designated employee.

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2-016 Plans and Specifications

(1) Until the designated employee has reviewed and accepted plans and specifications for the construction and an electrical permit has been issued, no person may begin construction on

(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, switchboards, large storage batteries, etc.; or
(c) other installations specified by the designated employee

(2) The owner is responsible for submitting the plans and specifications referred to in Subrule (1) in quantities reasonably required by the designated employee.

2-018 Connection

(1) No electrical installation, extension, alteration, or addition shall be connected or reconnected to any service or other source of electrical energy by a supply authority, electrical contractor, or other person, until the designated employee has issued an electrical permit and given authorization to make such connection or reconnection.

(2) Subrule (1) does not apply to Manitoba Hydro when it reconnects electrical power to a location where the service has been cut off for non-payment of bills or a change of occupant, provided there have been no alterations or additions to the installation subsequent to the last authorization.

2-020 Re-Inspection

The designated employee may re-inspect any installation if and when he or she reasonably considers such action to be necessary.

2-024 Use of Approved Equipment

(1) Electrical equipment used in electrical installations shall be approved, and shall be of a kind or type and rating approved for the specific purpose for which it is to be employed.

(2) No person may connect unapproved electrical equipment.

2-026 Withdrawal of Approval (See Appendix B)

The designated employee may withdraw approval of electrical equipment at any time if

(a) the equipment is of lesser quality than the sample on which approval was based;
(b) the conditions of use indicate that the equipment is not suitable; or
(c) the terms of the approval agreement are not being carried out.

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2-028 Damage and Interference with Electrical Equipment

(1) No person shall damage any electrical installation or a component of an electrical installation.

(2) Unless prior permission has been obtained from the designated employee, no person shall cut, break or interfere with any lock or seal that has been placed on any electrical equipment by or at the direction of the designated employee.

(3) No person shall interfere with any electrical installation or component of an electrical installation except when, in the course of alterations or repairs to non-electrical equipment or structures, it is necessary to disconnect or move components of an electrical installation, it which case it is the responsibility of the person carrying out the alterations or repairs to ensure that the electrical installation is restored to a safe operating condition as soon as the progress of the alterations or repairs will permit.

2-030 Deviations or postponements

(1) The designated employee may grant special permission to deviate from or postpone compliance with the requirements and standards of this Code where the deviation or postponement will not, in the reasonable opinion of the designated employee, jeopardize the safety of people or property and will permit substantial compliance with the objects of the requirement or standard, but such permission applies solely to the specific installation and circumstances for which it is granted.

(2) Requests for special permission or deviation must be submitted to the designated employee via a "Request for code deviation" form.

2-032 Role of the Designated Employee

(1) The designated employee is responsible for the administration and enforcement of this Code and for these purposes he or she and all individuals to whom he or she has delegated authority to administer or enforce all or part of this Code have all the powers of a "designated employee" under The City of Winnipeg Charter.

(2) An order from a designated employee requiring that construction be stopped on a project shall set out the conditions under which the construction may be resumed.

(3) The designated employee shall accept as satisfactory any construction or condition that lawfully existed prior to the effective date of this By-law, so long as the construction or condition does not constitute an unsafe condition.

(4) The designated employee is authorized to determine the type and form of plans, drawings and other documents that are required under Rule 2-000 to be submitted as part of an application for an electrical permit.

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(5) Without restricting the generality of Subrule (4), but subject to Subrule 2-002(2), the designated employee is authorized to establish the text of a certificate signed and sealed by a Professional Engineer that the owner must submit as part of an application for a building permit, an electrical permit, an interim building occupancy permit or a building occupancy permit.

(6) For the purposes of complying with the City's obligation to inspect and approve plans relating to construction prior to a building permit being issued, the designated employee may rely on a certificate or representation of a Professional Engineer as to the compliance of plans and drawings or other documents, or of construction, with this By-law and the Winnipeg Building By-law.

(7) In relying on a certificate or representation of a Professional Engineer pursuant to Subrule (6), the designated employee may establish circumstances in which no examination or review whatsoever of certain aspects or parts, or of the entirety, of the plans or drawings or other documents signed and sealed by a Professional Engineer, or of construction reviewed by a Professional Engineer, will be conducted by the City of Winnipeg before a building permit, an electrical permit or an interim or final building occupancy permit is issued.

(8) As part of the authority granted by Subrule (6), the designated employee is authorized to determine:

- *(a) subject to this Rule, the form and content of the certification or representation to be provided, including a signed statement using specific text approved by the designated employee, or sealed plans and drawings;*
- *(b) the amount of professional liability insurance, if any, that must be carried by a Professional Engineer who provides certifications or representations;*
- *(c) the criteria, if any, for determining when the City of Winnipeg will not rely solely or at all on the required certificates or representations submitted by specific individual Professional Engineers; and*
- *(d) the form of an audit or other programs, if any, to encourage compliance of submitted plans and specifications with this Code and applicable by-laws.*

(9) Subject to Subrule (10), the designated employee may institute a program in which building permits and occupancy permits authorizing the construction or installation of electrical installations or of interim or final occupancy of buildings to which Rule 2-000 does not apply are issued by the City with minimal examination or review by the City of plans, drawings or specifications for compliance with this By-law and with minimal or no inspection of construction or installation of electrical facilities.

(10) The program referred to in Subrule (9) must include an audit function which subjects the unexamined plans or specifications as well as the construction of the building to random, systematic or targeted review.

(11) As part of the authority granted by this Rule, the designated employee is authorized to establish the circumstances in which the program authorized in Subrule (9) will apply and to determine the form of the audit function established as part of the program.

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(12) Notwithstanding that permits have been issued under this rule on the basis of plans, specification or certifications signed and sealed by a Professional Engineer, where a designated employee determines, through an audit or otherwise, that plans, specifications or certifications, or actual construction based upon those plans and specifications fail to comply with this By-law or the Building By-law, the designated employee may order the Professional Engineer or the owner, or both, to rectify the point of non-compliance within a reasonable time. A Professional Engineer or owner who fails to comply with an order issued under this provision commits an offence.

(13) The designated employee may refuse to issue an electrical permit or permits:

- *(a) whenever information submitted is inadequate to determine compliance with the provision of this By-law;*
- *(b) whenever incorrect information is submitted;*
- *(c) to any person who has failed to pay any fee or payment due and owing to the City of Winnipeg under this By-law or the City of Winnipeg Fees and Charges Schedule;*
- *(d) if a violation of another By-law, standard, act or regulation could result from the electrical construction permitted by it; or*
- *(e) if, in the case of an addition, alteration, repair or extension to any wiring system, in, on or through any building or place, the existing wiring is not in accordance with the provisions of this By-law.*

(14) The designated employee may cancel any electrical permit if:

- *(a) in the opinion of the designated employee, the privileges granted by that permit are being misused;*
- *(b) any condition under which the permit was issued is not being observed;*
- *(c) the permit was issued in error;*
- *(d) the permit was issued on the basis of incorrect information; or*
- *(e) in the reasonable opinion of the designated employee, the electrical construction is not proceeding at a satisfactory rate.*

2-034 Duties of the Owner

(1) Every owner shall make or have made at his own expense such tests or inspections as are necessary to demonstrate to the designated employee that the equipment or action proposed complies with this By-law.

(2) When required by the designated employee, every owner shall uncover and replace at his own expense any construction that has been covered contrary to Rule 2-014.

(3) The owner of a building must ensure that the electrical installations in the building are in compliance with the Electrical Code that was in effect at the time that that the electrical installations were constructed or installed. This requirement applies whether or not the owner owned the building at the time that the electrical installations were constructed or installed.

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(4) The owner shall maintain the electrical installations associated with the property in a safe condition.

(5) When the electrical installations on a property are in an unsafe condition, the owner shall immediately take all necessary action to put the building electrical installations in a safe condition.

(6) The owner shall maintain in good working order all safeguards or devices that are required to be installed in the building by the Winnipeg Building By-law or this Code.

(7) Every owner shall ensure that no unsafe condition exists or will exist because of the work being undertaken and not completed, should occupancy exist or occur prior to the completion of any work being undertaking that requires a permit.

(8) When a "stop work" order is issued by a designated employee, the owner shall ensure that the person or persons to whom it is directed stops construction immediately, except for the installation or erection of covers or guards so as to be able to maintain the site in a safe condition.

(9) When required by the designated employee, every owner shall provide a letter to certify compliance with the requirements of this By-law and of any permits required.

(10) An owner shall ensure that electrical installations on his or her premises are not overloaded, defective or being misused.

(11) An owner shall remove or cause to be removed from the premises

(a) unsafe electrical appliances or wiring;
(b) dead or unused electrical wires or equipment that are or may become a hazard.

(12) An owner shall comply with orders made by a designated employee.

2-036 Duties of the Permit Holder

(1) Every permit holder shall ensure that all construction safety requirements of this By-law are complied with.

(2) Every permit holder shall ensure that all construction is carried out in accordance with this By-law and all provisions as described on the permit and accepted drawings.

(3) Every permit holder shall give notice to a designated employee:

(a) when construction is ready to be inspected prior to covering; and
(b) when construction has been completed so that a final inspection can be made.

(4) Every permit holder is jointly and severally responsible with the owner for any construction actually undertaken.

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(5) When required by the designated employee, the permit holder shall provide a statutory declaration that the electrical installation was constructed in accordance to the accepted plans, specifications and requirements of the Winnipeg Electrical By-law and the Winnipeg Building By-law.

(6) When a "stop work" order is issued by a designated employee, a permit holder shall ensure that the construction ceases immediately, except for the installation or erection of covers or guards so as to be able to maintain the site in a safe condition.

(7) A permit holder shall comply with orders made by a designated employee.

2-038 Service of orders and other documents

Orders to remedy a contravention of this By-law or a decision made by the designated employee that is subject to an appeal shall be served in accordance with The City of Winnipeg Charter and, where an address for sending an order or decision is required; one of the following shall be used:

(a) if the person to be served is the owner of real property, the address maintained by the tax collector for the purpose of issuing the tax notice for that property; and
(b) if the person to be served is the occupant of real property, the street address for that property; and
(c) if the document to be served relates to a permit, licence or other document for which the person to be served has applied, the address provided by the person in the application.

2-040 Appeals

An appeal from an order to remedy a contravention of this By-law or a decision made by the designated employee that is subject to appeal may be made to the Standing Policy Committee on Property and Development in accordance with The City of Winnipeg Charter.

Variations to Section 6 of the Code

SERVICES AND SERVICE EQUIPMENT

Control and Protective Equipment

6-206 Consumer's Service Equipment Location

Rule 6-206 is amended by striking out Items (1)(d) and (e) and substituting the following:

(d) Permitted to be placed on the outside of the building or on a pole and shall be:
(i) Protected from the weather or be weatherproof; and
(ii) Protected from mechanical injury if less than 2m above ground; and
(e) Except for Item (1)(d), as close as practicable to the point where the consumer's service conductors enter the building.

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Metering Equipment

6-400 Metering Equipment
Section 6 of the Code is varied by renumbering the present Rule 6-400 as Subrule 6-400(1) and by adding the following Subrule immediately after it:

(2) For determining the type of metering equipment required by the Supply Authority, reference shall be made to Supply Authority Metering Standards which shall be amendatory or additional to Rules 6-402 to 6-412 inclusive.

Variations to Section 10 of the Code

GROUNDING AND BONDING

Grounding Electrodes

10-700 Grounding Electrodes

Section 10 of the Code is varied by striking out Item 10-700(2)(a) and substituting the following:

(a) in the case of rod grounding electrodes (except for a chemically charged rod electrode where only one need to be installed),
- *(i) consist of 2 copper-clad rod electrodes;*
- *(ii) be not less 15.8mm in diameter;*
- *(iii) be spaced no less than 3 m apart;*
- *(iv) be bonded together with a grounding conductor sized in accordance with Rule 10-812; and*
- *(v) be driven to the full length of the rod; or*

Variations to Section 12 of the Code

WIRING METHODS

Exposed Wiring on Exteriors of Buildings and Between Buildings on the Same Premises

12-300 Exterior Exposed Wiring Rules
Section 12 of the Code is varied by renumbering the existing Rule 12-300 as Subrule 12-300(1) and by adding the following Subrule immediately after it:

(2) Exposed overhead wiring on the exteriors of buildings and between buildings or structures on the same premises shall not be permitted, except by special permission or deviation from the designated employee.

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Cable Trays

12-2208 Provisions for Bonding
Section 12 of the Code is varied by striking out Subrules 12-2208(1) and (2) and substituting the following:

(1) Metal cable trays shall be adequately bonded at intervals not exceeding 15 m and the size of bonding conductors shall be based on the ampacity of the largest ungrounded conductor in the circuits or equivalent for multiple parallel conductors carried by the cable tray in accordance with the requirements of Rule 10-814.

Variations to Section 26 of the Code

INSTALLATION OF ELECTRICAL EQUIPMENT

General

26-008 Sprinklered Equipment
Section 26 of the Code is varied by striking out Rule 26-008 and substituting the following:

Electrical service and distribution equipment with ventilation openings located in sprinklered buildings or spaces shall be protected where needed by non-combustible hoods or shields so arranged as to minimize interference with the sprinkler equipment.

Receptacles

26-700 General
Section 26 of the Code is varied by adding the following Subrule to Rule 26-700:

(13) Where a sump pump is required by the Winnipeg Building By-law for the control of water from a subsurface drainage (weeping tile) system:

(a) A receptacle shall be installed for the connection of the sump pump; and
(b) The receptacle for the sump pump shall be supplied from a branch circuit that supplies no other outlets or equipment.

Receptacles for Residential Occupancies

26-714 Receptacles for Single Dwellings
Section 26 of the Code is varied by adding the following Item to Rule 26-714***:***

(d) At least one receptacle shall be provided for each driveway.

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Branch Circuits for Residential Occupancies

26-724 Branch circuits for single dwellings
Section 26 of the Code is varied by adding the following Item to Rule 26-724:

(d) At least one branch circuit shall be provided solely for receptacle(s) for the driveway in accordance with 26-714(d).

Variations to Section 30 of the Code

INSTALLATION OF LIGHTING EQUIPMENT

Luminaires in Buildings of Residential Occupancy

30-504 Stairways
Section 30 of the Code is varied by adding the following Subrule to Rule 30-504:

(4) Notwithstanding Subrule (3) and Appendix G, provision for 3-way switches shall be installed for stairway lighting to basements.

Variations to Section 46 of the Code

EMERGENCY POWER SUPPLY, UNIT EQUIPMENT, EXIT SIGNS, AND LIFE SAFETY SYSTEMS

General

46-108 Wiring Method
Section 46 of the Code is varied by deleting Subrule 46-108(3) and substituting the following:

(3) Conductors installed in buildings of combustible construction in accordance with the Rules of Section 12 shall be:

(a) Non-metallic Sheathed cable; or
(b) Installed in totally enclosed non-metallic raceway.

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Variations to Section 60 of the Code

ELECTRICAL COMMUNICATION SYSTEMS

Outside Conductors

60-500 Overhead Conductors on Poles
Section 60 of the Code is varied by renumbering Rule 60-500 as Subrule 60-500(1) and adding the following Subrule immediately after it:

(2) Exposed overhead wiring on the exteriors of buildings and between buildings or structures on the same premises shall not be permitted, except by special permission from the designated employee.

Variations to Section 76 of the Code

TEMPORARY WIRING

Section 76 of the Code is varied by deleting Rule 76-006 and substituting the following:

76-006 Service Entrance Equipment

(1) Service entrance equipment shall be permitted to be in a temporary building adjacent to the construction or demolition site but if such a building is not available the equipment shall be:

- *(a) Accessible to authorized persons only; and*
- *(b) Capable of being locked; and*
- *(c) Protected against the weather and mechanical damage.*

(2) If not in or on a building, the temporary service shall be mounted:

- *(a) On a pole, or solid wood post measuring at least 89 mm x 140 mm nominal and adequately braced for overhead and underground services not exceeding 200 amperes; or*
- *(b) On a substantial pole structure for services exceeding 200 amperes.*