Province of Alberta

SAFETY CODES ACT

Revised Statutes of Alberta 2000
Chapter S-1

Current as of December 1, 2017

Office Consolidation

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Note

All persons making use of this consolidation are reminded that it has no legislative sanction, that amendments have been embodied for convenience of reference only. The official Statutes and Regulations should be consulted for all purposes of interpreting and applying the law.

Amendments Not in Force

This consolidation incorporates only those amendments in force on the consolidation date shown on the cover. It does not include the following amendments:

2015 c10 s19 amends s38, s25 amends s51.

Regulations

The following is a list of the regulations made under the *Safety Codes Act* that are filed as Alberta Regulations under the Regulations Act

	Alta. Reg.	*Amendments*
Safety Codes Act		
Administrative Items	16/2004	*49/2006, 35/2007, 68/2008, 52/2011, 170/2012, 53/2016*
Administrative Penalties	207/2017	
Alberta Safety Codes Authority Order	29/2016	
Amusement Rides Standards	223/2001	*32/2005, 283/2006, 180/2012, 206/2016*
Building Code	31/2015	
Certification and Permit	295/2009	*39/2012, 193/2014*
Electrical Code	209/2006	*14/2008, 178/2009, 176/2013, 126/2015*
Elevating Devices Codes	192/2015	
Elevating Devices, Passenger Ropeways and Amusement Rides Permit	28/2012	*170/2012, 39/2015,*

SAFETY CODES ACT

Chapter S-1

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Transitional Provisions

HER MAJESTY, by and with the advice and consent of the Legislative Assembly of Alberta, enacts as follows:

Interpretation

1(1) In this Act,

(a) "accredited agency" means a person designated as an accredited agency under this Act;

(b) "accredited corporation" means a corporation designated as an accredited corporation under this Act;

(c) "accredited municipality" means a municipality that is designated as an accredited municipality under this Act;

(d) "accredited regional services commission" means a regional services commission established under the *Municipal Government Act* that is designated as an accredited regional services commission under this Act;

(d.1) "administrative penalty" means an administrative penalty referred to in section 57.1;

(e) "Administrator" means an Administrator appointed under this Act;

(e.1) "Authority" means the Alberta Safety Codes Authority established under section 30.1;

(f) "building" includes a structure and any part of a building or structure, but does not include any thing excluded by the regulations from the definition of building;

(g) "construction" includes alteration, installation, repair, relocation, demolition and removal;

(h) "contractor" means a person or organization that does or undertakes to do, either for the person's or organization's own use or benefit or for that of another, whether or not for the purposes of gain, any process or activity to which this Act applies;

(i) "Council" means the Safety Codes Council established under this Act;

(j) "design" includes plans, diagrams, drawings and specifications depicting the arrangement and operation of any thing, process or activity to which this Act applies;

(k) "electrical system" means an assembly or any part of an assembly of electrical equipment or components used or intended to be used for the generation, transmission, distribution, control or utilization of electric energy, but does not include any thing excluded by the regulations from the definition of electrical system;

(l) "elevating device" means a passenger elevator, freight elevator, dumbwaiter, emergency elevator, escalator, inclined passenger lift, manlift, passenger ropeway, material lift, moving walk, personnel hoist, lift for persons with disabilities, or amusement ride, as defined in the regulations, or anything designated by the regulations as an elevating device;

(m) "evaluation" includes load, destructive and non-destructive tests;

(n) "fire protection" includes fire detection, prevention and suppression;

(o) "gas" means any gas or compressed gas or any mixture or dilution of gases and includes any combustible or flammable fluid, but does not include any gas, mixture or dilution of gases or combustible or flammable fluid excluded by the regulations from the definition of gas;

(p) "gas system" means any equipment or installation used or intended to be used in or in conjunction with the processing, transmission, storage, distribution, supply or use of gas, but does not include any thing excluded by the regulations from the definition of gas system;

(q) "information system" means an information system maintained under section 58;

(r) "local authority" means

(i) a council of a city, town, village, summer village or municipal district,

(ii) for the purposes of this Act, a settlement council of a Metis settlement,

(iii) a board of administrators of a new town,

(iv) the Minister responsible for the *Municipal Government Act*, in the case of an improvement district, or

(v) the Minister responsible for the *Special Areas Act*, in the case of a special area;

(s) "Metis patented land" means patented land as defined in the *Metis Settlements Act*;

(t) "Minister" means the Minister determined under section 16 of the *Government Organization Act* as the Minister responsible for this Act;

(u) "municipality" includes, for the purposes of this Act, a Metis settlement;

(v) "owner" includes a lessee, a person in charge, a person who has care and control and a person who holds out that the person has the powers and authority of ownership or who for the time being exercises the powers and authority of ownership;

(w) "person" includes a partnership and a band as defined in the *Indian Act* (Canada);

(x) "plumbing system" means the whole or any part of a drainage system, a venting system or a water system, but does not include any thing excluded by the regulations from the definition of plumbing system;

(y) "pressure equipment" means a boiler, a fired-heater pressure coil, a thermal liquid heating system and other equipment designed to contain expansible fluid under pressure, including, but not limited to, pressure vessels, pressure piping systems and fittings, as defined in the regulations;

(z) "private sewage disposal system" means the whole or any part of a system for the management, treatment and disposal of sewage on the site where the sewage is generated, but does not include anything excluded by the regulations;

(aa) "quality management system" means all the documented, planned and systematic actions needed to ensure that this Act is complied with;

(bb) "safety codes officer" means an individual designated as a safety codes officer under section 31;

(cc) repealed 2015 c10 s2;

(cc.1) "sub-council" means a sub-council of the Council established under section 16.1(3);

(cc.2) "tele-warrant" means a tele-warrant issued under section 48.1;

(dd) "variance" means a variance issued under this Act;

(ee) "vendor" includes a lessor.

(2) In this Act, a reference to "this Act" includes the regulations and bylaws made under this Act and any code, standards or body of rules declared to be in force pursuant to this Act.

(3) This Act is to be interpreted in a manner consistent with the principles of barrier-free design and access to allow persons with physical and sensory disabilities to more easily and safely access and use buildings, facilities and services to which this Act applies.

RSA 2000 cS-1 s1;2015 c10 s2

Application of Act

2(1) This Act applies to fire protection, barrier-free design and the design, manufacture, construction, installation, use, operation, occupancy and maintenance of

(a) buildings,

(b) electrical systems,

(c) elevating devices,

(d) gas systems,

(e) plumbing systems,

(f) pressure equipment, and

(g) private sewage disposal systems.

(2) The Minister may, by order, exempt any person or municipality or any thing, process or activity from any or all provisions of this Act and attach terms and conditions to the exemption.

(3) An exemption order made under subsection (2) may be made to apply generally or specifically and to all or a particular area of Alberta.

(4) The *Regulations Act* applies to an exemption order made under subsection (2).

RSA 2000 cS-1 s2;2004 c19 s2;2015 c10 s3

Validation of orders

2.1(1) The following orders are, as of the date they came into force, validated and declared for all purposes to have been validly made under section 2:

(a) Ministerial Order No. P:002/04, an exemption regarding the GP3 Generation Facility;

(b) Ministerial Order No. P:007/10, an exemption regarding the application of sentence 9.10.15.3(1) of Division B of the Alberta Building Code 2006.

(2) Everything done under or pursuant to the orders referred to in subsection (1) is validated and declared for all purposes to have been validly done.

2015 c10 s4

Crown bound

3 The Crown is bound by this Act.

1991 cS-0.5 s3

Part 1
Responsibilities

Government

4(1) The Minister shall, in accordance with this Act, co-ordinate and encourage the safe management and control of any thing, process or activity to which this Act applies.

(2) The Minister shall, in accordance with this Act, co-ordinate and encourage the principles of barrier-free design and access for any thing, process or activity to which this Act applies.

RSA 2000 cS-1 s4;2004 c19 s3

Owners, care and control

5 The owner of any thing, process or activity to which this Act applies shall ensure that it meets the requirements of this Act, that the thing is maintained as required by the regulations and that when the process or activity is undertaken it is done in a safe manner.

1991 cS-0.5 s5

Design duties

6 A person who creates, alters, has care and control of or owns a design or offers a design for use by others shall ensure that the design complies with this Act and that it is submitted for review or registered if required by this Act, and if the design is deregistered,

the person shall provide notice of its deregistration in accordance with the regulations.

1991 cS-0.5 s6

Manufacturers' duties

7 A person who manufactures any thing or undertakes a process or activity to which this Act applies shall ensure that the thing, the process or the activity complies with this Act.

1991 cS-0.5 s7

Contractors' duties

8 A contractor who undertakes construction, operation or maintenance of or builds or installs any thing to which this Act applies shall ensure that this Act is complied with.

1991 cS-0.5 s8

Vendors' duties

9(1) A person who is a vendor in the ordinary course of business, other than as an employee or an agent, shall not advertise, display or offer for sale, for lease or for other disposal, or sell, lease or otherwise dispose of, any thing to which this Act applies unless that thing complies with this Act.

(2) A person who sells, leases or otherwise disposes of a thing referred to in subsection (1) shall provide any warnings or instructions required by this Act.

(3) No person shall advertise, display or offer for sale, for lease or for other disposal, or sell, lease or otherwise dispose of, any thing that is prohibited from being sold by the regulations.

1991 cS-0.5 s9

Use of variances

10(1) An owner, vendor, contractor, manufacturer or designer of a thing, or a person who authorizes, undertakes or supervises any process or activity, to which a variance applies shall ensure that the terms and conditions of the variance are complied with.

(2) Compliance with a variance is deemed to be compliance with this Act.

1991 cS-0.5 s10

Professional services

11 A person permitted to affix stamps or seals pursuant to the *Architects Act* or the *Engineering and Geoscience Professions Act* shall ensure that any professional service the person renders to which this Act applies, including the affixing of stamps and seals, complies with this Act.

RSA 2000 cS-1 s11;2011 c3 s33

Liability exemption

12(1) No action lies against the Crown, the Council, members of the Council, employees or officers of the Council, safety codes officers, accredited municipalities or their employees or officers, accredited regional services commissions or their employees or officers, accredited agencies or their employees or officers or Administrators for anything done or not done by any of them in good faith while exercising their powers and performing their duties under this Act.

(2) The Crown, the Council, an accredited municipality, an accredited regional services commission and an accredited agency acting in good faith under this Act are not liable for any damage caused by a decision related to the system of inspections, examinations, evaluations and investigations, including but not limited to a decision relating to their frequency and the manner in which they are carried out.

(3) The Crown, the Council, an accredited municipality and an accredited regional services commission that engage the services of an accredited agency are not liable for any negligence or nuisance of the accredited agency that causes an injury, loss or damage to any person or property.

(4) Subject to this section, nothing done pursuant to this Act affects the liability of any person for injury, loss or damage caused by any thing, process or activity to which this Act applies.

RSA 2000 cS-1 s12;2015 c10 s5

Part 2
Administration

Overall administration

13(1) The Minister administers this Act but an accredited municipality, an accredited regional services commission, an accredited corporation and the Authority shall provide for the administration of this Act in accordance with

(a) the order that designated the accredited municipality, accredited regional services commission or accredited corporation, or

(b) the order referred to in section 18(d.1) authorizing the establishment of the Authority.

(2) The Minister or the Council may, in accordance with the regulations, establish and operate safety information and education programs or services related to any thing, process or activity to which this Act applies.

RSA 2000 cS-1 s13;2015 c10 s6

Administrator

Administrator appointed

14(1) The Minister may appoint persons as Administrators and prescribe their powers and duties and may make an order fixing or governing the terms and conditions of service, including remuneration and expenses, applicable to an Administrator if the person is not an employee as defined in the *Public Service Act*.

(2) The Minister may direct, in writing,

(a) that an Administrator report to the Council with respect to exercising the powers and performing the duties of an Administrator, and

(b) that the Council direct the Administrator in exercising the powers and performing the duties of an Administrator.

1991 cS-0.5 s14

Deemed an officer

15 An Administrator may, in accordance with the appointment under section 14, exercise any or all of the powers and perform any or all of the duties of a safety codes officer.

1991 cS-0.5 s15

Safety Codes Council

Council

16(1) There is hereby established a corporation to be known as the "Safety Codes Council".

(2) On the coming into force of this subsection, a person who, immediately before the coming into force of this subsection, held an appointment as a member of the Council continues as a member of the Council until the term of office stated in the member's appointment expires or the appointment is terminated, revoked or rescinded.

(3) Subject to subsection (2), the Council consists of the persons appointed to the Council by the Minister and the persons appointed to the Council by the Board of Directors in accordance with this section.

(4) The persons appointed to the Council by the Board of Directors must include persons who are experts in fire protection, buildings, barrier-free building design, electrical systems, elevating devices, gas systems, plumbing systems, private sewage disposal systems or pressure equipment.

(5) The Board of Directors shall ensure that representatives of municipalities, business, labour and persons with disabilities are appointed to the Council from among the persons described in subsection (4).

(6) An Administrator is not eligible to be appointed to the Council.

(7) A person appointed under subsection (3)

(a) holds office for a term not exceeding 3 years, as set out in the appointment, and

(b) continues to hold office after the expiry of the term of office until the person is reappointed or a successor is appointed.

(8) If a member of the Council resigns or the appointment terminates, that person may, in relation to an appeal in which the person participated as a member of the Council, perform and complete the duties or responsibilities and continue to exercise the powers that the person would have had if the person had not ceased to be a member of the Council, until the appeal is completed.

(9) Subject to subsection (7)(b) and (11), a member of the Council may not hold office for a period exceeding 9 consecutive years.

(10) Breaks in service of less than 2 years shall be disregarded in determining the number of consecutive years for the purposes of subsection (9).

(11) The Minister may make an order providing that subsection (9) does not apply in respect of a specified appointment to the Council if in the opinion of the Minister that order is necessary to ensure the effective operation of the Council.

RSA 2000 cS-1 s16;2004 c19 s4;2015 c10 s7

Board of Directors and sub-councils

16.1(1) On the coming into force of this section,

(a) the Co-ordinating Committee of the Safety Codes Council as it existed immediately before the coming into force of this section is continued as the Board of Directors;

(b) a person who, immediately before the coming into force of this section, held an appointment as a member of the

Co-ordinating Committee of the Safety Codes Council continues as a member of the Board of Directors until the term of office stated in the member's appointment expires or the appointment is terminated, revoked or rescinded;

(c) a person who, immediately before the coming into force of this section, held the designation as the Chair of the Council continues as the chair of the Board of Directors until the term of office stated in the designation expires or the designation is terminated, revoked or rescinded;

(d) a person who, immediately before the coming into force of this section, held a designation as an alternate to chair the Council continues as vice-chair of the Board of Directors until the term of office stated in the designation expires or the designation is terminated, revoked or rescinded.

(2) Subject to subsection (1), the Board of Directors shall consist of

(a) a chair appointed by the Minister as a member of the Council and as the chair of the Board of Directors,

(b) one or more members of the Council appointed by the Board of Directors as a vice-chair of the Board of Directors, and

(c) the members of the Council appointed by the Board of Directors as directors.

(3) The Board of Directors may establish sub-councils of the Council, including, without limitation, sub-councils relating to any thing, process or activity to which this Act applies.

(4) A sub-council shall consist of

(a) the members of the Council appointed by the Board of Directors as members of the sub-council, and

(b) a member of the public appointed by the Minister as a member of the Council and as the public member of the sub-council.

2015 c10 s8

Expenses

17 The Council may pay members of the Council travelling and living expenses while away from their ordinary places of residence in the course of their duties as members of the Council at the rates provided for in the regulations under the *Public Service Act*.

1991 cS-0.5 s17;1993 c7 s4

Duties and powers

18 The Council

(a) shall perform its duties and responsibilities under this Act,

(b) shall hear appeals under Part 5,

(c) shall, on the request of the Minister, provide information about any matter related to this Act,

(d) shall carry out any activities that the Minister directs,

(d.1) shall, on the order of the Minister, establish the Authority referred to in section 30.1,

(e) may promote uniformity of safety standards for any thing, process or activity to which this Act applies,

(e.1) may promote the principles of barrier-free design and access for any thing, process or activity to which this Act applies,

(f) may provide a liaison between the Minister and any person or organization interested in safety or barrier-free design and access matters governed by this Act,

(g) may review and formulate classifications of certificates of competency and qualifications required of a person to hold a certificate of competency,

(h) may, with the consent of the Minister, review and formulate codes and standards for accreditation, safety standards and barrier-free design and access for any thing, process or activity to which this Act applies and promulgate those codes and standards, and

(i) may

(i) provide advice and recommendations to the Minister about safety information, barrier-free design and access information, education programs and services, accreditation and other information and services related to this Act, and

(ii) with the consent of the Minister, publish or provide to the public the information and services referred to in subclause (i).

RSA 2000 cS-1 s18;2004 c19 s5;2015 c10 s9

Bylaws

19 The Council may make bylaws

(a) respecting the Board of Directors, sub-councils and committees of the Council and the delegation of any power or duty conferred or imposed on it, except the power to make bylaws, to the Board of Directors, a sub-council or committee of the Council or a member of the Council;

(b) respecting the Authority and the exercise of its powers and performance of its duties under this Act;

(c) governing the calling of its meetings and the meetings of the Board of Directors, sub-councils and committees of the Council, and regulating the conduct of those meetings;

(d) governing the practice and procedure applicable to appeals before it;

(e) governing the business, property, operation and affairs of the Council.

RSA 2000 cS-1 s19; 2015 c10 s10

Staff

20(1) The Council may enter into agreements to engage the services of persons it considers necessary and may prescribe their duties and conditions of employment and pay their salary, remuneration and expenses.

(2) The Council may enter into agreements to engage the services of agents, advisors or persons providing special, technical or professional services of a kind required by the Council in connection with its business and affairs and may pay their remuneration, fees and expenses.

1991 cS-0.5 s20

Money

21(1) The Council, in connection with the powers conferred and duties imposed on it under this Act, may acquire real property, construct buildings or improvements or hold or dispose of real property.

(2) The Council, in connection with the powers conferred and duties imposed on it under this Act, may acquire, hold and dispose of personal property.

(3) Any money that is derived from donations that is not immediately required for the operation of the Council may, subject to the regulations, be invested only in accordance with the *Trustee Act*.

(3.1) Subsection (3) is subject to any trust or condition that applies to the donation.

(4) The Council may spend money only for purposes related to the powers conferred and duties imposed on it under this Act.

(5) Notwithstanding the *Financial Administration Act*, any money received by the Council belongs to the Council.

RSA 2000 cS-1 s21;2001 c28 s19;2006 c9 s17

Fees

22 The Council may establish and charge fees

(a) for anything issued or for any material, information, education program or service the Council provides,

(b) with respect to the conduct of appeals, and

(c) for any research that is carried out that relates to any thing, process or activity to which this Act applies.

1993 c7 s6

Levies

23(1) The Council may, with the approval of the Minister, for the purpose of enabling the Council to carry out activities and services it is directed or authorized to carry out under this Act, collect money by the levy of assessments on persons who apply for, or hold, certificates or permits or who apply to register, or register, designs.

(2) The Council may require an accredited municipality, accredited regional services commission, accredited corporation, accredited agency or other organization that issues certificates or permits or registers designs to collect the money referred to in subsection (1) and to remit it to the Council.

1994 c44 s2;1999 c26 s23

Levies

24(1) An accredited agency may, with the approval of the Minister, for the purpose of enabling the accredited agency to carry out activities and services it is directed or authorized to carry out under this Act, collect money by the levy of assessments on persons who apply for, or hold, certificates or permits or who apply to register, or register, designs.

(2) An accredited agency may, with the approval of the Minister, require an accredited municipality, accredited regional services commission, accredited corporation, accredited agency or other organization that issues certificates or permits or registers designs, to collect the money referred to in subsection (1), and the accredited municipality, accredited regional services commission, accredited corporation, accredited agency or other organization

shall collect the money and remit it as directed by the accredited agency.

1994 c44 s2;1999 c26 s23

Reports

25(1) The Council shall, after the end of each fiscal year, prepare and submit to the Minister an annual report consisting of a general summary of its activities in that year and a financial report.

(2) The Council may, at any time, report to the Minister on any matter related to this Act.

(3) The Minister shall lay a copy of the report described in subsection (1) before the Legislative Assembly if it is then sitting, and if it is not then sitting, within 15 days after the commencement of the next sitting.

1991 cS-0.5 s22

Accreditation

Accredited municipalities

26(1) On the application of a local authority, the Minister may, by order,

(a) designate a municipality as an accredited municipality authorized to administer all or part of this Act with respect to any or all things, processes or activities to which this Act applies within the boundaries of the municipality, or

(b) designate 2 or more municipalities as accredited municipalities authorized to administer in common all or part of this Act with respect to any or all things, processes or activities to which this Act applies within the boundaries of those municipalities.

(2) The Minister may include terms and conditions in an order under this section.

(3) If the Minister, on reasonable and probable grounds, is of the opinion that an accredited municipality does not comply with the requirements of this Act or the terms and conditions of its designation, or that any thing, process or activity to be administered by the accredited municipality may constitute a serious danger to persons or property, the Minister may

(a) request the local authority to take the action necessary to correct the situation;

(b) direct a safety codes officer appointed under section 33(1) to undertake the administration of this Act in that accredited

municipality and to charge fees, in the amount provided for by the regulations,

(i) to the accredited municipality for any permit issued by the safety codes officer and for any material or service that is provided by the safety codes officer,

(ii) to the owner of a premises or place for any material or services provided by the safety codes officer, and

(iii) to the recipient of any permit issued by the safety codes officer;

(c) by order, cancel or suspend the municipality's designation as an accredited municipality.

(4) An order under this section shall be published in The Alberta Gazette.

(5) The Minister may delegate any or all of the Minister's powers under this section to the Council, and if the Council refuses to designate a municipality as an accredited municipality or cancels or suspends the designation of an accredited municipality, the municipality may appeal the refusal, cancellation or suspension to the Minister.

1991 cS-0.5 s23

Accredited regional services commission

27(1) On the application of a regional services commission established under the *Municipal Government Act*, the Minister may, by order, designate a regional services commission as an accredited regional services commission authorized to administer all or part of this Act with respect to any or all things, processes or activities to which this Act applies within the boundaries of its members.

(2) The Minister may include terms and conditions in an order under this section.

(3) If the Minister, on reasonable and probable grounds, is of the opinion that an accredited regional services commission does not comply with the requirements of this Act or with the terms and conditions of its designation, or that any thing, process or activity to be administered by the accredited regional services commission may constitute a serious danger to persons or property, the Minister may

(a) request the board of directors of the accredited regional services commission to take the action necessary to correct the situation;

(b) direct a safety codes officer appointed under section 33(1) to undertake the administration of this Act on behalf of that accredited regional services commission and to charge fees, in the amount provided for by the regulations,

(i) to the accredited regional services commission for any permit issued by the safety codes officer and for any material or service that is provided by the safety codes officer,

(ii) to the owner of a premises or place for any material or services provided by the safety codes officer, and

(iii) to the recipient of any permit issued by the safety codes officer;

(c) by order, cancel or suspend the regional services commission's designation as an accredited regional services commission.

(4) An order under this section must be published in The Alberta Gazette.

(5) The Minister may delegate any or all of the Minister's powers under this section to the Council, and if the Council refuses to designate a regional services commission as an accredited regional services commission or cancels or suspends the designation of an accredited regional services commission, the regional services commission may appeal the refusal, cancellation or suspension to the Minister.

1999 c26 s23

Accredited corporations

28(1) On the application of a corporation an Administrator may, by order, designate it as an accredited corporation authorized to administer all or part of this Act with respect to any or all things, processes or activities to which this Act applies that are owned by or are under the care and control of the corporation.

(2) If an Administrator refuses to designate a corporation as an accredited corporation, the Administrator shall serve written notice of the refusal on the corporation.

(3) An Administrator may include terms and conditions and specify locations and facilities in an order under this section.

(4) If an Administrator, on reasonable and probable grounds, is of the opinion that an accredited corporation does not comply with the requirements of this Act or with the terms and conditions of its designation, the Administrator may, by order, suspend or cancel the designation as an accredited corporation and shall serve the corporation with a written notice of the suspension or cancellation.

(5) A corporation may appeal to the Council in accordance with the Council's bylaws

(a) a refusal of designation as an accredited corporation, and

(b) a suspension or cancellation of a designation as an accredited corporation.

(6) An order under this section shall be published in The Alberta Gazette.

1991 cS-0.5 s24

Accreditation overlap

29(1) If an accredited municipality, an accredited regional services commission and an accredited corporation are authorized to administer the same part of this Act with respect to the same thing, process or activity at the same location, the Minister may direct whether the accredited municipality, the accredited regional services commission or the accredited corporation may administer this Act with respect to that thing, process or activity.

(2) If the Minister considers it expedient and in the public interest, the Minister may delegate the Minister's powers under this section to another individual.

(3) The Municipal Government Board established under section 486(1) of the *Municipal Government Act* shall, at the request of the Minister, provide recommendations regarding a question or matter relating to an accreditation overlap referred to in subsection (1).

RSA 2000 cS-1 s29; 2015 c10 s11

Accredited agencies

30(1) On the application of a person, an Administrator may, by order, designate the person as an accredited agency authorized to provide services pursuant to all or part of this Act with respect to any or all things, processes or activities to which this Act applies.

(2) If an Administrator refuses to designate a person as an accredited agency, the Administrator shall serve the person with a written notice of the refusal.

(3) An Administrator may include terms and conditions in an order under this section.

(4) An accredited agency may enter into an agreement with the Minister, the Council, an accredited municipality, an accredited corporation or another person approved by the Minister to provide services under this Act that the agency is authorized to provide.

(5) If an Administrator, on reasonable and probable grounds, is of the opinion that an accredited agency does not comply with the requirements of this or any other Act or with the terms and conditions of its designation, the Administrator may, by order, suspend or cancel the designation as an accredited agency and shall serve the agency with a written notice of the suspension or cancellation.

(6) A person may appeal to the Council in accordance with the Council's bylaws

(a) a refusal of designation as an accredited agency, and

(b) a suspension or cancellation of a designation as an accredited agency.

(7) An order under this section shall be published in The Alberta Gazette.

RSA 2000 cS-1 s30;2015 c10 s12

Alberta Safety Codes Authority

Establishment and powers of Authority

30.1(1) On the order of the Minister, the Council shall establish a division of the Council to be known as the "Alberta Safety Codes Authority" to oversee the provision of services pursuant to all or part of this Act identified by the order in areas to be administered by the Crown.

(2) The membership, powers and duties of the Authority shall be established in accordance with the order referred to in subsection (1).

(3) The Authority may enter into contracts on behalf of the Council that the Authority considers appropriate for the exercise of its powers and performance of its duties under this Act.

(4) The Authority may appear as an applicant or respondent in legal proceedings concerning the services that it provides or oversees pursuant to this section.

(5) The *Regulations Act* applies to an order made under this section.

2015 c10 s13

Safety Codes Officers

Designation

31(1) On receipt of an application, an Administrator may

(a) designate a person who holds an appropriate certificate of competency and meets the requirements of the regulations as a safety codes officer with respect to all or part of this Act, and

(b) designate the powers that a safety codes officer referred to in section 33(2) to (6) may exercise.

(2) If an Administrator refuses to designate a person as a safety codes officer, the Administrator shall serve the person with a written notice of the refusal.

(3) If an Administrator, on reasonable and probable grounds, is of the opinion that a safety codes officer contravenes this Act or the terms of the person's designation as a safety codes officer, the Administrator may suspend or cancel the designation and shall serve the safety codes officer with a written notice of the suspension or cancellation.

(4) A safety codes officer may appeal to the Council a refusal of designation and a suspension or cancellation of a designation as a safety codes officer in accordance with the Council's bylaws.

RSA 2000 cS-1 s31;2015 c10 s14

Officer's powers and duties

32 A safety codes officer designated in accordance with section 31(1)(a) may exercise the powers and perform the duties of a safety codes officer only in accordance with

(a) a designation of powers under section 31(1)(b) and the safety codes officer's terms of employment, or

(b) an appointment referred to in section 33(1) and the safety codes officer's terms of employment.

RSA 2000 cS-1 s32;2015 c10 s15

Employment

33(1) The Minister may, in accordance with the *Public Service Act*, appoint safety codes officers for the administration of all or part of this Act anywhere in Alberta and shall prescribe the powers and duties of the safety codes officers.

(2) A local authority shall provide for safety codes officers for the purpose of administering all or part of this Act that an accredited municipality is authorized to administer.

(3) An accredited regional services commission shall provide for safety codes officers for the purpose of administering all or part of this Act that it is authorized to administer.

(4) An accredited corporation shall provide for safety codes officers for the purpose of administering all or part of this Act that it is authorized to administer.

(5) An accredited agency shall provide for safety codes officers for the purpose of providing services under this Act that it is authorized to provide.

(6) The Authority shall provide for safety codes officers for the purpose of providing services under this Act that it provides or oversees pursuant to section 30.1.

RSA 2000 cS-1 s33;2015 c10 s16

Inspections

34(1) For the purpose of ensuring that this Act and any thing issued under this Act are complied with, a safety codes officer may, without a warrant, at any reasonable time, enter any premises or place, except a private dwelling place that is in use as a dwelling, in which the officer has reason to believe there is something to which this Act applies and may, using reasonable care, carry out an inspection, review designs and examine and evaluate quality management systems and manufacturing and construction processes.

(2) For the purpose of ensuring that this Act and any thing issued under this Act are complied with, a safety codes officer may, at any reasonable time and on reasonable notice, enter a private dwelling place that is in use as a dwelling in which the officer has reason to believe there is something to which this Act applies and, using reasonable care, may carry out an inspection and review designs

(a) with the consent of the owner or occupant, or

(b) with a warrant from a justice.

(3) On entering a premises or place, a safety codes officer shall, on request, produce identification in accordance with the regulations and provide advice on the powers to carry out inspections, review designs and examine and evaluate quality management systems and manufacturing and construction processes.

(4) In carrying out an inspection, review, examination or evaluation under this Act, a safety codes officer may

(a) be accompanied by a police officer, a peace officer or any other person or with any thing that the safety codes officer considers appropriate,

(b) inspect, review, examine and evaluate any thing, process or activity to which this Act applies and photograph or otherwise record any thing, process or activity that the safety codes officer considers would be of assistance,

(c) require any person on the premises or at the place to be interviewed and to make full disclosure either orally or in writing about any matter concerning any thing, process or activity to which this Act applies,

(d) if necessary for safety reasons and on providing notice when practical, temporarily close or disconnect, or require temporary closure or disconnection of, any thing, process or activity to which this Act applies for the purpose of making the inspection, review, examination or evaluation, and

(e) review, perform or require to be performed any tests and evaluations the safety codes officer considers necessary on any thing, process or activity to which this Act applies and remove any thing, if necessary, for the purpose of having tests or evaluations performed.

(5) The owner or occupier of premises or a place or thing shall ensure, during an inspection, review, examination or evaluation, that

(a) on the request of a safety codes officer, there is a person in attendance who is capable of taking all the necessary precautions and providing reasonable assistance to ensure the safety of the safety codes officer, and

(b) any necessary safety equipment, including but not limited to that requested by a safety codes officer, is immediately available for the officer's use.

(6) A safety codes officer who has reviewed, detained or removed any thing shall, on completion of the inspection, review, examination or evaluation, return the thing to the person entitled to it unless it is impossible, unsafe or impractical to return that thing.

(7) On completion of an inspection, review, examination or evaluation, the safety codes officer may provide, to the owner, occupier, vendor, contractor, manufacturer or designer, advice or a report on the thing, process or activity that was inspected, reviewed, examined or evaluated.

(8) Notwithstanding subsection (6), a safety codes officer may,

(a) on obtaining a warrant, or

(b) without a warrant if the safety codes officer believes on reasonable and probable grounds that it is not practical to obtain a warrant because the necessary delay may result in the loss of evidence,

detain or remove for the purposes of evidence any thing that the officer discovers during an inspection, review, examination or evaluation that the officer believes on reasonable and probable grounds may provide evidence of the commission of an offence under this Act.

RSA 2000 cS-1 s34;2015 c10 s17

Production of documents

35(1) For the purpose of ensuring that this Act and any thing issued under this Act are complied with, a safety codes officer may demand the production, within a reasonable time, of any record or document pertaining in any manner to compliance with this Act and may on giving a receipt for it remove it for not more than 48 hours for the purpose of making copies of it.

(2) If a person on whom a demand is made under subsection (1) refuses or fails to comply, the safety codes officer may apply to a judge of the Court of Queen's Bench and the judge may make any order that the judge considers necessary to enforce compliance with subsection (1).

(3) A copy of the application and a copy of each affidavit in support shall be served not less than 3 days before the day named in the application for the hearing.

RSA 2000 cS-1 s35;2009 c53 s167

Incriminating disclosures

36 A person who makes a disclosure under section 34(4)(c) has the right not to have any incriminating disclosure so given used to incriminate the person in a prosecution under this Act except in a prosecution under section 67(2).

1991 cS-0.5 s32

Officer hindered

37(1) If a person refuses to allow a safety codes officer to exercise that officer's powers under this Act or interferes or attempts to interfere with a safety codes officer in the exercise of that officer's powers under this Act, an Administrator, an accredited municipality, an accredited regional services commission, the

Authority or the Council may apply to the Court of Queen's Bench for an order

(a) restraining that person from preventing or in any manner interfering with a safety codes officer in the exercise of that officer's powers under this Act, and

(b) for the purposes of providing protection, authorizing a police officer to accompany the safety codes officer on an inspection, review, examination or evaluation under this Act.

(2) A copy of the application and a copy of each affidavit in support shall be served not less than 3 days before the day named in the application for the hearing.

RSA 2000 cS-1 s37;2009 c53 s167;2015 c10 s18

Part 3
Standards

Variances

38(1) An Administrator or a safety codes officer may issue a written variance with respect to any thing, process or activity to which this Act applies if the Administrator or officer is of the opinion that the variance provides approximately equivalent or greater safety performance with respect to persons and property as that provided for by this Act.

(2) An Administrator or a safety codes officer may include terms and conditions in the variance.

(3) A safety codes officer on issuing a variance shall notify an Administrator.

(4) The *Regulations Act* does not apply to variances issued under this section.

1991 cS-0.5 s34

Quality management system

39(1) An owner, occupier, vendor, contractor, manufacturer or designer of a thing, or a person who authorizes, undertakes or supervises a process or activity, to which this Act applies may be required by a written order of an Administrator or by this Act to have and maintain a quality management system that meets the requirements of the regulations.

(2) No person shall make a change to a quality management system without first notifying an Administrator of the change if it is a type of change of which an Administrator requires notification.

(3) A person who has or maintains a quality management system shall, on the request of an Administrator or a safety codes officer, make available a copy of a written description of the quality management system and submit reports respecting the quality management system.

1991 cS-0.5 s35

Design registration

40(1) An Administrator or safety codes officer may register the design of any thing, process or activity that is required by this Act to be registered if the submitted design meets the requirements of this Act.

(2) If this Act requires that the design of any thing, process or activity be registered, no person shall construct or manufacture the thing or undertake or operate the process or activity unless the design is registered.

(3) If an application to have a design registered is refused

(a) by an Administrator, the Administrator shall serve the applicant with a written notice of the refusal, or

(b) by a safety codes officer, the safety codes officer shall serve the applicant with a written notice of the refusal.

(4) If an Administrator is of the opinion that a registered design does not meet the requirements of this Act or is unsafe, the Administrator may deregister the design and shall as soon as practicable notify the person who submitted the design for registration.

(5) If a person's application to have a design registered is refused or if a person's registered design is deregistered, the person may appeal the refusal or deregistration to the Council in accordance with the Council's bylaws.

RSA 2000 cS-1 s40;2014 c18 s3

Certificate required

41(1) No person shall, without a certificate of competency, control or operate any thing to which this Act applies or supervise, operate or undertake any process or activity to which this Act applies if this Act requires that the person hold a certificate of competency to do so.

(2) No person shall employ or authorize a person who does not hold a certificate of competency to control or operate any thing or to supervise, operate or undertake a process or activity if this Act

requires that an employed or authorized person hold a certificate of competency.

1991 cS-0.5 s37

Certificate issues

42(1) On receipt of an application, an Administrator may issue a certificate of competency to a person who complies with the requirements of this Act.

(2) A certificate of competency is valid for the length of time specified in it unless it is cancelled or suspended earlier.

(3) An Administrator may suspend or cancel a certificate of competency if the Administrator, on reasonable and probable grounds, is of the opinion that

(a) the person no longer complies with the requirements of this Act for a certificate of competency, or

(b) the person does not comply with this Act when acting pursuant to the certificate of competency.

(4) The Administrator shall serve written notice of a refusal to issue a certificate of competency or of the suspension or cancellation of a certificate of competency on the applicant for or the holder of the certificate of competency.

(5) A person who is refused a certificate of competency or whose certificate of competency is suspended or cancelled may appeal the refusal, suspension or cancellation to the Council in accordance with the Council's bylaws.

1991 cS-0.5 s38

Permits required

43(1) If this Act requires a person to have a permit to sell, construct, control or operate any thing or supervise, operate or undertake any process or activity, no person shall do so unless the person has the appropriate permit.

(2) If any thing to which this Act applies is approved by the regulations for a certain use or purpose, no person shall use that thing for any other use or purpose unless a safety codes officer issues a permit for that other use or purpose or it is an innocuous use or purpose.

(3) If the regulations require that any thing be approved before it is installed or operated, no person shall install or operate that thing unless a safety codes officer issues a permit for it.

(4) A permit under this Act does not authorize a person to do any thing, implement any process or engage in any activity that does not comply with any other enactment.

1991 cS-0.5 s39

Permit issues

44(1) On receipt of an application, a safety codes officer or other person designated by an Administrator may issue a permit to a person who complies with the requirements of this Act or issue a permit with respect to a thing, process or activity if it complies with the requirements of this Act.

(2) A safety codes officer or other person designated by an Administrator may include terms and conditions in a permit.

(3) If a safety codes officer or other person designated by an Administrator refuses to issue a permit, the safety codes officer or other person designated by an Administrator shall serve the applicant with a written notice of the refusal.

(4) A person who acts pursuant to a permit shall do so in accordance with this Act and shall comply with this Act and any terms or conditions contained in the permit.

(5) A person who is refused a permit may appeal the refusal to the Council in accordance with the Council's bylaws.

1991 cS-0.5 s40;1994 c23 s42

Stamps, seals

45(1) If the regulations require the design of any thing, process or activity to which this Act applies to be submitted for review or to be registered and

(a) to have a stamp or seal affixed to it and to be signed pursuant to the *Architects Act*, or

(b) to have a seal affixed to it and to be signed pursuant to the *Engineering and Geoscience Professions Act*,

no permit may be issued with respect to the design unless the design is submitted for review or registered and is signed, stamped and sealed in accordance with the regulations.

(2) Despite subsection (1), a permit may be issued on or before April 1, 2016 with respect to a design submitted on or before April 1, 2016 that does not bear the signatures referred to in subsection (1).

RSA 2000 cS-1 s45;2011 c3 s33;2015 c10 s20

Permit suspended, etc.

46(1) A safety codes officer may suspend or cancel a permit if the safety codes officer, on reasonable and probable grounds, is of the opinion that the permit holder does not comply with this Act when acting pursuant to the permit or that the thing, process or activity does not comply with this Act.

(2) The safety codes officer shall serve written notice of the suspension or cancellation on the permit holder and shall also notify an Administrator.

(3) A person whose permit is suspended or cancelled may appeal the suspension or cancellation to the Council in accordance with the Council's bylaws.

1991 cS-0.5 s42

Part 4
Unusual Situations

Emergency

47(1) If a safety codes officer is, on reasonable and probable grounds, of the opinion that there is an imminent serious danger to persons or property because of any thing, process or activity to which this Act applies or because of a fire hazard or risk of an explosion, the officer may take any action that the officer considers necessary to remove or reduce the danger.

(2) An action taken under subsection (1) may include ordering the evacuation of persons from the affected premises and disconnecting or requiring the disconnection of an electrical, gas, sewage or plumbing system.

(3) A safety codes officer may request the assistance of a police officer, a peace officer or any other person as the safety codes officer considers appropriate when taking an action under subsection (1).

(4) If an action is taken under subsection (1) in respect of land that is not Metis patented land, the local authority may place an amount equal to the expense incurred in carrying out the action on the tax roll as an additional tax against the land concerned, and that amount

(a) forms a lien on the land in favour of the local authority,

(b) is, for all purposes, deemed to be a tax imposed and assessed on the land and in arrears under the *Municipal Government Act* from the date the amount was placed on the tax roll, and

(c) the *Municipal Government Act* applies for the purposes of the enforcement, collection and recovery of that amount.

(5) If an action is taken under subsection (1) by a safety codes officer appointed under section 33(1) or (6), or in respect of a subject-matter that is not under the administration of an accredited municipality or an accredited regional services commission, an amount equal to the expense incurred in carrying out the investigation is a debt due to the Crown jointly and severally by the owners of the land concerned, but those persons may only include

(a) the owners of the land concerned as registered under the *Land Titles Act*, or

(b) in the case of Metis patented land, the persons registered in the Metis Settlements Land Registry as owners of the Metis title, provisional Metis title or an allotment in the land.

(6) Nothing in this section precludes the owners of the land concerned from seeking indemnity from a third party for the removal or reduction of a danger or any expense incurred in carrying out an investigation.

RSA 2000 cS-1 s47;2015 c10 s21

Investigation

48(1) A safety codes officer may investigate an unsafe condition, accident or fire to determine its cause and circumstances and make recommendations related to safety.

(2) For the purposes of investigating an unsafe condition, accident or fire, a safety codes officer may whenever necessary

(a) exercise any of the powers of a safety codes officer under sections 34, 35 and 48.1, and

(b) for 48 hours or any extended period of time authorized by a justice, close all or part of the affected premises and prohibit any person from entering or remaining on the closed premises except a police officer or a person who enters to prevent injury or death or to preserve property if, in the opinion of the safety codes officer, there are dangerous or emergency circumstances and the action is necessary for safety reasons or to preserve evidence.

(3) A safety codes officer shall, as soon as possible after the completion of the investigation, return to the person entitled to it any thing removed during the investigation unless it is impossible, unsafe or impractical to return that thing.

(4) A safety codes officer who conducts an investigation shall provide a report to an Administrator.

RSA 2000 cS-1 s48;2015 c10 s22

Tele-warrants

48.1(1) In carrying out an investigation under section 48, if

(a) a safety codes officer has reasonable grounds to believe that there is in a place anything that will afford evidence as to the investigation,

(b) a person refuses to allow a safety codes officer to exercise that officer's powers under this Act or interferes or attempts to interfere with a safety codes officer in the exercise of that officer's powers under this Act, and

(c) it would be impracticable to appear personally before a justice to make an application for a search warrant,

the safety codes officer may submit an information on oath to a justice by telephone or other means of telecommunication.

(2) An information submitted by telephone or other means of telecommunication must be recorded verbatim by the justice, who must, as soon as practicable, cause to be filed with the clerk of The Provincial Court of Alberta nearest to the area in which the tele-warrant is intended for execution, the record or a transcription of the record certified by the justice as to time, date and contents.

(3) For the purposes of subsection (2), an oath may be administered by telephone or other means of telecommunication.

(4) An information on oath submitted by telephone or other means of telecommunication must include

(a) a statement of the circumstances that make it impracticable for the safety codes officer to appear personally before a justice,

(b) a statement of the place to be searched and the things alleged to be liable to seizure in respect of the investigation,

(c) a statement of the safety codes officer's grounds for believing that things liable to seizure in respect of the investigation will be found in the place to be searched, and

(d) a statement as to any prior application under this section or any other warrant or order issued or applied for in respect of the same matter of which the safety codes officer has knowledge.

(5) A justice who is satisfied that an information on oath submitted by telephone or other means of telecommunication

(a) is in respect of an investigation under this Act and conforms to the requirements of subsection (4),

(b) discloses reasonable grounds for dispensing with an information presented personally and in writing, and

(c) discloses reasonable grounds for the issuance of a search warrant in respect of the investigation,

may issue a tele-warrant to a safety codes officer and may require that the tele-warrant be executed within any time period that the justice may order.

(6) A tele-warrant issued under this section may confer the same authority as may be conferred by a warrant issued by a justice before whom the safety codes officer appears personally.

(7) If a justice issues a tele-warrant under subsection (5),

(a) the justice must complete and sign the tele-warrant in the form prescribed in the regulations, noting on its face the date, time and place of issuance,

(b) the safety codes officer, on the direction of the justice, must complete, in duplicate, a facsimile of the tele-warrant in the form prescribed in the regulations, noting on its face the name of the issuing justice and the date, time and place of issuance, and

(c) the justice must, as soon as practicable after the tele-warrant has been issued, cause the tele-warrant to be filed with the clerk of The Provincial Court of Alberta nearest to the area in which the tele-warrant is intended for execution.

(8) A safety codes officer who executes a tele-warrant issued under subsection (5) must, before entering the place to be investigated, or as soon as is practicable afterwards, give a facsimile of the tele-warrant to any person present and ostensibly in control of the place.

(9) A safety codes officer who, in any unoccupied place, executes a tele-warrant issued under subsection (5) must, on entering the place or as soon as is practicable afterwards, cause a facsimile of the tele-warrant to be suitably affixed in a prominent location within the place.

(10) A safety codes officer to whom a tele-warrant is issued under subsection (5) must file a written report with the clerk of The Provincial Court of Alberta nearest to the area in which the tele-warrant was executed as soon as is practicable but not more than 7 days after the tele-warrant was executed, which report must include

(a) a statement of the time and date the tele-warrant was executed, or if the tele-warrant was not executed, a statement of the reasons why it was not executed,

(b) a statement of the things, if any, that were seized pursuant to the tele-warrant and the location where they are being held, and

(c) a statement of the information, data, records, reports, documents and things, if any, that were seized in addition to the things mentioned in the tele-warrant and the location where they are being held, together with a statement of the safety codes officer's grounds for believing that those additional things provide evidence relevant to the unsafe condition, accident or fire under investigation.

(11) The clerk of The Provincial Court of Alberta with whom a written report is filed pursuant to subsection (10) must, as soon as is practicable, cause the report, together with the information on oath and a copy of the tele-warrant to which it pertains, to be brought before a justice to be dealt with in respect of anything that was seized and is referred to in the report, in the same manner as if the things were seized pursuant to a search warrant issued by a justice on an information presented personally by a safety codes officer.

(12) In any proceeding in which it is material for a court to be satisfied that a search or seizure was authorized by a tele-warrant issued under subsection (5), the absence of a copy of the information on oath, transcribed and certified by the justice as to the time, date and contents, or a copy of the tele-warrant, signed by the justice and carrying on its face a notation of the time, date and place of issuance, is, in the absence of evidence to the contrary, proof that the search or seizure was not authorized by a tele-warrant issued under subsection (5).

2015 c10 s23

Part 5
Orders, Appeals

Order

49(1) A safety codes officer may issue an order if the safety codes officer believes, on reasonable and probable grounds, that

(a) this Act is contravened, or

(b) the design, construction, manufacture, operation, maintenance, use or relocation of a thing or the condition of a thing, process or activity to which this Act applies is such that there is danger of serious injury or damage to a person or property.

(2) An order may be issued to a person who provides services that are the subject-matter of the order or to the owner, occupier, vendor, contractor, manufacturer or designer of the thing or to the person who authorizes, undertakes or supervises the process or activity that is the subject-matter of the order, or may be issued to any 2 or more of them.

(3) An order

(a) shall set out what a person is required to do or to stop doing in respect of the thing, process or activity and a reasonable time within which it must be done or stopped;

(b) may direct a method of work, construction, manufacturing, operation, maintenance, use or relocation that must be followed;

(c) may direct that the use of the thing, process or activity be stopped in whole or in part in accordance with the order;

(d) may direct that a design be altered;

(e) may direct that an altered design be submitted to an Administrator for review or for registration;

(f) may direct compliance with this Act, a permit, a certificate or a variance;

(g) shall meet the requirements of the regulations on format and contents.

(4) On issuing an order, the safety codes officer shall serve a copy on the person to whom it is issued in accordance with the

regulations and send a copy of it to an Administrator in a form and within the time satisfactory to the Administrator.

(5) A person who is served with an order under subsection (4) may, within 14 days after being served, submit a written request to the Administrator for a review of the order.

(6) If an Administrator receives a request, in accordance with subsection (5), from a person on whom an order is served and if the Administrator considers that the order

(a) is improper, impractical or unreasonable,

(b) contains incorrect references or typographical errors, or

(c) does not correct or satisfy concerns about safety,

the Administrator may, by order, revoke or vary the original order within 21 days from when the original order was served.

(7) If an Administrator issues an order under subsection (6), the Administrator shall serve it, in accordance with the regulations, on all the persons on whom the original order was served and on the safety codes officer who issued the original order.

1991 cS-0.5 s45;1999 c26 s23

Appeal of orders

50(1) A person to whom an order is issued may, if the person objects to the contents of the order, appeal the order to the Council in accordance with the Council's bylaws within 35 days after the date the order was served on the person.

(2) The Council, on receipt of a notice of appeal in the form approved by the Council, shall

(a) send a copy of the notice of appeal to

(i) the relevant Administrator,

(ii) the safety codes officer who issued the order being appealed, and

(iii) an accredited municipality, accredited regional services commission or the Authority, as the case may be, if the subject-matter of the order is administered by the accredited municipality, accredited regional services commission or the Authority,

and

(b) notify the persons listed in clause (a) and the appellant of the time and place of the appeal.

(3) An appeal may proceed under this section regardless of whether a request was made in accordance with section 49(5).

RSA 2000 cS-1 s50;AR 49/2002 s8; 2002 c30 s28;2015 c10 s24

Appeal of refusals, suspensions, cancellations

51(1) The Council, on receipt of a notice of appeal with respect to

(a) a refusal to designate a corporation as an accredited corporation or a person as an accredited agency,

(b) a refusal to register a design or a deregistration of a design, or

(c) a suspension or cancellation of a designation of accreditation, a certificate of competency or a permit,

shall send a copy of the notice of appeal to the relevant Administrator and the safety codes officer, if any, who issued the suspension or cancellation, and notify them and the appellant of the time and place of the appeal.

(2) In order for an appeal to proceed, the Council must receive a notice of appeal within 30 days after the date the corporation or person was served with the written notice of the refusal to designate, refusal to register, deregistration, suspension or cancellation.

1991 cS-0.5 s47

Council considers appeal

52(1) When the Council is considering an appeal,

(a) it may, at the direction of the chair of the Board of Directors or in accordance with the Council's bylaws, sit in one or more divisions, and the divisions may sit simultaneously or at different times;

(b) 3 members constitute a quorum of a division of the Council;

(c) an order of a division is an order of the Council and binds all members of the Council;

(d) evidence may be given before the Council in any manner the Council considers appropriate and the Council is not bound by the rules of law respecting evidence applicable to judicial proceedings.

(2) The Council may by order

(a) confirm, revoke or vary an order, suspension or cancellation appealed to it and as a term of its order may issue a written variance with respect to any thing, process or activity related to the subject-matter of the order if in its opinion the variance provides approximately equivalent or greater safety performance with respect to persons and property as that provided for by this Act,

(b) confirm a refusal or direct that a designation, certificate or permit be issued and direct the inclusion of terms and conditions in the designation, certificate or permit,

(b.1) confirm the refusal by a safety codes officer to issue a written variance or revoke the refusal by a safety codes officer to issue a written variance and issue a written variance on the terms and conditions that the Council considers appropriate, or

(c) confirm a deregistration of a design, confirm a refusal to register a design or direct that a design be submitted for review or be registered and that changes be made to the design before it is submitted for review or is registered.

(3) The Council may include terms and conditions in a variance and shall, on issuing a variance, notify an Administrator.

(4) The *Regulations Act* does not apply to a variance issued under this section.

(5) The Council shall serve a copy of its order on the appellant and the Administrator and on the accredited municipality, the accredited regional services commission, the Authority and the safety codes officer if they were sent a copy of the notice of appeal.

RSA 2000 cS-1 s52;2015 c10 s26

Appeal to Court

53(1) An appeal lies from an order of the Council to the Court of Queen's Bench only on a question of law or jurisdiction.

(2) An appeal under this section may be commenced within 30 days after receipt of service of the Council's decision

(a) by filing an application with the clerk of the Court, and

(b) by serving a copy of the application

(i) on the Council and on the respondent, if the appellant is the person to whom the order under appeal is directed, or

(ii) on the Council and on the person to whom the order under appeal is directed, if the appellant is an Administrator, an accredited municipality, an accredited regional services commission or the Authority.

(3) The Court may, on application either before or after the time referred to in subsection (2), extend that time if it considers it appropriate to do so.

(4) The Court may, in respect of an appeal under subsection (2),

(a) determine the issues to be resolved on the appeal, and

(b) limit the evidence to be submitted by the Council to a copy of the Council's decision certified by the person who was the chair when the appeal was heard and those materials necessary for the disposition of those issues.

(5) On hearing the appeal, the Court may confirm, revoke or vary the order of the Council.

RSA 2000 cS-1 s53;2009 c53 s167;2015 c10 s27

Stay pending appeal

54(1) An appeal taken under section 50 or 51 does not operate as a stay of the order, suspension or cancellation appealed from unless a person who may chair the Council, on receipt of a written application, so directs.

(2) An appeal taken under section 53 does not operate as a stay of the order of the Council unless a judge of the Court of Queen's Bench so directs.

(3) A stay directed under this section may include terms and conditions and shall be in writing.

1991 cS-0.5 s50

Enforcement of order

55(1) An Administrator or a safety codes officer appointed under section 33(1) or referred to in section 33(2) or (3), together with a police officer, a peace officer or any other person as the safety codes officer considers appropriate, may enter, at any reasonable time, any premises or place for the purpose of carrying out an order unless the owner refuses to allow or interferes with the entry or the carrying out of an order

(a) if a person to whom the order is issued under section 49, 52 or 53 with respect to any thing, process or activity under the administration of an accredited municipality or accredited regional services commission does not commence an appeal of the order within the time set out for the commencement

of the appeal and the order is not carried out within the time set out in the order, and

(b) if the owner of the land concerned as registered under the *Land Titles Act* or, in the case of Metis patented land, the settlement member registered in the Metis Settlements Land Registry as owner of the Metis title, provisional Metis title or an allotment in the land has been given written notice of the intention of the accredited municipality, the accredited regional services commission or the Authority to carry out the order.

(2) When an order is carried out under subsection (1) in respect of land that is not Metis patented land, the local authority may place the amount of the expenses incurred in carrying out the order on the tax roll as an additional tax against the land concerned, and that amount

(a) forms a lien on the land in favour of the municipality, and

(b) is, for all purposes, deemed to be taxes imposed and assessed on the land and in arrears under the *Municipal Government Act* from the date the amount was placed on the tax roll, and that Act applies to the enforcement, collection and recovery of the amount.

(3) When an order is carried out under subsection (1) in respect of Metis patented land, the settlement council may place the amount of the expenses incurred in carrying out the order on the tax roll as an additional tax against the land concerned, and that amount is, for all purposes, deemed to be taxes imposed and assessed on the land and in arrears under the *Metis Settlements Act* from the date the amount was placed on the tax roll, and that Act applies to the enforcement, collection and recovery of the amount.

(4) In addition to the power granted under subsection (3), when an order is carried out under subsection (1) in respect of Metis patented land, the settlement council may record a notification of the amount of the expenses incurred in carrying out the order in the Metis Settlements Land Registry against the Metis title, provisional Metis title or an allotment in the land, and

(a) the expenses are a debt due to the Metis settlement by the settlement member who is registered as owner of the Metis title, provisional Metis title or allotment, and

(b) no dealings in respect of the land by the settlement member may be recorded in the Registry without the consent of the

settlement council until the recording of the notification is cancelled.

(5) A Metis settlement may, in addition to the rights under this section, exercise any rights granted under a General Council Policy to collect the expenses incurred in carrying out an order under subsection (1) that are payable by a settlement member.

RSA 2000 cS-1 s55;2015 c10 s28

Enforcement of order

56(1) An Administrator or a safety codes officer appointed under section 33(1) or referred to in section 33(6) and designated by the Administrator, together with a police officer, a peace officer or any other person as the safety codes officer considers appropriate, may enter, at any reasonable time, any premises or place for the purpose of carrying out an order unless the owner refuses to allow or interferes with the entry or the carrying out of an order

(a) if a person to whom an order is issued under section 49, 52 or 53 with respect to a subject-matter that is not under the administration of an accredited municipality or an accredited regional services commission does not commence an appeal of the order within the time set out for the commencement of the appeal and the order is not carried out within the time set out in the order, and

(b) if the owner of the land concerned as registered under the *Land Titles Act* or, in the case of Metis patented land, the person registered in the Metis Settlements Land Registry as owner of the Metis title, provisional Metis title or an allotment in the land and the persons named by the Minister under subsection (2) have been given written notice of the intention to carry out the order.

(2) When an order is carried out under subsection (1), the amount of the expenses incurred in carrying out the order is a debt due to the Crown jointly and severally by the persons named by the Minister prior to the carrying out of the order, but those persons may only include

(a) the owner of the land concerned as registered under the *Land Titles Act*,

(b) in the case of Metis patented land, the person registered in the Metis Settlements Land Registry as owner of the Metis title, provisional Metis title or an allotment in the land, and

(c) the persons to whom the order was issued.

(3) The Minister may delegate any or all of the Minister's powers under this section to the Council.

RSA 2000 cS-1 s56;2015 c10 s29

Order of the Court

57(1) If a person refuses to allow an Administrator or a safety codes officer or a person lawfully accompanying either of them to carry out an order under section 55 or 56 or interferes with or attempts to interfere with the carrying out of that order, the Administrator, the accredited municipality, the accredited regional services commission or the Authority, as the case may be, may, whether or not that person has been prosecuted under section 67(1) or 67(4)(c) or (d), make an application to the Court of Queen's Bench for an order

(a) requiring that person to comply with the order issued under this Act, or

(b) restraining that person from interfering in any manner with the carrying out of an order in accordance with section 55 or 56.

(2) A copy of the application and each affidavit in support shall be served not less than 3 days before the day named in the application for the hearing or within any shorter time that the Court may direct.

RSA 2000 cS-1 s57;2009 c53 s167;2015 c10 s30

Part 5.1
Administrative Penalties

Administrative penalties

57.1(1) An Administrator may impose an administrative penalty in accordance with this section and the regulations if the Administrator is of the opinion that a person has

(a) contravened a provision of this Act, the regulations or a code or standard adopted under this Act that is prescribed as a provision in respect of which an administrative penalty may be imposed, or

(b) failed to comply with or contravened an order made under this Act that is prescribed as an order in respect of which an administrative penalty may be imposed.

(2) An administrative penalty may be

(a) a single amount, or

(b) an amount for each day or part of a day on which the contravention or failure to comply continues.

(3) The total amount of an administrative penalty must not exceed

(a) in the case of a penalty referred to in subsection (2)(b), the maximum daily amount of $10 000, and

(b) the maximum cumulative amount of $100 000.

(4) A notice of administrative penalty must be in writing and contain the following information:

(a) the name of the person required to pay the administrative penalty;

(b) the particulars of the contravention or failure to comply;

(c) the amount of the administrative penalty and whether it is imposed as a single amount or as an amount applicable to each day that the contravention or failure to comply has continued or will continue;

(d) the date on which the notice is issued;

(e) the date by which the administrative penalty must be paid;

(f) a statement that the person otherwise liable to pay the administrative penalty may, under section 57.3, appeal the imposition of or the amount of the administrative penalty, or both;

(g) any other information required by the regulations.

(5) A notice of administrative penalty may be served within 3 years from the date on which the contravention or failure to comply is alleged to have occurred, but not afterward.

(6) A notice of administrative penalty must be served on the person alleged to have contravened or failed to comply.

(7) Except as otherwise provided in this Part, a person who has been served with a notice of administrative penalty shall pay the amount of the penalty within 30 days after the date on which the notice was served.

(8) A person who pays an administrative penalty in respect of a contravention or failure to comply shall not be charged with an offence under this Act in respect of the contravention or failure to comply described in the notice of administrative penalty.

2015 c10 s31

Discretion to suspend, reduce or withdraw

57.2 After imposing an administrative penalty under section 57.1, if the person served with a notice of administrative penalty has not submitted a notice of appeal and the Administrator is of the opinion that the person is taking reasonable measures to remedy the contravention or failure to comply, the Administrator may, in writing, as the Administrator considers appropriate, and in accordance with the regulations,

(a) suspend, reduce or withdraw the administrative penalty, and

(b) impose terms and conditions concerning a suspension.

2015 c10 s31

Appeal of administrative penalty

57.3(1) A person served with a notice of administrative penalty may appeal the imposition of or the amount of the administrative penalty, or both, by submitting a notice of appeal of administrative penalty in accordance with the regulations to the appeal body established or designated by the regulations.

(2) Subject to the regulations, the appeal body referred to in subsection (1) may make rules governing its own procedure and business.

(3) The *Regulations Act* does not apply to rules made under subsection (2).

(4) The appeal referred to in subsection (1) shall be dealt with in accordance with the regulations and the rules made under subsection (2).

(5) Any subsequent actions before a court following a notice of administrative penalty shall be dealt with in accordance with the regulations.

2015 c10 s31

Enforcement of administrative penalty

57.4 Subject to the right to appeal, where a person fails to pay an administrative penalty in accordance with a notice of administrative penalty and any suspension or reduction of an administrative penalty referred to in section 57.2, the Administrator may file a copy of the notice of administrative penalty together with the written suspension or reduction of an administrative penalty, if any, with the clerk of the Court of Queen's Bench, and on being filed, they have the same force and effect and may be enforced as a judgment of the Court.

2015 c10 s31

Part 6
Information

Information systems

58 An Administrator or the Council may, in accordance with the regulations, maintain one or more information systems with respect to

(a) the administration of and exercise of powers and performance of duties under this Act, and

(b) any matter to which this Act applies.

RSA 2000 cS-1 s58;2015 c10 s32

Accident notification

59 If there is an unsafe condition, accident or fire that involves a thing, process or activity to which this Act applies, the owner or person designated in the regulations shall, if required by the regulations, forthwith report it to an Administrator, or to the accredited municipality, the accredited regional services commission or the Authority, as the case may be, if the thing, process or activity is under the administration of the accredited municipality, the accredited regional services commission or the Authority.

RSA 2000 cS-1 s59;2015 c10 s33

Information compilation

60 If any information is required to be prepared, submitted or retained under this Act, the regulations and the terms and conditions of a permit may state the qualifications required to be held by the person who prepares, submits or retains it and may provide for how the information is to be prepared, submitted and retained.

1991 cS-0.5 s56

Outstanding orders

61 If a person to whom an order is issued under this Act

(a) does not commence an appeal of the order within the time set out in this Act for commencement of an appeal, and

(b) does not carry out the order within the time set out in the order,

an Administrator may place an entry on the relevant information system that briefly indicates the subject-matter of the outstanding order, the name of the owner and the location of the thing, process or activity that is the subject-matter of the outstanding order.

RSA 2000 cS-1 s61;2015 c10 s34

Variance register

62 An Administrator may place an entry on the relevant information system that briefly indicates the subject-matter of a variance and the location of the thing, process or activity to which the variance applies.

RSA 2000 cS-1 s62;2015 c10 s35

Release of information

63(1) Any person employed or assisting in the administration of this Act shall preserve confidentiality with respect to personal information, as defined in the *Freedom of Information and Protection of Privacy Act*, that comes to the person's attention under this Act and shall not disclose or communicate that information except as follows:

(a) an accredited municipality, an accredited regional services commission, an accredited agency and the Authority must, on request by a municipality, release information, including personal information, to the municipality with respect to the administration of this Act within the municipality;

(b) a person may disclose personal information in accordance with the *Freedom of Information and Protection of Privacy Act*.

(2) An accredited municipality, an accredited regional services commission, an accredited corporation and an accredited agency must, on the request of the Council, release information to the Council with respect to any matter related to this Act.

(3) Subsection (2) does not authorize the release of personal information as defined in the *Freedom of Information and Protection of Privacy Act*.

(4) Subject to the regulations, a person may request a search of a relevant information system for variances, orders and records related to the issuance of variances and orders, and the search request may be granted in accordance with the regulations and the *Freedom of Information and Protection of Privacy Act*.

RSA 2000 cS-1 s63;2015 c10 s36

Part 7
General

Fees

64(1) The Government may charge fees, in accordance with an order of the Minister,

(a) for anything issued or for any material, information, education program, publication or service provided by the Minister under this Act,

(b) for any research that is carried out by the Minister that relates to any thing, process or activity to which this Act applies, and

(c) for the filing of a notice of appeal of an administrative penalty referred to in section 57.3(1).

(2) The Minister may make orders respecting the payment of fees to witnesses and interpreters and for reporting fires.

RSA 2000 cS-1 s64;2015 c10 s37

Service

64.1 If a document is required to be served on a person under this Act, the service must be effected in accordance with the regulations.

2015 c10 s38

Regulations

65(1) The Lieutenant Governor in Council may make regulations

(a) governing fire protection and the safe design, manufacture, construction, sale, installation, use, operation, occupancy and maintenance of

(i) buildings,

(ii) electrical systems,

(iii) elevating devices,

(iv) fire protection systems and equipment,

(v) gas systems,

(vi) plumbing systems,

(vii) pressure equipment, and

(viii) private sewage disposal systems;

(b) respecting the requirements for designs to be signed or have stamps or seals affixed by persons licensed or registered under the *Architects Act* or the *Engineering and Geoscience Professions Act* or any other enactment governing a profession or occupation;

(c) respecting exclusions from the definitions of

(i) building,

(ii) electrical system,

(iii) gas,

(iv) gas system,

(v) plumbing system, and

(vi) private sewage disposal system,

for the purposes of this Act;

(d) respecting the designation of any thing as an elevating device;

(e) defining for the purposes of this Act

(i) a passenger elevator, freight elevator, dumbwaiter, emergency elevator, escalator, inclined passenger lift, manlift, passenger ropeway, material lift, moving walk, personnel hoist, lift for persons with disabilities or amusement ride, and

(ii) boilers, pressure vessels, pressure piping systems and fittings, fired-heater pressure coils and thermal liquid heating systems;

(e.1) governing barrier-free design and access;

(e.2) defining for the purposes of this Act principles of barrier-free design and access;

(f) governing the qualifications and the evaluation of the qualifications of safety codes officers and applicants for and holders of permits and certificates of competency;

(g) designating things, processes or activities with respect to which a certificate of competency or permit is required and establishing the classifications of certificates of competency and permits;

(h) governing the issuance, display, making available, suspension, renewal and cancellation of permits and certificates of competency;

(i) governing the provision of identification of safety codes officers and the use of the identification;

(i.1) respecting the investment of money for the purpose of section 21(3);

(i.2) respecting the request of the Minister and recommendations regarding a question or matter relating to an accreditation overlap referred to in section 29(3);

(i.3) respecting the administrative penalties referred to in section 57.1, including regulations

(i) respecting notices of administrative penalty, their form and contents;

(ii) respecting the amount of an administrative penalty;

(iii) respecting any other matter the Lieutenant Governor in Council considers necessary or advisable to carry out the intent and purpose of the system of administrative penalties;

(i.4) respecting the suspension, reduction and withdrawal of administrative penalties under section 57.2;

(i.5) respecting the form and contents of a notice of appeal of administrative penalty referred to in section 57.3(1);

(i.6) designating a body as the appeal body for the hearing of appeals from notices of administrative penalty referred to in section 57.3(1) or respecting the establishment of an appeal body for the hearing of appeals from notices of administrative penalty referred to in section 57.3(1);

(i.7) respecting the conduct of appeals before the appeal body referred to in section 57.3, including

(i) adjournments of matters before the appeal body;

(ii) the attendance of witnesses before the appeal body;

(iii) the applicability of the rules of evidence in judicial proceedings to hearings before the appeal body;

(iv) the receiving and recording of evidence;

(v) empowering the appeal body to proceed when a party to the appeal fails to appear at or attend a hearing;

(vi) empowering the appeal body to require the production of any record, object or thing;

(vii) the reconsideration of decisions made by the appeal body;

(viii) costs;

(i.8) respecting the subsequent actions before a court following a notice of administrative penalty referred to in section 57.3(5);

(i.9) respecting the enforcement of administrative penalties under section 57.4;

(j) respecting forms for the purposes of this Act;

(k) governing the information systems referred to in section 58, including

(i) the information, including personal information, to be included in an information system,

(ii) the release of information, including personal information, from an information system under section 63, and

(iii) the portion of the information in an information system, including personal information, that may be made available to the public in response to a search request referred to in section 63(4);

(k.1) governing

(i) the content of a municipal bylaw referred to in section 66(2)(b.1) respecting private sewage disposal systems, and

(ii) the manner in which a municipality may make a municipal bylaw referred to in section 66(2)(b.1) respecting private sewage disposal systems;

(l) governing orders and the service of orders, notices and other documents;

(m) governing the preparation, submission and retention of reports and information and the reporting of unsafe conditions, accidents and fires;

(n) governing designs;

(o) governing quality management systems;

(p) governing accredited municipalities, accredited regional services commissions, accredited corporations, accredited agencies and the Authority.

(2) The Lieutenant Governor in Council may, by regulation,

(a) declare in force a code, standard or body of rules relating to the matters set out in subsection (1) and require compliance;

(b) amend or repeal a code, standard or body of rules declared in force before or after the coming into force of this subsection.

(3) A code, standard or body of rules may be declared in force under subsection (2)

(a) in whole or in part and with variations or disclaimers, and

(b) as it read on a specified day or as amended or replaced from time to time.

(4) If a code, standard or body of rules is declared in force as amended or replaced from time to time, any amendments to the code, standard or body of rules or replacement of the code, standard or body of rules comes into force on the first day of the month following the expiry of 12 months after the date on which the amendment or replacement is published, unless the Minister publishes an order in Part I of The Alberta Gazette declaring

(a) that the amendment or replacement will not be in force on the expiry of 12 months following the date on which the amendment was published, or

(b) that the coming into force of the amendment or replacement is to occur on an earlier or later date.

(5) Regulations under this section may apply generally or specifically and may provide for which provision of which regulation prevails in the case of a conflict between the regulations.

(6) Before making a regulation under this section, the Lieutenant Governor in Council shall ensure that the Council has the opportunity to review the proposed regulation for a period of 90 days prior to the regulation's being made unless the Council has waived or reduced that period.

(7) Before making a regulation referred to in subsection (2), the Lieutenant Governor in Council shall ensure that the code,

standard, body of rules, amendment or replacement is published, whether by the Council or another association or person, and available to the public.

(8) The Lieutenant Governor in Council may make regulations respecting

(a) the determination of the date on which an amendment or replacement of a code, standard or body of rules was published;

(b) the timely review, amendment, repeal and replacement of codes, standards and bodies of rules;

(c) the timely commencement of codes, standards and bodies of rules, amendments, repeals and replacements.

RSA 2000 cS-1 s65;2001 c28 s19;2004 c19 s6;2011 c3 s33;2015 c10 s39

Wood construction

65.1 A building that is 6 storeys or less in building height may be of wood construction if the building meets the requirements of this Act.

2015 c3 s2

Implementation amendments to regulations

65.01(1) The Lieutenant Governor in Council may, by regulation, amend other regulations made under this Act

(a) for consistency with this Act as amended from time to time;

(b) to declare more than one code, standard or body of rules in force as amended or replaced from time to time under section 65(3), (4) and (5).

(2) An amendment under subsection (1) may be made notwithstanding that the regulation being amended was made by a member of the Executive Council or some other person or body.

2015 c10 s40

Bylaws

66(1) Except as provided in this section, a bylaw of a municipality that purports to regulate a matter that is regulated by this Act is inoperative.

(2) Notwithstanding subsection (1), a municipality may make bylaws

(a) to carry out its powers and duties under the *Forest and Prairie Protection Act*;

(b) respecting minimum maintenance standards for buildings and structures;

(b.1) in the manner and to the extent authorized by the regulations, respecting private sewage disposal systems;

(c) respecting unsightly or derelict buildings or structures.

(3) Notwithstanding subsection (1), an accredited municipality may make bylaws

(a) respecting fees for anything issued or any material or service provided pursuant to this Act, and

(b) respecting the carrying out of its powers and duties as an accredited municipality.

RSA 2000 cS-1 s66;2015 c10 s41

Prohibitions

Offences

67(1) A person who interferes with or in any manner hinders an Administrator or a safety codes officer in the exercise of the Administrator's or officer's powers and performance of the Administrator's or officer's duties under this Act is guilty of an offence.

(2) A person who knowingly makes a false or misleading statement under section 34(4)(c) either orally or in writing is guilty of an offence.

(3) A person who fails to prepare, submit or retain any information that the person is required by this Act to prepare, submit or retain is guilty of an offence.

(4) A person who

(a) contravenes this Act,

(b) contravenes a condition in a permit, certificate or variance,

(c) contravenes an order, or

(d) fails to carry out any action required in an order to be taken within the time specified in it,

is guilty of an offence.

(5) A person who is guilty of an offence under this Act is liable on conviction for each day or part of a day on which the offence occurs or continues.

RSA 2000 cS-1 s67;2015 c10 s42

Penalty

68(1) A person who is guilty of an offence is liable

(a) for a first offence,

(i) to a fine of not more than $100 000 and, in the case of a continuing offence, to a further fine of not more than $1000 for each day during which the offence continues after the first day or part of a day, or

(ii) to imprisonment for a term not exceeding 6 months,

or to both fines and imprisonment, and

(b) for a 2nd or subsequent offence,

(i) to a fine of not more than $500 000 and, in the case of a continuing offence, to a further fine of not more than $2000 for each day or part of a day during which the offence continues after the first day, or

(ii) to imprisonment for a term not exceeding 12 months,

or to both fines and imprisonment.

(2) If a person is guilty of an offence under this Act, the court may, in addition to any other penalty imposed or order made, order the person to comply with this Act or any order, permit, certificate or variance, or all or any one or more of them, as the case requires.

RSA 2000 cS-1 s68;2012 c7 s3

Prosecution time limit

68.1(1) A prosecution of an offence under this Act may not be commenced more than 3 years after the day on which evidence of the offence first came to the attention of a safety codes officer.

(2) This section applies only in respect of offences that are committed on or after the day on which this section comes into force.

2012 c7 s3

Proof by certificate

69 For the purpose of a prosecution for a contravention of any provision of this Act requiring a person to hold a certificate of competency, permit or variance, a certificate purporting to be

signed by an Administrator stating that a person was or was not on a named day the holder of a certificate of competency, permit or variance is proof, in the absence of evidence to the contrary, of the facts stated in it, without proof of the signature or official character of the person signing the certificate.

1991 cS-0.5 s65

Penalty proceeds

70 If a fine results from an offence under this Act with respect to a matter that an accredited municipality is authorized to administer, the fine may, on the application of the accredited municipality when the fine is assessed, accrue to the benefit of the municipality.

1991 cS-0.5 s66

Transitional Provisions

Permits, etc., continue

71(1) On March 31, 1994, a permit, licence, certificate, approval, registration or order under the

(a) *Fire Prevention Act*, SA 1982 cF-10.1, or

(b) *Uniform Building Standards Act*, RSA 1980 cU-4,

continues as a permit, certificate, registration or order under this Act until it would have expired under the Act under which it was issued or it is suspended or cancelled.

(2) On October 1, 1994, a permit, licence, certificate, approval, registration or order under the

(a) *Electrical Protection Act*, RSA 1980 cE-6,

(b) *Elevator and Fixed Conveyances Act*, RSA 1980 cE-7,

(c) *Gas Protection Act*, RSA 1980 cG-2,

(d) *Plumbing and Drainage Act*, RSA 1980 cP-10, or

(e) *Boilers and Pressure Vessels Act*, RSA 1980 cB-8,

continues as a permit, certificate, registration or order under this Act until it would have expired under the Act under which it was issued or it is suspended or cancelled.

(3) In accordance with section 36(1)(e) of the *Interpretation Act*, all or any part of a code, standard or body of rules and the revisions, variations and modifications to it that have been adopted or declared in force by a regulation under an Act referred to in

subsection (1) or (2) is deemed to be a regulation that has been made under this Act.

1991 cS-0.5 s67

Inspectors, local assistants

72(1) On March 31, 1994, a person who is appointed as an inspector under the

(a) *Fire Prevention Act*, SA 1982 cF-10.1, or

(b) *Uniform Building Standards Act*, RSA 1980 cU-4,

is deemed, in accordance with the regulations, to be appointed as a safety codes officer for the period of time set out in the regulations with the powers and duties of an inspector that the person had under the previous Act.

(2) On October 1, 1994, a person who is appointed as an inspector under the

(a) *Electrical Protection Act*, RSA 1980 cE-6,

(b) *Elevator and Fixed Conveyances Act*, RSA 1980 cE-7,

(c) *Gas Protection Act*, RSA 1980 cG-2,

(d) *Plumbing and Drainage Act*, RSA 1980 cP-10,

(e) *Boilers and Pressure Vessels Act*, RSA 1980 cB-8, or

(f) bylaws passed pursuant to section 159(i) of the *Municipal Government Act*, RSA 1980 cM-26,

is deemed, in accordance with the regulations, to be appointed as a safety codes officer for the period of time set out in the regulations with the powers and duties of an inspector that the person had under the previous Act.

(3) On March 31, 1994, a person who is designated or appointed as a local assistant under the *Fire Prevention Act*, SA 1982 cF-10.1, is deemed, in accordance with the regulations, to be designated or appointed as a safety codes officer under this Act for the period of time set out in the regulations with the powers and duties that the person had under the *Fire Prevention Act*.

1991 cS-0.5 s68;1994 c44 s5

Municipal duties

73(1) A local authority, as defined in the *Uniform Building Standards Act*, RSA 1980 cU-4, that is authorized to enforce that Act is deemed to be an accredited municipality under this Act with

all the powers and duties it had under the *Uniform Building Standards Act*.

(2) On March 31, 1994, a municipality with any powers or duties under the *Fire Prevention Act*, SA 1982 cF-10.1, relating to matters regulated under this Act is deemed to be an accredited municipality with those powers and duties.

(3) On October 1, 1994, a municipality with any powers or duties under the

(a) *Electrical Protection Act*, RSA 1980 cE-6,

(b) *Elevator and Fixed Conveyances Act*, RSA 1980 cE-7,

(c) *Gas Protection Act*, RSA 1980 cG-2,

(d) *Plumbing and Drainage Act*, RSA 1980 cP-10,

(e) *Boilers and Pressure Vessels Act*, RSA 1980 cB-8, or

(f) bylaws passed pursuant to section 159(i) of the *Municipal Government Act*, RSA 1980 cM-26,

relating to matters related under this Act is deemed to be an accredited municipality with those powers and duties.

1991 cS-0.5 s69;1994 c23 s42;1994 c44 s6

Printed on Recycled Paper

Province of Alberta

SAFETY CODES ACT

CERTIFICATION AND PERMIT REGULATION

Alberta Regulation 295/2009

With amendments up to and including Alberta Regulation 229/2018

Current as of December 12, 2018

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Note

All persons making use of this consolidation are reminded that it has no legislative sanction, that amendments have been embodied for convenience of reference only. The official Statutes and Regulations should be consulted for all purposes of interpreting and applying the law.

(Consolidated up to 229/2018)

ALBERTA REGULATION 295/2009

Safety Codes Act

CERTIFICATION AND PERMIT REGULATION

Table of Contents

Interpretation

1 The definitions in the *Permit Regulation* (AR 204/2007) apply to this Regulation.

Purpose

2 The certificates of competency issued under this Regulation are for the purpose of obtaining a permit under the *Permit Regulation* (AR 204/2007).

AR 295/2009 s2;39/2012

Private sewage installer

3(1) The Administrator may issue or renew a private sewage installer certificate of competency to a person who has

(a) training in private sewage systems or in water and sewer service piping, satisfactory to the Administrator, and

(b) paid the appropriate fee.

(2) The Administrator shall

(a) state the type of private sewage system or water and sewer service piping for which the holder of the certificate may obtain a permit based on the training of the holder of the certificate, and

(b) state the term of the certificate of competency.

Master electrician

4(1) The Administrator may issue a master electrician certificate of competency to an applicant who

(a) holds a trade certificate as defined in section 1(o)(i) or (ii) of the *Apprenticeship and Industry Training Act* in the trade of electrician,

(b) has, in the 5 years preceding the application,

(i) obtained a minimum of 3 years of relevant experience in the electrical industry satisfactory to the Administrator, or

(ii) been actively engaged in electrical contracting for a minimum of 3 years under a restricted master electrician certificate,

(c) has paid the appropriate fee, and

(d) has attained a mark of at least 75% in a master electrician examination approved by the Administrator.

(2) The Administrator may issue a master electrician certificate of competency to an applicant who

(a) satisfies the Administrator that the applicant holds a certificate that was issued in a Canadian jurisdiction and that is substantively equivalent to a master electrician certificate of competency,

(b) has paid the appropriate fee, and

(c) has attained a mark of at least 75% in an examination approved by the Administrator respecting the legislation applicable to electricians in Alberta.

(3) An examination fee may be refunded if, for any reason satisfactory to the Administrator, a person is unable to take the examination after having paid the examination fee.

(4) The Administrator may renew a master electrician certificate of competency issued under subsection (1) or (2) if the holder of the certificate

(a) has paid the appropriate fee, and

(b) has completed, to the satisfaction of the Administrator, any code update training that the Administrator requires the holder to complete.

(5) The Administrator may, in a master electrician certificate of competency issued under subsection (2), specify that the maximum voltage between conductors and the maximum capacity of the electrical systems for which the holder of the certificate may obtain a permit are the same as the maximums that are authorized by the certificate referred to in subsection (2)(a).

(6) The term of a master electrician certificate of competency issued or renewed under this section is one year from the date of the issuance or renewal unless the Administrator specifies a longer term.

AR 295/2009 s4;39/2012;193/2014

Restricted master electrician, rural wireman — grandfathering

5(1) The Administrator may renew a restricted master electrician certificate of competency or a rural wireman certificate of competency originally issued or renewed under the *Certification and Permit Regulation* (AR 168/2002).

(2) In the case of a restricted master electrician certificate, the holder of the certificate may obtain a permit with respect to electrical installations of not more than 300 volts between conductors with an ampacity of not more than 200 amperes.

(3) In the case of a rural wireman certificate, the Administrator shall state the areas of Alberta where the rural wireman is permitted to perform electrical work, but the Administrator may adjust these areas at any time.

(3.1) The term of a certificate renewed under this section is one year from the date of the renewal unless the Administrator specifies a longer term.

(4) The term of the certificate of competency is

(a) one year from the date of issue, or

(b) for a period of not less than one year as specified by the Administrator.

AR 295/2009 s5;39/2012

ID card

6(1) The Administrator shall issue an identification card to a holder of a certificate of competency under this Regulation identifying the status of the holder in a form satisfactory to the Administrator.

(2) In the case of an ID card with respect to a rural wireman's certificate of competency, the card must indicate the area in which the holder may do electrical work.

Certificates to be displayed

7 The holder of a certificate of competency issued under this Regulation shall

(a) prominently display it at the holder's place of business or employment, or

(b) have it available to be produced immediately on the request of the Administrator or a safety codes officer.

Duplicate certificates

8 The Administrator may issue a duplicate certificate of competency under this Regulation if the Administrator is satisfied that the original has been lost, destroyed or mutilated or the name of the certificate holder has been legally changed.

Consequential amendment

9 The *Permit Regulation* (AR 204/2007) is amended in section 9(1)(a) by adding "within the scope of the master electrician's certification" **after** "system".

Repeal

10 The *Certification and Permit Regulation* (AR 168/2002) is repealed.

Expiry

11 For the purpose of ensuring that this Regulation is reviewed for ongoing relevancy and necessity, with the option that it may be repassed in its present or an amended form following a review, this Regulation expires on October 31, 2024.

AR 295/2009 s11;193/2014;229/2018

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Province of Alberta

SAFETY CODES ACT

PERMIT REGULATION

Alberta Regulation 204/2007

With amendments up to and including Alberta Regulation 208/2017

Office Consolidation

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Note

All persons making use of this consolidation are reminded that it has no legislative sanction, that amendments have been embodied for convenience of reference only. The official Statutes and Regulations should be consulted for all purposes of interpreting and applying the law

(Consolidated up to 208/2017)

ALBERTA REGULATION 204/2007

Safety Codes Act

PERMIT REGULATION

Table of Contents

Interpretation

1(1) In this Regulation,

(a) "Act" means the *Safety Codes Act*;

(b) "Administrator" means an Administrator appointed under section 14 of the Act with respect to the applicable discipline;

(c) repealed AR 31/2015 s5;

(d) "Alberta Electrical Utility Code" means the Alberta Electrical Utility Code declared in force by the *Electrical Code Regulation* (AR 209/2006);

(e) "Alberta Fire Code" means the Alberta Fire Code 2014 declared in force by the *Fire Code Regulation* (AR 32/2015);

(f) "Electrical Code" means the Canadian Electrical Code, Part I, declared in force by the *Electrical Code Regulation* (AR 209/2006);

(g) "electrician" means a person who holds a trade certificate or equivalency in the electrician trade acceptable under the *Apprenticeship and Industry Training Act*;

(h) "electronic signature" means information that a person creates, adopts, records, transmits or stores in digital or other intangible form in order to effect a signature on a document and that is either in, attached to or associated with that document;

(i) "farm building" means a building located on agricultural land as defined in the *Agricultural Operation Practices Act* that is occupied for an agricultural operation as defined in the *Agricultural Operation Practices Act*, including, but not limited to,

(i) housing livestock,

(ii) storing, sorting, grading or bulk packaging of agricultural products that have not undergone secondary processing, and

(iii) housing, storing or maintaining machinery that is undertaken in the building;

(j) "gasfitter" means a person who holds a trade certificate or equivalency in the gasfitter trade acceptable under the *Apprenticeship and Industry Training Act*;

(k) "master electrician" means a person who holds a master electrician certificate of competency issued pursuant to the Act;

(l) "parcel of land" means a parcel of land as defined in section 616 of the *Municipal Government Act*;

(m) "permit issuer" means a safety codes officer or a person designated to issue permits pursuant to section 44 of the Act;

(n) "plumber" means a person who holds a trade certificate or equivalency in the plumber trade acceptable under the *Apprenticeship and Industry Training Act*;

(o) "private sewage installer" means a person who holds a private sewage installer certificate of competency issued pursuant to the Act;

(p) "relocatable industrial accommodation" means a building to which Part 10 of the Alberta Building Code 2014 declared in force by the *Building Code Regulation*

(AR 31/2015) or the Alberta Building Code 2006 declared in force by the *Building Code Regulation* (AR 117/2007) applies;

(q) "restricted master electrician" means a person who holds a restricted master electrician certificate of competency issued pursuant to the Act;

(r) "restricted private sewage installer" means a person who holds a restricted private sewage installer certificate of competency issued pursuant to the Act;

(s) "rural wireman" means a person who holds a rural wireman certificate of competency issued pursuant to the Act;

(s.1) "sheet metal worker" means a person who holds a trade certificate or equivalency in the sheet metal worker trade acceptable under the *Apprenticeship and Industry Training Act*;

(t) "sign installation technician" means a person who is permitted to perform sign installation tasks in the electrical trade pursuant to an authorization under the *Apprenticeship and Industry Training Act*;

(u) "single family residential dwelling" means a residential dwelling for a single family that includes, if applicable, a residential garage or accessory structure associated by use to the dwelling, if the garage or structure is situated on the same parcel of land as the dwelling;

(v) "undertaking" means the construction of a thing or the control or operation of a thing, process or activity to which the Act applies.

(2) Unless otherwise defined in the Act or this Regulation, the definitions in a code, standard or body of rules relating to the building, electrical, gas plumbing or private sewage discipline declared in force under the Act apply to this Regulation.

(3) For greater certainty, in this Regulation a building includes a stage and a tent, including an overhead structure used or intended to be used in conjunction with a stage or tent

AR 204/2007 s1;40/2012;17/2015;31/2015;194/2015

Exemptions

2 This Regulation does not apply to the following:

(a) an accredited corporation operating within the scope of its terms of accreditation;

(b) equipment and materials regulated under the *Elevating Devices, Passenger Ropeways and Amusement Rides Permit Regulation* (AR 28/2012);

(c) equipment, materials and systems regulated under the *Pressure Equipment Safety Regulation* (AR 49/2006).

AR 204/2007 s2;17/2015

Part 1
Permits

Permit required

3(1) Subject to subsection (2), a person shall not start any undertaking for which a permit is required under this Regulation unless a permit has been issued.

(2) If a permit issuer is not readily available and there is imminent serious danger to, or imminent serious danger of damage to, persons or property because of any thing, process or activity to which this Act applies or because of a fire hazard or risk of an explosion, a person may, without a permit, start an undertaking for which a permit is required under this Regulation but that person must apply for a permit as soon as a permit issuer is available.

Permit not required

4 A permit is not required for

(a) an undertaking that a body accredited by the Standards Council of Canada has inspected pursuant to the body's terms of accreditation and has certified, or

(b) an undertaking governed by a quality control program acceptable to an Administrator.

Liability

5 A permit issued under this Regulation does not make or imply any assurance or guarantee about the life expectancy, durability, operating performance or workmanship of the equipment, materials or undertaking nor shall the permit be construed as an approval or acceptance of the undertaking.

Building Discipline

Building permit

6(1) A permit in the building discipline is required for the following if the Alberta Building Code 2014 or the National Energy Code of Canada for Buildings 2011 declared in force by the *Building Code Regulation* (AR 31/2015) or the Alberta Building Code 2006 declared in force by the *Building Code Regulation* (AR 117/2007) applies to it:

(a) the construction of a building, including the renovation or addition to a building;

(b) a change in the occupancy classification of a building.

(2) A permit issuer may require a separate permit for specific parts of the undertaking to which the Alberta Building Code 2014 declared in force by the Building Code Regulation (AR 31/2015) or the Alberta Building Code 2006 declared in force by the Building Code Regulation (AR 117/2007) applies if the specific parts involve a compulsory certification trade under the Apprenticeship and Industry Training Act.

(3) Despite subsection (1), a permit is not required for the following:

(a) construction of a building, including a renovation or an addition to a building, if

(i) the building is not a stage or tent or an overhead structure that is used in or intended to be used in conjunction with a stage or tent,

(ii) the construction, renovation or addition does not exceed $5000 in prevailing market value, and

(iii) matters affecting health or safety are not at risk;

(b) painting or decorating if

(i) matters affecting health or safety are not at risk, and

(ii) there is no structural change to the building;

(c) re-roofing or re-siding if

(i) the re-roofing or re-siding is undertaken for aesthetic purposes or for the purposes of maintaining the building,

(ii) the re-roofing or re-siding is being replaced with roofing or siding of a similar type,

(iii) matters affecting health or safety are not at risk, and

(iv) there is no structural change to the building;

(d) to replace or alter ducting serving a space heating appliance if

(i) it is located in a single family residential dwelling, and

(ii) there is no design change required to the heating and ventilation system;

(e) construction of, including a renovation of or an addition to, a stage if the platform of the stage is not at a distance greater than 1200 mm above the adjacent surface on any side;

(f) construction of, including a renovation of or an addition to, a tent

(i) that is

(A) located on property that is designated for residential use by municipal land use bylaws and used as a single family residential dwelling, and

(B) not used for a commercial purpose,

or

(ii) that is located on a campsite or campground or more than 3 m from any other structure if the tent

(A) does not cover, and is not part of a group of tents that collectively cover, more than 60 m^2 of ground, and

(B) does not contain, and is not intended to contain, commercial cooking equipment;

(g) construction of an exterior deck that is attached to or detached from a single family dwelling that is not greater than 600 mm from that adjacent grade on all sides of the deck.

(4) Despite subsection (1), a permit is not required with respect to the relocation of a relocatable industrial accommodation if the relocatable industrial accommodation is at the relocation site for not more than 28 days.

AR 204/2007 s6;223/2010;31/2015;194/2015

Building permit for new home

6.1(1) In this section,

(a) "authorization" means an authorization as defined in the *New Home Buyer Protection Act*;

(a.1) "licence" means a licence as defined in the *New Home Buyer Protection Act*;

(a.2) "operator's licence" has the same meaning as in section 1(1)(bb) of the *Traffic Safety Act*;

(b) "new home" means a new home as defined in the *New Home Buyer Protection Act*;

(c) "owner builder" means an owner builder as defined in the *New Home Buyer Protection Act*;

(d) "Registrar" means the person appointed under section 8 of the *New Home Buyer Protection Act* as the Registrar for the purposes of that Act;

(e) "required home warranty coverage" means required home warranty coverage as defined in the *New Home Buyer Protection Act*.

(2) A permit issuer shall not issue a building permit for a proposed new home unless the applicant provides evidence to the permit issuer, in a form acceptable to the Registrar, that the proposed new home

(a) complies with the requirements of the *New Home Buyer Protection Act*, and

(b) will be built by a person that holds the appropriate licence or authorization or is exempt from the requirement for a licence or authorization.

(2.1) Before issuing a building permit to an applicant, a permit issuer may require the applicant to produce the applicant's operator's licence or another form of identification that is issued by the government of Canada or a province, is satisfactory to the Registrar and shows the applicant's date of birth.

(3) On request of the Registrar, a permit issuer shall forward to the Registrar information provided by applicants for permits under subsection (2).

(4) Where a permit issuer issues a building permit for a proposed new home, the permit issuer shall indicate on the permit the date that it was applied for.

AR 212/2013 s2;99/2016;208/2017

Building discipline permit holder

7(1) A permit issuer may issue a permit in the building discipline to an owner of the building or to the owner's agent.

(2) A permit issuer may issue a permit for an undertaking referred to in section 6(2) to the following:

(a) a person having the appropriate certification to carry out the undertaking as required by the *Apprenticeship and Industry Training Act*;

(b) an owner who resides or intends to reside in a single family residential dwelling for the installation of building systems in the dwelling.

(3) Without limiting the generality of section 44(2) of the Act, for the purpose of achieving the level of safety intended by the Act and the regulations, a permit issuer may limit the type and scope of the undertaking for which a permit is issued under subsection (2)(b).

AR 204/2007 s7;17/2015

Electrical Discipline

Electrical permit

8(1) A permit in the electrical discipline is required to install, alter or add to an electrical system.

(2) Despite subsection (1), a permit is not required for the following:

(a) communication systems;

(b) electrical installations to which the CSA Standard CAN/CSA M421-00(R2000) The Use of Electricity in Mines applies;

(c) electrical installations related to an elevating device;

(d) extra low voltage, Class 2 electrical circuits unless they are for any of the following:

(i) safety control;

(ii) locations described as hazardous in the Electrical Code;

(iii) electro-medical purposes;

(iv) lighting;

(e) the replacement of electrical equipment with units of a similar type if the replacement is made for the purpose of maintaining the system and does not modify the ratings or characteristics of the electrical installation.

AR 204/2007 s8;194/2015

Electrical discipline permit holder

9(1) A permit issuer may issue a permit in the electrical discipline to the following:

(a) a master electrician for any electrical system within the scope of the master electrician's certification;

(b) a restricted master electrician for any electrical system within the scope of the restricted master electrician's certification;

(c) a rural wireman for an electrical undertaking in a residence, farm building or similar structure, in an area of Alberta prescribed by an Administrator, if the service ampacity does not exceed 100 amperes and 300 volts single phase;

(d) an owner who resides or intends to reside in a single family residential dwelling where the electrical system serves that dwelling;

(e) an owner of a farm building served by a single phase electrical system;

(f) an owner, operator or designate of a power line construction company or an electrical utility for the construction of an overhead or underground power system governed by the Alberta Electrical Utility Code;

(g) a sign installation technician to perform electrical undertakings within the scope of the technician's duties as permitted by the *Apprenticeship and Industry Training Act*;

(h) an owner or operator if the requirements of section 23 are met.

(2) Without limiting the generality of section 44(2) of the Act, for the purpose of achieving the level of safety intended by the Act and the regulations, a permit issuer may limit the type and scope of the undertaking for which a permit is issued under subsection (1)(d) or (e).

AR 204/2007 s9;295/2009;17/2015

Fire Discipline

Storage tank system permit

10 A permit in the fire discipline is required to install, alter or remove a storage tank system to which the Alberta Fire Code applies.

Fire discipline permit holder

11 A permit issuer may issue a permit in the fire discipline to the owner of the parcel of land on which the storage tank system is to be installed.

Gas Discipline

Gas permit

12(1) A permit in the gas discipline is required to install, alter or add to a gas system.

(2) Despite subsection (1), a permit is not required for the following:

(a) a gas system that uses propane or natural gas as an alternate or principal fuel for motive power on a motor vehicle;

(b) a gas system that uses propane or natural gas to provide conditioned air in a cargo transport unit;

(c) the replacement of a dryer, range, water heater or space heating appliance if

(i) it is located in a single family residential dwelling, and

(ii) no design change is required to any gas piping or venting system;

(d) the relocation, by a gas utility company, of a gas meter, including any piping changes that may be required for the relocation;

(e) a container having a propane capacity of not more than 454 litres water capacity or when containers are manifolded together, the aggregate capacity of the containers does not exceed 454 litres water capacity;

(f) a propane container and installation serving a pump jack, flare stack or oil tank heater at an oil field well site.

Gas discipline permit holder

13(1) A permit issuer may issue a permit in the gas discipline to the following:

(a) a gasfitter;

(b) an owner who resides or intends to reside in a single family residential dwelling if the gas system serves the dwelling;

(c) an owner of a farm building if the gas system serves the farm building;

(d) a person who has satisfactorily completed a course of training acceptable to the Administrator for the installation of liquefied petroleum tanks;

(e) a person who has satisfactorily completed a course of training acceptable to the Administrator for the installation of natural gas secondary lines;

(f) an owner or operator if the requirements of section 23 are met;

(g) a certified journeyperson sheet metal worker if the permit is for the replacement of a furnace in a single family residential dwelling including, if applicable, the replacement of the gas piping downstream of the shut-off valves for the furnace.

(2) Without limiting the generality of section 44(2) of the Act, for the purpose of achieving the level of safety intended by the Act and the regulations, a permit issuer may limit the type and scope of the undertaking for which a permit is issued under subsection (1)(b) or (c).

AR 204/2007 s13;17/2015

Plumbing Discipline

Plumbing permit

14(1) A permit in the plumbing discipline is required to install, alter or add to a plumbing system.

(2) Despite subsection (1), a permit is not required for the following:

(a) to install a water service that connects a building to a municipal or private water supply;

(b) to install a building sewer or storm sewer outside of a building;

(c) to change a fixture, water heater, faucet, trap or valve if a design change to the piping system is not required;

(d) to install plumbing fixtures in a single family residential dwelling if roughed-in piping has been completed under another permit;

(e) to install residential water treatment devices in a single family residential dwelling.

Plumbing permit holder

15(1) A permit issuer may issue a permit in the plumbing discipline to the following:

(a) a plumber;

(b) an owner who resides or intends to reside in a single family residential dwelling if the plumbing system serves the dwelling;

(c) an owner of a farm building if the plumbing system serves the farm building;

(d) an owner or operator if the requirements of section 23 are met;

(e) a person holding a valid private sewage installer certificate of competency, in respect of a portion of a plumbing system that is

(i) located outside a building, and

(ii) required for the treatment, flow control or pressure delivery of wastewater from a plumbing system that

discharges into a municipal sewage collection system.

(2) Without limiting the generality of section 44(2) of the Act, for the purpose of achieving the level of safety intended by the Act and the regulations, a permit issuer may limit the type and scope of the undertaking for which a permit is issued under subsection (1)(b) or (c).

AR 204/2007 s15;17/2015;194/2015

Private Sewage Discipline

Private sewage disposal permit

16(1) A permit in the private sewage discipline is required for a private sewage disposal system undertaking.

(2) Despite subsection (1), a permit is not required for the replacement of any equipment of a private sewage disposal system with units of a similar type if the replacement is made for the purpose of maintaining the system and does not modify the design of the system.

(3) Despite subsection (1), a permit is not required for basic privies that are not connected to a holding tank.

AR 204/2007 s16;266/2009

Private sewage system permit holder

17(1) A permit issuer may issue a permit in the private sewage discipline to the following:

(a) a private sewage installer for any private sewage system;

(b) a restricted private sewage installer for the installation of holding tank;

(c) an owner who resides or intends to reside in a single family residential dwelling for any private sewage system if the private sewage disposal system serves the dwelling;

(d) an owner of a farm building for any private sewage system if the private sewage disposal system serves the farm building.

(2) Without limiting the generality of section 44(2) of the Act, for the purpose of achieving the level of safety intended by the Act and the regulations, a permit issuer may limit the type and scope of the undertaking for which a permit is issued under subsection (1)(c) or (d).

AR 204/2007 s17;17/2015

Utility Connections

Gas, electricity, water

18(1) A supply of gas or electricity shall not be provided to a gas or electrical system unless

(a) the permit issued in respect of that installation is presented to the supplier,

(b) the permit issuer notifies the supplier that the required permit has been obtained, or

(c) the permit issuer authorizes a temporary connection.

(2) Despite subsection (1), a permit or notification from a permit issuer does not obligate a supplier of gas or electricity to supply gas or electricity to an installation.

(3) A permit or notification from a permit issuer does not obligate a supplier of water to supply water to a plumbing system.

Information System

Permit information

19(1) A permit issuer shall, on request, provide an Administrator or the Council with permit information for use in an information system.

(2) The Administrator or the Council may disclose the permit information in accordance with section 63 of the Act.

AR 204/2007 s19;17/2015

Part 2
Permit Administration

Form of permit application

20 An application for a permit and any information required to be included with the application must be submitted in a form and in a manner satisfactory to the permit issuer and the application must

(a) state the use or proposed use of the premises,

(b) clearly set forth the address or location at or in which the undertaking will take place,

(c) include the owner's name and mailing address,

(d) include any further information as required to enable the permit issuer to determine the permit fee,

(e) describe the undertaking, including information, satisfactory to the permit issuer, regarding the technical nature and extent of the undertaking,

(f) set out the name, complete address, telephone number and evidence of credentials required of the permit applicant, together with the written or electronic signature of the permit applicant,

(g) for a permit for the building discipline,

(i) state the type of occupancy,

(ii) set out the prevailing market value of the undertaking, and

(iii) if a structure is to be installed on a temporary basis, as determined by the permit issuer, state the period for which the structure will be installed,

(h) include a method of payment of fees acceptable to the permit issuer, and

(i) include any further information that the permit issuer considers necessary, including the provision of

(i) a site plan that shows the actual dimensions of the parcel of land and the location of the proposed undertaking in relation to the boundaries of the parcel of land and other buildings on the same parcel of land,

(ii) copies of plans and specifications for the proposed undertaking, and

(iii) documentation required to verify information provided by the applicant.

AR 204/2007 s20;223/2010;17/2015

Required permit issued - terms

21 A permit issued under this Regulation

(a) must include a unique identifier that has been assigned by the permit issuer to the undertaking,

(b) must state the date on which the permit is issued,

(c) must state the name of the owner and the person to whom the permit has been issued,

(d) must state where the undertaking is to take place,

(e) must describe the undertaking or portion of the undertaking governed by the permit, and

(f) may contain any other information that the permit issuer considers necessary.

Terms and conditions of permit

22 A permit issuer may issue a permit for an undertaking, or part of the undertaking, and may, without limiting the generality of section 44(2) of the Act and subject to the applicable policies of the Minister and of the accredited municipality or accredited regional services commission, impose terms and conditions on the permit that are consistent with the purpose and intent of the Regulation, including, but not limited to,

(a) requiring that permission be obtained from the permit issuer before the occupancy or use of the construction, process or activity under the permit,

(b) setting the date on which the permit expires,

(c) setting a condition that causes the permit to expire,

(d) setting the period of time that the undertaking may be occupied, used or operated,

(e) setting out the scope of the undertaking being permitted,

(f) setting the location or locations of the undertaking being permitted,

(g) setting the qualifications of the person responsible for the undertaking,

(h) requiring an identification number or label to be affixed to the undertaking, and

(i) requiring the approval of a safety codes officer before any part of the building or system is covered or concealed.

Annual permit

23 A permit issuer may issue a permit in the electrical, gas or plumbing discipline allowing the owner or operator of the premises to effect minor repairs, alterations or additions on the premises under the following conditions:

(a) a person who holds a trade certificate in the appropriate trade under the *Apprenticeship and Industry Training Act* carries out the undertaking;

(b) the permit does not entitle the owner or operator to effect major alterations in or additions to the premises;

(c) the owner or operator maintains on the premises an accurate record of all repairs for the previous 2 years and makes the record available to a safety codes officer on request;

(d) the permit is limited to a one-year term, subject to renewal by the permit issuer.

AR 204/2007 s23;17/2015

Responsibilities of the permit holder

24 On the issuance of a permit, the permit holder must

(a) comply with the terms and conditions of the permit,

(b) undertake the construction, process or activity in accordance with the Act and applicable codes and standards,

(c) notify the permit issuer

(i) if the permit holder does not intend to complete the undertaking, or

(ii) if there is a change in ownership from the owner as stated on the permit application,

(d) ensure that all plans and specifications required to apply for the permit are available at the construction site at all reasonable times for inspection by a safety codes officer, and

(e) ensure that a permit for the building discipline is posted or readily available at the construction site.

AR 204/2007 s24;17/2015

Term of a permit

25(1) In the absence of a different term set under section 22, a permit expires if the undertaking to which it applies

(a) is not commenced within 90 days from the date of issue of the permit,

(b) is suspended or abandoned for a period of 120 days, or

(c) is in respect of a seasonal use residence and the undertaking is suspended or abandoned for a period of 240 days after the undertaking is started.

(2) Despite subsection (1), when the term of a permit has not expired, a permit issuer may, in writing, and on the request of the permit holder, extend the permit for an additional fixed period of time that the permit issuer considers appropriate.

Refusal to issue, suspension or cancellation

26 Without restricting the generality of section 46 of the Act, a permit issuer may refuse to issue a permit and, without restricting the generality of section 44 of the Act, a safety codes officer may suspend or cancel a permit that has been issued if

(a) in the case of an addition or alteration, the existing undertaking is unsafe or will reduce the level of safety of the undertaking governed by the permit to below that which is intended by the Act and regulations, codes, standards or body of rules declared to be in force pursuant to the Act,

(b) incorrect or insufficient information is submitted with respect to the permit or the undertaking to be governed by the permit,

(b.1) incorrect or insufficient information is provided under section 11 of the New Home Buyer Protection (General) Regulation or section 2 of the New Home Buyer Protection (Regional Municipality of Wood Buffalo) Regulation,

(b.2) evidence provided under section 6.1(2) was incorrect or is no longer correct,

(c) in the opinion of the permit issuer, the undertaking for which the permit would be or has been issued would or does contravene the Act or another enactment,

(d) the permit fee has not been paid,

(e) there is a contravention of any condition under which the permit was issued, or

(f) the permit was issued in error,

(g) an administrative penalty has been issued, to the person who submitted the permit application, and was not paid within 30 days, if

(i) no appeal was filed under section 57.3 of the Act, or

(ii) an appeal was filed under section 57.3 of the Act and the penalty was upheld in whole or in part.

AR 204/2007 s26;99/2016;207/2017

Deviation from permit conditions

27 No person shall deviate or authorize a deviation from a permit or terms or conditions of a permit without first obtaining the written permission of the permit issuer.

Permit transfer, termination

28(1) If a holder of a permit relinquishes the holder's interest or participation in the undertaking governed by the permit before the undertaking is completed, the permit or any label or identification number issued as part of a permit

(a) is terminated, and

(b) applies only to the part of the undertaking completed before the termination unless the permit issuer authorizes the permit or label or identification number to be transferred.

(2) A permit is not transferable to any other person unless the transfer is authorized in writing by the permit issuer.

Part 3
Coming into Force

29 Repealed AR 208/2017 s4.

Coming into force

30 This Regulation comes into force on April 1, 2008.

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Province of Alberta

SAFETY CODES ACT

ELECTRICAL CODE REGULATION

Alberta Regulation 209/2006

With amendments up to and including Alberta Regulation 186/2018

Current as of February 1, 2019

Office Consolidation

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(Consolidated up to 186/2018)

ALBERTA REGULATION 209/2006

Safety Codes Act

ELECTRICAL CODE REGULATION

Table of Contents

Definitions

1(1) In this Regulation,

(a) "Act" means the *Safety Codes Act*;

(b) "certification body" means an organization accredited by the Standards Council of Canada as a certification body;

(c) "inspection body" means an organization accredited by the Standards Council of Canada as an inspection body.

(2) The definitions in the Act and a code declared in force by this Regulation apply to the words used in this Regulation.

Electrical systems equipment

2(1) If a code, standard or body of rules declared in force under the Act with respect to electrical systems requires approved equipment, that equipment must meet the requirements of this section.

(2) No person shall manufacture, install, sell or offer for sale any equipment related to electrical systems for use in Alberta unless the equipment has been

(a) certified by a certification body in accordance with the certification body's terms of accreditation with the Standards Council of Canada, or

(b) inspected by an inspection body in accordance with the inspection body's terms of accreditation with the Standards Council of Canada.

(3) Subsection (2) does not apply to electrical equipment of an electric distribution system or a transmission line as defined in the *Hydro and Electric Energy Act*.

Codes declared in force

3 The following codes, as amended or replaced from time to time, are declared in force in respect of electrical systems:

(a) the CSA Standard C22.1-18 - 2018 Canadian Electrical Code, Part 1 (24th edition), Safety Standard for Electrical Installations, published by the CSA Group;

(b) the Alberta Electrical Utility Code - 5th Edition, April 2016, published by the Safety Codes Council.

AR 209/2006 s3;14/2008;178/2009;176/2013;126/2015;186/2018

Repeal

4 The *Electrical Code Regulation* (AR 145/2002) is repealed.

Coming into force

5 This Regulation comes into force on September 1, 2006.

Schedule Repealed AR 126/2015 s3.

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Province of Alberta

SAFETY CODES ACT

ADMINISTRATIVE ITEMS REGULATION

Alberta Regulation 16/2004

With amendments up to and including Alberta Regulation 53/2016

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(Consolidated up to 53/2016)

ALBERTA REGULATION 16/2004

Safety Codes Act

ADMINISTRATIVE ITEMS REGULATION

Table of Contents

Interpretation

1 In this Regulation,

(a) "Act" means the *Safety Codes Act*;

(b) repealed AR 53/2016 s2;

(c) "architectural work" means the preparation of designs for the erection of, construction of or addition to a building but does not include engineering work;

(d) "engineering work" means the preparation of designs for electrical, mechanical and structural systems or components of buildings and includes applicable geotechnical engineering work and the design of pressure equipment;

(e) "Fire Commissioner" means the Fire Commissioner employed by the Government within the Department of Municipal Affairs;

(e.1) "fire service organization" means a fire service organization as defined in the *Municipal Government Act*;

(f) "plans" include drawings;

(g) repealed AR 53/2016 s2;

(h) repealed AR 53/2016 s2.

AR 16/2004 s1;35/2007;68/2008;170/2012;53/2016

General

2 Repealed AR 53/2016 s3.

Safety codes officer identification

3 Identification of a person as a safety codes officer consists of an identification card that

(a) has a photograph of the person,

(b) is signed by the person,

(c) states the person's name and number of the person's certificate of competency,

(d) states that the person is a safety codes officer appointed under the Act,

(e) states the discipline and competency level to which the person's powers and duties relate,

(f) states the expiry date of the identification card, and

(g) purports to be signed by an Administrator.

Safety codes officer probationary certification

4(1) On receipt of an application for designation as a safety codes officer, an Administrator who is authorized to issue certificates of competency and to designate the powers that a safety codes officer may exercise may issue a probationary certificate of competency to the applicant if

(a) the Administrator believes that the applicant's training and experience are adequate to enable the applicant to function adequately as a safety codes officer in a specific discipline, or

(b) the applicant has partial qualifications and is diligently undertaking the process of completing qualifications to permit a certificate of competency to be issued.

(2) The Administrator shall not include authorization to exercise the powers under section 49 of the Act in a designation of powers for a safety codes officer who holds a probationary certificate of competency.

(3) A probationary certificate of competency must contain an expiry date.

Service of orders and notices

5(1) An order issued, confirmed, revoked or varied under the Act and a written notice required by the Act to be issued must be served

(a) in the case of an individual,

(i) by personal service,

(ii) by leaving it for the individual with a person apparently at least 18 years of age at the individual's current or most usual dwelling place,

(iii) by sending it by registered mail to the individual's last known address, or

(iv) by sending it by facsimile or other form of electronic transmission to the individual's last known facsimile number or electronic address, if there is a record of so sending it,

and

(b) in the case of a corporation,

(i) by leaving it with a director, manager or officer of the corporation, or the president, chairperson or other head officer, by whatever name that person is known, of the corporation,

(ii) by leaving it at the corporation's registered office,

(iii) by sending it by registered mail to the corporation's registered office, or

(iv) in the case of an extra-provincial corporation, by leaving it with, at the address of, or by sending it by registered mail to the address of, the corporation's attorney for service appointed as required by the *Business Corporations Act*.

(2) The Safety Codes Council, a sub-council of the Safety Codes Council, an Administrator or a safety codes officer may request the assistance of a peace officer in the service of an order.

Format and content of orders

6 An order issued under the Act must

(a) be mechanically written or handwritten in a legible manner, on paper,

(b) state that it is an order,

(c) identify the section in the Act providing the authority under which the order is issued,

(d) identify the safety codes officer who is issuing the order and the employer of the safety codes officer,

(e) identify the contravention, if that is the subject-matter of the order, including the section of the code, standard or body of rules that has been contravened, if applicable, and

(f) include

(i) the name of the person or persons to whom the order is issued,

(ii) the personal or business address of the person or persons to whom the order is issued,

(iii) the municipal address or legal description of the property on which the thing, process or activity that is the subject-matter of the order is located,

(iv) instructions and information regarding the procedure for requesting a review of the order by an Administrator,

(v) the name, address, telephone and facsimile numbers of an Administrator in respect of the discipline of the safety codes officer who is issuing the order,

(vi) instructions and information regarding the procedure for starting an appeal of the order,

(vii) the address, telephone and facsimile numbers of the Safety Codes Council, and

(viii) notice that non-compliance with the instructions of the order is an offence under the Act.

Determining the date when a code is published

6.1(1) For the purposes of section 65(4) of the Act, the date on which an amendment or a replacement of a code, standard or body of rules is published is,

(a) the day, month and year of publication printed or included in the amendment or replacement, if any,

(b) if only a month and year of publication are printed or included in the amendment or replacement, the last day of that month, and

(c) if only the year of publication is printed or included in the amendment or replacement or if no date is printed or included in the amendment or replacement, the date, assigned by the Administrator, by order, that the Administrator considers to be appropriate, considering the date when the code became available to the public.

(2) An order referred to in subsection (1)(c) shall be published or posted on an information system as the Administrator considers to be appropriate.

AR 53/2016 s4

Information system

7(1) An Administrator or the Safety Codes Council may maintain information systems respecting any or all matters under the Act.

(2) Entries may be made to the information system by an Administrator or the Safety Codes Council.

(3) When a person requests a search of an information system for variances or outstanding orders pursuant to section 63(3) of the Act, the information must be issued if all the applicable fees have been paid.

Reporting Fires, Accidents and Unsafe Conditions

Reporting and investigating fires

8(1) Subject to subsection (2), if the responding officer of a fire service organization knows of a fire within the jurisdiction of the fire service organization in which a person dies or suffers an injury that requires professional medical attention or in which property is damaged or destroyed, the reporting officer must report the fire to a safety codes officer for the fire discipline.

(2) A safety codes officer for the fire discipline must investigate the cause, origin and circumstances of every fire within the safety codes officer's jurisdiction in which a person dies or suffers injury that requires professional medical attention or in which property is damaged or destroyed.

(3) This section does not apply to forest fires.

AR 16/2004 s8;53/2016

Fire investigation report

9 A safety codes officer for the fire discipline who investigates the causes and circumstances of a fire must

(a) within 30 days after the date of the fire started prepare and submit to the Fire Commissioner a report in a form satisfactory to the Fire Commissioner, and

(b) immediately notify the Fire Commissioner if the safety codes officer has information that indicates the fire,

(i) is or may be of incendiary origin, or

(ii) has resulted in loss of life,

and

(c) provide to the Fire Commissioner any further information respecting the investigation that the Fire Commissioner requests.

No fire insurance

10 A person, firm or corporation that sustains a loss by fire of property in Alberta on which no insurance is in effect must, within 10 days after the occurrence of the fire, submit to the Fire Commissioner a report in a form satisfactory to the Fire Commissioner.

Insurance companies reporting fires

11(1) An insurance company licensed to undertake contracts for fire insurance in Alberta must, within 7 days after the end of every month, submit to the Fire Commissioner a report in a form satisfactory to the Fire Commissioner regarding every fire that occurred in Alberta in the previous month and in which that company is interested as insurer.

(2) A person who sustains loss by fire of property in Alberta that is insured wholly or partially with an insurance company not licensed or registered under the *Insurance Act* must, within 10 days after complete proofs of the loss are submitted to the company with which the insurance is placed, submit a report to the Fire Commissioner in a form satisfactory to the Fire Commissioner.

(3) A person engaged in making adjustments of a loss or damage by fire in Alberta must, within 7 days after the end of every month, submit to the Fire Commissioner a report in a form satisfactory to the Fire Commissioner showing the adjustments made by the adjuster in the previous month.

(4) A person engaged in

(a) making adjustments of a loss or damage by fire, or

(b) investigating a fire, other than a peace officer or a person making an investigation under section 34 of the Act,

must immediately notify the Fire Commissioner if that person has information that indicates the fire is or may be of incendiary origin.

Reporting in the gas discipline

12(1) Subject to subsection (2), a person who knows of

(a) a fatality involving a gas installation or gas equipment,

(b) property damage estimated to exceed $250, if it is caused by a fire or explosion, or

(c) an accident involving a gas installation or gas equipment where the accident results in injury to a person that requires professional medical attention,

must notify a safety codes officer for the gas discipline of the circumstances and details of the accident and provide the safety codes officer with any other information that the safety codes officer requests and the safety codes officer must notify an Administrator for the gas discipline of the accident.

(2) Subsection (1) does not apply to a person who knows or has reasonable grounds to believe that the accident has been reported to a safety codes officer for the gas discipline.

Reporting in the plumbing discipline

13 An operator of a public water supply system who knows of an accident or an unsafe condition related to the supply or use of the public water supply system must, as soon as practicable, notify an Administrator for the plumbing discipline.

Reporting in the private sewage disposal discipline

14 A person who knows of an accident or unsafe condition related to the use of a private sewage disposal system must, as soon as practicable, notify an Administrator for the plumbing discipline.

Reporting in the electrical discipline

15(1) Subject to subsection (2), any person who knows of

(a) an accident to a person, a fatal accident to livestock or a power line contact involving an electrical installation or electrical equipment, or

(b) a fire of electrical origin or suspected electrical origin

must, as soon as practicable, report the accident, contact or fire to an Administrator for the electrical discipline or to a safety codes officer and the safety codes officer must notify an Administrator for the electrical discipline.

(2) Subsection (1) does not apply to a person who knows or has reasonable grounds to believe that the accident, contact or fire has already been reported to a safety codes officer or an Administrator for the electrical discipline.

(3) After an accident described in subsection (1), no person shall remove or interfere with anything in, on or about the place where the accident occurred until permission has been granted by a safety codes officer for the electrical discipline, unless it is necessary to do so to prevent death or injury, to protect property or to restore service.

Reporting in the elevating devices discipline

16 An owner of an elevating device or an owner's agent must

(a) notify an Administrator for the elevating devices discipline or a safety codes officer and the safety codes officer must notify an Administrator for the elevating devices discipline as soon as practicable after an accident involving the elevating device that results in death or serious injury to a person or damage to equipment, and

(b) if requested by an Administrator for the elevating devices discipline, submit, as soon as practicable, a full written report of any accident involving the elevating device that results in death or serious injury to a person or damage to equipment.

17 Repealed AR 49/2006 s47.

Seals and Stamps

Complex projects

18(1) If, in the opinion of a safety codes officer, the size or complexity of a project may give rise to special safety concerns, the safety codes officer may require that all plans and specifications, or any part of them, for the project's

(a) buildings,

(b) electrical systems,

(c) elevating devices,

(d) gas systems,

(e) plumbing and private sewage disposal systems, or

(f) repealed AR 49/2006 s47;

(g) fire protection systems and equipment,

be imprinted with a seal or stamp affixed in accordance with the *Engineering and Geoscience Professions Act* for engineering work, or the *Architects Act* for architectural work.

(2) If, in the opinion of a safety codes officer, the size or complexity of a project may give rise to special safety concerns, the safety codes officer may require that the construction of any or all of the project's

(a) buildings,

(b) electrical systems,

(c) elevating devices,

(d) gas systems,

(e) plumbing and private sewage disposal systems, or

(f) repealed AR 49/2006 s47;

(g) fire protection systems and equipment,

be reviewed during construction in accordance with the *Engineering and Geoscience Professions Act* for engineering work, or the *Architects Act* for architectural work.

AR 16/2004 s18;49/2006;53/2016

19 Repealed AR 49/2006 s47.

Design of amusement rides

20 A safety codes officer may accept plans for the design of amusement rides with a seal affixed by an engineer who is registered in any jurisdiction.

21 to **24** Repealed AR 53/2016 s7.

Repeals and Coming into Force

Repeals

25 The following regulations are repealed:

(a) the *Administrative Items Regulation* (AR 83/94);

(b) the *Administration and Information Systems Regulation* (AR 55/95).

26 Repealed AR 53/2016 s9.

Coming into force

27 This Regulation comes into force on April 1, 2004.

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Province of Alberta

APPRENTICESHIP AND INDUSTRY TRAINING ACT

ELECTRICIAN TRADE REGULATION

Alberta Regulation 274/2000

With amendments up to and including Alberta Regulation 165/2017

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(Consolidated up to 165/2017)

ALBERTA REGULATION 274/2000

Apprenticeship and Industry Training Act

ELECTRICIAN TRADE REGULATION

Table of Contents

Definitions

1 In this Regulation,

(a) "apprentice" means a person who is an apprentice in the trade;

(b) "certified journeyperson" means a certified journeyperson as defined in the *Apprenticeship Program Regulation*;

(c) "electrical systems" means any type of residential, commercial, institutional or industrial building or structural electrical system and without limiting the generality of the foregoing includes

(i) fire alarm systems;

(ii) signal systems;

(iii) control systems;

(iv) lighting systems;

(v) heating and cooling systems;

(vi) systems providing power;

(vii) data systems;

(viii) communication systems;

(ix) fibre optic systems;

(x) lightning protection systems;

(xi) cathodic protection systems;

(xii) grounding and bonding systems;

(d) "technical training" means technical training as defined in the *Apprenticeship Program Regulation*;

(e) "trade" means the occupation of electrician that is designated as a compulsory certification trade pursuant to the *Apprenticeship and Industry Training Act*.

AR 274/2000 s1;392/2003;270/2006

General Matters Respecting the Trade

Constitution of the trade

2 The undertakings that constitute the trade are the installation, alteration, repair, inspection, verification, commissioning, maintenance and operation of electrical systems.

Tasks, activities and functions

3 When practising or otherwise carrying out work in the trade, the following tasks, activities and functions come within the trade:

(a) interpreting electrical industry codes, including the Canadian Electrical Code;

(a.1) erecting, assembling, removing, repairing, replacing and using scaffolding, handling devices, hoists, slings, ropes, rigging equipment and related hardware;

(b) using hand tools, power tools, testing equipment and specialty tools required by the trade;

(c) preparation of holes and openings for conductors, cables, raceways, boxes and fittings, fasteners and devices and making panel backboards, box supports and similar items;

(d) selecting and specifying location and planning layout of electrical systems, components and controls from drawings, specifications, contract documents and related information;

(e) scheduling labour and material requirements for electrical work;

(f) testing electrical and electronic equipment and components for continuity, current, voltage and resistance;

(g) installing, repairing, examining, operating, removing, replacing, altering, maintaining, connecting, testing, energizing and cleaning

(i) electric surface or flush mounted receptacles, junction, outlet and device boxes and components;

(ii) feeder and distribution busways and busducts;

(iii) lighting fixtures and related electrical equipment and components;

(iv) dry cell and storage batteries and storage battery systems;

(v) consumer's service entrance distribution and metering equipment for connection to overhead and underground supply;

(vi) loadcentres, panelboards, fused switch and breaker assemblies, switchboards, switchgear, protective relays, associated circuitry and other devices for power distribution;

(vii) power transformers, regulators, capacitors, phase converters and reactors;

(viii) generator sets including auto start and transfer systems for standby use and synchronized systems and their controls;

(ix) alternating current to direct current conversion devices and power inverters for conversion of direct current to alternating current;

(x) electrical appliances, electrical heating, solar heating, ventilation and air-conditioning units, components and controls;

(xi) oil, gas, coal, electric or wood burner control systems, or any combination of them, and associated wiring;

(xii) infra-red heating units and other types of infra-red units, controls and components;

(xiii) fire alarm systems;

(xiv) security systems, intrusion alarms, access control, card key lock systems or similar equipment;

(xv) clock systems, including self-correcting or synchronized master-slave equipment and programmable time devices for signals, energy management, lighting control and similar installations;

(xvi) sound and visual communications systems;

(xvii) fibre optic systems and components;

(xviii) electronic devices, discrete devices, manual or automatic devices, control devices, limit switches, pilot or sensing devices, signal devices, circuits and indication lamps, panels or similar equipment and components;

(xix) relay, static logic or programmable control components and systems;

(xx) servo-mechanisms and associated circuitry, robotic systems and numerically controlled and computerized numerically controlled systems;

(xxi) electric motors, generators, controls, other electromechanical devices and auxiliary equipment;

(xxii) motor starters, motor speed controllers and braking systems, direct current solid state drives, alternating current adjustable frequency drives, magnetic drive assemblies and controls;

(xxiii) recording instruments and metering instruments;

(xxiv) grid-connected solar photovoltaic systems, including systems using storage;

(xxv) grid-isolated solar photovoltaic systems;

(h) installing, repairing, examining, removing, replacing, altering, maintaining, terminating, splicing, connecting, testing, energizing and cleaning

(i) cable assemblies;

(ii) underground and overhead wiring installations;

(iii) high voltage conductors, cables, terminations and insulation materials;

(iv) lighting fixtures and related electrical equipment and components;

(v) dry cell and storage batteries and storage battery systems;

(vi) electric heat tracing cable assemblies and controls;

(i) installing, repairing, examining, removing, replacing, altering, maintaining, connecting, testing and cleaning

(i) raceway systems, including fittings;

(ii) mechanical supports and protection for electrical systems;

(iii) grounding and bonding systems;

(j) terminating and splicing

(i) feeder and distribution busways and busducts;

(ii) fibre optic systems and components;

(k) terminating

(i) electric surface or flush mounted receptacles, junction, outlet and device boxes and components;

(ii) lighting fixtures and related electrical equipment and components;

(iii) dry cell and storage batteries and storage battery systems;

(iv) consumer's service entrance distribution and metering equipment for connection to overhead and underground supply;

(v) loadcentres, panelboards, fused switch and breaker assemblies, switchboards, switchgear, protective

relays, associated circuitry and other devices for power distribution;

(l) programming and calibrating

(i) generator sets, including auto start and transfer systems for standby use and synchronized systems and their controls;

(ii) relay, static logic or programmable control components and systems;

(iii) servo-mechanisms and associated circuitry, robotic systems and numerically controlled and computerized numerically controlled systems;

(m) calibrating

(i) loadcentres, panelboards, fused switch and breaker assemblies, switchboards, switchgear, protective relays, associated circuitry and other devices for power distribution;

(ii) electrical heating, solar heating, ventilation and air-conditioning units, components and controls;

(iii) oil, gas, coal, electric or wood burner control systems, or any combination of them, and associated wiring;

(iv) electric motors, generators, controls, other electromechanical devices and auxiliary equipment;

(v) motor starters, motor speed controllers and braking systems, direct current solid state drives, alternating current adjustable frequency drives, magnetic drive assemblies and controls;

(vi) recording instruments;

(n) lubricating

(i) loadcentres, panelboards, fused switch and breaker assemblies, switchboards, switchgear, protective relays, associated circuitry and other devices for power distribution;

(ii) generator sets, including auto start and transfer systems for standby use and synchronized systems and their controls;

(iii) electric motors, generators, controls, other electromechanical devices and auxiliary equipment.

AR 274/2000 s3;392/2003;108/2004;122/2014;150/2016

Apprenticeship

Term of the apprenticeship program

4(1) Subject to credit for previous training or experience being granted pursuant to an order of the Board the term of an apprenticeship program for the trade is 4 periods of not less than 12 months each.

(2) In the first period of the apprenticeship program an apprentice must acquire not less than 1560 hours of on the job training and successfully complete the technical training that is required or approved by the Board.

(3) In the 2nd period of the apprenticeship program an apprentice must acquire not less than 1560 hours of on the job training and successfully complete the technical training that is required or approved by the Board.

(4) In the 3rd period of the apprenticeship program an apprentice must acquire not less than 1560 hours of on the job training and successfully complete the technical training that is required or approved by the Board.

(5) In the 4th period of the apprenticeship program an apprentice must acquire not less than 1440 hours of on the job training and successfully complete the technical training that is required or approved by the Board.

AR 274/2000 s4;165/2017

Employment of apprentices

5(1) Where a person employs an apprentice, that employment must be carried out in accordance with this section.

(2) Subject to subsection (3), a person who is a certified journeyperson in the trade or employs a certified journeyperson in the trade may employ 2 apprentices and 2 additional apprentices for each additional certified journeyperson in the trade that is employed by that person at the job site.

(3) Subsection (2) does not apply to an apprentice who is engaged in an apprenticeship program in the trade and has completed all the requirements required or approved by the Board for advancement into the 4th period of that apprenticeship program.

AR 274/2000 s5;48/2003;203/2003;392/2003;114/2004;102/2006;270/2006;1/2011

Wages

6(1) Subject to the *Apprenticeship Program Regulation*, a person shall not pay wages to an apprentice that are less than those provided for under subsection (2).

(2) Subject to the *Employment Standards Code*, a person employing an apprentice must pay wages to the apprentice that are at least equal to the following percentages of the wages paid to employees who are certified journeypersons in the trade:

(a) 50% in the first period of the apprenticeship program;

(b) 60% in the 2nd period of the apprenticeship program;

(c) 70% in the 3rd period of the apprenticeship program;

(d) 80% in the 4th period of the apprenticeship program.

AR 274/2000 s6;270/2006

Transitional Provisions, Repeals, and Coming into Force

Apprenticeship continues

7 A person who immediately prior to January 1, 2001 was an apprentice in an apprenticeship program under the *Electrician Trade Regulation* (AR 98/95), continues as an apprenticeship in that apprenticeship program under this Regulation.

Repeal

8 The *Electrician Trade Regulation* (AR 98/95) is repealed.

9 Repealed AR 165/2017 s3.

Coming into force

10 This Regulation comes into force on January 1, 2001.

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Province of Alberta

APPRENTICESHIP AND INDUSTRY TRAINING ACT

APPRENTICESHIP PROGRAM REGULATION

Alberta Regulation 258/2000

With amendments up to and including Alberta Regulation 119/2018

Current as of June 20, 2018

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(Consolidated up to 119/2018)

ALBERTA REGULATION 258/2000

Apprenticeship and Industry Training Act

APPRENTICESHIP PROGRAM REGULATION

Table of Contents

Definitions

1 In this Regulation,

(a) "Act" means the *Apprenticeship and Industry Training Act*;

(b) "Board" means the Alberta Apprenticeship and Industry Training Board;

(c) "certified journeyperson" means a person who holds a trade certificate under the Act;

(d) "Executive Director" means the Executive Director appointed under the Act;

(e) "on the job training" means the training provided to an apprentice by the apprentice's employer or supervisor and includes those circumstances under which an apprentice acquires skill and knowledge by means of work experience gained during the apprentice's apprenticeship program;

(f) "record book" means a record book issued in respect of an apprenticeship program in which the progress of an apprentice is to be documented and includes the material or documentation known as the "blue book";

(g) "supervisor" means,

(i) in the case of a compulsory certification trade, a person who is

(A) a certified journeyperson in that compulsory certification trade, or

(B) a certified journeyperson or an uncertified journeyperson in another designated trade where the task, activity or function that is being carried out by an apprentice in that compulsory certification trade is the same task, activity or function that is also carried out by a certified journeyperson or uncertified journeyperson in that other designated trade;

(ii) in the case of an optional certification trade, a person who is

(A) a certified journeyperson or an uncertified journeyperson in that optional certification trade, or

(B) a certified journeyperson or an uncertified journeyperson in another designated trade where the task, activity or function that is being carried out by an apprentice in that optional certification trade is the same task, activity or function that is also carried out by a certified journeyperson or uncertified journeyperson in that other designated trade;

(h) "technical training" means the formal instruction and technical courses, or any combination of them, that are part of an apprenticeship program;

(i) "trade regulation" means, in respect of a designated trade, the regulation under the Act that prescribes the undertakings and the tasks, activities and functions that come within that designated trade;

(j) "uncertified journeyperson" means a person who is not a certified journeyperson but

(i) who, in the opinion of that person's employer, possesses the skills and knowledge in an optional certification trade that are expected of a certified journeyperson in that trade, or

(ii) who

(A) is self-employed, and

(B) in respect of that self-employment primarily works in or performs one or more tasks, activities or functions in an optional certification trade.

AR 258/2000 s1;270/2006

2 Repealed AR 46/2009 s2.

Content of an apprenticeship program

3(1) An apprenticeship program in a designated trade consists of the technical training and the on the job training provided for under the applicable trade regulation.

(2) The content of the technical training and of the on the job training of an apprenticeship program consists of those matters approved by the Board after consulting with the applicable provincial apprenticeship committee.

Term of apprenticeship

4(1) The term of an apprenticeship program consists of the number of periods that are prescribed for that program by the applicable trade regulation.

(2) The length of each period of an apprenticeship program is the length of time that is set out in the applicable trade regulation during which the prescribed number of hours of on the job training and the required technical training are to be completed.

Requirements to become an apprentice

5 To be an apprentice a person and that person's employer must have entered a contract of apprenticeship that is registered with the Executive Director under the *Apprenticeship and Industry Training Administration Regulation*.

Requirements of employer re compulsory certification trade

6 A person shall not employ an apprentice in a compulsory certification trade, unless

(a) that person is a certified journeyperson or employs a certified journeyperson in that trade, and

(b) subject to section 16, that person is able to provide to the apprentice supervision and training in the tasks, activities and functions that are carried out in that trade.

AR 258/2000 s6;270/2006

Requirements of employer re optional certification trade

7 A person shall not employ an apprentice in an optional certification trade, unless

(a) that person

(i) is a certified journeyperson or employs a certified journeyperson in that trade, or

(ii) is an uncertified journeyperson or employs an uncertified journeyperson in that trade,

and

(b) subject to section 16, that person is able to provide to the apprentice supervision and training in the tasks, activities and functions that are carried out in that trade.

AR 258/2000 s7;270/2006

Application for apprenticeship

8(1) If a person is working in a designated trade in circumstances under which that person

(a) is receiving training, instruction, guidance or direction, or

(b) is engaging in some other form of a learning process not referred to in clause (a)

with respect to the carrying out of tasks, activities or functions in that trade, that person and that person's employer must without

delay apply to the Executive Director to enter an apprenticeship program in that trade and pursuant to that application enter into a contract of apprenticeship.

(2) During the time that a person is working in a designated trade pursuant to a subsisting application made under subsection (1), that person is to work under the same conditions and be subject to the same supervision as that of an apprentice in that trade.

(3) This section does not apply in those circumstances where a person who is carrying out work in a designated trade is doing so in accordance with Part 2, Division 1 of the Act.

Apprenticeship re Executive Director

9(1) Where

(a) a prospective apprentice is eligible to be granted or has been granted credit for previous training or experience,

(b) the prospective apprentice is unemployed, and

(c) in the opinion of the Executive Director, entering into a contract of apprenticeship between the Executive Director and the prospective apprentice will be of benefit to the prospective apprentice,

the Executive Director may at the request of the prospective apprentice enter into a contract of apprenticeship with the prospective apprentice.

(2) A contract of apprenticeship that is entered into under subsection (1) may not remain in force for more than one year from the day that the contract of apprenticeship is entered into unless within that year the contract of apprenticeship is transferred from the Executive Director to a person who is eligible to employ an apprentice.

Apprenticeship re self- employment

10 Notwithstanding section 8, where

(a) a prospective apprentice is self-employed, and

(b) the prospective apprentice's self-employment primarily involves working in or performing tasks, activities or functions in an optional certification or compulsory certification trade,

the prospective apprentice may, with respect to that optional certification or compulsory certification trade, enter into a contract

of apprenticeship with another person if the prospective apprentice has made arrangements for supervision and training under section 16.

AR 258/2000 s10;46/2009

Employee's responsibilities re granting of credit

11(1) Where a person who is an apprentice or a prospective apprentice advises that person's employer that the person has had previous experience with respect to tasks, activities or functions in a designated trade, it is the responsibility of the employer to recommend to the Executive Director that credit for some or all of the previous experience be granted to that person if

(a) the employer is satisfied that the person has had previous experience in respect of tasks, activities or functions that are carried out in that trade, and

(b) in the opinion of the employer, that person is able to carry out those tasks, activities or functions in a satisfactory manner.

(2) If

(a) at a time that a person is granted credit for previous experience that person is not working in a designated trade,

(b) subsequent to the granting of credit for the previous experience, that person became employed to work as an apprentice in the designated trade,

(c) the apprentice's employer is of the opinion that the amount of credit that was granted for the previous experience is greater than the apprentice's skills actually warrant, and

(d) the employer referred in clause (c) is the first person to employ the apprentice to work in the designated trade subsequent to the credit being granted for the previous experience,

it is the responsibility of that employer to advise the Executive Director that the amount of credit granted to that person for the previous experience should be reduced to an amount that the employer considers appropriate.

Responsibilities of an employer

12 It is the responsibility of a person who employs one or more apprentices in a designated trade to do the following with respect to each apprentice:

(a) to provide for on the job training for the apprentice in those tasks, activities and functions in that trade that are carried out by the person employing the apprentice;

(b) to ensure supervision of the apprentice as required by section 16;

(c) to pay wages to the apprentice in accordance with section 13;

(d) to encourage and enable the apprentice to regularly attend the technical training that is required under the apprentice's apprenticeship program;

(e) to ensure that the appropriate entries are made in an apprentice's record book;

(f) to submit to the Executive Director the forms and other documents that are required by the Executive Director.

AR 258/2000 s12;46/2009

Wages

13(1) Where a trade regulation prescribes the percentage of wages to be paid to apprentices in a trade, a person employing an apprentice in that trade must, subject to the *Employment Standards Code*,

(a) pay wages to the apprentice at a rate that is not less than the percentage prescribed by the trade regulation, and

(b) ensure that the apprentice is paid the required increment commencing on the date that the apprentice's record book is approved by the Executive Director.

(2) Nothing in this Regulation is to be construed so as to require a person to pay wages or prohibit a person from paying wages to an apprentice during the period of time that the apprentice is attending the technical training.

AR 258/2000 s13;46/2009

Wages re approved programs

14(1) In this section, "approved program" means a program approved by the Board under which persons are provided with an opportunity to engage in apprenticeship programs who may not

otherwise have an opportunity or be able to engage in an apprenticeship program.

(2) Notwithstanding sections 12(c) and 13 but subject to the *Employment Standards Code*, where an apprentice is employed in a designated trade under an approved program, an employer employing that apprentice may, while the apprentice is participating in the approved program, pay to that apprentice wages at a rate approved by the Board that are less than the rate provided for under the applicable trade regulation.

Employment of apprentices

15(1) Except where the applicable trade regulation does not provide for the number of apprentices that may be employed by a person in a designated trade, the number of apprentices that a person may employ in a designated trade is that number as determined in accordance with the applicable trade regulation.

(2) Subject to subsection (2.1), where

(a) a person who is a certified journeyperson or an uncertified journeyperson or who employs a certified journeyperson or an uncertified journeyperson in a designated trade is eligible to employ an apprentice in the trade, and

(b) the number of additional apprentices that the person may employ is based on the number of additional certified journeypersons or uncertified journeypersons employed by that person,

that person, in determining the number of additional apprentices that may be employed, is to take into account only those certified journeypersons or uncertified journeypersons who will be providing supervision with respect to the work of the apprentices.

(2.1) Subsection (2) does not apply to an apprentice who is engaged in an apprenticeship program that has 3 or more periods and has completed all the requirements required or approved by the Board for advancement into the final period of the apprenticeship program.

(3) Notwithstanding subsections (1) and (2), if

(a) a person carries on business in respect of which the person must use the services of, as the case may be, a certified journeyperson or an uncertified journeyperson in a designated trade,

(b) at a location at which the person carries on that business there is an insufficient number of, as the case may be,

certified journeypersons or uncertified journeypersons in that trade to provide those services, and

(c) due to that lack of a sufficient number of certified journeypersons or uncertified journeypersons in the trade the person is unable to carry out the work to which the person is committed,

the Executive Director may, subject to any conditions that the Executive Director considers appropriate, permit the person to employ, in addition to the number of apprentices authorized under the applicable trade regulation, extra apprentices so as to enable the person to carry out the work to which the person is committed.

(4) A person shall not employ an apprentice except in accordance with the applicable trade regulation and this Regulation.

AR 258/2000 s15;102/2006;270/2006

Supervision and training

16 In order for a person to be able to provide to an apprentice the supervision and training for the purposes of this or an applicable trade regulation,

(a) the supervision must be provided by a supervisor who

(i) is the employer of the apprentice,

(ii) is an employee of the employer of the apprentice, or

(iii) if not employed by the employer of the apprentice, is a person with whom that employer has made arrangements for the supervision of the apprentice,

(b) the supervision must, to the satisfaction of the Executive Director, be of such a nature that

(i) the apprentice being supervised has access to the supervisor and is able to communicate with the supervisor in respect of the task, activity or function being supervised, and

(ii) the supervision provided to the apprentice by the supervisor is sufficient so that the supervisor supplies to the apprentice the technical information, knowledge and guidance that is necessary for the apprentice to develop skills in the task, activity or function that is being supervised to a standard of skill and competence that is expected of a journeyperson in the trade or of a person who has reached the

apprentice's level in the apprenticeship program, as the case may be,

and

(c) the training must, to the satisfaction of the Executive Director, be provided to the apprentice in such a manner that the apprentice is able to

(i) acquire the technical information and knowledge, and

(ii) develop the skills

in the tasks, activities and functions that are expected of a journeyperson in the trade or of a person who has reached the apprentice's level in the apprenticeship program, as the case may be.

AR 258/2000 s16;270/2006

Entries in record book

17 To the extent possible in the circumstances, the apprentice's direct supervisor is to make the appropriate entries in the apprentice's record book

(a) on the completion by the apprentice of each period of the apprenticeship program;

(b) in the case where the apprentice's contract of apprenticeship is transferred, at the time of the transfer;

(c) in the case where the supervision has been provided by someone other than the apprentice's employer or an employee of the apprentice's employer, on completion of the training in the tasks, activities and functions for the trade.

Responsibilities of an apprentice

18 It is the responsibility of an apprentice to do the following:

(a) to complete the required on the job training in the tasks, activities and functions for the trade as assigned by the person employing the apprentice;

(b) to meet any additional training requirements relating to the trade that the person employing the apprentice or the applicable local apprenticeship committee or, where there is not a local apprenticeship committee, the applicable

provincial apprenticeship committee considers appropriate;

(c) to attend regularly the technical training that is required in order for the contract of apprenticeship to be completed;

(d) to plan for and make any necessary arrangements to meet financial needs while attending the technical training;

(e) to acquire the text books and other supplies that are required for the apprentice to engage in the technical training;

(f) to successfully complete in a timely manner all requirements required pursuant to the technical training and all the examinations required by the Board;

(g) to successfully complete the term of apprenticeship;

(h) to review with the apprentice's direct supervisor, at the completion of each period of apprenticeship, the hours worked and the on the job training completed during that period;

(i) to ensure that the apprentice's record book is kept up to date;

(j) to send the apprentice's record book, or otherwise ensure that it is sent, to the Executive Director on the successful completion of the requirements set out in clauses (a) to (c) and (f) to (i);

(k) to complete the documentation required to transfer the contract of apprenticeship should the apprentice become unemployed or employed by another person;

(l) to immediately notify the Executive Director of any change in address or in employment;

(m) to carry the apprentice's identification card at all times while at work and to produce it on request.

AR 258/2000 s18;46/2009

Resolution of disagreement

19(1) Where a disagreement arises between an employer and an employee in respect of an apprenticeship program or a contract of apprenticeship and the parties to the disagreement are unable to settle the matter, both or either of the parties may refer the matter to the presiding officer of the applicable local apprenticeship committee for settlement.

(2) Notwithstanding subsection (1), in the event that a local apprenticeship committee does not exist to which a disagreement may be referred under subsection (1), both or either of the parties to the disagreement may refer the matter to the presiding officer of the applicable provincial apprenticeship committee for settlement.

(3) If the presiding officer of the local apprenticeship committee is unable to effect a settlement of the matter,

(a) the presiding officer of the local apprenticeship committee, or

(b) both or either of the parties to the disagreement,

may refer the matter to the presiding officer of the applicable provincial apprenticeship committee for settlement.

(4) If a matter is referred to the presiding officer of a provincial apprenticeship committee under subsection (2) or (3) and the presiding officer is unable to effect a settlement of the matter,

(a) the presiding officer of the provincial apprenticeship committee, or

(b) both or either of the parties to the disagreement,

may refer the matter to the presiding officer of the Board for settlement.

(5) Where the presiding officer of the Board renders a decision on a matter referred to the presiding officer under subsection (4), the decision is binding on the parties to the disagreement.

(6) Where the subject-matter of the disagreement or the contents of the decision of the presiding officer of the Board is a matter that may be appealed under Part 4 of the Act, an appeal of that matter under Part 4 of the Act is not to be commenced until the process provided for by subsections (1) to (4) of this section is completed and the presiding officer of the Board has rendered a decision.

(7) For the purposes of Part 4 of the Act, the 30-day appeal period commences on the day after the day that the decision of the presiding officer of the Board is served on the party wishing to appeal that decision.

(8) Where a matter is referred to a presiding officer under subsection (1), (2), (3) or (4), the following apply:

(a) the presiding officer must, unless the parties to the disagreement otherwise agree, convene one or more meetings between the parties and the presiding officer for the purpose of resolving the disagreement;

(b) with the consent of the parties to a disagreement, a meeting convened under clause (a) may be conducted by means of electronic communications equipment if that equipment enables all the persons attending the meeting to communicate with each other;

(c) the presiding officer may proceed to review the matter and consider representations made, if any, notwithstanding that a party to the disagreement fails to attend a meeting convened under clause (a);

(d) the presiding officer must commence the review of the matter within 21 days from the day that the matter was referred to the presiding officer;

(e) if a matter referred to the presiding officer of a committee is not resolved within 45 days from the day that the matter was referred to the presiding officer, the matter may be treated by the presiding officer or a party to the disagreement as if the presiding officer was unable to effect a settlement of the matter;

(f) for the purposes of subsection (6), if the presiding officer of the Board does not render a decision within 45 days from the day the matter was referred to the presiding officer, a party to the disagreement may proceed as if the process provided for by subsections (1) to (4) had been completed and a decision had been rendered;

(g) the presiding officer of the local apprenticeship committee may authorize a member of that committee to act under this section in the place of the presiding officer;

(h) the presiding officer of the provincial apprenticeship committee may authorize a member of that committee to act under this section in the place of the presiding officer;

(i) the presiding officer of the Board may authorize a member of the Board to act under this section in place of the presiding officer.

Repeal

20 The *Apprenticeship Program and Certification Regulation* (AR 1/92) is repealed.

21 Repealed AR 119/2018 s1.

Coming into force

22 This Regulation comes into force on January 1, 2001.

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WCB-Alberta

Employer Handbook

wcb Workers' Compensation Board – Alberta

Your responsibilities when a work-related injury or illness happens:

Report the injury

- ✔ If you have been advised that one of your employees has been injured, **it is the law to report the injury to us within 72 hours.**
- ✔ **Report fatalities immediately.**
- ✔ **Provide your worker with a *Worker Report of Injury Form*** and a copy of your *Employer Report of Injury or Occupational Disease.*

Treatment

- ✔ **Provide any first aid treatment required at the scene of the accident.** Keep a record of the treatment and provide your worker with a copy.
- ✔ **If required, send your worker for immediate medical attention.** You are responsible to arrange and pay for transportation if there is a cost associated (e.g., ambulance fees or taxi fare).

Wages and health benefits

- ✔ **Pay your injured worker's full wages for the day the injury occurred.** If he/she is unable to work beyond the day of the accident, compensation payments start the first regular working day afterward. Cheques are issued every two weeks.
- ✔ **If you continue to pay your worker full wages during the period of disability, the compensation he/she is eligible to receive will be paid to you.** Please advise your adjudicator or case manager that you are paying your worker directly to avoid duplicate wage-loss payments.
- ✔ **Notify us within 24 hours of your worker's return to work.**
- ✔ **If you have been paying into an employment benefit plan for your worker before their accident or illness, you're also required to continue to pay your injured worker's health benefits** if they are absent from work for up to one year following the date of the accident.

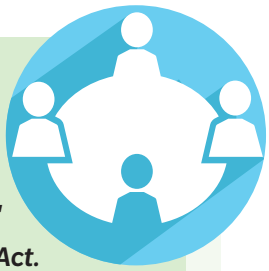
Contents

What is workers' compensation?

The *Workers' Compensation Act* is the provincial legislation that regulates the workers' compensation system and the assistance workers receive following a workplace accident.

The workers' compensation system defines the income and medical support for workers injured on the job.

The Workers' Compensation Board – Alberta (WCB-Alberta) is a neutral body tasked with administering the *Workers' Compensation Act*.



WCB-Alberta's responsibility

To provide high quality service and fair compensation to employers and injured workers.

Employer's responsibility

- To report workplace injuries to WCB-Alberta;
- To maintain an account and pay premiums;
- To work with employees to prevent injuries and help injured workers return to work.
- To return their injured workers to the same job or an alternative job after a workplace accident.

IMPORTANT: When a workplace injury happens, it is the law for you to report it. It is illegal for an employer/supervisor to ask your injured worker to not report an injury. Please see page 7 for the types of injuries that require reporting.

Worker's responsibility

- To file a WCB claim if they are hurt at work;
- To maintain regular contact with their employer, WCB-Alberta and their health care provider to help coordinate their return to work.

Health care provider's responsibility

To work with employers, injured workers, other health care providers and WCB-Alberta to assist in recovery and return-to-work planning.

To view the* Act *online, visit our website at *About WCB > Policy and legislation > Legislation*.

Principles of the workers' compensation system

- Workers are eligible to receive benefits for work-related injuries no matter who is at fault.
- Employers and workers are protected against lawsuits for work-related accidents by others who are also protected under the system.
- Employers throughout the province share the cost of compensating injured workers so individual employers don't have to bear the full cost of claims alone.
- WCB funding is provided entirely by employers through the premiums they pay. Premiums should be fair and competitive. They should cover the full costs of claims, today and into the future.
- WCB-Alberta has exclusive legal authority to make all decisions arising under the *Workers' Compensation Act*.
- Compensation should be fair and take into account both the nature of the injury and the impact on employment earnings.
- Adjudication decisions are made in favour of the injured worker where all evidence for and against is equally balanced.
- The system provides a comprehensive range of services to both prevent injuries and manage disabilities.
- The system is structured and operated to ensure its long-term stability and financial security as well as its overall cost-effectiveness.

Working with WCB-Alberta

Our priority is to help injured workers get back on the job safely—but we don't do this alone. The entire claims process is made better when we can collaborate with you and your worker, and health care providers to make it happen.

Once your worker's claim is approved, we develop a case plan with him/her and you, the employer. A case plan lists clear return-to-work goals and how we will work together to achieve them.

Protection from lawsuit

As an employer with workers' compensation coverage for your workers, you are protected from lawsuits by them or by any other workers covered by workers' compensation if they are injured on the job.

If you are a business owner, you are not automatically covered by workers' compensation legislation—only your workers are. Employers should consider purchasing personal coverage as well.

Who is covered?

Employers and workers in most industries are covered by the workers' compensation system. However, some industries are exempt and do not require coverage. These are listed on our website. Visit *www.wcb.ab.ca* and search "exempt". If you are not sure, call us at 1-866-922-9221.

Workers

Most employers in Alberta are required by law to have workers' compensation coverage for all their workers, including:

- full-time employees
- temporary or casual employees (including foreign workers)
- part-time employees
- unpaid workers (working for for-profit companies)*
- contract workers (unless they are covered by workers' compensation from another employer)
- subcontractors who are considered by WCB-Alberta to be your workers

**Volunteers (working for not-for-profit companies) are not covered unless the employer chooses optional coverage to protect them.*

Most employers not required to have workers' compensation coverage can apply for optional coverage.

Farm workers

Farms and ranches that employ waged, non-family workers are required to have a WCB account.

Detailed information about who farm and ranch owners need to cover can be found on our website or by calling us at 1-866-922-9221.

Employers

By having workers' compensation coverage for your workers, you are protected from lawsuits by them or by any other workers covered by workers' compensation if they are injured at work. As an employer, you are not automatically eligible for compensation benefits yourself. To protect yourself in the event of a workplace injury, you may wish to consider purchasing personal coverage.

Directors

Directors are registered officers of a corporation. Where a corporation is the employer, directors of the corporation are not automatically protected from lawsuits by injured workers covered by workers' compensation, nor are they covered for their own work-related injuries. However, they may apply for voluntary personal coverage that provides both forms of protection (see Personal coverage, page 5).

Contractors and subcontractors

WCB-Alberta coverage for contractors and subcontractors varies depending on whether they are contractors with employees or proprietors.

If you contract your services and also employ workers, you are considered an employer and must maintain your own WCB-Alberta account. In most cases, you are not considered a worker of the principal and are responsible for your own workers' compensation coverage. Coverage may be extended under the principal's account in cases where you employ workers on a strictly casual or intermittent basis.

Proprietors

For WCB-Alberta purposes, a proprietor is an individual who owns and operates a business and does not employ any workers. Proprietors are not covered unless they purchase personal coverage.

Hiring proprietors

If you hire proprietors to perform work for you and they do not maintain their own WCB-Alberta accounts, they are considered to be your workers and are covered through your account. This means you must pay premiums to cover the work they perform for your business. It also means that your experience record will reflect any injury claims they have while working for you.

Hiring contractors

If you hire contractors with their own WCB-Alberta coverage, you should ensure their accounts are in good standing. If a contractor's account is in arrears, you may be liable for their unpaid premiums related to the work they do for you even if they are not considered your workers. You can obtain a clearance letter from us online verifying your contractor's coverage and protecting you from this liability (see page 15).

Coverage for workers outside Alberta

If your employees work outside Alberta, even for a short period, contact us to determine whether your Alberta workers' compensation coverage extends outside the province. You should also contact the workers' compensation board in the jurisdiction where your employees will be working to determine whether you need to establish coverage for your workers there.

Personal coverage

If you are a business owner, you are not automatically covered by workers' compensation benefits—only your workers are. Don't worry though, optional personal coverage is available to you. This coverage is available to:

- business owners or proprietors with or without workers
- partners in a partnership, with or without workers
- directors of a corporation and members of a society, board, authority, commission or foundation

Personal coverage is flexible, and it can be opened and changed at any time. It automatically renews every year on January 1. You can also customize the amount of coverage you hold based on confirmed earnings. Call us for details.

Benefits of personal coverage

- Protection against loss of employment income. E.g., if your injury or illness is work-related and you are unable to work, you can receive compensation for lost earnings.
- Medical and rehabilitation services. Unlike other coverage, WCB-Alberta offers a variety of specialized services to assist you with your return to work, with no preset limits.
- The only coverage that offers protection from lawsuit for you and other parties protected under the system. If you do not have personal coverage, you (as a director) may not be personally protected from lawsuit even though your company may be protected.

Personal coverage may be a contract requirement of bidding on and/or being awarded a contract.

Choosing a coverage amount

Cost will vary based on the amount of coverage you purchase and the industry you're in. The minimum annual premium on a WCB account is $200. It's important to base the coverage on your actual employment earnings (before tax, CPP and EI deductions). This amount will be used to determine the amount you receive if you're hurt at work.

If your income exceeds the maximum earnings covered by WCB, you may also consider carrying additional private insurance to make up the difference.

If injured, you will need to verify your self-employment earnings. This is done through records such as T4 slips, tax returns (T1 General), income and expense statements or payroll stubs. If your records do not match the amount of coverage purchased, compensation benefits will be based on the lesser amount of coverage purchased, guaranteed coverage amount (if applicable) or verified earnings.

If you're a new business owner, we will request a copy of the previous year's tax information. If you do not have a history of self-employed income, you may want to purchase minimum coverage until your business is established and you're able to provide proof of personal employment income.

Visit our website for current wage replacement benefit rates.

Go to *www.wcb.ab.ca/insurance-and-premiums/types-of-coverage/personal-coverage.html*.

Guaranteed coverage amount

An extension of personal coverage, the guaranteed coverage amount allows business owners to be covered, at a set level, without providing earnings information if injured.

There are guaranteed coverage amounts for more than 150 industries. Visit our website under *Resources > For employers > Fact sheets > Coverage for details*.

Registering for coverage

To register for personal coverage, you first have to open a WCB-Alberta account. Signing up is easy. Visit our website under *Resources > For employers > Online services*.

If you have any questions about additional personal coverage, please call our Contact Centre at 1-866-922-9221.

Working in more than one industry

Personal coverage gives you the option of splitting coverage between industries, companies and locations. This can all be done with one policy. If you're an owner in more than one industry, company or location, the distribution of the personal coverage cost is split based on the percentage of time spent in each.

Personal coverage, like all workers' compensation, is based on the overall operations of your business. If your business operations change or expand, please contact us so we can make sure your personal coverage is complete and covers you for all of your work-related activities. Coverage is valid only in the approved industries.

Reporting an injury

By law, employers are required to report injuries that their workers suffer while on the job. If your worker has been injured, you have 72 hours after becoming aware of an injury or illness to submit the Employer Report of Injury form. The sooner we receive your information, the faster we can determine entitlement to benefits and services for your worker.

You should submit a report to WCB if the accident results in, or is likely to result in:

- lost time or the need to temporarily or permanently modify work beyond the date of accident
- death or permanent disability (amputation, hearing loss, etc.)
- a disabling or potentially disabling condition caused by occupational exposure or activity (poisoning, infection, respiratory disease, dermatitis, etc.)
- the need for medical treatment beyond first aid (assessment by physician, physiotherapy, chiropractic, etc.)
- incurring medical aid expenses (dental treatment, eyeglass repair or replacement, prescription medications, etc.)

Option 1:

Report online using myWCB

myWCB provides you with access to a number of online services, including reporting. Through myWCB, electronic injury reporting will guide you through the reporting process and provide you with help along the way.

To learn more about myWCB, visit our website under *Resources > For employers > Online services*.

Option 2:

Submit a one-time injury report

If you are unable to sign up for online services you can still submit a one-time injury report online. Visit our website under *Claims > Report an injury > For employers*.

Option 3:

Report by fax

If you are unable to access our online services you can submit the Employer Report of Injury form by fax to:

780-427-5863 (Edmonton)
1-800-661-1993 (within Canada)

If you fax the report, do not send another copy by mail.

If you have questions or need help reporting, call us.

Inside Alberta: 1-866-922-9221
Outside Alberta: 1-800-661-9608 (in Canada)

Return-to-work planning

Every successful return to work starts with a great plan.

Employers and workers are expected to work together towards a return to the same job or alternative job after a workplace incident.

We are here to support you during your employee's recovery and help you arrange for a safe return to work for him or her. Your worker's adjudicator or case manager will work with you, your employee and health care providers along the way.

To help your injured employee get back on the job sooner, first you need to know what he/she can do while recovering. If the injury has already happened and you have a myWCB account, you can access a wide range of return-to-work information by logging in.

There is also return-to-work planning information that can be accessed on our website under *Return to Work > Return-to-work planning > For employers*.

Occupational Injury Service

Occupational Injury Service (OIS) clinics are specially designated to help injured workers return to work quickly and safely by providing expedited care. Injured workers are typically seen within 30 minutes of arriving at the clinic and are seen by a doctor with experience in work-related injuries and WCB-Alberta processes.

OIS is a great support for in-depth return-to-work plans. Quick treatment and a safe and early return to work can reduce claim costs and can help you lower your premiums. In addition to fast access to physicians, return-to-work services offered by OIS include:

- Same-day completion and submission of reports.
- Fast-tracked diagnostic and treatment services for injured workers.
- Return-to-work plan development.
- Retention of skilled and productive workers.
- Coordination of assessment and treatment communication.
- Follow-up support.

Employers must register for OIS in order to access these services. To sign up and to learn more about the program, including fees, please visit our website under *Treatment and Recovery > Get treatment > Occupational Injury Service clinics and doctors*.

Modified work

Under legislation, offering your worker modified work is no longer an option, it's your responsibility. Modified work is a way of adjusting your employee's job so he/she can return to work while recovering.

Modified work can include:

- Changes in job tasks or functions (e.g., less lifting or bending).
- Changes in workload (e.g., hours worked per day or the work schedule).
- Alterations to the work area and environment (e.g., work in the office, shop or front counter) or the equipment used.
- Work normally performed by others (e.g., administrative work).
- Cross training or job shadowing.
- Work that needs to be done but you currently do not have an employee assigned to complete the work.

When considering a task as a modified work option for your worker, it is important you make sure the modified task is:

- **Achievable** – given your worker's injury, is he/she able to do the job physically?
- **Safe** – your modified work plan should not endanger your worker's recovery or safety, or the safety of others.

- **Constructive** – your modified work plan should contribute to your worker's skill development and return to full duties and not cause difficulty or additional expense to your employee (e.g., a shift change that requires additional child care costs).
- **Productive** – your worker's duties should be meaningful to your organization.

How you benefit from providing modified work:

- You retain an experienced worker and reduce any additional hiring or training costs.
- You decrease your worker's time away from work and reduce costs associated with claims.
- You strengthen worker relations by showing an injury doesn't threaten job security.
- You boost worker morale.

To formalize a modified work program for your business, visit our website under *Return to Work > Return-to-work planning > Formalizing a modified work program*.

BEST PRACTICES in implementing a successful return-to-work program

1. **With WCB-Alberta, develop a modified work policy that reflects your company's commitment to return to work. It will also ensure you are meeting your obligations after a workplace injury.**

✓ Ensure that modified work is meaningful, of value to the organization and meets the employee's medical restrictions and physical limitations.

✓ Ensure your employees know that they are expected to participate and you will do everything possible to assist them in getting back to work.

✓ Make the program flexible so it can accommodate a variety of different situations.

✓ Ensure the program is available to employees who have work-related and non-work-related injuries.

✓ Ensure union representatives (if applicable) are aware of the benefits of return-to-work programs.

2. **Identify modified work in your company.**

✓ Ask for input from employees regarding modified work opportunities.

✓ Consider using outside resources to help identify modified work within the organization.

✓ Observe employees' job tasks and note the physical demands of each, then determine how they could be changed to accommodate an injured employee and document this information.

3. **Educate employees about return-to-work practices.**

✓ Ensure everyone in the organization understands the organization's return-to-work philosophy.

✓ Educate management about the needs of injured workers who are returning to work.

✓ Ensure employees are aware of the benefits of return-to-work programs.

4. **Follow modified work policies and procedures.**

✓ If your employee performs modified work past the day of the accident to accommodate an injury, you must report the accident to WCB-Alberta, even if there is no lost time or loss of earnings.

✓ Ensure all modified work offers are medically approved and documentation is provided to the case manager.

✓ Maintain regular contact with your employee, his/her doctor and WCB-Alberta.

Managing claims

Claim classification

After reporting—required reporting forms are submitted by you, your worker and a doctor, your worker's injury will be classified and a decision will be made regarding the status of the claim. We work to process claims as quickly as possible to determine the appropriate compensation benefits for your worker.

We will register your worker's claim as one of the following:

1. **No-time-lost claim**
2. **Lost-time claim**
3. **Interjurisdictional claim**

No-time-lost claim

If your worker did not miss work past the day of injury, a claim process team will monitor medical treatment.

Lost-time claim

Your worker's claim will be assigned to an adjudicator who makes the initial benefit decisions. If he/she needs additional rehabilitation support to return to work, the claim may be transferred from an adjudicator to a case manager.

Interjurisdictional claim

If a worker is injured in a province that he/she works in, but is not a resident of, he/she can choose to have the claim started in the province of employment or their home province.

For example, a worker who lives in British Columbia, but gets injured on the job while working in Alberta can have his/her claim initiated in B.C. if they prefer. If so, the workers' compensation board in B.C. can request reimbursement costs from WCB-Alberta.

Claim decision

Depending on the information submitted to WCB, the status of your worker's claim may be:

- accepted
- not accepted
- pending (a decision has not been made yet)
- processed (a claim has been registered and medical costs are being paid, but the claim has not been reviewed for a decision)
- forwarded for medical investigation (further medical assessments are required before a decision can be made)

Notifying WCB of a worker's injury and partnering with us to provide safe return-to-work options are important ways that employers are involved in the claims process.

Benefits

Once your worker's claim is accepted they may be entitled to benefits. These can vary depending on the seriousness of their work injury as well as the impact of it on their ability to continue working. The adjudicator and/or case manager will review the claim to ensure they receive the right benefits at the right time during their recovery.

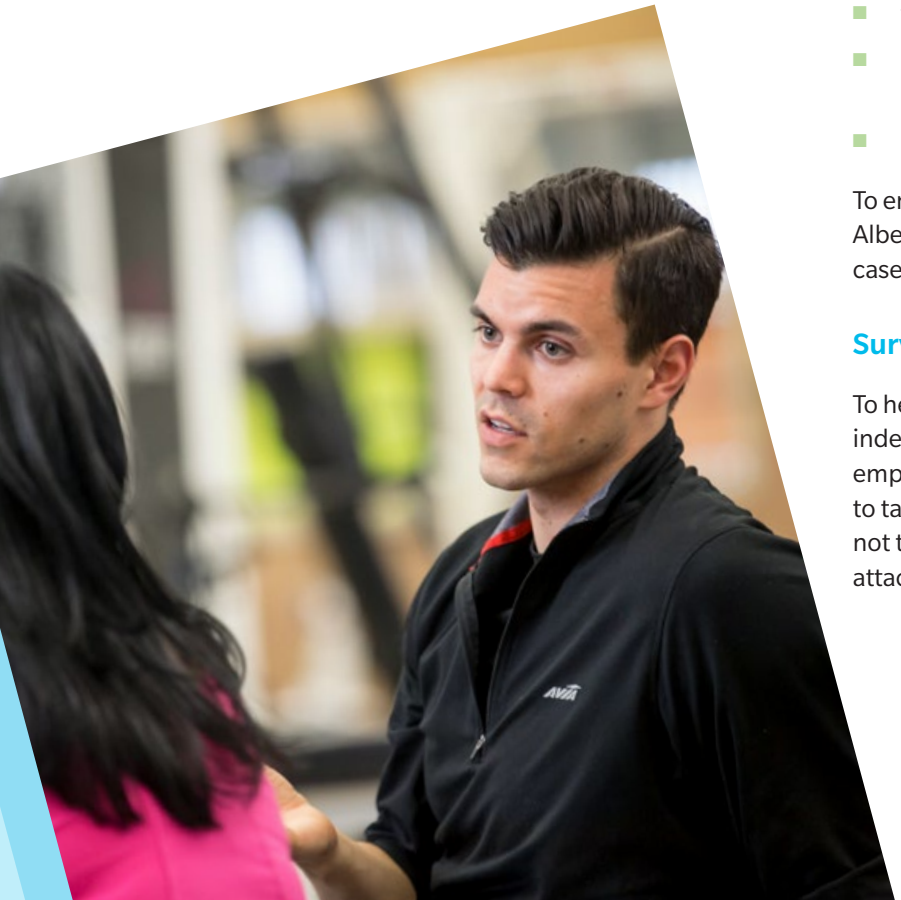
Medical benefits

These include but are not limited to:

- care and reporting from his/her doctor
- medications to manage his/her injury*
- physiotherapy
- chiropractic treatment
- prescriptions

- hospital care
- dental—for dental injuries
- optometry—for eye injuries
- medically related treatments and tests
- acupuncture
- rehabilitation programs
- psychology services
- hospital-related costs (like casting)
- splints
- crutches
- wheelchairs
- braces
- orthotics
- dental treatment or dentures
- hearing aids—for hearing loss injuries
- lump-sum payment for permanent disability or impairment
- bandages

**Opioid medications have specific limitations. These may be discussed with your worker's adjudicator or case manager.*



Return-to-work services, vocational rehabilitation

If your worker's injuries prevent them from returning to their job, their case manager will talk to them about training and skills development opportunities. Here are some of the services we offer:

- return-to-work skills profile
- resumé development/review
- job planning
- Training-on-the-Job (TOJ) program
- academic assessment
- job coaching
- supported job search

How the *Freedom of Information and Protection of Privacy (FOIP) Act* affects you

The Workers' Compensation Board is subject to the *Freedom of Information and Protection of Privacy (FOIP) Act.* The FOIP Act aims to balance the public's right to know and the individual's right to privacy, as these rights relate to information held by public bodies in Alberta. WCB-Alberta is required to protect personal information of workers and employers from unauthorized collection, use and disclosure.

As an employer, you have the right to access your injured worker's claim file for the limited purposes of:

- facilitating return-to-work planning
- understanding medical and vocational rehabilitation and decisions made by WCB-Alberta
- contemplating or advancing a review or appeal

To ensure that his/her privacy is protected, WCB-Alberta will provide only the information relevant to the case, not necessarily the entire claim file.

Survey data

To help WCB-Alberta improve services, we hire an independent research company to survey a sample of employers. The research company may contact you to take part in the survey. The research company does not tell us who has been contacted and no names are attached to any of the survey responses.

Premiums and your account

All employers covered by the *Workers' Compensation Act* must establish and maintain an account with WCB-Alberta. As an employer, the premiums you pay help fund the workers' compensation system, protecting you and your workers against the impacts of workplace accidents and injuries. The premium rate-setting process promotes fairness and accountability—today's employers pay the full cost of today's claims, securing future benefits for injured workers.

Industry classifications

You're classified in an industry with other employers who have similar businesses and risks as you do, with a premium rate set annually for that industry. A premium rate is the amount you pay per $100 of assessable earnings. The rates vary from industry to industry, reflecting the loss experience for each group.

All employer accounts are subject to a minimum annual premium of $200.

Employer annual return

Your workers' compensation coverage is renewed annually. Reporting the assessable earnings paid to your workers for the current year and estimate of what you expect to pay in the upcoming year will ensure that you have the correct WCB-Alberta coverage in place. Through filing your annual return, the information you provide will help make sure you are paying the correct premium amount and receiving a fair and accurate invoice.

The annual return must be submitted before the last day in February of each year.

Assessable earnings

Assessable earnings are the portion of your workers' gross earnings which you must report on and on which you pay WCB-Alberta premiums. Assessable earnings include the following:

- wages (including overtime)
- salaries
- fair market value for volunteer or unpaid workers
- piece work
- commissions
- training-on-the-job earnings
- bonuses
- holiday pay
- recorded tips and gratuities
- pay in lieu of notice
- taxable benefits

You should review your assessable earnings estimate throughout the year. If your actual assessable earnings vary significantly from your estimate at any time, you should provide a revised estimate to WCB-Alberta to avoid under-reporting penalties.

For farming and ranching operations, some workers are not automatically covered (such as family members of the owner). Assessable earnings need to be reported for these farm and ranch workers only if the farm or ranch owner has purchased optional coverage for them. For more details on who is covered on farming and ranching operations, please visit our website and *Insurance and Premiums > Types of coverage > Farming coverage* or call us at 1-866-922-9221.

Premium audits

To ensure you pay a fair premium and are in compliance with the Act, WCB-Alberta conducts mandatory premium audits. Premium auditors review employer records of workers' assessable earnings to ensure employers are meeting their reporting requirements, and also review business operations to ensure employers are classified in the correct industry.

It is against the law to take deductions, directly or indirectly, from your workers' earnings to pay the cost of WCB-Alberta coverage.

How your accident experience affects your premium

Under the performance-based pricing model used by WCB-Alberta, employers with poor performance pay higher premiums; employers with fewer injuries in their operations pay less. All employers participate in these programs; however, WCB-Alberta has developed different pricing programs for different size employers.

Experience rating plan for small employers

Employers with less than $15,000 in premiums over a three-year period can earn discounts or surcharges based on the number of lost-time claims they've had in the previous five years.

Experience rating plan for large employers

This plan is designed for those employers paying $15,000 or more in premiums over a three-year period. Employers pay premium rates higher or lower than the industry rate, based on their company's claims experience. An employer's claim costs are compared to an industry average to determine a discount or surcharge.

Those employers with consistently poor accident records may receive additional surcharges through the Poor Performance Surcharge program. WCB-Alberta works with those employers to help them reduce injuries and manage claims better.

Industry Custom Pricing (ICP)

Industry Custom Pricing (ICP) lets your industry take greater control of the premiums you pay. It's a voluntary, flexible option that allows industries to customize various features of their pricing program.

It's an industry-based option that can be chosen only if the majority of the industry agrees to change the base performance pricing program. Employers in the industry are polled, and if 50 per cent of the industry (as measured by assessable earnings) votes in favour, the ICP program will start the next rate year.

Features from the standard performance pricing model that can be customized with ICP include:

- **Experience ratio** – This is your accident experience compared to other employers in your industry. This can be changed allowing more of your performance to be recognized.
- **Participation** – Every employer in the experience rating program is given a participation rate. The larger an employer is (as measured by premiums), the larger their participation factor. This can be changed to allow greater opportunities for bigger discounts or surcharges.
- **Maximum discounts and surcharges** – These can be increased from the standard 40 per cent to 60 per cent.
- **Costs used to measure performance** – If an industry chooses to no longer have cost relief (used to pay for claims that involve the aggravation of injuries from pre-existing claims), the levy required to fund these costs is removed. The result? A decrease to your base industry rate and a more accurate assessment of performance within your industry.

Depending on the ICP options your industry selects, employers doing well will likely pay less, and those who are doing poorly will pay more. All employers will get a lower base premium rate if the industry chooses to remove the cost relief levy.

Partnerships in Injury Reduction (PIR)

Partnerships in Injury Reduction (PIR) is designed to help you lower your premiums by encouraging prevention and effective workplace health, safety and return-to-work plans.

It is a voluntary program that operates through the combined efforts of WCB, the Ministry of Labour, industry partners, safety associations, employers and labour groups.

All employers can participate in the program and be eligible for refunds up to 20 per cent by maintaining a Certificate of Recognition (COR).

For more information on WCB-Alberta's pricing programs, visit us on our website under Insurance and Premiums or give our Underwriting team a call at 780-498-7936.

Past due accounts

If you are unable to pay by the due date stated on your invoice, please call 780-498-3999 for assistance.

Services for employers

If an injury happens at work, we're here to help you and your worker, every step of the way—but don't forget, we're here to help you manage your WCB-Alberta account, too. Call us, or visit the Resources section of our website for details on any of the following topics.

Managing your account

- premium information
- personal coverage
- payment arrangements
- clearances for subcontractors
- experience rating
- appeal process
- regulatory requirements
- classification changes
- reporting information

Reporting and managing claims

- injury reporting
- case management
- claims registration
- return-to-work programs and adjudication
- injury prevention and management

Claims audits/evaluation tools

WCB-Alberta audits employers and provides self-evaluation tools to help you evaluate core claims management processes.

Our Claims Audit team educates employers on the importance of legislative compliance when a work-related accident happens, and offers support to effectively manage their injured employees' return to work. They provide self-evaluation tools that can help you monitor or improve your claims management process.

For information, email *claims_audit@wcb.ab.ca*.

Employer education seminars

Creating a solid return-to-work plan and lowering your premiums doesn't happen by accident, it happens by design. And we can help. We offer a variety of workshops and seminars in Edmonton, Calgary and various locations throughout the province to help you take a look at your programs and your costs. All of the seminars are free to employers with a valid WCB account.

For more information, please call 780-498-4694 or toll free in Alberta 1-866-498-4694. You can also email us at *mailbox.cs.seminars&workshops@wcb.ab.ca*.

Please note: You must register 48 hours prior to the seminar date.

Employer information seminar

This half-day workshop is designed for people who are new to working within the workers' compensation system and have a position in human resources, payroll or finance within their organization.

Return-to-work (modified work) seminar

When an injury happens, it's your responsibility to offer your employees modified work. Return-to-work planning helps you make sure a solid plan is in place to get your injured workers back to work safely. This half-day program is designed for people in management, as well as people involved in health and safety coordination and claims/disability management within your organization.

Action planning seminar

Learn more about reducing the costs of workplace injuries and paying the lowest premium for your account. This half-day program is designed for people involved in managing health and safety and disability management programs within your organization.

Pre-requisite: You must be registered in the claims administrator/manager role on myWCB—access to myWCB is needed for this course. You must also have completed the return-to-work seminar within the past 24 months.

Appeals system seminar

This half-day seminar gives you a closer look at the WCB review and appeal system. It's designed for people in management, and people who are involved in health & safety coordination and claims/disability management within your organization.

> ***To register,*** visit us on our website under *Resources > For Employers > Seminars and workshops*

Clearances

Before hiring contractors or subcontractors, we can advise you whether or not their WCB accounts are in good standing. If a contractor defaults on their WCB-Alberta account, you may be liable for unpaid premiums on your project.

You can verify that a contractor or subcontractor has a WCB-Alberta account by requesting a clearance from us. Before releasing final payment to contractors or subcontractors, you should obtain a final clearance letter that states their accounts are in good standing and paid to date. A clearance letter relieves you of your liability for that contractor or subcontractor should they default on their WCB-Alberta premium payment.

Requesting and receiving clearances is done on our website under *Insurance and Premiums > Clearance letters > Get a clearance letter*.

Health care and rehabilitation services

Treating workplace illnesses and injuries may require a variety of health care services. We have partnered with various health care providers to help your injured workers get quick access to the services they need to recover and get back to work.

Authorized health care providers

A province-wide network of health care professionals under contract with WCB-Alberta is available to provide services to injured workers. This network ensures injured workers receive timely and appropriate medical treatment without compromising service quality.

Occupational Injury Service

Occupational Injury Service (OIS) gives injured workers access to a doctor with experience in work-related injuries. Injured workers are typically seen within 30 minutes of arriving at the clinic. The clinics help injured workers return to work quickly and safely by providing expedited care.

Millard Health

Proudly operated by WCB-Alberta, Millard Health is a leading provider of occupational rehabilitation and disability management services in Alberta. We use a successful model with the right combination of experts to help your injured workers return to work. This approach treats the needs of the whole person—physically, psychologically and occupationally.

Review and appeals

We are committed to making decisions that are fair and we want to make sure you understand all the decisions that affect your worker's claim or your account. We know that sometimes you may not agree with some of our decisions, and we're here to help.

It is important that you know your rights when it comes to questioning a decision made on a claim that affects your policy. We will make every attempt to resolve disagreements whenever possible.

Questioning a decision made by WCB-Alberta

If you disagree with a decision regarding your WCB-Alberta account or your injured worker's claim, you can have it reviewed by the department that made the decision. If resolution is not able to be reached through discussion with the adjudicator or case manager or supervisor, you may request a review in writing to the Dispute Resolution and Decision Review Body (DRDRB), up to one year from the original decision date.

If you do not agree with the DRDRB's decision, you can appeal in writing to the Appeals Commission, which is independent from WCB. For all decisions dated September 1, 2018 or later, you have two years from the date of the DRDRB's decision to appeal to the Appeals Commission.

You can complete the Request for Review form online at our website under *Claims > Reviews and appeals > For employers*.

Need help submitting your review request? Contact our Employer Appeal Consulting service. Established by WCB, this service helps employers understand the facts, policies and legislation used to make a decision, with a focus on resolution. There is no charge for this service.

To request this service, complete the Request for Employer Appeal Consulting form on our website under *Claims > Reviews and appeals > For employers*.

Role of the Appeals Commission

The Appeals Commission for Workers' Compensation is an external appeals body, which is independent from WCB-Alberta. It is the final level of appeal and its decisions are final. The Appeals Commission will, however, reconsider a matter in the event that new information, which might affect a previous decision, is introduced.

Access to your injured worker's claim file

You can access relevant documents from your worker's claim file, if it is under review or appeal by contacting WCB-Alberta's Access to Information staff at 780-498-3999.

Contacting the Appeals Commission

Edmonton
1100, 10405 Jasper Avenue
Edmonton, AB T5J 3N4

Ph: 780-412-8700
Fax: 780-412-8701
Hrs: 8 a.m. - 4:30 p.m., weekdays

Calgary
Braithwaite Boyle Centre
206-1701 Centre Street North
Calgary, AB T2E 7Y2

Ph: 403-508-8800
Fax: 403-508-8822
Hrs: 8 a.m. - 4:30 p.m., weekdays

For long distance calls within Alberta, call the Government of Alberta Contact Centre toll-free at 310-0000.

Outside Alberta, call 1-866-222-4109.

Key terms

Claim
The application for compensation under the terms of the *Workers' Compensation Act* and WCB-Alberta policy.

Employer
An individual, firm, association, body or corporation that has, or is considered by WCB-Alberta to have, one or more workers in its service.

Assessable earnings
The portion of workers' gross earnings on which employers must report and pay WCB-Alberta premiums.

Premium
The amount employers pay to WCB-Alberta for workers' compensation coverage or optional personal coverage.

Premium rate
The basic rate at which employers can be assessed for workers' compensation coverage based on their industry and claim history.

Principal
A person or entity who hires a contractor or subcontractor to perform work or services.

Proprietor
An individual operating a business without any workers.

Rate group
A grouping of one or more industries with similar activities, claim types and costs per claim. The rate group is the primary level at which premium rates are determined.

Subcontractor (contractor)
An individual, partners in a partnership or limited company hired by a principal to perform work or services.

Worker
A person who enters into or works under a contract of service or apprenticeship, paid or unpaid, written or oral, express or implied, whether by way of manual labour or otherwise, or considered by WCB-Alberta to be a worker.

myWCB for Employers

Your gateway to the information and services you need to work with WCB-Alberta

https://my.wcb.ab.ca/ess/signup

Apply for a WCB-Alberta account

Simply enter your information and we take care of the rest.

Report an injury

No paperwork, no faxing, quick turn-around.

Obtain your account statistics

This self-service system allows you to electronically request and receive claim cost history and pricing program reports. At a glance you can see the impact workplace injuries have on your premiums.

Obtain a clearance certificate

Hiring someone with their own WCB-Alberta account? You may be liable for any unpaid premiums on your subcontractor's WCB-Alberta account. To avoid this, find out quickly if they maintain a WCB-Alberta account and confirm it is in good standing by obtaining a clearance letter.

File your annual return

This system tailors itself to your needs by showing only relevant screens. The built-in error checking and prorating ensure premium rate accuracy. You can also save your work in progress.

Pay your premiums

Six options are available for employers to pay premiums.

Maintain/close your WCB-Alberta account

Update your mailing address, contact information, assessable earnings and more.

Need help with online services?

Email ***ebusiness.support@wcb.ab.ca***
or call 780-498-7688.

How to reach us

If you need more information or have questions about the information in this handbook, please call one of the numbers below. ***Please have your WCB–Alberta account number ready when you call****.*

Employer Account Services

Edmonton

Mailing address
PO Box 2415
Edmonton, AB T5J 2S5

Inquiries

Phone:	780-498-3999
Fax:	780-498-7999
Claims fax:	780-427-5863
E-mail:	*contact.centre@wcb.ab.ca*
Hours:	8 a.m. to 4:30 p.m., Monday through Friday

Street address
9912-107 Street
Edmonton, AB T5K 1G5

Access to Information
Phone: 780-498-3999
Fax: 780-498-7867

Calgary

Mailing address
PO Box 2415
Edmonton, AB T5J 2S5

Inquiries

Phone:	403-517-6000
Fax:	403-517-6201
Hours:	8 a.m. to 4:30 p.m., Monday through Friday

Street address
150, 4311-12 Street N.E.
Calgary, AB T2E 4P9

Toll free

Inquiries

Phone within Alberta:	1-866-922-9221 to reach the contact centre or enter the area code and seven digit number of the office you wish to reach
Phone outside Alberta:	1-800-661-9608
Fax within Canada:	1-800-661-1993
Fax outside Canada:	Not available—please fax claims to 780-427-5863
Hours:	8 a.m. to 4:30 p.m., Monday through Friday

Millard Health

131 Airport Road
Edmonton, AB T5G 0W6

Phone:	780-498-3200
Fax:	780-498-3907
Hours:	7 a.m. to 7 p.m., Monday through Thursday 7 a.m. to 5 p.m., Friday

wcb Workers' Compensation Board – Alberta

www.wcb.ab.ca

Employer's guide to occupational health and safety

The purpose of this guide is to help you understand the *Occupational Health and Safety Act (OHS Act)* and your role in ensuring health and safety at the work site. This guide explains what you need to do to comply with the legislation and make your work site a healthier and safer place.

Our goal – health and safety

Having a healthy and safe work environment is a goal everyone shares and each person on a work site needs to pitch in to make it happen.

The internal responsibility system is a foundational principle of OHS legislation that allows this to happen. Its core premise is that everyone—including employers and workers—is accountable for workplace health and safety, each according to their authority and level of control.

Alberta's *OHS Act* is an important piece of legislation that affects you. It outlines your responsibilities as an employer, as well as the rights and responsibilities of others working at or involved with the work site. The *OHS Act* sets minimum standards to protect and promote the health and safety of workers throughout Alberta.

Does the *OHS Act* apply to me?

The *OHS Act* applies to most workers and employers in Alberta. You are covered by the requirements set out in the *OHS Act* unless you are:

- under federal jurisdiction (e.g. Canadian chartered banks, interprovincial transportation companies, television and radio broadcasters, etc.); or
- a farm and ranch operations owner, family member of the owner or non-waged individual.

If you employ waged, non-family workers in a farm and ranch operation, you have employer obligations under the OHS legislation. If you employ a domestic worker (such as nanny and housekeeper), you are also required to comply with the OHS legislation. For these employers, the basic health and safety standards set out in the *OHS Act* and regulations must be followed.

You are an employer if:

- you employ or engage one or more workers, including workers from a temporary staffing agency;
- you are designated to represent an employer; or
- you are responsible for overseeing workers' health and safety for your corporation or employer.

An employer, along with other work site parties, has OHS responsibilities. Part 1 of the *OHS Act* defines the roles and responsibilities of each work site party, including supervisors, workers, suppliers, service providers, owners, contractors, prime contractors, self-employed persons, and temporary staffing agencies. While each work site party may have a different role, health and safety is a shared responsibility.

The *OHS Act,* regulations and Code

The *OHS Act*, the regulations and the OHS Code provide "rules" to help keep your work site healthy and safe.

The *OHS Act* gives the government authority to make regulations and codes (or rules) about health and safety in the workplace.

The regulations address requirements related to general administrative matters and broad health and safety rules. The OHS Code specifies detailed technical standards and health and safety rules that work site parties must comply with to fulfill their obligations. Technical requirements cover areas such as chemical hazards, equipment safety, first aid, harassment and violence, and noise to name a few.

LI009 ISBN 978-1-4601-3851-9 (PDF)

Alberta Government

Role of Alberta OHS

OHS administers and enforces the Alberta government's OHS legislation. Alberta OHS has resources available to help you:

- learn about the health and safety rules;
- understand work site parties' rights and responsibilities; and
- prevent injuries, illnesses and fatalities.

If you have questions or concerns, get in touch with the Alberta OHS Contact Centre by phone or online.

OHS officers attend work sites to perform inspections, conduct investigations, respond to inquiries and carry out tests necessary to determine compliance with the OHS legislation.

Sometimes people mistake Alberta OHS for the Workers' Compensation Board (WCB). While both report to the Minister responsible for Labour, Alberta OHS is a separate entity from the WCB.

The WCB's role is to see that the *Workers' Compensation Act* is followed, provide rehabilitation programs for workers suffering from job-related injuries and illnesses, and work with Alberta OHS, industry and labour to help reduce the number of workers getting hurt or sick. The WCB oversees the insurance plan funded by employers that pays workers who are injured on the job or develop illness caused by their work.

OHS officers

OHS officers conduct inspections and investigations to enforce the OHS legislation. The officers are authorized to:

- enter your work site;
- look at and copy relevant documents;
- require you or others to provide reasonable assistance or produce information;
- inspect or take samples of any material, product or equipment or other thing being produced;
- bring along any equipment, materials or persons with expert knowledge to assist the officer;
- conduct tests, take pictures, measurements or recordings;
- require you or your designate to demonstrate the use of machinery, equipment, appliance, or other thing at the work site; and
- interview and take statements from any person at the work site or others who are not present at the work site.

If an officer believes a work site is unhealthy or unsafe, they can take steps (including issuing compliance orders, stop use orders, stop work orders), where appropriate, to monitor compliance with the legislation.

Details about OHS officers are described in the publication: Role and duties of government occupation health and safety officers (LI046).

It is your responsibility

The *OHS Act* states that you, as an employer, must do everything you reasonably can to:

- protect the health, safety and welfare of your workers, other workers at your work site and other persons at or in the vicinity of the work site;
- make your workers aware of their rights and responsibilities under the OHS legislation and of any workplace health and safety issues;
- protect your workers from harassment or violence at the work site and ensure that workers do not participate in harassment or violence;
- ensure workers are supervised by supervisors who are competent and familiar with relevant OHS legislation that applies to the work performed;
- ensure workers are properly trained;
- work with a joint work site health and safety committee (HSC) or a health and safety (HS) representative, as applicable, to share health and safety information and resolve issues in a timely manner;

- resolve health and safety concerns in a timely manner;
- provide a prime contractor, if one is required at the work site, names of all the supervisors;
- cooperate with any person exercising a duty under the OHS legislation; and
- comply with the OHS legislation.

In addition to the obligations outlined in the *OHS Act*, an employer has other responsibilities. Maintaining equipment at your work site in safe working order and ensure hazardous products (such as dangerous substance or chemicals) are properly labeled and stored and safety data sheets are readily available to workers are also an employer responsibility.

You must make sure workers are appropriately trained in work practices and procedures, how to safely use equipment and how to select and use personal protective equipment that they require. It is up to you to make sure workers have the skills and training to do their jobs safely.

According to the *OHS Act*, to "train" means to give information and explanation to worker with respect to a particular subject-matter and to require a practical demonstration that the worker has acquired knowledge or skill related to the subject-matter.

You must also provide health and safety information. This is information that may affect the health and safety of a person at a work site. It includes information about hazards at the work site, hazard controls and work practices and procedures. Health and safety information does not include personal information about identifiable individual, confidential proprietary information or trade secrets. You have the duty to:

- make OHS information readily available to the HSC or HS representative, workers and the prime contractor;
- make OHS legislation readily available;
- ensure OHS reports, plans or procedures are in writing and readily available;
- ensure OHS orders or notices are posted or readily available; and
- ensure HSC minutes are posted or readily available.

Employers must address harassment or violence at the work site to ensure workers are not subject to, or do not participate in harassment or violence at the work site.

Please note that the above represents only some highlighted responsibilities of the employer. There are many other employer obligations found throughout the *OHS Act*, Regulation and Code. You, as the employer, must ensure compliance with all such obligations.

Workers' rights and responsibilities

Employers need to be aware of workers' rights and responsibilities under the internal responsibility system.

Workers have three fundamental rights under the *OHS Act*:

- right to know,
- right to participate, and
- right to refuse dangerous work.

Workers also have duties under the *OHS Act*. These include, but are not limited to, the following:

- work in a manner for ensuring the health and safety of themselves and others;
- cooperate with you, the supervisor or any other person to protect their health and safety;
- use safety devices and wear personal protective equipment;
- refrain from causing or participating in harassment or violence;

- report concerns about unsafe or harmful work site acts or conditions;
- cooperate with any person exercising a duty under the OHS legislation; and
- comply with the OHS legislation.

Details about workers' rights and responsibilities are described in the publication: Worker's guide to occupational health and safety (LI008).

Joint work site health and safety committee and representative

The purpose of the joint work site health and safety committee and health and safety representative is to encourage worker and employer participation in decisions and provide input on OHS matters at the workplace. HSCs and HS representatives help serve as internal monitoring to ensure ongoing effectiveness of OHS at the work site.

Larger employers (with 20 or more full-time and part-time workers at a work site) must establish a HSC for work lasting 90 days or more. HSCs consist of worker and employer representatives who meet on a regular basis to discuss and resolve work site health and safety issues.

If you're a smaller employer (with five to 19 full-time and part-time workers at a work site), you must designate a HS representative for work lasting 90 days or more.

As an employer, you are required to ensure the co-chairs of the HSC or HS representative receive appropriate training.

HSCs and HS representatives have similar duties related to health and safety functions such as identifying hazards in the work site, investigating incidents, resolving complaints and more. (See sections 19 and 20 of the *OHS Act* for complete list of duties.) During an inspection, an OHS officer must, where feasible, request the HSC co-chair who represents the workers or the co-chair's designates, or the HS representative to be present.

Details about HSC and HS representative are described in the publications: Joint work site health and safety committees (LI036) and Health and safety representatives (LI040).

Health and safety program

If you have 20 or more workers, you must set up an occupational health and safety program in consultation with the HSC, and implement the program. A health and safety program is a coordinated system of procedures, processes and other measures that is designed to be implemented in order to promote continuous improvement in workplace health and safety and reduce injuries and illnesses.

The *OHS Act* requires the program to include certain elements and the program must be reviewed and updated at least every three years. The required elements are:

- a health and safety policy;
- hazard assessment and control;
- an emergency response plan;
- a statement of OHS responsibilities of the employer, supervisors and workers at the work site;
- a schedule and procedures for inspection of the work site;
- procedures for when another employer or self-employed person is working at the work site;
- health and safety orientation and training for workers and supervisors;
- procedures for investigating incidents, injuries and refusals to work;
- procedures for worker participation in work site health and safety, including inspections and investigation of incidents, injuries and refusals to work;
- procedures for reviewing and revising the health and safety program; and
- any other elements required by the regulations.

If you employ fewer than 20 workers, no program is required. However, you must still have documentation in place that meets the requirements established by the legislation. This includes, but is not limited to, hazard assessment and control and an emergency response plan.

Details about health and safety program are described in the publications: Health and safety programs (LI042) and Do I need a health and safety program? (LI036-1).

Hazard assessment

You must conduct a hazard assessment of your work site and implement measures to eliminate or control the hazards identified, even when you're not required to set up a health and safety program.

Every workplace has situations, conditions or things that may be dangerous to health and safety of workers. The hazard assessment and control process is a documented approach to prevent work-related injury or illness.

A team approach is necessary when doing hazard assessments. You must involve the HSC or HS representative, if there is one. You must also involve workers affected by the hazards.

In addition, you must ensure that all workers who may be affected by the hazards are familiar with the necessary health and safety measures or procedures to keep themselves and others healthy and safe on the job.

Find more information on the hazard assessment process and templates in: Hazard assessment and control: a handbook for Alberta employers and workers (BP018).

Right to refuse dangerous work

Workers must not undertake tasks or assignments that they are either unable or not prepared to do in a healthy and safe manner. In such cases a worker has the right to refuse work.

You must ensure your workers understand the hazards at the workplace, know what needs to be reported and have the support to exercise their right.

The right to refuse is based on the worker having reasonable grounds to believe the work is dangerous to that worker or any other person. Work involving health and safety hazards that are not normal for the job is considered as dangerous condition that could trigger a work refusal.

If a worker determines that they need to refuse to do particular work, they must promptly report the refusal and the reasons for it to the employer, supervisor or another designated person. As an employer, you are required to look into and eliminate the danger if it exists.

The worker is entitled to the same wages and benefits that they would have received had the refusal not taken place. You may temporarily re-assign the worker to alternate work while the work refusal situation is being resolved.

You cannot take discriminatory action (such as termination, layoff, demotion, transfer, change in job location, etc.) against workers for exercising their rights and duties under the law.

Asking a worker to work in dangerous conditions is against the law.

Unless the dangerous condition is remedied immediately, you must prepare a written report of the worker's refusal to work, the employer's investigation into the refusal and any actions taken. A copy of the report must be given to the worker who refused the work, the HSC or HS representative, if one exists. The report cannot contain any personal information about the worker who refused to work.

If they are not satisfied that the employer has addressed the dangerous condition, workers have the right to file a complaint with the Alberta OHS Contact Centre. Workers may also file a complaint with the Contact Centre if they have been subjected to discriminatory action. An OHS officer is required to investigate the complaint and issue a written report to the worker who refused to do the work, the employer, the HSC or HS representative if one exists, and any other person who filed the complaint.

You may reassign the work to other workers after you determine that no dangerous condition exists. When reassigning the work, you must advise the other workers of the refusal, reason for it, and make them aware of their own right to refuse the work.

Reporting incidents and injuries

You must report to Alberta OHS if an incident or injury falls into the following categories:

- reportable serious injury or incident,
- potentially serious incident (PSI), or
- incident at a mine or mine site.

You must report specific **serious injuries or incidents** to Alberta OHS Contact Centre (1-866-415-8690), including:

- an injury or incident that results in the death of a worker;
- an injury or incident that results in a worker being admitted to a hospital;
- an unplanned or uncontrolled explosion, fire or flood that causes or may cause a serious injury;
- the collapse or upset of a crane, derrick or hoist;
- the collapse or failure of any component of a building or structure necessary for structural integrity; or
- an injury or incident or a class of injuries or incidents specified in the regulations.

You must also report **potentially serious incidents** (PSIs) to Alberta OHS using the online reporting service. A PSI is any incident where a reasonable and informed person would determine that:

- the injury sustained requires medical attention beyond first aid; or
- the incident could have caused serious injury and
  - the hazard was not identified in the hazard assessment, or
  - the identified hazard had not been reasonably controlled.

If you're an employer of a mine or mine site, refer to sections 40(3-4) of the *OHS Act* for additional reporting requirements.

An OHS officer may look into the incident. The officer may conduct interviews and gather evidence to determine what happened. The *OHS Act* defines the powers of the officers. You, your workers and other work site parties are required to cooperate with the officer. The officer will prepare an investigation report summarizing the circumstances of the incident.

You are also required to carry out your own investigation of the incident with the participation of the HSC or HS representative, as applicable. Once the investigation is complete, you must provide a copy of the report to the HSC or HS representative, as applicable. If there is no HSC or HS representative, you must share the report with your workers.

You must ensure the investigation report of serious injuries or incidents is readily available and provided to Alberta OHS upon request. For PSIs, employer must submit the investigation report to Alberta OHS using the online reporting service.

Notification to Alberta OHS is separate from any notice you are required to give to the WCB or other local authorities, like the police.

For more information, see the publications: Reporting and investigating injuries and incidents (LI016) and Reporting and investigating potentially serious incidents (LI016-1).

Acceptances and Approvals

The OHS legislation may specify mandatory procedures, processes, standards, requirements, substance control, service, first aid service, first aid equipment and equipment. If you want to do things in a different way, you may apply for **acceptance** requesting permission to use alternative approaches. If you can satisfy Alberta OHS that your choice offers equal or greater protection to workers than the requirements specified in the legislation, an acceptance may be issued. An application for an acceptance must be in writing and provide specific details for Alberta OHS to make a decision.

You must make your workers and other parties aware of the acceptance. This includes posting a copy of the application at the work site and sharing a copy of the application with the HSC or HS representative, if one exists. Alberta OHS can require you to consult with the HSC or the HS representative, individual workers and other parties about the application. Once you receive the acceptance, you must post it at the work site or inform the workers who are affected by the acceptance.

An approval allows for Alberta OHS to approve a process, equipment, standard, course or training agency, among other things. Examples of these approvals include practices or procedures for joint work site health and safety committees that differ from those listed in the *OHS Act*. An application for an approval must be in writing and provide specific details for Alberta OHS to make a decision.

When considering an approval request, Alberta OHS can require you to consult with the HSC or the HS representative, individual workers and other parties about the application.

For more information, see the publications: Applying for an OHS acceptance (LI030), Applying for an OHS approval (LI030-1) and Applying for a HSC or HS representative approval (LI030-2).

Non-compliance

It is in everyone's best interests to provide healthy and safe work sites and proper training, and to make sure that your workers follow safe and healthy practices. However, if you, your workers and other work site parties don't take the necessary steps to do so, the *OHS Act* can be used to compel both you, your workers and other parties to follow the rules.

OHS orders

The *OHS Act* gives OHS officers authority to issue orders, which requires work site parties to take measures that result in compliance with the OHS legislation. Types of orders include:

- compliance orders—note instances of observed non-compliance and the actions required to be taken to achieve compliance by a specified date.
- stop use orders—equipment be shut down or taken out of service if it appears unhealthy or unsafe to operate.
- stop work orders—stop work that is being done in a unhealthy or unsafe manner and can apply to an entire work site, multiple work sites of a single employer or to a certain activities or areas of work site.

The person who receives a compliance order must report back to Alberta OHS on corrective measures taken, provide a copy of the report to their health and safety committee or representative and post the report at the work site.

Ticketing and administrative penalties

OHS officers have authority to write immediate, on-the-spot tickets for specific contraventions of OHS legislation against employers, workers, supervisors and self-employed persons who put theirs or others health and safety at risk. Ticket amounts range from $100 to $500 per violation. A 15% victim surcharge is applied to each ticket.

Preventive in nature, administrative penalties encourage compliance and are issued by Alberta OHS for serious or repeat non-compliance with OHS legislation. An officer may refer a regulated work site party for an administrative penalty, when the OHS officer is of the opinion that a person has contravened the OHS legislation; has failed to comply with an order, acceptance or approval; or makes a false statement or gives false or misleading information to an officer.

Administrative penalty amounts are a maximum of $10,000 per day, per contravention, and are determined on a case-by-case basis.

Some of the factors that are considered in deciding an administrative penalty are:

- the severity of the contravention;
- risk of harm resulting from the contravention;

- the regulated party's compliance history, including orders, violation tickets, other interactions with OHS; and
- whether there is a demonstrated commitment to health and safety.

For more information, see OHS website: OHS violation tickets and OHS administrative penalties.

Prosecutions

If you, your workers or other work site parties (e.g. supervisors) break the rules of the *OHS Act*, the regulations or the OHS Code, or ignore what an OHS officer says, you, your workers or other work site parties can be charged. Problems may be resolved in court if people ignore the law or do not cooperate and fix workplace health and safety problems. Conviction on a first offense can lead to a fine up to $500,000, plus $30,000 each day an offence continues and/or a jail term of up to six months per violation. A second conviction can result in a fine of up to $1,000,000 plus $60,000 each day an offense continues and/or a jail term of up to one year per violation.

In certain cases involving serious injury or death, criminal negligence charges can be laid. In such cases, the maximum jail penalties are 10 years for each person injured, and life imprisonment for each person killed. Federal legislation amended the Canadian Criminal Code that established legal duties for workplace health and safety and imposed serious penalties for violations that result in injuries or death.

Review and appeal of an OHS order, decision or action

If you receive an order from OHS or disagree with an OHS decision, there are steps you can take to have the matter reviewed.

Director review

A person receiving an order or decision from an OHS officer may request a review by a Director of Inspection (with exception of discriminatory action orders.)

If you wish to have an order reviewed, you must file a request for a Director review within 30 days of being given that order.

A Director of Inspection has the authority to:

- confirm, vary or revoke an order or decision;
- make any other order the Director considers reasonable; and
- refer the matter to the Alberta Labour Relations Board.

Alberta Labour Relations Board appeals

The Alberta Labour Relations Board (ALRB) hears appeals of various matters including orders or decisions by Director of Inspection, discriminatory action orders, administrative penalties, decisions from Director reviews, etc.

The ALRB has the authority to:

- confirm, vary or revoke an order or decision; and
- reject to hear an appeal when it determines the matter is without merit.

For more information and how to request a review or file an appeal, see OHS website: Request a review of an OHS order or decision and Appeal an OHS action.

Contact Us

OHS Contact Centre

Edmonton & Surrounding area
- 780-415-8690

Throughout Alberta
- 1-866-415-8690

Deaf or hearing impaired:
- 780-427-9999 (Edmonton)
- 1-800-232-7215 (Alberta)

PSI Online Reporting Service
alberta.ca/report-potentially-serious-incidents.aspx

Website
alberta.ca/occupational-health-safety.aspx

Get Copies of *OHS Act*, Regulations and Code

Alberta Queen's Printer
qp.gov.ab.ca

Occupational Health and Safety
alberta.ca/ohs-act-regulation-code.aspx

For more information

Alberta OHS resources
alberta.ca/ohs-resources.aspx

Hazard assessment and control
ohs-pubstore.labour.alberta.ca/BP018

Health and safety programs
ohs-pubstore.labour.alberta.ca/LI042

Reporting and investigating injuries and incidents
ohs-pubstore.labour.alberta.ca/LI016

Role and duties of government OHS officers
ohs-pubstore.labour.alberta.ca/LI046

Worker's guide to occupational health and safety
ohs-pubstore.labour.alberta.ca/LI008

Work site health and safety committees and representatives
alberta.ca/work-site-health-safety-committees.aspx

Worker participation in health and safety
ohs-pubstore.labour.alberta.ca/LI041

Workers' Compensation Board
wcb.ab.ca

STANDATA

ELECTRICAL

February 2019

(Updates to February 2019)

Alberta
Municipal Affairs

STANDATA Revisions to February 1 2019

LEG-SCA-59 [Rev-3]

Errata CEC-g1

CEC Section 0-Object, Scope and Definitions

CEC Section 2-General Rules

CEC Section 4-Conductors

CEC Section 6-Services and Service Equipment

CEC Section 8-Circuit Loading and Demand Factors

CEC Section 10-Grounding and Bonding

CEC Section 12-Wiring Methods

CEC Section 16-Class 1 and Class 2 Circuits

CEC Section 18-Hazardous locations

CEC Section 20-Flammable Liquid and Gas Dispensing and Service Stations, Garages, Bulk Storage Plants, Finishing Processes, and Aircraft Hangars

CEC Section 22-Locations in which corrosive liquids or vapors or excessive moisture are likely to be present

CEC Section 24-Patient care areas

CEC Section 26-Installation of electrical equipment

CEC Section 28-Motors and generators

CEC Section 30-Installation of lighting equipment

CEC Section 32-Fire alarm systems and fire pumps

CEC Section 36-High voltage installations

CEC Section 46-Emergency power supply, unit equipment, exit signs and life safety systems

CEC Section 60-Electrical communication systems

CEC Section 62-Fixed electric heating systems

CEC Section 64-Renewable energy systems

CEC Section 68-Pools, tubs and spas

CEC Section 76-Temporary wiring

CEC Section 84-Interconnection of electric power production sources

Rule 6-112-Attachment of overhead service conductors

14-FCI-003-Mobile/temporary cooking equipment

14-BCI-002R1-Visual signals

STANDATA
ELECTRICAL
INTRODUCTION – JANUARY 2016

To standardize technical information bulletins in the various disciplines, Safety Services and the Safety Codes Council have adopted the "STANDATA" format used by the building discipline. Each discipline establishes their own method of numbering and indexing, but the overall appearance between disciplines will be uniform.

For the electrical discipline, the information system is broken down into main categories (i.e., Introduction, Legislation, Canadian Electrical Code, Variances, etc.) and subcategories as required. Each STANDATA is issued by a subject name pertaining to a specific topic or section of the category in question. Headings and subheadings may be introduced to further define the subject matter contained in the STANDATA. The STANDATA is given a unique identifier designed to facilitate locating a specific bulletin.

Example: CEC-2 [rev-#] where:

- **CEC** refers to the main category (i.e., Canadian Electrical Code)
- **2** refers to the Section of the Code
- **rev-#** refers to the latest revision of the specific bulletin with '0' being the original issue

This format allows STANDATA items to be developed or revised as required without having to republish the entire information system each time. It becomes a "living document" continually being upgraded to provide the user with current information.

STANDATA may be found on the Safety Services website at:

www.municipalaffairs.alberta.ca/cp_electrical_standata.cfm

An option to receive update notifications via email is available by signing up for the List Subscription Service found on the above website. Printed copies of STANDATA are no longer available for purchase.

Stakeholders are invited to forward proposals for new or revised information items to the Electrical Sub-council for consideration. The Electrical Sub-council will address each proposal directly or through recommendations from appropriate advisory committees. Proposals may be submitted to:

Alberta Municipal Affairs – Safety Services
16th floor, Commerce Place
10155 - 102 Street
Edmonton, AB T5J 4L4 Fax: (780) 427-8686
E-mail: safety.services@gov.ab.ca

What Is Electrical STANDATA?
Electrical STANDATA is an information system designed to provide interpretations, guidelines, and recommended practices pertaining to legislation, codes, and standards under the Safety Codes Act. It is important to note that information provided in STANDATA is not regulation and that you should consult current legislation along with adopted codes and standards for the purposes of applying the law. Legislation, codes and standards applicable to the electrical discipline are as follows:

- *Safety Codes Act* **(RSA 2000, Chapter S-1)**
- *Administrative Items Regulation* **(AR 16/2004 with amendments up to and including AR170/2012)**
- *Electrical Code Regulation* **(AR 209/2006 with amendments up to and including AR126/2015)**
  [Adopts the following codes]
  - The Canadian Electrical Code, Part I, Twenty-Third Edition (C22.1-15)

    - The Code for Electrical Installations at Oil and Gas Facilities, Fifth Edition (2015)
    - The Alberta Electrical Utility Code, Fourth Edition (2013)
- *Certification and Permit Regulation* **(AR295/2009 with amendments up to and including AR39/2012)**
- *Permit Regulation* **(AR 204/2007 with amendments up to and including AR17/2015**)

Acknowledgements
The content of this STANDATA is the result of a long-standing tradition of industry involvement and commitment to electrical safety. Over the years, countless Alberta stakeholders have contributed to the information contained herein. We also recognize the valued input from other provinces and national and international industry experts, as well as the Electrical Sub-council of the Safety Codes Council, in partnership with Alberta Municipal Affairs.

Legislation STANDATA

Safety Codes Act (Interpretations)

ELECTRICAL SAFETY
Information Bulletin

STANDATA

October 2009 **LEG-SCA-38 [rev-4]**

LEGISLATION
Safety Codes Act

SUBJECT: Section 38 - Variances (see also STANDATA **CEC-2**)

Guidelines on Variances Issued by a Safety Codes Officer

Under the provisions of Section 38 of the Safety Codes Act, a safety codes officer (SCO) may issue a variance from established standards if the SCO is " . . . of the opinion that the variance provides approximately equivalent or greater safety performance with respect to persons and property as that provided for by this Act." Unless requested by the owner of the thing, process, or activity being varied, a SCO may choose to not issue a variance where safety performance is not a factor.

Who can apply for a variance?

The person ultimately responsible for the thing, process or activity being varied should apply for the variance. This person is normally the owner of the installation or equipment. Occasionally an owner may authorize someone to represent him/her in these matters. Nevertheless, procedures should be in place to ensure that the owner is aware of the application for, and the issuance of, a variance.

A SCO should not issue a variance without confirming that the owner, or the owner's authorized representative, understands and agrees with the variance.

What is a variance?

A variance is permission in writing to deviate from a required practice or code rule.

<u>Is the "special permission" referenced in the Canadian Electrical Code and other provincial regulations considered a variance?</u>

Where a code rule or regulation allows for "special permission" or "deviation" (i.e., Rule 6-104 of the Canadian Electrical Code), a SCO must grant the special permission or deviation under a variance. The alternative allowed for by the code or regulation is considered a deviation from normal practice and therefore a variance by definition. The application for deviation must be in writing and the applicant must satisfy a SCO that the alternate action provides equivalent or greater safety performance. Once the SCO grants

the variance (deviation, special permission, postponement, etc.), he or she must report it to the Administrator (see sample notification form attached).

Why is a variance issued?

A person may require a variance to use alternate practices not recognized in the codes, or to permit the installation and use of unapproved electrical equipment in a specialized application.

When and where may a Safety Codes Officer issue a variance?

A SCO may issue a variance only when the owner or the owner's authorized representative can demonstrate that they are not compromising safety. The officer may only issue a variance for a specific situation on a specific project within the officer's *Designation of Powers* and terms of employment.

> ***Note:*** *Section 38 of the Safety Codes Act recognizes that a SCO may issue a variance for any thing, process or activity. However, Section 32 allows limits to be placed on a SCO's powers through the officer's designation and terms of employment. (e.g., An accredited municipality or corporation may restrict all but a senior SCO from issuing certain types of variances.)*

A SCO should take extra precautions when considering a variance. It is essential that the owner provide adequate documentation by a competent technical specialist that assures the variance provides equivalent or superior safety performance.

How is a variance processed?

To initiate the variance process, the owner (or the owner's authorized representative) must apply in writing to a SCO within the appropriate jurisdiction. The SCO will review the request along with accompanying documentation and provide a decision to the applicant. The SCO may request additional documentation to support the request.

The owner is responsible for documenting the full particulars regarding the variance and maintaining a permanent record for future reference. The SCO will issue a variance in writing and register the variance (see sample notification form on page 4 of this bulletin) with the Technical Administrator by submitting the following information:

1. Date of Issue
2. The name of the issuing SCO including certification and designation numbers
3. The SCO's employer
4. The name of the accredited jurisdiction or, for a non-accredited area, the name of the municipality in which the variance is issued
5. The owner's name, address and postal code and the name, address and postal code of the owner's authorized representative where applicable
6. The project location, as a civic address or legal description
7. A brief description of the installation including the reason for the variance and any conditions

8. Code and the code rule being varied

In situations where a SCO accepts special equipment under variance, the owner is also responsible for permanently marking the equipment with the following information:

- Name of Manufacturer
- Indication that it was accepted under a variance
- Any electrical information required by the SCO

Why must a variance be registered?

The Safety Codes Act allows a person to request a search for variances and outstanding orders. Apart from searches, the technical councils and administrators use the information to identify the need for possible revisions to codes and standards or to issue a province-wide variance.

Government of Alberta ■

VARIANCE NOTIFICATION FORM (Electrical)

SAFETY CODES COUNCIL

Issued by:

Issue Date	Name of Safety Codes Officer	Certification # / Designation #	Employer:

On behalf of:

Accredited Municipality, or _____ Name of Accredited Municipality

Accredited Corporation, or _____ Name of Accredited Corporation

Municipal Affairs (non-accredited areas) _____ Name of Non-Accredited Municipality

Issued to:

Owner Information:

Name _____ Contact Person _____

Mail Address _____ Telephone _____

_____ Fax _____

Owner's Authorized Representative Information (when variance application is handled by other than owner)

Name _____ Contact Person _____

Mail Address _____ Telephone _____

_____ Fax _____

Location

Municipal Location

and Street/Avenue _____ and/or Lot _____ Block _____ Plan _____

or Legal Description

LSD or Part of Sec.(NE,SE,NW,SW) _____ Sec. _____ Twp. _____ Rge. _____ West of ? M. _____

Other Descriptive Information

Bldg. Name, site description, etc. _____

Details

Description of Variance

_____

_____

_____

_____

Name of Code/Standard _____ Section/Part _____ Rule # _____

ELECTRICAL SAFETY Information Bulletin

STANDATA

February 2019 **LEG-SCA-59 [rev-3]**

LEGISLATION
***Safety Codes Act* (Administrative Items Regulation)**

SUBJECT: Reporting of electrical incidents/accidents

REPORTING REQUIRED

The purpose of this Information Bulletin is to remind industry stakeholders and members of the public in Alberta that all electrical incidents are required to be reported to the Provincial Electrical Administrator.

Under the provisions of Section 59 of the *Safety Codes Act* "if there is an unsafe condition, accident or fire that involves a thing, process or activity to which this Act applies, the owner or person designated in the regulations shall, if required by the regulations, forthwith report it to an Administrator, or to the accredited municipality or accredited regional services commission if the thing, process or activity is under the administration of the accredited municipality or accredited regional services commission."

Section 15 of the Administrative Items Regulation requires that "any person who knows of:

(a) an accident to a person, a fatal accident to livestock or a power line contact involving an electrical installation or electrical equipment, or

(b) a fire of electrical origin or suspected electrical origin must, as soon as practicable, report the accident, contact or fire to an Administrator for the electrical discipline or to a safety codes officer and the safety codes officer must notify an Administrator for the electrical discipline.

What needs to be reported?

The *Safety Codes Act* (*SCA*) requires that anyone designated by a regulation under the *SCA* must report any incident or accident that involves anything governed by the *SCA*. The *Administrative Items Regulation* defines the "person designated in the regulations" as "any person who knows of" any electrical incident or accident.

The Administrative Items Regulation further defines an incident or accident to be any of the following:

- an accident to a person
- a fatal accident to livestock
- a power line contact involving an electrical installation or electrical equipment
- a fire of electrical origin

Issue of this STANDATA is authorized by the Provincial Electrical Administrator

[Original Signed]
Clarence C. Cormier, P.Eng.

Alberta Government

Alberta Municipal Affairs – Community & Technical Support, 16th Floor, 10155 – 102 Street, Edmonton, Alberta, Canada, T5J 4L4
Phone: 1-866-421-6929 Email: safety.services@gov.ab.ca Website: www.municipalaffairs.alberta.ca

What is an accident to a person?

In the electrical discipline an accident to a person means any situation where a person has contacted a live electrical part, whether that electrical contact causes death, injury or no damage to the person(s) involved. All contacts between people and any live electrical parts are considered to be a reportable incident under the *Safety Codes Act*.

What is a fatal accident to livestock?

In the electrical discipline a fatal accident to livestock means any situation where a domesticated animal has been killed as a result of contact with a live electrical part.

What is a powerline contact?

In the electrical discipline a powerline contact is any situation where a person or piece of equipment has contacted any part of an overhead or underground electrical circuit. This contact may involve the conductors, the supporting structures for the conductors or any other piece of electrical equipment involved in transmitting electricity such as (but not limited to): poles, light standards, guy wires, transformers, switching devices and overhead or underground lines.

What is a fire of electrical origin?

In the electrical discipline a fire of electrical origin occurs when the source of the fire is a consequence of the failure of an electrical appliance or circuit.

What does "any person who knows of" actually mean?

The Administrative Items Regulation states that anyone who has knowledge of an electrical incident must report that incident, unless that person knows (or has reasonable grounds to believe) that the incident has already been reported by another person. The phrase "any person" means that no person in the Province of Alberta is exempt from this requirement.

Some examples include (but are not limited to):

- a health care professional treating a person for electrical burns in an emergency room is required to report the incident which caused the electrical injury
- a police officer investigating a traffic accident where a car has knocked down a wooden power line support is required to report the incident
- a construction worker who witnesses a colleague receive a shock from a hand-held electrical tool is required to report the incident even if the effected worker is not injured

Are there any consequences for not reporting an incident?

Section 67 of the *SCA* states that "a person who fails to prepare, submit or retain any information that the person is required by this Act to prepare, submit or retain is guilty of an offence."

The penalties for offences under the *SCA* have recently increased to a maximum of $100,000.00 for the first offence and an additional $1,000.00 per day for a continuing offence. In addition; subsequent offences carry a maximum fine of $500,000.00 and an additional $1,000.00 per day for continuing offences.

How are incidents or accidents to be reported?

Municipal Affairs has developed a standard form for use in reporting incidents. This form is available as a fillable pdf document for download at:
http://www.municipalaffairs.alberta.ca/documents/IncidentOccurrenceReportFormFillable-2016.pdf

Municipal Affairs staff members are available to assist with the completion of this form. Staff can be reached by telephone at 1-866-421-6929 or by email at safety.services@gov.ab.ca.

What is the purpose of an incident/accident report?

The data from the reports is collected by Municipal Affairs for several reasons.

The data is used to produce an annual report of electrical incidents which is made available to the public. Reports are available online at:
http://www.municipalaffairs.alberta.ca/cp_electrical_forms_and_reports.cfm

The data is also used to review the requirements for electrical installations in Alberta; occasionally changes in the national or provincial Codes and Standards are brought about as a result of incidents that are reported by Albertans.

The data can also be used to warn other provinces of unapproved products that have caused incidents in Alberta.

The data can also used by training facilities for trades people in order to give students up-to-date information on acceptable practices and problems that result from incorrect installations.

No personally identifying information is ever released to anyone outside of the Ministry of Municipal Affairs, unless the release of this information is required by law.

Electrical Code Regulation (Interpretations)

ELECTRICAL SAFETY
Information Bulletin

STANDATA

LEGISLATION
Electrical Code Regulation

SUBJECT: Section 2 - Electrical Systems Equipment

Definition
Rule 2-024 of the Canadian Electrical Code (CE Code) requires that electrical equipment be approved. The CE Code defines "approved" in Section 0.

In Alberta, section 2 of the *Electrical Code Regulation* prescribes the conditions for the use of equipment related to electrical systems and applies these requirements to the term "approved" as referenced in the Code. Section 2 of the *Electrical Code Regulation* reads as follows:

2(1) If a code, standard or body of rules declared in force under the Act with respect to electrical systems requires approved equipment, that equipment must meet the requirements of this section.

(2) No person shall manufacture, install, sell or offer for sale any equipment related to electrical systems for use in Alberta unless the equipment has been

(a) certified by a certification body in accordance with the certification body's terms of accreditation with Standards Council of Canada, or

(b) inspected by an inspection body in accordance with the inspection body's terms of accreditation with Standards Council of Canada

(3) Subsection (2) does not apply to electrical equipment of an electric distribution system or transmission lines as defined in the *Hydro and Electric Energy Act*.

The regulation defines "certification body" and "inspection body" as follows:

"certification body" means an organization accredited by the Standards Council of Canada as a certification body.

"inspection body" means an organization accredited by the Standards Council of Canada as an inspection body.

Products certified by an accredited certification body are approved; also, products deemed acceptable by an inspection body through a field evaluation process, such as SPE-1000, or SPE-3000 for medical equipment, are also approved.

A directory of certification bodies and inspection bodies and their respective scope of accreditation can be found on the Standards Council of Canada's website at:

Certification:
www.scc.ca/en/accreditation/product-process-and-service-certification/directory-of-accredited-clients

Inspection:
www.scc.ca/en/accreditation/inspection-bodies/directory-of-accredited-clients

Issue of this STANDATA is authorized by
the Electrical Administrator

[Original Signed]
Clarence C. Cormier, P.Eng.

Alberta Government

Permit Regulation (Interpretations)

LEGISLATION
Permit Regulation

SUBJECT: General – Permit Regulation, Communication Systems and Travelling Carnival, Entertainment and Show Facilities

Permit Regulation

The *Permit Regulation AR 204/2007*[1] came into force on April 1, 2008. This document mandates "Required Permits", "Permit Eligibility", and "Conditions" for obtaining a permit as well as "Administrative" requirements for permits.

A permit:

- provides the owner with access to expert advice before costly mistakes are made;
- provides the owner with a record of having done their due diligence to comply with the codes and standards;
- informs the jurisdiction with the responsibility for administering the *Safety Codes Act*[1] that the project is taking place;
- provides the additional oversight at the early stages of a project through services such as plans or design review; and
- initiates an inspection process by a trained and certified safety codes officer.

Communication Systems

Communication circuits are audio, video or data circuits. These systems are exempt from requiring a permit.

Even though a permit is not required for communication systems, the systems must still meet the requirements of the Canadian Electrical Code (section 60) and the Safety Codes Act (SCA). Owners are responsible for the care and control of communication systems on their side of the connection point between the customer and the utility, including making sure they comply with the relevant sections of the Canadian Electrical Code.

[1] Copies of the noted Acts and Regulations are available from Alberta Queen's Printer:
Main Floor, Park Plaza
10611 – 98th Avenue
Edmonton, AB T5K 2P7
Phone: 780 427-4952 Web Site: http://www.qp.alberta.ca/index.cfm

Travelling Carnival, Entertainment and Show Facilities

Problem to be addressed:

The amusement ride industry in Alberta is concerned that the cost imposed by frequent inspections on a facility as it travels within Alberta is unwarranted. Part 1 of the *Safety Codes Act* defines the responsibilities for owners/operators of such facilities. By fulfilling that responsibility, the safety of Albertans can be assured without imposing undue cost.

The facilities involved, including their power supply and distribution systems, are those that travel between inspection jurisdictions within the province and may or may not have evidence of inspection and approval by a recognized certification organization.

Those facilities intended to be set up for a local show and not relocated to another jurisdiction do not fall within this policy. Similarly those facilities governed by the amusement ride standards are the responsibility of the Alberta Elevating Devices and Amusement Ride Association and do not fall within this policy.

Policy Statement:

Owners of travelling carnival, entertainment and show facilities touring Alberta must be able to demonstrate evidence of inspection in the form of:

- an authorized label of an accredited certification organization[1], or
- an inspection report, issued within the current year by a safety codes officer designated the power to perform inspections under the Safety Codes Act.

Sponsoring organizations must ensure that owners of these facilities can demonstrate evidence of inspection and adequate maintenance procedures. Sponsoring organizations are to report to the inspection authority where this evidence cannot be produced or where there is an identified safety concern.

Process:

Once travelling carnival, entertainment or show facilities enter a community, the sponsoring organization will determine if the owners have evidence of inspection and if there are no obvious safety concerns.

The sponsoring organization will notify the inspection authority when they identify safety concerns. The inspection authority will determine whether further inspections are required. Owners must comply with the Safety Codes Act before they operate their facilities.

Responsibilities:

Owner's Responsibility

Sections 5 through 9 of the Safety Codes Act outline the responsibilities or duties of the various persons involved. An owner is responsible;

- to ensure that facilities under its care and control are safe from electrical hazards,
- to ensure the facility bears evidence of inspection in the form of:
  - an authorized label of an accredited certification organization[1], or
  - an inspection report, issued within the current year by a safety codes officer designated the power to perform inspections under the Safety Codes Act,
- to ensure that it is available for review by a safety codes officer or the sponsoring organization, and
- to ensure the facility is maintained in a manner that provides for continued safety.

Sponsoring Organization's Responsibility

By nature of the relationship between the owner of the facility covered by this policy and the sponsoring organization, the sponsor shares the responsibility for safety with the owner. In most cases, the sponsor will be obtaining the services of a contractor to install electrical systems, or to ensure local facilities are ready for use. This person is already on site and can visually check for 'evidence of inspection' on all of the travelling facilities and note any obvious safety concerns that may be present. The sponsoring organization is responsible:

- to ensure all local facilities comply with the Act,
- to ensure all travelling facilities bear evidence of inspection and there are no obvious hazards present,
- to ensure that facilities that do not have evidence of inspection or that show possible safety concerns are inspected by the inspection authority before they are connected to the power supply, and
- to ensure that the power supply, if a generator, and the distribution system used for the facilities are installed in a safe manner.

Inspection Authority's Responsibility:

- Work with the sponsoring organization to ensure that this policy is implemented.
- Provide inspections when required to address an identified safety concern or to provide a facility with evidence of inspection.

[1] Please see STANDATA LEG-ECR-2 for information on accredited certification organizations

Canadian Electrical Code

STANDATA

ELECTRICAL SAFETY Information Bulletin

STANDATA

February 2019

CEC-g1

2018 CANADIAN ELECTRICAL CODE

SUBJECT: Errata

CSA International provides automatic notifications concerning updates and errata for their publications through the CSA Standards Upgrade Service. This service is available online by visiting:

http://register.csa.ca/standards.csa.ca~availableupdates~web/UpdateServices.action

Additional information concerning the CSA Standards Update Service can be found at the beginning of each applicable standard.

Issue of this STANDATA is authorized by the Provincial Electrical Administrator

[Original Signed]
Clarence C. Cormier, P.Eng.

Alberta Government

Alberta Municipal Affairs – Community & Technical Support, 16th Floor, 10155 – 102 Street, Edmonton, Alberta, Canada, T5J 4L4
Phone: 1-866-421-6929 Email: safety.services@gov.ab.ca Website: www.municipalaffairs.alberta.ca

ELECTRICAL SAFETY Information Bulletin

STANDATA

February 2019 **CEC-0**

2018 CANADIAN ELECTRICAL CODE

SUBJECT: Section 0 — Object, scope, and definitions

Scope

Street lighting and primary metered installations

Supply authorities have traditionally installed, operated and maintained street-lighting and high voltage distribution facilities. Due to deregulation, some supply authorities have divested themselves of the street-lighting portion of their operations or allowed for the primary metering of high voltage distribution systems. Other organizations, such as municipal and/or provincial transportation departments, are taking over these installations. It is not clear as to which electrical code applies, the CE Code, Part I, or the AEUC.

In Alberta, two electrical codes are adopted and in force:

- The Canadian Electrical Code (CE Code), Part I for use by other than the Supply Authority in the exercise of its function as an electric utility;
- The Alberta Electrical Utility Code (AEUC), which indirectly adopts the CE Code, Part III, No. 1 and 7 with amendments, for use by the Supply Authority in the exercise of its function as an electric utility.

Ownership notwithstanding, if the street lighting installation or primary metered distribution system is under the care and control of the Supply Authority, it shall meet the requirements of the AEUC. If, however, these installations are under the care and control of an organization other than the Supply Authority, they shall meet the requirements of the CE Code, Part I.

Issue of this STANDATA is authorized by
the Provincial Electrical Administrator

[Original Signed]
Clarence C. Cormier, P.Eng.

Alberta Government

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2018 CANADIAN ELECTRICAL CODE

SUBJECT: Section 2 – General rules

Administrative

The *Safety Codes Act* and associated regulations, supplemented by the policies of Alberta Municipal Affairs, the Safety Codes Council and accredited organizations, detail Alberta's administrative requirements for enforcing the CE Code. Accordingly, because legislation is paramount, the administrative rules of the Code will generally not apply.

The rationale and intent for the Administrative Rules (rules 2-000 to 2-032) of the Canadian Electrical Code (CE Code) is to provide a guide for authorities in developing their administrative requirements to enforce the Code [see latest edition of the CE Code Handbook]. Where a regulatory authority has established administrative requirements through legislation, they supersede and render inoperative the administrative requirements in a code.

Following is an accounting of how Alberta legislation affects the administrative rules in the Canadian Electrical Code:

Rule 2-000 Authority for rules

The *Electrical Code Regulation* is the vehicle through which we adopt the CE Code.

Rule 2-002 Special requirements

This is an information statement on the relationship between the supplementary and amendatory sections of the Code and the general requirements of the Code.

Rule 2-004 Permit

The *Permit Regulation* supersedes this rule. Part 1 of the regulation sets the requirements for who permits may be issued to and under what conditions as well as where permits are required throughout the province. Part 2 sets the requirements for administration of the *Permit Regulation*.

Rule 2-006 Application for inspection

This rule refers the user to the "inspection department". In Alberta, the permit has traditionally been used for this purpose but an inspection authority having jurisdiction may set its own requirements for a separate 'application for inspection' form.

Rule 2-008 Fees

This rule refers the user to the "inspection department". Each inspection authority having jurisdiction is responsible for setting its own fee structure.

Rule 2-010 Posting of permit

The *Permit Regulation* supersedes this rule. The absence of a requirement to post an electrical permit in the *Permit Regulation* allows inspection authorities having jurisdiction the ability to address the requirement through bylaw or policy.

Rule 2-012 Notification of inspection

Inspection authorities having jurisdiction in Alberta set inspection requirements through bylaw or policy. That policy will define whether they require notification for inspection.

Rule 2-014 Plans and specifications

This rule refers the user to the “inspection department”. The inspection authority having jurisdiction may set its own requirements around “Plans and Specifications” through policy.

Rule 2-016 Current-permits

The *Alberta Electrical Utility Code* requires that a supply authority obtain a copy of the permit before service connection. Inspection authorities may require additional information before allowing an installation to be energized.

Rule 2-018 Reconnection

Rule 2-020 Reinspection

Rule 2-022 Renovation of existing installations

Rule 2-026 Powers of rejection

Rule 2-028 Availability of work for inspection

Inspection authorities having jurisdiction may set their own requirements for any of these items.

Rule 2-024 Use of approved equipment

This rule mandates the use of approved equipment and is more of a technical requirement than an administrative one. The term approved, as suggested in the definitions of the CE Code, is otherwise defined by the *Electrical Code Regulation*. It sets the conditions for use of any equipment related to electrical systems. (see STANDATA **LEG-ECR-2**)

Minor equipment alterations

Minor modifications to electrical equipment such as when adding certified devices or kits (i.e., indicating lights, control switches, or monitoring devices, etc.) would not generally require that the equipment be re-certified. The devices must be suitable for the application and approved for use with the particular piece of equipment.

Modifications falling outside these parameters should be re-evaluated for safety by an Inspection Body through Special Inspection/Field Evaluation/Special Acceptance/etc. or otherwise accepted by a variance.

Installations of metering equipment (revenue or energy management systems)

Concern has been expressed about the installation of devices into certified electrical distribution and control equipment for the purpose of metering. Often these are installed in larger capacity installations in either existing installations or at the initial construction stage. The industry is reminded that any alterations of certified equipment will void the original certification.

The Electrical Sub-council has agreed that where metering devices (revenue or energy management) are to be incorporated in a new installation, the equipment must form part of an

approved switchgear assembly constructed by the manufacturer of the switchgear, or be installed in separate enclosures connected to the switchgear by recognized wiring methods. Where it is proposed to add metering devices (revenue or energy management) to an existing installation, approved devices are to be used and the electrical inspection authority having jurisdiction should be contacted prior to the installation to determine the acceptability of the proposed modifications.

Rule 2-030 Deviation or postponement

Section 38, of the *Safety Codes Act* outlines provisions for allowing a variance. A deviation or postponement is considered a variance. Section 38 of the *Safety Codes Act* reads as follows:

> **38 1)** An Administrator or a safety codes officer may issue a written variance with respect to any thing, process or activity to which this Act applies if the Administrator or officer is of the opinion that the variance provides approximately equivalent or greater safety performance with respect to persons and property as that provided for by this Act.
>
> **2)** An Administrator or a safety codes officer may include terms and conditions in the variance.
>
> **3)** A safety codes officer on issuing a variance shall notify an Administrator.
>
> **4)** The *Regulations Act* does not apply to variances issued under this section.

Where any rule in the CE Code is varied, or where a particular rule in the CE Code requires 'special permission' by referencing Rule 2-030, section 38 of the Act applies. Where safety performance is not a factor, the Administrator or safety codes officer may choose to not issue a variance. Regardless of whether a variance is issued, owners, designers, manufacturers, contractors and vendors (as specified in Part 1 of the *Safety Codes Act*) are responsible for ensuring that a thing, process or activity under their care and control is safe.

> **NOTE:** See STANDATA **LEG-SCA-38** for Guidelines on Variances Issued by a Safety Codes Officer.

Rule 2-032 Damage and interference

This requirement is addressed under civil and criminal legislation where it is an offence to wilfully damage property. Section 67 of the Safety Codes Act also identifies offences that interfere with the administration of, or otherwise contravene, the Act.

For detailed information on administrative requirements, contact the inspection authority having jurisdiction in your area. If you are not sure of who is the authority in your area, you can call Community & Technical Support at 1-866-421-6929 or go to http://www.municipalaffairs.alberta.ca/permits

Technical

Rule 2-100 Marking of equipment

Factory-built structures (skid units) - definition

The term "skid", "relocatable structure" and "module" are used interchangeably to refer to a factory-built structure intended for relocation to a site either as a temporary or as a permanent facility. As a large percentage of these units are installed in a permanent manner, the term "relocatable" becomes redundant. The term "factory-built structure" should be used and is defined as follows:

Factory-built structure — a collection of elements such as buildings, process equipment and electrical equipment interconnected together into a pre-manufactured product intended to be transported to a site separate from the fabrication facility and installed either temporarily (relocatable) or permanently (non-relocatable) at that site.

Factory-built structures require adequate information for end-users and for the Authority Having Jurisdiction to facilitate verification of compliance to codes, standards, drawings and specifications. This information is divided into 2 groups, “nameplate data” and “documentation”.

Nameplate Data

1. Nameplate requirements for non-relocatable factory built structures (intended/designed for permanent foundations, includes modules)
   a. Minimum requirements on the Nameplate: Manufacturer’s Name (or Identification Means), Date of Manufacture, ID of the “Structure” (i.e. a basic Description).
   b. All the “Documentation” items 1 through 4 below needs to be available within the user’s document control system or provided with the unit.

   (Note: this documentation may be included on the Nameplate, or may be provided via separate documentation such as Drawings, Reports, and Manuals readily available for the Installer, Inspector, Operator, Maintainer, and Designer, or a combination)
2. Nameplate requirement for relocatable factory built structures
   a. Minimum nameplate requirements as per CE Code Rule 70-128, and;
   b. Indication of wiring methods used as per the CE Code (e.g. Zone, Group, Temperature Code, etc.)
   c. All the “Documentation” items 1 through 4 below needs to be provided with the unit.

   (Note: It may be included on the Nameplate, or may be located with the structure as it moves (i.e., self contained) via separate documentation such as Drawings, Reports, and Manuals readily available for the Installer, Inspector, Operator, Maintainer, and Designer, or a combination)

Manufacturer: Skids Manufacturing Ltd.
Contact: (780) 555-5555

Phase & Voltage: 3Ø, 120-208 V

Rated Load Amperes: N/A

Frequency: 60 Hz

Hazardous Location Classification:
Inside of structure – Zone 1
3 m envelope outside of Structure – Zone 2
Group – IIA
Temperature Code – T6

Note: Above hazloc classification assumes installation of skid in non-hazardous location.

Classification Drawings: Dwg. # 12345-04
Available at “Skids Electrical Engineering” Calgary, AB

Documentation

The following documentation on a factory-built structure must be readily available by having it permanently attached to the structure and/or located within the user’s document control system:

1. Site installations instructions (e.g. drawings and specifications)
   a. Electrical ratings as applicable to enable a safe installation at the site, such as voltages, kilowatt, current, etc.
   b. In more complex situations, detailed information on Schematic/Wiring/Single Line/etc. drawings will be required, and may be integrated in the site’s overall document control system.
   c. If the factory-built structure is “permanent (or non-relocatable)”, the documentation should be integrated in the overall site electrical documentation.

d. If factory-built structure is “temporary (or relocatable)”, the documentation needs to be retained, readily available, and located with the structure as it moves (i.e. self contained).

2. Sufficient information to verify compliance to electrical codes and standards
   a. Hazardous Location – must identify if a skid hazardous location (hazloc) classification has been performed, including group(s), temperature codes, and any restrictions, e.g. skid final location at site. If a hazardous area exists at the site, then a site hazloc classification must be performed. The skid hazloc classification must be integrated into the site hazloc classification, including engineering drawings and specifications. All skid electrical equipment and wiring must be rated to meet the skid/site hazloc classification requirements.
   b. Environmental data as applicable (e.g. temperature min/max, indoor/outdoor, underground/wet, etc.).

3. Approval
   a. If a factory or fabrication shop approval (certification agency, special inspection body or inspection authority) has been performed, then evidence needs to be provided (e.g. certification reports complete with approval labels, or inspection reports complete with appropriate identification such as an inspection label or permanent tag).

4. Manufacturers Name (or Identification Means), Date of Manufacture, ID of the “Structure” (i.e. a basic Description).

Additional responsibilities

1. Responsibility for maintenance, alterations or modifications of the factory-built structure are under the care and control of the owner as per the definition of ‘owner’ within the *Safety Codes Act:*

   “owner” includes a lessee, a person in charge, a person who has care and control and a person who holds out that the person has the powers and authority of ownership or who for the time being exercises the powers and authority of ownership;

2. The original documentation as outlined above needs to be maintained.

3. Any changes to the structure, needs to have the documentation updated, which then becomes the new “Documentation” for the structure:
   a. if an Accredited Corporation, follow their QMP process;
   b. if other than an Accredited Corporation, work needs to be by ‘Permit’ and therefore re-inspected, or re-approved (if previously certified or Special Inspection).

4. Maintenance – follow standard practices – CE Code rules, maintenance instructions, etc.

Rule 2-106 Rebuilt equipment

Repair of motors and generators for use in hazardous locations

Electrical equipment in Alberta must be approved. Approval is usually through certification by a body accredited by the Standards Council of Canada. Repairs to certified equipment, if not done properly, may void certification. Rule 2-102 requires repair work of electrical equipment to be done to the applicable Canadian standards.

To preserve equipment certification, repairs that can potentially alter the ratings, characteristics or integrity of the equipment must be done by the manufacturer or by a Qualified Facility. A “Qualified Facility” is one that meets the requirements of a Certification Body for carrying out such repairs.

In situations of routine maintenance where the ratings, characteristics and integrity of the equipment are not affected, owners are responsible for ensuring that trained persons using proper tools, materials and applicable standards do the work.

To maintain the integrity of the equipment and of the certification mark for all types of repairs, the manufacturer and the certification body should be consulted for advice.

Retrofitting luminaires for energy conservation or similar programs

As indicated above, repairs or alterations to certified equipment, if not done properly, may void certification. The following guideline is recommended to facilitate the process of modifying luminaires for energy conservation purposes and intended for luminaires located in non-hazardous locations.

REMOVED FOR MODIFICATION
When all luminaires are removed from the ceiling and modified either on site or at a remote location, these locations can be termed a 'defined factory location'. The luminaires are eligible for re-inspection and labelling through equipment approval procedures, by an acceptable Certification Body. (See STANDATA LEG-ECR-2)

IN-SITU MODIFICATION
It may be more practicable to modify the luminaires without removing them from the ceiling. In this case, the following procedure is recommended:

A detailed description of the intended modification for each model of luminaire is to be submitted for an evaluation by the Certification Body whose mark appears on the product. The Certification Body should be able to confirm that the intended procedure for modifying each model of luminaire is acceptable.

A suitable label showing the following information is to be placed on each luminaire:

(a) Identification of the party responsible for the modifications
(b) New electrical ratings
(c) New bulb type and size (if applicable)
(d) Date code
(e) Reference to the certification body’s file number

Please contact the local electrical inspection authority to obtain the required permits.

Rule 2-200 General

Protection of automobile heater receptacles

Electrical installations must have adequate protection from mechanical damage. You can reduce the risk of damage to receptacles for automobile heaters by installing the receptacles in such a way that they are protected by location or by providing mechanical protection.

- Protection by location can be achieved by installing the receptacles on structures of adequate strength (i.e., fences, walls, etc.). You should also ensure that the electrical wiring and devices are located in such a way that they are not subject to accidental damage from vehicles. (e.g., 750mm above grade, on the side of a guard-rail not subject to damage by vehicles, etc.)
- Mechanical protection for freestanding receptacles can be provided in a number of ways, the most common being wheel stops and reinforced concrete posts.
  - Wheel stops should be 150mm wide by 150mm high and located not less than 900mm from the receptacles and associated wiring. They should be properly secured using 5/8"

(15.875mm) rods driven 300mm into the parking surface or 5/8" (15.875mm) bolts set into a concrete slab.

- Reinforced concrete posts should be no less than 300mm in diameter with the wiring and outlet:
  (a) mounted on the face of the post opposite the vehicle, or
  (b) cast into concrete posts with the face of receptacles no less than 750mm above grade where receptacles face the vehicles, or
  (c) mounted on rigid conduit extending beyond the top of the concrete post allowing for the installation of an outlet box.

- To ensure an acceptable installation, consult with the inspection department before proceeding.

Rule 2-302 Maintenance in hazardous locations

Multi-wire circuits

Rule 2-302 redirects the reader to Rule 18-010. Rule 18-010 prohibits repairs or alterations on any live equipment in hazardous locations. Extra precautions must be taken in situations where there is an intention to work on equipment supplied from a breaker on one phase of a multi-wire circuit as permitted by Rule 14-010. Although the device for the phase supplying the equipment can be opened, the neutral conductor can potentially carry current from other phases of the same multi-wire circuit and is considered live unless all phases of that multi-wire circuit are de-energized.

Persons conducting repairs or maintenance on these types of circuits in hazardous locations are cautioned to de-energize all phases of a multi-wire circuit supplying equipment despite the equipment being only connected to one phase.

Rule 2-304 disconnection

As in Rule 2-302 above, the same precautions should be observed for working on equipment in non-hazardous locations.

Testing of protective equipment

Protective equipment should be certified to industry recognized standards. For continued personal protection, protective equipment (i.e., rubber gloves, hot sticks, climbing equipment, etc.) should be maintained and tested according to the manufacturing standards and the manufacturer's instructions. For further information regarding protective equipment, contact Occupational Health and Safety at 1-866-415-8690.

Rule 2-306 Shock and arc flash protection

Below is an example of a label that meets the minimum requirements of field marking electrical equipment as per Rule 2-306. Additional marking for shock and arc flash protection is beyond the requirements of the Canadian Electrical Code.

Example – Simple Label that is Compliant with Rule 2-306

2018 CANADIAN ELECTRICAL CODE

SUBJECT: Section 4 - Conductors

Rule 4-004 Ampacity of wire and cables

Underground Installations

The Appendix B note on this item makes reference to "defined assumptions"…

> *It is the intent of this Rule that where ampacities of underground installations of cable size 1/0 and larger are based on conditions of use other than those set out in the foregoing notes or the defined assumptions preceding them, they should be justified by precise calculation based on IEEE 835.*

…but nowhere are those assumptions apparent. However, if we refer to the 1994 (seventeenth edition), the Appendix B note does provide the assumptions as follows:

Assumptions used in the Calculation of Cable Ampacity Rating for Direct Buried and Underground Conduit Installations

General

Load factor	– *100%*
Ambient Soil Temperature	– 20°C
Conductor Temperature	– 90°C
Soil Thermal Resistivity	– 90°C - *CM* / *Watt*
Insulation/Jacket Thermal Resistivity	– 400°C - *CM* / *Watt*
Shield or Sheath Operation	– *Open Circuit*
Voltage Rating	– 0 *to* 5 kV

Direct Buried Installation

Cable Depth of Burial	– 915 mm *(36")*
Cable Types	– *RWU90* – *RA90* – *TECK90* – *ACWU90*

Conduit Installation

Diameter of Conduit	– 127 mm *(5")*
Depth of Concrete from Surface	– 760 mm *(30")*
Concrete Thermal Resistivity	– 85°C - *CM* / *Watt*
Cable Type	– *RW90*

In determining the maximum current which copper or aluminum conductors may carry in underground runs, paragraphs 1) d) *(for copper)* and 2) d) *(for aluminum)* of Rule 4-004 requires that, for conductors 1/0 AWG and larger, diagrams D8 to D11 and tables D8A to D11B assist the code user in determining the maximum conductor ampacity. The results arrived at when using diagrams D8 to D11and tables D8A to D11B are based on the foregoing assumptions.

Otherwise, to determine precise maximum ampacities, for conductors 1/0 AWG and larger, the detailed calculations in IEEE Standard 835 should be applied as advised in the Appendix B note to Rule 4-004.

Cable Arrangements

The Appendix B note to Rule 4-004 indicates where tables D8A to D11B may be used to determine ampacities of conductors for the cable arrangements shown in diagrams D8 to D11. Where other cable configurations are used, you should consult the cable manufacturer or a registered engineering professional to verify the cable ampacities.

Metallic vs. Non-metallic Raceway

Note (1) of Tables D9A and D9B refers to non-metallic underground raceways. These tables apply to an installation configuration of a single conductor per raceway. The values in the table do not take into consideration heating effects of circulating currents that would be imposed on metallic conduit, hence the reference to only non-metallic raceways.

Rule 4-012 Uses of flexible cord

Portable multi-outlet assemblies

Approved indoor power poles of the portable type are available with a flexible supply cord. The installation of receptacle outlets above suspended ceilings for the connection of cord connected portable indoor power poles is considered acceptable. The installation however, is normally concealed in the ceiling space resulting in a potential for proper maintenance to be overlooked. Therefore, the use of extension cords or "cube" taps are discouraged and the power pole flexible supply cord should be plugged directly into the receptacle outlet.

Rule 4-018 Size of neutral conductor

Reduced neutral conductor size for single family dwellings

For a single family dwelling with provision for a 120/240 V electric range, or a 120/240 V electric dryer, the neutral conductor of the consumer’s service, or feeder, may be reduced to a size having not less than 70% of the ampacity of the ungrounded conductors.

This concept may be equally applied to a feeder or service supplying more than one unit of row housing or similar installations.

As explained in Rule 4-004 4), the common conductor of a consumer’s service or feeder connected to 2-phase wires and the neutral of a 4-wire, 3-phase system carries approximately the same current as the other conductors and therefore shall not be reduced.

Neutral overload from the effect of harmonics on a system

When designing an installation that will incorporate a number of electronic devices, a registered engineering professional should review the design to ensure that conductors will not be subject to an overload condition due to harmonic effect.

> **Note:** The standard averaging type clamp-on ammeter cannot measure the overload imposed on a system from the effect of harmonics accurately. A "true RMS" type must be used.

Rule 4-022 Installation of identified conductor

Identified conductor

An identified conductor is a conductor that has either a white or grey covering (or other effective means), or, in the case of certain flexible cords, a raised longitudinal ridge. In either case, the identified conductor is the grounded circuit conductor or a neutral.

Pigtailing of identified conductor

Where a device, such as a receptacle or lampholder, is fed from a 2-wire circuit employing an identified conductor, pigtailing the identified conductor is not required. Where a device is fed from a multi-wire branch circuit employing an identified conductor, pigtailing of the identified conductor is required as per Rule 4-030 4).

Rule 4-024 Identification of insulated neutral conductors up to and including No. 2 AWG copper or aluminum

Conductors suitable for exposed wiring where exposed to weather

When exposed conductors are installed outdoors, such as service entrance installations, they are required to be suitable for exposure to weather in accordance with Rule 2-024, 4-008 and 12-100. Note #30 of Table 19 reinforces this requirement.

Because of the cold weather we experience in Alberta, the common choice for service entrance conductors is usually a thermoset conductor manufactured in accordance with CSA C22.2 No. 38-18. Clause 4.8 of this standard requires that conductors used where exposed to weather have a minimum of 2.5% by weight of suitable carbon black, well dispersed. Because of the high carbon content, this requirement essentially eliminates the ability of the manufacturer to introduce coloured insulations that would be suitable for exposure to weather.

Rule 4-024 1) requires that the neutral conductor of consumer services up to and including No. 2 AWG copper and aluminum be identified with a white or natural grey covering or by three continuous white stripes along the entire length of the conductor. When only black conductors are available, the identified (neutral) conductor should be permanently marked as outlined in Subrule 4) of Rule 4.

2018 CANADIAN ELECTRICAL CODE

SUBJECT: Section 6 – Services and service equipment

Rule 6-102 Number of supply services permitted

Row housing type residential dwelling units

Discussion with various provincial and municipal inspection authorities has resulted in the interpretation of Rule 6-102 as permitting a multi-unit residential building of the row housing type to have more than one supply service, one to each self-contained occupancy, provided:

- a fire-separation, meeting the requirements of the Alberta Building Code, separates each occupancy, and
- each occupancy has a separate entrance with direct access to ground level.

Rule 6-200 Service equipment

Service equipment

Equipment approved as switchgear, industrial control equipment, or distribution panelboards may not incorporate the features necessary to comply with the definition of "service box" contained in the Canadian Electrical Code. To be acceptable for this purpose, equipment should be constructed in conformance with the applicable requirements of the CSA Standards. Following is a general guide for determining the suitability of a switch or circuit breaker forming part of an assembly for use as a service entrance:

1. The main switch or circuit breaker is separated from the feeder or branch circuit distribution compartment by sheet metal barriers or equivalent with bushed holes for the necessary wiring between compartments;
2. The main switch or circuit breaker compartment has a separate access cover with means for locking or sealing the cover in the closed position;
3. The service disconnecting means is manually operable with the cover closed and no bare live parts are exposed;
4. The operating handle of the switch or circuit breaker is capable of being locked in the "OFF" position;
5. The service enclosure has a neutral assembly with an adequate number of wire connectors for individual conductors; and
6. A solderless connector, clamp, or other suitable means for bonding the enclosure to the neutral assembly in the main compartment when required. The 2018 CE Code allows the grounded conductor to be bonded to the grounding conductor once only. If this is done in the meter socket, it would not be allowed to be done in the service box as well.
7. The equipment is factory labeled as “SUITABLE FOR USE AS SERVICE EQUIPMENT”

Issue of this STANDATA is authorized by the Provincial Electrical Administrator

[Original Signed]
Clarence C. Cormier, P.Eng.

Alberta Government

In some jurisdictions in Alberta, rural properties with services up to 200 A have been permitted to use the utility-owned equipment as the consumer service disconnect. This has led to inconsistent application of Code requirements in the province. It is now recognized that the previously permitted installation is not compliant with the Canadian Electrical Code requirement for consumers' services. Utility-owned equipment such as the commonly-used "economizer/totalizer" for rural services typically does not comply with the definition of "service box" and, therefore, cannot be considered to be acceptable as a consumer service disconnect. Moving forward, several code-compliant installation methods exist and should provide sufficient flexibility for rural services under 200 A. The installation of the utility-owned equipment is not restricted under the requirements of the CE Code and the installation of an "economizer/totalizer" is not prevented by this information bulletin. However, this piece of equipment cannot be considered to be the consumer's service disconnect required by Rule 6-200 1). Users are reminded to consider Sections 6 and 10 requirements when planning any consumer's service.

Rule 6-206 Consumer's service equipment location

Length of service conductors in buildings

Rule 6-206 1) c) requires that service equipment be located as close as practicable to the point where the service conductors enter the building. Rule 6-208 outlines where the conductors must be located. Both rules recognize that service conductors must enter the building to make connection to the service equipment. While it is generally agreed that, in the interest of safety, the unfused conductors within the building should be as short as possible, this distance is not clear.

A recommended practice in Alberta is to limit the length of service conductor in the building to 3m. Where this is not practicable, service conductors may extend further inside the building provided they are mechanically protected in rigid metal conduit. The maximum distance for service conductors inside a building should not exceed 7.5 m.

Alternatively, Rule 6-206(3) may be applied in situations when the service panel cannot be located near the point of entry of the consumer's service conductors. In this case, a Safety Codes Officer must evaluate each situation on an individual basis.

Rule 6-300 Installation of underground consumer's service conductors

Underground service cable on the customers' premises

Electrical utilities do not always install secondary underground service cable on the customers' premises. In these situations, it is necessary for the property owner, developer or contractor to arrange for the safe and reliable installation of this facility.

The following guidelines are recommended:

1. Only qualified persons should install underground service conductors.
2. Obtain the appropriate electrical permits from the inspection authority having jurisdiction.
3. To facilitate connection to the utility distribution system, terminate the supply end of the service conductors in a location and manner acceptable to the supply authority.
4. Seal the exposed supply end of the consumer's service conductors to prevent the entry of moisture into the conductors or cable.
5. Provide mechanical protection as necessary to prevent damage to the conductors or cable pending connection by the supply authority.

6. The supply authority is responsible for connecting the consumer's service conductors to the supply lines.
7. Ensure that service conductors and cables are approved and suitable for the application in accordance with Rule 2-024, 6-300 and Table 19.
8. Where settlement of earth is likely to occur, position conductors in a manner that will prevent settlement of the surrounding earth from placing any strain on the conductors entering the meter socket or building. Trench to a depth where the conductors will be laid on solid undisturbed ground.
9. To prevent strain on the connections in the meter socket, arrange the conductors to form an inverted "U" above the line side terminals.
10. Label the service box with wording similar to:

> **Warning** - This building is supplied by an underground electric service. CALL “ALBERTA ONE-CALL” BEFORE YOU DIG at 1-800-242-3447 (Toll Free)

11. To avoid inconvenience and unnecessary costs to the customer, co-ordinate the installation of the power conductors with telephone and/or T.V. services.

    The telephone and T.V. cables may be installed without a fixed minimum separation from the power service conductors, provided:
    - a concentric neutral cable or metal covered cable is used for the power conductors, or
    - the power conductors are installed in a conduit or plastic pipe.

    Otherwise, the separation between the communication cables and the power service conductors should be not less than 300 mm of well-tamped earth, 100 mm of brick, or 75 mm of concrete.

12. Place service conductors loosely on undisturbed earth and install and protect them in accordance with Rule 12-012.

Depth of burial

Rule 6-300 1) b) i) references Rule 12-012 for underground installation requirements. Rule 12-012(1) further references Table 53 for proper burial depths. Because of potentially much larger fault currents, it is recommended that the minimum cover requirements for direct buried service entrance conductors, cables or raceways meet the requirements for vehicular areas as shown in Table 53, even in non-vehicular areas.

Underground service entrance (USE) cables

USEB and USEI cables listed for use in Table 19 for service conductors do not contain a bonding conductor as part of the cable as required by Rule 10-610. As such, USEB and USEI cables are not acceptable for use as feeders beyond the load side of the service equipment where the grounded conductor is bonded to ground.

Connection of consumer's service conductors to utility pad mount transformers

The supply authority is responsible for the safety and acceptability of secondary terminations on their pad mount transformers regardless of who makes the actual connections. The following guidelines are recommended regarding safety procedures for the connection of a Consumer's service to the secondary terminals of a utility pad mount transformer:

1. Obtain written authorization and supplementary instructions from the supply authority before commencing electrical work in the pad mount transformer enclosure.
2. Supply and install terminating lugs:
   - approved for the type of conductors used, and
   - compatible with the secondary terminals or bus of the transformer.
3. Ensure that the supply authority inspects the terminations prior to energizing the transformer.

Maintenance of underground consumer's services

If breakdown occurs in underground service conductors or repairs become necessary, the local electrical utility company must be contacted to disconnect and isolate the consumer's service conductors from the power supply.

The electrical utility companies have an agreement with “Alberta One-Call” to locate and mark the location of the underground service conductors for digging postholes or other excavation and digging operations.

Electrical conductors and gas services in the same trench

The Electrical Code does not establish specific requirements for installing Electrical Conductors in the same trench as gas-lines. Gas services installed by gas utilities are subject to requirements administered by the Rural Utilities Branch of Alberta Agriculture and Forestry. If you wish to install electrical conductors in the same trench as a gas service, consult the local gas utility for advice.

Gas sub-service lines (i.e., house to garage) are an owner responsibility under the gas code regulation and when electrical conductors are installed in the same trench, it is recommended that the two systems be separated by 300mm of well tamped earth or a 50mm treated plank.

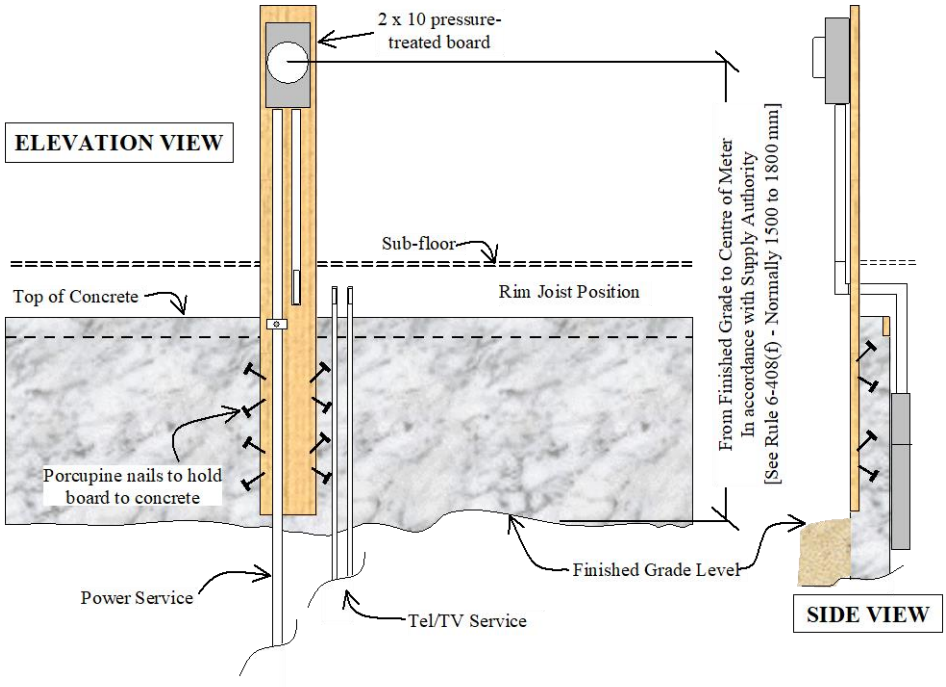
Rule 6-312 Condensation in consumer’s’ service raceway

The industry has expressed concern with the ongoing use of fibreglass thermal insulation for sealing service raceways. The insulation often becomes saturated with moisture making it no longer effective and increasing the potential for rupture of the raceway during “freeze/thaw” cycles. Rule 2-126 2) does not permit the use of thermal insulation for this purpose. “Duct Seal” or other approved compounds are acceptable.

Rules 6-400 to 6-412 Metering equipment

The location and type of metering equipment must be acceptable to the supply authority. To avoid costly changes and delays in getting a power connection, please consult the local supply authority for metering requirements.

Residential Permanent Meter Socket Support



Normally, the meter socket and service equipment is installed once the outside walls are constructed. Some contractors, however, have introduced alternate means of supporting the meter prior to outside walls being constructed in order to provide electrical service earlier during the construction phase of the residence. In these circumstances, consideration must be given to ensuring that the meter is effectively supported. The diagram to the left shows one acceptable method of supporting the meter.

In addition to effective meter support, precautions must be taken to protect the panelboard from the effects of rain until the sub-floor is in place.

Installation of current transformers

For protection and safety of workers, the industry is reminded to short circuit the terminals of current transformers before opening the metering circuit while the system is energized. By design, current transformers may produce an extremely high open circuit voltage with the potential for serious shock hazard and equipment damage.

At installation, an accessible shorting block or similar mechanism should be provided for workers to be able to readily short circuit the current transformer circuit prior to opening the circuit.

2018 CANADIAN ELECTRICAL CODE

SUBJECT: Section 8 – Circuit loading and demand factors

Rule 8-100 Current calculations

120/208 V, 3-wire feeders from a 120/208 V, 3 phase, 4-wire supply

To obtain the voltage divisor for calculating the minimum ampacity of 120/208 V, 3-wire feeders, use the voltage between a phase and the identified conductor (120 V) multiplied by two (120 V x 2 = 240V).

The voltage divisor for calculating the minimum ampacity of the 120/208 V, 3-phase, 4-wire service conductors is, of course, 1.73 x 208 V.

Rule 8-202 Apartment and similar buildings

Calculating Additional Loads in Excess of 1500 W

To determine the minimum ampacity of service conductors or feeder conductors in accordance with Rule 8-202 1)a)vii), the nameplate rating of each load with a rating greater than 1500 W is to be used in the calculations.

Rule 8-400 Branch circuits and feeders supplying heater receptacles for vehicles powered by flammable or combustible fuels

The minimum ampacity of service or feeder conductors for a building should be calculated by using Rules 8-202 to 8-208 as applicable for the type of occupancy, and separately calculating the load for the automobile heater receptacles according to Rule 8-400. These two figures, each with its own demand factor already applied, are then added together to determine the total load.

Where the parking lot receptacles are supplied from individual dwelling units of an apartment or similar multi-family building, the above method of calculating total demand should also be applied. The 75% demand factor in Rule 8-202 3)e) is not to be applied, because a demand factor is included in the load as determined in compliance with Rule 8-400.

For the application of Rule 8-106 3, an automobile heater receptacle load may be considered similar to an "electric space heating" load. In applying this rule, ensure the air conditioning load will not be operated in conjunction with the heating equipment and or with the automobile heater receptacle load.

Issue of this STANDATA is authorized by the Provincial Electrical Administrator

[Original Signed]
Clarence C. Cormier, P.Eng.

Alberta Government

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2018 CANADIAN ELECTRICAL CODE

SUBJECT: Section 10 – Grounding and bonding

Rule 10-102 Grounding electrodes

Replacing metal water service lines with non-metal type

The replacement of existing metal water service lines with a non-metal type and the insertion of non-metal devices such as water softeners in the water line may result in a loss of adequate service grounding.

To ensure that grounding is not compromised:

a) Where a metal water service line serving as the grounding electrode is replaced with a non-metal line, an alternate ground electrode should be installed.
b) Where non-metal devices are inserted into a water line serving as the grounding conductor, a grounding jumper sized in accordance with Rule 10-114 should be installed.

When utilizing a metal water pipe as an electrode, connection as per Rule 10-118 should be made on the street side of the water meter and as close as practicable to the point of entrance of the water service.

Plate Electrode

Rule 10-102 2) c) requires that a plate electrode be buried at least 600 mm below finished grade level. Safety Codes Officers have encountered situations where plate electrodes have been placed just below the concrete slab in basements, apparently due to a misunderstanding of the term “finished grade level”.

Finished grade level is interpreted as the anticipated final elevation of the surface directly above the plate electrode.

Plate electrodes in basements should be buried at least 600mm below the expected final surface elevation of the basement floor.

Note: see end of this STANDATA for information on Grounding and Bonding at Oil and Gas Drilling or Servicing Operations

Rule 10-210 Grounding connections for solidly grounded ac systems supplied by the supply authority

Installation of Grounded Service Conductor

The bonding conductor in a cable assembly is intended to be used as an equipment-bonding conductor. Where armoured cables are installed as consumer's service conductors in compliance with Rule 6-302, the bonding conductor does not necessarily meet the minimum size requirements of Rule 10-114 and it may be necessary to use a 4-conductor cable.

Elimination of stray voltage in areas housing livestock

Where stray voltages are severe enough to present a problem in facilities housing livestock, neutral to earth reactors (commonly known as "tingle voltage filters") are permitted by Rule 10-116 2).

Neutral to earth reactors should not be used until it has been determined that improperly installed, or improperly maintained electrical systems or equipment have been corrected to eliminate them as a possible cause of the stray voltage problems.

Rule 10-212 Grounding connections for solidly grounded separately derived ac systems

Circuits supplied from two sources

Where circuits are supplied from two sources, certain grounding arrangements may affect the operation of ground fault sensing devices. Following are some guidelines for effectively grounding two sources supplying circuits through a transfer switch or tie.

Grounding at both sources of supply

Where two ground electrodes are used, one for each source of supply (e.g., utility power and power from a standby or emergency generator), it would be good design practice to isolate the grounded circuit conductor for each system through an extra pole at the transfer switch. This arrangement would reduce the potential for nuisance tripping of ground-fault sensing equipment.

Grounding at a single point

Subrule 1) a) iii) permits a single connection to a grounding conductor to be connected to the tie point of the grounded circuit conductors in the transfer switch or at the service equipment.

Rule 10-214 Grounding connections for portable generator assemblies and vehicle-mounted or mobile generators

Neutral Connections

Portable generators are being used more and more by homeowners as back-up or stand-by power and it is important that the electrical system is properly grounded. Generators are available with the neutral bonded to the frame or without (floating neutral). The following is recommended:

Neutral Bonded to Frame

If the generator has a neutral bonded to the frame, the neutral should also be grounded to a grounding electrode and the transfer switch should have an extra pole to switch the neutral. Switching the neutral will ensure that at any given time the neutral is only grounded at one point (either the main switch or the generator).

Floating Neutral

If the generator has a floating neutral, it should not be grounded to a grounding electrode nor should it be switched in the transfer switch. The generator frame is bonded to ground as a result of the “equipment bonding” requirements of the Code and the neutral connection to the electrode is maintained at the main service via a solid neutral connection in the transfer switch.

Because of the variety of emergency and standby power systems, it is not always feasible to provide fixed recommended practices. Each installation should be evaluated and designed to satisfy specific load, customer and code requirements. Furthermore, in situations where it may be necessary to remove bonding screws or jumpers in the service switch or at the generator, you should follow manufacturers' instructions.

Bonding – General (10-500 Series)

Installation of equipment bonding conductors

(1) The bonding conductor for equipment shall be permitted to be spliced or tapped, but such splices or taps shall be made only within boxes, except in the case of open wiring where they shall be permitted to be made externally from boxes and shall be covered with insulation.

(2) Where more than one bonding conductor enters a box, all such conductors shall be in good electrical contact with each other by securing all bonding conductors under bonding screws, or by connecting them together with a solderless connector and connecting one conductor only to the box by a bonding screw or a bonding device, and the arrangement shall be such that the disconnection or removal of electrical equipment fed from the box will not interfere with, or interrupt, the bonding continuity.

(3) Where a bonding conductor is run in the same raceway with other conductors of the system to which it is connected, it shall be insulated, except that where the length of the raceway does not exceed 15 m and does not contain more than the equivalent of two quarter bends, an uninsulated bonding conductor shall be permitted to be used.

(4) Where a metal raceway or steel pipe is used as a bonding conductor, the installation shall comply with Section 12.

(5) A copper bonding conductor shall
- a) if No. 6 AWG or larger and attached securely to the surface on which it is carried, be protected where exposed to mechanical damage; and
- b) if smaller than No. 6 AWG, or if the installation does not come within the provisions of Item a) of this Subrule, be installed and protected in the same manner as the circuit conductor for a given installation.

(6) An aluminum bonding conductor shall
- a) if No. 4 AWG or larger and attached securely to the surface on which it is carried, be protected where exposed to mechanical damage; or
- b) if smaller than No. 4 AWG, or if the installation does not come within the provisions of Item a) of this Subrule, be installed and protected in the same manner as the circuit conductor for a given installation.

(7) Where a separate bonding conductor is required by this Code to supplement the bonding afforded by a metal raceway, it shall be installed in the same raceway as the circuit conductors.

(8) Where a separate bonding conductor, required by this Code, is run with single-conductor cables, the bonding conductor shall follow the same route as the cables.

Rule 10-600 Bonding for fixed electrical equipment

Rule 10-610 Bonding means – fixed equipment

<u>Stainless steel mineral-insulated electrical-heat-trace cable bonding requirements.</u>

It is common practice to install SS MI EHT cable, (stainless steel mineral insulated electrical heat trace cable), for Modular fabrication of piping systems, with splices between portions of cables made in the field. Where SS MI EHT cable is spliced in the field, confusion exists

regarding the bonding to ground of metallic junction boxes. To assist industry in determining bonding requirements for metallic junction boxes, the following requirements are to be observed:

- Rule 10-600 1) requires that all non-current carrying parts of electrical equipment to be connected to a bonding conductor.
- Rule 10-610 outlines the acceptable means of achieving equipment bonding

In the application of these requirements, distinction must be made between:

1. stainless steel MI cable supplying power to electrical equipment
2. stainless steel MI electrical heat tracing being supplied power as electrical equipment.

1. For SS MI cable supplying power to electrical equipment, the sheath is not considered as a suitable bonding conductor, and therefore the MI cable requires a bonding conductor incorporated within the cable.
2. When SS MI electric heat trace cable is being supplied power as electrical equipment, the stainless steel sheath is not serving as a bonding conductor, but rather as a metallic enclosure. Therefore this stainless steel metallic sheath must be bonded as required by Rule 62-102 2).

Guidelines for field installed SS MI EHT cable splices/junctions:

1. Metallic junction boxes used in conjunction with SS MI EHT, to interconnect various sections, must be bonded to ground as required by Rule 10-600 1).
2. Fiberglass/Plastic junction boxes used in conjunction with SS MI EHT will not require a bonding conductor to the JB, however the continuity between the connectors/cable sheaths must be maintained. Bonding jumpers installed as per Rules 10-614 will be acceptable.
3. SS MI EHT male and female cold lead assemblies attached to the SS MI EHT are certified for that purpose and no additional bonding is required.

Bonding Jumpers with Flexible Conduit

The requirement to install an equipment bonding conductor within flexible conduit as described in Rule 10-610 3) may not always be practicable. Motors and other equipment may not have provision for connecting a bonding conductor within the connection box.

The following alternative is considered acceptable:

A bonding conductor meeting the requirements of Rules 10-612 and 10-614 may be secured to the exterior of flexible conduit where:

(a) The conduit does not exceed 1.5 m in length; and

(b) The motor or equipment is being reused or relocated in either new or existing installations; and

(c) The equipment does not have provision for connection of the bonding conductor within the connection box.

Rule 10-700 Equipotential bonding of non-electrical equipment

Bonding of Gas Piping Systems

Bonding of gas piping systems should not interfere with any cathodic protection forming part of the gas piping system. The bonding of the gas line should therefore be made on the consumer side of the gas meter. Common practice in residential applications has been to bond the gas piping system to the cold water pipe at the hot-water tank. With the increasing use of plastic

water lines, it is recommended that the gas piping system be bonded to the main distribution panel or the grounding conductor or the grounding electrode. When bonding soft copper propane lines and other similar tubing, care should be taken to ensure the piping is not damaged.

Grounding and bonding at oil and gas drilling or servicing operations

Rule 10-102 1) requires that grounding electrodes shall consist of a manufactured, field-assembled or in-situ type.

When setting up a service rig or a drilling rig, the use of manufactured or field-assembled electrodes as described in Rules 10-102 2) and 10-102 3) can be impractical. The following interpretation is considered acceptable for meeting the intent of an in-situ type grounding electrode:

a) The rig guyline anchor (usually the closest one to the rig generator)

b) The well casing,

For equivalency to conventional electrodes, the portion of the anchor or well casing below 600 mm from finished grade should present an equivalent surface area in contact with earth as do manufactured electrodes.

Equipotential bonding of non-electrical equipment

Although the CE Code does not specifically require that non-electrical equipment around drilling or service rig installations be bonded, the intent of Rule 10-700 is to have the metal parts of non-electrical equipment bonded to ground to prevent dangerous potentials in the event of electrical faults (see the Appendix B note to this Rule).

The nature of the activity around drilling operations (i.e., wet conditions and the potential for explosive atmospheres) is a strong factor to support the need for bonding non-electrical metal equipment to minimize shock hazards and potential static discharges.

EXAMPLES OF BONDING

Note single metal-to-metal connection

Note double metal-to-metal connection

Equipotential bonding conductor requirements

Rules 10-702 to 10-708 serves as a guideline for bonding non-electrical equipment to ground. To protect against loss of bonding, approved lugs are required for a positive connection. Due to the possibility of damage, a bonding conductor no smaller than AWG #6 copper or AWG #4 aluminum should be used.

Rule 10-706 requires that equipotential bonding connections are made secure and be suitable for the conditions to which they may be subjected. For grounding and bonding of rigs, the use of a suitably rated copper or aluminum lugs with associated buss is acceptable. Pliers-style, screw-type or spring enabled booster cable clamps are not considered acceptable as they may be easily dislodged.

It is important that the installation and connections of the grounding and bonding conductors are reliable. The connections or lugs should make good metal-to-metal contact to the non-electrical equipment being bonded. The conductors should be well secured to the connectors. In addition, Rule 10-116 of the Canadian Electrical Code requires that the grounding conductor be electrically continuous throughout its length.

Extra precautions should be taken to ensure conductors and connectors are not subject to damage that could result in a loss of continuity. Contractors should incorporate measures to prevent circumstances within operations that could result in a loss of continuity. This may include altering traffic patterns, flagging or other means of protecting the grounding and bonding conductors and their connections.

Typical grounding and bonding layout

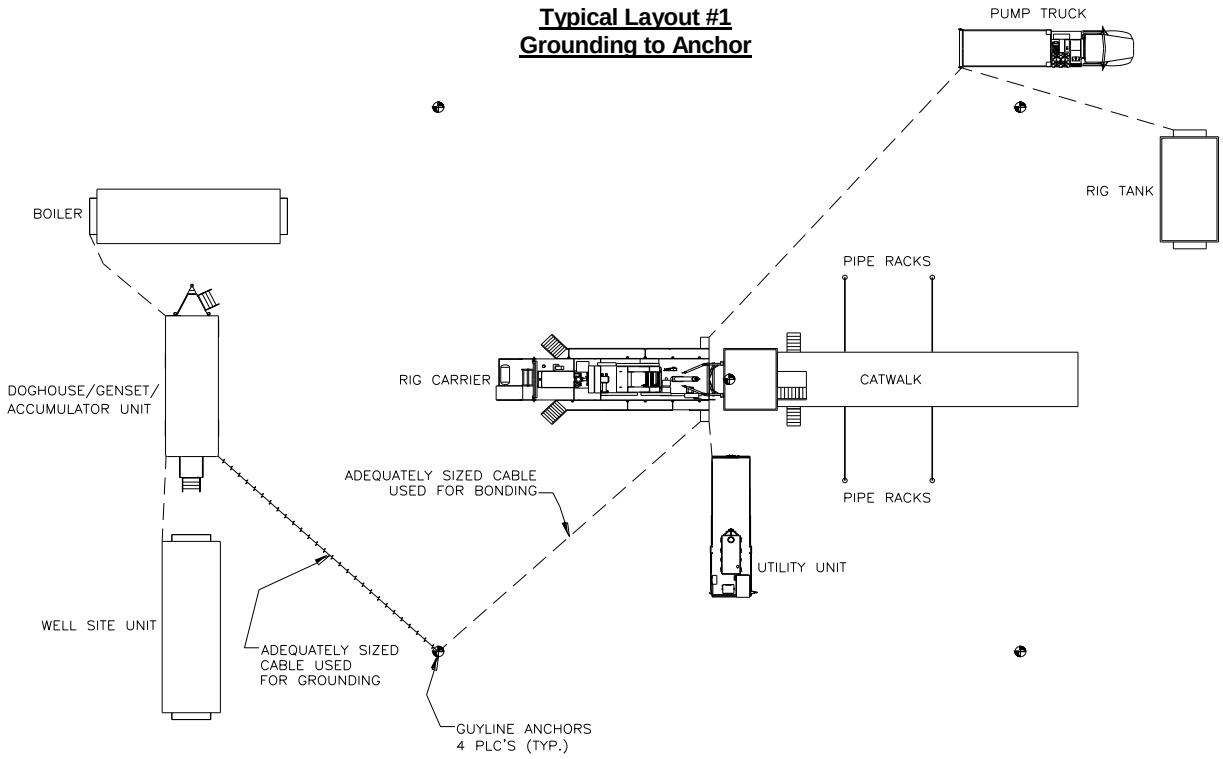
1) AC system grounding conductor run to an aluminum lug or buss attached to a rig anchor or the wellhead.
2) The remaining “non-electrical equipment” (i.e., rig, utility skid, mud pump, mud tank, generator building, boiler, etc.) bonded to ground with:

a) a bonding conductor interconnecting each piece of equipment back to the ground electrode; or
b) a bonding conductor from each piece of equipment to the ground electrode; or
c) a combination of a) and b) above.

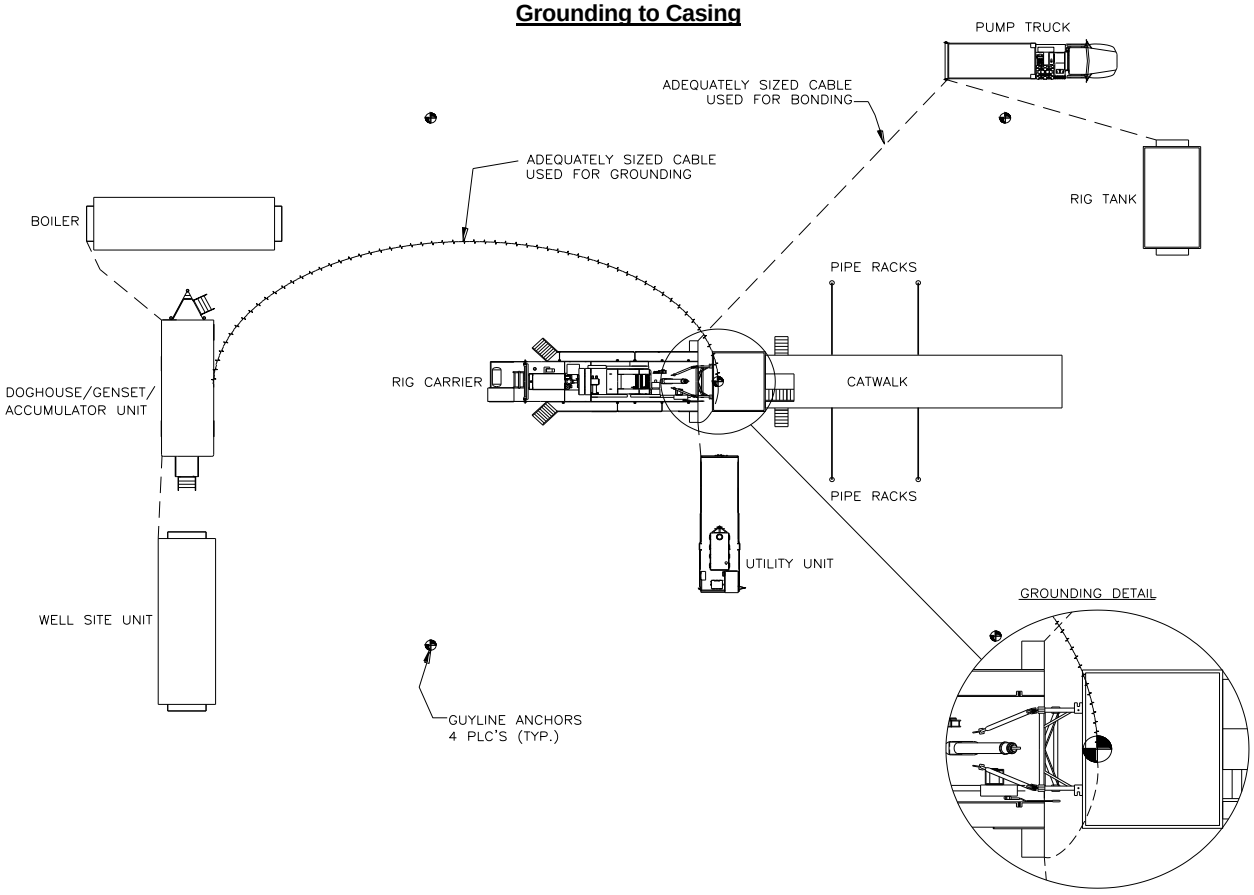
A #4 copper welding cable provides an excellent type of flexible cable for bonding purposes and AC system ground for most applications on service rigs.

Refer to the following diagrams as examples of typical rig grounding and bonding layouts.

Typical Layout #1
Grounding to Anchor



Typical Layout #2
Grounding to Casing



2018 CANADIAN ELECTRICAL CODE

SUBJECT: Section 12 – Wiring methods

Conductors general

Insulation thickness on conductors used in ungrounded or impedance grounded systems

With the change in the conductor standards, RW90 conductor is now available with a voltage rating of 600 V. The suitability of this conductor on 600 V ungrounded and impedance grounded systems, where past practice has been to use 1000 V conductors, has been questioned.

Electro-Federation Canada has issued a paper explaining that the insulation thickness on low voltage conductors is intended for mechanical strength as well as insulation value. Therefore, it is thicker than would be required for insulation value alone. Based on this, the wire and cable manufacturers have agreed that 600 V RW90 rated cable is suitable for use on 600 V ungrounded or impedance grounded systems.

Rule 12-012 Underground installations

Protection of conductors and cables

A review of Rule 12-012 5) indicates that it is intended to apply to cables other than armoured cable, mineral-insulated cable and aluminum-sheathed cable. Requirements for mechanical protection of these cables are stipulated in Rules 12-604 and 12-710 (see comments on Rule 12-604).

Rule 12-306 Insulated conductor and cable supports

When using wood poles to support overhead conductors, the following guidelines are recommended:

The poles should be treated with an acceptable preservative to prevent premature rotting and:

(a) Be of sufficient length to provide the conductor clearances specified in Rule 6-112

(b) Be guyed where necessary to maintain the specified clearances

(c) Have a minimum circumference at the top of 430 mm

(d) Have a minimum circumference measured at a point 1.8 m from the butt of:
  (i) 700 mm - for poles not exceeding 7.7 m in length; or
  (ii) 760 mm - for poles exceeding 7.7 m but not exceeding 9.2 m; or
  (iii) 810 mm - for poles exceeding 9.2 m but not exceeding 11.0 m; or
  (iv) 860 mm - for poles exceeding 11.0 m but not exceeding 12.2 m; and

(e) Be set in the ground a minimum depth of:
  (i) 1.5 m - for poles not exceeding 7.7 m in length; or
  (ii) 1.6 m - for poles exceeding 7.7 m but not exceeding 9.2 m; or
  (iii) 1.8 m - for poles exceeding 9.2 m but not exceeding 12.2 m;

except that for poles set in rock, concrete, or fabricated bases, this depth may be reduced.

Rule 12-310 Clearance of insulated conductors and cables

Although the Canadian Electrical Code, Part I does not specifically prescribe clearances for overhead conductors that are not service conductors, the clearance requirements of Rule 6-112 for service conductors are used. Farms are interpreted as commercial /industrial premises and the 5m clearance in 6-112 is recommended.

Clearances for conductors over buildings are required to be 2.5m over flat roofs and at least 1m over peaked roofs. Where metal roofing is involved, a 3m clearance is recommended. Buildings of this type may require a supporting mast so that at least a 3m clearance over the roof can be maintained.

ELECTRICAL SAFETY Information Bulletin

STANDATA

February 2019

2018 CANADIAN ELECTRICAL CODE

SUBJECT: Section 16 – Class 1 and Class 2 circuits

Rule 16-010 Circuits to safety control devices

Even though a remote-control circuit may have the power characteristics of a Class 2 circuit, where the failure to operate a remote-control circuit to a safety control device introduces a direct fire or life safety hazard the remote-control circuit shall be deemed to be a Class 1 circuit.

Examples of safety control devices, which may introduce a direct fire or life safety hazard, include boiler safety control devices such as high limit switches and pressure switches, or ski lift safety circuit devices such as limit switches or stop switches.

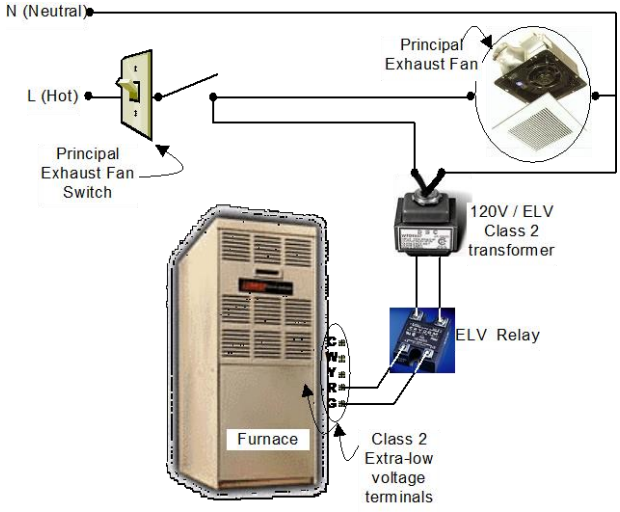
Energy management systems designed to control all heating, air conditioning, and ventilation functions in a building may have both Class 1 and Class 2 circuits. Power requirements, wiring method, application, and design may determine the actual circuit classification. However, any remote-control circuits to a safety control devices that will introduce a direct fire or life safety hazard must be installed as a Class 1 circuit.

For clarification on whether a remote-control circuit with Class 2 power characteristics should be deemed a Class 1 circuit, the installation owner and designer should be consulted to identify if failure of the circuit controlling the safety device will introduce a direct fire or life safety hazard.

Rule 16-212 Separation of Class 2 circuit conductors from other circuits

<u>Principal Exhaust Fans</u>

The Alberta Building Code (Article 9.32.3.4.) requires the mechanical ventilation system in residential occupancies serving only one dwelling unit to incorporate a principal exhaust fan interconnected with a make-up-air supply fan. The principal exhaust fan is controlled by a centrally located control switch, which simultaneously starts the ventilation system supply fan. Where the dwelling uses a forced-air heating system, the principal exhaust fan must be interlocked with the furnace fan.



Most furnaces have a Class 2 circuit, which controls the furnace fan through a relay. It is important when interlocking the principal exhaust fan with the furnace fan not to mix the Class 2 furnace control circuit with the power circuit for the principal exhaust fan. Rule 16-212 3) indicates Class 2 circuits and power circuits must not be in the same enclosure or raceway.

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The diagram depicts one example of a proper method for interlocking the Class 2 furnace fan control circuit with the power circuit of the principal exhaust fan. Other methods may also be acceptable.

ELECTRICAL SAFETY Information Bulletin

STANDATA

February 2019 **CEC-18**

2018 CANADIAN ELECTRICAL CODE

SUBJECT: Section 18 – Hazardous locations

Rule 18-006 Locations containing an explosive gas atmosphere

General

For area classification requirements at oil and gas facilities, permitted or constructed prior to February 1, 2019, the use of the "Code for Electrical Installations at Oil and Gas Facilities", published by the Safety Codes Council, is permitted. For oil and gas facilities permitted on or after February 1, 2019, the prescriptive requirements of Rule 18-004 of the 2018 Canadian Electrical Code, Part I shall apply.

For classification requirements at Flammable liquid and gasoline dispensing, service stations, garages, bulk storage plants, finishing processes, and aircraft hangars please consult Section 20 of the Canadian Electrical Code and STANDATA CEC-20.

For classification requirements at sewage lift and treatment plants, see Rule 22-704.

Area Classification

The purpose of area classification, as outlined in the Canadian Electrical Code, is to determine the proper equipment, materials, and wiring methods for electrical installations in the Hazardous Locations.

Rule 18-004 of the 2018 Canadian Electrical Code requires that hazardous location classification be carried out and documented by qualified persons, and that the person assuming responsibility for the classification shall authenticate the hazardous area classification. In Alberta we interpret this to mean a registered engineering professional who is authorized to engage in the practice of engineering under the *Engineering and Geoscience Professions Act* and its Regulations. The engineering professional then authenticates (affixes their stamp to) the area classification documentation. Subrule 4) of Rule 18-004 allows installations within the scope of Section 20 to be classified in accordance with Section 20.

In determining if an area is required to be classified as a hazardous location, consideration should be given to:

- the definition of 'hazardous location' in Section 0,
- the divisions of explosive atmospheres into Zones based on frequency of occurrence and
  duration of the explosive atmosphere as prescribed in Rules 18-006 and 18-008, and
- the definitions of Zones in Rule 18-002.

Once it is determined that an explosive atmosphere could exist in an area, an area classification would be performed in compliance with 18-004.

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Due to the nature of hazardous locations and the risk of fire and explosions associated with them, involvement by various individuals who understand the relevance and significance of the properties of the hazardous materials involved, are knowledgeable in the appropriate classification standards / guidelines, and who are familiar with the process and equipment is essential to ensure that appropriate measures are taken to properly classify the hazardous locations. For a small or simple facility, this may only require the input of a single discipline, whereas for a large or complex facility, this may involve more than one discipline such as electrical, mechanical, process, safety, and operations specialists.

Documentation is an essential element in classifying hazardous locations, and typically includes items such as drawings, studies and calculations, reports and operating descriptions. This documentation should be maintained and updated over the life of the facility.

Appendix L of the CE Code contains more details on area classification guidelines.

Rule 18-050 Electrical Equipment

Ammonia machinery rooms

Ammonia is listed in Rule 18-050 as a Group IIA hazardous gas. CSA Standard B52-Mechanical Refrigeration Code includes installation requirements for refrigerating systems that use ammonia. Where a refrigerating system uses ammonia in a "Machinery Room", the room is normally considered a hazardous location.

However, when a refrigerating system using ammonia is installed in a "Class T Machinery Room", the room shall not be considered a hazardous location. One of the requirements for a Class T machinery room is that where the independent mechanical ventilation system is not operated continuously, a gas monitoring system shall be installed that will automatically start up the ventilation system and actuate a remote alarm at the lowest practical instrument-detection level not exceeding 25 per cent of the lower explosive limit.

To be acceptable as a non-hazardous location, it may be necessary to provide the appropriate Authority Having Jurisdiction written confirmation that the refrigerating system is installed in a "Class T Machinery Room" in conformance with CSA Standard B52.

Installation of transducers and similar devices

Transducers are devices used to convert one form of energy into another (such as pressure-to-current or vice versa). In a typical application the transducer converts an electrical output signal (usually 4-20mA) from a controller to a pneumatic signal necessary to operate a control valve actuator or pneumatic positioner (I/P). Another application may be to monitor the flow and/or pressure of process fluids with transducers that convert pressure to a 4-20mA signal (P/I).

Careful consideration must be given to the selection of an appropriate transducer if a flammable gas or liquid (explosive fluid) is intended as the medium for operation. Using transducers designed only to be operated with “normal air” pose significant safety hazards when they are actually operated by an explosive fluid. In these situations, the device has not been designed or tested for use with an explosive fluid and is not suitable for the application thus voiding its certification and is in non-compliance with the Canadian Electrical Code.

When a “normal air” transducer is operated with an explosive fluid there is a significant risk that the explosive fluid will migrate into the wiring system with potentially increased pressures within the equipment and the wiring system further compounding the hazard. Even though the wiring system and equipment enclosure may be explosion proof, they may not have been designed for

use where we have a combination of an explosive fluid at elevated pressures. Therefore, the "normal air" transducer is not suitable for the application.

CSA Standard C22.2 No. 30 – *Explosion Proof Enclosures for Use in Class I Hazardous Locations* has provisions for incorporating an explosive fluid seal where a transducer is operated by an explosive fluid. When selecting a transducer (or similar device) intended for operation with an explosive fluid, be sure to specify to the supplier/manufacturer its intended application and that it requires an explosive fluid seal. At existing transducer installations, where an explosive fluid is the medium used to operate the device, you are encouraged to review documentation and consult with the manufacturer to determine whether the device incorporates an explosive fluid seal. Where it is identified that these installations have a transducer that is not suitable for the application, you are advised to take all necessary actions to resolve a potentially hazardous situation.

> **Note:** Although the installation of this type of equipment is prevalent in hazardous locations, there are certainly situations where a transducer operated by an explosive fluid is located in a non-hazardous location. In those cases, the above information is also equally applicable.

Relocatable structures (skid units)

See STANDATA CEC-2, Item "Rule 2-100 Marking of Equipment".

Rule 18-062 Pressurized equipment or rooms

CE Code Rule 18-062 allows equipment pressurized with a protective gas to be located in an explosive atmosphere. The appendix B note to this Rule suggests three possible references that could be used to meet the requirements of this Rule. The NFPA standard 496 "Standard for Purged and Pressurized Enclosures for Electrical Equipment" is frequently used as a guide in designing systems to meet the requirements of Rule 18-064 in Zone 2 or Class 1, Division 2 Hazardous Locations. The purpose of this STANDATA item is to highlight a common error that is made in applying this Standard, as outlined in the following:

The pressurization system used by the standard to pressurize enclosures in Zone 2/Class 1, Division 2 Hazardous Locations is a type Z purge. Three requirements of type Z pressurizing in the standard read as follows:

> ***4.8* Type Z Purging***
>
> *4.8.1 Detection shall be provided to indicate failure to maintain positive pressure within a protected enclosure*
>
> *4.8.1.1* Failure to maintain positive pressure within a protected enclosure shall be communicated by an alarm or an indicator.*
>
> *4.8.1.2 It shall not be required to de-energize the protected equipment upon detection of the failure to maintain positive pressure within the protected enclosure.*

Note that when reading the standard an asterisk (*) at the beginning of a paragraph, indicates that explanatory material on the paragraph can be found in Appendix A of the standard.

In some cases designers have interpreted paragraph 4.8.1.2 to mean that while loss of pressurization requires an alarm, it will not be necessary to de-energize the protected equipment. It should be noted that the wording in paragraph 4.8.1.2 should be understood to mean that while it may not be necessary to de-energize the protected equipment immediately

"upon" loss of pressurization, if the pressurization cannot be restored within a short period, the protected equipment should be de-energized.

This interpretation is confirmed by the Appendix A note to the definition for an alarm which reads as follows:

> ***A.3.3.1 Alarm.*** *An alarm is intended to alert the user that the pressurizing system should be immediately repaired or that the electrical equipment protected by the failed pressurizing system should be removed from service.*

If the protected equipment is critical to the operation of a facility, installation of backup pressurization means should be considered as a part of the design.

Rule 18-072 Bonding in hazardous locations

For sizing bonding conductors or bonding jumpers in hazardous locations, Rule 10-614 (Size of system bonding jumper or bonding conductor) should be used.

Rules 18-104 Sealing, Zone 1 & 18-154 Sealing, Zone 2

Sealing of control cables with bundled sub-assemblies

CSA Standards C22.2 No.174 (Cables and cable glands for use in hazardous Locations) and C22.2 No.230 (Tray Cables) have provisions to test and mark cables with bundled sub-assemblies for extending through a sealing fitting or gland without removing the shield. Cables that meet the requirements of these standards will bear the mark "HL" (for cables approved for hazardous locations) or "TC" (for Tray Cable), followed by the appropriate group designation.

Only those cables tested and marked in accordance with the appropriate CSA Standards will be acceptable when extended through a seal without removing the shield and separating the individual conductors of the pairs, triads, etc.

Sealing underground conduits and cables

Areas in earth below grade are normally considered non-hazardous, although the areas above grade have been classified as hazardous locations. In some cases however, spilled flammable liquids or heavier than air gases seeping through the earth and entering underground can enter conduits and cables. Examples of such locations may be service stations, bulk storage plants, refineries, tank farms and batteries.

To prevent the transfer of ignitable vapours into non-hazardous areas, conduits and cables located in such areas should be sealed at the point of emergence in the non-hazardous area. Cables may be sealed at the first point of termination in the non-hazardous area. The holes through which such conduits and cables enter the building should be made vapour-tight to prevent ignitable vapours from entering the building around the outside of the conduits or cables.

Rule 18-150 Equipment, Zone 2 locations

Resistance temperature devices (RTDs)

RTDs used to measure temperature do not operate above ambient temperature and are therefore considered part of the exception that exempts them from the requirements of Rule 18-150 1)

Installation of transducers and similar devices

See Information item to Rule 18-050 above.

ELECTRICAL SAFETY Information Bulletin

STANDATA

February 2019

2018 CANADIAN ELECTRICAL CODE

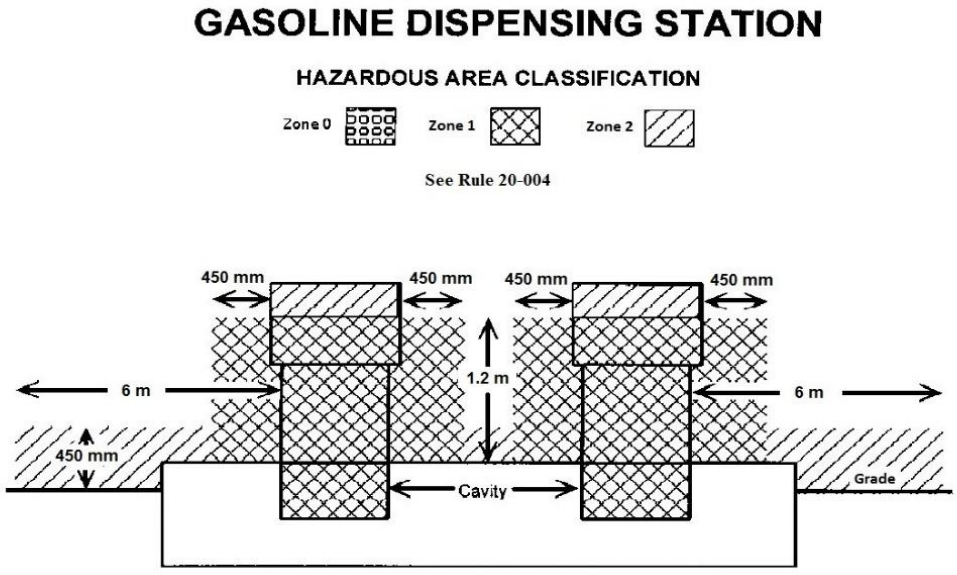
SUBJECT: **Section 20 - Flammable liquid and gasoline dispensing, service stations, garages, bulk storage plants, finishing processes, and aircraft hangars**

Gasoline dispensing and service stations

Rule 20-004 Hazardous areas

Rule 20-004 8) should not be interpreted as classifying the earth below the surface of the Zone 1 and Zone 2 areas around gasoline dispensing pumps as being a hazardous area. The rule stipulates that electrical wiring and equipment below the surface of areas defined as hazardous shall be considered to be within a Zone 1 location that extends to the point of emergence above grade. Therefore, electrical wiring extending from a pit or depression below the surface of the Zone 1 or Zone 2 hazardous area around gasoline dispensing pumps to the point of emergence shall be Zone 1 wiring.

Seals are to be located in accordance with the requirements of Section 18 for the hazardous location involved.



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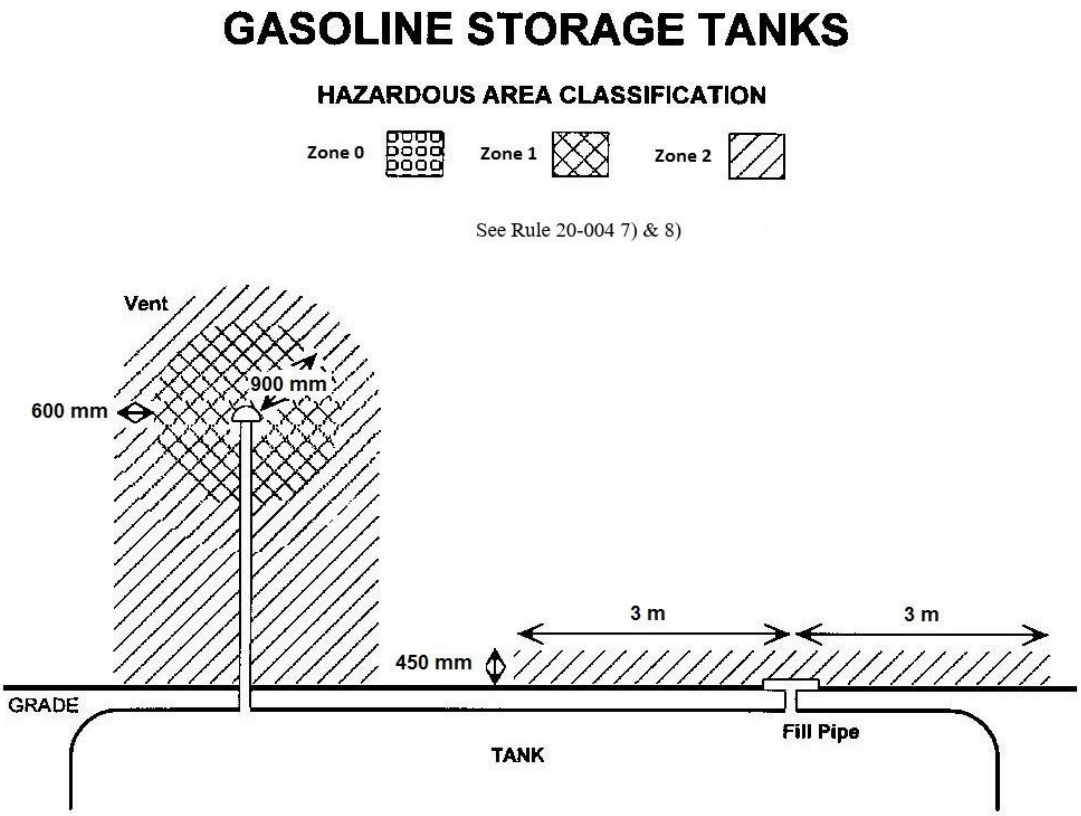


Outdoor aboveground gasoline storage tanks and dispensing

Some gasoline dispensing operations and service stations employ aboveground gasoline storage tanks. Industry has expressed concerns that Section 20 does not clearly identify hazardous area classifications in the vicinity of above ground gasoline storage tanks when used in conjunction with gasoline dispensing operations.

Where a registered engineering professional has not classified an installation, the following guidelines may be used for the classification of outdoor aboveground gasoline storage tanks and dispensing operations:

Location	Zone	Extent of Classified Area
Tank – interior (including interstitial space)	0	Area within the tank.
Tank – exterior (single and double walled tanks)	2	Area extending 3 m in all directions from the tank surface.
Pumps, valves, manifolds etc.	2	Area within 3 m of a potential source of leakage.
Underground tank fill opening	1	Area within the spill containment box.
	2	Area within 3 m of tank fill opening extending upward to a level 450 mm above driveway or ground level.
Aboveground tank fill opening	1	Area within a 900 mm radius of the fill connection or fill opening.
	2	Area beyond the 900 mm extending to a radius of 3 m from the fill connection or opening
Vent discharging upwards	1	The spherical volume within a 900 mm radius from the point of discharge.
	2	The spherical volume between 900 mm and 1.5 m radius from point of discharge.
Vent that does not discharge upwards		The cylindrical volume below both the Zone 1 and Zone 2 locations extending to the ground shall be considered a Zone 2 location.
Spill containment / Dike	2	The area within the perimeter extending to the top of the spill containment.
Dispenser		Refer to Rules 20-002 to 20-014

Propane dispensing, container filling, and storage

The Scope of this part of Section 20 does not cover consumer's propane storage tanks. For full information regarding these installations, consult your gas inspection authority.

As a general guideline for electrical installations near consumer's propane storage tanks, the following applies:

The area around a consumer propane storage tank is considered a Zone 2 hazardous location:

(a) Within 3 m of a tank having a capacity of 125 USWG (over 475 L) to not more than 1000 USWG (3800 L); and

(b) Within 7.5 m of a tank having a capacity in excess of 1000 USWG (over 3800 L).

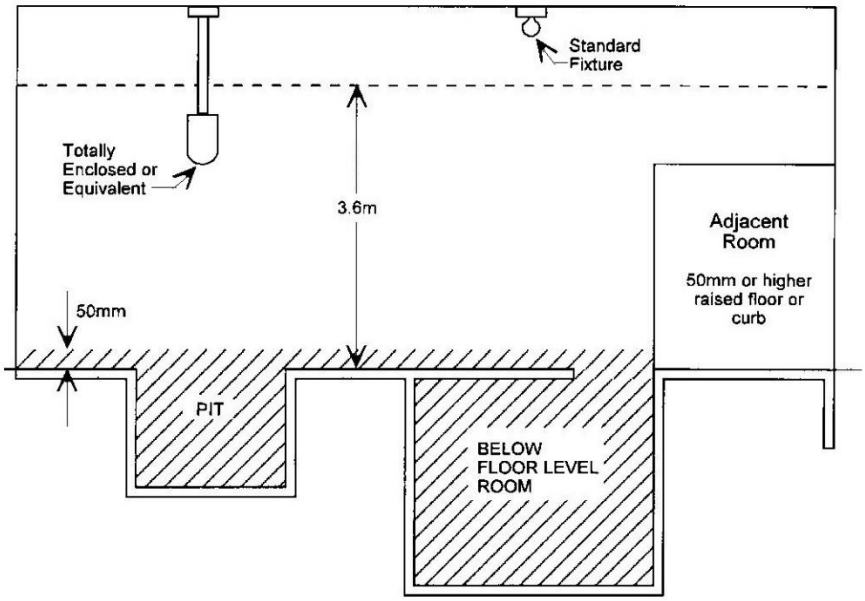
A "consumer" propane storage tank is a tank used to supply propane gas for propane burning appliances and equipment, and is not used for the purpose of transferring liquid propane to other containers.

COMMERCIAL REPAIR GARAGES

HAZARDOUS AREA CLASSIFICATION

Zone 0 Zone 1 Zone 2

See Rule 20-102



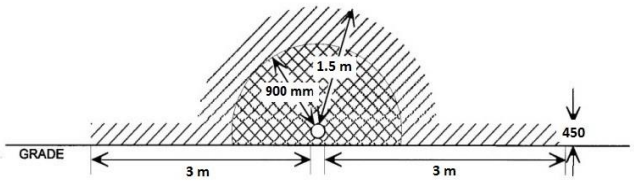
Bulk storage plants
(See Table 69)

FLAMMABLE LIQUIDS BULK PLANTS

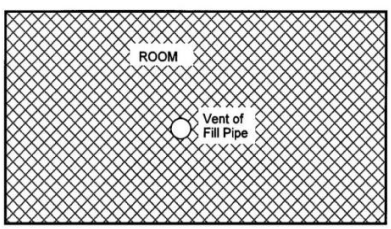
HAZARDOUS AREA CLASSIFICATION

Zone 0 Zone 1 Zone 2

Outdoor Transfer of Flammable Liquids to Individual Containers



Transfer of Flammable Liquids to Individual Containers Indoors Without Mechanical Ventilation

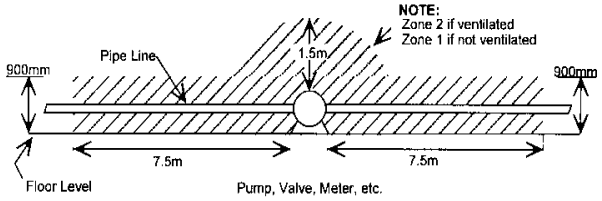


FLAMMABLE LIQUIDS BULK PLANTS

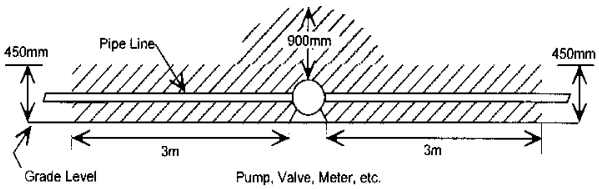
HAZARDOUS AREA CLASSIFICATION

Zone 0 Zone 1 Zone 2

INDOOR AREA



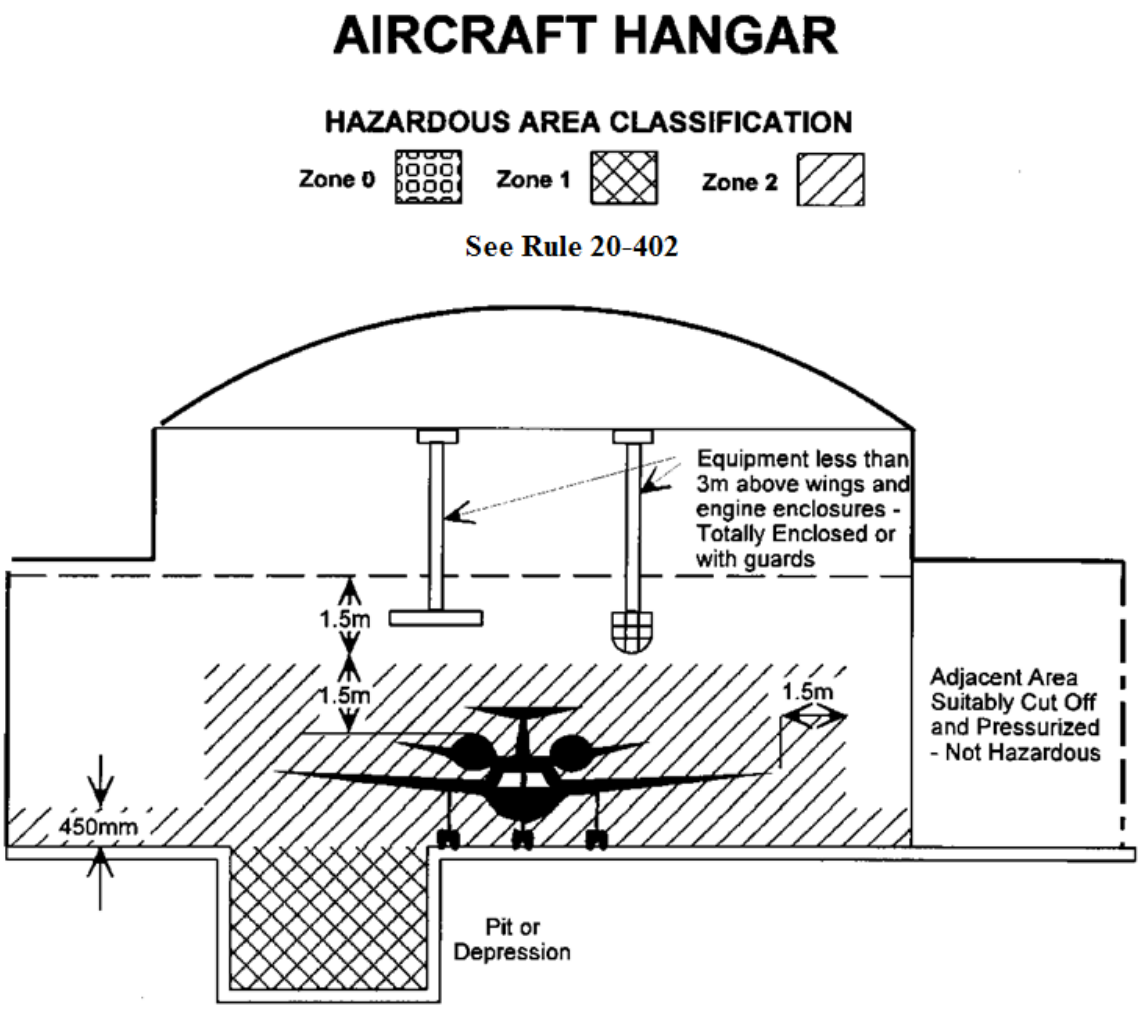
OUTDOOR AREA



Aircraft hangars

Rule 20-400 Scope

Although all aircraft hangers are considered to fall within the scope of this section, there are some cases where strict compliance is not warranted. For instance, small storage sheds used for private aircraft at private airstrips, flying clubs, and the like are not considered to present the same hazard as larger commercial hangers and often wiring methods outlined in Section 12 would be acceptable. For these types of facilities, please contact the local authority having jurisdiction for assistance in determining an acceptable wiring method and to obtain any required variances.



ELECTRICAL SAFETY Information Bulletin

STANDATA

February 2018

2018 CANADIAN ELECTRICAL CODE

SUBJECT: Section 22-Locations in which corrosive liquids or vapours or excessive moisture are likely to be present

Rule 22-204 Wiring methods in buildings housing livestock and poultry

Subrule (3) of this rules permits the use of wiring selected in accordance with Rule 12-102 3) for damp locations (i.e., Non-metallic sheathed cable – NMD90) when the livestock or poultry building is provided with adequate ventilation. The Appendix B note to this rule suggests that *"additional information on the ventilation of buildings housing livestock and poultry can be found in the National Farm Building Code"*.

Research into the National Farm Building Code[1] finds that it only addresses ventilation requirements for silos, where three air changes per hour are prescribed. The CE Code Handbook further describes adequate ventilation as "some form of dehumidification or at least three air changes per hour".

Since the term "adequate" is subjective, a safety codes officer may wish to question whether the building has adequate ventilation to justify the wiring method used. In these cases, the safety codes officer may request the owner provide evidence to indicate there is adequate ventilation.

[1] The National Farm Building Code is available for download from the National Research Council Canada Virtual Store at:
https://www.nrc-cnrc.gc.ca/eng/publications/codes_centre/1995_national_farm_building_code.html

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ELECTRICAL SAFETY Information Bulletin

STANDATA

February 2019 **CEC-24**

2018 CANADIAN ELECTRICAL CODE

SUBJECT: Section 24 – Patient care areas

Rule 24-000 Scope

Section 24, in the 2002 Canadian Electrical Code, was rewritten to recognize the changing nature of health care. Procedures once reserved for hospitals are now being performed in other health care facilities. As such, Section 24 has been modified to include patient care areas of health care facilities.

Section 24 rules are to be applied to health care facilities beyond the traditional hospital locations including, but not limited to, dental clinics, physician's offices, and chiropractic clinics.

Contractors should reference CAN/CSA-Z32 and consult with the facility practitioners, or the licensing body, to determine the different patient care areas in a facility, when these areas have not been designated by a registered architect or registered engineering professional.

Increasingly, health care activities are being moved into residential settings. Contractors should note that where health care equipment is installed in a dwelling unit, there may be special installation requirements for that equipment. Examples include: dialysis machines, electric hospital beds, pneumatic pumps, wound VAC machines, feeding pumps, suction machines, oxygen concentrators, cold nebulizer machines, pulse oximeters, curlin pumps, blood pressure monitors/ventilators and other similar types of medical equipment. Where such equipment is installed in a dwelling unit, the circuit(s) and device(s) supplying the equipment should comply with the requirements of Section 24. Contractors are also reminded to comply with the equipment manufacturer's installation guidelines and requirements.

The requirements of Section 24 need not apply to circuits or devices that do not supply home-based medical equipment.

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ELECTRICAL SAFETY Information Bulletin

STANDATA

February 2019 **CEC-26**

2018 CANADIAN ELECTRICAL CODE

SUBJECT: Section 26 - Installation of electrical equipment

Rule 26-600 Location of panelboards

Concerns were expressed with the requirement for mounting panelboards in dwelling units with no overcurrent device being more than 1.7 m above finished floor level. This could create a situation where the non-metallic-sheathed branch circuit cables may come within the 1.5m from the floor described in Rule 12-518.

The rationale for Rule 26-600 is for panelboards to be located in areas where they will not be subject to damage and be readily accessible. The rationale for Rule 12-518 is to protect cables from mechanical damage when they come within 1.5m of the floor or be installed in a location where there is no potential for damage. Given that panelboards are installed in an area not subject to damage, then the non-metallic-sheathed cable entering the panelboard would meet the intent of Rule 12-518, not requiring additional mechanical protection.

Rule 26-706 Tamper-resistant receptacles

Receptacles in child care facilities
A child care facility is a facility which requires a license under the Alberta Child Care Licensing Act & Regulations.

Rule 26-724 d) iv) Receptacles for dwelling units

Safety codes officers have raised concerns about the possibility of damage to non-metallic sheathed cable feeding receptacles in island counters not permanently fixed to the building structure.

Some building contractors are designing island counters so that they may be easily moved to different locations in a kitchen. A movable island counter is not a "**fixed island counter"** and therefore does not require a receptacle as outlined in Rule 26-724 d) iv). Island counters are deemed to be **"fixed"** when secured to the structure with nails, screws or equivalent method.

Electrical contractors should consult with the building contractor to determine if the kitchen island counter is movable or fixed, and should only install receptacles in fixed island counters.

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2018 CANADIAN ELECTRICAL CODE

SUBJECT: Section 28 - Motors and generators

General

Motors controlled by variable frequency drives (VFDs)

Motors that have not been specifically tested as suitable to be operated by VFDs can cause various problems to both the customer's electrical system and the utility supply. Some of these concerns include motor overheating from reduced cooling capabilities due to a slower fan speeds and from harmonic wave distortion. Harmonic wave distortion can reduce motor efficiency due to increased losses, increased heating of motors, circuit conductors and transformers and increased stress on motor insulation. Consideration should also be given to what effects harmonic distortion could have on other areas of the plant such as power quality degradation, voltage dips, premature equipment failure, and interference with telephone or computer equipment.

CSA Standard C22.2 No. 100-14, Clause 13.4 states that in addition to the normal marking requirements, inverter duty machines (motors) shall be permanently marked. It reads as follows:

> ***13.4 Marking***
>
> ***13.4.1***
>
> *In addition to the marking requirements of Clause 5, and Clauses 7 to 9, inverter-duty machines shall be permanently marked with the following:*
>
> *(a) machine application (e.g. inverter-duty motor);*
>
> *(b) speed range over which the machine is designed to operate;*
>
> *(c) type(s) of torque application for which the machine is designed (e.g. VT (variable torque), CT (constant torque), CHp (constant horsepower) or equivalent);*
>
> *(d) type(s) of inverter with which the machine is intended to be used (e.g. VSI or VVI (6-step voltage-source), CSI (6-step current-source), VPWM (voltage-source pulse width modulated), CPWM (current-source pulse width modulated), LCI (load commutated), cycloconverter, or equivalent).*
>
> ***13.4.2***
>
> *Machines equipped with an integral inverter need not be marked in accordance with Clause 12.4.1(c) and (d).*

Considering that:

- motors intended for use with a Variable Frequency Drive should be suitable for operation by a VFD; and

- Rule 2-024 of the Code requires that electrical equipment “be of a kind or type and rating approved for the specific purpose for which it is to be employed.”; and
- CSA Standard C22.2 No. 100-14 has marking requirements for VFD rated motors,

For new installations, we should therefore ensure that motors and VFDs intended for use in a variable speed application be compatible and that motors are marked accordingly.

For existing installations, where motors are retrofitted to incorporate VFDs, owners are responsible for assessing the compatibility of the motor with the corresponding VFD. To facilitate ongoing operation and maintenance, owners are also encouraged to maintain a record of the compatibility assessment information.

Rule 28-106 Insulated conductors - Individual motors

Rule 28-108 Insulated conductors~~,~~ - Two or more motors

Table 27 Duty Cycle

The insulated branch circuit conductors for an individual motor are normally sized to those values specified in Table D16 for the full load current rating of the motor. The exception is where a motor is designed and used for short-time, intermittent, periodic or varying duty, under the specific conditions as shown in Table 27. In addition, a motor application is considered one of continuous duty unless the nature of the apparatus that it drives is such that the motor will not operate continuously under load during any condition of use.

Caution is advised where Table 27 is being applied, particularly when the use of insulated conductors rated less than 125% of the motor nameplate current rating are being considered. It would usually be necessary, in such cases, to have complete manufacturer's technical data for the motor and the apparatus driven to ensure that the operational conditions and design characteristics would be compatible with the reduced size of conductors.

2018 CANADIAN ELECTRICAL CODE

SUBJECT: Section 30 - Installation of lighting equipment

Rule 30-302 Supports

Luminaires on suspended ceilings

To confirm that adequate load-bearing characteristics are inherent in the suspended ceiling design to support the additional weight of the lighting fixtures, you should consult the designer or building architect.

Where lighting fixtures form part of an existing ornamental or suspended ceiling, they should be independently supported unless it can be established that the ceiling will suitably support the fixtures and any associated wiring material.

Rule 30-308 Circuit connections

Disconnect and retrofit/renovation installations for luminaires with double-ended lamps

Retrofit and renovation installations have consistently required clarification regarding the need for disconnects in existing luminaires utilizing double-ended lamps connected to a ballast or driver.

Any existing luminaires utilizing double-ended lamps connected to a ballast or driver and rated over 150 V to ground, which are disconnected then reconnected (at the same location or not) are considered as being installed as a new luminaire and therefore require disconnects.

Retrofit jobs whereby luminaires utilizing double-ended lamps connected to a ballast or driver and rated over 150 V to ground, having modifications made for energy conservation purposes will also require disconnects (Re-certification as per STANDATA CEC-2 is also required).

Simple ballast or driver replacements for maintenance purposes would not be considered as requiring a disconnect by the literal interpretation of the code rule. However, owners and contractors are encouraged to provide luminaire disconnects in these situations.

Rule 30-314 Minimum height of low luminaires

Following are guidelines for applying Rule 30-314:

(a) A rigidly mounted ceiling luminaire in a readily accessible location should be no less than 2.1 m above the floor if the lamp is not guarded.

(b) A rigidly mounted ceiling luminaire should be located so that the bottom of the luminaire is no less than 2 m above the floor.

(c) Rigidly mounted wall luminaires with outer globes or other enclosures may be located at a lesser height, since the wall provides some protection against people walking directly under or adjacent to them. In no case should the bottom of the luminaire be less than 1.8m above the floor. Where a wall mounted luminaire is installed over a cabinet or

vanity it is considered to be protected by location. A luminaire over the vanity in a bathroom should be kept at least 1m from the tub or shower enclosure.

Rule 30-320 Lighting equipment in damp locations or near grounded metal

Switches in bathrooms

Although the rule references only switches controlling lampholders and luminaires, it is also considered to apply to switches controlling heat lamps, exhaust fans and other equipment.

Note: A steam room is considered the equivalent of a shower or bathtub for the purposes of Rule 30-320(3).

Rules 30-500 to 30-510 Luminaires in buildings of residential occupancy

Wall Switches

Rules 30-500 to 30-510 prescribe the requirements for wall switches in residential occupancies. For the purpose of these Rules, a wall switch may include any form of wall mounted lighting controls, including wireless, provided that the following conditions are met:

- Wall switches are permanently mounted in a location as per the prescriptive requirements of the Canadian Electrical Code, Part I and the Alberta Building Code.
- Electrical equipment is approved in order to satisfy the legislative requirements of the Electrical Code Regulation.

2018 CANADIAN ELECTRICAL CODE

SUBJECT: Section 32 - Fire alarm systems smoke and carbon monoxide alarms, and fire pumps

Rule 32-200 Installation of smoke alarms and carbon monoxide alarms in dwelling units

The Alberta Building Code sets the requirements for the location of smoke alarms within dwelling units. This includes provisions for smoke alarms on each floor level of a dwelling unit, including basements and sleeping rooms. Where more than one smoke alarm is installed in a residence, the Alberta Building Code requires that they must be interconnected.

Where a smoke alarm circuit in a combustible building is supplied from a Class 2 power supply, the interconnection of the smoke alarms is permitted to be an approved Class 2 wiring method. However, extra-low-voltage control cable (such as Type LVT, rated 30 V maximum) is not permitted to enter boxes, fittings or enclosures containing conductors connected to circuits of a higher voltage.

Regular residential smoke alarms normally require a 120 V connection from a 15 A circuit. Rule 32-100 requires that the conductors be of copper with an ampacity adequate to carry the maximum current provided by the circuit; therefore #14 AWG or larger.

Interconnection of smoke alarms with carbon monoxide Alarms

Some manufactures supply smoke alarms and carbon monoxide alarms that can be interconnected. Although the Canadian Electrical Code does not specifically address this practice, the installation may be permitted provided certain precautions are taken:

1. Each device is approved.
2. Each device is suitable for interconnection with each other (consult manufacturers' literature for each device).
3. Each device is installed according to rule 32-200 and the manufacturers' instructions.

Fire pumps

Definition of Fire Pump

All pumping equipment used in sprinkler, hose and standpipe systems that are required by the Alberta Building Code to either boost the pressure or pump from a standing water source are considered to be "fire pumps". This includes pumps used at various levels in high rise buildings, but does not include maintenance pumps (jockey or makeup).

Rule 32-304 Service box for fire pumps

When separate consumer services are installed for fire pumps, the installation should be coordinated with the electric utility concerned.

For further information pertaining to the electrical installation of fire pumps, reference should be made to the current Alberta Building Code, which references NFPA Standard #20 Centrifugal Fire Pumps.

ELECTRICAL SAFETY Information Bulletin

STANDATA

February 2019 **CEC-36**

2018 CANADIAN ELECTRICAL CODE

SUBJECT: Section 36 – High-voltage installations

Rule 36-308 Connections to the station ground electrode

The boundary of a station located indoors is limited to the equipment and the equipment enclosure. For the purposes of bonding non-current-carrying metal parts inside the building not deemed part of the station, Section 10 applies.

Industry is reminded to consider limiting touch and step potential according to the tolerable levels specified in Table 52.

Issue of this STANDATA is authorized by the Provincial Electrical Administrator

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ELECTRICAL SAFETY Information Bulletin

STANDATA

February 2019 **CEC-46**

2018 Canadian Electrical Code

SUBJECT: Section 46 – Emergency power supply, unit equipment, exit signs, and life safety systems

Purpose

The purpose of this Standata is to clarify the allowable circuit configurations for exit signs and the activation of emergency lighting when supplied by unit equipment.

Discussion

Industry has requested clarification on the allowable circuit configurations for the installation of unit equipment (emergency lighting) and exit signs. A compliant installation requires application of several code rules together.

The information covered here deals with exit signs and emergency lighting provided from battery power and deals only with internally illuminated exit signs and unit equipment constructed in conformance to CSA C22.2 No. 141 Emergency Lighting Equipment. The following information is provided to assist industry.

Code References

Unit equipment

46-304 Supply connections

1) Receptacles to which unit equipment is to be connected shall be not less than 2.5 m above the floor, where practicable, and shall be not more than 1.5 m from the location of the unit equipment.
2) Unit equipment shall be permanently connected to the supply if
   a) The voltage rating exceeds 250 V; or
   b) The marked input rating exceeds 24 A.
3) Where the ratings in Subrule 2) are not exceeded, the unit equipment shall be permitted to be connected using the flexible cord and attachment plug supplied with the equipment.
4) Unit equipment shall be installed in such a manner that it will be automatically actuated upon failure of the power supply to the normal lighting in the area covered by that unit equipment.

Exit signs

46-400 Exit signs (see Appendices B and G)

1) Where exit signs are connected to an electrical circuit, that circuit shall be used for no other purpose.
2) Notwithstanding Subrule 1), exit signs shall be permitted to be connected to a circuit supplying emergency lighting in the area where these exit signs are installed.
3) Exit signs in Subrules 1) and 2) shall be illuminated by an emergency power supply where emergency lighting is required by the *National Building Code of Canada*.
4) The circuitry serving luminaires used to illuminate exit signs that are not connected to an electrical circuit shall comply with Subrules 1) to 3), as required by the *National Building Code of Canada.*

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Objective of these rules

The objective of the rules for emergency lighting and exit signs is to provide a clear and recognizable path of travel for evacuation without persons being impeded or delayed in moving to a safe space. A minimum level of lighting must be maintained during an emergency or in a power failure condition.

Interpretation

CE Code 46-304 ~~(~~4)

- CE Code rule 46-304 4) requires unit equipment (emergency lighting) to be installed in such a manner that it will automatically activate upon failure of the power supply to the normal lighting in the same area covered by that unit equipment.
- Connecting unit equipment to a different circuit on the same panelboard as the normal lighting without provisions to automatically activate the unit equipment on failure of the power supply to the normal lighting does not meet the objective of the code.
- In order for emergency lighting to be activated when lighting in the affected area is interrupted, when battery power (unit equipment) is used, it must be on or controlled by the circuit that also serves the normal lighting in that area
- For large open areas with multiple normal power lighting circuits serving these areas, a possible design is to use a dedicated normal power lighting circuit that is connected to luminaires along the means of egress. The unit equipment (emergency lighting) is connected to this dedicated normal power lighting circuit so that it is activated whenever this circuit fails. This ensures that the means of egress will always be adequately illuminated. It is recommended that designs for large areas be reviewed with the local Authority Having Jurisdiction.
- How the circuits can be configured is covered by rule 46-400 which must work in conjunction with the requirements of 46-304 4).

CE Code 46-400

- CE Code 46-400 1) – requires that the power supply for the exit sign be provided from a branch circuit that is used for no other purpose – a dedicated circuit for exit signs only.
- However, 46-400 2) waives the dedicated circuit requirement under specific conditions. The exit sign may also be supplied from a circuit that supplies emergency lighting in the same area where the exit signs are installed. Unit equipment fits into the category of emergency lighting, so a circuit supplying unit equipment could also supply exit signs.
- Another exemption under 46-400 2) for what source circuit can supply an exit sign: In order to meet the requirements of 46-304 4) for unit equipment to activate when the normal lighting in the same area fails, the normal lighting circuit serving that area will typically supply or control the unit equipment. In order to allow this to happen, a key interpretation of 46-400 2) is as follows.
- It is intended by the notwithstanding sub-rule 46-400 2) to allow use of a lighting circuit supplied from the normal ac power source to feed both the normal area lighting and the unit equipment for emergency lighting located in that particular area and to also feed the electrically connected exit signs located in that area.

CE Code 2-100 3) a) Marking of equipment.

- It is important to be able to identify these circuits for testing purposes. At each branch circuit panelboard, equipment is to be marked that it controls emergency lighting unit equipment and/or exit signs.

ELECTRICAL SAFETY Information Bulletin

STANDATA

February 2019

2018 CANADIAN ELECTRICAL CODE

SUBJECT: Section 60 - Electrical communication systems

Rule 60-000 Scope

Section 60 applies to the wiring and equipment of the consumer's portion of a communication installation. Before installing an electrical communication system on a consumer's premises that is intended to be connected to a communication network, the appropriate communication utility should be consulted. The communication utility will provide the necessary information for an acceptable demarcation point between the consumer's and the utility's portion of the installation.

Rules 60-302 to 60-334 Inside conductors

Although the rules regarding the installation of communication circuits inside do not specifically state that boxes and enclosures are required, note that Section 60 is supplementary to other rules of the code. Rule 2-202, states that bare live parts shall be guarded against accidental contact and applies to communication circuits as well as others.

Connections for communication circuits are, therefore, to be enclosed in a suitable manner to prevent accidental contact.

Rule 60-314 Communication conductors in ducts and plenum chambers

A raceway is sometimes used to enclose communication cables run in plenums [described in 12-010 3)] because the cables do not have the proper flame spread requirements of 2-130. Concern has been expressed regarding the difficulty in terminating the conduit and cable at the top of a pole type multi-outlet assembly.

Discussions with the building discipline have concluded that it is acceptable to terminate the raceway adjacent to the pole and run the cables open for a distance not exceeding 300 mm to facilitate entry.

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ELECTRICAL SAFETY Information Bulletin

STANDATA

February 2019

2018 CANADIAN ELECTRICAL CODE

SUBJECT: Section 62 – Fixed electric heating systems

Rule 62-126 Field repair, modification or assembly of series heating cable sets

Industry has requested clarification as to the information required on the permanent tag. The following information is provided to assist industry with the permanent tag information and installation.

Field Repair

Rule 62-126 a); when the total length of the heating portion of the sets is not changed by more than 3%, no additional tag is required.

Modification or Assembly

Rule 62-126 b) i) requires a permanent tag with new design information to be installed on series heating sets that have been field modified or field assembled. Although the design information is not specified in the rule, Standard C22.2 No. 130-16 provides guidance as to the marking of field-assembled heating device sets. Minimum marking requirements on the permanent tag should include:

1. the manufacturers name
2. the word “series” and usage markings
3. the rated voltage
4. the rated output in watts per unit length or area and the specified temperature for that output for those heating devices that vary their power output with temperature
5. the maximum permissible steady-state current
6. a reference number or other similar identification which relates to a permanent record of the assembly or modification

Nameplates bearing the original markings shall **not** be removed. The new permanent tag should be installed directly beside the original nameplate.

The permanent tag shall be clearly legible and suitable for the environment (outdoors, corrosive environment, etc.). The tag should be permanently secured adjacent the original nameplate.

Rule 62-212 Installation of heating cable sets and heating panel sets

Flexible Heating Panels

Several fires in Canada have been attributed to the improper installation of flexible heating panels. Although the actual cause for such fires has yet to be determined, investigations have revealed the need for extreme care with installation practices.
The Electrical Sub-Council of the Safety Codes Council advises the following practices as necessary to reduce the risk of fire or product failure:

1. Flexible heating panels are to be installed by qualified persons.

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2. The work of the various trades involved in the installation process must be coordinated. The installation of the electric heating panels, the construction practices involved in the area where the panels are located, the type of insulation used, etc. are critical to the safety of the final installation.
3. It is strongly recommended that the heating panel manufacturer or representative be directly involved in the installation to ensure the product, building construction and the insulation type are correct for the heating product to operate safely.
4. Permits for a flexible heating panel installation should identify the type of heating panel used.
5. Resistance measurements taken in compliance with the manufacturer's instructions are to be in the form of a permanent record at either the distribution panel location or the thermostat location.

Other heating systems

Rule 62-400 Heating cable sets and heating panel sets installed within pipes, ducts, or vessels

Immersion heaters

A recent incident involving an immersion heater installed in an oilfield tank is cause to alert industry of a potential problem with the installation of immersion heaters. An investigation of the incident has revealed that the level of the liquid was lowered to a point where some of the heater elements were exposed. The flashpoint of the fluid in the tank was approximately 60°C and its auto-ignition temperature 380°C. When temperature control called for the heater to operate, the elements near the surface caused the fluid to vaporize (flash). The vaporized fluid, mixed with the air present in the tank, created a flammable atmosphere and some of the elements of the immersion heater were exposed to the flammable atmosphere. The heater elements are mineral insulated (MI) construction (typical for immersion heaters) that can operate at high temperatures, significantly above the ignition temperature of the flammable gas mixture. The oilfield tank atmosphere was ignited, resulting in an explosion and the collapse of the tank. Personnel were able to vacate the area with no injury. Failure or misapplication of an electric immersion heater was determined to be responsible for the ignition. An unofficial survey within the oil and gas sector has identified a number of similar incidents where immersion heaters were suspected to be the cause of an unwanted fire/explosion.

Since there is no Canadian standard specific for process immersion heaters, certification bodies certify them to an "other recognized document" (ORD). In the testing procedures, the heating elements are assumed to be immersed in a liquid all the time, and the testing for maximum temperature (or temperature code) is for those parts of the heater that are exposed to the atmosphere. The heating elements themselves are not temperature tested. Additionally, tests for conductor temperature rating at the heater connection point are made. Since these specific types of process heaters are semi-custom, the certifier engages in technical discussions with the manufacturer on specifics for testing such as the materials or range of materials for immersion and the environment. It was suggested that a test be made for the heater element temperature in air, however it was deemed unnecessary because: a) the heater elements are assumed to always be within the liquid, and b) the current test procedure is consistent with other certification bodies.

As part of the certification, the manufacturer is required to put warning statements in the instruction manual and a caution label on the product that a **liquid level and/or high temperature limit control must be used to de-energize the heater**. Manufacturer documentation contains these instructions and warnings, and therefore they become a requirement for installation. The certification body verifies that the documentation contains the appropriate instructions and warnings.

It is a user responsibility to ensure that the elements remain immersed while in operation by installing level controls and/or have a high temperature limit control on the elements. Therefore:

1. Electric immersion heaters need to be installed with a high integrity liquid level control to ensure the element does not become un-immersed and/or a surface temperature limit device to de-energize the heater if the elements become un-immersed.
2. Other installations of process immersion heaters should be investigated for potential similar misapplications.

ELECTRICAL SAFETY Information Bulletin

STANDATA

February 2019

2018 CANADIAN ELECTRICAL CODE

SUBJECT: Section 64 – Renewable energy systems

Rules 64-210 5), 64-216, and 2-200

Purpose:

Industry has requested clarification on solar photovoltaic (PV) dc arc fault protection and how this relates to rodent protection requirements.

Code references:

64-210 Wiring method

5) Where the dc arc-fault protection referred to in Rule 64-216 is not located at the module, photovoltaic source circuit conductors and cables installed on or above a building, and installed in accordance with Subrules 1), 2), and 3) shall be provided with mechanical protection, in the form of an enclosed raceway or other acceptable material to protect against damage from rodents.

64-216 Photovoltaic dc arc-fault circuit protection

1) Photovoltaic systems with dc source circuits or output circuits, or both, and operating at a maximum system voltage of 80 V or greater, shall be protected by
   a) a dc arc-fault circuit interrupter; or
   b) other system equipment approved to provide equivalent protection.

2) The arc-fault protection system required in Subrule 1) shall
   a) detect and interrupt arcing faults resulting from a failure in the intended continuity of a conductor, connection, photovoltaic module, or other system component in the dc photovoltaic source and output circuits;
   b) not have the capability of being automatically restarted;
   c) have annunciation, without an automatic reset, that provides a visual indication that the circuit interrupter has operated; and
   d) disable or disconnect
      i) inverters or charge controllers connected to the faulted circuit when the fault is detected; or
      ii) the photovoltaic dc source circuits or dc output circuits either within the combiner, at the module junction box, or at the module cable connectors.

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Protection of persons and property

2-200 General

Electrical equipment shall be installed and guarded so that adequate provision is made for the safety of persons and property and for the protection of the electrical equipment from mechanical or other damage to which it is liable to be exposed.

Discussion:

Solar PV system dc arc-fault protection is designed to detect and mitigate the effects of arcing faults that can pose a risk of fire ignition under certain conditions if the arcing persists. This may be the result of a failure of (or damage to) a conductor, connection, PV module or other system component.

The dc arc-fault protection required under Rule 64-216 provides series arc fault protection. This position is supported by the rule's requirement to detect and interrupt arcing faults resulting from a "failure of the intended continuity of a conductor".

Solar PV inverters sold in Canada are manufactured under a number of standards. Standard CSA C22.2 No. 292 dc arc fault protection for photovoltaic applications has recently been published. Prior to its development, manufacturers followed CSA Technical Information Letter T.I.L. M-07 and the UL1699B standard for photovoltaic dc arc-fault circuit protection. These standards describe testing for both Type 1 series arc-fault protection and Type 2 parallel arc-fault protection.

However, only series faults are required to be detected and protected against by current electrical codes. For this reason, today's Type 1 PV inverters are only certified to detect and interrupt series arc-faults. When the inverter senses a series arc fault within the specified fault value (≥ 300W), the inverter shuts down and stops current flow in the entire circuit feeding into that inverter, effectively quenching the arc. This arc fault protection is provided for the entire run of dc conductors from the inverter to the module, inside the module and the connections between modules. When this occurs, the inverter provides a fault message and must be reset manually. Each string in the PV system feeding that inverter must be inspected for faults as per the manufacturers' installation manual.

A certified dc arc fault protective device can also be embodied in a number of ways such as in a combiner box. Module integrated products are in development stages, but are not yet readily available due to a number of technical challenges.

Interpretation:

Subrule 64-210 5)

This Subrule indicates that where the dc arc-fault protection referred to in Rule 64-216 is not located at the module, PV source circuit conductors and cables installed on or above a building require mechanical protection against damage from rodents. Detection and interruption of arc-faults provided by shutdown of an approved Type 1 inverter (or other certified component) referenced in Rule 64-216 is required to quench a series arc-fault. It will accomplish this throughout all of the PV source circuits and PV output circuits connected to that inverter. Because of this protection provided by the inverter (or other certified component), up to and including at the module, there is no requirement for additional rodent protection **above that which would be normally required by Rule 2-200 to protect equipment and cables from damage from environmental hazards which may be present (such as the presence of rodents and wildlife)**, when such equipment that is compliant with Rule 64-216 is installed.

Rule 2-200

Even when arc-fault protection has been provided under the terms of Rule 64-216, **Rule 2-200 requires that electrical equipment be guarded from mechanical or other damage to which it is liable to be exposed**. For solar PV systems, the owner and designer are responsible to identify the likelihood of damage from any means (including rodents) on the specific site of installation. Those specific individual site conditions will dictate the requirement for installation of protection.

For example, a solar array installed on a roof of a house surrounded by mature trees would be a strong candidate for rodent protection compared to an installation on the roof of an industrial building of non-combustible construction.

Caution must be exercised in the application of rodent protection in certain conditions. In flat roof ballasted systems, there is a potential risk of increased wind loading. Racking systems have specific wind tunnel testing to generate wind coefficients but may not include additional mesh/fencing that could create wind drag and change the wind behavior and dynamics of the original design. This could potentially void the engineered racking design. There is also a high likelihood that energy production would be reduced and temperatures increased due to restricted air movement under the array during warmer weather.

For projects with professional involvement, this responsibility to identify the risks and the protection system should fall on the designer and should be fully acknowledged by the owner. It is strongly recommended that the installer consult the local Authority Having Jurisdiction well in advance to discuss the need for, and the type(s) of, additional protection required. No matter what type of equipment is installed, the owner should be made aware that regular inspections of the system are essential.

ELECTRICAL SAFETY Information Bulletin

STANDATA

February 2019 **CEC-68**

2018 CANADIAN ELECTRICAL CODE

SUBJECT: Section 68 - Pools, tubs and spas

Rule 68-058 Bonding

Although there may be no electrical equipment or electrical wiring associated with a pool during the initial stages of construction, the likelihood of introducing electrical equipment in the future is high. When electrical equipment is added later, it becomes very difficult, if not impossible to bond the structural or reinforcing steel at that time. It is therefore recommended that the structural and reinforcing steel be bonded for all swimming pools at the initial stages of construction in accordance with Rule 68-058, even though electrical equipment or electrical wiring is not involved.

Rule 68-308 Other electric equipment

Pumps for hydromassage bathtubs

The location of the pump for hydromassage bathtubs must comply with Rule 2-122. It states: "Electrical equipment shall be so installed as to ensure that after installation there is ready access to nameplates and access to parts requiring maintenance."

To comply with Rule 2-122, pumps, or any other electrical equipment, for hydromassage bathtubs are to be readily accessible. This could be in the form of a removable panel or other similar arrangement that will provide suitable access.

Spas and hot tubs

Rule 68-400 General

There are two options for installing a spa or hot tub. One is to apply the requirements of Rules 68-400 to 68-408 for field assembled units and the other is to install a pre-manufactured unit and supply power to it accordingly.

Pre-manufactured units must be certified as a complete package to the appropriate Canadian recognized standard (CAN/CSA-C22.2 No. 218.1 – *Spas, Hot Tubs, and Associated Equipment*). This standard contains the requirement for ground fault protection. The manufacturer has the option of either including GFCI protection as an integral part of the hot tub or providing a cautionary marking to the effect that GFCI protection must be provided by the installer. Regardless of which method is chosen by the manufacturer, you are cautioned to ensure that a ground fault circuit interrupter ultimately protects any electrical equipment, forming an integral part of a manufactured spa or hot tub. This is consistent with the requirements of Rule 68-302.

Furthermore, *certified* pre-manufactured spas and hot tubs are identified as certified by an acceptable certification mark found on the nameplate located on the outside of the spa or hot tub. Certification marks located on associated equipment identifies the equipment as certified but does not suggest that the entire spa or hot tub unit is certified. In situations where a

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certification mark cannot be found on an exterior nameplate, even though the associated equipment is certified, the spa or hot tub must be considered a field assembled unit subject to the requirements of Rules 68-400 to 68-408.

Field-Assembled Units are normally assembled or built on the site where it is intended to operate. There may be situations where spas and hot tubs are assembled in a manufacturing setting and transported for permanent installation at a field site. In either case, the spa or hot tub must meet the requirements of Rules 68-400 to 68-408 with all associated equipment specifically approved for use with spas and hot tubs in accordance with Rule 68-408 2).

The Code requirements for spas and hot tubs are in keeping with standard CAN/CSA-C22.2 No. 218.1, with the notable exception of not specifically mandating the use of GFCI protection. To be consistent with the standard, it is strongly recommended that GFCI protection be installed for all installations of field-assembled spa and hot tub units.

Electrical permits, regardless of whether the spa or hot tub is pre-manufactured or field-assembled, are required from the inspection authority having jurisdiction. Inspectors will be responsible for determining the depth of inspection based on the type of installation.

ELECTRICAL SAFETY Information Bulletin

STANDATA

February 2019

CEC-76

2018 CANADIAN ELECTRICAL CODE

SUBJECT: Section 76 - Temporary wiring

Rule 76-006 Service entrance equipment

Support for temporary construction service equipment

Inadequate support of service entrance equipment for temporary power on construction or demolition sites often results in equipment damage and failure and presents a potential safety hazard. To minimize the occurrence of an incident, modifications to the supporting structure should be done on de-energized equipment. The following guidelines are recommended for supporting temporary services.

1. Temporary services of 200A or less, not mounted on a building and intended for overhead connection, should be mounted on a pole, or solid wood post not less than 89mm by 140mm (4 in. x 6 in.).
2. Set the pole or post solidly into the earth to a depth of at least 1.2m (4 ft.). Brace as necessary to provide enough strength to support the supply service conductors and to support the potential for a person on a ladder making a power connection.
3. Maintain required clearances for overhead supply conductors in compliance with Rule 6-112 3).
4. Provide additional supporting structures for service equipment larger than 200A; self-supporting, weatherproof, skid-mounted units are also acceptable.
5. Mount service equipment intended for connection to an underground supply service on a solidly braced post, or structure.
6. Coordinate the installation of the consumer's service conductors and the supply service conductors in accordance with the requirements of the supply authority.

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ELECTRICAL SAFETY Information Bulletin

STANDATA

February 2019

2018 CANADIAN ELECTRICAL CODE

SUBJECT: Section 84 – Interconnection of electric power production sources

Rule 84-024 Disconnecting means – General

The intent of Rule 84-024 c), which requires that the disconnecting means "have contact operation verifiable by direct visible means…" is better described "have contacts in the open position visually verifiable…" and is considered to have been met when:

1. The output of the electric power production source is 750 V or less and the open position of the contacts can be visually verified by opening the door of the disconnecting means enclosure, unless of the draw-out type.
2. The output of the electric power production source is greater than 750 V and the open position can be visually verified through a suitable transparent opening of the disconnecting means or otherwise meets Rule 36-214 of the CE Code.

Rationale

- The intent for Rule 84-024 c) is described in the CE Code Handbook as "able to visually verify that the contact of the disconnecting means is open…"[1]. The definition of *Visible-break disconnect* in Part I of the Alberta Distributed Generation Interconnection Guide states that the design of the disconnect "must allow adequate visible inspection of the contacts in the open position."[2]
- The Code does not prescribe how visible verification should to be achieved in either Rules 84-024 or 36-214.
- Section 84 was introduced at a time when high-voltage (HV - > 750 V) electric power production sources were the norm for interconnected systems. Low-voltage (LV - $\leq$ 750 V) interconnected systems (solar photovoltaic, fuel cell) are becoming increasingly popular.
- Because of the higher degrees of safety risk associated with HV switchgear, transparent windows are a common industry practice for HV applications.
- Aside from installations of interconnected electric power production sources, nowhere else does the CE Code require visual verification of contact position in LV disconnecting means.

This interpretation is provided specifically to address the visual verification requirement of Rule 84-024 c) in the CE Code. Requests to use alternative disconnecting means that do not have 'contact position visually verifiable' as described in the interpretation should be addressed through a variance with the local inspection authority having jurisdiction.

[1] " CE Code Handbook" – published by the Canadian Standards Association
[2] " Alberta Distributed Generation Interconnection Guide" – developed by the Alberta Distributed Generation Technical and Policy Committee

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Variance STANDATA

VARIANCE
CANADIAN ELECTRICAL CODE

SUBJECT: Rule 2-024 – RE: Oil and Gas Industry Electrical Submersible Pumps

Preamble

Rule 2-024 requires that electrical equipment be approved. Section 2 of the *Electrical Code Regulation* mandates approval requirements:

> **Electrical systems equipment**
>
> **2(1)** If a code, standard or body of rules declared in force under the Act with respect to electrical systems requires approved equipment, that equipment must meet the requirements of this section.
>
> **(2)** No person shall manufacture, install, sell or offer for sale any equipment related to electrical systems for use in Alberta unless the equipment has been
>
> (a) certified by a certification body in accordance with the certification body's terms of accreditation with the Standards Council of Canada, or
>
> (b) inspected by an inspection body in accordance with the inspection body's terms of accreditation with the Standards Council of Canada.
>
> (3) Subsection (2) does not apply to electrical equipment of an electric distribution system or a transmission line as defined in the *Hydro and Electric Energy Act.*

(Note: "certification body" is defined as 'an organization accredited by the Standards Council of Canada as a certification body;' and "inspection body" is defined as 'an organization accredited by the Standards Council of Canada as an inspection body.')

There is seldom occasion where we cannot meet this requirement. Situations do exist however, where the requirement may be onerous or impracticable.

In the specific situation of Electrical Submersible Pumps (ESP's) and associated down-hole cable assemblies, certification organizations have yet to identify a demand for developing a product certification program around these particular electrical products. In addition, standards development organizations have not developed a certification standard for these products, consequently, certified ESP's and cables are not available.

Variance

This Variance applies to ESP's and associated down-hole cables used in wells within the Oil and Gas industry. ESP's are multistage centrifugal pumps driven by 3-phase motors constructed to fit within the inside diameter of the well tubing. Motors range in size from 5kW to 1200 kW and in lengths from 1.2 m to 12 m. Power cables are normally 3-phase with tape-in or plug in pot head connection at the motor. Instrument cables may also be associated with the ESP installation.

ESP's and associated down-hole cables mentioned in this variance have a history of successful and safe operation. This installation poses no fire or shock risks. The motor is underground in an oxygen deficient atmosphere and could not create an explosion. Personnel are physically isolated from the motor and cable, and consequently, there is no shock hazard. Creating a certification program for this type of equipment, with a proven safety record, adds no value. Therefore, a Variance is required to address the approval requirements of Rule 2-024.

Therefore, manufacturers, distributors, owners and installers of ESPs and associated down-hole cables shall be permitted to deviate from Rule 2-024 of the Canadian Electrical Code provided they meet the following conditions:

Conditions

1. a) Manufactured to North American Standards
ESP's and/or associated down hole cables are acceptable when the manufacturer declares that they have manufactured, inspected and tested the ESP's and/or associated down-hole cables to the requirements of the appropriate and current standards. These standards include but are not limited to:

• IEEE 252	Standard Test Procedure for Polyphase Induction Motors having Liquid in the Magnetic Gap.
• IEEE 1017	Recommended Practice for Field Testing Electric Submersible Pump Cable.
• IEEE 1018	Recommended Practice for specifying Electric Submersible Pump Cable Ethylene-Propylene Rubber Insulation.
• IEEE 1019	Recommended Practice for specifying Electric Submersible Pump Cable Polypropylene Rubber Insulation.

b) Manufactured to Other than North American Standards
Where ESPs and/or associated down-hole cables are manufactured to other than North American standards, the manufacturer must declare that the product has equivalent safety performance as one manufactured to North American standards. Alternatively, a licensed engineering professional may evaluate and accept the product standard to which the ESP's and/or associated down-hole cables were manufactured to, if it compares favourably with the appropriate North American standards concerning safety performance.

2. Product Identification

The following documentation for ESPs and associated down-hole cables must be readily accessible:

- a manufacturer's declaration stating that the product meets industry recognized standards; and
- specification sheets stating the product's electrical ratings and characteristics.

3. Additional Requirements

- The installation is bonded to ground. Proper overcurrent and overload protection must be provided in accordance with the CE Code, Part 1
- All above ground components associated with the installations meets the requirements of the CE Code and the Electrical Code Regulation.
- The installation is subject to a Safety Codes inspection to verify compliance with the CE Code Part 1.

Expiry

This variance remains in effect until such time that it is revoked by the Administrator.

VARIANCE
Canadian Electrical Code

SUBJECT: Rule 2-024 – RE: Liquid-filled Transformers

Preamble

Rule 2-024 requires that electrical equipment be approved. The definition of 'approved' in the Canadian Electrical Code does not apply because Alberta regulation has otherwise defined it. In Alberta, section 2 of the Electrical Code Regulation defines 'approved' as follows:

> **Electrical systems equipment**
>
> **2(1)** If a code, standard or body of rules declared in force under the Act with respect to electrical systems requires approved equipment, that equipment must meet the requirements of this section.
>
> **(2)** No person shall manufacture, install, sell or offer for sale any equipment related to electrical systems for use in Alberta unless the equipment has been
>
> (a) certified by a certification body in accordance with the certification body's terms of accreditation with the Standards Council of Canada, or
>
> (b) inspected by an inspection body in accordance with the inspection body's terms of accreditation with the Standards Council of Canada.
>
> **(3)** Subsection (2) does not apply to electrical equipment of an electric distribution system or a transmission line as defined in the *Hydro and Electric Energy Act.*

*(**Note:** "certification body" is defined as 'an organization accredited by the Standards Council of Canada as a certification body;' and "inspection body" is defined as 'an organization accredited by the Standards Council of Canada as an inspection body.')*

There is seldom occasion where we cannot meet this requirement. Situations do exist however, where the requirement may be onerous or impracticable.

In the specific situation of liquid-filled transformers, certification organizations have yet to identify a demand for developing a product certification program around this particular electrical equipment. Consequently, certified liquid-filled transformers are not available.

Conditions

Owners/users required to use liquid-filled transformers are permitted to deviate from Rule 2-024 of the Canadian Electrical Code provided they meet the following conditions.

1. a) Manufactured to Canadian Standards
   Liquid-filled transformers are acceptable when the manufacturer declares that they have manufactured, inspected and tested the transformer to the requirements of the appropriate and current Canadian standards. These standards include but are not limited to:
   - CAN/CSA-C2 Single Phase and Three Phase Distribution Transformers
   - CAN/CSA-C88 Power Transformers and Reactors
   - CAN/CSA-C227.3 Low Profile, Single Phase, Dead Front Pad-mounted, Distribution Transformers
   - CAN/CSA-C227.4 Three Phase, Dead Front Pad-mounted, Distribution Transformers

   b) Manufactured to Other than Canadian Standards
   Where liquid-filled transformers are manufactured to other than Canadian standards, the manufacturer must declare that the product has equivalent safety performance as one manufactured to Canadian standards. Alternatively, a licensed engineering professional may evaluate and accept the product standard to which the liquid-filled transformer was manufactured if it compares favourably with the appropriate Canadian standards concerning safety performance.

2. Product Identification
   In addition to meeting the requirements of Rule 2-100 of the Canadian Electrical Code, the liquid-filled transformer must identify the standard to which it was manufactured.

   The following documentation or appropriate marking must also accompany the product:
   - a manufacturer's declaration stating that they have manufactured the product to one or more appropriate Canadian standards, or
   - when manufactured to other than Canadian standards:
     i. a manufacturer's declaration that the product has equivalent safety performance as one manufactured to the appropriate Canadian standards, or
     ii. a licensed engineering professional's evaluation report indicating the product as having equivalent safety performance as one manufactured to appropriate Canadian standards.

3. Maintenance
   The owner of the equipment shall ensure the product is maintained to industry standards and manufacturer's specifications.

4. Expiry
   This variance remains in force until such time that it is revoked by the Administrator.

ELECTRICAL SAFETY Information Bulletin

STANDATA

February 2019

VARIANCE
2018 Canadian Electrical Code

SUBJECT: Rule 6-112 Support for the attachment of overhead supply or consumer's service conductors or cables

Preamble:

In complying with 6-112 5), Alberta has historically accepted rigid steel conduit in trade sizes 35 and larger to be used as a service mast, providing certain conditions are met.

Therefore the following province-wide Variance has been approved to allow the continued use of this practise:

Variance

Rule 6-112 Attachment of overhead service conductors

Use of rigid steel conduit as a service mast

Rule 6-112 5) states that service masts shall be assembled from components suitable for such use. (See the Appendix B note for this rule). To be acceptable, a service mast must be able to withstand the stresses it may be subjected to.

In complying with 6-112 5), rigid steel conduit in trade sizes 35 and larger may be used as a service mast provided:

1. the point of attachment for the supply service drop does not extend above the roof more than the following distances:

Conduit Trade Size	Distance Above Roof
35	450 mm
41	600 mm
53	900 mm

Note: 1) If the distances above must be exceeded, an acceptable alternate type of service mast must be installed. To ensure an acceptable installation, consult with the inspection authority having jurisdiction.

2) Electrical metallic tubing and aluminum conduit are not suitable for use as a service mast.

Issue of this STANDATA is authorized by the Provincial Electrical Administrator

[Original Signed]
Clarence C. Cormier, P.Eng.

Alberta Government

2. Where 35 and 41 trade size conduits are used, the stress imposed by aluminum neutral supported (NS) cable is minimized by ensuring that the NS cable is No. 4 AWG or smaller and the span does not exceed 30 m in length with a sag of 450 mm at 15ºC.
3. The conduit is secured to the building with at least two “anchor” or "U" bolts spaced at least 450 mm apart with one placed near the roof line and the other near the meter socket. Standard conduit straps are not acceptable for this purpose.
4. A suitable roof jack is installed where the mast extends through the upper section of the roof.
5. The service drop is attached to the mast with an insulator located at least 300 mm above the roof surface and not more than 300 mm below the service head.

Where a supporting mast is installed at a distance greater than 600 mm from the outer edge of the roof, or the service drop extends away from the building at an angle less than 45º from the roof edge, the vertical clearances in 12-310 shall apply.

Expiry:

This variance remains in force until revoked by the Administrator.

Building Code Interpretations

BUILDING CODE BULLETIN

STANDATA

August 15, 2013

DISASTER RECOVERY PROGRAM FLOOD MITIGATION MEASURES

PURPOSE

To outline alternative solutions for minimum flood mitigation measures when building owners apply for Disaster Recovery Program (DRP) funding to perform repairs on their property.

DISCUSSION

The scale of damage and obstacles to recovery as a result of the 2013 flooding in Southern Alberta has resulted in the decision by the Government of Alberta to appoint an advisory panel on community flood mitigation, to provide direct input on the latest flood prevention technology from around the world. In the interim period, flood mitigation measures have been established and revised through consultation with municipalities, industry and owners to provide minimum impact to the building structure and systems. The measures include locating electrical equipment above the flood level and the selection of building materials and finishes which are less likely to be damaged by flood water or easier to restore. These measures are consistent with the recognized disaster recovery mitigation measures under the Government of Canada's Disaster Financial Assistance Arrangements (DFFA) Guidelines and the U.S. Federal Emergency Management Agency (FEMA).

All flood mitigation measures are to be included under one flood mitigation permit form (see attached form) issued by the DRP and certified by a safety codes officer employed by the municipality or an accredited agency. The municipality or accredited agency will include all measures under the flood mitigation permit form and perform necessary inspections by the appropriate safety codes officers. The flood mitigation permit form certifies compliance with flood mitigation measures when signed and dated by a safety codes officer.

GENERAL REQUIREMENTS

Homeowners and small businesses located in the flood fringe must take the minimum flood mitigation measures identified below to satisfy conditions for DRP funding in the flood fringe. The following measures are referred to as "wet flood-protection", which are intended only to minimize damage and to speed restoration in the event of a flood. This is accomplished in four primary ways:

1. Basements. The objective is to minimize moisture damage or facilitate disposal of materials and restoration.

   Alternative solutions require moisture resistant flooring and include but are not limited to:
   - The choice to leave the basement unfinished and use minimal materials;
   - The choice to use cleanable and moisture resistant materials;
   - The choice to use disposable materials allowing for easy restoration.

Issue of this STANDATA is authorized by
the Chief Administrators in Building, Electrical and
Plumbing and Gas.

Alberta Government

SAFETY CODES COUNCIL

Alberta Municipal Affairs – Safety Services, 16th Floor, 10155-102 Street, Edmonton, Alberta, Canada, T5J 4L4
Safety Codes Council, Suite 1000, 10665 Jasper Avenue, Edmonton, Alberta, Canada, T5J 3S9

2. Electrical equipment: The objective is to minimize the risk to life safety by providing a safe means to de-energize and re-energize the building. This allows for the de-energization of electrical equipment without having to access the basement and stand in flood water. Another consideration is being able to supply power for restoration services while being able to isolate electrical equipment damaged or made unsafe from flood waters.

   Alternative solutions include but are not limited to:
   - Re-locate the main electrical panel out of the basement and isolate circuits feeding electrical outlets and equipment in the basement so that power can be restored quickly in the event of a flood.
   - Installing a weather proof service disconnect switch on the outside of the building between the meter socket and the existing panel in the basement. This switch would have provisions for disconnection of the existing panel.
   - Installing a service panel in the garage if one exists, and feeding the house as a sub-panel. Receptacles within the garage could supply power for restoration, while the house remains de-energized.

   The Canadian Electrical Code rules regarding location and clearances for electrical panels would still apply in all cases. Other installation methods may be acceptable. Contact the Authority Having Jurisdiction (municipality or accredited agency) in your area for clarification.

3. Penetrations: The objective is to minimize water seepage into the building.

   Alternative solutions include but are not limited to:
   - Seal piping, wiring, conduit penetrations at basement walls.
   - More extensive sealing of penetrations such as windows and other exterior measures may have unintended consequences (i.e. the prevention of emergency window egress) and therefore should be undertaken on the advice of a professional.

4. The objective is to protect plumbing fixtures/equipment located in basements from backflow from the public sewers.
   - Solution: Backflow prevention devices are required under the National Plumbing Code as adopted by regulation in Alberta. All backflow prevention devices shall be installed in accordance with manufacturer's recommendations and the Plumbing Regulations.
   - Plumbing fixtures/equipment located in basements shall be protected from backflow from the public sewers. All backflow prevention devices shall be installed in accordance with manufacturer's recommendations and the Plumbing Regulations.

Questions regarding this bulletin may be directed to the Safety Services Branch.
Toll free telephone number: 1-866-421-6929.

[Original Signed]
Harry Li
Acting Chief Building Administrator

[Original Signed]
Sidney Manning
Chief Plumbing and Gas Administrator

[Original Signed]
Dan Niven
Acting Chief Electrical Administrator

APPENDIX NOTES

Acceptable materials for flood damage reduction:

Proper selection of building materials and finishes which are less likely to be damaged by flood water will reduce the extent of damage and amount of time it takes to return the facility to operation. For example, the DFAA relies on “specific repair projects to reduce vulnerability to future emergencies”. For more information on provincial mitigation solutions recognized by DFAA and federal funding support to provinces and territories, please link to http://www.publicsafety.gc.ca/cnt/rsrcs/pblctns/gdlns-dsstr-ssstnc/index-eng.aspx#s6

Similar measures are recognized by FEMA for structural materials and finish materials commonly used in the construction of floors, walls, and ceilings, with a level of acceptability given for each material. For example, “Flood damage-resistant material” is defined as “any building product [material, component or system] capable of withstanding direct and prolonged contact with floodwaters without sustaining significant damage.” The term “prolonged contact” means at least 72 hours, and the term “significant damage” means any damage requiring more than cosmetic repair.

Following is a link to this document:

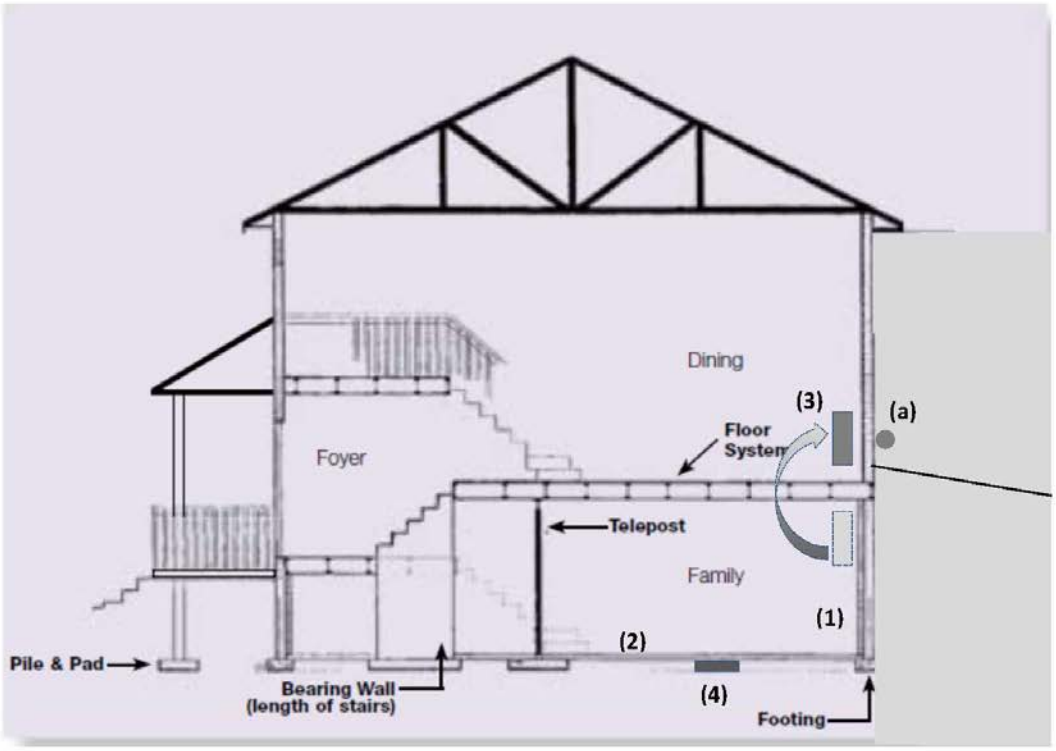
https://s3-us-gov-west-1.amazonaws.com/dam-production/uploads/20130726-1502-20490-4764/fema_tb_2_rev1.pdf

Please note that other applicable requirements of the Alberta Building Code such as flame spread rating, smoke development classification, material standards, etc., must still be complied with.

The following are examples of flood damage-resistant building materials acceptable for reconstruction work under the DRP program. This is not an exhaustive list and in no way precludes the use of other products. Materials and products that are not listed may still be used if accepted by the local building official (Building SCO). In such cases, manufacturers’ literature (i.e., specifications, materials, safety data sheets, test reports etc.) may be used to determine if the product meets flood damage-resistance requirements. Acceptance should be based on sufficient evidence provided by the applicant that the materials proposed to be used will resist flood damage without requiring more than cosmetic repair and cleaning.

1. Construction Materials for Walls and Ceilings
    a. brick, metal, concrete, concrete block, porcelain, slate, glass block, stone, and ceramic and clay tile
    b. cement board, reinforced concrete
    c. polyester epoxy paint
    d. pressure treated lumber or steel studs
    e. pressure treated and marine grade plywood
    f. foam and closed-cell insulation
    g. water resistant non-paper faced gypsum exterior sheathing
    h. wall panel, steel
2. Materials for Flooring
    a. concrete, concrete tile and precast concrete
    b. latex or bituminous flooring, ceramic, clay terrazzo
    c. vinyl and rubber sheets and tiles
    d. pressure treated wood
3. Other
    a. metal doors
    b. fibreglass or vinyl doors

Flood Mitigation Sketches



Alternative solution 3- (a)

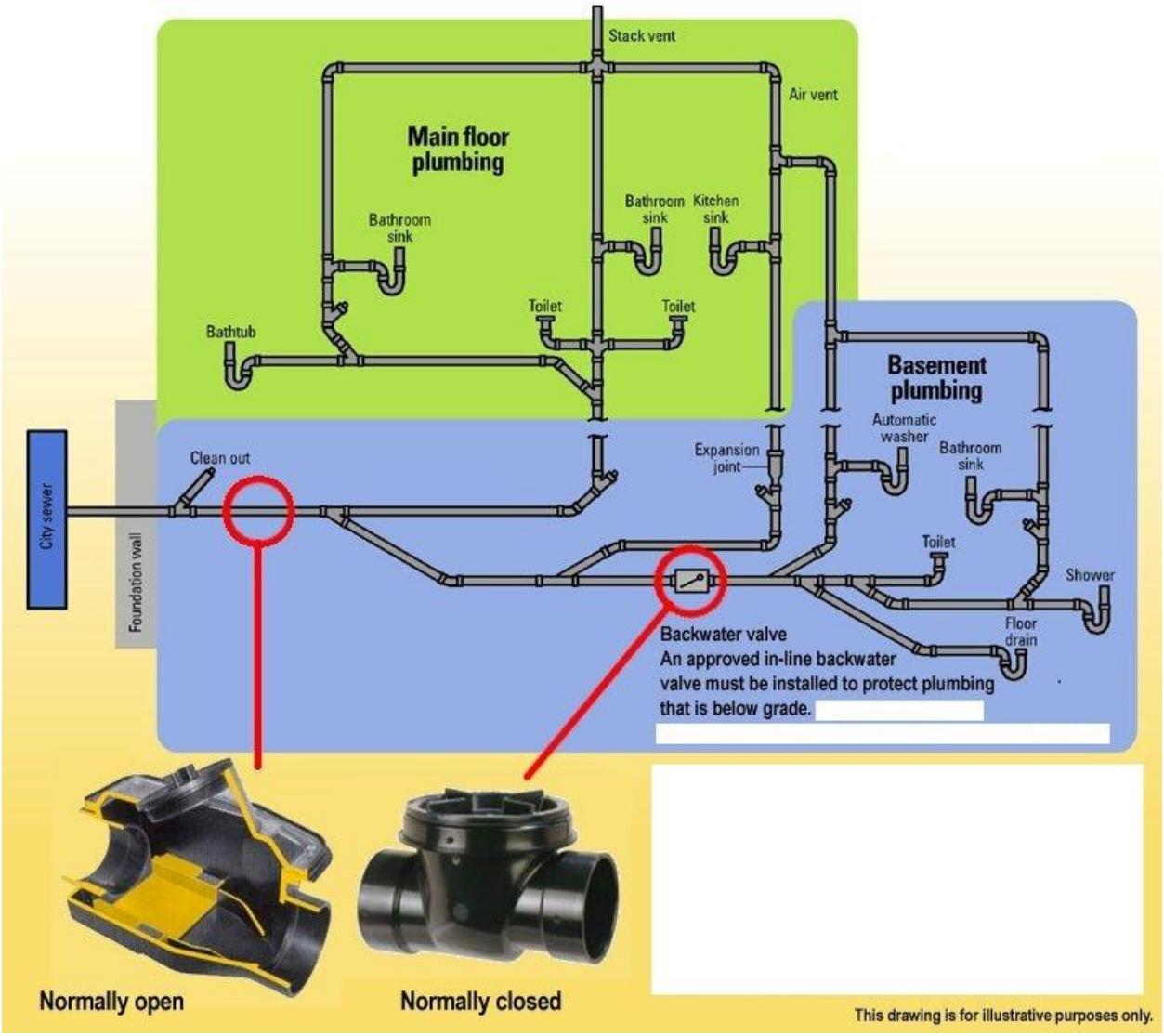
(1)- (2) Walls and Floors: Use cleanable moisture resistance material or materials easy to dispose and restore.

(3) Relocate Electric Panel or use alternative solution (a): mount a service disconnect SWITCH on the outside of the home or garage.

(4) Install a backflow prevention device.

Service Disconnect SWITCH, located outside the house or garage.

Typical household backwater valve installations



Flood Mitigation Permit Form

Disaster Recovery Program

1-866-825-4455

PLEASE PRINT

Project Location	
Project Address	Municipality

Applicant/Owner Information		
Owner Name	Contact Person	Phone
Address (if different than Project Address)		Fax
DRP Reference Number		

Permit Information			
Building	Contractor Name	Building Permit Number	
		Issuer signature (or attach permit copy)	
	Basement Penetrations Sealed	☐ Yes ☐ No ☐ NA (if NA explain)	
	Basement materials Acceptable	☐ Yes ☐ No ☐ NA (if NA explain)	
Building Certified Compliant		SCO Signature	Date
Electrical	Contractor Name	Electrical Permit Number	
		Issuer signature (or attach permit copy)	
	Disconnect or panel above grade	☐ Yes ☐ No ☐ NA (if NA explain)	
	Basement circuits isolated	☐ Yes ☐ No ☐ NA (if NA explain)	
Electrical Certified Compliant		SCO Signature	Date
Plumbing	Contractor Name	Plumbing Permit Number	
		Issuer signature (or attach permit copy)	
	Back Water protection in place	☐ Yes ☐ No ☐ NA (if NA explain)	
Plumbing Certified Compliant		SCO Signature	Date

Project Information		
Applicant's Declaration, I certify that information provided above and/or submitted with this application is true and correct.		
Please Print Name	Signature	
Address	Phone Number	Date

BUILDING CODE BULLETIN

STANDATA

September 20, 2013

DISASTER RECOVERY PROGRAM
FLOOD MITIGATION MEASURES FOR HOMES BEING REBUILT

PURPOSE

To outline the flood mitigation measures required for Disaster Recovery Program (DRP) funding for residences and small business irreparably damaged and located in the flood fringe.

DISCUSSION

There are several strategies that may be employed for flood loss prevention. The best solution to avoid flooding is to build in areas that are outside of the predicted flood hazard area. Where this strategy is not possible or practical, a strategy for “flood protection” may be employed involving the construction of levees, dikes or floodwalls. These “flood protection” measures reduce the potential for flooding but do not eliminate it, as the measures may fail due to flooding beyond predicted levels or other unanticipated causes.

Another strategy known as “high and dry” may also be considered. “High and dry” involves elevating the site to ensure the building and outdoor equipment is above the predicted flood level, which in Alberta is the 1-in-100 year flood level. One of the drawbacks of the “high and dry” strategy is that it can be expensive and not always practical to apply. Site elevation is often a better solution at the community planning stage to avoid creating issues such as surface drainage to adjacent properties at a lower level.

“Wet-flood mitigation” is a commonly used strategy based on the assumption that water will enter the building. The objective is to minimize moisture damage and allow for rapid restoration of building material and equipment. Municipal Affairs published "Disaster Recovery Program Flood Mitigation Measures," on August 15, 2013 (STANDATA Information Bulletin 06-BCB-009R1) which set out the minimum “wet-flood mitigation” measures for owners of homes and small business to be eligible for DRP funding. These measures involved minimizing moisture damage in the basement, safe means to cut and restore power, sealing penetrations and backflow prevention for plumbing.

ENHANCED FLOOD MITIGATION MEASURES FOR REBUILDS

In cases where the building is irreparably damaged in the flood fringe, this STANDATA sets out conditions for owners to be eligible for DRP funding. Owners will be required to reconstruct to these measures only to the extent reasonably possible in cases where reconstruction is in progress. These measures are consistent with the recognized disaster recovery mitigation measures under the Government of Canada’s Disaster Financial Assistance Arrangements (DFFA) Guidelines and the U.S. Federal Emergency Management Agency (FEMA).

Issue of this STANDATA is authorized by
the Chief Administrators in Building, Electrical and
Plumbing and Gas.

Alberta Government

SAFETY CODES COUNCIL

Alberta Municipal Affairs – Safety Services, 16th Floor, 10155-102 Street, Edmonton, Alberta, Canada, T5J 4L4
Safety Codes Council, Suite 1000, 10665 Jasper Avenue, Edmonton, Alberta, Canada, T5J 3S9

All flood mitigation measures are to be included under one flood mitigation permit form (see attached form) issued by the DRP and verified by a safety codes officer employed by the municipality or an accredited agency. The municipality or accredited agency will include all measures under the flood mitigation permit form and issue permits and perform inspections by the appropriate safety codes officers. The flood mitigation permit form verifies compliance with flood mitigation measures when signed and dated by a safety codes officer.

Municipalities may have requirements for flood mitigation and reconstruction under local bylaws. Owners are required to be in compliance with local bylaw requirements as this STANDATA sets out conditions for DRP funding eligibility only. Questions regarding DRP funding for flood mitigation required by your municipality should be addressed to the DRP office at Alberta Emergency Management Agency at 1-866-825-4455. DRP has established policy for dealing with municipal bylaws that are above the standards (Minimum Individual Mitigation Measures and Required Mitigation Measures for Rebuilding).

PROFESSIONAL INVOLVEMENT

Where deemed eligible for DRP funding by the Alberta Emergency Management Agency, building reconstruction that falls within the scope of this STANDATA — foundation and/or superstructure reconstruction — may require related design work to be carried out by a

1) Professional engineer/technologist licensed to engage in the practice of engineering under the Engineering and Geoscience Professions Act, or an
2) Architect licensed to engage in the practice of architecture under the Architects Act,

where the designer is suitably qualified for the area of work the reconstruction project entails. Professional involvement is required for assessment of foundations and structural safety and may be required for grading and complex design issues involving structural, mechanical, electrical construction. Consult with the building safety codes officer for your municipality to determine if professional involvement is required.

DESIGN MEASURES

The following table sets out the objectives for rebuilds that homeowners and small business owners must comply with to qualify for DRP funding. Designers may consider specific variations within these design measures, as is normally the case for standard design and construction to codes and standards under the Safety Codes Act. Design and construction is subject to the review and approval of the safety codes officer in that jurisdiction.

Recommended Design Measures for Building Reconstruction		
Design Measure	**Objective(s)**	**Design Considerations**
1. Furnaces above flood level	• To minimize flood-related damage by locating all primary and secondary heating systems above the design flood level.	• Furnaces need to be located above the predicted flood level and supported appropriately, whether located outside the residence, inside the building, on main floors or attic spaces (ensure manufacturer's installation instructions are addressed and environmental conditions that may relate to temperature and humidity). • Boilers shall be located above the design flood level in a serviceable location that meets the requirements of the manufacturer's installation instructions and the appropriate code.
2. Hot water heaters above flood level	• To minimize flood-related damage by locating all domestic hot water heating systems above the design flood level.	• Hot water tanks and instantaneous hot water heaters shall be located above the predicted flood level in a serviceable location that meets the requirements of the manufacturer's installation instructions and the appropriate code. • Elevated domestic hot water tanks may require additional protection for stability and protection from back siphonage.
3. Electrical service box/panelboards above flood level	• To minimize flood related damage and prevent electrical shock hazard.	• Service box located on the main floor or in garage if above the predicted flood level.
4. Isolating basement circuits	• To allow for power to be restored to remainder of building if basement has been flooded.	• Basement circuits limited to basement only.
5. Service disconnect above grade	• To allow for easy disconnect of power in an emergency. • To allow ability to safely re-energize without having to enter a flooded basement.	• New rule in the 2012 Canadian Electrical Code allows for an outdoor service disconnect. • Installing a service panel in the garage if one exists, and feeding the house as a sub-panel. Receptacles within the garage could supply power for restoration, while the house remains de-energized.
6. Installing weeping tiles on either the interior or exterior of the structure	• To minimize flood-related damage due to the infiltration of groundwater.	• Ensure that backflow protection is addressed as required by the National Plumbing Code for combination systems. • Contact local authorities to ensure termination of the sump of discharge meets local requirements.
7. Installing sump pumps on either the interior or exterior of the structure	• To minimize flood-related damage due to the build-up of groundwater.	• Ensure sump pumps are secured in place, protected from frost if necessary, supported with backflow protection and create no additional flood risk, plus ensure discharge to the surface terminates such that drainage away from the foundation is supported.
8. Securing propane tanks	• To prevent tank flotation by having all propane tanks properly secured, or installed above predicted flood level.	• Propane tanks need to be considered over the entire range of capacity from full to near empty conditions so that bracing/restraints can ensure security of the tank in any condition.

9. Using easily disposable or water-resistant building materials in basement	• To minimize flood-related damage to basement materials. • To allow for easier restoration of basement.	• Refer to STANDATA Building Code Bulletin 06-BCB-009R1, “Disaster Recovery Program Flood Mitigation Measures,” for guidance on materials.
10. Changing to exterior basement insulation	• To avoid need to restore or replace interior insulation in event of flooding.	• Compliance with the manufacturer’s installation instructions to ensure proper protection and water management capability of the exterior insulation. • In lieu of exterior insulation, insulate on the interior side but to 600 mm (2 ft.) below grade only.
11. Disconnecting downspouts and foundation drains from sewers	• To minimize the load on existing sanitary systems during extreme events such as flooding.	• Ensure no interconnection between weeping tile, sump drains, downspouts and foundation drains to sewer. • Combined sewers, require special attention to ensure overloading is minimized.
12. Installing protective plumbing such as backflow prevention valves.	• To minimize risk of exposure to sanitary sewage and storm water through backflow events during flooding.	• Backflow protection shall be provided for drainage piping that serves all fixtures below the level of the adjoining street. • Drainage systems shall be designed such that backflow prevention devices are sufficient for expected surge. This may require manual valves, plus normally opened, and normally closed backwater valves to ensure proper protection in the event of a flood. • Storm drainage system may require additional reinforcement to ensure stability under extreme backflow conditions. • Existing combined sewers need to be considered as sewers so that the storm system can be separated and discharged independently.
13. Limiting foundation openings	• To minimize seepage or flow of floodwater into basement through openings.	• Foundations must be able to withstand increased hydrostatic forces as a result of less flood water ingress into basement/deeper exterior floodwater. • Seal piping, wiring, conduit penetrations at basement walls. • More extensive sealing of penetrations such as windows and other exterior measures may have unintended consequences (i.e. the prevention of bedroom emergency window egress) • Elevation of foundation openings above design flood level, provided bedroom window egress is not undermined. • Basement window well design enhancement, i.e. improve drainage to footings, extension of window well walls above grade, or above predicted flood level where possible.

14. Elevating ventilation system	• To reduce likelihood of floodwater ingress into ventilation system.	• Locate ducts above the design flood level, or designed and constructed to prevent water from entering or accumulating within the ducts during floods up to the predicted flood level. • If the ducts are located below the predicted flood level, the ducts shall be capable of resisting hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of flooding to the predicted flood level. • If duct work must be installed below the design flood level, it should be minimized as much as possible (while remaining in compliance with the ventilation requirements of the ABC for living spaces). • Protected controls from flood inundation. • Protected exterior units from floodwater inundation, scour, and impact. • Protected exterior piping and wall penetrations below the design flood level from impact and water infiltration, i.e. outside air intake, dryer vent, combustion air/exhaust venting, etc.

General/Additional Design Considerations:

- In addition to the requirements set out in this STANDATA, all related requirements of codes and standards under the Safety Codes Act must be met.
- Appliances and equipment placed in unheated spaces or outside of the building rather than in main or upper levels of the building shall be protected for safe operation and efficiency.
- Frost protection shall be addressed on any portion of the system that is subject to freezing temperatures.
- Sump pit covers should be designed to remain closed and in place in the event of a flood (i.e. attached and hinged) and withstand bodyweight loads to limit the possibility of injury.
- Avoid storage within the furnace/service room to minimize obstructions in accessing building service controls following a flood.

[Original Signed]
Harry Li
Acting Chief Building Administrator

[Original Signed]
Sidney Manning
Chief Plumbing and Gas Administrator

[Original Signed]
Clarence Cormier
Chief Electrical Administrator

Flood Mitigation Permit Form

Disaster Recovery Program

1-866-825-4455

PLEASE PRINT

Project Location	
Project Address	Municipality

Applicant/Owner Information		
Owner Name	Contact Person	Phone
Address (if different than Project Address)		Fax
DRP Reference Number		

Permit Information			
Building	Contractor Name	Building Permit Number	
		Issuer signature (or attach permit copy)	
	Furnaces above flood level	☐ Yes ☐ No ☐ NA (if NA explain)	
	Basement materials acceptable	☐ Yes ☐ No ☐ NA (if NA explain)	
	Elevating ventilation system	☐ Yes ☐ No ☐ NA (if NA explain)	
	Limiting foundation openings & penetration sealing	☐ Yes ☐ No ☐ NA (if NA explain)	
	Basement insulation installation	☐ Yes ☐ No ☐ NA (if NA explain)	
Building Verified Compliant		SCO Signature	Date
Electrical	Contractor Name	Electrical Permit Number	
		Issuer signature (or attach permit copy)	
	Electrical service box above flood level	☐ Yes ☐ No ☐ NA (if NA explain)	
	Basement circuits isolated	☐ Yes ☐ No ☐ NA (if NA explain)	
	Service disconnect above flood level	☐ Yes ☐ No ☐ NA (if NA explain)	
	Panels above flood level	☐ Yes ☐ No ☐ NA (if NA explain)	

…/2

Electrical Verified Compliant		SCO Signature	Date
Plumbing	Contractor Name	Plumbing Permit Number	
		Issuer signature (or attach permit copy)	
	Hot water heaters above flood level	☐ Yes ☐ No ☐ NA (if NA explain)	
	Back Water protection in place	☐ Yes ☐ No ☐ NA (if NA explain)	
	Securing propane tanks	☐ Yes ☐ No ☐ NA (if NA explain)	
	Disconnecting downspouts & foundation drains from sewers	☐ Yes ☐ No ☐ NA (if NA explain)	
	Weeping Tile	☐ Yes ☐ No ☐ NA (if NA explain)	
	Sump Pump	☐ Yes ☐ No ☐ NA (if NA explain)	
Plumbing Verified Compliant		SCO Signature	Date

Project Information

Applicant's Declaration, I certify that information provided above and/or submitted with this application is true and correct.

Please Print Name	Signature	
Address	Phone Number	Date

BUILDING CODE VARIANCE

STANDATA

October 2017

INTERCONNECTED SMOKE ALARMS

PURPOSE

To provide an alternative solution to the requirement for interconnecting smoke alarms by wire under the Alberta Building Code (ABC) 2014.

DISCUSSION

Smoke alarms and their installation in new dwellings must conform to the requirements of the ABC 2014. Smoke alarms shall conform to the CAN/ULC-S531, “Smoke-Alarms” manufacturing standard and be installed to CAN/ULC-S553, “Installation of Smoke-Alarms.” Under the ABC 2014, all required smoke alarms shall be interconnected.

Under the ABC 2014, smoke alarms must be provided with power from a hardwired source and provided with a battery back-up. To satisfy the requirement for interconnected smoke alarms, historically the only option available to industry had been to connect the smoke alarms by hard wiring. Certified smoke alarms that utilise wireless interconnection technology have been available for some time, but were prevented from installation because of the common understanding that the ABC prohibited wireless technology for this purpose.

The intent of the requirement for interconnected smoke alarms in the ABC 2014 is to limit the probability that persons in one part of the dwelling unit or any part of the house with a secondary suite will not be promptly notified of a fire in another part of the dwelling unit, or any part of the house with a secondary suite. Sentence 3.2.4.21.(9) of the ABC 2014 includes the wording that “if more than one smoke alarm is required in a dwelling unit, the smoke alarms shall be wired so that the actuation of one smoke alarm will cause all smoke alarms within the dwelling unit to sound.” The actuation of one smoke alarm that will cause all smoke alarms to sound may be achieved by wired or wireless systems using certified equipment. Hardwiring between smoke alarms was the industry method available during the original code development.

Under CAN/ULC-S553, “Installation of Smoke-Alarms” standard, interconnected smoke alarms are “installed to operate in combination with other *smoke-alarms* to provide common signalling on all smoke-alarms such that activation of one *smoke-alarm* will cause all connected *smoke-alarms* to sound.” While the referenced standard is subordinate to the requirements of the ABC 2014, the wording of the standard is further evidence for interpreting the meaning of the words “shall be wired” under the ABC 2014 to mean “shall be connected”.

CODE REFERENCES

Sentence 3.2.4.21.(9) states:

3.2.4.21. Smoke Alarms

9) If more than one *smoke alarm* is required in a *dwelling unit*, the *smoke alarms* shall be wired so that the actuation of one *smoke alarm* will cause all *smoke alarms* within the *dwelling unit* to sound.

Unless stated otherwise, all Code references in this STANDATA are to Division B of the Alberta Building Code 2014.

Issue of this STANDATA is authorized by the Building Administrator

[Original Signed]
Paul Chang

Alberta Government

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Sentences 9.10.19.5.(1)(2) states:

9.10.19.5. Interconnection of Smoke Alarms

1) Except as permitted in Sentence (3), where more than one *smoke alarm* is required in a *dwelling unit*, the *smoke alarms* shall be wired so that the activation of one alarm will cause all alarms within the *dwelling unit* to sound.

2) *Smoke alarms* in a house with a *secondary suite* shall be wired so that the activation of any one *smoke alarm* causes all *smoke alarms* within the house with a *secondary suite* to sound.

Sentence 9.10.19.4.(1) states:

9.10.19.4. Power Supply

1) Except as provided in Sentences (2) and (3), *smoke alarms* described in Sentence 9.10.19.1.(1) shall

a) be installed with permanent connections to an electrical circuit (see A-3.2.4.21.(6)(a) in Appendix A),

b) have no disconnect switch between the overcurrent device and the *smoke alarm*, and

c) in case the regular power supply to the *smoke alarm* is interrupted, be provided with a battery as an alternative power source that can continue to provide power to the *smoke alarm* for a period of no less than 7 days in the normal condition, followed by 4 minutes of alarm.

CAN/ULC-S553-02 Installation of Smoke-Alarms states:

INTERCONNECTED - Installed to operate in combination with other *smoke-alarms* to provide common signalling on all smoke-alarms such that activation of one *smoke-alarm* will cause all connected *smoke-alarms* to sound.

APPLICATION

This Variance applies where smoke alarms are required to be interconnected under the ABC 2014, so that the actuation of one smoke alarm will cause all interconnected smoke alarms within the dwelling unit or any part of a house with a secondary suite to sound.

VARIANCE

This variance, which can be applied to new and existing buildings, provides approximately equivalent or greater safety performance with respect to persons and property as that provided for by the Safety Codes Act, the ABC 2014 and the AFC 2014.

A smoke alarm that is certified in conformance with CAN/ULC-S531, “Smoke-Alarms” and uses a wireless interconnection system is an acceptable alternative solution to the interconnection requirements of Sentence 3.2.4.21.(9) and Sentences 9.10.19.5.(1) and (2) in the ABC 2014.

This Variance is applicable throughout the province of Alberta.

BUILDING / FIRE CODE VARIANCE

STANDATA

October 2017

DOOR RELEASE HARDWARE

PURPOSE

To provide an alternative solution to limit the probability of residents in treatment and care occupancies with safety restrictions exiting a building or supervised area and exposing themselves or others to undue risks.

DISCUSSION

Residents in treatment and care occupancies, with memory related condition or disorders may be subject to harm by wandering away from supervised areas without staff being aware that the resident has exited the supervised floor area or building. Often the resident will leave through an emergency exit. If the door is not alarmed then staff are unaware the patient has left the area or the building. If the door is alarmed then the fire alarm system is set off causing an automatic signal to the local fire department resulting in costly nuisance alarms. Currently systems are being installed which may be unsafe and non-compliant that restrict egress and create a risk to life safety.

The Alberta Building Code 2014 (ABC 2014) has allowances for using electromagnetic locks on exit doors provided that these locks release within 15 seconds of actuation. These provisions have also been applied to existing buildings whose operation and modification are regulated by the Alberta Fire Code 2014 (AFC 2014).

The National Building Code of Canada 2015 (NBC 2015) includes a new Sentence 3.4.6.16.(5) with specific conditions related to using electromagnetic locking devices in Treatment-Group B, Division 2 (B2) and Care-Group B, Division 3 (B3) occupancies. Transparent boxes that set off an audible signal when opened can be installed to cover the manual stations. Also, one optional additional release device (e.g. swipe card device, key pad) can be installed to facilitate the free movement of staff and visitors in the building without setting off the alarm system from the electromagnetic locks.

CODE REFERENCES

ABC 2014 Sentence 3.4.6.16.(1) Door Release Hardware states:

> 1) Except for devices on doors serving a *contained use area* or an *impeded egress zone* designed to be remotely released in conformance with Article 3.3.1.13., and except as permitted by Sentence (4) and Article 3.4.6.17., locking, latching and other fastening devices on a principal entrance door to a *building* as well as on every *exit* door shall permit the door to be readily opened from the inside with not more than one releasing operation and without requiring keys, special devices or specialized knowledge of the door opening mechanism. (See Appendix A.)

Unless stated otherwise, all Code references in this STANDATA are to Division B of the Alberta Building Code 2014.

Issue of this STANDATA is authorized by the Building and Fire Administrators

[Original Signed] Paul Chang

[Original Signed] Kevan D. Jess

Alberta Government

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ABC 2014 Sentence 3.2.4.8.(4) Signals to Fire Department states:

4) Notification of the fire department, as required by Sentences (1), (2) and (3), shall be provided in conformance with CAN/ULC-S561, “Installation and Services for Fire Signal Receiving Centres and Systems.” (See Appendix A.)

NBC 2015, Sentence 3.4.6.16.(5) Door Release Hardware states:

5) Electromagnetic locks that do not incorporate latches, pins or other similar devices to keep the door in the closed position are permitted to be installed on doors in Group B, Division 2 and Division 3 occupancies, provided
a) the building is
   i) equipped with a fire alarm system, and
   ii) sprinklered,
b) the electromagnetic lock releases upon
   i) actuation of the alarm signal from the building’s fire alarm system,
   ii) loss of its power supply and of power to its auxiliary controls,
   iii) actuation of a manually operated switch that is readily accessible at a constantly attended location within the locked space, and
   iv) actuation of the manual station installed within 0.5 m of each door and equipped with an auxiliary contact, which directly releases the electromagnetic lock,
c) upon release, the electromagnetic lock requires manual resetting by actuation of the switch referred to in Subclause (b)(iii),
d) a legible sign with the words “EMERGENCY EXIT UNLOCKED BY FIRE ALARM” written in letters at least 25 mm high with a stroke at least 5 mm wide is permanently mounted on the door,
e) the operation of any by-pass switch, where provided for testing of the fire alarm system, sets off an audible signal and a visual signal at the fire alarm annunciator panel and at the monitoring station referred to in Sentence 3.2.4.7.(4), and
f) emergency lighting is provided at the doors.
(See Note A-3.4.6.16.(5).)

A-3.4.6.16.(5) Electromagnetic Locks in Care and Treatment Occupancies. The installation of electromagnetic locks in care and treatment occupancies requires special provisions to address the compromised condition of residents and the nature of daily operations. Accordingly, to reduce the incidence of false operation by residents, transparent boxes that set off an audible signal when opened can be installed to cover the manual stations. Also, one optional additional release device (e.g. swipe card device, key pad) can be installed to facilitate the free movement of staff and visitors in the building.

APPLICATION

This Variance applies to doors in Group B, Division 2 and Division 3 occupancies.

VARIANCE

This variance, which can be applied to new and existing buildings, provides approximately equivalent or greater safety performance with respect to persons and property as that provided for by the Safety Codes Act, the ABC 2014 and the AFC 2014.

1. Electromagnetic locks that do not incorporate latches, pins or other similar devices to keep the door in the closed position are permitted to be installed on doors in Group B, Division 2 and Division 3 occupancies, provided
   a) the building is

i) equipped with a fire alarm system, and
ii) sprinklered,

b) the electromagnetic lock releases upon
i) actuation of the alarm signal from the building's fire alarm system,
ii) loss of its power supply and of power to its auxiliary controls,
iii) actuation of a manually operated switch that is readily accessible at a constantly attended location within the locked space, and
iv) actuation of the manual station installed within 0.5 m of each door and equipped with an auxiliary contact, which directly releases the electromagnetic lock, (these manual stations may be covered with a transparent box that sets off an audible signal when opened).

c) upon release, the electromagnetic lock requires manual resetting by actuation of the switch referred to in Subclause (b)(iii),

d) a legible sign with the words "EMERGENCY EXIT UNLOCKED BY FIRE ALARM" written in letters at least 25 mm high with a stroke at least 5 mm wide is permanently mounted on the door,

e) the operation of any by-pass switch, where provided for testing of the fire alarm system, sets off an audible signal and a visual signal at the fire alarm annunciator panel and at the monitoring station referred to in Sentence 3.2.4.8.(4) of ABC 2014, and

f) emergency lighting is provided at the doors.

2. One optional additional release device (e.g. swipe card device, key pad) can be installed to facilitate the free movement of staff and visitors in the building.

This VARIANCE is applicable throughout the province of Alberta.

FIRE ALARM AND FIRE SUPPRESSION SYSTEM VERIFICATION AND TESTING CERTIFICATES

PURPOSE

This STANDATA has been developed to give municipalities and agencies guidance regarding the requirement for fire alarm and fire suppression systems to be tested after installation.

DISCUSSION

The Alberta Building Code 2014 (ABC 2014) directs that fire alarm and fire suppression systems are to be tested or verified after installation. However, there is no guidance within the ABC 2014 as to how the person or company performing the verification is to inform the authority having jurisdiction (AHJ) about the results of the tests.

This interpretation applies to all fire suppression systems that are installed in buildings, including, but not limited to:

1. fire suppression systems for entire buildings or floor areas within buildings,
2. fire suppression systems protecting commercial cooking ventilation systems, and
3. fire suppression systems protecting spray rooms, spray booths and spray areas for flammable and combustible material spray operations.

CODE REFERENCES

FIRE ALARM SYSTEMS

1. Sentence 3.2.4.5.(2) states:

> **2)** Fire alarm systems shall be verified in conformance with CAN/ULC-S537, "Verification of Fire Alarm Systems," to ensure they are operating satisfactorily.

2. Sentence 2.4.2.4.(1) of Division C states:

> **1)** If a fire alarm system is to be installed in a *building* described in Sentence 2.4.2.1.(4) or (5), the *owner* shall submit evidence to the *authority having jurisdiction*, before construction begins, that they have retained a *registered engineering professional* to
>
> a) design the system,
>
> b) perform *field reviews* of the system during installation, and
>
> c) perform verification of the system after installation.

Issue of this STANDATA is authorized by the
Provincial Building Administrator

[Original Signed]
Paul Chang

Alberta Government

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ULC STANDARD

1. The preface to CAN/ULC-S537, "Verification of Fire Alarm Systems" states:

> The requirements of this Standard contemplates that the verification procedure described herein will be conducted by an organization other than the installing contractor and designer, and that the verification will be carried out by qualified personnel in the employ of an organization acceptable to the authority having jurisdiction.

The preface to the ULC standard states that the installing contractor and the designer should not be involved in the verification of the system. The ABC 2014 is more specific in this area. Where professional involvement is required for all aspects of the building, the registered engineering professional will be involved in both the design and verification of the system, as specified in Sentence 2.4.2.4.(1) of Division C of the ABC 2014. Only in those buildings where professional involvement is not required for the entire building would the above preface to CAN/ULC-S537 be applicable.

FIRE SUPPRESSION SYSTEMS

1. Sentence 3.2.5.12.(1) to (2) states:

> **1)** Except as permitted by Sentences (2), (3) and (4), an automatic sprinkler system shall be designed, constructed, installed and tested in conformance with NFPA 13, "Installation of Sprinkler Systems." (See Appendix A.)
>
> **2)** Except as provided in Sentences (10) and (11), NFPA 13R, "Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height," is permitted to be used for the design, construction and installation of an automatic sprinkler system installed
>
> a) in a *building* of *residential occupancy* throughout that
>
> i) is not more than 4 *storeys* in *building height* and conforms to one of Articles 3.2.2.47. to 3.2.2.54., or
>
> ii) is not more than 3 *storeys* in *building height* and conforms to Article 9.10.1.3., or
>
> b) in a *building* of *care occupancy* with not more than 10 occupants that is not more than 3 *storeys* in *building height* and conforms to one of Articles 3.2.2.42. to 3.2.2.46.

2. Sentence 2.4.2.3.(1) of Division C states:

> **1)** If an automatic fire suppression system is to be installed in a *building* described in Sentence 2.4.2.1.(4) or (5), the *owner* shall submit evidence to the *authority having jurisdiction*, before construction begins, that they have retained a *registered engineering professional* to
>
> a) design the system,
>
> b) perform *field reviews* of the system during installation, and
>
> c) witness the testing of the system after installation.

NFPA Standards

1. Article 10.2.6 of NFPA 96, "Ventilation Control and Fire Protection of Commercial Cooking Operations" states:

> **10.2.6** Automatic fire-extinguishing systems shall be installed in accordance with the terms of their listing, the manufacturer's instructions, and the following standards where applicable.
> (1) NFPA 12
> (2) NFPA 13
> (3) NFPA 17
> (4) NFPA 17A.

2. Article 9.1.1 of NFPA 33, "Spray Application Using Flammable or Combustible Materials" states:

> **9.1.1** The automatic fire protection system shall be permitted to be, and shall be installed in accordance with, any of the following:
> (1) An automatic water sprinkler system that meets all applicable requirements of NFPA 13, Standard for the Installation of Sprinkler Systems
> (2) An automatic foam water sprinkler system that meets all applicable requirements of NFPA 16, Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems
> (3) A carbon dioxide extinguishing system that meets all applicable requirements of NFPA 12, Standard on Carbon Dioxide Extinguishing Systems
> (4) A dry chemical extinguishing system that meets all applicable requirements of NFPA 17, Standard for Dry Chemical Extinguishing Systems
> (5) A gaseous agent extinguishing system that meets all applicable requirements of NFPA 2001, Standard on Clean Agent Fire Extinguishing Systems

INTERPRETATION

1. CAN/ULC-S537 and all of the NFPA standards that apply to fire suppression systems contain requirements for performing testing and/or verification of the systems after installation is complete and before the systems are put into operation.

   In order to satisfy the AHJ that the testing and verification of the fire alarm and/or fire suppression system has been performed according to the relevant standards, the person or company responsible for the verification should provide documentation to the AHJ in the form set out in Appendix A and B of this STANDATA. The documentation provided should contain the following information:
   a. the name of the person or company performing the test or verification,
   b. the name of the building owner or designer/design engineer for whom the test or verification is being done,
   c. the name of the designer,
   d. the name of the contractor who installed the system,
   e. the name of the contractor who updated the drawings and specifications to 'as-built' status,
   f. the address of the building where the system is installed,
   g. the date of installation of the system,
   h. the date on which the system was tested or verified,
   i. the codes and standards to which the system was tested or verified,
   j. the signature of the person responsible for the verification, and
   k. the professional's seal if required (see items 2 and 3 below).

In addition to the requirements listed above and set out in Appendices A and B, the various NFPA standards and CAN/ULC-S537 contain document templates for reporting on the testing and verification of fire alarm and fire suppression systems.

2. For buildings that are required by Article 2.4.2.1. of Division C to be designed and to have construction reviewed by *Registered Architectural Professionals* **and/or** *Registered Engineering Professionals*, the following conditions should be met:
   a. the verification of the fire alarm system and the required documentation of that verification must be completed under the direction of a *Registered Engineering Professional* who, through training and experience, is familiar with the installation and functional requirements of fire alarm systems,
   b. once the verification of the fire alarm system is complete, **the Certificate of Verification (see Appendix A) is to be sealed by the *Registered Engineering Professional* assuming responsibility for the verification,**
   c. the test of the fire suppression system and the required documentation of that test must be completed under the direction of a *Registered Engineering Professional* who, through training and experience, is familiar with the installation and functional requirements of fire suppression systems, and
   d. once the test of the fire suppression system is complete, **the Certificate of Verification (see Appendix B) is to be sealed by the *Registered Engineering Professional* assuming responsibility for the test.**

3. For buildings that are **not** required by Article 2.4.2.1. of Division C to be designed and to have construction reviewed by *Registered Architectural Professionals* or *Registered Engineering Professionals*, the following conditions should be met:
   a. the verification of the fire alarm system and the required documentation of that verification should be completed under the direction of
      i. the person responsible for the design and/or construction review who, through training and experience, is familiar with the installation and functional requirements of fire alarm systems, or
      ii. an independent third party who, through training and experience, is familiar with the installation and functional requirements of fire alarm systems,
   b. once the verification of the fire alarm system is complete, **the Certificate of Verification (see Appendix A) should be signed by the person assuming responsibility for the verification,**
   c. the test of the fire suppression system and the required documentation of that test should be completed under the direction of
      i. the person responsible for the design and/or construction review who, through training and experience, is familiar with the installation and functional requirements of fire suppression systems, or
      ii. an independent third party who, through training and experience, is familiar with the installation and functional requirements of fire suppression systems, and
   d. once the test of the fire suppression system is complete, **the Certificate of Verification (see Appendix B) should be signed by the person assuming responsibility for the verification.**

This INTERPRETATION is applicable throughout the province of Alberta.

APPENDIX A

FIRE ALARM SYSTEM VERIFICATION

Note: This Appendix does not form a mandatory part of this STANDATA.
It should be modified as necessary to meet specific project requirements.

_____ on behalf of
Name of Company or Person Performing Verification

_____ has carried out an on-site verification of the Fire Alarm System installed at:
Name of Building Owner or Designer/Design-Registered Engineering Professional

_____
Address of Installation (City/Town)

This verification was carried out in accordance with CAN/ULC-S537, "Verification of Fire Alarm Systems," as required by Sentence 3.2.4.5.(2) of Division B of the Alberta Building Code 2014.

_____ hereby confirms that
Name of Company or Person Performing Verification

on _____, the Fire Alarm System as installed was reviewed for conformance with drawings and specifications originally prepared by:
Month/Day/Year

_____ and subsequently updated to "As-Built" status by: _____
Name of Designer *Name of Contractor*

The Fire Alarm System was tested on _____ and found to be fully operational in accordance with:
Month/Day/Year

1. The Alberta Building Code 2014,
2. CAN/ULC-S524-06, "Installation of Fire Alarm Systems," and
3. The Electrical Regulations made pursuant to the Safety Codes Act.

_____
Name of Company or Person Performing Verification

_____
Signature of Person Responsible for Verification

Note: Modifications of the Fire Alarm System after _____ will invalidate this Verification Certificate.
Month/Day/Year

Signature of Person Assuming Responsibility for Verification

APPENDIX B

FIRE SUPPRESSION SYSTEM TEST

Note: This Appendix does not form a mandatory part of this STANDATA.
It should be modified as necessary to meet specific project requirements.

_____ on behalf of
Name of Company or Person Performing Verification

_____ has carried out an on-
Name of Building Owner or Designer/Design -Registered Engineering Professional
site test of the Fire Suppression System installed at:

_____
Address of Installation (City/Town)

This test was carried out in accordance with the appropriate NFPA standard noted below, as required by Sentence 3.2.5.12.(1) of Division B of the Alberta Building Code 2014.

_____ hereby confirms that
Name of Company or Person Performing Verification

on _____, the Fire Suppression System as installed was reviewed for conformance with
Month/Day/Year
drawings and specifications originally prepared by:

_____ and subsequently
Name of Designer

updated to "As-Built" status by: _____
Name of Contractor

The Fire Suppression System was tested on _____ and found to be fully operational in
Month/Day/Year
accordance with:

1. The Alberta Building Code 2014, and
2. The appropriate NFPA standard indicated below (check only one):
   - ❑ NFPA 13-2013, "Installation of Sprinkler Systems,"
   - ❑ NFPA 13R-2010, "Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height,"
   - ❑ NFPA 12-2011, "Carbon Dioxide Extinguishing Systems,"
   - ❑ NFPA 16-2011, "Installation of Foam-Water Sprinkler and Foam-Water Spray Systems,"
   - ❑ NFPA 17-2009, "Dry Chemical Extinguishing Systems,"
   - ❑ NFPA 17A-2009, "Wet Chemical Extinguishing Systems,"
   - ❑ NFPA 96-2011, "Ventilation Control and Fire Protection of Commercial Cooking Operations."

_____ _____
Name of Company or Person Performing Test *Signature or Person Responsible for Test*

Note: Modifications of the Fire Suppression System after _____ will invalidate
Month/Day/Year
this Verification Certificate.

Signature of Person Assuming Responsibility for Test

Photoluminescent Exit Signs

PURPOSE

The purpose of this interpretation is to provide clarification regarding the required illumination of photoluminescent (PL) exit signs according to Articles 3.4.5.1. and 9.9.11.3. of the Alberta Building Code 2014 (ABC 2014).

DISCUSSION

The ABC 2014 permits the use of listed PL exit signs within the scope of both Part 3 and Part 9 under Clause 3.4.5.1.(3)(b) and Sentence 3.4.5.1.(4) and Clause 9.9.11.3.(3)(b) and Sentence 9.9.11.3.(4) respectively.

Objectives and Functional Statements are consistent throughout Articles 3.4.5.1. and 9.9.11.3.

The intent of Sentences 3.4.5.1.(5) and 9.9.11.3.(5) is to limit the probability that electrical circuits for the illumination of exit signs will not operate properly [e.g. due to normal power failure, or will fail or be disconnected due to deficiencies with other non-emergency electrical equipment]. Non operation of the exit signs may result in:

- the exit signs not being illuminated in an emergency situation,
- exit locations not being readily identified,
- delays in the evacuation or movement of persons to a safe place,
- harm to persons.

CAN/ULC-S572 “Photoluminescent and Self-Luminous Signs and Path Marking Systems” is the standard which covers requirements for PL exit signs.

CAN/ULC-S572:

Defined Terms:

PHOTOLUMINESCENT SYSTEM(S) - Having the property of emitting light that continues for a length of time after excitation by visible or invisible light has been removed.

SELF-LUMINOUS - Illuminated by a self-contained energy source other than a battery, such as radioactive tritium gas. Operation is independent of external power supplies or other external forms of energy.

Under normal power failure conditions a PL exit sign is no longer externally illuminated but conforms to Sentence 3.4.5.1.(3)(b) as the charged sign is not powered by an electrical circuit for illumination.

The charging light source for a photoluminescent exit sign shall not be connected to automatic timers. Under normal building power, continuous illumination of the exit sign is needed for compliance to Sentence 3.4.5.1.(4).

Issue of this STANDATA is authorized by
the Provincial Building Administrator

[Original Signed]
Paul Chang

Alberta Government

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Lighting for exit signs is exempt from certain requirements of the National Energy Code for Buildings 2011 (NECB 2011)

CODE REFERENCES

Article 3.4.5.1. Exit Signs states:

3) Internally illuminated *exit* signs shall be continuously illuminated and
a) where illumination of the sign is powered by an electrical circuit, be constructed in conformance with CSA C22.2 No. 141, "Emergency Lighting Equipment," or
b) where illumination of the sign is not powered by an electrical circuit, be constructed in conformance with CAN/ULC-S572, "Photoluminescent and Self-Luminous Signs and Path Marking Systems."
4) Externally illuminated *exit* signs shall be continuously illuminated and be constructed in conformance with CAN/ULC-S572, "Photoluminescent and Self-Luminous Signs and Path Marking Systems." (See Appendix A.)
5) The circuitry serving lighting for externally and internally illuminated *exit* signs shall
a) serve no equipment other than emergency equipment, and
b) be connected to an emergency power supply as described in Article 3.2.7.4.

Appendix Note:
A-3.4.5.1.(4) Externally Illuminated Signs. An external lighting source is required to properly charge photoluminescent signs. These types of signs must be lit in conformance with the charging requirements stated in CAN/ULC-S572.

NECB 2011 Division B:

4.2.1.4. Determination of the Installed Interior Lighting Power
1) Except as provided in Sentences (4) and (5), the installed interior lighting power shall include all power used by the luminaires, including lamps, ballasts, transformers, and control devices.
…..
4) Lighting for the following functions, spaces or equipment need not be included in the calculation of installed interior lighting power:
…..
k) exit signs, …

4.2.2.1. Automatic Lighting Shut-off Controls
(See Appendix A.)
1) Except as provided in Sentence (4), interior lighting in buildings shall be controlled with automatic control devices to shut off building lighting in all spaces.
…..
4) The requirements of Sentence (1) shall not apply to
a) lighting required round the clock due to operational requirements,
b) lighting in spaces where patient care is rendered, and
c) lighting in spaces where an automatic shut-off would endanger the safety or security of its occupants.

CAN/ULC-S572

PHOTOLUMINESCENT SYSTEM(S) - Having the property of emitting light that continues for a length of time after excitation by visible or invisible light has been removed.

INTERPRETATION

Charging lights for PL exit signs does not require connection to the emergency power supply as per Sentence 3.4.5.1.(5), or 9.9.11.3.(5), provided the following conditions are met:

1. Under normal building power conditions the PL exit signs are to be continuously illuminated [Sentences 3.4.5.1.(4), 9.9.11.3.(4)] and as required for charging the photoluminescent properties of the PL exit sign such that the PL exit sign will perform its function under a power failure situation.
2. The charging lights shall be on a separate circuit used only for the charging lights.
3. The control for the charging light shall only be accessible to authorized personnel to prevent interference with the equipment.
4. The charging light type and lux shall conform to the listing as required for the PL exit sign.
5. PL exit signs shall be installed in accordance to the listed installation instructions.
6. The PL exit sign shall be labelled in accordance with the time duration for which it has been tested and listed.

This INTERPRETATION is applicable throughout the province of Alberta.

VISUAL SIGNALS

PURPOSE

This interpretation is to clarify the intended locations for Visual Signal Devices under the Alberta Building Code 2014 (ABC 2014).

DISCUSSION

Safety codes officers and code users have raised issues with the lack of clarity as to the required number and location of visual signal devices. Situations have developed where visual signals are installed in locations that are not necessary for compliance or alternatively, visual signals are omitted from locations that are necessary for compliance and public safety. This interpretation is designed to provide a consistent application of the ABC 2014.

CODE REFERENCES

Article 3.2.4.5. states:

3.2.4.5. Installation and Verification of Fire Alarm Systems
1) Except as permitted by Articles 3.2.4.11. and 3.2.4.20., fire alarm systems, including the voice communication capability where provided, shall be installed in conformance with CAN/ULC-S524, “Installation of Fire Alarm Systems.”

Article 3.2.4.20. states:

3.2.4.20. Visual Signals
(See Appendix A.)
1) Visual signal devices shall be installed in addition to audible signal devices in *buildings* required to have a fire alarm system and shall conform to CAN/ULC-S526, “Visible Signal Devices for Fire Alarm Systems Including Accessories.”
2) Visual signal devices required by Sentence (1) shall be installed so that the signal from at least one device is visible within a *suite* in which they are installed.

Article 3.8.3.12. states:

3.8.3.12. Universal Toilet Rooms
1) A universal toilet room shall
a) be served by a *barrier-free* path of travel,
b) have a door capable of being locked from the inside and released from the outside in case of emergency and having
i) a latch-operating mechanism that is operable with a closed fist, located not less than 900 mm and not more than 1 000 mm above the floor,
ii) if it is an outward swinging door, a door pull not less than 140 mm long located on the inside so that its midpoint is not less than 200 mm and not more than 300 mm from the hinged side of the door and not less than 900 mm and not more than 1 000 mm above the floor (see A-3.8.3.8.(1)(b)(iv) in Appendix A), and

Issue of this STANDATA is authorized by
the Building Administrator

[Original Signed]
Paul Chang

Alberta Government

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iii) if it is an outward swinging door, a door closer, spring hinges or gravity hinges, so that the door closes automatically,

c) have one lavatory conforming to Article 3.8.3.11.,

d) have one water closet conforming to the requirements of Article 3.8.3.9. that has a clearance to the walls of

i) not less than 285 mm and not more than 305 mm on one side, and

ii) not less than 875 mm on the other side,

e) have grab bars conforming to Clause 3.8.3.8.(1)(d),

f) have no internal dimension between the walls that is less than 1 700 mm,

g) have a coat hook conforming to Clause 3.8.3.8.(1)(e) and a shelf located not more than 1 200 mm above the floor,

h) be designed to permit a wheelchair to back in alongside the water closet in the space referred to in Subclause (d)(ii), and

i) be designed to permit a wheelchair to turn in an open space not less than 1 500 mm in diameter.

APPLICATION

Sentence 3.2.4.20.(1) applies to all buildings with a fire alarm system.

Sentence 3.2.4.20.(2) applies to suites and also applies to residential suites.

INTERPRETATION

1) Where a fire alarm system is installed, visual signals shall be provided in addition to *alarm signals*

a) in *buildings* or portions thereof intended for use primarily by persons with a hearing impairment,

b) in *assembly occupancies* in which music and other sounds associated with performances could exceed 100 dBA,

c) in any *floor area* in which the ambient noise level is more than 87 dBA, and

d) in any *floor area* in which the occupants

i) use ear protection devices,

ii) are located in an audiometric booth, or

iii) are located in sound-insulating enclosures,

e) in *public corridors* serving a Group B, C, D or E *major occupancy*,

f) in corridors used by the public serving a Group A *major occupancy*,

g) in washrooms, except

i) those located within *suites* of *residential occupancy*,

ii) those located within *suites* of *care occupancy*,

iii) those located within patients' sleeping rooms, or

iv) single toilet rooms,

h) in universal toilet rooms (in accordance with Article 3.8.3.12), and

i) in a suite of residential occupancy; such that at least one device is located within the principal living area.

2) Visual signal devices required by Sentence (1) shall be installed so that the signal from at least one device is visible throughout the *floor area* or portion thereof in which they are installed.

3) The visual signal required by (i) shall be visible within the residential suite's principal living area (i.e. living room); which is intended for use by all occupants of the suite.

4) Installations shall conform to CAN/ULC-S524-06 "Installation of Fire Alarm Systems" including amendment 1 issued February 2011.

This INTERPRETATION is applicable throughout the province of Alberta.

Fire Code Interpretations

JOINT CODE INTERPRETATION

STANDATA

May 2018

Mobile/Temporary Cooking Equipment

PURPOSE

The purpose of this interpretation is to assist owners/operators of mobile cooking operations and safety codes officers with the minimum requirements under the *Safety Codes Act* for Mobile Cooking Operations (MCO).

DISCUSSION

Application of the Alberta Building Code

While a building means *any structure used or intended for supporting or sheltering any use or occupancy* and an MCO does support temporary occupancy or sheltering a use, an MCO is not purely a "building". An MCO is also a vehicle that may be parked or sited on a temporary basis and then moves to a different location. Describing an MCO as a building would be similar to describing a recreational vehicle as a building for use as a residential occupancy. If we accept that an MCO is a combination of uses as a vehicle and as a fixed shelter for temporary periods, then a selective application of the *Safety Codes Act* to MCOs is supported by the legislation.

This Interpretation has been jointly developed by Provincial Administrators for Fire, Building, Gas, Plumbing and Electrical disciplines at Alberta Municipal Affairs and the associated fire, building, gas, plumbing and electrical sub-councils of the Safety Codes Council.

APPLICATION OF INTERPRETATION UNDER THE *SAFETY CODES ACT*

There are specific provisions in the Alberta Building Code 2014 (ABC 2014) which apply to commercial cooking equipment used in an MCO that are also referenced in the Alberta Fire Code 2014 (AFC 2014) related to ventilation and fire suppression equipment.

Clause 1.1.1.1.(1)(m) of Division A of the ABC 2014 states:

> **Application of this Code**
> 1) This Code applies to any one or more of the following:
> m) the installation, replacement, or *alteration* of equipment regulated by this Code,

Article 6.2.2.7. of Division B of the ABC 2014 states:

> **Commercial Cooking Equipment**
> 1) Systems for the ventilation of commercial cooking equipment shall be designed, constructed and installed to conform to NFPA 96, "Ventilation Control and Fire Protection of Commercial Cooking Operations," except as required by Sentence 3.6.3.1.(1) and Article 3.6.4.2.
> 2) Fire protection systems for commercial cooking equipment referred to in Sentence (1) using vegetable oil or animal fat shall conform to
> a) ANSI/UL 300, "Fire Testing of Fire Extinguishing Systems for Protection of Commercial Cooking Equipment," or
> b) ULC/ORD-C1254.6, "Fire Testing of Restaurant Cooking Area Fire Extinguishing System Units."

Issue of this STANDATA is authorized by the Provincial Fire, Plumbing, Gas, Building and Electrical Administrators

Alberta Government

Ventilation, exhaust and suppression requirements for an MCO are within the scope of National Fire Protection Association (NFPA) 96, "Ventilation Control and Fire Protection of Commercial Cooking Operations" referenced in both the ABC 2014 and AFC 2014.

The 2011 edition of NFPA 96 states that "this document shall apply to":

> **4.1.9*** Cooking equipment used in fixed, mobile, or temporary concessions, such as trucks, buses, trailers, pavilions, tents, or any form of roofed enclosure, shall comply with this standard unless otherwise exempted by the authority having jurisdiction in accordance with 1.3.2 of this standard.
> (**1.3.2** The authority having jurisdiction shall determine compliance with this standard and authorize equivalent deviations from it in all applications.)
>
> ***A.4.1.9** The authority having jurisdiction can exempt temporary facilities, such as a tent, upon evaluation for compliance to the applicable portions of this standard.
> Although it might not be practical to enforce all requirements of this standard in temporary facilities, the authority having jurisdiction should determine that all necessary provisions that affect the personal safety of the occupants are considered.

The Authority Having Jurisdiction (AHJ) may also require additional building and fire code requirements related to fire protection and exhaust/ventilation systems. Examples of the application of the ABC 2014 to an MCO include but are not limited to:

- An MCO with an exhaust hood and fire suppression system is required where the production of smoke, heat and grease laden vapour occurs.
- An MCO with a ventilation system is not required to provide a make-up air system beyond provision of properly sized openable closures that are used for food service.
- An MCO is required to have a fan interlock ensuring that the exhaust fan can only operate when such closures have been opened.

For MCO's operating in or under a "tent" the tent shall conform to CAN/ULC S109 as per Article 3.1.6.5. of Division B of the ABC 2014 which states:

> **Flame Resistance**
> 1) Every tent and *air-supported structure* and all tarpaulins and decorative materials used in connection with these structures shall conform to CAN/ULC-S109, "Flame Tests of Flame-Resistant Fabrics and Films."

NOTE: NFPA has published the 2017 Edition of NFPA 96 "Ventilation Control and Fire Protection of Commercial Cooking Operations" and Annex B specifically speaks to Mobile Cooking Operations.

Application of the Alberta Fire Code

Article 2.6.1.9. of the AFC 2014 requires that commercial cooking ventilation and exhaust systems comply with the requirements of the ABC 2014. The ABC 2014 directs compliance with NFPA 96 for exhaust and fire suppression installations. Article 2.6.1.9. of the AFC 2014 also requires that the ventilation, exhaust and suppression systems be inspected and maintained in accordance with NFPA 96.

Article 2.6.1.9. of Division B of the AFC 2014 states:

> **2.6.1.9. Commercial Cooking Equipment**
> 1) Commercial cooking equipment exhaust and fire protection systems shall be designed and installed in conformance with the ABC.
> 2) Except as required in Sentences (3) to (5), the use, inspection and maintenance of

commercial cooking equipment exhaust and fire protection systems shall be in conformance with NFPA 96, “Ventilation Control and Fire Protection of Commercial Cooking Operations.”
3) Hoods, grease removal devices, fans, ducts, and other appurtenances shall be cleaned at frequent intervals to prevent surfaces from becoming heavily contaminated with grease or other residues. (See Appendix A.)
4) Flammable cleaning materials or solvents shall not be used for the cleaning of exhaust systems.
5) Instructions for manually operating the fire protection systems shall be posted conspicuously in the kitchen as part of the fire safety plan.
6) Commercial cooking equipment that is certified shall be installed and maintained in conformance with its certification.
7) Uncertified commercial cooking equipment shall be installed and maintained so as not to create a fire hazard.

NOTE: Uncertified gas (natural or propane) or electrical appliances are not acceptable for installation in an MCO.

Article 2.1.3.5. of Division B of the AFC 2014 states that the installation and maintenance requirements for a kitchen fire suppression system are in NFPA 17A, “Standard for Wet Chemical Extinguishing Systems”.

Article 2.1.3.5. of Division B of the AFC 2014 states:

2.1.3.5. Special Fire Suppression Systems
1) Where a special fire suppression system is required by this Code, the system shall conform to one of the standards *listed* in Sentences (3) and (4).
3) The design and installation of a special fire suppression system that is not water-based shall conform to one of the following standards:
f) NFPA 17A, “Wet Chemical Extinguishing Systems,”

The AFC 2014 also requires Portable Fire Extinguishers for an MCO in accordance with NFPA 10, “Portable Fire Extinguishers”.

Under the requirements of Sections 2.8. and 5.1. of the AFC 2014, the fire safety provisions for:

- the safe storage, use and location of gasoline for generators;
- generators to be cooled prior to refueling;
- the location of the MCO at least 3 metres from buildings and other MCOs; and
- the location of any generator 3 metres from a building and the MCO

are all items required under a fire safety plan.

The NFPA’s “**FIRE SAFETY TIPS FOR MOBILE COOKING OPERATIONS**” (attached to this Interpretation as Appendix “A”) provides a list of items for consideration in the fire safety plan to be developed by the owner/operator and submitted to the local fire department.

The AFC 2014 also requires the electrical and cooking fuel gas systems to comply and be maintained in accordance with the electrical and gas regulations adopted under the *Safety Codes Act.*

Fire Code Interpretation Standata FCI-14-02 provides additional information regarding the application of the AFC 2014 to kitchen exhaust systems and associated fire protection, at:

FCI-14-02 Fixed Fire Suppression & Exhaust Systems - Cooking

Application of the Electrical Code
The Electrical Code Regulation, section 2, prescribes the conditions for the use of equipment related to electrical systems and applies these requirements to the term “approved’ as referenced in the 2015 Canadian Electrical Code, Part 1 (2015 CE Code).

The scope of the 2015 CE Code covers the wiring, equipment, components and accessories of the appliances located and connected within and to a MCO. Electrical equipment must be certified and identified with acceptable markings, as per the Electrical Safety Information Bulletin at:

Section 2 - Electrical Systems Equipment LEG-ECR-2 [rev-25]

In addition, any electrical installation for an MCO shall comply with the requirements of the 2015 CE Code. The installation of wiring and the connection of electrical equipment are identified under the Permit Regulation as activities requiring electrical permits.

Application of the Gas Code
The Gas Code Regulation adopts CAN/CSA B149.1-15 “Natural Gas and Propane Installation Code”, CAN/CSA B149.2-15 “Propane Storage and Handling Code” and CAN/CSA B149.5-15 “Installation Code for Propane Fuel Systems and Tanks on Highway Vehicles”.

The scope of these regulations and codes covers all installation of appliances, equipment, components, and accessories where natural or propane gas is used for fuel purposes. Whenever the installation, extension, alteration or addition of a gas system occurs, compliance with the current code in force is required. Any natural gas and propane system installations in an MCO shall comply with the requirements of these regulations and codes and are identified under the Permit Regulation as activities requiring gas permits.

Application of the Plumbing Code
The Plumbing Code Regulation adopts the National Plumbing Code of Canada 2015. The scope of this code addresses any portion of a plumbing system installation that is not certified as part of a Recreational Vehicle or portable structure.

ADDITIONAL INFORMATION

In addition to the *Safety Codes Act*, MCOs are subject to other legislation (including regulations, codes, bylaws and other rules). The owner/operator is advised to contact:

- Each local municipality for any business licenses, permits, zoning and location approvals and restrictions.
- Environmental Public Health – Safe Food at Alberta Health Services for applicable licensing or inspection requirements. To contact a Public Health office for your local area, please access the following link:

http://www.albertahealthservices.ca/eph/eph.aspx

INTERPRETATION

Mobile Cooking Operations (MCO) and equipment, when stationary and used to produce, cook, sell and/or distribute food, support or intend to support an occupancy and subject to select application of the *Safety Codes Act* as set out in this Interpretation (Iincludes regulations made under this *Act* and any codes, standards or body of rules declared in force pursuant to this *Act*).

This Interpretation applies to all portable/temporary food-service and cooking equipment including but not limited to food truck, vending truck, chip truck, burger wagon, doughnut shack, mobile/portable food vending unit, hot dog cart and other MCO uses in Alberta. The MCO may utilize electricity, wood, charcoal, propane or natural gas as energy for cooking and may use either supplied or on-site generated electricity to power lights, fans and cooling equipment.

This INTERPRETATION is applicable throughout the province of Alberta.

Issue of this STANDATA is authorized by the following Administrators:

[Original Signed]
Tina Parker
Provincial Fire Administrator

[Original Signed]
Sidney Manning
Provincial Plumbing and Gas Administrator

[Original Signed]
Paul Chang
Provincial Building Administrator

[Original Signed]
Clarence Cormier
Provincial Electrical Administrator

FIRE SAFETY TIPS FOR MOBILE COOKING OPERATIONS

NFPA

General
- Does your jurisdiction require a license or permit to operate (e.g. local fire/health department)?
- Is cooking equipment attended at all times?
- Are all required ventilation openings open during cooking operations?
- Is the cooking hood/ventilation system free from grease?
- Is the vehicle parked at least 3 m from buildings, other vehicles, or combustibles?
- Is the vehicle parked so as not to block fire hydrants, fire lanes, fire department connections, exits, etc.?

Training
- Are employees trained in proper use of cooking equipment?
- Are employees trained in how to shut-off fuel sources (e.g. propane, generators)?
- Are employees trained in how to notify the local fire department in an emergency?
- Are employees trained in proper storage, handling and fueling procedures?
- Are employees trained in how to perform a leak test and when one is needed?
- Are workers trained in the proper use of portable fire extinguishers and hood extinguishing system?

Fire Protection

PORTABLE FIRE EXTINGUISHERS
- Are portable fire extinguishers charged, not obstructed, and in operating condition?
- Are portable fire extinguisher located near the cooking appliance, solid fuel storage, and any portable energy source (e.g. generator)?

Hood Fire Suppression System
- Is the hood fire suppression system charged and in operating condition?

Fuel and Power Sources

PROPANE
- Is the propane system inspected prior to use?
- Are the propane tanks secured in an upright position?
- Are the propane tanks within their hydrostatic test date?
- Is the propane system in good condition, (i.e. no leaks, rust)?
- Has the propane system been leak tested?
- Has a leak test been performed when a new tank is installed, or a modification to the system has been made?
- Is documentation available for any leak test?
- Is the main shut-off marked, in plain view and easily assessable?
- Is the fuel supply shut off when not in use and while in transit?
- On gas system piping, is a flexible connector installed between the regulator outlet and the fixed piping system?

ELECTRICAL
- Is the electrical system and other equipment in good working condition?
- Are extension cords in good condition?
- Is the electrical system, including extension cords in accordance with the electrical code?

GENERATORS
- Are generators placed at least 3 m from buildings, structures, vehicles and combustibles?
- Are generator exhausts directed away from mobile cooking vehicle, vehicles, buildings, structures, exits and openings?
- Are generators protected from contact by the public?
- Are fuel supplies properly stored?
- When refueling are the generators shut down, engine cooled and then refueled?

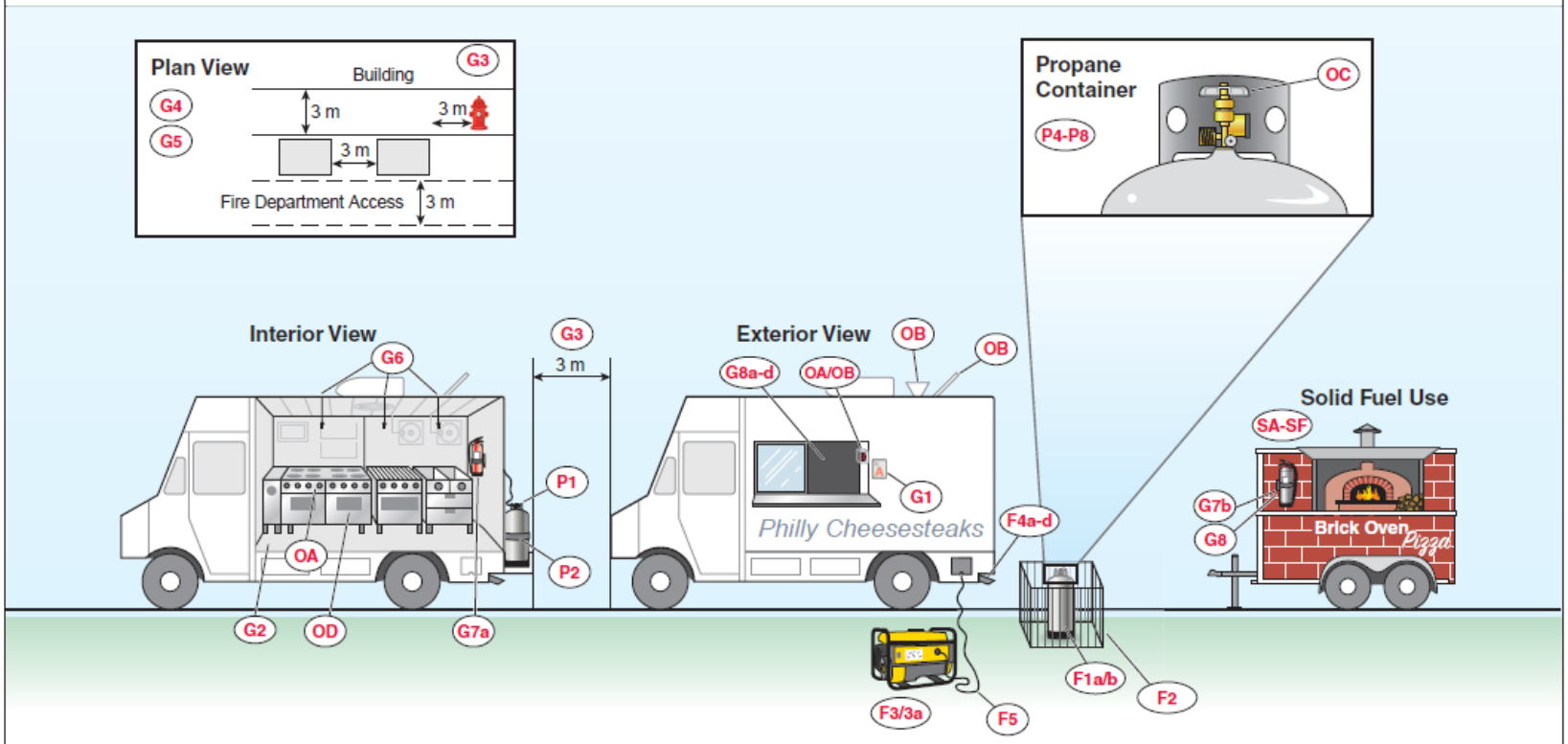
SOLID FUEL
- Is combustible solid fuel stored properly and away from combustibles or heat producing appliances?
- Are ashes, cinders, and other fire debris removed at the end of the day and stored in a proper container away from the vehicle, buildings and combustibles?

» NOTE: This Safety Sheet has been developed by the Ministry of Alberta Municipal Affairs, Community and Technical Support Division and is based on the "Fact Sheet for Food Truck Safety" created by the National Fire Protection Association ("NFPA"). The Ministry of Alberta Municipal Affairs is solely responsible for the content of this Sheet and therefore the NFPA takes no responsibility whatsoever for its contents and further the NFPA makes no warranty as to the accuracy or completeness of any information contained therein. This information is provided to help advance safety of mobile and temporary cooking operations. It is not intended to be a comprehensive list of requirements for mobile and temporary cooking operations. Check with the local jurisdiction for specific requirements. This safety sheet does not represent the official position of the NFPA or its Technical Committees. The NFPA disclaims liability for any personal injury, property, or other damages of any nature whatsoever resulting from the use of this information. For more information, go to nfpa.org/foodtrucksafety.

FOR MORE INFORMATION go to nfpa.org/foodtrucksafety

NFPA

FACT SHEET » Food Truck Safety



NFPA

NATIONAL FIRE PROTECTION ASSOCIATION

The leading information and knowledge resource on fire, electrical and related hazards

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FACT SHEET » Food Truck Safety *(continued)*

Code references are provided at the end of each item. The red keys correspond to the NFPA food truck safety diagram. For more detailed information, see Annex B in NFPA 96.

General Safety Checklist

- ❑ Obtain license or permits from the Local Authority Having Jurisdiction. [SCA] G1
- ❑ Ensure there is no public seating within the mobile food truck. G2
- ❑ Check that there is a clearance of at least 3 m away from buildings, structures, vehicles, and any combustible materials. [NFPA 96:7.8.2; 96:7.8.3 NOTE: Check with Local Authority Having Jurisdiction] G3
- ❑ Verify fire department vehicular access is provided for fire lanes and access roads. [AFC 2.5.1.5.] G4
- ❑ Ensure clearance is provided for the fire department to access fire hydrants and access fire department connections. [AFC 2.5.1.4.] G5
- ❑ Check that appliances using combustible media are protected by an approved fire extinguishing system. [NFPA 96:10.1.2, B149.2:4.15] G6
- ❑ Verify portable fire extinguishers have been selected and installed in kitchen cooking areas in accordance with NFPA 10. [AFC 2.1.5.1., & 6.2, NFPA 96:10.9.3] G7a
- ❑ Where solid fuel cooking appliance produce grease-laden vapors, make sure the appliances are protected by listed fire-extinguishing equipment. [ABC 6.2.2.7., NFPA 96:14.7.1] G7b
- ❑ Ensure that workers are trained in the following: [NFPA 96:B.15.1] G8
  - ❑ Proper use of portable fire extinguishers and extinguishing systems [NFPA 10:1.2] G8a
  - ❑ Proper method of shutting off fuel sources [NFPA 96:10.4.1] G8b
  - ❑ Proper procedure for notifying the local fire department [NFPA 1:10.14.9] G8c
  - ❑ Proper procedure for how to perform simple leak test on gas connections. [B149.1:4.4.2] G8d

Fuel & Power Sources Checklist

- ❑ Verify that fuel tanks are filled to the capacity needed for uninterrupted operation during normal operating hours. F1a
- ❑ Ensure that refueling is conducted only during non-operating hours. [NFPA 96:B.18.3] F1b
- ❑ Check that any engine-driven source of power is separated from the public by barriers, such as physical guards, fencing, or enclosures. [NFPA 96:B.16.2.2] F2
- ❑ Ensure that any engine-driven source of power is shut down prior to refueling from a portable container. F3
- ❑ Check that surfaces of engine-driven source of power are cool to the touch prior to refueling from a portable container. F3a
- ❑ Make sure that exhaust from engine-driven source of power complies with the following: F4
  - ❑ At least 3 m in all directions from openings and air intakes [NFPA 96:B.13] F4a
  - ❑ At least 3 m from every means of egress [NFPA 96:B.13] F4b
  - ❑ Directed away from all buildings F4c
  - ❑ Directed away from all other cooking vehicles and operations F4d
- ❑ Ensure that all electrical appliances, fixtures, equipment, and wiring complies with the Canadian Electrical Code. F5

Propane System Integrity Checklist

- ❑ Check that the main shutoff valve on all gas containers is readily accessible. [B149.5:5.3.5.6] P1
- ❑ Ensure that portable gas containers are in the upright position and secured to prevent tipping over. [B149.2:6.1.8 & 5.5] P2
- ❑ Inspect gas systems prior to each use. [NFPA 96:B.19.2.3] P3
- ❑ Perform leak testing on all new gas connections of the gas system. [B149.1:4.12.1 & 6.22.3] P4
- ❑ Perform leak testing on all gas connections affected by replacement of an exchangeable container. [B149.5:5.7.10.3] P5
- ❑ Document leak testing and make documentation available for review by the authorized official. [B149.5:Annex F] P6
- ❑ Ensure that on gas system piping, a flexible connector is installed between the regulator outlet and the fixed piping system. [B149.1:6.16.3] P7
- ❑ Where a gas detection system is installed, ensure that it has been tested in accordance with the manufacturer's instructions. [NFPA 96:B.19.2.1] P8

Operational Safety Checklist

- ❑ Do not leave cooking equipment unattended while it is still hot. (This is the leading cause of home structure fires and home fire injuries.) OA
- ❑ Operate cooking equipment only when all windows, service hatches, and ventilation sources are fully opened. [B149.1:4.25.6, NFPA 96:14.2.2 & 14.2.3] OB
- ❑ Close gas supply piping valves and gas container valves when equipment is not in use. [B149.2:5.12.5] OC
- ❑ Keep cooking equipment, including the cooking ventilation system, clean by regularly removing grease. [NFPA 96:11.4] OD

Solid Fuel Safety Checklist (Where Wood, Charcoal, or Other Solid Fuel is Used)

- ❑ Fuel is not stored above any heat-producing appliance or vent. [NFPA 96:14.9.2.2] SA
- ❑ Fuel is not stored closer than 0.92 m to any cooking appliance. [NFPA 96:14.9.2.2] SB
- ❑ Fuel is not stored near any combustible flammable liquids, ignition sources, chemicals, and food supplies and packaged goods. [NFPA 96:14.9.2.7] SC
- ❑ Fuel is not stored in the path of the ash removal or near removed ashes. [NFPA 96:14.9.2.4] SD
- ❑ Ash, cinders, and other fire debris should be removed from the firebox at regular intervals and at least once a day. [NFPA 96:14.9.3.6.1] SE
- ❑ Removed ashes, cinders, and other removed fire debris should be placed in a closed, metal container located at least 0.92 m from any cooking appliance. [NFPA 96:14.9.3.8] SF

Referenced Documents

- ❑ Safety Codes Act and its Regulations
- ❑ Alberta Building Code 2014
- ❑ Alberta Fire Code 2014
- ❑ CSA C22.1-15 Canadian Electrical Code
- ❑ CSA B149.1-15 Natural Gas and Propane Installation Code
- ❑ CSA B149.2-15 Propane Storage and Handling Code
- ❑ CSA B149.5-15 Installation Code for Propane Fuel Systems and Containers on Motor Vehicles
- ❑ NFPA 10 Standard for Portable Fire Extinguishers, 2010 Edition
- ❑ NFPA 96, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, 2017 Edition