

# Apprenticeship and Industry Training Act

## Electrician Trade Regulation

Alberta Regulation 274/2000  
Consolidated to November 3, 2006

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Apprenticeship and  
Industry Training

**ALBERTA REGULATION 274/2000**  
**as amended by Alta. Reg. 48/2003, 203/2003, 392/2003, 114/2004, 102/2006 and 270/2006**  
**Apprenticeship and Industry Training Act**  
**ELECTRICIAN TRADE REGULATION**

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Definitions

**1** In this Regulation,

- (a) “apprentice” means a person who is an apprentice in the trade;
- (b) “certified journeyman” means a certified journeyman as defined in the *Apprenticeship Program Regulation*;  
[Alta. Reg. 270/2006]
- (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*.

[Alta. Reg. 392/2003]

### **General Matters Respecting the Trade**

- |                                 |          |   |
|---------------------------------|----------|---|
| Constitution of the trade       | <b>2</b> | The undertakings that constitute the trade are the installation, alteration, repair, inspection, verification, commissioning, maintenance and operation of electrical systems.  |
| Tasks, activities and functions | <b>3</b> | <p>When practising or otherwise carrying out work in the trade, the following tasks, activities and functions come within the trade:</p> <ul style="list-style-type: none"> <li>(a) erecting, assembling, removing, repairing, replacing and using scaffolding, handling devices, hoists, slings, ropes, rigging equipment and related hardware;</li> <li>(b) using hand tools, power tools, testing equipment and specialty tools required by the trade;</li> <li>(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;</li> <li>(d) selecting and specifying location and planning layout of electrical systems, components and controls from drawings, specifications, contract documents and related information;</li> </ul> |

- (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 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 communication 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;
- (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 conductor, 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.

[Alta. Reg. 392/2003]

## **Apprenticeship**

- |                                    |          |  |
|------------------------------------|----------|--|
| Term of the apprenticeship program | <b>4</b> | <p><b>(1)</b> 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.</p> <p><b>(2)</b> In the first period of the apprenticeship program an apprentice must acquire not less than 1500 hours of on the job training and successfully complete the technical training that is required or approved by the Board.</p> <p><b>(3)</b> In the 2nd period of the apprenticeship program an apprentice must acquire not less than 1500 hours of on the job training and successfully complete the technical training that is required or approved by the Board.</p> <p><b>(4)</b> In the 3rd period of the apprenticeship program an apprentice must acquire not less than 1500 hours of on the job training and successfully complete the technical training that is required or approved by the Board.</p> <p><b>(5)</b> In the 4th period of the apprenticeship program an apprentice must acquire not less than 1350 hours of on the job training and successfully complete the technical training that is required or approved by the Board.</p> |
| Employment of apprentices          | <b>5</b> | <p><b>(1)</b> Where a person employs an apprentice, that employment must be carried out in accordance with this section.</p>   |

- (2) Subject to subsection (3), a person who is a certified journeyman in the trade or employs a certified journeyman in the trade may employ one apprentice and one additional apprentice for each additional certified journeyman 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 4<sup>th</sup> period of that apprenticeship program.

[Alta. Reg. 114/2004, 102/2006, 270/2006]

(a) repealed

(b) repealed

[Alta. Reg. 48/2003; 203/2003; 392/2003]

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 journeymen in the trade:

[Alta. Reg. 270/2006]

- (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.

### Transitional Provisions, Repeals, Expiry 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 apprentice in that apprenticeship program under this Regulation.

Repeal

- 8 The *Electrician Trade Regulation* (AR 98/95) is repealed.

Expiry

- 9 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 August 31, 2014.

[Alta. Reg. 392/2003]

Coming into force

- 10 This Regulation comes into force on January 1, 2001.