



BERMUDA

NATIONAL OCCUPATIONAL CERTIFICATION (ELECTRICIAN) REGULATIONS
2008

BR 54 / 2008

The National Training Board, with the approval of the Minister responsible for the National Training Board, in exercise of the powers conferred by section 15(1)(a) of the National Occupational Certification Act 2004, makes the following Regulations:

Short title

1 These Regulations may be cited as the National Occupational Certification (Electrician) Regulations 2008.

Interpretation

2 In these Regulations—

“Act” means the National Occupational Certification Act 2004;

“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 —

- (a) fire alarm systems;
- (b) signal systems;
- (c) control systems;
- (d) lighting systems;
- (e) heating and cooling systems;
- (f) systems providing power;
- (g) data systems;

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- (h) communication systems;
- (i) fibre optic systems;
- (j) lightning protection systems;
- (k) cathodic protection systems;
- (l) grounding and bonding systems;

“electrician” means a person who performs any of the tasks, activities and functions in these regulations;

“occupation” means the occupation of electrician designated under the National Occupational Certification (Designation of Occupations) Regulations 2008.

Tasks, activities and functions of the occupation

3 The tasks, activities and functions of the occupation are the installation, alteration, repairing, inspection, verification, commissioning, maintenance and operation of electrical systems and, without limiting the generality of the foregoing, include the following—

- (a) 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; and
- (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, junctions, 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 the connection to overhead and underground supply;

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- (vi) power transformers, regulators, capacitors, phase converters and reactors;
- (vii) alternating current to direct current conversion devices and power inverters for conversion of direct current to alternating current;
- (viii) electrical appliances, electrical heating, solar heating, ventilation and air-conditioning units, components and controls;
- (ix) oil, gas, coal, electric or wood burner control systems, or any combination of them, and associated wiring;
- (x) infra-red heating units and other types of infra-red units, controls and components;
- (xi) fire alarm systems;
- (xii) security systems, intrusion alarms, access control, card key lock systems or similar equipment;
- (xiii) clock systems, including self-correcting or synchronized master-slave equipment and programmable time devices for signals, energy management, lighting control and similar installations;
- (xiv) sound and visual communications systems;
- (xv) fibre optic systems and components;
- (xvi) 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;
- (xvii) relay, static logic or programmable control components and systems;
- (xviii) servo-mechanisms and associated circuitry, robotic systems and numerically controlled and computerized numerically controlled systems;
- (xix) electric motors, generators, controls, other electromechanical devices and auxiliary equipment;
- (xx) motor starters, motor speed controllers and braking systems, direct current solid state drives, alternating current adjustable frequency drives, magnetic drive assemblies and controls; and
- (xxi) 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;

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- (iii) high voltage conductors, cable terminations and insulation materials;
- (iv) lighting fixtures and related electrical equipment and components;
- (v) dry cell and storage batteries and storage battery systems; and
- (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 the electrical systems; and
 - (iii) grounding and bonding systems;
- (j) terminating and splicing—
 - (i) feeder and distribution busways and busducts; and
 - (ii) fibre optic systems and components;
- (k) terminating—
 - (i) electric surface or flush mounted receptacles, junction lighting fixtures and related electrical equipment and components;
 - (ii) dry cell and storage batteries and storage battery systems;
 - (iii) consumer's service entrance distribution and metering equipment for the connections to overhead and underground supply; and
 - (iv) loadcenters, 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; and
 - (iii) servo-mechanisms and associated circuitry, robotic systems and numerically controlled and computerized numerically controlled systems;
- (m) calibrating—
 - (i) loadcenter, 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;

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- (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 controller and braking systems, direct current solid state drives, alternating current adjustable frequency drives, magnetic drive assemblies and controllers; and
- (vi) recording instruments;
- (n) lubricating—
 - (i) loadcenters, 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; and
 - (iii) electric motors, generators, controls, other electromechanical devices and auxiliary equipment;
- (o) using any new innovative trade related technological changes with respect to—
 - (i) materials or methods; and
 - (ii) the carrying out of the tasks, activities and functions referred to in this regulation.

Commencement

4 These Regulations shall come into operation on 31st December, 2009.

Made this 21st day of April 2008

Chairman
National Training Board