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**ELECTRICITY LAW**

**(2005 Revision)**

**ELECTRICITY REGULATIONS**

**(2005 Revision)**

The Electricity Regulations, 1977 made the 27th day of September, 1977, consolidated with the-

Electricity (Amendment) Regulations, 1978 made the 5th December, 1978

Electricity (Amendment) Regulations, 1980 made the 3rd January, 1980

Electricity (Amendment) Regulations, 1986 made the 25th March, 1986

Electricity (Amendment) Regulations, 1987 made the 2nd December, 1987

Electricity (Amendment) Regulations, 1991 made the 29th January, 1991

Electricity (Amendment) (No.2) Regulations, 1991 made the 10th December, 1991

Electricity (Amendment) Regulations, 1992 made the 11th August, 1992

Electricity (Amendment) Regulations, 1999 made the 18th May, 1999

Electricity (Amendment) Regulations, 2002 made the 17th December, 2002

Electricity (Amendment) Regulations, 2004 made the 6th April, 2004,

and as amended by Law 10 of 2005 (part) enacted the 2nd March, 2005.

Revised under the authority of the Law Revision Law (1999 Revision).

Consolidated and revised this 12th day of July, 2005.

*Note (not forming part of the Law): This revision replaces the 2003 Revision which should now be discarded.*



**ELECTRICITY REGULATIONS**

**(2005 Revision)**

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**ELECTRICITY REGULATIONS**

**(2005 Revision)**

**PART I-Introductory**

1. These regulations may be cited as the Electricity Regulations (2005 Revision). Citation

2. In these regulations- Definitions

“accessory” means a device such as an adapter cut-out, plug or socket which is associated with wiring, fitting, switchboards or appliances; but does not include a switchboard, fitting or appliance as herein specifically defined;

“approved” means approved by the Electrical Inspectorate;

“armoured cable” means a cable provided with a metallic covering of wires or tapes as a protection against mechanical injury;

“authorised Inspector” means an Electrical Inspector authorised in writing under the Law;

“Board” means the Electrical Board of Examiners appointed under section 6 of the Law;

“British Standard Specification” means a specification issued under that name by the British Standards Institution, and includes all supplements, amendments and additional British Standards which may, from time to time, be issued in connection therewith;

“building permit” means a permit issued under the Building Code Regulations (2003 Revision); 2003 Revision

“cable” means one or more conductors whether with or without insulating covering and with or without protective coverings;

“Central Planning Authority” means the body established under section 3 of the Development and Planning Law (2005 Revision); 2005 Revision

“consumer” means any person supplied or entitled to be supplied with electricity by licensees;

“electrical contractor” means a person who undertakes or contracts or engages in business in electrical work of any nature;

“electrical hazard” means danger to life and/or property from electrical energy;

“fixed wiring” means all conductors forming part of the electrical installation between the place of entry at which supply is obtained and any point of outlet;

“fuse-link” means the actual wire or strip of metal in a cut-out or other device which is intended to be fused by an excessive current;

“grounded” means connected to the general mass of earth in such a manner as will ensure at all times the immediate discharge of electrical energy without electrical hazard;

“inflammable” means capable of being readily ignited;

“live” or “alive” in relation to a conductor, means its condition when a potential difference exists between it and ground;

“N.E.C.” means the National Electrical Code published by the National Fire Protection Association in the United States of America and current at any time;

“non-reversible” in respect of any accessory device in the nature of an adapter, or a plug and socket, for connecting apparatus, means so constructed and installed that the respective conductors between such adapter, or plug, and the device are always connected to the same pole, phase, neutral or earthed conductor, as the case may be;

“point” means a point on the wiring system at which current is taken to supply lamps, heaters, motors and current-using devices generally;

“premises” includes any land owned or occupied by a licensee or consumer, as the case may be, on which electrical energy is generated, transmitted or used;

“P.V.C.” means polyvinyl-chloride compound;

“source of supply” means either the generating station, substation or transformer, as the case may be, which is the source of the electrical energy at the voltage at which it is delivered to the consumer; and

“switchgear” means any apparatus for controlling the distribution of electrical energy, for controlling or protecting electrical circuits machines or other apparatus.

## **PART II-Application, Modification and Exemption**

Application

3. (1) Subject to section 3, these regulations apply to all electrical installations connected with any source from which electrical energy is available:

Provided that nothing herein contained applies to any electric line or work which is an installation-

- (a) on any vessel or vehicle used for transport purposes with the exception of mobile homes or recreational vehicles;



- (b) of communication equipment under the exclusive control of communication utilities, located outdoors or in building spaces used exclusively for such installations; or
- (c) under the exclusive control of electric utilities for the purpose of communication or metering; or for the generation, control, transmission and distribution of electric energy located in buildings used exclusively by utilities for such purposes or located outdoors on property owned or leased by the utility or on public highways, streets, roads, etc., or outdoors by established rights over private property.

(2) Additions and alterations to existing installations are deemed to be new installations, and these regulations apply to all work done in connection with such additions and alterations.

4. (1) Subject to subregulation (2), where a licensee is empowered to supply electrical energy to any consumer, such licensee shall not connect with such supply any new installation on a consumer's premises unless such installation or any completed part thereof has been inspected, tested and certified under regulations 55 and 56.

Connection, inspection and testing, etc.

(2) An authorised inspector may authorise a temporary connection pending an inspection, provided that the tests prescribed by regulations 51 and 55 have (where applicable) been satisfied, and that such temporary connection is made for a period not exceeding three months.

5. No licensee shall connect, supply or continue to supply electrical energy to any existing installation connected with such licensee's lines unless every part of such installation is free from electrical hazard.

Hazardous installations

6. Where any installation and all appliances connected therewith comply with the requirements of these regulations, the licensee shall not, without the written permission of the Inspectorate, refuse or fail to supply such installation on the ground only that the installation or any appliance therewith constitutes an electrical hazard.

Compliance with regulations

7. In any case where the licensee is also the consumer of the electrical energy supplied by it, the conditions imposed by regulations 3 and 4 shall apply to it in its capacity as licensee as if it were supplying energy to a consumer other than itself.

Supply authority as consumer

8. (1) No person other than an electrical contractor licensed under the Law shall make, cause to be made or extend any installation of wires or fittings for electrical purposes.

Persons to be licensed

(2) Persons engaged in electrical work shall be classified in accordance with regulation 61.

Licences

9. For the purpose of obtaining a licence, persons shall be subject to the requirements of regulations 57 to 61.

Existing permits, approval, etc.

10. Permits, approvals, requirements and authorisations, and generally all acts of authority which subsist at the 10th October, 1977 take effect for the purposes of these regulations as fully and effectually as if they had originated under these regulations and are deemed so to have originated.

Material in stock, etc.

11. (1) Nothing in these regulations prohibits the sale, installation or use of anything thereby affected which was in the Islands, in transit in the Islands or the subject of an irrevocable order by a person in the Islands at the 10th October, 1977 provided that it is free from electrical hazard and either conforms with or is approved under the Law.

(2) The Inspectorate may, by giving not less than six months' notice in the Gazette, require that material which does not comply with the requirements or these regulations, be used only in certain specified places and have affixed, before sale or installation, an official transfer issued by the Inspectorate.

(3) In the event of any dispute as to whether the material was in the Islands, in transit to the Islands or the subject of an irrevocable order by a person in the Islands on the 10th October 1977, the onus of proof is on the person making the claim.

Modification of requirements

12. (1) If the Inspectorate, upon application being made in writing by any person proposing to make any new installation, alteration or addition to an existing installation, is satisfied that strict compliance with these regulations would involve expenditure out of proportion to the freedom from electrical hazard to be secured thereby it may modify them if satisfied that freedom from electrical hazard can be secured in a more convenient manner.

(2) Every such application shall be accompanied by a statement of the reasons why such modification is desired and the nature thereof, and by a statement or opinion by the licensee as to whether the application is a reasonable one and whether the modification would be safe.

(3) In granting any such modification the Inspectorate shall specify what special work, if any, is required to be done to render the installation free from electrical hazard.

(4) The Inspectorate may, at any time, rescind any modification if satisfied that the electrical hazard has thereby been unduly increased.

13. Where a licensee licensed under the Electricity Regulatory Authority Law, 2005 proposes to change from one voltage or system to another, the permission of the Authority must first be obtained and, if granted, the Authority shall recommend to the Governor any modifications to these regulations in their application to the reconditioning of installations for the purpose of such change, and any modifications accepted by the Governor shall be published by notice in the Gazette.

Changeovers  
Law 10 of 2005

### **PART III-General**

14. The Authority may, from time to time, by notice in the Gazette, approve methods or types of construction or materials not especially provided for in these regulations and impose such conditions as appear necessary in that behalf.

Approval of other  
methods

15. (1) The Inspectorate may prohibit the installation and use of any appliance, apparatus, accessory, cable, fitting, machine, switchgear, switchboard, method or type of construction, or material or method of installation which in his opinion constitutes or may constitute an electrical hazard.

Prohibited work

(2) The premises of any business or institution which caters for the public or invites public attendance and complexes comprising multiple units must, if wired after 31st. December, 1978, and if capable of accommodating one hundred persons or more at any time, have an all conduit wiring system installed.

(3) Where E.M.T. (Electrical Metallic Tubing) is used there must be a continuous ground wire run in the conduit along with the other conductors.

(4) Where there is more than one metered supply to the same building, the metered circuits belonging to one consumer may not run through any switch or panel board of another consumer unless there is a separate compartment sealed off. In the absence of such separate compartment the circuit must run directly in conduit from the meter to the appropriate consumer's panel board.

16. No person shall manufacture for sale, sell or offer for sale, and no person shall install or cause or permit to be installed or assist in installation on any premises any device or apparatus which does not comply with the requirements or which is not, the character specified by these regulations in respect of such device or apparatus.

Device and apparatus  
which do not comply

*Electricity Regulations (2005 Revision)*

Wiring which does not comply	17. No person shall install, cause or permit to be installed or assist in stalling on any premises any wiring which does not comply with the requirements or which is not of the character specified by these regulations in respect of such wiring.
Methods which do not comply	18. No person shall install, cause or permit to be installed or assist in installing on any premises any device or apparatus or wiring in a manner contrary to these regulations.
Uses prohibited	19. (1) No person shall use, maintain or cause or permit to be used or maintained on any premises any apparatus, device or wiring- <ul style="list-style-type: none"><li>(a) which does not comply with the requirements or which is not of the character specified by these regulations in respect of such apparatus, device or wiring; or</li><li>(b) in a manner contrary to these regulations.</li></ul> <p>(2) No person shall knowingly continue to use, maintain or cause or permit to continue to be used or maintained for or in connection with the supply, distribution or consumption of electrical energy any device or apparatus or wiring or any part of an installation which has ceased to comply with the requirements or to be of the character specified by these regulations in respect thereof. The Inspectorate, if satisfied that any installation does not comply with these regulations, shall have the right to call on the licensee to disconnect such installation.</p> <p>(3) This regulation does not apply to any apparatus, device or wiring installed on any premises prior to the 10th October, 1977 provided it is in use at the premises where so installed and is free from electrical hazard.</p>
Disputes	20. (1) A dispute between an electrical contractor or the Inspectorate and a licensee, or between an electrical contractor and the Inspectorate, regarding any technical interpretation or application of these regulations may be referred to the Inspectorate for adjudication whose decision is final. <p>(2) A consumer to whose premises a licensee, in compliance with these regulations, refuses or discontinues a supply of energy who is aggrieved thereby may apply for his installation to be inspected and tested by the Inspectorate whose decisions are final.</p>
Assembly and repair	21. No person shall assemble, wire-up or repair any electrical device or apparatus in a manner which contravenes these regulations.
Reporting of accidents	22. If an accident of an electrical nature causes or is likely to cause loss of life the licensee shall give immediate notice thereof to the Authority and to the Inspectorate.

23. Notices or requisitions required to be served upon the Inspectorate under these regulations may be so served by being addressed to the Inspectorate and left at, or transmitted through the post to, the Inspectorate at the office of the Department of Planning, and notices required to be served upon a licensee or other person may be served by being addressed to such licensee or person and left at, or transmitted through the post to, his last known address.

Service of notices

#### PART IV-Penalties

24. If it appears to the Board that a licensee has conducted works in a manner or of a nature which could constitute a danger to human life or safety or otherwise fails to comply with the Law or these regulations, the Board may suspend or revoke the licensee's licence.

Dangerous operations

25. If it appears to the Board that a licensee has failed to comply with any condition imposed in respect of any licence issued under these regulations, the Board may suspend or revoke any such licence.

Breach of licence conditions

26. Whoever employs an unlicensed person for carrying out electrical installations is guilty of an offence and liable on summary conviction to a fine of five hundred dollars.

Employment of unlicensed electricians

27. Whoever carries out electrical installations when not licensed under these regulations is guilty of an offence and liable on summary conviction to a fine of five hundred dollars and a penalty of one hundred dollars per day in the event of a continuing offence.

Penal

28. Whoever carries out any electrical works or installations which constitutes a danger to human life or safety is guilty of an offence and liable on summary conviction to a fine of ten thousand dollars or to imprisonment for three months.

Offences re dangerous work

#### PART V-Permits for Wiring Work

29. (1) Save as provided in regulations 42 to 44, no licensee shall, until he has obtained a building permit-

Approvals

- (a) do any electrical wiring work; or
- (b) connect to any source from which electrical energy is available-
  - (i) any electrical wiring;
  - (ii) any electrical apparatus for use in any situation where a person touching it may under normal conditions simultaneously make contact with earth or earthed metal; or
  - (iii) electrical apparatus exceeding ten amperes in capacity.

(2) Applications shall be accompanied by sketch plans and specifications and the plans shall include riser diagrams, floor plans, panel schedules, load calculations, circuits identification as well as a site plan showing the location of the utility company service.

(3) The Inspectorate shall-

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- (a) on receipt of an application to do any electrical wiring work, satisfy itself that any necessary permission to do the work under the Development and Planning Law (2005 Revision) has been obtained; or
- (b) on receipt of an application to make a connection to any source from which electricity is available, satisfy itself that any necessary permission under the Development and Planning Law (2005 Revision) has been obtained and any condition subject to which that permission was granted has been complied with,

and shall refuse its approval if that permission has not been obtained or any such condition has not been complied with, as the case may be, but shall otherwise signify its approval or disapproval as soon as possible.

Work to begin within two months of approval

30. (1) Every approval under regulation 29 authorises the execution of the work only on condition that the work is commenced within two calendar months of the approval being granted and, if the work has not commenced within such period, the approval expires.

(2) The applicant shall inform the Inspectorate of the date on which he intends to commence work.

Validity of approval

31. Every such approval shall be valid for a period not exceeding one year from the date of commencement of the work and the Inspectorate may extend such approval or, if satisfied that the licensee is in breach, may withdraw it.

Only one approval to be in force at a time

32. No approval shall be issued for any work in relation to which a previous approval is in force.

Inspection after completion

33. (1) Persons who have carried out electrical wiring or installation shall, on completion of such work, notify the Inspectorate in writing that the work is completed and that the tests prescribed by regulations 49 to 54 (where applicable) have been satisfied, and request an inspection of the work. Such notice shall include the signature and registration number of the electrical workman in charge of the work along with a receipt from the Treasury for the appropriate sum paid in accordance with regulation 48.

(2) Inspections are to be made at each floor level and no panels, conduit boxes or other electrical appurtenances may be covered or concealed until they have been approved.

(3) Final inspection is to be made after the work is completed and the premises are ready for use or occupancy.

34. A temporary supply consists of a service head, service mast and meter socket and is to be provided with a rain-tight safety switch, or enclosed circuit breakers with one or more receptacles mounted in a weather proof box situated on a pole or wall. The temporary supply is to be disconnected as soon as a permanent supply has been connected. Temporary supply

35. The Inspectorate may grant permission for temporary electrical wiring work, and such permission authorises the undertaking of the work referred to therein so that regulations 30 and 32 apply and also authorises the use and maintenance of such work for the period stated in such permit. No permits under this regulation shall be for a period exceeding three months from the date when the work is first connected with the source from which electrical energy is available. Temporary wiring

36. The period for which any temporary electrical wiring may be used and maintained may, from time to time, be extended by successive permits each for a period not exceeding one month provided that the total period for which such work may be used and maintained does not (except in the case of temporary electrical wiring work used or maintained in connection with a building or works in course of construction) exceed six months from the date when the work was first connected with the source from which electrical energy is available. Period for temporary wiring

37. Permits issued under regulation 35 may be subject to such written conditions, not in conflict with these regulations, as the Inspectorate thinks fit to impose. Conditions for temporary wiring

38. No person shall connect any temporary electrical wiring work with a source from which electrical energy is available until such work has been inspected and approved by an authorised Inspector as having been installed in accordance with these regulations and with the conditions, if any, set out in the permit. Connection and inspection of temporary wiring

39. No person shall continue to use or maintain any temporary electrical wiring work after the expiration of the period authorised by a permit granted under these regulations. Expiry of period

40. On the expiration of the period during which any temporary electrical wiring work may lawfully be used and maintained pursuant to a permit granted Temporary wiring to be removed

under these regulations, the occupier of the premises on which such work is constructed shall forthwith have such work demolished and dismantled.

Dead and disused wire, etc.

41. All dead or disused conductors, accessories, appliances and apparatus-
- (a) which do not conform to these regulations, shall either be removed from the building or be rendered useless for electrical purposes to the satisfaction of an authorised Inspector; or
  - (b) which conform to these regulations shall be maintained free from electrical hazard.

Emergency repair work

42. In any case of emergency due to a breakdown or other accident, a person licensed to do electrical wiring work may, without first obtaining a permit as required by these regulations, begin any work necessary to repair or make safe the installation:

Provided that a person who begins any such work shall notify the Inspectorate within forty eight hours after such work begins.

Licensee as consumer or contractor  
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43. Notwithstanding the terms of any licence issued under the Electricity Regulatory Authority Law (2005 Revision) or any regulation to the contrary, in any case where a licensee under that Law is also a consumer of electrical energy supplied by such licensee or is the electrical contractor for any electrical wiring work, unless the Authority directs otherwise, these regulations shall apply.

Private plants

44. Where electrical energy is generated upon a consumer's premises or is obtained from a privately owned plant no person shall, until he has obtained written permission from the Inspectorate-

- (a) commence or undertake any electrical wiring work; or
- (b) connect to any source from which electrical energy is available-
  - (i) any electrical wiring work;
  - (ii) any electrical apparatus intended to be used in any situation where the person touching it, may under normal conditions, simultaneously make contact with earth or earthed metal; or
  - (iii) electrical apparatus exceeding ten amperes in capacity.

#### **PART VI - Inspection and Fees**

Manholes

45. Manholes shall be provided in ceilings to facilitate access to the roof of all buildings for the purpose of inspection.

Traps

46. Traps shall, where practicable, be provided at all inspection fittings and drawn-in boxes, and such traps shall be securely fastened by means of screws.



47. (1) An authorised Inspector may, at any time between 9:00 a.m. and 5:00 p.m. on any day other than a Sunday, upon production of his authority, demand admission to the premises of any consumer for the purpose of ascertaining whether these regulations have been complied with.

Admission to premises

(2) The consumer shall render such person every reasonable facility for inspecting and testing the installation.

(3) If a consumer refuses to admit such person during such hours, the licensee shall, on demand in writing by the Inspectorate, discontinue to supply electrical energy to such consumer.

48. (1) Application for inspection shall be made on the prescribed form and submitted to the Inspectorate.

Inspection and fees

(2) The application form shall contain details of the installation, the full address of the building or premises where the work has been done, the name of the occupier and the signature of the licensed electrician who has done the work.

(3) In the event of an installation failing the test, a new application shall be made.

(4) The fees to be charged in connection with the licensing of persons and the inspection of work under the Law or these regulations are -

(a) For the examination of-

Electrical engineer	\$25
Master electrician	\$25
Electrician	\$25
Wireman	\$25
Lineman	\$25

(b) For registration of licence -

Electrical engineer	\$300
Master electrician	\$250
Electrician	\$175
Wireman	\$100
Lineman	\$175
Apprentice	\$35

- (c) For renewal of registration of licence-

Electrical engineer	\$300
Master electrician	\$250
Electrician	\$175
Wireman	\$100
Lineman	\$175
Apprentice	\$35

(5) A re-inspection fee of one hundred dollars shall be charged for the re-inspection of any work if, in the opinion of the Chief Building Control Officer, a person making a request for inspection of the work has not, at the time of inspection, completed the work.

### PART VII-Testing

Testing of installations,  
etc.

49. On completion of every wiring work or installation there shall be carried out the following insulation resistance tests with a direct current voltage in each case of not less than twice the voltage to which the circuits will normally be subject, provided that in the case of medium voltage (250v to 650v) circuits, the test voltage need not exceed 500 volts-

- (a) where a test is desired of the permanent wiring before any fitting, accessories, appliances or lamps are installed, the conductors shall be connected together so as to ensure that all parts of every circuit are simultaneously tested; the test shall be made between conductors as a whole and ground:

Provided that such test shall be deemed to be satisfied if the insulation resistance is not less in megohms than the result of dividing the number 100 by the outlets (points and switch positions) from the fixed wiring;

- (b) (i) a test of the completed installation or an addition to or alteration of an existing installation with all fuse-links in place, all switches in the 'on' position (including the main switch, if practicable) and all lamps in position; the test shall be made between conductors as a whole and ground:  
Provided that such test shall be deemed to be satisfied if the insulation resistance is not less in megohms than the result of dividing the number 50 by the number of outlets (points and switch positions) from the fixed wiring;
- (ii) control rheostats, heating, cooking and power appliances and outdoor electric signs may be disconnected from the

circuits during the test, in which case the insulation resistance between the case or frame-work and all live parts of each such rheostat, appliance and sign shall be tested:

Provided that such test shall be deemed to be satisfied if the insulation resistance is not less than half megohm;

- (c) where a whole installation is being tested a lower value than that given by the formula above subject to a minimum of two megohms is acceptable; and
- (d) where practicable there shall be a test between conductors:  
Provided that such test shall be deemed to be satisfactory if the insulation resistance is not less than two megohms.

50. There shall be the following continuity tests of every wiring installation- Continuity

- (a) a test between the connection to ground and any other part of the completed installation in all cases where metal conduits, metallic sheathed cables or armoured cables which have no other metallic sheath are used; and
- (b) a test between the connection to ground and any part of any grounding lead:

Provided that each such test shall be deemed to be satisfied if the electrical resistance of such conduit sheathing or grounding-lead does not exceed two ohms.

51. A test shall be made on every wiring installation to verify that no single pole switch or circuit-breaker has been fitted in any neutral conductor or ground conductor and, in the case of a non-grounded two-wire system, that every such switch or circuit-breaker is fitted in the same conductor throughout. This test shall not apply to a switch mounted on a portable appliance or to ground fault circuit interrupters. Position of s.p. switches

52. A test shall be made of every two-pin non-reversible type plug socket and every three-pin plug socket to verify that the conductors have been connected in accordance with the appropriate provisions of the N.E.C. Non-reversible plug sockets

53. Ground resistance tests will be made in accordance with the appropriate provisions of the N.E.C. Ground resistance tests

54. All moulded insulating material shall be capable of withstanding the tests prescribed by the appropriate current edition of the British Standard Specification or equivalent standard. Moulded insulation

**PART VIII-Certification**

Issue of certificate

55. (1) After having inspected any electrical wiring work or installation, the authorised Inspector, if satisfied that the work has been carried out in accordance with these regulations, shall certify in writing to the licensee, or, where there is no such licensee, then to the party responsible for the supply of electrical energy, that he has duly inspected such work and that the tests are satisfactory, and that to the best of his knowledge and belief the installation may be safely connected with the source from which electrical energy is available. Any authorised Inspector shall, at all times, have the right to inspect and test any electrical installation at his discretion.

(2) Nothing in any such certificate shall relieve the owner or occupier of any premises from the obligation to bring any installation into conformity with these regulations if, on any subsequent inspection, any defects are discovered which render such installation electrically hazardous.

(3) Any certificate issued under subregulation (1) shall be delivered only to the licensee for the area concerned or to the party responsible for the supply of electrical energy, as the case may be, and shall, in no event, be handed or delivered to any other person or body.

Special connections

56. (1) Notwithstanding anything to the contrary in this Part, the Inspectorate may, in case of urgency, issue a permit authorising an installation to be temporarily connected with the source from which electrical energy is available notwithstanding that any one or more of the hereinbefore prescribed insulation resistance tests have not been satisfied:

Provided that no such permit shall be granted unless the installation otherwise generally complies with these regulations and is in the opinion of an authorised Inspector to be reasonably free from electrical hazard; such permit shall be subject to the conditions set out in regulations 36 to 38.

(2) On the expiration of the period or extended period for which temporary connection has been so authorised the installation shall be disconnected from the source from which electrical energy is available unless, before such expiration, an authorised Inspector has issued his certificate pursuant to regulation 55(1).

**PART IX-Licensing of Electrical Employees**

Qualification of licensees

57. (1) Every person requiring a licence authorising him to carry out electrical work of any nature shall make application for such a licence stating the category

or type of licence he is applying for. Such application shall be made in writing to the Board and shall specify in full the name, age and address of the applicant, where he acquired his experience and the length of his experience together with satisfactory references as to his character and experience, together with a receipt from the Treasury for the fee required under regulation 48(4)(a). The Board, on being satisfied of the applicant's qualifications and fitness for a licence, shall issue a licence to such applicant subject to such terms and conditions as it deems fit.

(2) For the purpose of subregulation (1), conditions which the Board may impose on a licence issued under subregulation (1) include but are not limited to-

- (a) a condition restricting the licence to a specified period of time;
- (b) a condition restricting the licensee to perform works for a specified electrical contractor;
- (c) a condition restricting the licensee to perform certain specified works; and
- (d) any other condition which the Board may deem fit.

58. Except where a period of time is specified under regulation 57(2)(a), every licence shall expire on the 31st of December after the date of issue. Duration of licences

59. No person shall carry out electrical work of any kind except under and in accordance with the terms and conditions of a licence issued under regulation 61. Work undertaken to be in accordance with licence

60 (1) No person shall trade, contract or carry on business as an electrical contractor of any nature or employ staff for any such work unless he is licensed in that behalf by the Board and also holds a licence as an electrician or contractor under the Trade and Business Licensing Law (2003 Revision). Trading and supervision by non-licensees prohibited  
2003 Revision

(2) Qualification for an electrical contractor's licence shall be that the applicant is the holder of, or whose business is managed and supervised by the holder of, a valid licence under regulation 61(1)(a), (b) or (c) for a period exceeding two years immediately preceding the date of the application and who satisfies the Board that he is a suitable candidate for such licence.

(3) Any licence issued under this regulation shall be subject to any condition imposed in respect of the applicant's licence issued under regulation 61.

61. (1) Except as provided in regulation 62, every person carrying out electrical work shall be licensed in one of the following categories- Categories of licences

- (a) electrical engineer;
- (b) master electrician;
- (c) electrician;

- (d) wireman;
- (e) lineman; or
- (f) apprentice.

(2) The qualification requirements for an electrical engineer's licence are -

- (a) corporate membership of the Institution of Electrical Engineers, or any other similar institution approved by the Board;
- (b) possession of an electrical engineering degree or similar qualification from a college or university approved by the Board; and
- (c) at least five years' experience in the field of electrical engineering plus at least three years' subsequent experience in a position of responsibility.

(3) The qualification requirements for a master electrician's licence are -

- (a) at least ten years' experience working as an electrician;
- (b) possession of an electrical engineering degree or similar qualification from a college or university approved by the Board;
- (c) evidence that the applicant has held an electrician's licence, issued in the Islands, for a period of at least four years; and
- (d) (i) evidence, to the satisfaction of the Board, of supervisory experience, experience in estimating quantities and costs of electrical installation materials, and experience in designing wiring installations in buildings to the specifications of engineers or architects; and  
(ii) a pass in the Master Electricians Trade Test which will be carried out by the Board.

(4) Persons not qualified as required for an electrical engineer's or master electrician's licence may place a submission before the Board of Examiners seeking a licence as an electrical engineer or master electrician on grounds of experience and superior responsibility within the profession, and the Board may, at its discretion, grant such licence.

(5) The qualification requirements for an electrician's licence are a pass of seventy per cent in the Electricians Trade Test which will be carried out by the Board, together with -

- (a) at least five years' experience working as a wireman;
- (b) possession of an electrical engineering degree or similar qualification from a college or university approved by the Board; or
- (c) evidence, to the satisfaction of the Board, of experience in commercial and residential electrical installation and design,

but persons who satisfy the Board that during the two years immediately prior to the 10th October, 1977 they have worked as electricians in the Islands shall be exempted from such Trade Test but will be required to satisfy the Board that they are familiar with the Law and these regulations.

(6) The qualification requirements for a wireman's licence are a pass of sixty per cent in the Electricians Trade Test which will be carried out by the Board, together with -

- (a) at least two years' experience working as an apprentice (and the applicant shall furnish a report from his employer indicating the length of the employment and the type of work performed); or
- (b) evidence, to the satisfaction of the Board, of experience in commercial and residential electrical installation and design.

(7) Except as provided in subregulation (9), a person shall not be issued with any licence specified in subregulation (1) (nor, in the case of an electrician's or lineman's licence, even to sit the Electricians Trade Test) unless -

- (a) he possesses Caymanian status or is a permanent resident of the Islands with a right to work in the Islands; or
- (b) he is a spouse of a person possessing Caymanian status, who satisfied the Board that he has, in addition to the requirements specified in subregulations (5) and (6), two years' practical experience.

(8) Exemption from the Trade Test may be granted at the discretion of the Board of Examiners provided that the applicant furnishes documentary evidence that he already possesses a licence which, in the opinion of the Board, has been issued by a statutory body requiring equivalent standards and qualifies under subregulation (7).

(9) The Board may, in its discretion and subject to such terms and conditions as it thinks fit, grant a temporary licence (that is, a licence that allows the applicant to hold it during the currency of the occupation he is engaged in at the time he makes the application and the application is granted) if he furnishes to the Board documentary evidence to the effect that he already possesses a licence which, in the opinion of the Board, was issued outside the Islands by a statutory body requiring standards equivalent to standards required in the Islands, but such licence shall not be recognised for the purposes of regulation 60.

(10) A lineman may carry out work on power, telephone, wireless or television pole lines or masts and associated fittings with conductors attached thereto, providing that at all times he is in the employment of a licensed electrical

contractor or licensee and working under the said contractor's or licensee's direct instructions.

(11) Qualifications for such licenses shall be by approval of the Board of Examiners who, at their discretion, may grant a licence to the applicant providing they are satisfied with-

- (a) his past experience as a lineman or trainee lineman for a continuous period of employment of at least three years;
- (b) his knowledge of line erection, line maintenance and elementary electrical principles; and
- (c) his knowledge of safety precautions.

(12) The Board of Examiners may, at their discretion, grant a total exemption from examination provided that the applicant has had at least seven years' experience of continuous employment, has held a senior grade position in overhead linework and furnishes a letter of support from a qualified electrical engineer.

(13) An apprentice may only carry out electrical work under the direct supervision of a licensed electrical workman, and such work shall be subject to any condition or limitation imposed in respect of that workman's licence.

Work teams licensees 62. Electrical work may be carried out only by licensed electricians, each of whom may be assisted by one apprentice and three wireman.

Supervision by licensees essential 63. An apprentice shall, at all times, work under the supervision of and in the presence of a licensed electrician or licensed electrical engineer.

Unauthorised work to be stopped 64. Regulation 62 requires that any work undertaken by persons other than those described shall be stopped until the required number of licensed workmen are engaged.

#### **PART X-Miscellaneous**

Application of the U S N.E.C. 65. The N.E.C. shall, subject to any modifications contained in regulations 66 to 69 and to any regulations made by the Governor in Cabinet, from time to time, apply to the Islands.

Buried cable 66. Notwithstanding anything to the contrary contained in the N.E.C. no cable other than armoured cable or P.V.C/S.W.I.A./P.V.C. cable may be buried directly in the ground.



67. The use of aluminium conductor cable will not be permitted without special permission from the Inspectorate, and under no circumstances will be permitted for internal fixed wiring. Aluminium cable

68. Conductors manufactured in accordance with British Standards may be substituted for U.S. Standard Conductors in the N.E.C. in accordance with the following correlation table. British Standards

69. All conductors in any installation shall be colour coded in accordance with the following Colour Code- Colour code

Single Phase 120/240		
Black		Line 1
Black		Line 2
White or grey with white stripe		Neutral
Grounding Conductor green, or green with yellow stripe		
Three Phase 277/480 (Wye)		
Brown		Phase A
Purple		Phase B
Yellow		Phase C
White or grey with white stripe		Neutral
Grounding Conductor green, or green with yellow stripe		
120/240 (Delta)		
Black		Phase A
Orange	Phase B	High Leg
Red		Neutral
White or grey with white stripe		Phase C
Grounding Conductor green, or green with yellow stripe		
120/208 (Wye)		
Red		Phase A
Blue		Phase B
Black		Phase C
White or grey with white stripe		Neutral
Grounding Conductor green, or green with yellow stripe		

Bathroom circuits      70. (1) All circuits, outlets and switches located in a bathroom shall be protected by Ground-Fault Circuit Interrupters as defined by the N.E.C.

FIRST SCHEDULE

Table of Equivalents for U.S., Metric and Imperial Conductors

AMPS	U.S.						METRIC (MM)						IMPERIAL						
	In conduit up to 3 cond.						Single conductor			PVC non-armoured			PVC sheathed cable			Steel wire armoured		Single core PVC	
	RW TW UF	RHW THW RUH	THHN XHHW RHH	RW TW UF	RHW THW RUH	THHN XHHW RHH	Single-core copper on tray	Two cables 1Ø	3 or 4 cables 3Ø	Single-core copper on tray	Two cables 1Ø	3 or 4 cables 3Ø	Twinned & earth	Twinned & earth	Multi-core	Two wires 2Ø	Three wires 3Ø	Two wires	Three or four wires
15	14	14	14	-	-	-	2.5	2.5	2.5	1.5	1.5	1.5	1.5	2.5	1.5	1.5	3.036	7/029	7/029
20	12	12	12	14	14	-	4	4	2.5	2.5	2.5	2.5	4	4	2.5	4	7/029	7/036	7/036
25	-	-	-	12	12	-	6	6	-	4	-	4	-	-	4	6	7/036	7/044	7/044
30	10	10	10	-	-	-	6	-	-	-	-	-	-	6	6	-	7/044	7/052	7/052
35	-	-	-	-	-	-	-	-	6	6	-	6	-	-	-	-	7/044	7/064	7/064
40	8	-	-	10	10	-	-	10	-	10	-	-	-	10	-	-	7/052	19/044	19/044
45	-	8	-	-	-	-	10	-	-	-	-	10	-	-	10	-	-	-	-
50	-	-	8	-	-	-	16	16	10	-	-	-	-	16	-	16	7/064	19/052	19/052
55	6	-	-	-	-	8	16	-	-	-	-	-	-	-	16	-	-	-	-
60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19/044	-	-
65	-	6	-	-	-	-	-	25	16	-	-	16	-	25	-	25	-	19/064	19/064
70	4	-	6	-	-	-	-	-	-	-	-	25	-	35	-	-	19/052	-	-
75	-	-	-	-	-	-	25	-	-	-	-	-	-	-	25	-	-	-	-
80	3	-	-	-	-	6	-	35	-	-	-	-	-	-	-	35	-	-	-
85	-	4	-	-	-	-	-	-	25	-	-	35	-	-	-	-	-	-	-
90	-	-	4	-	-	-	35	-	-	-	-	-	-	-	35	-	-	-	-
95	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
100	-	3	3	4	-	-	-	-	-	-	-	-	-	-	-	-	19/064	19/083	19/083
110	1	-	-	-	-	-	-	35	-	-	-	-	-	-	-	-	-	-	-
120	1/0	2	2	3	4	-	-	50	-	-	-	-	50	-	-	50	-	37/072	37/072
130	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
140	2/0	1/0	1	2	3	-	50	50	35	35	50	50	50	50	35	50	19/083	-	-
150	-	-	1/0	-	-	1/0	-	-	-	-	-	-	70	70	50	70	-	37/083	37/083
160	3/0	-	-	-	-	-	-	70	-	-	-	-	-	-	-	-	-	-	-

Table of Equivalents Continued

AMPS	U.S.						METRIC (MM)						IMPERIAL	
	In conduit up to 3 cond.						PVC sheathed cable						Single core PVC	
	RUW TW UF	RHW THW RUH	THHN XHHW RHH	RUW TW UF	THW RUH	RHW	Single conductor	PVC non-armoured	Single-core copper on tray	PVC sheathed cable	Steel wire armoured	Single core PVC		
170	-	2.0	-	-	2	-	-	3 or 4 cables 3Ø	3 or 4 cables 3Ø	-	-	-		
180	-	-	2.0	-	-	-	70	-	-	70	-	37/072		
190	4.0	-	-	1.0	1	-	-	-	-	95	-	-		
200	-	3.0	-	-	-	-	-	70	-	-	-	37/103		
210	-	-	3.0	-	-	-	-	-	95	120	-	37/083		
220	-	-	-	2.0	-	-	70	-	-	95	120	-		
230	-	4.0	4.0	-	1.0	-	-	-	-	-	-	-		
240	3.00	-	-	-	-	-	-	95	-	-	-	61/083		
250	-	2.50	-	-	2.0	-	-	-	120	150	-	-		
260	3.50	-	-	3.0	2.0	-	-	-	-	120	-	-		
270	-	-	2.50	-	-	-	95	-	-	-	-	61/103		
280	4.00	3.00	-	-	-	-	-	120	150	185	-	-		
290	-	-	-	-	-	-	-	-	-	-	-	-		
300	-	-	3.00	4.0	3.0	-	-	-	-	150	-	-		
310	-	3.50	-	-	3.0	-	120	-	-	-	-	-		
320	5.00	-	3.50	-	-	-	-	150	185	-	-	-		
330	-	4.00	-	2.50	-	-	-	-	240	-	-	-		
340	-	-	-	2.50	3.0	-	-	-	185	240	-	-		
350	6.00	4.00	3.50	2.50	3.0	-	150	150	185	185	-	61/083		
360	-	-	4.00	-	4.0	-	-	-	185	-	-	-		
370	-	-	-	3.00	-	-	-	-	-	-	-	-		
380	7.00	5.00	-	-	-	-	-	-	300	-	-	-		
400	7.50	-	5.00	-	2.50	-	-	-	240	300	-	61/103		
420	-	6.00	-	3.50	-	-	185	-	-	240	-	-		
430	9.00	-	-	-	-	-	-	240	-	-	-	-		
450	10.00	7.00	6.00	4.00	3.00	-	-	-	300	300	-	-		

Table of Equivalents Continued

AMPS	U.S.						METRIC (MM)						IMPERIAL		
	In conduit up to 3 cond.						PVC sheathed cable						Single core PVC		
	RW TW UF	RHW THW RUH	THHN XHHW RHH	RW TW UF	RHW TW UF		PVC non-armoured	Single-core copper on tray	Twin & earth	Multi-core	Steel wire armoured	Two wires 2Ø	3 or 4 wires 3Ø	Two wires	3 or 4 wires
480	1250	800	700	-	-	-	-	240	-	-	-	-	-	-	-
500	-	-	750	-	-	350	-	300	-	-	-	-	-	-	-
520	1500	900	800	500	-	-	-	-	-	400	-	-	-	-	-
540	1750	1000	900	-	400	-	-	-	-	-	-	-	-	-	-
560	2000	1250	-	600	-	-	-	300	-	-	-	-	-	-	-
580	-	-	1000	-	-	-	-	-	-	-	-	-	-	-	-
620	-	1500	-	700	500	-	-	400	-	-	-	-	-	-	-
650	-	1750	1250	750	-	-	-	-	-	-	-	-	-	-	-
660	-	2000	-	800	-	-	-	400	-	-	-	-	-	-	-
700	-	-	1500	-	600	-	-	500	-	-	-	-	-	-	-
740	-	-	1750	900	700	-	-	-	-	-	-	-	-	-	-
770	-	-	2000	1000	750	-	-	-	-	-	-	-	-	-	-
800	-	-	-	-	800	-	-	500	-	-	-	-	-	-	-
820	-	-	-	1000	800	-	-	500	630	-	-	-	-	-	-
870	-	-	-	1250	900	-	-	-	-	-	-	-	-	-	-
900	-	-	-	-	-	-	-	630	-	-	-	-	-	-	-
930	-	-	-	-	1000	-	-	-	-	-	-	-	-	-	-
980	-	-	-	1500	-	-	-	-	-	-	-	-	-	-	-
1100	-	-	-	2000	1500	-	-	-	-	-	-	-	-	-	-
1280	-	-	-	-	1750	-	-	-	-	-	-	-	-	-	-
1380	-	-	-	-	2000	-	-	-	-	-	-	-	-	-	-

**SECOND SCHEDULE**

**Ambient Temperature Correlation Factors**

Wire type	25°C	35°C	(104°F) 40°C	(113°F) 45°C	(122°F) 50°C	(131°F) 55°C	60°C	65°C
Type TW	-	-	.82	.71	.58	.41	-	-
Type THW	-	-	.88	.81	.75	.67	.58	-
Type THHN	-	-	.90	.85	.80	.74	.67	.52
UK metric	1.06	.94	.87	.79	.71	.61	.5	.35
UK imperial	1.13	.86	.69	.47	-	-	-	-

**THIRD SCHEDULE**

**Amendments to N.E.C.**

Page 70-11	<p style="text-align: center;"><b>Chapter 1</b></p> <p style="text-align: center;"><b>Article 100-Definitions</b></p> <p>Delete the definition of “Qualified person” and substitute- “Qualified person. An electrical engineer or electrician licensed under the Electricity Law (2000 Revision).”.</p>
Section 210-19(b)  215-2-(b)  230-41-(b)-(3)  230-43	<p style="text-align: center;"><b>Chapter 2</b></p> <p style="text-align: center;"><b>Wiring Design &amp; Protection</b></p> <p>Delete “No. 8” in last line of first paragraph and substitute- “No. 6”.</p> <p>Delete subsection and substitute- “The feeder conductor shall not be less than No. 4 AWG”.</p> <p>Delete this subsection.</p> <p>Add the following paragraph- “Where PVC conduit is used it shall be schedule 80 PVC and where conduit is laid on a rock surface it shall be protected by covering it with a minimum of two inches of concrete, otherwise the conduit shall be buried to a minimum depth of 1’6”. Where such conduit is attached to a pole it shall be protected by a metal covering or enclosed in an additional larger diameter PVC pipe, over the first four feet from ground level, as a protection against accidental damage.”.</p>

Publication in consolidated and revised form authorised by the Governor in Cabinet this 12th day of July, 2005.

Carmena Watler  
Clerk of Cabinet





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