1947

1987/391

THE ELECTRICAL WIRING REGULATIONS 1976, AMENDMENT NO. 4

PAUL REEVES, Governor-General

ORDER IN COUNCIL

At Wellington this 7th day of December 1987

Present:

HIS EXCELLENCY THE GOVERNOR-GENERAL IN COUNCIL

PURSUANT to the Electricity Act 1968, His Excellency the Governor-General, acting by and with the advice and consent of the Executive Council, hereby makes the following regulations.

ANALYSIS

REGULATIONS

1. Title and commencement—(1) These regulations may be cited as the Electrical Wiring Regulations 1976, Amendment No. 4, and shall be read together with and deemed part of the Electrical Wiring Regulations 1976* (hereinafter referred to as the principal regulations).

(2) These regulations shall come into force on the 28th day after the date of their notification in the *Gazette*.

2. Permission to use other methods and material—Regulation 7 of the principal regulations is hereby amended by omitting the words "use or", and substituting the words "use of".

3. Isolation of installations and apparatus—The principal regulations are hereby amended by revoking regulation 30, and substituting the following regulation:

"30. (1) Such efficient switchgear, suitably located, shall be provided for cutting off all voltage from every part of an installation as may be necessary to prevent danger. Each fire compartment may have its own switchgear for the purposes of isolation.

"(2) All electrical supplies to a fire compartment must be able to be controllable for the purposes of isolation from the one operating position.

"(3) Where multiple units of switchgear must be operated to effect isolation, all such switchgear must be so positioned in close proximity and labelled so that the actions necessary to isolate all voltage are clearly indicated.

"(4) For the purpose of this regulation, separate fire compartments shall be defined in New Zealand Standard 1900 Chapter 5 for 1½ hours separation."

4. Relative ratings of conductor and protective devices—Regulation 48 (2) of the principal regulations is hereby amended by adding the following paragraph:

"(i) Where overload and short circuit current protection is provided at the remote end of a subcircuit and there are no other connections to the subcircuit, the short circuit current protection at the origin of the subcircuit shall be not greater than twice the current rating of the subcircuit conductors:

"Provided that the short circuit current protection at the origin of the subcircuit may be more than twice the current rating of the subcircuit conductors where evidence is documented and certified by a Registered Electrical Engineer, that to the best of his or her knowledge and belief thermal, transient or mechanical damage to the conductors will not eventuate."

5. Number of points on, and current rating of, subcircuits—(1) The principal regulations are hereby amended by revoking regulation 50, and substituting the following regulation:

"50. (1) Subcircuits supplying one lamp, one plug socket, or one appliance are not limited as to current rating.

*S.R. 1976/38
Amendment No. 1: S.R. 1979/184
Amendment No. 2: S.R. 1987/90
Amendment No. 3: S.R. 1987/178

"(2) Except as provided for in subclause (3) (b) of this regulation, provision of separate subcircuits shall be made for lighting points and plug sockets.

"(3) Where more than one point is provided on a subcircuit, the maximum number of points on, and the maximum protective current rating of, the subcircuit shall be in accordance with the following table:

Type of Subcircuit	Maximum No. of Points	Maximum Rating of Subcircuit	Cable Size
(a) Lighting, protected by a fuse which may include fixed connections for small appliances not exceeding 1000 watts total rating	Not more than 60% of the lighting points in the installation	16 amperes	Not smaller than subcircuit rating
(b) Lighting, protected by a circuit breaker having fixed non-adjustable time/current characteristics which may include one plug socket or one appliance not exceeding 2300 watts rating	Not more than 60% of the lighting points in the installation	20 amperes	Not smaller than circuit-breaker rating
(c) Plug sockets and fixed outlets of similar rating protected by a fuse:			
(i) Plug sockets and fixed outlets not exceeding 10 amperes rating	2	20 amperes	Not smaller than subcircuit rating
(ii) Plug sockets and fixed outlets exceeding 10 but not exceeding 63 amperes rating	2	63 amperes	Not smaller than subcircuit rating
(iii) Plug sockets and fixed outlets exceeding 63 amperes where all are of the same current rating	2	Not exceeding the current rating of one plug socket	Not smaller than subcircuit rating
(d) Plug sockets and fixed outlets of similar rating protected by a circuit-breaker having fixed non-adjustable time/current characteristics:			
(i) Plug sockets and fixed outlets not exceeding 10 amperes rating	Any number	20 amperes	Not smaller than circuit-breaker rating
(ii) Plug sockets and fixed outlets exceeding 10 but not exceeding 63 amperes rating	Any number	63 amperes	Not smaller than circuit-breaker rating
(iii) Plug sockets and fixed outlets exceeding 63 amperes where all are of the same rating	Any number	Not exceeding the current rating of one plug socket	Not smaller than subcircuit current rating
(e) Plug sockets of differing current ratings protected by a circuit-breaker having fixed non-adjustable time/current characteristics	Any number	Not exceeding twice the current rating of the smallest rated plug socket	Not smaller than circuit-breaker rating

Type of Subcircuit	Maximum No. of Points	Maximum Rating of Subcircuit	Cable Size
(f) Plug sockets for use with fused plugs and connected to a ring circuit protected either by a fuse or by circuit-breaker having fixed non-adjustable time/current characteristics	House or flat—Any number	32 amperes	Not smaller than 20 amperes rating
	Other premises 6	63 amperes	Not smaller than 40 amperes rating
(g) Plug sockets, fixed appliances or permanently connected semi-portable appliances protected by a circuit-breaker having fixed non-adjustable time/current characteristics	Any number	Not exceeding twice the current rating of the smallest rated plug socket or fixed outlet	Not smaller than circuit-breaker rating
(h) Fixed appliances and permanently connected semi-portable appliances where each appliance has individual excess-current protection or where the subcircuit is protected by a circuit-breaker having fixed non-adjustable time/current characteristics	Any number	Not limited	Not smaller than circuit-breaker rating

"(4) Subclause (3) of this regulation shall not apply to electric discharge lamps installed in accordance with regulation 130 of these regulations.

"(5) Where lighting track is used it shall be so arranged that all active conductors are isolated simultaneously."

(2) The Electrical Wiring Regulations, Amendment No. 1 are hereby consequentially amended by revoking regulation 6.

6. Control of points—Regulation 53 (1) of the principal regulations is hereby amended by omitting the expression "30 amperes", and substituting the expression "32 amperes".

7. Minimum size of conductor—(1) Regulation 58 of the principal regulations is hereby amended by revoking paragraph (e), and substituting the following paragraph:

"(e) The flexible cord used with decorative lighting sets containing sub-miniature lamps and complying with the appropriate New Zealand standard shall have a cross sectional area of not less than 0.20 mm^2:".

(2) Regulation 58 of the principal regulations is hereby further amended by adding the following paragraph:

"(h) Wiring used in conjunction with extra low voltage circuits may have a minimum cross sectional area of 0.5 mm^2 where the current in the circuits does not exceed 0.5 amperes."

8. Protection of cables against fire or explosion—(1) The principal regulations are hereby amended by revoking regulation 67, and substituting the following regulation:

"67. (1) In any situation where flammable or explosive dust, vapour, or gas is likely to be present, the wiring type and system shall be in accordance with either of the following paragraphs:

"(a) Cables drawn into screwed, solid drawn, or seam welded steel conduits installed in accordance with section 25 of British Standard 5345 Pt 1; Selection, installation, and maintenance of electrical apparatus for use in potentially explosive atmospheres:

"(b) Cables that are otherwise suitably protected against mechanical damage:

"Provided that aluminium, plastics, or flexible conduit shall not be used in Zone 0 or Zone 1 areas.

"(2) For the purposes of subclause (1) (b) of this regulation, the following types of cable may be used in Zones 1 and 2, subject to satisfactory life in the specific environment:

"(a) Lead sheathed cable:

"(b) Armoured cable:

"(c) Thermoplastic or elastomer insulated, screened or armoured cable with PVC, PCP or similar sheath overall:

"(d) Cables enclosed in a seamless aluminium sheath, with or without armour, with an outer protective sheath:

"(e) Mineral insulated metal sheathed cable:

"(f) Thermoplastic or elastomer insulated flexible cable or cord with a flexible metallic screen or armour and with a PVC, PCP or similar sheath overall:

"(g) Thermoplastic insulated cable with semi-rigid sheath:

"Provided that, in Zone 2 only, other approved cables may be used.

"(3) Every cable that enters a flameproof enclosure shall be of the type which is approved for the purposes of this regulation and be installed using a method declared suitable for that type of cable.

"(4) For the purposes of subclause (3) of this regulation, the following types of cable are approved:

"(a) Thermoplastic or elastometric types complying with the requirements of any of British Standards 6346, 6116, or 5467 which have extruded bedding and non-hygroscopic fillers which effectively fill the cable cross section:

"(b) Other cables with thermoplastic or elastometric core insulation and bedding:

"(c) Mineral-insulated cables with or without outer protective sheathing.

"(5) For the purposes of subclause (4) (a) of this regulation, the following methods are declared suitable:

"(a) Cable termination boxes with cable entry devices certified as part of the apparatus:

"(b) Plugs, complete with suitable cable glands, which engage with sockets all of which are certified as part of the apparatus:

"(c) Group IIA and Group IIB apparatus, flameproof cable glands with component approval, where the cables are terminated in an indirect entry (type X) flameproof enclosure or other flameproof enclosure containing terminals only:

"(d) Group IIA and Group IIB apparatus where cables are terminated into a direct entry (type Y) enclosure, and for all Group IIC

apparatus, a sealing device, e.g. a stopper box or an equivalent cable gland, having appropriate component approval.

"(6) For the purposes of subclause (4) (b) of this regulation, the following methods are declared suitable:

"(a) A sealing device, e.g. a stopper box or sealing chamber, certified as part of the apparatus or having component approval, and employing cable glands appropriate to the cables used:

"(b) Cable glands incorporating compound filled seals or other equivalent sealing arrangement and having appropriate component approval.

"(7) For the purposes of subclause (4) (c) of this regulation, flameproof cable glands having component approval are declared suitable.

"(8) For the purposes of subclauses (5) and (6) of this regulation, the sealing devices such as stopper boxes, sealing chambers, or equivalent glands referred to shall incorporate compound or other appropriate seals which permit stopping around individual cores. Sealing devices shall be fitted at the points of entry of cables to the apparatus.

"(9) Particular cables and cable termination arrangements as specified in the certification documents are deemed to comply with the provisions of subclause (3) of this regulation.

"(10) Where cables or conduit pass through a floor, wall, partition, or ceiling that forms a gas or fire barrier, the hole provided for them shall be made good with cement or similar incombustible material to the full thickness of the floor, wall, partition, or ceiling, or cable glands or cable transits may be used.

"(11) Where trunking, ducts, pipes, or trenches are used to accommodate cables, precautions shall be taken to prevent the passage of flammable gases, vapours, or liquids from one area to another and to prevent the collection of flammable gases, vapours, or liquids in trenches.

"(12) For the purposes of this regulation hazardous zones and apparatus groupings and enclosure types are those specified in British Standard 5345."

9. Additional requirements for neutral-screened cables—Regulation 82 (1) of the principal regulations is hereby amended by inserting, after the word "copper", the words "or aluminium".

10. Safe use of portable appliances—(1) Regulation 103 of the principal regulations is hereby amended by revoking subclause (4) (as substituted by regulation 14 (1) of the Electrical Wiring Regulations 1976, Amendment No. 1), and substituting the following subclause:

"(4) The following forms of construction and means of supply for portable appliances are approved for the purposes of this regulation:

"(a) The portable appliance is of the all-insulated type:

"(b) Direct earthing by means of the earth continuity conductor in a flexible cable or flexible cord where such an earth continuity conductor is not a braided metallic covering:

"(c) Direct earthing by means of the earth continuity conductor in a flexible cable or flexible cord having a braided metallic covering, installed in accordance with the provisions of regulation 158 of these regulations, which relates to the connections of earth continuity conductors, and fitted with suitable accessories:

"(d) Supply from a monitored earth circuit arranged to cut off supply automatically in the event of the earth-continuity conductor to the portable appliance breaking or becoming disconnected:

"(e) Supply from a source connected to earth in such a way that the voltage to earth will not exceed 55 volts:

"(f) A residual current operated device complying with and installed to the requirements of regulation 159 of these regulations:

"(g) Double insulation complying with an approved standard:

"(h) Supply from a source isolated from earth and having a voltage between conductors not exceeding 250 volts:

"(i) Supply from a source isolated from earth and having a voltage between conductors not exceeding 250 volts and having one appliance connected through a continuous flexible cord:

"(j) Supply from an extra low voltage source which is isolated from the supply mains by means such as a safety isolating transformer or motor generator providing equivalent isolation."

(2) Regulation 103 (5) (b) of the principal regulations is hereby amended by omitting the words "paragraphs (c) to (i)", and substituting the words "paragraphs (c) to (j)".

(3) Regulation 103 (5) of the principal regulations is hereby further amended by revoking paragraph (c), and substituting the following paragraphs:

"(c) In any normally damp indoor situation or in any building or structure under construction, or in any outdoor situation, except as in paragraph (d) below	Any of the types described in paragraphs (d) to (j).
"(d) In any situation where a person is partially or wholly immersed in a conductive substance, or in a near wholly conductive location	Not less than the type described in paragraph (f), combined with the type described in paragraph (g) or the type described in paragraph (i) or the type described in paragraph (j)."

(4) The Electrical Wiring Regulations 1976, Amendment No. 1 are hereby consequentially amended by revoking regulation 14.

11. **Heating and cooking appliances**—Regulation 106 of the principal regulations is hereby amended by revoking subclause (2), and substituting the following subclause:

"(2) Any heating appliance installed in a bathroom shall—

"(a) Be of a type with the element totally enclosed in metal; or

"(b) Be of a type with the element enclosed with metal such that the element or its connections cannot be contacted by a standard test finger as described in New Zealand Standard 6300, and—

"(i) Have provision that should the element or its sheath break, the element will not contact or fall outside the heater enclosure; and

"(ii) Be installed in such a position that it cannot be touched by a person standing in or sitting on the bath; or

"(c) Be of a type where the element or its connections cannot be touched by the standard test finger described in New Zealand Standard 6300; and—

"(i) Be installed at a height of not less than 1.8 m above the floor; or

"(ii) Be in such a position that it cannot be touched by a person standing in the bath."

12. Control of motors and motor circuits—(1) Regulation 108 (4) of the principal regulations is hereby amended by omitting the words "a rating", and substituting the words "an output rating".

(2) Regulation 108 of the principal regulations is hereby further amended by adding the following subclause:

"(9) Where failure of one phase of supply or reversal of phase rotation of supply is liable to cause injury to persons or damage to property, every polyphase motor shall be fitted with phase failure and reversal protection."

13. Additional requirements for theatres—Regulation 120 of the principal regulations is hereby amended by revoking subclause (5), and substituting the following subclause:

"(5) All stage lighting shall be so wired that the maximum loading on any subcircuit shall not exceed the current rating of the subcircuit cable and the fixed close excess current protective devices at the point of origin of the sub-circuit."

14. Additional requirements for electric-fence controllers and electric fences—Regulation 121 of the principal regulations is hereby amended by revoking subclause (3), and substituting the following subclause:

"(3) An electric fence controller shall not be fixed to any pole which forms part of an Electrical Supply Authority distribution system, except with the express permission of the Electrical Supply Authority. In all cases where a fence controller is fitted to a pole of an electric line, clearances as specified in regulation 84 of these regulations shall be maintained."

15. Additional requirements for extra-low-voltage installations—Regulation 123 of the principal regulations is hereby amended by revoking subclause (1), and substituting the following subclauses:

"(1) Every installation or part thereof operating at extra-low voltage shall comply with the requirements of these regulations and with the additional requirements prescribed in subclauses (3) to (5) of this regulation, subject to the exemptions set out in subclause (2) of this regulation.

"(1A) Where the whole or any part of an extra-low-voltage installation is in or passes through an explosion hazard area for which requirements are prescribed in regulation 94 of these regulations, the exemptions as set out in subclause (2) of this regulation do not apply."

16. Additional requirements for caravans and other vehicles intended for connection to an electricity supply system—(1) The

principal regulations are hereby amended by revoking regulation 125, and substituting the following regulation:

"125. (1) The electrical installation of any caravan intended for connection to a low-voltage single-phase multiple-earthed-neutral supply, and having a maximum demand not in excess of 16 amperes, in addition to complying with the other provisions of these regulations shall conform with the following provisions:

"(a) Supply to the caravan shall be by means of a three-core tough rubber-sheathed or tough plastic-sheathed flexible cord, each conductor of which shall have a cross-sectional area of not less than 1.5 mm^2 and which shall—

"(i) Be in one piece; and

"(ii) Be connected to the caravan appliance inlet by means of a suitable connector conforming to British Standard 4343 for caravans wired on or after the 1st day of January 1989, or be permanently wired into the caravan wiring with a suitable weatherproof cord storage compartment being provided; and

"(iii) Have fitted to the end distant from the caravan a weatherproof, 15 ampere, two-pin and earth, non-reversible plug conforming to New Zealand Standard 1989:

"(b) An appliance inlet installed on the outside of the caravan shall be of the type conforming to British Standard 4343 and shall have a weatherproof cover:

"(c) Provision is to be made for the supply flexible cord to be attached to the outside wall of the caravan by means of a suitable fitting, fitted as high as practicable, for strain relief on connections and support of the cord from the ground. A bracket and insulator, or hook and thimble, or non-perishable guy rope tensioner are suitable ways of meeting this requirement:

"(d) Caravans shall be wired with tough rubber-sheathed or tough plastic-sheathed cable.

"(2) Any electrical installation in any caravan not coming within the scope of subclause (1) of this regulation, or in any other vehicle, and intended for connection to an electricity supply system, shall comply with the requirements of regulation 104 of these regulations, which relates to semi-portable appliances.

"(3) It shall be contrary to these regulations for an electrical installation in any caravan or other vehicle to be connected to a supply of electricity, unless it complies fully with these regulations as evidenced by a warrant of electrical fitness to that effect issued within the previous 40 months by an Electrical Supply Authority. The warrant of electrical fitness shall be permanently attached to the caravan or vehicle in a conspicuous position. The Electrical Supply Authority may charge a fee and allowance determined by the Secretary with the consent of the Minster for each inspection."

(2) The Electrical Wiring Regulations, Amendment No. 1 are hereby amended by revoking regulation 21.

17. Basic requirements for earthing—(1) Regulation 152 of the principal regulations is hereby amended by inserting, before the words "The earthing arrangements", the words "Subject to subclause (2) of this regulation,".

(2) Regulation 152 of the principal regulations is hereby further amended by adding the following subclause:

"(2) Where required in these regulations or by special circumstances, more precise operation of protective devices is required than that in subclause (1) of this regulation, the following provisions shall apply:

"(a) The characteristics of the protective devices, the earthing arrangement for the installation, and the relevant impedances of the circuits concerned shall be co-ordinated so that during an earth fault the simultaneous voltages between accessible exposed conductive parts occurring anywhere in the installation shall be of such magnitude and duration as not to cause danger. Fault voltage shall not exceed 40 volts r.m.s.:

"(b) Paragraph (a) of this subclause is deemed to be satisfied if the earth fault loop impedance of every circuit of the installation or part of the installation under consideration is such that disconnection occurs within 0.4 seconds:

"(c) A suitably rated residual current device to an approved standard is an alternative means of compliance with paragraph (a) of this subclause:

"(d) Where protection is afforded by an overcurrent device, and the nominal voltage to earth is 240V r.m.s. a.c. the earth fault loop impedance shall not exceed the value in table 9 of these regulations. For types and rated currents of overcurrent protective devices other than those mentioned in the tables, the necessary time/current characteristics shall be those specified in Appendix 8 of the 15th Edition 1981 of the Institution of Electrical Engineers Regulations for Electrical Installations."

(3) The principal regulations are hereby further amended by adding table 9 set out in the Schedule to these regulations.

18. Residual current devices (current operated earth leakage detectors)—The principal regulations are hereby amended by revoking regulation 159, and substituting the following regulation:

"159. (1) Where residual current devices are used to meet the requirements of regulation 152 (1) (b) of these regulations or to reduce the chance of fire from electrical causes or to provide safeguard for life or property, in addition to the safeguards set down in these regulations, the following provisions shall apply:

"(a) The residual current device shall comply with an appropriate standard:

"(b) In the event of a current flow to earth equal to or greater than the rated residual current, the supply is disconnected in 0.4 seconds or less:

"(c) Residual current devices shall be installed in a readily accessible position on the main switchboard or at some other readily accessible position:

"(d) The arrangements of the installation earthing shall conform to the requirements of regulations 153, 154, 155, 157, and 158 of these regulations:

"(e) Where a residual current device is installed to meet the requirements of regulation 152 (1) (b) of these regulations, the service main of the installation shall be of such form or installed

in such manner that double insulation is provided on the conductors:

"(f) Every residual current device shall be provided with means for testing the effectiveness of its operation:

"(g) A notice shall be affixed to every residual current device stating that periodic testing by the test device is required. This notice shall be so located that it can be read easily when the circuit breaker is mounted in its operating position:

"(h) Where a residual current device is installed to comply in all respects with the specified requirements of these regulations for the main switch of an installation or for a switch for the control of a stated appliance, apparatus, or outlet, no other main switch need be installed in respect of the installation and no other control switch need be installed in respect of the appliance, apparatus, or outlet.

"(2) Where residual current devices are used as a safeguard in accordance with regulation 103 of these regulations, the following provisions shall apply:

"(a) The residual current devices shall comply with an appropriate standard, and have a rated residual operating current not exceeding 30 milliamps:

"(b) The residual current devices shall be tested after installation, and shall trip when a fault current of 150mA is passed. The test shall be applied 5 times. In each of the tests tripping shall occur within 0.04 seconds and the mean value of the tripping times shall not exceed 0.03 seconds:

"(c) The residual current device shall trip within the times specified in paragraph (b) of this subclause when a pulsating dc residual current exceeding 1.4 times the rated residual current is applied. Multiple pole residual current devices shall have the test repeated on each pole. The test shall be made with an instrument designed for the purpose:

"(d) A warning notice in durable letters shall be affixed to each residual current device in a prominent position requiring testing of the device by means of the inbuilt push button or key:

"(e) The residual current device shall be permanently connected in the circuit before the first point from which a portable appliance is used. Where residual current devices are incorporated in semi-portable switchboards they may be considered to have met this requirement if the semi-portable switchboard is connected to the permanent supply by means of a plug and socket conforming to British Standard 4343:

"Provided that this paragraph shall not apply to portable residual current devices approved by the Secretary subject to such conditions as the Secretary may prescribe:

"(f) Where residual current devices are used as a safeguard under paragraphs (b), (c), and (d) of subclause (5) of regulation 103 of these regulations all of the circuits in the installation shall have disconnection times in accordance with regulation 152 (2) of these regulations:

"(g) All residual current devices used as a safeguard under paragraphs (b), (c), and (d) of subclause (5) of regulation 103 of these regulations shall be tested in the manner described in

paragraphs (b) and (c) of this subclause at intervals not exceeding 3 months, and a register of tests shall be kept on the premises showing the name of the person who carried out the tests, the date of the tests, and the results. Such register shall be available to Electrical Supply Authority Electrical Inspectors and Inspectors of the Department of Labour."

19. Insulation-resistance tests—Regulation 162 (1) of the principal regulations is hereby amended by omitting the words "and tested separately".

SCHEDULE Reg. 17 (3)

NEW TABLE 9 TO PRINCIPAL REGULATIONS

"TABLE 9 Reg 152 (2) (d)

MAXIMUM EARTH FAULT LOOP IMPEDANCE ZS

1. **Fuses**

Fuses to BS 88 Part 2

Rating (amperes)	6	10	16	20	25	32	40	50
Zs (ohms)	8.7	5.3	2.8	1.8	1.5	1.1	0.8	0.6

Fuses to BS 3036

Rating (amperes)	5	15	20	30	45
Zs (ohms)	9.6	2.7	1.8	1.1	0.6

2. **Circuit Breakers**

Type 1 miniature circuit breakers to BS 3871

Rating (amperes)	5	10	15	20	30	50	In
Zs (ohms)	12	6	4	3	2	1.2	60/In

Type 2 miniature circuit breakers to BS 3871

Rating (amperes)	5	10	15	20	30	50	In
Zs (ohms)	6.8	3.4	2.3	1.7	1.1	0.68	34/In

Type 3 miniature circuit breakers to BS 3871

Rating (amperes)	5	10	15	20	30	50	In
Zs (ohms)	4.8	2.4	1.6	1.2	0.8	0.48	24/In

NOTE When U_0, the nominal voltage to Earth, is other than 240V the tabulated impedance values are to be multiplied by $U_0/240$."

C. J. HILL,
Acting for Clerk of the Executive Council.

EXPLANATORY NOTE

This note is not part of the regulations, but is intended to indicate their general effect.

These regulations, which come into force on 1 January 1988, amend the Electrical Wiring Regulations 1976.

Regulation 2 is a drafting amendment.

Regulation 3 amends regulation 30 to provide one position in an installation for the isolation of all electrical circuits.

Regulation 4 amends the requirement in regulation 38 for the protection of conductors to provide for the protection to be installed at the remote end.

Regulation 5 rewrites regulation 50 to allow for new wiring practices and systems.

Regulation 6 amends regulation 53 to align the rating specified with international standards.

Regulation 7 amends regulation 58 to align cable sizes with internationally recognised sizes.

Regulation 8 rewrites regulation 67 to define clearly the wiring type and system to be employed in areas where there is a risk of fire or explosion.

Regulation 9 amends regulation 82 to provide for aluminium conductors in neutral screened cables.

Regulation 10 amends regulation 103 to allow the use of earth leakage circuit breakers as an approved safeguard and to provide for extra low voltage in areas that are subject to a high degree of danger.

Regulation 11 amends the requirements in regulation 106 in relation to heating appliances in bathrooms.

Regulation 12 amends regulation 108 in relation to the control of motors and motor circuits.

Regulation 13 amends regulation 120 to provide for increased ampere loading in theatres.

Regulation 14 amends regulation 121 to allow electric fence controllers to be fixed to Electric Supply Authority poles with prior permission.

Regulation 15 amends regulation 123 to provide for additional requirements for electrical work in hazardous areas.

Regulation 16 amends the requirements in regulation 125 in relation to caravans connected to an electrical supply system.

Regulation 17 amends regulation 152 in relation to the basic requirements for earthing.

Regulation 18 rewrites regulation 158 which deals with residual current devices to accord with internationally accepted criteria.

Regulation 19 amends regulation 162 to exempt electrical apparatus from the conventional insulation testing methods.

Issued under the authority of the Regulations Act 1936.
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These regulations are administered in the Ministry of Energy.