1965/43



## THE ELECTRICAL WIRING REGULATIONS 1961, AMENDMENT NO. 2

## BERNARD FERGUSSON, Governor-General ORDER IN COUNCIL

At the Government Buildings at Wellington this 22nd day of March 1965

Present:

THE RIGHT HON. KEITH HOLYOAKE, C.H., PRESIDING IN COUNCIL

PURSUANT to the Public Works Act 1928, His Excellency the Governor-General, acting by and with the advice and consent of the Executive Council, hereby makes the following regulations.

## REGULATIONS

1. These regulations may be cited as the Electrical Wiring Regulations 1961, Amendment No. 2, and shall be read together with and deemed part of the Electrical Wiring Regulations 1961\* (hereinafter referred to as the principal regulations).

2. (1) Regulation 20 of the principal regulations is hereby amended—

(a) By omitting from subclause (1) the words "subclause (3)", and substituting the words "subclauses (3) and (4)":

(b) By inserting in paragraph (d) of subclause (2), after the word "purposes", the words "or radio interference suppressors".

(2) Regulation 20 of the principal regulations is hereby further amended by adding to subclause (3) the following paragraph: "(d) Overhead-line connector boxes complying with New Zealand

Standard Specification No. 1212."

(3) Regulation 20 of the principal regulations is hereby further amended by adding the following subclause:

"(4) Marking as prescribed by subclauses (1) and (2) of this regulation may be omitted from the integral components of apparatus where the apparatus as a whole is adequately marked for the purposes of this regulation."

3. Regulation 35 of the principal regulations is hereby amended by adding to subclause (2) the words "except that, where fuses are used at the point of tap-off from a common submain in accordance with regulation 45 hereof, the fuses need not be controlled by an adjacent switch if there is not more than one such fuse per phase".

\*S.R. 1961/8 Amendment No. 1: S.R. 1961/130

234

4. Regulation 37 of the principal regulations is hereby amended by omitting from subclause (4) the word "iron-clad", and substituting the word "metal-clad".

5. Regulation 40 of the principal regulations is hereby amended by revoking subclause (1), and substituting the following subclause:

"(1) Where the neutral conductor of the supply is earthed, there shall be fitted to each switchboard a bus-bar which shall be insulated from any earthed metal associated with the switchboard and to which neutral conductors shall be connected, and a separate bus-bar to which earth-continuity conductors shall be connected."

6. Regulation 51 of the principal regulations is hereby amended by revoking paragraph (b) of subclause (3), and substituting the following paragraph—

"(b) Each subcircuit supplying plug sockets shall be deemed to have a full connected load equivalent to the current rating of the subcircuit as determined under regulation 50 hereof."

7. Regulation 57 of the principal regulation is hereby amended by adding the following paragraph: "(e) Flexible cord having a conductor of a cross-sectional area not

e) Flexible cord having a conductor of a cross-sectional area not less than 0.0003 sq. in. (7/.0076 in. diameter) may be used with sub-miniature lamps in decorative lighting sets complying with British Standard No. 3479."

8. Regulation 58 of the principal regulations is hereby amended by adding the words "Conductors of solidal type cables".

9. (1) Regulation 61 of the principal regulations is hereby amended by adding to subclause (3) the following paragraph:

"(c) The colours green-and-yellow in combination may be used as an alternative to green for the identification of the earthcontinuity conductor in a flexible cord if the colours are clearly discernible and on any length of 0.6 in. of the core each of the colours green and yellow covers at least 30 per cent of the surface of the core."

(2) Regulation 61 of the principal regulations is hereby further amended by revoking paragraph (f) of subclause (5), and substituting the following paragraph:

"(f) Two core flexible cord-

"(i) In which the provision for identifying the manufacturer

is also suitable as a means of identifying the conductors; or "(ii) Which has one tinned and one untinned copper conductor; or

"(iii) Of the flat twin type which has a longitudinal rib along the outer covering of one of the cores."

10. Regulation 83 of the principal regulations is hereby amended by adding the following subclause $\rightarrow$ 

(15) The relevant provisions of the Electrical Supply Regulations 1935 may be used as an alternative to the foregoing provisions of this regulation:

"Provided that, where an aerial line is attached to a building or other structure, including a pole located adjacent to a building or structure, being a pole to which is connected any submain or subcircuit conductor, only conductors having an approved covering shall be used for phase or other live conductors for a distance of not less than 60 ft from the attachment of the line to the building, structure, or pole, or (where the line is less than 60 ft in length) for the whole length of the line."

11. Regulation 107 of the principal regulations is hereby amended by revoking subclause (4), and substituting the following subclause:

"(4) Every electric motor having a rating exceeding 1 horsepower shall be provided with effective automatic overload protection so arranged that, in operation, it disconnects all live conductors from the motor."

12. Regulation 115 of the principal regulations is hereby amended by revoking subclause (3), and substituting the following subclause:

"(3) Electric mains-supplied radio and other electronic apparatus for acoustic or visual reproduction shall comply with New Zealand Standard Specification 1678, which relates to the safety requirements for electric mains-supplied radio or other electronic apparatus for acoustic or visual reproduction."

13. Regulation 118 of the principal regulations is hereby amended by adding to subclause (6) the words "except that a single trailing cable may be used for the wiring if all the conductors in the cable are insulated for the highest voltage present in the cable".

14. Regulation 120 of the principal regulations is hereby amended by inserting in subclause (8), after the word "measuring", the words "not less than".

15. Regulation 123 of the principal regulations is hereby amended by inserting, after the word "laboratory", the words "or at any research project out of doors".

16. Regulation 125 of the principal regulations is hereby amended by revoking subclause (4), and substituting the following subclause:

"(4) Any capacitor connected between any line conductor and exposed metal frame of a portable or semi-portable appliance shall not exceed 0.005 micro-farad in the case of alternating current and 0.1micro-farad in the case of direct current."

17. Regulation 134 of the principal regulations is hereby amended by inserting, after the word "high-voltage", the words "or extra-high-voltage".

18. Regulation 149 of the principal regulations is hereby amended by revoking subclause (2), and substituting the following subclause:

"(2) The secondary winding of a transformer used for a manuallyoperated, portable or semi-portable, arc welding set shall not be connected to the earthed metal of the transformer."

19. Regulation 150 of the principal regulations is hereby amended by omitting the words "to the earth-continuity conductor".

20. Regulation 152 of the principal regulations is hereby amended by omitting from paragraph (d) of subclause (3) the words "not less than one-half that prescribed for earthing leads in table 26 hereof, as".

21. (1) Regulation 153 of the principal regulations is hereby amended by inserting in paragraph (a), after the word "shall", the words— "except as provided in subclause (2) of this regulation".

(2) Regulation 153 of the principal regulations is hereby further amended by adding as subclause (2) the following subclause:

"(2) Where the provisions of subclause (3) of regulation 155 hereof apply the separate and independent earthing lead shall be connected to the Electrical Supply Authority's distribution-line neutral."

22. The principal regulations are hereby amended by revoking regulation 155, and substituting the following regulation:

"155. Use of supply system earthed conductor for earthing—(1)Except as provided in subclauses (2) and (3) of this regulation, the earthed conductor of any system of supply shall not be used as an earthing conductor.

"(2) The neutral of a multiple earthed-neutral system may be used, in the case of aerial conductors, for the earthing of stays, outdoor lamp brackets, isolated overhead-line connector boxes, earthing guards, or other line hardware if the stays, brackets, boxes, guards, or hardware are mounted on poles at a height of not less than 9 ft above ground level.

"(3) Where mobile units are required to be connected temporarily to an Electrical Supply Authority's aerial lines for a short period in locations where, in the opinion of the Electrical Supply Authority, a separate connection with earth cannot be established without unreasonable expenditure or undue inconvenience, the distribution-line neutral of a multiple-earthed-neutral system may be used for the purpose of earthing if-

- "(a) The neutral and earthing conductors from the unit are run separately and are insulated from each other except where connection is made to the neutral bar and to the distributionline neutral; and
- "(b) The connection of the neutral conductor and the earthing conductor to the distribution-line neutral are separately made, one on each side of the distribution-line pole; and
- "(c) The Electrical Supply Authority is satisfied that no increase in electrical hazard will result from the method of earthing."

23. Regulation 157 of the principal regulations is hereby amended by inserting in subclause (5), after the word "copper", the words "or suit-able plastic material".

24. The principal regulations are hereby amended by revoking regulation 164.

25. Table 24 of the principal regulations is hereby amended by omitting the figure "0.0015" where it appears in column 3 in the same line as the figure "3/036" in column 2, and substituting the figure "0·001."

> T. J. SHERRARD, 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 make a number of detailed amendments in the requirements of the Electrical Wiring Regulations 1961.

Issued under the authority of the Regulations Act 1936. Date of notification in *Gazette*: 25 March 1965.

These regulations are administered in the New Zealand Electricity Department