

DIRECTIVE

BC ELECTRICAL CODE SECTION 4 CONDUCTORS

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This Directive is being issued by a provincial safety manager pursuant to section 30 of the Safety Standards Act.

4-004 Ampacity of wires and cables (see Appendix B)

Subrule 1) f):

1) The maximum current that a copper conductor of a given size and insulation is permitted to carry shall be as follows:

"1) f) underground configurations in conductor sizes smaller than No. 1/0 AWG, as specified in Item b) or as calculated by the IEEE 835 calculation method"

(4-004 1) b) references conductors in a raceway or two or three conductor cable as specified in Table 2)

Subrule 2) f):

2) The maximum current that an aluminum conductor of a given size and insulation is permitted to carry shall be as follows:

"2) f) underground configurations in conductor sizes smaller than No. 1/0 AWG, as specified in Item b) or as calculated by the IEEE 835 calculation method"

(4-004 2) b) references conductors in a raceway or two or three conductor cable as specified in Table 4)

Interpretation:

When the ampacity of a conductor is selected in accordance with item f) and subsequently increased in size to a conductor #1/0 or larger to meet voltage drop requirements, the conductor may be installed in compliance with Rule 12-012 Underground instillations.



Subrule 5) The ampacity of neutral supported cable shall be as specified in Tables 36A and 36B.

Interpretation:

When a conductor of a neutral supported cable has been utilized as a non-current carrying conductor, the ampacity of the cable may be based on the number of current carrying conductors as specified in Tables 36A and 36B.

Example: One insulated conductor of an aluminum quadruplex neutral supported cable has been used as a bond conductor. The ampacity of the neutral supported cable may be based on the corresponding triplex column of Table 36A.

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References: Safety Standards Act Electrical Safety Regulation Safety Standards General Regulation