



Canadian Standards Association
Mississauga, Ontario
To the Part I Committee

Subject No. 3219

Chair: J. Poulin

Date: March 30, 2005

Title: Approval of Underground Conductors, Rule 60-600 and 60-602(e)

Submitted by: Mike Anderson of The City of Winnipeg (on behalf of the Manitoba Inspectors Advisory Coordinating Committee) on December 8, 2004.

Proposal: Request to replace the word “suitable” in rule 60-600 and subrule 60-602(e) with the word “approved”

Reasons for Request: Throughout the CEC, installed conductors or cable assemblies are required to be approved for the application for safety reasons. We have had some conflict with a conductor that was specified for a direct burial installation. The conductor was approved for dry and damp locations under table 19 and also suitable for wet locations (as verified by the manufacturer) but not approved for it.

Supporting Information: The term “approved” is a defined term indicating that a certification organization has determined that a product meets specific requirements. The term “suitable” is undefined and is open to interpretation.

The phrases “approved for direct burial” and “approved for wet locations” require a product to be tested to meet the minimum standards necessary for those approvals. When a manufacturer notes that his product is “suitable” for wet locations, what form of verification has been undertaken to determine this suitability?

If the CEC requires a product to be suitable for a particular installation then it should be approved for the purpose.

Chair’s Comments: The word "suitable" is subjective and I agree with the submitter that we should avoid it if possible. On the other hand, I wonder if the best solution is really to replace it by the word "approved". I am inviting the S/C to comment on this proposal.

Subcommittee Deliberation (1st ROUND)

Seven of nine Subcommittee members replied, four disagreeing, one agreeing without comments, two agreeing with comments.

Summary of comments:

- not sure that such a change is warranted
- Table 19 provides requirements for use of conductors in different environments, and the condition of use is manifested in many rules of the Code by the word "suitable" without any problem (Example: Rule 12-100)
- don't think change is required as it is already covered in Rule 2-024
- it may be better to provide a definition for "suitable" in Section 0
- put an explanatory note in the Appendix B being more careful and provide more guidance on what we mean by a suitable cable while not mentioning we need approved cable

The submitter made the following comment:

“As the submitter I appreciate the comments and on behalf of MIACC we are prepared to change our proposal somewhat. We could live with an Appendix B note that could say: "suitable means suitable for the condition of use as indicated in Table 19". This is similar to the wording in Rule 12-100.”

Chair’s Comment:

I contacted the submitter and proposed him to add the words “**as indicated in Table 19**” in the first sentence of the Rule 60-600 and at the end of the Subrule 60-602 (e). I told him that I thought this could be more efficient than a note in the Appendix B and it would be in line with the wording used in the Rule 12-100.

The submitter answered that he supports my proposed wording.

Chair’s Proposal (2nd ROUND):

1. Amend the first sentence of the Rule 60-600 to read as follows:

"Where communication conductors or cable assemblies are direct buried, the sheath shall be suitable for direct burial **as indicated in Table 19** and the conductor or cable assembly shall:"

2. Amend the Subrule 60-602 (e) to read as follows:

"The cable sheath shall be suitable for wet locations **as indicated in Table 19.**"

Subcommittee Deliberation (2nd ROUND)

Seven of ten Subcommittee members replied, all agreeing with the proposal.

One member made the following comment: “Maybe it would be interesting to put a general note to Section 60, that all cables and wires be according to Table 19, therefore covering all aspects in the Section”.

Chair’s comment:

I do not think that it would be necessary to put the suggested general note. I think the existing Rule 12-100 is sufficient, because the Subrule 60-000 (2) says: “The requirements of this Section are supplementary to, or amendatory of, the general requirements of this Code”. So the Rule 12-100 applies to Section 60.

The Subject 3219 will add reference to Table 19 in Rules 60-600 and 60-602 in order to clarify the meaning of the word “suitable”.

Subcommittee Recommendation:

1. Amend the first sentence of the Rule 60-600 to read as follows:

"Where communication conductors or cable assemblies are direct buried, the sheath shall be suitable for direct burial **as indicated in Table 19** and the conductor or cable assembly shall:"

2. Amend the Subrule 60-602 (e) to read as follows:

"The cable sheath shall be suitable for wet locations **as indicated in Table 19.**"