



Canadian Standards Association
Mississauga, Ontario
To the Part I Committee

Subject No. 3228

Chair: E. Zebedee

Date: April 6, 2005

Title: Removal of Abandoned Cables, Rule 2-XXX

Submitted by: Ken Richardson of Ken Richardson Fire Technologies, Inc., 891 Beauclaire Drive, Ottawa, Ontario, K1C 2J5, Canada, Tel: 1-613-841-3419 on behalf of David Kendall, Carlon, Lamson & Sessions Inc., 25701 Science Park Drive, Cleveland, OH 44122 on January 19, 2005.

Proposal: Request for an Amendment to Section 2.

Add new Rule 2-XXX as follows. Add new Appendix Note to Rule 2-XXX.

2-XXX Removal of Abandoned Cables

Abandoned cables located in plenum chambers in buildings shall be removed from the plenum chambers unless they are permitted to remain by the National Fire Code of Canada (See Appendix B).

Appendix B

2-XXX The requirement for the removal of abandoned cables in plenums is located in the National Fire Code of Canada (2005 Edition) in Sentence 2.4.1.1.(5) as follows:

- 5) *Abandoned optical fibre cables and electrical wire and cables, with combustible insulation, jackets, or sheathes, and nonmetallic raceways shall be removed from a plenum unless:*
- a) *they are permanently closed by the structure or finish of the building,*
 - b) *they are not capable of being removed without disturbing the building structure or finish, or*
 - c) *their removal will risk affecting the performance of cables in use.*

Reasons for Request:

The Canadian Commission on Building and Fire Codes (CCBFC) has determined that there is a significant fire spread potential from the proliferation and non-removal of cables installed in plenums. This finding was based on both fire losses and full scale fire testing. The proliferation of cables in plenums is the result of current practice which is to abandon the existing cables and install new ones in the same plenum chamber. The fires and testing demonstrated that the combustible load in the plenum, as a result of the many generations of cables, was so high that

intense fires resulted. The Standing Committee on Fire Safety and Occupancy of the CCBFC has determined that this cable build-up constitutes a genuine hazard that can best be addressed by requiring the removal of abandoned cables. This proposed change to Section 2 of the CEC Part 1 reflects a long term policy of complementary rules to ensure that the required level of fire safety is achieved and coordination occurs between the 2 codes. (For example, see Rule 2-128.)

This proposal is being submitted to Section 2 in recognition of the role that the CEC Part 1 plays in ensuring fire safety in buildings in use. There are many occasions when an electrical inspector will be called to a building as a result of a change of wiring or electrical equipment when a fire inspector may not be called. Since the hazard of cable build-up in plenums is genuine and since the electrical inspector will seek guidance from the electrical code, it is appropriate to have this hazard addressed in the CEC Part 1 as well as the National Fire Code.

A similar proposal was previously circulated to the Section 56 and 60 Committees since the vast majority of cables in plenums are either communications or optical fibre. Members of those Section Committees suggested that the rule should better be located in Section 2 and applicable to all abandoned cables in plenums.

This proposal also reflects similar rules in NEC Sections 800.52(B) and 800.53(A) which state that: abandoned cables are not be permitted to remain in a plenum.

Chair's Comments: I support the proposal. Also it is my opinion that the rule number should be 2-010 (6).

Subcommittee Deliberation:

First round

Two members agreed with comments and four disagreed with comments, but three of the negative voting members agreed to the intent.

One disagreeing member, Duncan Dunsire suggested a change, which the 2 agreeing members voted in the affirmative based on the proposed change, and one disagreeing member voted agreement with the intent but would agree based on the proposed change of Mr. Dunsire. Of the two remain negatives one comment from Mr. Tsisserev was in the wording and why if this is such a fire risk stop at combustible cables installed in plenum's only, but agreed with the intent.

The chair amended the proposal based on the comments of Mr. Dunsire and Mr. Tsisserev and an amended proposal was sent out, the submitter agreed to the amended proposal.

Second Round

The Chair supports the proposal and it is the Chair's opinion that with the amendments made we have encompassed most of the concerns of five of seven members. A follow up email was sent requesting further input and a 6th member voted in favor of the amended proposal.

Subcommittee Recommendation: Accept the amended proposal (2-XXX and B2-XXX).

The amended proposal is as follows:

2-XXX Abandoned combustible cables and combustible raceways, when not permanently made inaccessible by the building structure, shall be removed.