

## Canadian Standards Association Mississauga, Ontario To the Part I Committee

Subject No. 3083 Chair: M.D. Gardener Date: April 16, 2003

Title: Box Connectors on Nonmetallic Boxes, Rule 12-3024(3)

**Submitted by:** David Kendall of Carlon, 25701 Science Park Drive, Cleveland, Ohio, 44122, (216) 766-6645 on September 5, 2002.

**Proposal:** Amend Subrule 12-3024(3) to read as follows:

(3) Where nonmetallic sheathed cable enters a box, cabinet, or fitting, a box connector, either as a separate device designed for use with such cable or as part of the box, cabinet, or fitting, shall be used to secure the cable in place adequately and without injury to the conductors.

Box connectors are not required for nonmetallic single gang outlet boxes, nominal size 57.15mm X 101.6mm, when mounted within walls or ceilings and the cable is supported within 300mm of the box and the sheath extends no less than 6.35mm into the box through a cable knockout.

**Reasons for Request:** Cable pull out is unlikely since the cable is supported close enough to the outlet box entry. Damage to the nonmetallic sheathed cable and conductors will not occur with a nonmetallic outlet box. This has been an acceptable practice in the National Building Code for over 30 years without a reported incident.

**Vice-Chair's Comments:** I agree with the comment regarding cable "pull out", but another function of the box connector is to close any unnecessary opening around the cable entry. Given the smallish size of some NMS cables these days, I'm not sure the proposed revision would provide for that.

## **Vice-Chair's Comments (Second Round):**

Section 12 Subcommittee:

The results of the Subcommittee deliberations are not conclusive enough to declare consensus. Please review this subject again in light of the enclosed response from Carlon.

Summary of Subcommittee Deliberations:

There were eight respondents,

1 agreed with the submission,

1 agreed with the submission with the comment that the distance should be 200 mm to align more closely with the NEC,

- 2 disagreed with the submission stating concerns about the closure of the opening and the reliance of the staple to adequately prevent pullout, and
- 4 agreed with the comments of the vice-chair voicing concerns of closure of the opening around the cable.

Attached is a copy of correspondence from Carlon on the issue of closure.

## **Summary of Subcommittee Deliberations:**

First round: There were eight respondents,

- 1 agreed with the submission,
- 1 agreed with the submission with the comment that the distance should be  $200~\mathrm{mm}$  to align more closely with the NEC,
- 2 disagreed with the submission stating concerns about the closure of the opening and the reliance of the staple to adequately prevent pullout, and
- 4 agreed with the comments of the vice-chair voicing concerns of closure of the opening around the cable.

<u>Second round:</u> (This round included a letter of support from the submitter addressing the concerns regarding the opening around the cable).

There were 7 respondents, 5 of which disagreed with the proposal for the second time so there is no consensus.

**Subcommittee Recommendation:** Reject the proposal and close the subject.