



ENGINEERING DEPARTMENT

BULLETIN

No. 91

Date: August 21, 2003

Termination of Bonding Strip on Type AC Cable

This Bulletin explains the purpose of the internal bonding strip of Type AC Cable and provides recommended methods for terminating the Bonding Strip.

The National Electrical Code Section 320.100 covering Construction requires that “Type AC cable shall have an armor of flexible metal tape and shall have an internal bonding strip of copper or aluminum in intimate contact with the armor for its entire length”.

The Underwriters Laboratories Standard for Armored Cable is UL-4. The UL standard requires that, “Armored cable shall have an un-insulated bonding strip located between the conductor assembly and the armor throughout its entire length. The bonding strip, which enhances the grounding ability of the interlocking armor, shall be of aluminum and shall not be smaller than 16 AWG.”

During the termination of Type AC cables, the bonding strip is not terminated in the same manner as an equipment grounding conductor. The bonding strip is not an equipment-grounding conductor according to either UL or the NEC and it is not necessary for it to be terminated.

The best practices for terminating the bonding strip based on many years of trade experience with Type AC Cables include:

- (a) wrapping the bonding strip around the exterior of the cable armor, or
- (b) laying the bonding strip straight against the exterior of the armor.

The bonding strip however may also be completely cut and removed from the end of the armor. The enclosed illustration shows the recommended best trade practices with respect to the bond strip.

Preparing AC Cable for Termination



Method 1 - Bend back over anti-short



Method 2 - Bend back under anti-short



Method 3 - Back-wrap under anti-short



Method 4 - Back-wrap over anti-short

Distribution List:

Standards and Conformity Assessment Policy Committee
Codes and Standards Committee
NEMA Executive Staff