

NMB Cable in Outdoor Conduit Sleeves

Statewide Alternate Methods are approved by the division administrator in consultation with the appropriate advisory board. The advisory board's review includes technical and scientific facts of the proposed alternate method. In addition:

- *Building officials shall approve the use of any material, design or method of construction addressed in a statewide alternate method;*
- *The decision to use a statewide alternate method is at the discretion of the applicant; and*
- *Statewide alternate methods do not limit the authority of the building official to consider other proposed alternate methods encompassing the same subject matter.*

Code edition: 2017 Oregon Electrical Specialty Code (OESC) Sections 300.9 and 334.12(B)(4)

Date: Rescinded: April 1, 2021
Issued: July 24, 2008

Subject: NMB Cable in Outdoor Conduit Sleeves

Background:

This typical wiring method for additions and remodel projects has been used for many years with no documented incidents of cable corrosion or failure due to exposure to moisture. Article 300.9 in the OESC defines the interior of raceways installed in outdoor locations above ground, as a wet location, requiring conductors and cables listed for use in wet locations. Article 334.12(B)(4) indicates that NMB is prohibited from installation in wet or damp locations.

This alternate method ruling provides an alternative to requiring the installation of UF cable, or junction boxes in attics and crawl spaces for transition from NMB to waterproof wiring methods.

Discussion:

The use of conduit sleeves in outdoor locations for physical protection of non-metallic cable assemblies in limited lengths has been a standard and acceptable practice for decades. Limiting installations to short vertical runs will insure that moisture cannot accumulate within the conduit sleeve. The identification of this method as a conduit sleeve does not alter the prohibition for the installation of NMB cables in outdoor raceways.

Conclusion:

Vertical runs of weatherproof flexible conduit up to 3' in length that don't terminate in an enclosure on one end, and conduit up to 8' in length terminated in a conduit body with weatherproof fittings to provide physical protection, may be considered a 'sleeve' rather than a raceway. The intent of this ruling is to allow the use of NMB in these limited applications.

Note that Article 300.15(C) requires a fitting on the end(s) of conduit or tubing to protect the cable from abrasion.

Conductors and cables installed in any 'sleeve' longer than 24 inches must comply with the ampacity de-rating requirements of Table 310.15(B)(2)(a).

The technical and scientific facts for this Statewide Alternate Method are approved.

(Signature on file)

Mark Long, Administrator
Building Codes Division

June 30, 2008

Date