

State of Oregon
Building Codes Division

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Statewide Alternate Method No. OESC 08-02
(Ref.: ORS 455.060)

Issued June, 2008

Underground Splicing of Equipment Grounding Conductors
for Traffic Signal Installations
Oregon Electrical Specialty Code, ref. NEC 110.3(B)

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 merits of the proposal. 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 designer,*
- *statewide alternate methods do not limit the authority of the building official to consider other proposed alternate methods encompassing the same subject matter*

Requested by: Electrical Contractors

Purpose:

To allow the splicing of multiple grounding conductors using crimp-type connectors.

Background:

Methods of splicing equipment grounding conductors with connectors listed for use in underground installations are very limited. Split bolt mechanical connectors are listed but difficult to use and not always effective.

Exothermic connections are not required to be listed but this method is very expensive and the quality of the splice can be adversely affected by weather and environmental conditions.

Barrel type crimping connectors are listed for very specific combinations of wire types and sizes, and do not always meet the exact configuration desired.

Applicable Code Citation:

2008 Oregon Electrical Specialty Code, reference NEC 110.3(B)

Statewide Alternate Method:

This alternate method ruling applies only to copper equipment grounding conductors used for traffic signals and street lighting. A copper only barrel type connector shall be carefully selected for the proper size. The use of a proper die-less crimping tool is required. Inspectors shall verify the effectiveness of the connection by checking the crimp for loose conductors.

The recommendation and findings of the Elevator and Electrical Board are accepted and are adopted:



Mark Long, Administrator
Building Codes Division

June, 2008

Date 6/30/2008