

Florida Department of Transportation

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This Memo Has Expired

MATERIALS BULLETIN NO. 11-13 DCE MEMORANDUM NO. 16-13 (FHWA Approved: 07/11/2013)

TO:

DISTRICT MATERIALS AND RESEARCH ENGINEERS

DISTRICT CONSTRUCTION ENGINEERS

FROM:

Timothy Ruelke P.E., Director, Office of Materials

David A. Sadler, P.E., Director, Office of Construction

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SUBJECT:

DEMONSTRATION PROJECT FOR NON METALLIC REBAR

FASTENERS

The Department will gauge the effectiveness of the subject fasteners by allowing their use in the production of pre-cast concrete drainage products. The non metallic rebar fasteners shall be used in the applications where no weight other than the weight of concrete is loaded onto the reinforcing cage.

The process to approve the subject fasteners is as follows:

- 1. Producers will send a request to use the non metallic rebar fasteners to their appropriate DMO.
- 2. Once the request is approved the producers will cast a mockup of each type of product and inform the DMO and SMO of their casting date(s) to allow both entities to witness the fabrication of the rebar cages and the casting of the elements. Concrete cover over reinforcement and position measurements shall be performed on all dimensions after form removal and saw cutting the element.
- 3. The SMO will grant approval based on the ability of the fasteners to maintain sufficient strength to hold the reinforcing steel in position according to the plans.
- 4. The producer shall include, cover measurements for each element in the Quality Control plan. The DMO may allow a reduced frequency of measurements if QC data indicates concrete cover is maintained.

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5. The Producer shall modify the plant's Quality Control Plan to include the use of non metallic rebar fasteners and QC details used to verify the quality of the elements cast with the fasteners.

Once the effectiveness of the non metallic rebar fasteners is confirmed, Specification 415 will be revised to include the non metallic rebar fasteners.

The Department will rescind the approval of the non metallic rebar fasteners in the event that the fasteners or the method of connecting the fasteners fails to maintain the placement of the reinforcing bars during the casting process.

Should you have any questions please contact Mike Bergin (<u>michael.bergin@dot.state.fl.us</u>) at 352-955-6666 or Craig Roberts (<u>craig.roberts@dot.state.fl.us</u>) at 352-955-6684.

TR/DS/mb