



*Florida Department of Transportation*

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GOVERNOR

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KEVIN J. THIBAUT, P.E.  
SECRETARY

June 29, 2020

Khoa Nguyen  
Director, Office of Technical Services  
Federal Highway Administration  
3500 Financial Plaza, Suite 400  
Tallahassee, Florida 32312

Re: State Specifications Office  
Section: **450**  
Proposed Specification: **4500902 Precast Prestressed Concrete Construction.**

Dear Mr. Nguyen:

We are submitting, for your approval, two copies of the above referenced Supplemental Specification.

The changes are proposed by Thomas Frank by the State Materials Office to include finished surfaces under shallow surface crack description in addition to formed surface. Proposed language also includes stainless steel lifting devices as an option for highly corrosion resistant products.

Please review and transmit your comments, if any, within two weeks. Comments should be sent via email to [daniel.strickland@dot.state.fl.us](mailto:daniel.strickland@dot.state.fl.us).

If you have any questions relating to this specification change, please call me at 414-4130.

Sincerely,

Signature on File

Daniel Strickland, P.E.  
State Specifications Engineer

DS/rf

Attachment

cc: Florida Transportation Builders' Assoc.  
State Construction Engineer

**PRECAST PRESTRESSED CONCRETE CONSTRUCTION.****(REV 4-30-20)**

SUBARTICLE 450-9.2.1.1 is deleted and the following substituted:

**450-9.2 Other Embedded Materials:****450-9.2.1 Inserts and Lifting Devices:**

**450-9.2.1.1 Placement:** Locate inserts and lifting devices in accordance with the tolerances listed in 450-2.3. For stainless-steel or FRP reinforced products, use only non-metallic or stainless-steel (Type 304 or 316) inserts and lifting devices. ~~Use only non-metallic inserts and lifting devices with CFRP reinforced piling.~~

SUBARTICLE 450-11.6.1 is deleted and the following substituted:

**450-11.6.1 Beams Ends that will not be Permanently Encased in Concrete Diaphragms:**

1. Remove any corrosion product from all accessible surfaces at the cut end of the strands.
2. Apply two layers of epoxy to the exposed beam ends (including clipped and chamfered surfaces) no later than fourteen days after detensioning.  
Ensure that the first epoxy layer is cured before applying the second layer.  
The finished thickness of the epoxy coating must be a minimum of 1/16 inch and form a vertical flat plane without deviations or localized depressions from recessed strands or other defects.  
Ensure that the epoxy coating is cured per the manufacturer's recommendations prior to shipping the products.  
Any modifications to the time limits above must be approved by the Engineer.

SUBARTICLE 450-11.6.2 is deleted and the following substituted:

**450-11.6.2 Beams Ends that will be Permanently Encased in Concrete Diaphragms:**

1. Cut the strands in accordance with 450-11.5.1.
2. Seal openings between strand and sheathing for debonded strands with 100% silicone sealant within fourteen calendar days of detensioning, and cure per the manufacturer's recommendations.

SUBARTICLE 450-12.3.1.6 is deleted and the following substituted:

**450-12.3.1.6 Shallow Surface Cracks:** Shallow surface cracks are considered a minor defect, and are defined as the separation of the formed or finished surface up to 0.25 inch in depth.

4500902  
All Jobs

with 450-13.3.

Remove the affected material and repair the surface in accordance

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**450-9.2.1.1 Placement:** Locate inserts and lifting devices in accordance with the tolerances listed in 450-2.3. For stainless-steel or FRP reinforced products, use only non-metallic or stainless-steel (Type 304 or 316) inserts and lifting devices.

SUBARTICLE 450-11.6.1 is deleted and the following substituted:

**450-11.6.1 Beam Ends that will not be Permanently Encased in Concrete****Diaphragms:**

1. Remove any corrosion product from all accessible surfaces at the cut end of the strands.
2. Apply two layers of epoxy to the exposed beam ends (including clipped and chamfered surfaces) no later than fourteen days after detensioning.  
Ensure that the first epoxy layer is cured before applying the second layer.  
The finished thickness of the epoxy coating must be a minimum of 1/16 inch and form a vertical flat plane without deviations or localized depressions from recessed strands or other defects.  
Ensure that the epoxy coating is cured per the manufacturer's recommendations prior to shipping the products.  
Any modifications to the time limits above must be approved by the Engineer.

SUBARTICLE 450-11.6.2 is deleted and the following substituted:

**450-11.6.2 Beam Ends that will be Permanently Encased in Concrete****Diaphragms:**

1. Cut the strands in accordance with 450-11.5.1.
2. Seal openings between strand and sheathing for debonded strands with 100% silicone sealant within fourteen calendar days of detensioning, and cure per the manufacturer's recommendations.

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