



Florida Department of Transportation

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Tallahassee, FL 32399-0450

STEPHANIE KOPELOUSOS
SECRETARY

July 22, 2010

Monica Gourdine
Program Operations Engineer
Federal Highway Administration
545 John Knox Road, Suite 200
Tallahassee, Florida 32303

Re: Office of Design, Specifications
Section 450
Proposed Specification: 4500902 Precast Prestressed Concrete Construction.

Dear Ms. Gourdine:

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

These changes were proposed by Gevin McDaniel because the issue of corrosion protection of lifting devices for precast products had been addressed in a few Specification Sections separately (Section 407, 410 and 455), but were only applicable to those particular products. In lieu of continuing with the sprawling of requirements for protection of lifting devices, the decision was made to locate the language in a central location.

Please review and transmit your comments, if any, within two weeks. Comments should be sent via Email to ST986RP or rudy.powell@dot.state.fl.us.

If you have any questions relating to this specification change, please call Rudy Powell, State Specifications Engineer at 414-4280.

Sincerely,

Rudy Powell, Jr., P.E.
State Specifications Engineer

RP/cah
Attachment

cc: Gregory Jones, Chief Civil Litigation
Florida Transportation Builders' Assoc.
State Construction Engineer

PRECAST PRESTRESSED CONCRETE CONSTRUCTION.**(REV 76-2216-10)**

SUBARTICLE 450-9.2 (Page 482 – 483) is deleted and the following substituted:

450-9.2 Placing 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 450-2.1.

450-9.2.1.2 Corrosion Protection: *Provide corrosion protection for embedded metal lifting devices that would remain exposed after construction.*

*After lifting operations using recessed metal lifting devices are complete, backfill block-outs with a **Type F epoxy compound** ~~mortar~~ meeting the requirements of Section 926 for a minimum distance of 2 inches beyond the perimeter of the metal device as measured parallel to the exposed concrete surface. If the block-out extends less than 2 inches beyond the perimeter of the metal device, extend the epoxy mortar beyond the block-out along the concrete surface. If Type 304 or 316 stainless steel lifting devices are used, non-shrink grout meeting the requirements of Section 934 may be used to backfill the block-out within its limits.*

*After lifting operations using flush or protruding metal lifting devices are complete, cut the lifting devices back to a minimum depth of 1 inch below the concrete surface and patch with a **Type F epoxy compound** ~~mortar~~ meeting the requirements of Section 926. For all **square prestressed piling, concrete sheet piling** and concrete poles, cut and patch lifting devices before transporting from the casting yard.*

450-9.2.2 Placement of Bearing Assemblies: Set bearing assemblies designed to transmit reaction forces to the concrete in the position shown in the plans. Place bearing plate assemblies or shoes which are to be cast in a product within appropriate tolerances as provided in 450-2.1. Check the assemblies for position after stripping from the forms.

PRECAST PRESTRESSED CONCRETE CONSTRUCTION.**(REV 7-22-10)**

SUBARTICLE 450-9.2 (Page 482 – 483) 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 450-2.1.

450-9.2.1.2 Corrosion Protection: Provide corrosion protection for embedded metal lifting devices that would remain exposed after construction.

After lifting operations using recessed metal lifting devices are complete, backfill block-outs with a Type F epoxy compound meeting the requirements of Section 926 for a minimum distance of 2 inches beyond the perimeter of the metal device as measured parallel to the exposed concrete surface. If the block-out extends less than 2 inches beyond the perimeter of the metal device, extend the epoxy mortar beyond the block-out along the concrete surface. If Type 304 or 316 stainless steel lifting devices are used, non-shrink grout meeting the requirements of Section 934 may be used to backfill the block-out within its limits.

After lifting operations using flush or protruding metal lifting devices are complete, cut the lifting devices back to a minimum depth of 1 inch below the concrete surface and patch with a Type F epoxy compound meeting the requirements of Section 926. For all square prestressed piling, concrete sheet piling and concrete poles, cut and patch lifting devices before transporting from the casting yard.

450-9.2.2 Placement of Bearing Assemblies: Set bearing assemblies designed to transmit reaction forces to the concrete in the position shown in the plans. Place bearing plate assemblies or shoes which are to be cast in a product within appropriate tolerances as provided in 450-2.1. Check the assemblies for position after stripping from the forms.