



Florida Department of Transportation

JEB BUSH
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

THOMAS F. BARRY, JR.
SECRETARY

December 16, 2002

Mr. Donald Davis
Program Operations Engineer
Federal Highway Administration
227 N. Bronough Street, Suite 2015
Tallahassee, Florida 32301

Re: Office of Design, Specifications
Section 975
Proposed Specification: D9750000 – Elastomeric Coating System

Dear Mr. Davis:

We are submitting, for your approval, two copies of a proposed Supplemental Specification for Elastomeric Coating System.

This change has been developed by Robert Robertson, of the State Structures Office to combat severe corrosion in some structures and voids in the tendon grout.

Please review and transmit your comments, if any, within two weeks. Comments should be sent via Email to SP965DB or duane.brautigam@dot.state.fl.us.

If you have any questions relating to this specification change, please call Duane F. Brautigam, State Specifications Engineer at 414-4110.

Sincerely,

Duane F. Brautigam, P.E.
State Specifications Engineer

DFB/sh
Attachment

cc: General Counsel
Florida Transportation Builders' Assoc.
State Construction Engineer

**ELASTOMERIC COATING SYSTEM.
(REV 10-8-02)**

PAGE 948. The following new Section is added after Section 972:

**SECTION 975
ELASTOMERIC COATING SYSTEM**

975-1 General Requirements.

This section defines the requirements for an elastomeric polyurethane waterproof coating system (prime and subsequent coats). This system is to be used to provide an elastomeric coating providing a waterproof barrier over post-tensioning anchorages or other areas designated in the plans. The components of the coating system must be supplied by a single manufacturer and sold as a waterproof coating system. The surface preparation and application of the coating system must be applied in strict accordance with the manufacturer's specifications.

975-2 Certification.

Provide a written certification from the manufacturer that the product meets the requirements of this Section. The manufacturer must have quality control standards conforming to ISO 9000 Standards.

975-3 Physical Properties.

The elastomeric coating system is composed of several coats. The use of an epoxy prime coat is dependent upon the requirements of the manufacturer's waterproofing system. The polyurethane chemistry may be either waterborne aromatic (moisture-curing) or aromatic (moisture-sensitive). The minimum thickness of the system shall not be less than 30 mils. The cured coating system shall meet the following requirements:

Property	Test Value	Test Method
Hardness, Shore A	Between 60 and 90	ASTM D 2240
Tensile Strength	≥ 750 psi [5.2 MPa]	ASTM D 412
Elongation	≥ 400 %	ASTM D 412
Tear Strength	> 70 pli [12.35 N/mm]	ASTM C 957
Abrasion Resistance H-18 wheels 1000 gm/wheel	≤ 350 mg loss / 1000 revs.	ASTM C 957
Crack Bridging 1000 Cycles	System Passes	ASTM C 957
Elongation Recovery	≥ 94 %	ASTM C 957

975-4 System Modifications for Use on Bridge Substructure.

Supply the elastomeric coating system with an aliphatic polyurethane top coating. When applied to bridge substructures, match the color to the color scheme shown in the plans. If no color scheme is shown on the plans utilize a color similar to Federal Color Standard No. 595B, Table VIII, Shade No. 36622.