

SECTION 5.10

EVALUATION OF MANUFACTURED MATERIALS AND RANDOM SAMPLING OF APPROVED PRODUCTS

5.10.1 PURPOSE

To describe the testing process for evaluating products on the Florida Department of Transportation's (Department) Approved Products List (APL) and random sampling of these products from Department projects.

5.10.2 AUTHORITY

Sections 20.23(3)(a), 334.044(2), 334.044(7), 334.044(10), Florida Statutes.

5.10.3 REFERENCE

FEDERAL-AID POLICY GUIDE (FAPG), 23CFR, Subchapter G - Engineering and Traffic Operations, Part 637 - Construction Inspection and Approval, Subpart B - Quality Assurance Procedures for Construction.

5.10.4 SCOPE

Primary Offices affected by this procedure include: State Materials Office, District Materials Offices, State Maintenance Office, State Specifications Office, Product Evaluation Office, and State Construction Office.

5.10.5 GENERAL INFORMATION

This section describes the process for establishing the sample quantities required and the test protocols utilized in support of the Department's Random Sampling Program. Included in the process is the description for sampling the products and performing evaluations.

5.10.6 SAMPLING

Project specific guidance is provided in the Sampling, Testing and Reporting Guide (STRG) for each product type. Instructions for logging samples into the Department's database can be found on the State Materials Office website.

5.10.7 LABORATORY TESTING

The Random Sampling testing protocol is included in the STRG under Program Type Random Sampling. For new products that are being evaluated for inclusion on the APL, the test protocol is listed in the Materials Acceptance and Certification System (MAC) under Program Type APL. This is restricted for use by the State Materials Office.

If laboratory tests are required for the product, the performance should be evaluated prior to or in concurrence with any field testing.

The laboratory testing shall be performed by the Department or an independent laboratory.

The Department recognizes the American Association of State Highway and Transportation Officials (AASHTO's), National Transportation Product Evaluation Program (NTPEP) as an independent laboratory.

5.10.8 EVALUATION

The evaluation process will be continued until all tests have been completed unless a failing test result occurs.

5.10.9 VERIFICATION OF PRODUCTS ON THE APPROVED PRODUCTS LIST (RANDOM SAMPLING)

5.10.9.1 Sampling Identified Products

Project personnel are responsible for the sampling of materials identified below in **Table 1: Project Sampling**. The products to be sampled are listed in the **Sampling, Testing and Reporting Guide**. The Project Administrator will acquire a product sample for all products listed below in **Table 1**. The sample quantities are also listed in **Table 1** along with the pertinent **FDOT Specifications**.

The Project Administrator will log the sample into the Department's database under Program Type Random Sampling, label the sample with the system generated Sample Id and send it to the State Materials Office, along with completed sample transmittal form and a copy of the producer's certification. Sampling will continue until such time that the required samples for a product category have been received. Once the required samples are received, the State Materials Office will update MAC to indicate that no additional sampling for the category is required for the remainder of the

fiscal year. At the beginning of each fiscal year, sampling will once again be required. This cycle will repeat annually.

Since verification testing is mandated by the Federal Highway Administration and is a quality assurance measure for the Department, these samples may or may not affect project acceptance depending on the nature of the failure. The State Materials Office will provide a recommendation to the Product Evaluation Office for the final disposition of products with failing test results. In the case of a critical failure, the State Materials Office will notify the Project Administrator.

Table 1: Project Sampling				
Construction Specification	Materials Specification	MAC Specification	Product Category	Sample Quantity
353, 400, 449, 450, 534	926	926	Epoxy Compounds - All Types	1 tube or 1 pint each part
400	925	925	Membrane Forming Curing Compound	1 quart
400, 450, 649	934	934	Non-Shrink Grout	50 lb bag
400	975	975	Class 5 applied Finish Coating	1 quart
462	938	938	Post Tensioning Grout	50 lb bag
462	938	938	Flexible Filler	1 quart
521, 536, 705	993	993	Barrier Delineators	1 each
523		523	Patterned Textured Paving Products	3 feet or 1 pint each part
536	536	536	Composite Offset Blocks	1 each
536, 705	993	993	Object Markers	1 each
560	975	975	Structural Steel Coating System	1 quart
562	975	975	Galvanized Steel Coating System	1 quart
563	975	975	Anti-Graffiti Coating Materials	1 quart
706	970	970	Raised Pavement Markers	5 each
706	970	970	Raised Pavement Marker Adhesives	1 block
709	971	971	Two Reactive Components	1 pint each part(preformed
102, 710	971	971	Paint	1 quart
711	971	971	Standard Thermoplastic Preformed Thermoplastic	1 quart 3 feet
713	971	971	Permanent Tape	3 feet
709, 710, 711, 713	971	971	Glass Spheres	1 quart

Construction Specification	Materials Specification	MAC Specification	Product Category	Sample Quantity
102	990	971	Removable Tape	3 feet
	930	930	Materials for Concrete Repair	50 lb bag
350, 400, 410, 458, 520, 521, 522, 524,	932	932	Joint Materials	1 Block or 6 inches
	937	937	Post-Installed Anchor Systems	1 tube each part or 3 capsules
	975	975	Elastomeric Coatings	1 quart

5.10.9.2 Certifications

Sample certification forms are available on the State Materials Office website. The certification statement requires notarization from the manufacturer that the material is in compliance with the **FDOT Specifications**. The inspector will confirm that the material listed on the certification is the material represented for incorporation into the project. A thorough identification includes the product name, model name, batch or lot number and the specification reference number. Required information is noted on the example certification forms on the State Materials Office website.

5.10.10 REPORTS

Reports will include laboratory test results as well as, any required field test results. Most field tests have interim inspections, the results from these will also be included in the report.

5.10.11 TRAINING

None Required.

5.10.12 FORMS

Below are helpful links to forms and documents associated with this program.

Alleged Deficiency Forms – Form **630-020-01**:

Sample Transmittal Card – Form **675-050-4A** and **675-050-4B**:

<http://www2.dot.state.fl.us/proceduraldocuments/forms/ByNumber.asp?index=6>

Example Certifications:

<http://www.fdot.gov/materials/administration/resources/library/publications/certifications/sampleforms.shtm>