

Georgia Department of Transportation
Office of Materials and Research

Standard Operating Procedure (SOP) 17—Concrete
Acceptance of Miscellaneous Construction Items

I. General

As an aid to construction and maintenance personnel, the [Office of Materials and Research](#) maintains a [Qualified Products Manual](#). This Standard Operating Procedure provides guidelines to establish Qualified Products for use with miscellaneous construction items and governs the following [Qualified Products Lists](#) which are included in this manual:

QPL 13	Air Entraining Admixtures
QPL 14	Chemical Admixtures for Concrete
QPL 16	Membrane Curing Compounds
QPL 17	Special Surface Coatings for Concrete
QPL 42	Graffiti Proof Coatings for Concrete and Graffiti Removers

Products that appear on these lists have been evaluated by the [Office of Materials and Research](#) and have proven their capability of meeting the appropriate Georgia Department of Transportation Specification. Any of these products may be used without sampling or pre-testing provided the field engineer determines the product is uncontaminated and /or undamaged. However, products normally shipped as packaged units such as epoxy adhesives, special surface coatings for concrete surfaces, etc., may not be used if the units have been partially expended prior to arrival on the project. The field engineer must ascertain that the construction item is the same material identified on the appropriate [Qualified Products List](#) and will acknowledge receipt of these items in the project diary or as required by the Construction Manual.

It shall be the responsibility of the Concrete Branch Chief to monitor products covered by SOP 17—Concrete. [Office of Materials and Research](#) will update the [Qualified Products Manual](#) a minimum of every twelve months.

Standard Operating Procedure (SOP) 17

Representatives from the [Office of Materials and Research](#), at unscheduled times, may visit the producer's plant or warehouse and/or construction or maintenance projects to obtain random samples of items covered by this SOP. Products that consistently produce test results that significantly vary from those established by the manufacturer and verified by the [Office of Materials and Research](#) will be removed from the [Qualified Products Manual](#). Products that meet the current requirements of the Specifications but do not perform satisfactorily in the field will be removed from the [Qualified Products Manual](#). Products that meet current requirements of the Specifications but were not submitted for annual evaluation upon request by the Department will be removed from the [Qualified Products Manual](#). Removal from the Manual will prohibit the use of the product in Department of Transportation work until the acceptability of the product is re-established. Products that have not been used in Georgia Department of Transportation Construction or Maintenance work for a period of twelve months may, at the Department's discretion, be removed from the [Qualified Products Manual](#). The Department reserves the right to limit the number of products for each type material from any manufacturer.

II. Requirements

A. Manufacturer/Producer Requirements

Manufacturers and/or Producers must adhere to the following requirements: Samples may be submitted for Initial Evaluation at any time. Products covered by SOP 17—Concrete, currently approved by the Department and listed in the Departments [Qualified Products Manual](#) must be submitted for Annual Evaluation. Annual samples must be submitted in accordance with SOP 17—Concrete to the [Office of Materials and Research](#) before September 15th of each year.

When submitting a sample, the Office of Materials and Research requires the following:

1. A Product Evaluation Form (attached) must be completed, listing each sample submitted for evaluation.
2. A Manufacturer Safety Data Sheet (MSDS) should also accompany the sample when applicable. (See [Section IIB](#))
3. Warranty letter as described in [Section IIC](#).
4. The sample and required documentation should be sent to the following address:

Georgia Department of Transportation
Office of Materials and Research
15 Kennedy Drive
Forest Park, GA 30297-2599
Attn: Concrete Branch Chief

B. Independent Lab Results

Test results from a private lab are required on some items before the [Office of Materials and Research](#) will begin its evaluation. As a matter of information, any available test results, product data sheets, MSDS and independent lab evaluation and certification should be furnished when submitting a product for initial evaluation.

Standard Operating Procedure (SOP) 17

C. Annual Warranty

The manufacturer or producer must submit an annual warranty for each product before being added to the [Qualified Products Manual](#). The warranty shall be submitted on company letterhead and contain the following: Appropriate QPL warranty statement from [Section III](#) through [Section VII](#) followed by additional statement below, signed by a person legally responsible to bind the company, and notarized.

The Following Additional Warranty Shall Be Included As The Latter Part Of Every Warranty:

"We further warrant that material furnished to State of Georgia projects will be replaced without cost to the purchaser and State of Georgia when found not in conformity with any of the specified requirements. We accept full responsibility for determining the governing specification for each order, provided we are given notice of revised Specifications, and we warrant that the material currently being furnished is identical in formulation, composition, and properties as the material originally submitted for source approval."

D. Product Identification

Brand name, type, or lot or batch number, date of manufacture, and any other pertinent information must identify submitted products. The manufacturer will be expected to conduct sufficient tests and maintain product control records to verify that production is adequate to assure specification compliance. It will be required that the manufacturer notifies the [Office of Materials and Research](#), in writing, of any change in formulation or composition of any of their products in the [Qualified Products Manual](#) and submit samples for re-evaluation.

E. Production Quality Control Plan

Manufacturers must submit a copy of a production quality control plan for each of their products for review by the [Office of Materials and Research](#).

F. Product Labels

Product labels must be unique to the company wishing to list their products in the [Qualified Products Manual](#); therefore, companies will not be allowed to list product labels other than their own. The Department will not evaluate or list the same-labeled product in the [Qualified Products Lists](#) for multiple distributors, manufactures or producers, unless product is privately labeled and warranted.

G. Initial and Annual Evaluations

Submittal of products for Initial Evaluation or Annual Evaluation must be in accordance with this Standard Operating Procedure. The Department will not evaluate any improperly submitted products.

III. (QPL 13) Air Entraining Admixtures

Air Entraining Admixtures for Portland Cement concrete shall meet the current requirements of [Subsection 831.2.01](#) of the Georgia Department of Transportation Specifications. This specification requires that the material meet AASHTO M154.

A. Sample Requirements

1 qt (1 L)

Standard Operating Procedure (SOP) 17

Each sample must be identified by type and contain instructions relative to usage rates.

B. Warranty Letter

“This is to warrant that the product (Product Trade Name) as manufactured and sold by (Company Name) is an Air Entraining Admixture meeting the current requirements of AASHTO M154.”

Include remainder of Warranty from [Section IIC](#).

IV. (QPL 14) Chemical Admixture for Concrete

Water Reducing and/or Retarding Admixtures and Acceleration Admixtures shall meet the current requirements of Subsection 831.2.02 of the Georgia Department of Transportation Specifications. This specification requires that admixtures meet current requirements of AASHTO M 194, Type A or D or F, unless otherwise specified. The length change requirements are waived and the admixture shall contain not more than 0.8% chloride calculated as calcium chloride.

A. Sample Requirements

1 qt (1 L)

Each sample must be identified by type and contain instructions relative to usage rates.

B. Warranty Letter

“This is to warrant that the product (Product Trade Name) as manufactured and sold by (Company Name) is a (Water Reducing, Retarding or High Range Water Reducing) Admixture complying with the current requirements of AASHTO M 194 and Subsection 831.2.02 of the Georgia Department of Transportation Specifications for Type (A or D or F or A & D or A & F) . (Product Trade Name) contains not more than 0.8% Chloride calculated.”

Include remainder of Warranty from [Section IIC](#).

V. (QPL 16) Membrane Curing Compounds

Membrane Curing Compounds shall meet the current requirements of Subsection 832.2.03 of the Georgia Department of Transportation Specification. Membrane Curing Compounds shall be either Type I (clear or translucent) or Type 2 (white pigmented) as specified in AASHTO M148.

A. Sample Requirements

1 qt (1 L)

B. Warranty Letter

“This is to warrant that the product (Product Trade Name) as manufactured and sold by (Company Name) is a Wax Base or Resin Base Membrane Curing Compound meeting the current requirements of AASHTO M 148, (Type I or II).”

Include remainder of Warranty from [Section IIC](#).

VI. [\(QPL 17\)](#) Special Surface Coatings for Concrete

Surface Coatings for concrete shall meet the current requirements of Section 836 of the Georgia Department of Transportation Specifications. Manufacturers shall recommend uses, surface preparation, mixing instructions, applications, finishing requirements, and curing. Each container shall be labeled as to contents and use expiration date. In addition, complete mixing instructions shall be supplied with each shipment to the job site.

A. Sample Requirements

1. Initial Evaluation
1 qt (1 L)
2. Annual Evaluation
Warranty and Independent Lab Certification

B. Warranty Letter:

“This is to warrant that the product (Product Trade Name) as manufactured and sold by (Company Name) is a Special Surface Coating for concrete meeting the current requirements of Subsection 836 of the Georgia Department of Transportation Specifications.

Include remainder of Warranty from [Section IIC](#).

VII. [\(QPL 42\)](#) Graffiti Proof Coatings for Concrete and Graffiti Removers

Graffiti Proof Coatings for Concrete shall meet the current requirements of [Section 838](#) of the Georgia Department of Transportation Specifications.

A. Sample Requirements

1. Initial Evaluation
½ gal (1.9 L)
2. Annual Evaluation
Warranty and Independent Lab Certification

B. Warranty Letter:

“This is to warrant that the product (Product Trade Name) as manufactured and sold by (Company Name) is a Graffiti Proof Coating for Concrete/Graffiti Remover meeting the current requirements of Subsection 838 of the Georgia Department of Transportation Specifications.

Include remainder of Warranty from [Section IIC](#).

Georgene M. Geary, P.E.

State Materials and Research Engineer

Glenn W. Durrence, P.E.
Director of Construction