

# **QPL 4: CONCRETE ADMIXTURES AND ADDITIVES**

## **SECTION A: AIR-ENTRAINING ADMIXTURES**

### **GENERAL**

This evaluation procedure outlines the Department's approval process for air-entraining admixtures used to enhance or modify the properties of portland cement concrete.

### **SPECIFICATIONS**

- TDOT Standard Specification 921.06A.2 – Air-Entraining Admixtures
- AASHTO T157 – Standard Method of Test for Air-Entraining Admixtures for Concrete
- AASHTO Product Evaluation & Audit Solutions Program

### **PROCEDURES**

A completed Product Evaluation Form, safety data sheets (if applicable), and product data information must be submitted to the Division of Materials and Tests.

The Department bases product approval on a review of AASHTO Product Evaluation data. The manufacturer may submit 56-day test data from AASHTO Product Evaluation demonstrating that the product meets the above specifications. Submittal will be reviewed by Materials and Tests Field Operations Section.

# QPL 4: CONCRETE ADMIXTURES AND ADDITIVES

## SECTION B: CHEMICAL ADMIXTURES

### GENERAL

This evaluation procedure outlines the Department's approval process for chemical admixtures used to enhance or modify the properties of portland cement concrete.

This procedure applies to the following chemical additives used in concrete on Tennessee highway projects.

### SPECIFICATIONS

- TDOT Standard Specification 921.06A.1 – Portland Cement Concrete Mixtures
- AASHTO M194 – Standard Specification for Chemical Admixtures for Concrete
- AASHTO Product Evaluation & Audit Solutions Program

Type A	Water-reducing admixtures
Type B	Retarding admixtures
Type C	Accelerating admixtures
Type D	Water-reducing and retarding admixtures
Type E	Water-reducing and accelerating admixtures
Type F	Water-reducing, high range admixtures
Type G	Water-reducing, high range admixtures and retarding admixtures
Type S	Specific performance admixtures

### PROCEDURES

A completed Product Evaluation Form, safety data sheets (if applicable), and product data information must be submitted to the Division of Materials and Tests.

The Department bases product approval on a review of AASHTO Product Evaluation data. The manufacturer may submit 56-day test data from AASHTO Product Evaluation demonstrating that the product meets the above specifications. Submittal will be reviewed by Materials and Tests Field Operations Section.

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## **SECTION C: CHEMICAL ADMIXTURES FOR PRECAST CONCRETE**

### **GENERAL**

This evaluation procedure outlines the Department's approval process for chemical admixtures for precast concrete.

### **SPECIFICATION**

- TDOT Standard Specification 921.06A.1 – Portland Cement Concrete Mixtures
- AASHTO M194 – Standard Specification for Chemical Admixtures for Concrete
- AASHTO Product Evaluation & Audit Solutions Program

### **PROCEDURES**

A completed Product Evaluation Form, safety data sheets (if applicable), and product data information must be submitted to the Division of Materials and Tests.

The Department bases product approval on a review of AASHTO Product Evaluation data. The manufacturer may submit 56-day test data from AASHTO Product Evaluation demonstrating that the product meets the above specifications. Submittal will be reviewed by Materials and Tests Field Operations Section.

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## **SECTION D: MISCELLANEOUS ADDITIVES FOR CONCRETE**

### **GENERAL**

This evaluation procedure outlines the Department's approval process for chemical admixtures for precast concrete.

### **SPECIFICATION**

- None

### **PROCEDURES**

A completed Product Evaluation Form, safety data sheets (if applicable), and product data information must be submitted to the Division of Materials and Tests.

Submittal will be reviewed by Materials and Tests, Materials Control Section.