

QPL 4: AIR-ENTRAINING AND CHEMICAL ADMIXTURES FOR CONCRETE

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
- NTPEP Review – <http://www.ntpep.org/Pages/CADD.aspx>
- AASHTO T157 – Standard Method of Test for Air-Entraining Admixtures for Concrete

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 NTPEP data. The manufacturer may submit 56-day test data from NTPEP demonstrating that the product meets the above specifications. Submittal will be reviewed by Materials and Tests Field Operations Section.

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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
- NTPEP Review – <http://www.ntpep.org/Pages/CADD.aspx>

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 NTPEP data. The manufacturer may submit 1-year test data from NTPEP 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

- 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 Field Operations Section.

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SECTION D: MISCELLANEOUS ADMIXTURES 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 Field Operations Section.