### 1401 - AIR-ENTRAINING ADMIXTURES FOR CONCRETE

## **SECTION 1401**

### AIR-ENTRAINING ADMIXTURES FOR CONCRETE

#### 1401.1 DESCRIPTION

This specification covers admixtures for use as air-entraining agents to be added to concrete mixtures. An air-entraining agent is defined as an admixture that is used as an ingredient of concrete, added to the batch immediately before or during mixing, for the purpose of entraining air.

# 1401.2 REQUIREMENTS

Provide material that complies with AASHT0 M 154 for compressive and flexural strength, and resistance to freezing and thawing.

#### 1401.3 TEST METHODS

As specified in AASHTO M 154. Tests for bleeding, time of set, and length change are not required.

# 1401.4 PREQUALIFICATION

- **a.** Each air-entraining admixture must be prequalified. Submit a written request to be evaluated for prequalification to the Bureau Chief of Construction and Materials. Provide the following for each brand and type of material to be evaluated:
  - (1) Name and address of the manufacturer.
  - (2) Brand name of the material.
- (3) Two copies of a certified test report prepared by a laboratory regularly inspected by the Cement and Concrete Reference Laboratory (CCRL) of the National Institute of Standards and Technology, showing test results complying with the applicable requirements of AASHTO M 154. Also, include evidence that the laboratory is regularly inspected by CCRL. Test results are to be no more than 36 months out of date.
  - (4) An infra-red spectrum of the admixture which was used in the laboratory tests.
- (5) Results of tests from the AASHTO National Transportation Product Evaluation Program (NTPEP). Include the most recent NTPEP test report along with evidence that the product being offered is identical to the one reported in the NTPEP report.
- **b.** A one-liter sample from production of each type of admixture being offered will be accepted in lieu of the NTPEP test report until June 1, 2016. Submit the sample in addition to the documentation requested above for prequalification to the Engineer of Tests. The manufacturer will be advised of the results.
- **c.** The Bureau of Construction and Materials will maintain a list of prequalified air-entraining admixtures. Products that have been prequalified by the above procedures will remain prequalified, as long as the formulation and manufacturing processes remain unchanged, and field experience indicates that the admixture functions appropriately. Any prequalified product that does not have a NTPEP test report on file as of January 1, 2017 will be removed from the list of prequalified air-entraining admixtures for concrete. Changes in the formulation, manufacturing process, or failure of the admixture to function appropriately will require a new prequalification.

## 1401.5 BASIS OF ACCEPTANCE

- a. Prequalification as set forth under subsection 1401.4.
- **b.** Receipt and approval of a Type C certification as specified in **DIVISION 2600**.