FLORIDA DEPARTMENT OF TRANSPORTATION
State Materials Office
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September 1, 2000

Florida Methods for SAMPLING HYDRAULIC CEMENT, GROUND GRANULATED BLAST FURNACE SLAG, FLY ASH AND/OR OTHER POZZOLANIC MATERIALS

Designation: FM 5-503

1. SCOPE

1.1 This method covers procedures for sampling Hydraulic Cement, Ground Granulated Blast Furnace Slag, Fly Ash and/or other Pozzolanic Materials, after manufacture and/or production, and is ready to be offered for sale.

1.2 The values stated in inch-pound units are to be regarded as the standard. The SI units in parentheses are for information purposes only.

1.3 This method may involve hazardous materials, operations, and equipment. This method does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

2. REFERENCED DOCUMENTS

2.1 AASHTO Standards:

T 127 Sampling and Amount of Testing of Hydraulic Cement

3. SIGNIFICANCE AND USE

3.1 The sampling procedures described are intended for use in the procurement of samples of Hydraulic Cement, Ground Granulated Blast Furnace Slag, Fly Ash and/or other Pozzolanic Materials, after manufacturer and/or production, and is ready to be offered for sale. They are not intended as sampling procedures for quality control purposes during manufacturing or production.

3.2 The procedures covered in this method should be done by or for purchasers who are using a code or specification that requires sampling and testing to determine if the samples conform to the relevant acceptance specifications. The testing is done using specified methods to determine whether the samples yield test results that conform to the

specification, and the tests serve as a basis for acceptance or rejection of the lot of material sampled.

4. KIND, SIZE AND PROTECTION OF SAMPLES

4.1 A sample secured from bulk storage or bulk shipment, in one operation, shall be termed "grab sample". A sample obtained during a 10-minute interval using an automatic sampling device that continuously samples a stream of cement, slag, fly ash or other pozzolanic material may also be termed a grab sample.

4.2 All samples shall weigh at least 10 lbs.(5 kg) or approximately 1 gallon (approx. 4 Litres).

4.3 Samples shall be packed in moisture-proof, airtight, clean containers as they are taken to avoid moisture absorption and aeration of the sample.

Note 1: Polyvinyl chloride sample containers, upon occasion, have found to affect the air-entraining potential of a cement sample. The same problem might be experienced with containers made from other plastics.

5. SAMPLING POINTS

5.1 From Bulk Storage (Silo) - Where suitable facilities are provided to accommodate a tube type sampler, it may be used to obtain samples.(Note 2)

5.2 From Railroad Car or Truck Transport - Samples may be taken as material (cement, slag, fly ash, etc.) is being transferred to storage or from the tanker where access is available.(Note 2)

5.3 From Feed Line - Where accessible, samples may be taken immediately before entering the weighing hopper.

5.4 From Packaged Materials by means of Tube Sampler - Insert the tube diagonally into the valve of the bag, place thumb over the air hole and withdraw. Take a small sample from several bags of the lot and combine until the required amount of material has been obtained.(Note 3)

Note 2: Tube sampler shall be between 5 feet (1.52M) and 6 feet (1.83M) long and approximately 1.5 inches (.038M) in diameter with a beveled end or a tube sampler meeting the requirements in Section 7 of AASHTO T 127.

Note 3: Tube sampler shall be approximately 3 feet(0.91M) long and approximately 1.5 inches (.038) in diameter with a beveled end.