

**BLENDED PORTLAND CEMENT
(Portland-Pozzolan Cement &
Portland Blast-Furnace Slag Cement)**

Suppliers & Sources (Manufacturing Plant)	Material
Buzzi Unicem USA, Inc. New Orleans, Louisiana	Portland Blast-Furnace Slag Cement, Type IS(##)
Lafarge North America Joppa, Illinois	Portland Blast-Furnace Slag Cement, Type IS(##)
Oklahoma City, Oklahoma (Terminal)	Portland-Pozzolan Cement, Type IP(##)
Springfield, Missouri (Terminal)	Portland-Pozzolan Cement, Type IP(##)
Tulsa, Oklahoma	Portland-Pozzolan Cement, Type IP(##)

Type IP(##) identifies a pozzolan modified cement containing ##% pozzolan (by weight). The absolute maximum amount of pozzolan allowed in Type 1P will be 20% and would be identified as Type 1S(20).

Type IS(##) identifies a slag modified cement containing ##% Slag (by weight). The absolute maximum amount of blast furnace slag allowed in Type 1S will be 25% and would be identified as Type 1P(25).

METHOD OF DOCUMENTATION OF ACCEPTANCE: By the manufacturer's certified shipping notice in accordance with the attached agreement.

METHOD OF DOCUMENTATION OF USE:

The inspector shall note on the Concrete Plant Inspector's Daily Report the name of the producer/supplier, source location, and the type cement.

Destination Sampling and Testing:

Materials Division will request random samples through the Resident Engineer. These random samples shall be taken from the transport trailer/railroad car and be identified by:

- A. Name of producer/supplier/terminal/plant
- B. Blended portland cement type including fly ash/slag content.
- C. Bill of Lading Number
- D. Producer/Supplier Bin (silo) Number
- E. Mill Test Number

PROCEDURE AGREEMENT: The listed manufacturers are approved to ship blended cement in accord with the attached agreement.

AGREEMENT FOR THE ACCEPTANCE OF BLENDED PORTLAND CEMENT BASED ON CERTIFIED MILL TESTS

Blended portland cement will be accepted by the Arkansas State Highway and Transportation Department based on the producer's certification that the material meets all requirements of applicable Department specifications:

Type 1P ($\leq 20\%$ Pozzolan Content) (AASHTO M 240)

Type 1S ($\leq 25\%$ Slag Content) (AASHTO M 240)

The amount of pozzolan allowed shall not exceed an absolute maximum amount of 20% by weight.

The amount of slag allowed shall not exceed an absolute maximum amount of 25% by weight.

Blended portland cement will be accepted by the Arkansas State Highway and Transportation Department under the following conditions:

1. The producers shall maintain a file of their test results and methods of testing. The producer's laboratory shall be inspected periodically by the Concrete and Cement Reference Laboratory of the National Institute of Standards and Technology, or other acceptable testing laboratory, and upon request, make reports of inspections available to the Department.

2. Mill analyses covering the modified portland cement to be certified and shipped to Department projects shall be furnished to the Department's Materials Division. Mill analyses shall include the source, amount, and composition of the essential constituents used in the manufacturer of the finished cement and the composition of the blended cement. Mill analysis must reference the plant of origin and may be e-mailed to the Division at: materials@arkansashighways.com.

3. Shipments to Department projects shall be made only from bins (silos) that have been tested and found to meet Department specifications. No blended portland cement shall be shipped prior to satisfactory completion of three day compressive strength tests. Blended portland cement from different manufacturing plants will not be intermixed at terminals.

4. The producer shall furnish with each shipment a certification containing the following:

- a. consignee
- b. date and time of shipment
- c. truck or railroad car number
- d. quantity of blended portland cement shipped

- e. type of blended portland cement including fly ash or slag content.
- f. bin (silo) number from which shipped
- g. a statement that "This is to certify that the type modified portland cement in this shipment is from pretested bin (silo) number _____ and complies with the AASHTO specification for the type shipped."
- h. name of modified portland cement plant, terminal (if applicable) and the signature of a responsible company official

One copy of the shipment certification form for the Resident Engineer shall accompany the shipment.

5. A monthly composite sample will be sent to the Materials Division. This monthly composite sample will be composed of approximately equally sized type modified portland cement samples obtained from pretested bins. A composite sample will be sent for each type of type modified portland cement supplied to Department projects. Composite samples will be supplied from the manufacturing plant, not from terminals.

6. Destination samples will also be taken as deemed necessary to assure compliance with specifications. In the event samples taken at the job fail to meet specifications, the Department will reject the type modified portland cement. No further shipments will be accepted under this agreement until tests by the Department determine that the producer's product is in compliance with applicable specifications and requirements.

Acceptance of type modified portland cement by this method is subject to withdrawal for failure to comply with the above requirements.

Please acknowledge agreement to the above requirements by signing and returning a copy of this letter for our producer files.

Company Name – Plant Location

Signature

Typed/Printed Name

Date

Telephone No.: _____ Fax No.: _____

Email Address: _____