

MICHIGAN  
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION  
FOR  
**USE OF PRE-MIXED BAGGED PORTLAND CEMENT CONCRETE FOR POST  
EMBEDMENT**

CFS:CRB

1 of 2

APPR:KJK:LLR:12-12-25  
FHWA:APPR:12-19-25

**a. Description.** This special provision permits the use of commercial pre-mixed bagged Portland cement concrete (PCC) for low-volume non-critical concrete placements for fence post embedment for woven wire fence, wood post sleeves, tube breakaway systems, chain link fence, temporary fence, protective fence, high tensile wire fence applications, and small signpost foundations. Total concrete volume used from pre-mixed bag concrete is limited to less than 5 cubic yards per day.

**b. Materials.** If approved by the Engineer, furnish pre-mixed bagged concrete that can be used in place of Concrete, Grade 3000 required for the applications stated above. Furnish exterior grade, freeze-thaw durable, weather resistant pre-mixed PCC from the following companies, or equal approved by the Engineer:

*Sakrete*  
*Quikrete*  
*Handicrete*

Ensure that pre-mixed bagged concrete attains a minimum 28-day compressive strength of 3000 psi.

Furnish batching water for pre-mixed bagged concrete per section 911 of the Standard Specifications for Construction.

**c. Construction.**

Follow the manufacturer's recommendations for post installation procedures. Wait 24 hours before post is subjected to any vertical or lateral loading.

Provide the manufacturer's technical data sheets for proposed pre-mixed bagged concrete mixtures to the Engineer for review and approval a minimum of 14 days prior to placement. Do not place pre-mixed bagged concrete until approval has been granted by the Engineer. Follow the manufacturer's storage recommendations to prevent bags from being exposed to water or high humidity prior to use. Inform the Engineer of the intent to place concrete a minimum of 1 day prior to placement. Control the water addition to bagged concrete mixtures to ensure uniform mixing and hydration. Follow the manufacturers' recommendations for water addition volumes and mixing procedures needed to achieve the required water-to-cement ratio and strength. Document the total water used and the total weight of bagged cement used for pre-mixed bagged concrete placements on a daily basis for daily work reports and submit the records to the Engineer.

Contractor QC testing of fresh concrete is not required for bagged concrete placements.

Contractor compressive strength sampling and testing is not required for bagged concrete placements.

Prior to concrete placement, the Engineer will confirm by visual inspection and/or verification testing (and note in the Inspector's Daily Report) that the concrete represents the required physical quality properties. At any time during concrete placement, the Engineer may sample and conduct verification testing for temperature, slump, and air content of the fresh concrete. Provide enough fresh concrete to enable standard QA test samples at the request of the Engineer.

Acceptance of the pre-mixed bagged concrete mixture will be based on visual inspection. The Engineer may perform QA testing of any nature on any non-critical quantity concrete at their discretion. If test results do not meet specification requirements, standard concrete QC and QA can be required by the Engineer for the bagged concrete material.

**d. Measurement and Payment.** The cost of pre-mixed bagged concrete is to be included in the unit prices for the related pay items.