

July 1, 2021

APPROVED:
Division AdministratorBy: _____
FEDERAL HIGHWAY ADMINISTRATION**Fine and Coarse Aggregate for Portland Cement Concrete and Prestressed Concrete**

Delete **Subsection 701.2.9.1** of the Standard Specifications in its entirety and replace it with the following:

Section 701.2.9.1 General

Submit the fine aggregate in the concrete mix design for approval to the OMR. Use natural sand, manufactured sand, or a combination of natural and manufactured sand meeting the requirements of **Subsection 701.2.9.1** through **701.2.9.8**. Use marine limestone aggregate only if the water soluble chloride content of the aggregate, when tested in accordance with ASTM C1524, is below 200 ppm. Marine limestone coarse and fine aggregate can be used together only if their combined water soluble chloride content, when tested in accordance with ASTM C1524, is less than 200 ppm.

Delete **Subsection 701.2.10.1** of the Standard Specifications in its entirety and replace it with the following:

Section 701.2.10.1 General

Use coarse aggregate that is clean, tough, durable crushed gravel or crushed stone. Make sure that it is free from soft, thin, elongated, or laminated pieces and sufficiently washed during production to produce a clean aggregate free from lumps or coatings of clay, disintegrated particles, vegetation, or deleterious substances. Adherent coatings are considered injurious. Do not use coarse aggregate with a Los Angeles Abrasion loss exceeding 60% as determined by AASHTO T 96. Use coarse aggregate that has a weighted loss not exceeding 15% when subjected to five alternations of the sodium sulfate soundness test determined by AASHTO T 104. Use coarse aggregate for Portland cement concrete conforming to the requirements in **Subsection 701.2.10.1** through **701.2.10.4**.

Use marine limestone coarse aggregate in reinforced concrete only if the water soluble chloride content of the aggregate, when tested in accordance with ASTM C1524, is below 200 ppm. Marine limestone coarse and fine aggregate can be used together only if their combined water soluble chloride content, when tested in accordance with ASTM C1524, is less than 200 ppm. For non-reinforced concrete applications, use marine limestone coarse aggregate that has a weighted loss not exceeding 25% when subjected to five alternations of the sodium sulfate soundness test conducted in accordance with AASHTO T 104. When a marine limestone aggregate is used, use a sprinkler system to produce a saturated aggregate during concrete batching.

Delete **Subsection 704.2.1 (A)** of the Standard Specifications in its entirety and replace it with the following:

Section 704.2.1 (A)

Use marine limestone coarse aggregate and/or fine aggregate in prestressed concrete only if the total water soluble content of the combined coarse and fine aggregate, when tested in accordance with ASTM C1524, is below 100 ppm.