

**DIVISION III
MATERIALS REQUIREMENTS**

References in this Division to other publications shall mean the code or standard that is in effect at the date of advertising for bids.

PORTLAND CEMENT	750
AIR-ENTRAINING ADMIXTURES	751
CHEMICAL ADMIXTURES FOR CONCRETE	752

750 PORTLAND CEMENT

Portland Cement shall conform to AASHTO M 85 for the type specified. All cements shall not have more than 0.60 percent of Alkalies ($\text{Na}_2\text{O} + 0.658\text{K}_2\text{O}$).

Unless otherwise permitted by the Engineer, the product of only one mill of any one brand and type of Portland cement shall be used on the project.

751 AIR-ENTRAINING ADMIXTURES

Air-entraining admixtures for concrete shall be one hundred percent vinsol resin based or one of the products as listed on the approved products list for Air-Entraining Admixtures and shall conform to the requirements of AASHTO M 154, except as modified below:

Concrete having sufficient air-entraining admixture added to entrain 5 to 7 percent air shall have compressive strength at the age of 7 days of not less than 90 percent of the standard. The standard shall consist of a concrete of equal cement content, equal consistency and of the same aggregates in adjusted proportions, but without the addition of an air-entraining admixture.

752 CHEMICAL ADMIXTURES FOR CONCRETE

The chemical admixtures used for concrete shall conform to AASHTO M 194.

Chemical admixtures for concrete shall be a non-chloride based material containing less than one percent chloride ion by weight of admixture.