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# 2019 Standard Specifications Sections 509 & 510

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# Section 509 – Portland Cement Concrete Mix Designs

- New Concrete Classifications
- Mix Design Options

## 509.2.7.1 - Concrete Classifications

- Defines individual concrete classes and their general uses
- Renames Class F-LS as Class P (pavement)
- New Class HES (formerly called Rapid Set or Rapid Strength)
- Special Concrete Class – Project Specific

## 509.2.7.2 – Mix Design Options

### Creates Two Mix Design Options

#### Option 1

- Max. estimated project quantity
- Project specific approval - Concrete Engineer

#### Option 2

- Unlimited project quantities
- Does not require project specific approval

# 510 – Portland Cement Concrete

- Submittal requirements
- Changes to initial curing of cylinders
- In-place strength measurements
- Low strength investigation
- Pay factors

## 510.3.1 – Submittals

- Lists specific submittals
- Submitted no later than 30 days before start of concrete work
- Option 1 and project specific mix designs submittals forwarded to State Concrete Engineer

## 510.3.4.3 – Concrete Sampling and Testing

The Contractor shall test for Quality Control and the Department will test for Acceptance in accordance with Division 900 . . . . .

- Test the concrete for compliance and acceptance in accordance with Section 906 – Minimum Testing Requirements.

## 510.3.4.3 – Sampling and Testing (continued)

- Eliminates 25 minutes and 50 ft requirements  
NEW – Immediately after molding transport cylinders to curing station
- NEW - Contractor, Supplier and Project Manager must agree in writing to transport method and curing station location(s)
- “10.1.1 Storage—If specimens cannot be molded at the place where they will receive initial curing, immediately after finishing move the specimens to an initial curing place for storage.”
- ASTM C31-18, Standard Practice for Making and Curing Concrete Test Specimens in the Field



# QUESTIONS?

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