

SECTION 032000 - CONCRETE REINFORCEMENT

PART 1 - GENERAL

1.01 Applicable provisions of “General Conditions”, “Supplementary General Conditions” and “General Requirements”, Division 01, govern work under this section.

1.02 DESCRIPTION

- A. Work Included: Labor, materials and equipment to complete concrete reinforcement shown on the drawing, or herein specified, and as required for a complete installation.

1.03 QUALITY ASSURANCE

- A. Reference Standards (Current Editions):

1. ACI 301: Specifications for Structural Concrete for Buildings.
2. ACI 318: Building Code Requirements for Reinforced Concrete.
3. Building Code having jurisdiction for project.
4. CRSI: Reinforcing Bar Detailing.
5. ASTM Standards referenced herein.

- B. Accessibility of Standards: Maintain one copy of ACI 301, ACI 318 and Building Code at the construction office, readily accessible for reference.

1.04 SUBMITTALS

- A. Placing drawings: Show all fabrication dimensions, and locations and instructions for placing of reinforcing steel and bar supports.

1. Drawings shall not contain reproductions of the contract drawings.
2. Each submitted drawing shall be complete. No changes or additions shall be made to drawings after submittal except those needed to comply with Contractor’s checking or Engineer’s review.

- B. Manufacturer’s Data:

1. Manufacturer’s specifications and installation instructions for proprietary bar splicing systems.
2. Manufacturer’s printed data for proposed fibrous concrete reinforcement materials, and batching and mixing instructions.

- C. Copies: Forward copies of submittals in sufficient quantity that the Architect may retain two copies of each submission.

1.05 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Delivery: Deliver materials to the site in a timely manner, so that work on the project is uninterrupted.
- B. Storage: Store materials for ease of inspection and identification. Keep items off the ground, using blocking or other supports. Protect materials from deterioration.
- C. Handling: Handle steel items so as to prevent bending or distortion of material.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. General: Comply with ACI 301.
- B. Deformed Bars: Comply with ASTM A615, Grade 60 with Supplement (SI), marked "S". Where bars are to be spliced or connected by welding, insure that bars are weldable type.
 - 1. Provide zinc-coated bars where shown. Coating weight Class I.
 - 2. Provide epoxy-coated bars where shown.
- C. Welded Wire Fabric: Comply with ASTM A185. Furnish in flat sheets.
- D. Butt Splice Devices: Comply with Section 12.14.3.3 or Section 12.14.3.4 of ACI 318.
- E. Bar Supports: Wire, with plastic tips in contact with forming surfaces, where reinforcement is supported from formwork. Reinforcement supported from ground shall rest on precast concrete blocks at least 4 inches square and having a compressive strength not less than that of the concrete being placed.
- F. Tie Wire: Black, soft-annealed wire, not smaller than 16-gauge.

2.02 FABRICATION

- A. General: Comply with ACI 301.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Site Inspection: Inspect site prior to placement. Verify that conditions affecting placement are satisfactory. Do not start placement until unsatisfactory conditions are corrected.
- B. Compliance with Standards: Comply with ACI 301. Install bar supports in conformance with CRSI – Reinforcing Bar Detailing.

- C. Butt Splices: Butt splices for reinforcing bars shall be full welded or full mechanical type, complying with Section 12.14.3.3 or Section 12.14.3.4 of ACI 318.
- D. Damaged Zinc Bar Coating: Repair in conformance with ACI 301.
- E. Damaged Epoxy Bar Coating: Repair in conformance with ACI 301.

END OF SECTION 032000