



## SECTION 710

### EPOXY COATED REINFORCING STEEL

**710.1 Description.** This work shall consist of furnishing and placing epoxy-coated reinforcing steel of the shape, size and grade shown on the plans, and in accordance with [Sec 706](#), except as modified herein.

#### **710.2 Material.**

**710.2.1** All material shall be in accordance with Division 1000 Material Details, and specifically as follows:

Item	Section
Epoxy Coated Reinforcing Steel	<a href="#">1036</a>

**710.2.2** Epoxy coated reinforcing steel shall not be flame-cut.

#### **710.3 Construction Requirements.**

**710.3.1 Handling.** All systems for handling epoxy-coated bars shall have padded contact areas. If, in the judgment of the engineer, the coating is damaged to the extent that the coating can no longer provide the intended protection and cannot be satisfactorily patched, the material shall be returned to the coating applicator for repair or shall be replaced.

#### **710.3.2 Placement.**

**710.3.2.1** Epoxy-coated bars shall be held securely in the correct position with approved metal bar supports coated with plastic or epoxy or on plastic bar supports, and shall be held in place by use of plastic-coated tie wires or molded, plastic clips. When placing epoxy-coated bars, the bars shall be prevented from coming into contact with other steel items such as drains and shear connectors.

**710.3.2.2** The contractor shall prevent damage to the epoxy coating when placing and vibrating concrete. In order to prevent damaging the coated bars, the vibrator head shall be covered with a sheet of rubber, and shall be equipped with a rubber tip with a maximum diameter of 2 1/2 inches (65 mm). Another resilient material may be substituted for rubber as approved by the engineer.

**710.3.2.3** After the reinforcing bars are secured to approved bar supports, a final visual inspection will be made, and all uncoated or damaged areas shall be coated or repaired in accordance with [Sec 710.3.3](#) as directed by the engineer.

**710.3.3 Repairing Bars.** All damaged areas of epoxy coating shall be patched with the material specified in [Sec 1036](#), and in accordance with the manufacturer's recommendations. All sheared or cut ends of bars, end areas left bare during the coating process, and any areas where the entire coating is removed shall be patched. All repairs shall be completed as soon as practical, and in the case of bare end areas and sheared ends, before visible oxidation of the surface occurs.

**710.3.4 Mechanical Bar Splices.** Requirements for mechanical bar splice systems shown on the plans shall be in accordance with [Sec 706](#). Epoxy coated mechanical bar splices shall be used with epoxy-coated reinforcing steel, and if the epoxy coating is damaged, shall be repaired in accordance with [Sec 710.3.3](#) as directed by the engineer.

**710.4 Method of Measurement.** Measurement of epoxy-coated reinforcing steel will be made for plan weight (mass) of uncoated bars in accordance with [Sec 706.4](#).

**710.5 Basis of Payment.**

**710.5.1** The accepted quantity of epoxy-coated reinforcing steel, including any approved mechanical bar splice systems, complete in place, will be paid for at the contract unit price.

**710.5.2** Repair of damaged epoxy coating will be at the contractor's expense.