**Colorado Department of Transportation** 

# Standard Specifications for Road and Bridge Construction



2017

# SECTION 602 REINFORCING STEEL

## DESCRIPTION

**602.01** This work consists of furnishing and placing reinforcing steel in accordance with these specifications and in conformity with the plans.

### **MATERIALS**

**602.02** Reinforcing steel and welded wire fabric that will be furnished either uncoated or epoxy coated shall meet the requirements of subsection 709.01. The coating material shall be a light colored powdered epoxy resin which will highlight rusting of untreated bar areas.

Reinforcing steel that requires welding shall conform to ASTM A 706. Welding shall be done in accordance with ANSI/AWS D1.4.

All accessories, including reinforcing steel supports, ties, and splicers used in conjunction with epoxy coated reinforcing steel, shall be plastic or epoxy coated.

Reinforcing steel not identified on the plans as epoxy coated may be supplied as epoxy coated, at the Contractor's option, at no additional cost to the Department. Length of lap splices for epoxy coated reinforcing steel shall be in accordance with AASHTO *Standard Specifications for Highway Bridges*, unless otherwise specified.

### CONSTRUCTION REQUIREMENTS

**602.03** Bar List. Two copies of a list of all reinforcing steel and bending diagrams shall be furnished to the Engineer at the site of the work at least one week before the placing of reinforcing steel is begun. Such lists will not be reviewed for accuracy. The Contractor shall be responsible for the accuracy of the lists and for furnishing and placing all reinforcing steel in accordance with the details shown on the plans.

Bar lists and bending diagrams which are included on the plans, do not have to be furnished by the Contractor. When bar lists and bending diagrams are included on the plans, they are intended for estimating approximate quantities. The Contractor shall verify the quantity, size and shape of the bar reinforcement against those shown on the plans and make all necessary corrections before ordering.

**602.04** Protection of Materials. Reinforcing steel and its epoxy coating shall be protected at all times from damage. When placed in the work, the reinforcing steel shall be free from dirt, loose mill scale, paint, oil, loose rust, or other foreign substance.

**602.05** Bending. Unless otherwise permitted, all reinforcing bars shall be bent cold. Bars partially embedded in concrete shall not be field bent except as shown on plans or permitted. Bars shall not be bent or straightened in a manner that will