OK -		
	Tulsa OK	Fabricator & Epoxy Coater
Ambassador Steel		
	Bourbonnais IL	Fabricator & Epoxy Coater
	Kansas City MO	Fabricator
	Mooresville IN	Fabricator
	Newton IA	Fabricator
	St. Louis MO	Fabricator
	Kansas City MO	Fabricator
Cascade Steel Rolling Mills		Fabricator Producer
Cherokee Steel Fabricators	s, Inc. McMinnville OR	
Cherokee Steel Fabricators	s, Inc. McMinnville OR	
	s, Inc.  McMinnville OR s,	Producer
Cherokee Steel Fabricators LC.	s, Inc.  McMinnville OR s,	Producer
Cherokee Steel Fabricators LC.	s, Inc.  McMinnville OR  s,  Muskogee OK	Producer Fabricator

CMC Rebar		
	Birmingham AL	Fabricator
	Collierville TN	Fabricator
	Dallas TX	Fabricator
	Farmersville TX	Fabricator
	Gastonia NC	Fabricator & Epoxy Coater
	Kankakee IL	Fabricator & Epoxy Coater
	Kansas City MO	Fabricator & Epoxy Coater
	Knoxville TN	Fabricator & Epoxy Coater
	Melissa TX	Fabricator
	Muskogee OK	Fabricator & Epoxy Coater
	Nashville-Sidco TN	Fabricator
	Nashville-Visco TN	Fabricator
	Oklahoma City OK	Fabricator
	Polo MO	Fabricator
	Waxahachie TX	Fabricator
CMC Steel Arizona		
	Mesa AZ	Producer
CMC Steel Arkansas		
	Magnolia AR	Producer
CMC Steel Florida		
	Jacksonville FL	Producer
CMC Steel New Jersey		
,	Sayreville NJ	Producer & Epoxy Coater
CMC Steel Oklahoma		
	Durant OK	Producer
CMC Steel South Carolina		
	Cayce SC	Producer
CMC Steel Tennessee		

CMC Steel Texas		
	Seguin TX	Producer & Fabricator
Crimson Steel Supply, LLC		
	Muskogee OK	Fabricator
	Tulsa OK	Fabricator
Darragh Company		
	Benton AR	Fabricator
	Hot Springs AR	Fabricator
	Lowell AR	Fabricator
Dayton Superior Corporation		
	Kankakee IL	Fabricator & Epoxy Coater
EAL Manufacturing		
· ·	Dallas TX	Epoxy Coater
FABco, LLC		
	Denver CO	Epoxy Coater
	Grand Prairie TX	Fabricator
Gerdau AmeriSteel		
	Charlotte NC	Producer & Fabricator
	Midlothian TX	Producer
Great Plains Rebar, LLC		
	Oklahoma City OK	Fabricator
	Tulsa OK	Fabricator
Green Steel Manufacturing		
J	Madison MS	Fabricator & Epoxy Coater
Harris Rebar Jackson LLC.		
	Flowood MS	Fabricator
Harris Rebar Nufab, LLC		
	Longview TX	Fabricator
	Milton FL	Fabricator
	Riverside AL	Fabricator

Liberty Steel and Wire		
	Peoria IL	Producer
Lulich Steel Corporation		
	Slidell LA	Fabricator
Magnalia Stool Company Inc		
Magnolia Steel Company, Inc.	Meridian MS	Fabricator
NALLA A CONTRACTOR OF CONTRACTOR		
Mid-American Steel	Madill OK	Producer
	- Ividuiii Oit	Tiodacci
Midwest Pipe & Rebar Coating	O ala anno ella INI	Fabricator 9 France Ocator
	Schereville IN	Fabricator & Epoxy Coater
Nucor Bar Mill Group - Nucor Steel		
	Birmingham AL	Producer
	Jackson MS	Producer
	Jewett TX	Producer
	Kankakee IL	Producer
	Marion OH	Producer
Nucor Steel - Kingman, AZ		
<b>,</b>	Kingman AZ	Producer
Nucor Steel - Utah		
rudor dicor diam	Plymouth UT	Producer
Nucer Steel Sedelie 110		
Nucor Steel Sedalia, LLC.	Sedalia MO	Producer
Optimus Steel, LLC - Beaumont, TX		
	Vidor TX	Producer
Ozark Rebar, LLC.		
Ozan Nobal, LLO.	Greenbrier AR	Fabricator
Re-Steel Express Services, Inc.	Poplarville MS	Fabricator
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### Reinforcing Steel (Uncoated and Epoxy Coated Bars)

Rocky Mountain Steel Mills (A Division of EVRAZ)		
	Pueblo CO	Producer
Saber Steel, LLC.		
	Millington TN	Fabricator
Simcote, Inc.		
	Marion OH	Fabricator & Epoxy Coater
	St. Paul MN	Fabricator & Epoxy Coater
Sioux City Foundry Co.		
	Sioux City IA	Fabricator & Epoxy Coater
Southeastern Reinforcing, Inc.		
	Jackson TN	Fabricator
Southern States Steel Co.		
	Beaumont TX	Fabricator
Steel Dynamics, Inc.		
•	Columbia City IN	Producer
Steel Specialties of Mississippi		
,	Pearl MS	Fabricator
Steelcorp, Inc.		
F. / -	Miamitown OH	Fabricator

Note: Section 804 – Reinforcing Steel For Structures - requires bar reinforcement for concrete in sizes up to and including #18 (No. 57) to conform to the requirements of AASHTO M31 or M322 Type A.

#### **Method of Documentation of Acceptance:**

The following procedure defines a means whereby the Producer, Fabricator, or Epoxy Coater may certify the identity of uncoated and coated reinforcing steel and attest to its quality. This procedure shall be applicable only to reinforcing steel meeting the requirements of AASHTO M31 or M322, Grade 40 and 60. Further, it outlines methods to provide quality control of reinforcing steel to assure that only material meeting the contract specifications is shipped to and used on Arkansas Department of Transportation (ARDOT) projects.

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# Reinforcing Steel (Uncoated and Epoxy Coated Bars)

All iron and steel material used on Department projects must be in compliance with the "Buy America" requirements and the Department's "Standard Specifications for Highway Construction", Subsection 106.01. This means all manufacturing processes of iron and steel in a product (i.e., smelting/remelting and any subsequent process which alters the steel material's physical form or shape or changes its chemical composition) must occur within the United States to be considered of domestic origin. This includes processes such as rolling, extruding, machining, bending, grinding, drilling and applying coatings. The use of pig iron or processed, pelletized and reduced iron ore manufactured outside of the United States is permitted in the domestic manufacturing process for steel and/or iron materials. All steel and iron mill test reports must include a certified statement that all manufacturing processes for the iron or steel product occurred in the United States. Each supplier/fabricator of an intermediate product will also certify that the product complies with the "Buy America" requirements.

#### **Method of Approval:**

Those listed must agree to the requirements for certification as listed in the following pages. Failure to follow the certification agreement and/or failing results of tests of random samples will be cause for removal from this QPL.

#### PRODUCER PROCEDURES

- All Producers of reinforcing steel shall participate in AASHTO Product Evaluation & Audit Solutions (formerly National Transportation Products Evaluation Program (NTPEP) Audit Program) for Reinforcing Steel and shall have successfully met the requirements of the Program audit. This Program requires an annual audit by AASHTO or its representatives that will determine whether the producing mill has the capabilities to consistently meet the specification (AASHTO/ASTM) requirements for the bar product produced. AASHTO will publish a list showing which mills have successfully met the requirements of the audit. Information concerning the Program is available through the AASHTO web site, <a href="https://transportation.org/product-evaluation-and-audit-solutions/">https://transportation.org/product-evaluation-and-audit-solutions/</a>.
- All Certified Mill Test Reports (CMTR) for reinforcing steel covered by this procedure shall be maintained by the Producer for a minimum of three years from the date of shipping.
- Quantities of each heat and bar size shall be recorded by the Producer on the CMTR's and on the shipping papers of reinforcing steel. These documents shall be sent directly to Department projects, Fabricators, Epoxy Coaters, and other intermediate users of reinforcing steel.
- For ARDOT projects, the Producer shall agree to the following:

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## Reinforcing Steel (Uncoated and Epoxy Coated Bars)

- Supply reinforcing steel only from stock identifiable by mill heat number
- Accurately record the heat numbers shipped (by grade and bar size)
- Certify that all ARDOT and applicable AASHTO specifications are met
- Provide this information to the ARDOT on each project shipment.
- The Producer shall furnish a Certificate of Delivery with each shipment to an ARDOT project. The Certificate of Delivery shall include, but may not be limited to:
  - ARDOT Job Number
  - Consignee,
  - Applicable material specification (AASHTO M 31 or M 322),
  - Grade
  - Heat numbers
  - Sizes & Quantities
  - Producer & Location
  - Certifying statement

The certifying statement shall read as follows: I certify that the material was supplied from the heat numbers listed, complies with ARDOT and applicable AASHTO specifications. Certified Mill Test Reports for each of the above heat numbers are on file. This material complies with "Buy America" requirements.

The Certificate of Delivery shall be signed by an authorized official of the Producer. One copy shall accompany the shipment.

#### **FABRICATOR PROCEDURES**

- The Fabricator shall use reinforcing steel bars from a Department approved Producer.
- The Fabricator shall furnish a Certificate of Delivery with each shipment to an ARDOT project. Information on the Certificate of Delivery shall include, but not be limited to:
  - ARDOT Job Number
  - Consignee.
  - Applicable material specification (AASHTO M 31 or M 322),
  - Grade
  - Heat numbers
  - Sizes & Quantities
  - Producer & Location

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## Reinforcing Steel (Uncoated and Epoxy Coated Bars)

Certifying statement

The certifying statement shall read as follows: I certify that the reinforcing steel is from a Department approved Producer, complies with ARDOT and applicable AASHTO specifications, and was fabricated in accordance with ARDOT plans and specifications or approved bar lists. This material complies with "Buy America" requirements.

The Certificate of Delivery shall be signed by an authorized official of the Fabricator. One copy shall accompany the shipment.

#### **EPOXY COATER PROCEDURES**

- The Epoxy Coater shall use reinforcing steel bars from a Department approved Producer and Fabricator. The reinforcing steel bars shall be coated according to ASTM A775 using a coating material that meets the requirements of Annex A1 of ASTM A775 and has been approved by the Department. Patching material, compatible with coating material, inert in concrete, and meeting the requirements of Annex A2 of ASTM A775, shall be provided by the epoxy coating manufacturer with each shipment. Epoxy Coaters shall be Concrete Reinforcement Steel Institute (CRSI) certified. A copy of the CRSI certification shall be on file with the Department. All materials used, preparation of the bars, coating, and curing of the bars shall be according to current Department specifications and no bar's coating shall contain more than six (6) holidays per yard.
- The Epoxy Coater shall furnish a Certificate of Delivery with each shipment to an ARDOT project. Information on the Certificate of Delivery shall include, but not be limited to:
  - ARDOT job number
  - Consignee
  - Applicable material specification (AASHTO M 31 or M 322)
  - Grade
  - Heat numbers
  - Sizes & Quantities
  - Producer & Location
  - Epoxy Coater & Location
  - Certifying statement
  - Specific results of test of coating thickness and flexibility

The certifying statement shall read as follows: I certify that the reinforcing steel is from a Department approved Producer and Fabricator, complies with ARDOT and applicable AASHTO specifications, and was epoxy coated and fabricated in accordance with ARDOT plans and specifications or approved bar lists. This material complies with

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# Reinforcing Steel (Uncoated and Epoxy Coated Bars)

"Buy America" requirements.

The Certificate of Delivery shall be signed by an authorized official of the Epoxy Coater. One copy shall accompany the shipment.

- The Epoxy Coater shall supply to the consignee a written certification for the coating material that properly identifies the following:
  - Batch number(s) used in the order
  - Manufacturer and Brand
  - Quantity represented
  - Date of manufacture
  - Name and address of the manufacturer
  - A statement that the supplied coating material meets the requirements of Annex A1 of ASTM A775.

#### **CERTIFICATION PROCEDURE**

- A representative of the Materials Division may elect to review the plant facilities, its operation and the requirements of this procedure.
- The Department may take random samples of reinforcing steel for testing purposes. Samples shall be (2) 48 inch specimens. Additional samples may be taken at any time by the Department. Material may also be randomly sampled at the project site or designated project storage facility by ARDOT personnel. Testing shall be performed by the Materials Division in accordance with AASHTO, ARDOT, ASTM, or other applicable specifications.
- If failing results occur when testing the reinforcing steel, the Producer may be suspended from supplying materials of that grade from that mill to ARDOT projects, approved Fabricators, and approved Epoxy Coaters, pending a review with the mill and results of all tests.
- If the failing tests are failures of fabrication process or the epoxy coating process the Fabricator or the Epoxy Coater may be suspended from supplying materials to ARDOT projects pending a review.
- Material represented by failing test results shall not be used on ARDOT projects and shall be removed from the location for steel supplied under this procedure.
- The Department will review the Producer's, Fabricator's, or the Epoxy Coater's records to verify that these procedures are being followed and that the appropriate information is on file. Copies of CMTR's shall be furnished upon request.
- Material furnished to a manufacturer of precast concrete products will have a

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# **Reinforcing Steel (Uncoated and Epoxy Coated Bars)**

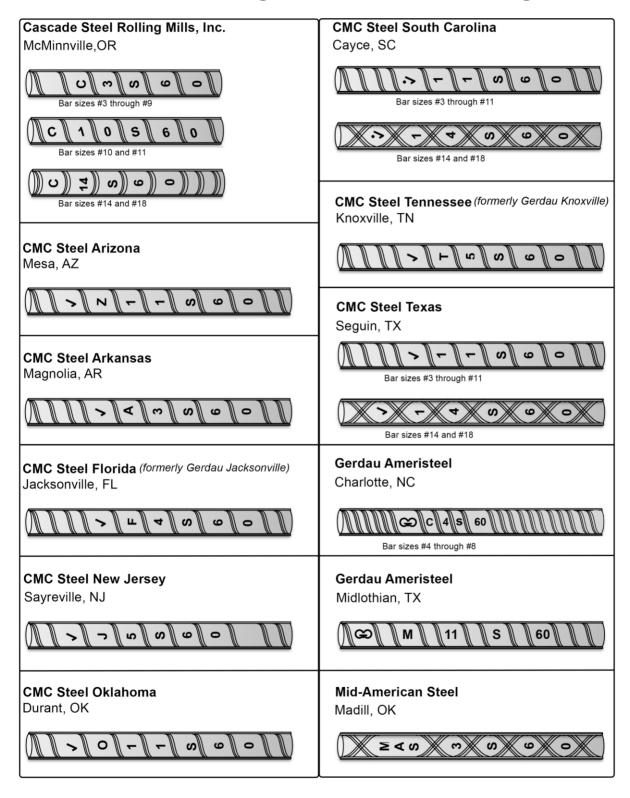
Certificate of Delivery and certifying statement on file with the precast manufacturer.

The producer, fabricator, and epoxy coater of privately labeled products must be disclosed.

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### Reinforcing Steel (Uncoated and Epoxy Coated Bars)

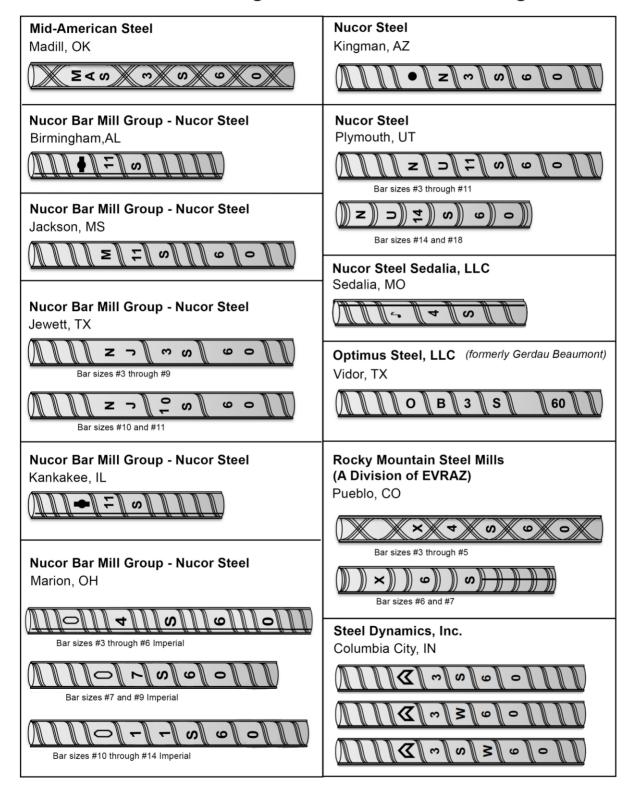
# **List of Reinforcing Bar Indentification Markings**



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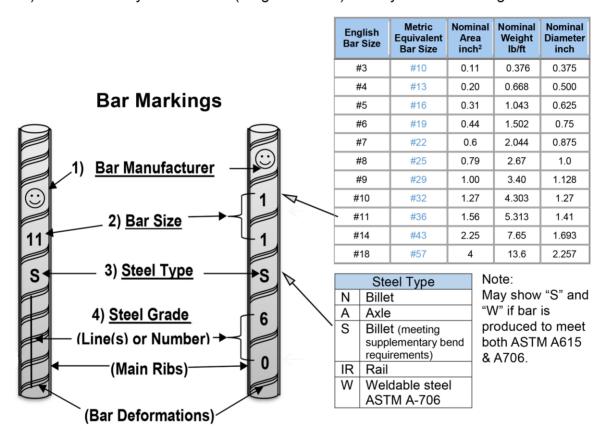
# Reinforcing Steel (Uncoated and Epoxy Coated Bars)

# List of Reinforcing Bar Indentification Markings



## **Identification of Reinforcement Bar Markings**

The specifications for billet steel, axle steel, and rail steel reinforcement bars (AASHTO M 31M, M 42M, and M 53M/ ASTM A 615M, A 616M, and A 617M, respectively) require identification marks to be rolled into the surface of one side of the bar to denote the producer's mill designation, bar size, type of steel, and, for Grade 420 (Grade 60), a grade mark indicating yield strength. Grade 300 (Grade 40) bars show only three marks (no grade mark) usually in the following order:



Grade 420 (Grade 60) bars must also show a minimum yield designation grade mark of either the number "4"("60") or one grade mark line continued for at least five deformation spaces.

A grade mark line is smaller than and between the two main ribs, which are sometimes on the opposite side of the bar. When a numerical grade is used, it is the 4th in order.