GALVABAR™

1. Product Name

- GalvaBar™

2. Manufacturer

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GalvaBar is owned and manufactured by Commercial Metals Company.

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3. Product Description

Basic Use

GalvaBar is a continuous galvanized rebar (CGR) with a specialized pure zinc alloy coating for construction projects featuring exceptional formability that complies with ASTM A1094/A1094M – 16. Because GalvaBar is processed prior to fabrication, bar can be staged in stock lengths prior to being released by fabrication creating a consistent flow of product. The end result is a seamless supply of GalvaBar to projects through current supply chain without double handling resulting in better product flow and customer satisfaction. GalvaBar is sold as a process to client rebar and as a product.

GalvaBar has the proven track record of hot-dip galvanizing and innovative processing. Because GalvaBar will not crack, flake or peel during fabrication, it allows for a seamless supply of corrosion resistant reinforcement. GalvaBar is released directly to the fabrication facility, thereby improving lead times. GalvaBar requires no special equipment for fabrication and is delivered straight to the job site. Installations require no special handling or equipment for protection from the elements at the job site.

Use where corrosion resistant reinforced concrete is used. GalvaBar can be used for:

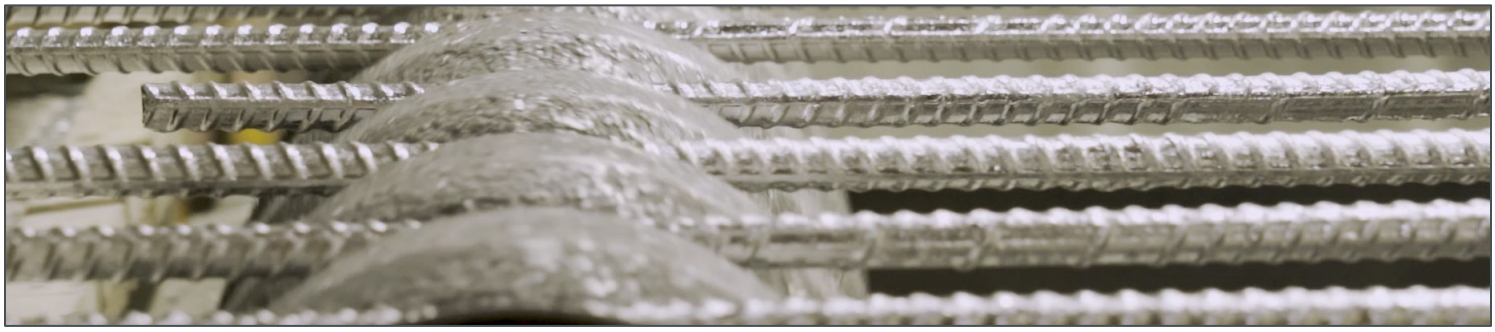
- Architectural concrete
- Retaining and sound walls
- Precast structures
- Parking structures
- Lifting points
- Highway barriers
- Reinforced bridge decks and components
- Paving slabs
- Foundations
- Roof slabs
- Sea walls
- Anchors

Composition and Materials

GalvaBar consists of a minimum 50 micron zinc alloy coating (2 mil); metallurgicallly bonded to steel rebar.

Features and Benefits

- **Design**
  - Designate the ASTM A1094/A1094M – 16 Standard Specification for Continuous Hot-Dip Galvanized Steel Bars for Concrete Reinforcement
  - Specify GalvaBar as a direct replacement for ASTM A767 Standard Specification for Zinc-coated (Galvanized) Steel Bars for Concrete Reinforcement
  - Engineered like uncoated “black” rebar for bend diameters and splice/lap lengths
- **Performance**
  - Formability—can be fabricated after galvanizing without cracking, peeling or flaking
  - Fabrication—by any rebar fabricator without specialized equipment
  - Durability—bond strength and slip resistance in concrete is superior to uncoated “black” bar
  - Reduced splice/lap lengths over epoxy coated rebar (ECR)
  - Proven protection of galvanizing dating back over 300 years
- **Processing**
  - Proven corrosion protection with pure zinc over other corrosion resistant reinforcement technologies
  - Automated factory-controlled procedures to optimize quality control of standard mill lengths up to 60+ feet
  - Consistent flow of inventorial product allowing for field changes to be addressed



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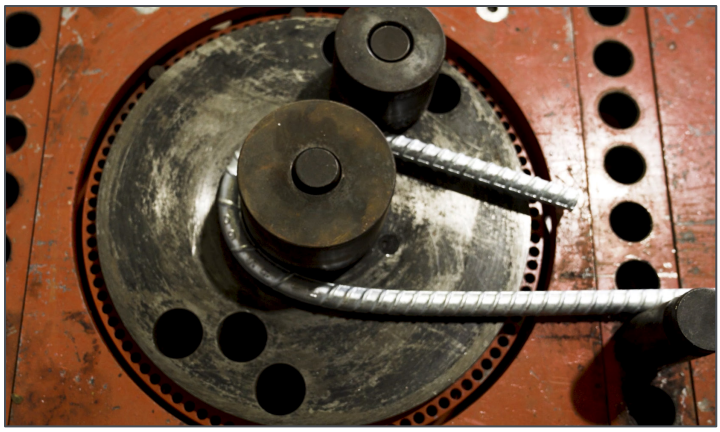

- **Installation**
  - Transport seamlessly through current supply chains without double handling or additional logistics
  - Handling rebar can be staged in stock lengths prior to being released by fabrication
  - Can be stored outside in the weather without deterioration of the process
- **Cost**
  - Significantly less expensive than non-ferrous, high strength and stainless rebar
  - Competitive with epoxy coated rebar (ECR)
  - Low total of ownership over the life of a structure

Types, Dimensions and Sizes

Sizes: #3 to #11 available.

Finish:

- Passivation-quench treatment available

Product Limitations:

The continuous galvanized rebar (CGR) process currently includes rebar sizes #3 thru #11 .

Other Applicable *CSI MasterFormat* Categories

- **03 33 13** Heavyweight Architectural Concrete
- **03 33 16** Lightweight Architectural Concrete
- **03 41 16** Precast Concrete Slabs
- **03 41 23** Precast Concrete Stairs
- **03 45 13** Faced Architectural Precast Concrete

4. Technical Data

Applicable Standards

American Association of State and Highway Transportation Officials (AASHTO):

- **M111-18** Standard Specification for Zinc (Hot-Dipped Galvanized) and coatings on iron and steel products

ASTM International

- **ASTM A123/123M** Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
- **ASTM A90/A90M** Test Method for Weight [Mass] of Coating on Iron and Steel Articles with Zinc or Zinc-Alloy Coatings
- **ASTM A143** Practice for Safeguarding Against Embrittlement of Hot-Dip Galvanized Structural Steel Products and Procedure for Detecting Embrittlement
- **ASTM A153/153M** Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware
- **ASTM A384** Practice for Safeguarding Against Warpage and Distortion During Hot-Dip Galvanizing of Steel Assemblies
- **ASTM A385** Practice for Providing High-Quality Zinc Coatings (Hot-Dip)
- **ASTM A615/A615M** Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement
- **ASTM A641** Specification for Zinc-Coated (Galvanized) Carbon Steel Wire
- **ASTM A706/A706M** Specification for Deformed and Plain Low-Alloy Steel Bars for Concrete Reinforcement
- **ASTM A767/A767M** Standard Specification for Zinc-coated (Galvanized) Steel Bars for Concrete Reinforcement
- **ASTM A780/A780M** Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings
- **ASTM A996/A996M** Specification for Rail-Steel and Axle-Steel Deformed Bars for Concrete Reinforcement
- **ASTM A1055/A1055M** Standard Specification for Zinc and Epoxy Dual-Coated Steel Reinforcing Bars
- **ASTM A1094/A1094M – 16** Standard Specification for Continuous Hot-Dip Galvanized Steel Bars for Concrete Reinforcement
- **ASTM B6** Specification for Zinc
- **ASTM B487** Test Method for Measurement of Metal and Oxide Coating Thickness by Microscopical Examination of Cross Section
- **ASTM B852** Specification for Continuous Galvanizing Grade (CGG) Zinc Alloys for Hot-Dip Galvanizing of Sheet Steel
- **ASTM E376** Practice for Measuring Coating Thickness by Magnetic-Field or Eddy-Current (Electromagnetic) Testing Methods

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Concrete Reinforcing Steel Institute (CRSI):

- **Manual of Standard Practice**
- **Placing Reinforcing Bars**

International Standards Organization (ISO)

- **ISO 14657** Zinc-coated steel for the reinforcement of concrete

US Federal Specifications

- **DOD-P-21035** Paint, High Zinc Dust Content, Galvanizing Repair
- **MIL-P-26915** Primer Coating, Zinc Dust Pigmented

Environmental Considerations

GalvaBar is a sustainable material created through an environmentally friendly process free of volatile organic compounds (VOCs) and hazardous air pollutants.

The 100 percent recyclability of galvanized steel is a great benefit to minimizing environmental impact,

Contact manufacturer for CRSI and AGA EPD(s) information.

5. Installation

Do not be bend or straighten bars in a manner that may injure the material. Splicing to be performed per manufacturer's instructiosn and according to project drawings.

Follow manufacturer's instructions, project drawings and per ASTM Practice A780/A780M.

Link to product installations are located **here.**

6. Availability and Cost

Please contact manufacturer for availability and pricing.

7. Warranty

This product does not have a warranty.

8. Maintenance

This product requires no maintenance.

9. Technical Services

Contact Galvabar for technical support. GalvaBar facilities will coordinate with steel mills and fabrication detailers to be sure all questions are answered and code requirements are met. Services include design professional consultation, continued education courses, and project-site assistance.

10. Filing Systems

- SpecLink
- ConstructConnect
- Additional product information is available from the manufacturer upon request

CMC Commercial Metals

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