

## Zinc Coated (Galvanized) Steel Chain Link Fence Fabric ASTM A 392, Federal specification RR-F-191 Type I, AASHTO M-181 Type I

### 1. PRODUCT NAME

Zinc Coated (Galvanized) Steel Chain Link Fence Fabric

### 2. MANUFACTURER

**Merchants Metals**  
**Manufacturing Locations:**

#### Whittier, CA 90608

12482 East Putnam Street  
Phone: (800) 336-2396  
Fax: (562) 696-9604

#### New Paris, IN 46553

71347 County Road 23  
Phone: (800) 831-4060  
Fax: (219) 831-3515

#### Statesville, NC 28677

165 Fanjoy Road  
Phone: (800) 438-7016  
Fax: (704) 873-1313

#### Houston, TX 77093

4901 Langley Road  
Phone: (800) 723-3623  
Fax: (713) 697-5806

#### Bladensburg, MD 20710

4301- 46<sup>th</sup> Street  
Phone: (301) 927-4080  
Fax: (301) 927-0368

### 3. PRODUCT DESCRIPTION

#### **Basic Use:**

Zinc coated (galvanized) steel chain link fence fabric for commercial, industrial, institutional and recreational applications. Zinc coated fabric is contained in various government specifications for use in prison, road, dock, airport, housing, forestry, and military uses.

#### **Composition and Materials:**

Zinc coated steel chain link fence fabric is produced by cold-drawing good commercial grade steel rod into wire of the appropriate diameter. The steel rod from which the wire is drawn is produced by the open hearth, electric furnace or basic oxygen process.

The zinc coating may be applied before weaving into fabric (GBW) or after weaving into fabric (GAW): *Galvanized before weaving (GBW)*: The wire is cleaned, passed through a bath of molten zinc, and then woven into chain link fabric.

#### *Galvanized after weaving (GAW):*

The uncoated wire is woven into chain link fence fabric of the appropriate height and mesh size. The coating is produced by passing the woven mesh through a continuous line which includes cleaning of the fabric. After cleaning, the fabric passes through a molten bath of zinc metal to produce the galvanized coating.

Zinc used to produce the coating conforms to the requirements of ASTM specification B6.

#### **Standards:**

ASTM A 392 *Zinc-Coated Steel Chain Link Fence Fabric*  
ASTM F567 *Installation of Chain Link Fence*  
ASTM A 817 *Metallic-Coated Wire for Use in Chain Link Fence*  
ASTM B6 *Zinc (Slab Zinc)*  
Federal specification RR-F-191K/1D Type I, *Fencing, Wire and Post Metal (Chain-Link Fence Fabric)*  
American Association of State Highway Transportation Officials M-181 *Chain Link Fence*, Type I

### 4. TECHNICAL DATA

#### **General:**

The manufacturer, if requested, will supply samples and certification that all materials furnished fully comply with the appropriate specifications.

#### **Chain Link Fence Fabric:**

The base metal of the chain link fence fabric is composed of commercial quality medium-carbon wire. The weight of zinc coating, wire sizes with allowable variances, and wire breaking strength, as shown in **Table 1**, conform to ASTM A 817 for the wire size specified. The fabric is zinc coated after weaving (GAW) or before weaving (GBW).

#### **Coating Weight**

Zinc-coated (galvanized) steel chain link fence fabric conforming to ASTM A392 and other specifications referenced above is available in two coating classes with the following minimum coating weights:

Class 1 - 1.2 oz/ft<sup>2</sup> (366 g/m<sup>2</sup>)  
Class 2 - 2.0 oz/ft<sup>2</sup> (610 g/m<sup>2</sup>)

GAW is available in either class. GBW is limited to Class 1 due to the limited availability of galvanized wire with a Class 2 coating. Fabric woven with 11 ga wire and fabric with mesh

sizes less than 1 - <sup>3</sup>/<sub>4</sub>" are GBW.

**Sizes:** Galvanized fabric is available in mesh sizes from 3/8 in. to 2 in. (10 mm to 50 mm), and in heights from 36 inches to 144 inches (910 mm to 3,660 mm). **See Table 2.**

Unless otherwise specified, chain link fence fabric woven with a 2 inch (50 mm) mesh and 60 inches (1,520 mm) or less in height is knuckled at both selvages; for fabrics 72 inches (1,830 mm) and above the selvages are knuckled at one edge and twisted at the other. All fabrics woven into mesh sizes under 2 in. are knuckled at both selvages.

### 5. INSTALLATION

Install chain link fence fabric in accordance with ASTM Practice 567.

### 6. AVAILABILITY AND COST

#### **Availability:**

Zinc coated steel chain link fence fabric is available for shipment throughout the United States and worldwide.

#### **Cost:**

Material costs may vary depending on specific requirements. Costs may be obtained through all Merchants Metals Service Centers.

### 7. WARRANTY

Class 2 galvanized steel chain link fence fabric is warranted for 25 years against failure due to rust or corrosion.

### 8. MAINTENANCE

Periodic inspection is recommended but no routine maintenance is required.

### 9. TECHNICAL SERVICES

Technical services are available through the Merchants Technical Sales Department:

Phone: (888) 260-1600 (toll free)  
Facsimile: (888) 261-3600 (toll free)

or your local Merchants Metals Service Center.



## Zinc Coated (Galvanized) Steel Chain Link Fence Fabric ASTM A 392, Federal specification RR-F-191 Type I, AASHTO M-181 Type I

Table 1 – Zinc Coated Wire Characteristics

Nominal Coated Wire Diameter			Allowable Variance		Zinc Coating Weight, min.				Breaking Strength, minimum	
Gage	Inch	mm	Inch	mm	Class 1		Class 2		lbf	Newtons
					oz/ft <sup>2</sup>	g/m <sup>2</sup>	oz/ft <sup>2</sup>	g/m <sup>2</sup>		
6	0.192	4.88	±0.005	±0.13	1.20	366	2.00	610	2,170	9,650
9	0.148	3.76	±0.005	±0.13	1.20	366	2.00	610	1,290	5,740
11	0.120	3.05	±0.005	±0.13	1.20	366	-----	-----	850	3,780

Table 2 – Zinc Coated Chain Link Fabric Characteristics

Recommended Use	Mesh Sizes Available		Nominal Coated Wire Size, gage	Height of Fence Fabric inch (mm)
	inch	mm		
Industrial/Commercial	2"	50	6	36 (910), 42 (1,070), 48 (1,220), 60 (1,520), 72 (1,830), 84 (2,130), 96 (2,440), 108 (2,740), 120 (3,050), 144 (3,660)
			9	36 (910), 42 (1,070), 48 (1,220), 60 (1,520), 72 (1,830), 84 (2,130), 96 (2,440), 108 (2,740), 120 (3,050), 144 (3,660)
			11	36 (910), 42 (1,070), 48 (1,220), 60 (1,520), 72 (1,830), 84 (2,130), 96 (2,440), 108 (2,740), 120 (3,050), 144 (3,660)
Industrial/Security	1"	25	6	36 (910), 42 (1,070), 48 (1,220), 60 (1,520), 72 (1,830), 84 (2,130), 96 (2,440), 108 (2,740), 120 (3,050), 144 (3,660)
			9	36 (910), 42 (1,070), 48 (1,220), 60 (1,520), 72 (1,830), 84 (2,130), 96 (2,440), 108 (2,740), 120 (3,050), 144 (3,660)
Security	1"	25	9	36 (910), 42 (1,070), 48 (1,220), 60 (1,520), 72 (1,830), 84 (2,130), 96 (2,440), 108 (2,740), 120 (3,050), 144 (3,660)
	1"	25	11	36 (910), 42 (1,070), 48 (1,220), 60 (1,520), 72 (1,830), 84 (2,130), 96 (2,440), 108 (2,740), 120 (3,050), 144 (3,660)
	3/4"	19	9	36 (910), 42 (1,070), 48 (1,220), 60 (1,520), 72 (1,830), 84 (2,130), 96 (2,440), 108 (2,740), 120 (3,050), 144 (3,660)
	3/4"	19	11	36 (910), 42 (1,070), 48 (1,220), 60 (1,520), 72 (1,830), 84 (2,130), 96 (2,440), 108 (2,740), 120 (3,050), 144 (3,660)
	5/8"	16	9	36 (910), 42 (1,070), 48 (1,220), 60 (1,520), 72 (1,830), 84 (2,130), 96 (2,440), 108 (2,740), 120 (3,050), 144 (3,660)
	5/8"	16	11	36 (910), 42 (1,070), 48 (1,220), 60 (1,520), 72 (1,830), 84 (2,130), 96 (2,440), 108 (2,740), 120 (3,050), 144 (3,660)
	1/2"	13	9	36 (910), 42 (1,070), 48 (1,220), 60 (1,520), 72 (1,830), 84 (2,130), 96 (2,440), 108 (2,740), 120 (3,050), 144 (3,660)
	1/2"	13	11	36 (910), 42 (1,070), 48 (1,220), 60 (1,520), 72 (1,830), 84 (2,130), 96 (2,440), 108 (2,740), 120 (3,050), 144 (3,660)
Tennis Court	1-3/4"	44	9	36 (910), 42 (1,070), 48 (1,220), 60 (1,520), 72 (1,830), 84 (2,130), 96 (2,440), 108 (2,740), 120 (3,050), 144 (3,660)
			11	36 (910), 42 (1,070), 48 (1,220), 60 (1,520), 72 (1,830), 84 (2,130), 96 (2,440), 108 (2,740), 120 (3,050), 144 (3,660)

- Notes to tables: (1) Red text indicates conformance with ASTM A-392.  
 (2) Breaking strength (Table 1) based on a minimum tensile strength of 75,000 psi.  
 (3) 11 ga fabric available with a Class 1 coating only.  
 (4) Fabric with mesh size less than 1-3/4" is galvanized before weaving.

Fabrics with other characteristics may be available. Contact the Merchants Metals Technical Sales Department or a Merchants Metals Service Center with specific requests.

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Technical Sales Department:  
 Telephone: (888) 260-1600  
 Facsimile: (888) 261-3600

