

Aluminum Coated Steel Chain Link Fence Fabric

ASTM A491, Federal specification RR-F-191/1F Type II, AASHTO M-181 Type II

1. PRODUCT NAME

Aluminum Coated Steel Chain Link Fence Fabric.

2. MANUFACTURER

Merchants Metals

Manufacturing Locations:

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

3. PRODUCT DESCRIPTION

Basic Use:

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

Composition and Materials:

Aluminized 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 shall be produced by the open hearth, electric furnace or basic oxygen process.

The coating is produced by passing the cleaned wire through a molten bath of aluminum metal. Aluminum metal pigs or ingots used to produce the coating shall have no more than the following maximum levels of impurities:

Copper - 0.10% maximum Cu

Iron - 0.50% maximum Fe

Standards:

ASTM A491 Aluminum-Coated Steel Chain Link Fence Fabric

ASTM F567 Installation of Chain Link Fence

ASTM A817 Metallic-Coated Wire for Use in Chain Link Fence

Federal specification RR-F-191/1F Chain Link Fabric, Type II

American Association of State

Highway Transportation Officials

(AASHTO) M-181 Chain Link Fence,

Type II

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 aluminum coated wire. The wire is coated with aluminum to produce a smooth and uniform coating. The weight of aluminum coating, wire sizes with allowable variances, and wire breaking strength, as shown in **Table 1**, conform to ASTM A817 for the wire size specified. The wire is aluminum coated before weaving.

Sizes:

Aluminized fabric is available in mesh sizes from $\frac{3}{8}$ in. to 2 in. (10 mm to 50 mm), and in heights from 36 in. to 240 in. (910 mm to 6,100 mm). **See Table 2.**

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

5. INSTALLATION

Install fence in accordance with ASTM Practice F567.

6. AVAILABILITY AND COST

Availability:

Aluminum 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

Aluminum coated steel chain link fence fabric is warranted for 15 to 25 years against failure due to rust or corrosion.

Note: ASTM specification A491, Federal specification RR-F-191 and other major specifications state that discoloration or

rust on the cut ends of aluminum coated fabric at the selvages are not cause for rejection.

8. MAINTENANCE

Periodic inspection is recommended but no routine maintenance is required.

9. TECHNICAL SERVICES

Specifications, drawings and other technical services are available through the Merchants Metals Technical Sales Department or your local Merchants Metals Service Center.

Technical Sales Department:

Email: Tech-Info@merchantsmetals.com

Website: www.merchantsmetals.com



Merchants Metals®

the first name in fence solutions

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Table 1 – Aluminum Coated Wire Characteristics

Nominal Coated Wire Diameter			Allowable Variance		Zinc Coating Weight, minimum		Breaking Strength, minimum	
gauge	inch	mm	inch	mm	oz/ft ²	g/m ²	lbf	newtons
6	0.192	4.88	±0.005	±0.13	0.40	122	2,170	9,650
9	0.148	3.76	±0.005	±0.13	0.40	122	1,290	5,740
10	0.135	3.43	±0.005	±0.13	0.40	122	1,290	5,740
11	0.120	3.05	±0.005	±0.13	0.35	107	850	3,780

Table 2 – Aluminum Coated Chain Link Fabric Characteristics

Recommended Use	Mesh Sizes Available		Nominal Coated Wire Size, gauge	Height of Fence Fabric inch (mm)
	inch	mm		
Industrial/Commercial	2 in.	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)
			10	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 in.	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 in.	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 in.	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)
	¾ in.	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)
	¾ in.	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)
	⅝ in.	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)
	⅝ in.	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)
	½ in.	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)
	½ in.	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)
	⅜ in.	10	10	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)
	⅜ in.	10	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 ¾ in.	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: Red text indicates conformance with ASTM A491.

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

Technical Sales Department:
 Email: Tech-Info@merchantsmetals.com
 Website: www.merchantsmetals.com