Designation: A392 – 11a (Reapproved 2022)

Standard Specification for Zinc-Coated Steel Chain-Link Fence Fabric[1]

This standard is issued under the fixed designation A392; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This specification covers zinc-coated steel chain-link fence fabric, zinc coated either before or after weaving.

1.2 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered standard.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.4 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*[2]

A90/A90M Test Method for Weight [Mass] of Coating on Iron and Steel Articles with Zinc or Zinc-Alloy Coatings

A370 Test Methods and Definitions for Mechanical Testing of Steel Products

A700 Guide for Packaging, Marking, and Loading Methods for Steel Products for Shipment

A817 Specification for Metallic-Coated Steel Wire for Chain-Link Fence Fabric and Marcelled Tension Wire

B6 Specification for Zinc

2.2 *Federal Standard:*[3]

Fed. Std. No. 123 Marking for Shipments (Civil Agencies)

2.3 *Military Standards:*[3]

MIL-STD-129 Marking for Shipment and Storage

MIL-STD 163 Steel Mill Products, Preparation for Shipment and Storage

3. Terminology

3.1 *Definitions of Terms Specific to This Standard:*

3.1.1 *chain-link fence fabric*—a fencing material made from steel wire helically wound and interwoven in such a manner as to provide a continuous mesh without knots or ties except in the form of knuckling or of twisting the ends of the wires to form the selvage of the fabric. Variations to knuckled or twisted selvages are permissible.

3.1.2 *diamond count*—the number of diamond openings from one edge of the fabric to the other. The diamond count of a given fabric shall begin at the first completed diamond at one edge and continue to the unfinished (½) or full opening at the other edge.

3.1.3 *knuckling*—the type of selvage obtained by interlocking adjacent pairs of wire ends and then bending the wire ends back into a loop. The loop shall be closed or nearly closed to a measurement less than the diameter of the wire.

3.1.4 *twisting*—the type of selvage obtained by twisting adjacent pairs of wire ends together in a close helix of 1½ machine turns, which is equivalent to 3 full twists, and cutting the wire ends at an angle. The wire ends beyond the twist shall be at least ¼ in. (6.4 mm) long. This type of selvage is not used on fabric with a mesh size of less than 2 in. (50.8 mm).

4. Ordering Information

4.1 Orders for chain-link fence fabric purchased to this specification shall include the following information:

4.1.1 Quantity (Section 14),

4.1.2 Zinc coated after weaving or before weaving (Section 5),

4.1.3 Size of mesh (Section 7),

4.1.4 Size of wire (Section 8),

4.1.5 Height of fabric (Section 9),

4.1.6 Diamond count, if specified (Section 6),

4.1.7 Type of selvage (Section 10),

4.1.8 Class of coating (Section 11),

4.1.9 ASTM designation and year of issue, and

4.1.10 Certification if required (Section 17).

[1] This specification is under the jurisdiction of ASTM Committee F14 on Fences and is the direct responsibility of Subcommittee F14.40 on Chain Link Fence and Wire Accessories.

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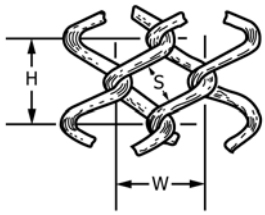
[2] For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

[3] Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS.



Mesh Size, S	Height, H, in.	Width, W, in.
⅜ in. mesh (9 mm)	¾ (19 mm)	¾ (19 mm)
½ in. mesh (13 mm)	15⁄16 (24 mm)	15⁄16 (24 mm)
⅝ in. mesh (16 mm)	1⅛ (29 mm)	1⅛ (29 mm)

FIG. 1 Mesh Dimensions for ⅜ in., ½ in., and ⅝ in. Fence Fabric

14.2 The length of roll shall be determined by unrolling a roll of fabric on a flat surface and exerting tension by appropriate means to remove all slack. The tension applied shall not reduce the actual height of the fabric by more than 1⁄16 in./ft (5.3 mm/m) of height or by more than ½ in. (12.7 mm), whichever is less.

15. Sampling and Number of Tests

15.1 One roll from every 50 rolls or fraction thereof in a lot shall be taken at random as a sample for test purposes. In no case shall less than two samples be tested, except when the lot is less than 10 rolls, only one roll shall be selected for the sample.

15.2 Sample rolls selected shall be inspected for weave (Section 6), size of mesh (Section 7), diamond count (6.2), wire size (Section 8), height of fabric (Section 9), selvage (Section 10) and length (Section 14).

15.3 On galvanized-after-weaving fabric, test specimens taken from the outside end of the sample rolls shall be tested for breaking strength (Section 12) and weight of zinc coating (Section 11).

15.4 If any specimen tested fails to meet the requirements of this specification, the roll represented by the specimen shall be rejected and two additional rolls shall be tested, both of which shall meet the requirements in every respect; otherwise, the lot represented by the samples may be rejected.

16. Inspection

16.1 Unless otherwise specified in the purchase order or contract, the manufacturer is responsible for the performance of all inspection and test requirements specified in this specification. Except as otherwise specified in the purchase order or contract, the manufacturer may use his own or any other suitable facilities for the performance of the inspection and test requirements unless disapproved by the purchaser at the time the order is placed. The purchaser shall have the right to perform any of the inspection and tests set forth in this specification when such inspections and tests are deemed necessary to assure that the material conforms to prescribed requirements.

17. Certification and Reports

17.1 When requested by the purchaser in the contract or order, a producer's or supplier's certification that the material was manufactured, sampled, tested, and inspected in accordance with this specification and has been found to meet the requirements. When specified in the purchase order or contract, a report of the tests results shall be furnished.

18. Packaging, Marking, and Loading

18.1 Each length of chain-link fence fabric shall be tightly rolled and firmly tied. Each roll shall carry a tag showing the class of coating, the specified wire size, the mesh size, the specified length and height of fabric in the roll, ASTM Designation A392 and the name or mark of the manufacturer.

18.2 Unless otherwise specified, packaging, marking, and loading for shipment shall be in accordance with Practices A700.

18.3 When specified in the contract or order, and for direct procurement by or direct shipment to the U.S. government, when Level A is specified, preservation, packaging, and packing shall be in accordance with Level A requirements of MIL-STD-163.

18.4 When specified in the contract or order and for direct procurement by or direct shipment to the U.S. government, marking for shipment, in addition to the requirements specified in the contract or order, shall be in accordance with MIL-STD-129 for U.S. military agencies and in accordance with Fed. Std. No. 123 for civil agencies.

19. Keywords

19.1 chain link fence; steel; coatings; zinc (galvanized); fence/fencing materials; chain link; zinc coated (galvanized) iron and steel articles; zinc coated (galvanized) steel chain link fence fabric

APPENDIX

(Nonmandatory Information)

X1. APPROXIMATE METRIC EQUIVALENTS FOR TABLES 1 AND 2

X1.1 See Table X1.1.

TABLE X1.1 Approximate Metric Equivalents for Tables 1 and 2

Sizes of Wire and Mesh		Height of Fence Fabric	
in.	mm	in.	mm
0.192	4.88	36	910
0.148	3.76	42	1070
0.120	3.05	48	1220
0.113	2.87	60	1520
1	25	72	1830
1¼	32	84	2130
1¾	44	96	2440
2	50	108	2740
2⅛	54	120	3050
		144	3660