



Designation: A 116 – 00

Standard Specification for Metallic-Coated, Steel-Woven Wire Fence Fabric¹

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1. Scope

1.1 This specification covers metallic-coated steel fence fabric having a series of horizontal (line) wires, with vertical (stay) wires woven or wrapped around the line wires, forming rectangular openings. The fence fabric is suitable for use in fences for farm field enclosure (to keep domestic animals in or out), for highway or railroad right-of-way fencing (to control access), and other similar uses.

1.2 This specification covers fence fabric in various designs, tensile strength grades, and metallic coating types and grades.

1.3 The values stated in inch-pound units are to be regarded as the standard. The values given in parentheses are for information only.

1.4 The text of this specification references notes and footnotes which provide explanatory material. These notes and footnotes (excluding those in tables and figures) shall not be considered as requirements of the specification.

2. Referenced Documents

2.1 ASTM Standards:

- A 90/A 90M Test Method for Weight [Mass] of Coating on Iron and Steel Articles with Zinc or Zinc-Alloy Coatings²
- A 370 Test Methods and Definitions for Mechanical Testing of Steel Products³
- A 428/A 428M Test Method for Weight of Coating on Aluminum-Coated Iron or Steel Articles²
- A 641/A 641M Specification for Zinc-Coated (Galvanized) Carbon Steel Wire²
- A 700 Practices for Packaging, Marking, and Loading Methods for Steel Products for Domestic Shipment⁴
- A 809 Specification for Aluminum-Coated (Aluminized) Carbon Steel Wire²
- A 856/A 856M Specification for Zinc-5 % Aluminum-Mischmetal Alloy-Coated Carbon Steel Wire²
- A 902 Terminology Relating to Metallic Coated Steel Products²

¹ This specification is under the jurisdiction of ASTM Committee A05 on Metallic-Coated Iron and Steel Products and is the direct responsibility of Subcommittee A05.12 on Wire Specifications.

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² Annual Book of ASTM Standards, Vol 01.06.

³ Annual Book of ASTM Standards, Vol 01.03.

⁴ Annual Book of ASTM Standards, Vol 01.05.

2.2 U.S. Federal Standard:

Fed. Std. No. 123 Marking for Shipments (Civil Agencies)⁵

2.3 U.S. Military Standards:

MIL-STD-129 Marking for Shipment and Storage⁵

MIL-STD-163 Steel Mill Products, Preparation for Shipments and Storage⁵

3. Terminology

3.1 *Definitions*—For definitions of terms used in this specification, refer to Terminology A 902.

3.2 Definitions of Terms Specific to This Standard:

3.2.1 *intermediate wires, n*—line wires other than top and bottom wires.

3.2.2 *top and bottom wires, n*—line wires at the edge of the fence fabric (the top and bottom edges as erected).

4. Classification

4.1 The woven wire fabric covered by this specification is classified as described in the following sections.

4.2 *Design Number*—Numbers describing standard sizes and constructions of this fabric, as listed in Table 1.

4.3 Metallic Coating Type:

4.3.1 *Coating Type A*—Made from aluminum-coated wire.

4.3.2 *Coating Type Z*—Made from zinc-coated wire.

4.3.3 *Coating Type ZA*—Made from zinc-5 % aluminum-mischmetal alloy (Zn-5Al-MM) coated wire.

4.4 *Metallic Coating Class*—The specified amount of coating (coating weight[mass]) on the strand wire. See Table 2 for the coating classes available.

4.5 *Tensile Strength Grades*—The fabric is available in strength grades of 60, 125, and 175 (see Table 1).

NOTE 1—The design numbers are related to the characteristics of the construction of the fence fabric. The design number indicates the number of line wires, approximate height, stay wire spacing, and size (gauge) of the line and stay wires.

5. Ordering Information

5.1 Orders for material under this specification shall include the following information, as necessary to describe each product ordered.

5.1.1 Name of material (woven steel fence fabric);



5.1.2 Quantity (number of rolls);
5.1.3 Design Number (see Table 1);

5.1.4 Tensile strength grade (see Table 1);

TABLE 1 Design Numbers for Woven Wire Fence Fabric

Design Numbers	Number of Horizontal Wires	Fence Height		Spacing of Stay Wires, in. (cm)	Size, Steel Wire Gage	
		Nominal (Design), in.	Specified (Actual), in. (cm)		Intermediate Line and Stay Wires	Top and Bottom Wires
No. 9 Grade 60						
1155-12-9	11	55	55.5 (141)	12 (30)	9	9
1047-12-9	10	47	46.5 (118)	12 (30)	9	9
939-12-9	9	39	38.5 (98)	12 (30)	9	9
832-12-9	8	32	31.5 (80)	12 (30)	9	9
726-12-9	7	26	25.5 (65)	12 (30)	9	9
949-12-9	9	49	49.0 (124)	12 (30)	9	9
845-12-9	8	45	45.0 (114)	12 (30)	9	9
635-12-9	6	35	35.5 (90)	12 (30)	9	9
1155-6-9	11	55	55.5 (141)	6 (15)	9	9
1047-6-9	10	47	46.5 (118)	6 (15)	9	9
726-6-9	7	26	25.5 (63)	6 (15)	9	9
No. 11 Grade 60						
1047-12-11	10	47	46.5 (118)	12 (30)	11	9
939-12-11	9	39	38.5 (98)	12 (30)	11	9
832-12-11	8	32	31.5 (80)	12 (30)	11	9
726-12-11	7	26	25.5 (65)	12 (30)	11	9
845-12-11	8	45	45.0 (114)	12 (30)	11	9
635-12-11	6	35	35.5 (90)	12 (30)	11	9
1047-6-11	10	47	46.5 (118)	6 (15)	11	9
939-6-11	9	39	38.5 (98)	6 (15)	11	9
832-6-11	8	32	31.5 (80)	6 (15)	11	9
726-6-11	7	26	25.5 (63)	6 (15)	11	9
No. 12½ Grade 60						
1047-12-12½	10	47	46.5 (118)	12 (30)	12½	10
939-12-12½	9	39	38.5 (98)	12 (30)	12½	10
832-12-12½	8	32	31.5 (80)	12 (30)	12½	10
726-12-12½	7	26	25.5 (65)	12 (30)	12½	10
845-12-12½	8	45	45.0 (114)	12 (30)	12½	10
635-12-12½	6	35	35.5 (90)	12 (30)	12½	10
1047-6-12½	10	47	46.5 (118)	6 (15)	12½	10
939-6-12½	9	39	38.5 (98)	6 (15)	12½	10
832-6-12½	8	32	31.5 (80)	6 (15)	12½	10
726-6-12½	7	26	25.5 (63)	6 (15)	12½	10
No. 14½ Grade 60						
939-6-14½	9	39	38.5 (98)	6 (15)	14½	11
832-6-14½	8	32	31.5 (80)	6 (15)	14½	11
726-6-14½	7	26	25.5 (65)	6 (15)	14½	11
No. 12½ Grade 125						
1047-12-12½	10	47	46.5 (118)	12 (30)	12½	10½
939-12-12½	9	39	38.5 (98)	12 (30)	12½	10½
832-12-12½	8	32	31.5 (80)	12 (30)	12½	10½
726-12-12½	7	26	25.5 (65)	12 (30)	12½	10½
1047-6-12½	10	47	46.5 (118)	6 (15)	12½	10½
939-6-12½	9	39	38.5 (98)	6 (15)	12½	10½
832-6-12½	8	32	31.5 (80)	6 (15)	12½	10½
726-6-12½	7	26	25.5 (65)	6 (15)	12½	10½
No. 12½ Grade 125						
1478-6-12½	14	78	78.0 (198)	6 (15)	12½	12½
No. 14 Grade 125						
1047-12-14	10	47	46.5 (118)	12 (30)	14	12½
939-12-14	9	39	38.5 (98)	12 (30)	14	12½
832-12-14	8	32	31.5 (80)	12 (30)	14	12½
726-12-14	7	26	25.5 (65)	12 (30)	14	12½
1047-6-14	10	47	46.5 (118)	6 (15)	14	12½
939-6-14	9	39	38.5 (98)	6 (15)	14	12½
832-6-14	8	32	31.5 (80)	6 (15)	14	12½
726-6-14	7	26	25.5 (65)	6 (15)	14	12½
No. 14½ Grade 125						