



Standard Specification for Metallic-Coated Carbon Steel Barbed Wire¹

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This standard has been approved for use by agencies of the Department of Defense.

1. Scope

1.1 This specification covers metallic-coated steel barbed wire, consisting of a strand of two wires.

1.2 The barbed wire is available with aluminum, zinc, and zinc-5 % aluminum-mischmetal alloy coatings, with a number of coating weights, in a number of different constructions (designs), and in two grades. Not all designs are available in all coating types.

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 that provide explanatory information. These notes and footnotes (excluding those in tables) shall not be considered as requirements of the specification.

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
- A428/A428M Test Method for Weight [Mass] of Coating on Aluminum-Coated Iron or Steel Articles
- A641/A641M Specification for Zinc-Coated (Galvanized) Carbon Steel Wire
- A700 Practices for Packaging, Marking, and Loading Methods for Steel Products for Shipment
- A809 Specification for Aluminum-Coated (Aluminized) Carbon Steel Wire
- A856/A856M Specification for Zinc-5 % Aluminum-Mischmetal Alloy-Coated Carbon Steel Wire
- A902 Terminology Relating to Metallic Coated Steel Products

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 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.

2.2 Federal Standard:

Fed. Std. No. 123 Marking for Shipments (Civil Agencies)³

2.3 Military Standards:

MIL-STD-129 Marking for Shipment and Storage³

MIL-STD-163 Steel Mill Products Preparation for Shipment and Storage³

3. Terminology

3.1 *Definitions*—For definitions of terms not specified in this specification, refer to Terminology A902.

4. Classification

4.1 The barbed wire covered by this specification is classified as described in this section.

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

4.3 Metallic Coating Type:

4.3.1 *Coating Type A*—Made from aluminum-coated strand wire. See 6.3. (Only one coating weight for each wire size.)

4.3.2 *Coating Type Z*—Made from zinc-coated strand wire. See Table 2.

4.3.3 *Coating Type ZA*—Made from zinc-5 % aluminum-mischmetal alloy (Zn-5AL-MM) coated strand wire. See Table 3.

4.4 *Metallic Coating Class*—The specified amount of coating (coating weight (mass)) on the strand wire.

4.5 Grades:

4.5.1 *Standard Grade*—Barbs spaced on 4 or 5-in. (102 or 127-mm) centers as indicated in Table 1.

4.5.2 *High-Security Grade*—Barbs spaced on 3-in. (76-mm) centers with Coating Type A, Z, or ZA only.

NOTE 1—The design numbers are related to the characteristics of the construction of the barbed wire, with the number groups related, in order, to the steel wire gage of the strand wires, number of barb points, spacing of barbs, steel wire gage of the barbs, and a letter indicating the shape of the barbs.

³ Available from Standardization Documents Order Desk, DODSSP, Bldg. 4, Section D, 700 Robbins Ave., Philadelphia, PA 19111-5098