Designation: F900 – 11 (Reapproved 2017)

Standard Specification for Industrial and Commercial Steel Swing Gates[1]

This standard is issued under the fixed designation F900; 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 detailed requirements for chain link fence gates, gate posts and accessories for both single and double swing-type gates for industrial and commercial application.

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 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]

A780 Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings

F1043 Specification for Strength and Protective Coatings on Steel Industrial Fence Framework

F1083 Specification for Pipe, Steel, Hot-Dipped Zinc-Coated (Galvanized) Welded, for Fence Structures

F2200 Specification for Automated Vehicular Gate Construction

3. Terminology

3.1 *Definitions of Terms Specific to This Standard:*

3.1.1 *polymer—in this specification*, polymer is used to describe all types of vinyl, poly(vinyl-chloride) (PVC) or similar types of coatings other than zinc or aluminum.

4. Materials and Manufacture

4.1 *Materials*—The base materials of the gate frame shall be round or rectangular tubular members, welded at all corners or assembled with corner fittings. Gates assembled with corner fittings shall have adjustable truss rods 5⁄16 in. (7.9 mm) minimum diameter on panels 5 ft (1.5 m) wide or wider. Truss rods shall be the same base metal and finish as the gate frames.

4.1.1 The interior bracing, when needed, shall be the same metal and shape tubular material and finish as the gate frame, but need not be the same size.

4.2 *Manufacture*—Gate frames shall be fabricated and coated where necessary, as described in 4.2.1 through 4.2.5. For gates intended to be automated, manufacture shall conform to the applicable provisions of Specification F2200.

4.2.1 *Zinc-Coated Steel Frames* shall be in accordance with Specifications F1043 or F1083, or a combination thereof, and shall match that selected for any adjoining fence framework. Welded joints shall be coated in accordance with Practice A780.

4.2.2 *Polymer-Coated Steel Frames* shall be in accordance with Specification F1043 and shall match that selected for any adjoining fence framework. Welded joints on polymer-coated steel gate frames shall be coated in accordance with Practice A780. The painted areas shall then be top-coated to match the frame color.

4.2.3 *Chain Link Gate Fabric*—The fabric shall be as specified for the fence.

4.2.4 *Barbed Wire Top*—When specified, shall have the end members of the gate frame extended in height to accommodate three strands of barbed wire uniformly spaced and positioned so that the top strand is approximately 1 ft (300 mm) above the top horizontal member of the gate frame, except that the minimum height for barbed wire installed at the top of gates intended to be automated shall be in accordance with Specification F2200. Barbed wire shall be attached by suitable means to prevent wire from moving out of position and shall be supported by a gate frame member at maximum intervals of 8 ft (2.44 mm).

4.2.5 *Barbed Tape*—The minimum height for barbed tape installed at the top of gates intended to be automated shall be a minimum of 8 ft - 0 in.

[1] This specification is under the jurisdiction of ASTM Committee F14 on Fences and is the direct responsibility of Subcommittee F14.15 on Gates.

Current edition approved June 1, 2017. Published July 2017. Originally approved in 1984. Last previous edition approved in 2011 as F900 - 11. DOI: 10.1520/F0900-11R17.

[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.