Designation: F 1712 – 02

Standard Specification for Steel Chain-Link Fencing Materials Used in Detention and Correctional Facilities[1]

This standard is issued under the fixed designation F 1712; 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 chain-link fencing material applications for detention and correctional facilities.

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

2. Referenced Documents

2.1 *ASTM Standards:*

A 121 Specification for Zinc-Coated (Galvanized) Steel Barbed Wire[2]

A 392 Specification for Zinc-Coated Steel Chain-Link Fence Fabric[2]

A 491 Specification for Aluminum-Coated Steel Chain-Link Fence Fabric[2]

A 824 Specification for Metallic-Coated Steel Marcelled Tension Wire for Use With Chain Link Fence[2]

F 626 Specification for Fence Fittings[2]

F 668 Specification for Poly (Vinyl Chloride) (PVC) and Other Organic Polymer-Coated Steel Chain-Link Fence Fabric[2]

F 900 Specification for Industrial and Commercial Swing Gates[2]

F 934 Specification for Standard Colors for Polymer–Coated Chain Link Fence Materials[2]

F 1043 Specification for Strength and Protective Coatings on Metal Industrial Chain-Link Fence Framework[2]

F 1184 Specification for Industrial and Commercial Horizontal Slide Gates[2]

F 1345 Specification for Zinc-5 % Aluminum-Mischmetal Alloy-Coated Steel Chain-Link Fence Fabric[2]

F 1379 Terminology Relating to Barbed Tape[2]

F 1664 Specification for Poly (Vinyl Chloride) (PVC) and Other Conforming Organic Polymer-Coated Steel Tension Wire Used with Chain-Link Fence[2]

F 1665 Specification for Poly (Vinyl Chloride) (PVC) and Other Confoming Polymer-Coated Steel Barbed Wire Used with Chain-Link Fence[2]

F 1910 Specification for Long Barbed Tape Obstacles[2]

F 1911 Practice for Installation of Barbed Tape[2]

F 1916 Specifications for Selecting Chain Link Barrier Systems with Coated Chain Link Fence Fabric and Round Posts for Detention Applications[3]

2.2 *Other Standard:*

UL 325 Door, Drapery, Gate, Louver, and Window Operators and Systems[4]

3. Significance and Use

3.1 Typical end users of this specification are detention and correctional facilities.

4. Materials and Manufacture

4.1 *Framework*—Shall meet the size and strength requirements in Specification F 1043 for heavy industrial fence framework. Where icing conditions and high wind loads are prevalent or fences are higher than 12 ft (3.7 m), strength requirements shall be determined through engineering calculations. Horizontal top, mid or bottom rails if specified shall be 1.660 in. (42 mm) O.D., or roll-formed section 1¼ by 1⅝ in. (32 by 41 mm). Framework may be polymer-coated and color shall be one of the choices listed in Specification F 934. Framework coatings shall be in accordance with Specification F 1043.

4.2 *Fabric*—Mesh larger than 1 in. (25 mm) shall be 6 gage, 0.192 in. (4.88 mm) or 9 gage, 0.148 in. (3.76 mm): 1-in. mesh shall be 9-gage coated steel wire conforming to Specifications A 392, A 491, or F 1345 as selected if metallic-coated, or conforming to Specification F 668 if polymer-coated. Mesh smaller than 1 in. shall be 11 gage, 0.120 in. (3.05 mm) conforming to Specifications A 491, F 668, or F 1345 as selected.

NOTE 1—The various chain link fabric specifications list fabric heights up to and including 12 ft (3.7 m) height. Some fabrics are available up to 20 ft (6.1 m). Reference Specification F 1916 for fabric installation especially where two fabric heights are spliced horizontally. Chain link fabric shall be installed on the secure side of the fence per Specification F 1916.

[1] This specification is under the jurisdiction of ASTM Committee F14 on Fences and is the direct responsibility of Subcommittee F14.10 on Specific Applications.

Current edition approved July 10, 2002. Published September 2002. Originally published as F 1712 – 96. Last previous edition F 1712 – 96a.

[2] *Annual Book of ASTM Standards*, Vol 01.06.

[3] *Annual Book of ASTM Standards*, Vol 15.08.

[4] Available from Underwriters Laboratories (UL) Corporate Progress, 333 Pfingsten Rd., Northbrook, IL 60062-2096.