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Standard Specification for Residential Chain Link Fence Gates[1]

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1. Scope

1.1 This specification covers detail requirements for residential chain link fence gates, gate posts, and accessories.

1.2 *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

F626 Specification for Fence Fittings

3. Classification

3.1 Residential chain link fence gates are classified as follows:

3.1.1 *Type I*—Single Swing

3.1.2 *Type II*—Double Swing

3.2 No gate leaf over 6 ft (1.829 m) in height or over 6 ft (1.829 m) in width shall be classified as residential, regardless of use or location.

4. Manufacture

4.1 Zinc-coated steel frames shall be zinc-coated in accordance with the zinc coating specified for the fence framework. Welded joints shall have suitable rust preventive coating applied to the welds.

4.2 Aluminum gate frame shall be the same base material and alloy as specified for the fence framework. Aluminum gate frames may be assembled with corner fittings.

4.3 Polymer-coated steel or aluminum frame shall be polymer coated as specified for framework. Polymer-coated steel frames may be assembled with corner fittings. Welded joints shall have suitable preventive coating applied to the welds.

NOTE 1—The word polymer is used to describe all types of heat set organic exterior coatings and is not applicable to metallic coatings, such as zinc or aluminum.

5. Gate Frames, Fabric, Attachment, and Finish

5.1 *Gate Frames* shall be of aluminum or steel tubing, round or square, and assembled by means of corner fittings or welded, or formed by bending. The bend should be smooth and continuous.

5.1.1 *Corner Fitted and Welded Gates* shall have vertical and horizontal interior members spaced so that no horizontal dimension between outside members shall be greater than 5 ft (1.524 m), and no vertical dimension between members shall be greater than 5 ft (1.524 m).

5.2 *Fabric* shall match that of the line fabric adjacent to the gate opening or as required by specifications or drawings, or both. However, fabric having a breaking strength equivalent to or greater than the fabric used in the line of fence may be used.

5.3 *Attachment of Fabric to Gate Frame*—Stretch the fabric so it is taut and fastened to frames by one of the following methods:

5.3.1 Place a round rod or flat bar through the fabric and fasten with clips or bands, at a maximum spacing of 12 in. (305 mm) on center, of sufficient strength to hold fabric taut between the vertical frame members. Clips or bands shall conform to the profile of the frame members.

5.3.2 Place a round rod or flat bar through the fabric and fasten with a J-bolt through the holes in the frame.

5.3.3 Fasten all fabric to horizontal frame members and to any interior frame members by means of clips, tie wires, or bands suitable to retain the fabric to the frame members. Spacing should be at a maximum of 18 in. (450 mm) apart.

6. Dimensions and Weights (of Gate Frames and Gate Posts)

6.1 *Dimension (Height):*

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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.

6.1.1 The vertical dimension (height) of the gate should be 2 in. (60 mm) less than the specified height of the adjacent fence.

6.1.2 Where interior members are required, they shall be evenly spaced between outside members.

6.2 *Dimension (Width)*—Gate opening sizes are figured on the inside dimensions between gate posts. The actual width of the gate panel shall be equal to the opening minus the space required for free operation of hinges and latches.

6.3 *Diameter and Weight of Frames* —See Table 1.

6.4 *Gate Post Dimensions and Weights* —See Table 2 and Table 3.

7. Gate Hardware

7.1 All gate hardware shall be of sufficient strength and durability to support the gate and repeated open-close cycles.

7.2 *Single and Double Gate Latches :*

7.2.1 *Single Gate Latches* shall be of lockable design.

7.2.2 *Double Gate Latches* shall be equipped with a center drop rod or bar, and suitable fork or gravity latch to retain both gates in a parallel position while closed, or a positive locking device with suitable attachment to retain both gates in parallel position while closed.

7.3 *Center Stops*— When required for drop rods or bars, center stops may be of manufactured design of aluminum or steel and suitable for attachment to slab or installed in concrete or may be a hole drilled into existing concrete slab.

7.4 *Gate Holdbacks* are optional to the purchaser.

7.5 *Accessories* are optional as required by specifications, drawings, or to match the line adjacent to the gates.

8. Workmanship

8.1 Gates shall be produced in accordance with good commercial practices. Defects in welds, chain link fabric, bracing and truss rods, and accessories shall be noted and, if present to any considerable extent, shall provide a basis for rejection.

9. Inspection

9.1 The manufacturer shall afford the inspector representing the purchaser all reasonable facilities to satisfy him that the material being furnished is in accordance with this specification. Unless otherwise specified, all tests and inspection shall be made at the place of manufacture, prior to shipment, and shall be so conducted as not to interfere unnecessarily with the operation of the work.

TABLE 1 Fence Frames (Minimum Requirements)

	Outside Dimension Pipe, in. (mm)	Wall Thickness, in. (mm)	Nominal Weight, lb/ft (kg/m)
Steel:			
Round tube	1.315 (33.4)	0.065 (1.65)	0.8681 (1.29)
Square tube	1.25 by 1.25 (31.75 by 31.75)	0.065 (1.65)	1.05 (1.56)

TABLE 2 Gate Posts (for Gate Leaf Width of 48 in. (1.219 m) or Less)

	Outside Dimension Pipe, in. (mm)	Wall Thickness, in. (mm)	Nominal Weight, lb/ft (kg/m)
Round Post:			
Steel	1.90 (48.3)	0.065 (1.651)	1.274 (1.896)
Square Post:			
Steel	2 by 2 (50.8 by 50.8)	0.080 (2.032)	2.09 (3.11)

TABLE 3 Gate Posts (for Gate Leaf Width over 48 in. (1.201 m) to 72 in. (1.829 m)[A]

	Outside Dimension Pipe, in. (mm)	Wall Thickness, in. (mm)	Nominal Weight, lb/ft (kg/m)
Round Post:			
Steel	2.375 (60.3)	0.095 (2.93)	2.31 (3.44)
Square Post:			
Steel	2.5 by 2.5 (63.5 by 63.5)	0.083 (2.11)	2.73 (4.06)

[A] Gate posts for gate leaf width up to 60 in. (1.524 m) may use a round steel post 2.375 in. (60.3 mm) in diameter with a wall thickness of 0.065 in. (1.651 mm).