



Standard Practice for Construction of Chain-Link Tennis Court Fence¹

This standard is issued under the fixed designation F969; 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 practice covers fencing around tennis courts, built from various types of chain-link fabric and framework materials, and installation practices for same.

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 standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:²

- A392 Specification for Zinc-Coated Steel Chain-Link Fence Fabric
- A491 Specification for Aluminum-Coated Steel Chain-Link Fence Fabric
- A824 Specification for Metallic-Coated Steel Marcellled Tension Wire for Use With Chain Link Fence
- F552 Terminology Relating to Chain Link Fencing
- F567 Practice for Installation of Chain-Link Fence
- F626 Specification for Fence Fittings
- F668 Specification for Polyvinyl Chloride (PVC), Polyolefin and Other Polymer-Coated Steel Chain Link Fence Fabric
- F900 Specification for Industrial and Commercial Steel Swing Gates
- F934 Specification for Colors for Polymer-Coated Chain Link Fence Materials
- 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
- F1345 Specification for Zinc-5 % Aluminum-Mischmetal Alloy-Coated Steel Chain-Link Fence Fabric
- F1664 Specification for Poly(Vinyl Chloride) (PVC) and Other Conforming Organic Polymer-Coated Steel Tension Wire Used with Chain-Link Fence

- 2.2 Chain Link Fence Manufacturers Institute:
WLG 2445 Chain Link Fence Wind Load Guide for the Selection of Line Post and Line Post Spacing³

3. Terminology

3.1 *Definitions*—See Definitions F552 for definitions of terms used in this practice.

4. Summary of Practice

4.1 This practice is intended primarily to guide those responsible for or concerned with the design and installation of chain-link fencing around tennis courts.

4.2 This practice does not intend to preclude any practice that has proven equal to or given better performance under varying conditions such as location, weather, intended use, etc.

5. Significance and Use

5.1 The intended use of this practice is for 10- or 12-ft (3050 or 3660 mm) high chain-link fencing as complete enclosures around single or multiple tennis courts, or as backstops at either end of tennis courts.

5.2 This practice is not intended for applications where fencing higher than 12 ft (3660 mm) is desired for a special application.

5.3 *Caution Regarding Windscreens*—If wind screens are to be installed at the time of fence erection or at a later time, it is advisable to use stronger framework and parts and closer spacing of posts or back bracing depending upon the type of screening material to be used, area of fence to be covered, and local wind conditions. The Chain Link Fence Manufacturers Institute's (CLFMI), Guide WLG 2445, provides the designer with the process to select the post size and post spacing.

¹ This practice 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 June 1, 2016. Published June 2016. Originally approved in 1986. Last previous edition approved in 2011 as F969 - 11. DOI: 10.1520/F0969-11R16.

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.

³ Available from Chain Link Fence Manufacturers Institute, 10015 Old Columbia Road, Suite B-215, Columbia, MD 21046, http://www.chainlinkinfo.org.

6. Classification

6.1 The four types of chain-link fencing described in this practice are classified as follows:

6.1.1 *Type I*—Built with aluminum-coated steel chain-link fence fabric as specified in Specification **A491**.

6.1.2 *Type II*—Built with zinc-coated steel chain-link fence fabric as specified in Specification **A392**, Class 1 or Class 2 coating, as selected.

6.1.3 *Type III*—Built with zinc-5% aluminum-mischmetal alloy-coated steel chain-link fence fabric as specified in Specification **F1345**, in a choice of Class 1 or Class 2 coating, as selected.

6.1.4 *Type IV*—Built with polymer-coated steel chain-link fence fabric as specified in Specification **F668**, in a choice of Class 1, Class 2a, or Class 2b coating, as selected.

7. Ordering Information

7.1 Purchase orders, construction specifications, or detailed drawings should include the following information:

7.1.1 Quantity or total measurements in lineal feet of fence and gates.

7.1.2 Type of fence fabric and gauge of wire; Type I, Type II (see **6.1.2**), Type III (see **6.1.3**), Type IV (see **6.1.4**), gauge of wire (see **8.1.3**).

7.1.3 Class of metallic-coated fence fabric Type II (Class 1 or Class 2) (see **6.1.2**), Type III (Class 1 or Class 2) (see **6.1.3**).

7.1.4 Class of Type IV polymer-coated fence fabric, Class 1, Class 2a or Class 2b (see **6.1.4**) and color (see **8.1.2**).

7.1.5 If framework, fittings and gates are to be color coated, select color from Specification **F934**.

7.1.6 Height of fence (10 or 12 ft (3050 or 3660 mm)).

7.1.7 Number of horizontal rails and location.

7.1.8 Bottom tension wire, if specified.

7.1.9 Depth and diameter of concrete post footings, if other than as indicated in Practice **F567**.

7.1.10 Spacing of line posts, if other than as indicated in Practice **F567**.

7.1.11 Any details peculiar to the project, such as special finishing of tops of concrete post footings, setting of posts in concrete curbs, etc. (see **9.2.2** and **9.2.3**).

NOTE 1—A typical ordering description is as follows: 360 lineal ft (109.7 m) chain-link tennis court fence to make a full enclosure 60 by 120 ft (18.3 by 36.6 m) with 3 ft (914 mm) gate at one corner, Type I, 12 ft (3660 mm) high, 3 horizontal rails (top, middle, and bottom), furnished and erected as shown on the enclosed drawing, and in accordance with ASTM F969.

7.2 A detailed drawing or drawings showing the complete layout of the fence line, together with typical elevations, details of pavement around post footings, etc., should be a part of the purchase order or construction contract.

8. Materials

8.1 Chain-Link Fabric:

8.1.1 If Type II or Type III is selected, indicate whether Class 1 or 2 is desired.

8.1.2 If Type IV is selected, indicate whether Class 1, 2a, or 2b is desired, and select color of fabric coating in accordance with Specification **F934**.

8.1.3 Size of wire shall be 0.120 in. (3.05 mm) 11 gauge or 0.148 in. (3.76 mm) 9 gauge. If polymer-coated Type IV fabric is selected, the wire size gauge is the gauge of the metallic-coated core wire.

8.1.4 Size of fabric mesh shall be 1³/₄ in. (44 mm).

8.1.5 Height of fabric shall be 10 or 12 ft (3050 or 3660 mm), as selected.

8.1.6 Fabric selvage shall be knuckled top and bottom.

8.2 Posts:

8.2.1 Posts shall be as selected from Specifications **F1043** and **F1083**. If polymer-coated, specify type of coating and color.

8.2.2 The posts shall not be splice-welded.

8.3 Horizontal Rails:

8.3.1 Horizontal rails shall be as selected from Specifications **F1043** and **F1083**. If polymer-coated, specify type of coating and color.

8.3.2 All fences shall have a top rail. Fences 12 ft (3660 mm) in height shall have a continuous middle rail. Additional rails at mid-points or at the bottom of the fence may be specified.

8.4 Bottom Tension Wire:

8.4.1 Bottom tension wire shall be used except where continuous bottom rail is specified.

8.4.2 Bottom tension wire shall be in accordance with Specification **A824** for metallic coated chain link fabric and Specification **F1664** for polymer-coated chain link fabric.

8.5 Fittings:

8.5.1 All fittings shall conform to Specification **F626**. If Type IV fabric is selected and polymer-coated posts and rails are also selected, all fittings shall be polymer coated as specified in Specification **F626**, Section 11.

8.6 Gates:

8.6.1 All gates shall be fabricated in accordance with Specification **F900**.

8.6.2 Minimum width of gate opening shall be 3 ft (914 mm).

8.6.3 All single walk gates shall be 7 ft (2133 mm) high with a transom panel above the gate extending to full height of the fence.

8.6.4 Gates shall have hinges to provide a full 180° swing from the closed to the open position.

8.6.5 Gate latch shall have provision for secure locking with a padlock.

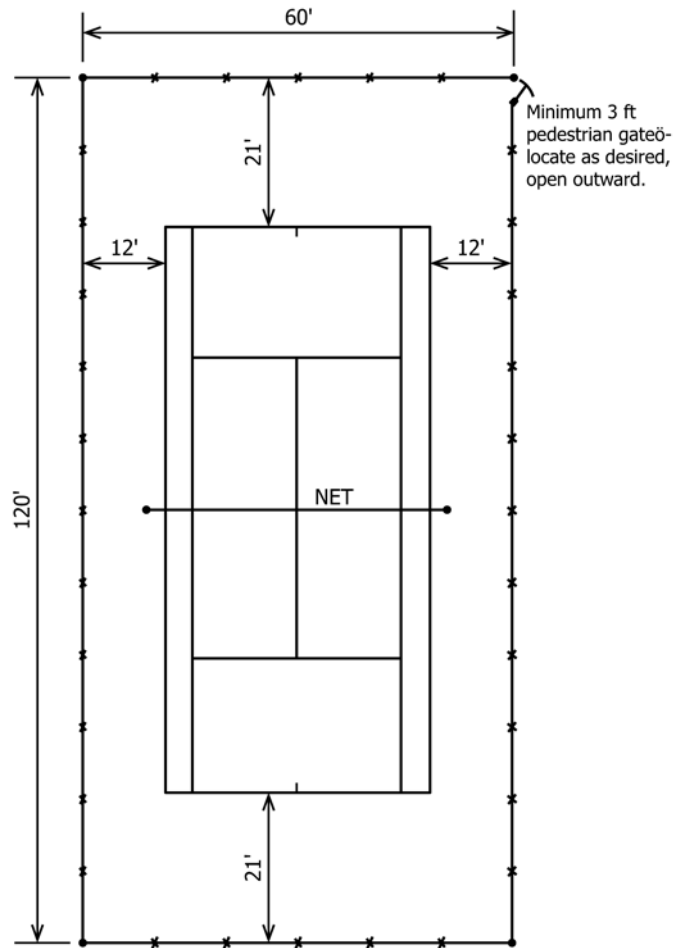
8.6.6 Gate latch shall have a built-in provision to permit the gate to open outward only.

9. Installation

9.1 Lay out the fence lines as shown in **Fig. 1**, **Fig. 2**, or **Fig. 3**.

9.2 Installation shall be in accordance with Practice **F567** with the following additional provisions or exceptions:

9.2.1 Unless otherwise specified, the chain-link fabric shall be placed on the playing side of the fence enclosure or backstops.



NOTE 1—See Table 1 for SI equivalents.

FIG. 1 Typical Fence Layout for Complete Enclosure of One Standard 36 by 78 ft (11 m by 23.8 m) Doubles Court

9.2.2 If fence is installed in concrete curbs around the perimeter of the tennis court(s), provide sleeves in the curbs for this purpose, then set the posts as indicated in Practice F567.

9.2.3 Since in most cases it is impractical to pave the courts after setting the posts, it becomes necessary to cut through the finished pavement and excavate the post holes. The contract specifications shall indicate whether the concrete footings around the posts should be brought up to finished grade and trowelled to a crown, or whether they should be left 6 in. (152 mm) below finished grade to allow for cover with black top as described in Practice F567. If the latter method is selected, the

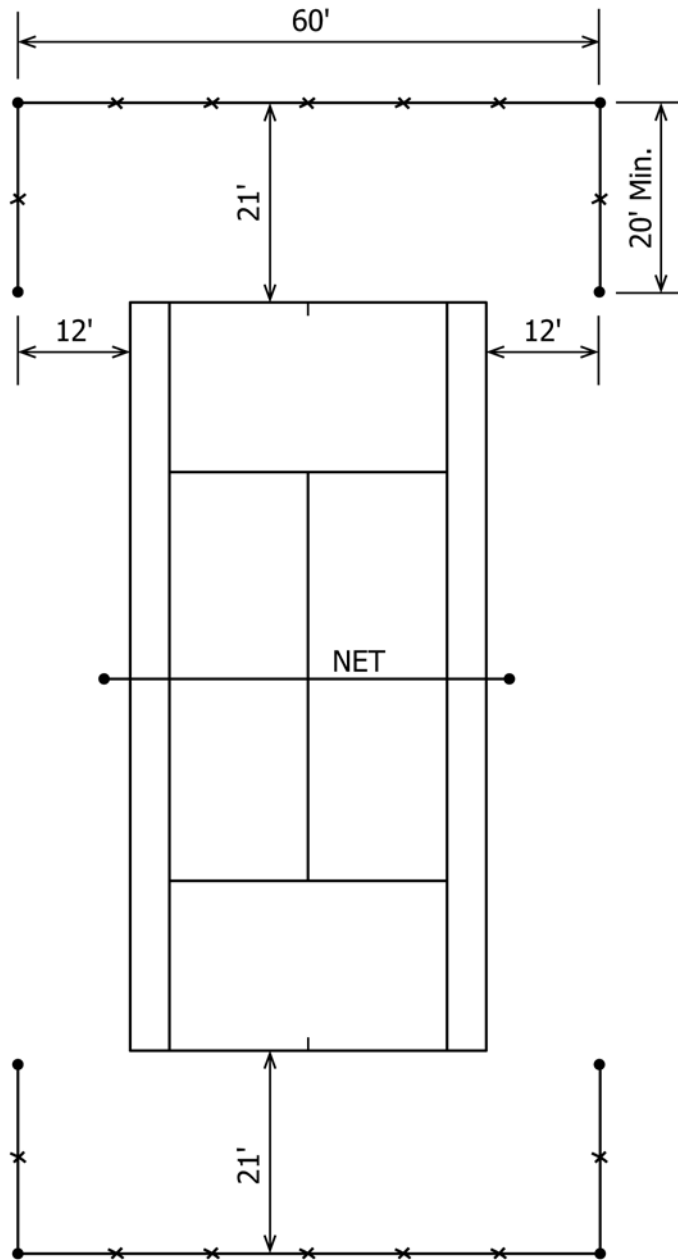
contract specifications shall stipulate who is responsible for installing the black top cover over the footings.

9.2.4 Install chain-link fabrics with bottom 1 in. (25 mm) maximum above finished pavement.

9.2.5 Where bottom tension wire is used, it shall be attached to the bottom diamond of the chain-link fabric.

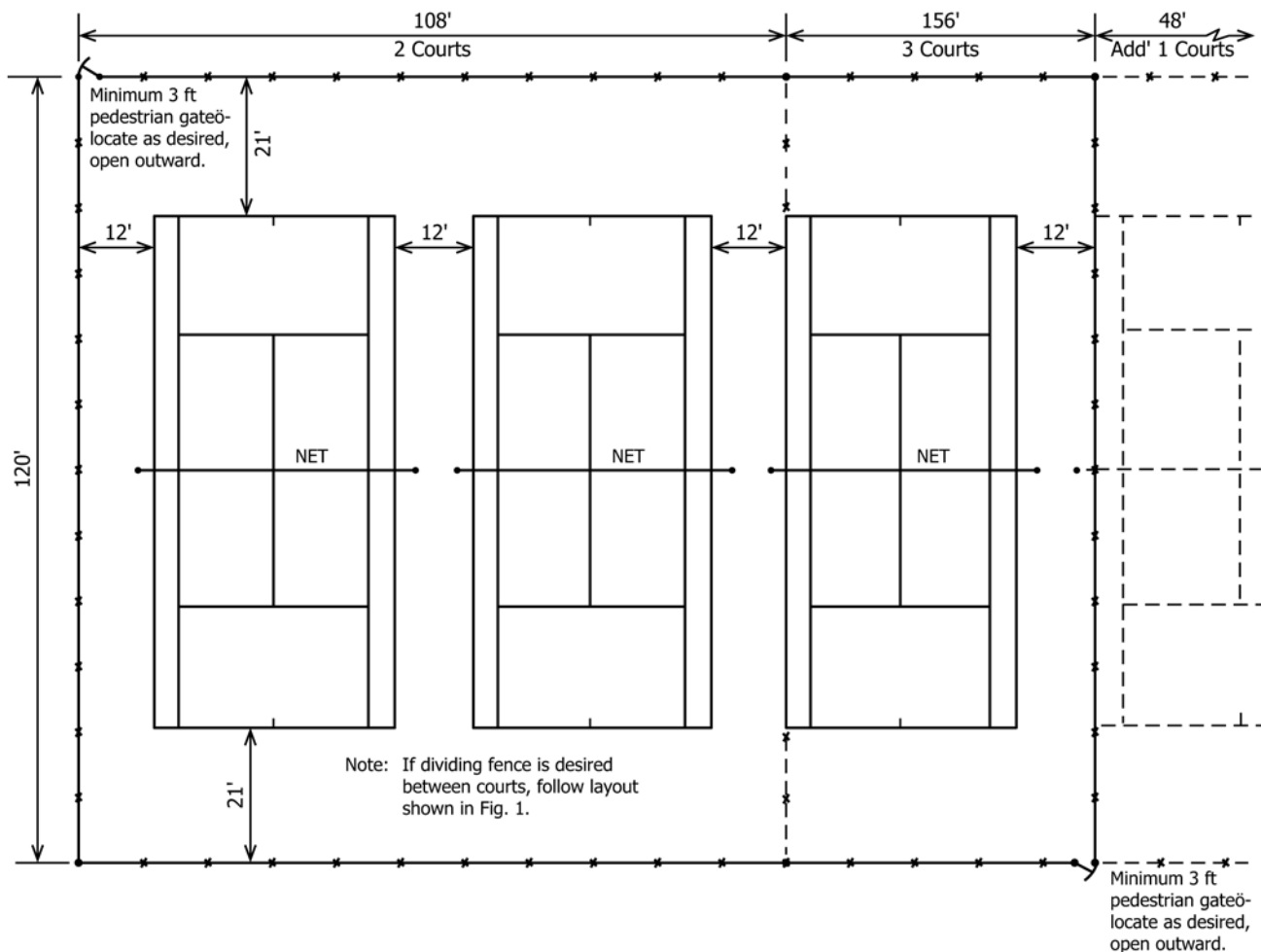
10. Keywords

10.1 tennis court fence; chain link; tension wire; bottom rail; 1¾ in. (44 mm) chain link mesh



NOTE 1—See Table 1 for SI equivalents.

FIG. 2 Typical Fence Layout for Backstops at Either End of One Standard 36 by 78 ft (11 m by 23.8 m) Doubles Court



NOTE 1—See Table 1 for SI equivalents.

FIG. 3 Typical Fence Layout for Complete Enclosure of Two or More Standard 36 by 78 ft (11 m by 23.8 m) Doubles Courts

TABLE 1 SI Reference Chart

| | |
|---------------|----------------------|
| 12 ft 0 in. | = 3.7 m (3 660 mm) |
| 21 ft 0 in. | = 6.4 m (6 400 mm) |
| 48 ft 0 in. | = 14.6 m (14 630 mm) |
| 60 ft 0 in. | = 18.3 m (18 288 mm) |
| 108 in. 0 in. | = 32.9 m (32 918 mm) |
| 120 ft 0 in. | = 36.6 m (36 576 mm) |
| 156 ft. 0 in. | = 47.5 m (47 540 mm) |

ASTM International takes no position respecting the validity of any patent rights asserted in connection with any item mentioned in this standard. Users of this standard are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, are entirely their own responsibility.

This standard is subject to revision at any time by the responsible technical committee and must be reviewed every five years and if not revised, either reapproved or withdrawn. Your comments are invited either for revision of this standard or for additional standards and should be addressed to ASTM International Headquarters. Your comments will receive careful consideration at a meeting of the responsible technical committee, which you may attend. If you feel that your comments have not received a fair hearing you should make your views known to the ASTM Committee on Standards, at the address shown below.

This standard is copyrighted by ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959, United States. Individual reprints (single or multiple copies) of this standard may be obtained by contacting ASTM at the above address or at 610-832-9585 (phone), 610-832-9555 (fax), or service@astm.org (e-mail); or through the ASTM website (www.astm.org). Permission rights to photocopy the standard may also be secured from the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, Tel: (978) 646-2600; http://www.copyright.com/