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## Standard Guide for Chain-Link Pickleball Court Fences<sup>1</sup>

This standard is issued under the fixed designation F3558; 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 ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

### 1. Scope

1.1 The purpose of this guide is to inform the builder, designer, facility manager, or owner, or a combination thereof, of a pickleball court or facility about the many details and features of pickleball court fence. It focuses on what to consider when designing a pickleball fence, offers some recommendations, and points the user to where they could find additional useful information regarding the design, construction, and maintenance of pickleball courts.

1.2 *Units*—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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.4 *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:*<sup>2</sup>
- 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 Standard 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

<sup>1</sup> This guide is under the jurisdiction of ASTM Committee F14 on Fences and is the direct responsibility of Subcommittee F14.10 on Specific Applications and Other Fence Systems and Components.

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<sup>2</sup> 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 *CLFMI Document:*<sup>3</sup>

[WLG 2445 Chain Link Fence Wind Load Guide for the Selection of Line Post and Line Post Spacing](#)

2.3 *USAP and ASBA Document:*<sup>4</sup>

[Pickleball Courts: A Construction & Maintenance Manual 2020](#)

2.4 *U.S. Access Board Document:*<sup>5</sup>

[Chapter 4 Guide to the ADA Accessibility Standards](#)

2.5 *PTI Document:*<sup>6</sup>

[DC10.3-20 Design, Construction and Maintenance of Post-Tensioned Concrete Courts](#)

### 3. Terminology

3.1 *Definitions*—See Terminology [F552](#) for definitions of terms used in this guide.

### 4. Summary of Guide

4.1 This guide is intended to guide those responsible for, or concerned with, the design and installation of chain-link fencing for both private and public pickleball courts, where other standards may not apply.

### 5. Significance and Use

5.1 *The Intended Use of This Guide* is to identify the specific functions and qualities desired of a pickleball fence and offer recommendations on how to achieve them with a chain link fence for different types of pickleball courts.

5.2 *The Primary Function of a Pickleball Court Fence* is to keep pickleball balls in and uninvited traffic out. It also serves as a barrier to prevent players from colliding with fixed objects and spectators. It also prevents players from running onto irregular or slippery surfaces or into dangerous adjacent areas. Fences need to respond to secondary functional requirements, including: spectator viewing, screening the court from wind and visual distractions outside the court, and being as open and welcoming as security conditions permit. In cases where security or dangerous adjacent conditions are an issue, a uniformly high type of enclosure can still be called for, but in most cases, pickleball fences are a variety of heights and may accommodate lights, shade shelters, gates for players and maintenance, and can have completely open (no fence) portions of the perimeter that lead to decks, grandstands, or landscaping

### 6. Pickleball Fence Recommendations

6.1 *Layout*—The most favorable environment for pickleball is one with the least amount of fencing required to meet the functional needs and address the site-related challenges.

6.1.1 There are numerous layouts of pickleball fence. The playing area of a pickleball court can be a variety of sizes and can be hard or soft, but hard courts are more common. Pickleball courts may be stand-alone, adjacent, or in batteries of multiple courts. The site conditions may impact the fencing requirements. Some courts can be completely enclosed while others can be more open. Not all court fences can be simple rectangles. A facility may have a unique set of requirements that also impact the fence layout.

6.1.2 *Court Size:*

6.1.2.1 A pickleball court measures 20 ft (6100 mm) by 44 ft (13 410 mm) with overall playing areas that range from the USAP recommended minimum of 30 ft (9145 mm) by 60 ft (18 290 mm) to as much as 50 ft (15 240 mm) by 80 ft (24 380 mm) for stadium courts. The most common size is 34 ft (10 360 mm) x 64 ft (19 510 mm). That is a perimeter of 180 linear ft (54 860 mm) for the smallest court to 260 lin. ft (79 250 mm) for the largest, and 196 lin. ft (59 740 mm) for the most common court.

6.1.3 *Fence Configurations*—The pickleball court fencing is made up of baseline and sideline fences. Each has its functions and particular characteristics.

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

<sup>4</sup> Available from American Sports Builders Association (ASBA), 2331 Rock Spring Rd., Forest Hill, MD 21050, [www.sportsbuilders.org](http://www.sportsbuilders.org).

<sup>5</sup> Available from U.S. Access Board, [www.access-board.gov](http://www.access-board.gov).

<sup>6</sup> Available from Post-Tensioning Institute (PTI), <https://www.post-tensioning.org>.

6.1.3.1 *Baseline Fence* is at the back of the pickleball court, parallel with the court baselines. The typical height of the high fencing is 8 ft (2440 mm), but could be as high as 12 ft (3660 mm) for rooftop and other extraordinary site conditions.

6.1.3.2 *Sideline Fence* is parallel to the court sideline. This fence varies the most in height. Along this fence line, 16 ft (4880 mm) on either side of the pickleball net can remain open or have a fence anywhere between 42 in. high and a height matching the backdrop. The recommendation for the first 16 ft (4880 mm) from the corners is that the height match the baseline fence.

6.1.3.3 *Backstop* is the term used for the portion of fence that is considered the minimum fence configuration. It is the high fencing made up of the entire baseline fence and the sideline fence along each side normally measuring 16 ft (4880 mm) from the corner on 30 ft by 60 ft and 34 ft by 64 ft courts.

6.1.3.4 *Divider Fence* is a shared fence between adjacent courts. If included, the recommended minimum distance from the court sideline to the fence is 5 ft (1550 mm), while 7 ft (2130 mm) is preferred. The divider fence may be 42 in. (1070 mm) or greater in height.

6.1.3.5 *Low Fence Option*—It is not unusual to see new pickleball courts built with 42 in., 4 ft, or 5 ft fencing around the entire perimeter. This option prioritizes the spectator experience and allows unobstructed viewing from all sides. This is not recommended for competition courts, but can be an option for recreation courts.

6.1.4 *Court Combinations*—The most common residential court is a stand-alone court. The popular court arrangement for clubs is two adjoining courts and the typical grouping of school and park courts is multi-court batteries.

6.1.4.1 *Stand-Alone Courts* include 30 ft (9145 mm) x 60 ft (18 290 mm) recommended minimum, converted courts, 34 ft (10 360 mm) x 64 ft (19 510 mm) preferred size courts, 44 ft (13 410 mm) x 74 ft (25 560 mm) wheelchair courts and 50 ft (15 420 mm) x 80 ft (24 380 mm) stadium courts. Their fences are designed for spectator viewing or an open appearance, or both.

6.1.4.2 *Two Adjoining Courts* that share a divider fence are popular in clubs. They may have interrupted sideline fences to make room for shade shelters. Although combinations of two courts is the most popular, three or more adjacent courts can be grouped together.

6.1.4.3 *Multi-Court Batteries* are the most economical model and therefore popular in facilities that have tight budgets for both construction and maintenance. Multi-court batteries are the most common arrangement of conversions.

<https://standards.iteh.ai/catalog/standards/astm/2d078444-6d04-4e63-8fc6-a094d60966e9/astm-f3558-24>

6.1.5 *Location* of the courts on a site may play a major role in determining the nature of the fencing.

6.1.5.1 *Open Sites*—Where site conditions are supportive, fences might be limited to the backstops only. This is especially common on elite and stadium courts.

6.1.5.2 *Tight Quarters*—Most facilities are designed efficiently and therefore require fences along the sidelines. In cases where the sideline is near a roadway, parking area, pond, or other use that may be difficult to navigate, higher fences are preferred.

6.1.5.3 *Elevated Courts*—The most dramatic locations of pickleball courts are rooftops. They can be one or more stories in the air and retrieving pickleball balls could be a chore. The perimeter fence enclosure can be extended another 4 ft to 8 ft with suspended netting to catch stray miss hit balls.

6.1.6 *Types of Court Surfaces*—Hard, clay, fastdry, and tiles.

6.1.6.1 *Hard Courts*, including concrete slabs, asphalt pavement, and even wood floors are commonly used for pickleball. The hard surfaces may have acrylic surfacing systems, cushioned acrylic systems, or poured urethane surfaces. These are the most popular for all levels of pickleball play. New courts have a wide range of heights, from 42 in. (1070 mm) to 8 ft (2440 mm). Many courts have 42 in. or 4 ft (1220 mm) high fences around the entire perimeter, but 8 ft (2440 mm) high backstops are recommended.

6.1.6.2 *Soft Courts*, including clay and fastdry surfaces, have grown in popularity and generally can include slightly lower backstop fences, but the recommendations for the backstops is the same as for the hard courts.

6.1.7 *Security* plays a major role in the height of pickleball fences. If security is a primary issue, the fence should be 7 ft