



Standard Practice for Installation of Barbed Tape¹

This standard is issued under the fixed designation F 1911; 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 the installation procedure for barbed tape.

1.2 The primary purpose of this practice is to guide those responsible for or concerned with the installation of barbed tape on chain link fences, masonry walls, roofs or used as ground barriers. This standard is not intended to cover aspects of perimeter security for establishing levels of product performance or give analysis relating to various design comparisons.

1.3 This standard involves the use of material, that may cause injury, including exposure to hazardous materials, and operation of specialized equipment.

1.4 *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:

F 1379 Terminology Relating to Barbed Tape²

F 1910 Specification for Long Barbed Tape Obstacles²

F 1916 Specification for Selecting Chain Link Barrier Systems With Coated Chain Link Fence Fabric and Round Posts for Detention Applications³

3. Terminology

3.1 Refers to Terminology F 1379.

4. Significance and Use

4.1 This practice is intended to provide standard requirements utilizing specialized equipment and hand tools.

4.2 Ensure that the barbed tape is fabricated from acceptable material and well constructed. Field verification of the barbed tape's acceptability shall be in accordance with the project's specifications and this specification.

5. Site Preparation

5.1 The owner shall specify the location in which the barbed tape shall be installed by furnishing drawings or personal instruction.

5.2 Barbed tape obstacles shall be in accordance with Specification F 1910 barbed tape specifications.

NOTE 1—Refer to Terminology F 1379 for barb configuration and cross sections.

6. Installation

6.1 When the specifications are unclear, refer to these instructions or contact the owner for information pertaining to placement, coil attachment, splicing, etc.

6.2 Non-Reinforced (Concertina):

6.2.1 *Description*—Barbed obstacle capable of being permanently or temporarily installed. Barbed tape used for some temporary installations shall have the ability of being recovered and used repeatedly.

6.2.2 *Top of the Fence Installation*—Barb Arms are recommended for top of the fence installations. Single 45° barb arms with a single strand of barbed wire or tension wire located in the outer position of the arm will support coils deployed at the top of the fence. Barb arms are positioned so that arms are out of reach from the approach side. “V” arms are not recommended for security applications where climbing is a threat or where only one row of barbed tape is specified. Two rows of barbed tape are recommended where “V” arms are specified. See Fig. 1.

6.2.2.1 *Deployment*—Stretch the coils out and allow them to rotate (spiral) naturally around their central axis. Allowing the coil to rotate will ensure that there is no mechanical stress within the obstacle before tying. Locate the coil loops uniformly at the specified coil spacing. The coil spacing is predetermined by one or more permanently attached cables running the entire length of the roll. The number of cables depends largely on the diameter and application. Coil loop spacing for non-reinforced products are generally 12.0 in. See Fig. 2.

6.2.2.2 *Tie Points*—Before making the final attachment to the fence, inspect the coils for tangles and proper coil spacing. Attach the first ties to the single strand of barbed wire, cable or tension wire located in the barb arm. Tie parallel coil loops at the desired spacing, determined by the spacer cable. Attach the

¹ This practice is under the jurisdiction of ASTM Committee F14 on Fences and is the direct responsibility of Subcommittee F14.40 on Chain Link Fence and Wire Accessories.

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

³ *Annual Book of ASTM Standards*, Vol 15.07.