

DELTA FORCE

Master Specification

Note: To establish a specific product specification, the text contained within red parens () is to be amended as appropriate for the specific application. Entries should be made in accordance with the manufacturer's selection guide.

PART 1 - GENERAL

1.01 WORK INCLUDED

The contractor shall provide all labor, materials and appurtenances necessary for installation of the tactical barbed tape obstacle and entanglement system defined herein at (specify project site).

1.02 SYSTEM DESCRIPTION

Section 022 ___ - Earthwork

Section 030 ___ - Concrete

1.03 SYSTEM DESCRIPTION

The manufacturer shall supply a total barbed tape obstacle and entanglement system of Ameristar® Delta Force® design. The system shall include all components (i.e., coils and related accessories) required.

1.04 QUALITY ASSURANCE

The contractor shall provide laborers and supervisors who are thoroughly familiar with the type of deployment involved and materials and techniques specified.

1.05 REFERENCES

- ASTM F 1910 - Standard Specification for Long Barbed Tape Obstacles.
- Military Commercial Item Description (CID) A-A-55522 - Barbed Tape, Concertina.

1.06 SUBMITTAL

The manufacturer's literature shall be submitted prior to installation.

1.07 PRODUCT HANDLING AND STORAGE

Upon receipt at the job site, all materials shall be checked to ensure that no damage occurred during shipping or handling. Materials shall be stored in such a manner to ensure proper ventilation and drainage, and to protect against damage, weather, vandalism and theft.

PART 2 - MATERIALS

2.01 MANUFACTURER

A. The tactical barbed tape entanglement system shall conform to Delta Force (specify Whiplash® style barbed tape helix - BTH, reinforced tape with long barbs, simple helical configuration, DefCon® style barbed tape obstacle - BTO, reinforced tape with long barbs, concertina configuration or ReCoil Alpha® style barbed tape coil - BTC, flangeless tape with medium barbs, concertina configuration) manufactured by Ameristar Fence Products, Inc., in Tulsa, Oklahoma.

B. The entire tactical entanglement system, and all associated accessories, shall be obtained from a single source.

2.02 MATERIALS

A. Barbed tape obstacle systems shall be designed to meet or exceed the requirements of (specify ASTM F 1910 for BTH, BTO, or CID A-A-55522 for BTC systems).

B. Steel strip material for tape shall be (specify applicable steel strip material criteria).

(For reinforced system including BTH, BTO, BTC, add following:)

C. Steel wire material for reinforcing core shall be (specify applicable steel wire material criteria).

2.03 FABRICATION

A. Prior to fabrication, tape material shall be (specify strip material width) wide by (specify strip material thickness) thick. It shall be punched to produce clusters of 4 barbs spaced (specify spacing of barb clusters) on center. Barbs shall be (specify flat or alternately offset .15" - .45") in profile with a minimum length of (specify barb length).

(For reinforced BTH and BTO systems, add following:)

After punching, the tape shall be reinforced by permanently cold clenching it around a stainless core wire with a 0.098" diameter and 130,000 psi minimum tensile strength. The barbed tape strip shall have a minimum wrap of 230 degrees about the core wire. The finished reinforced tape shall be a

minimum of 0.325" wide in the throat area and shall exhibit two cut-resistant flanges. These flanges shall taper off in the immediate vicinity of the barb clusters to allow maximum barb penetration.

(For reinforced BTC systems, add following:)

After punching, the tape shall be reinforced by permanently cold clenching it around a galvanized core wire with a 0.098" diameter and 220,000 psi minimum tensile strength. The finished reinforced barbed tape shall be without flanges between barbs and shall not disengage when a force of 100 pounds is applied.

B. Barbed tape coil loops shall be shaped with a **(specify circular)** profile and contain **(specify the number of loops)** loops, **(specify diameter for circular coils)** ± 1". Each loop shall contain **(specify the number of barb clusters per loop)** barb clusters ± 1.

(Note: For double coil systems, it will be necessary to specify the quantity, size and cluster count for both the inner and outer coils.)

(For concertina BTO systems, add following:)

Reinforced barbed tape shall be converted to concertina configuration by clipping alternate adjacent loops at **(specify number of attachment locations)** places about the circumference, continuous along the entire length of the coil. Clips shall be .375" by .065" and mechanically closed to withstand a minimum pull load of 200 pounds.

(For concertina BTC systems, add following:)

Flangeless reinforced coils shall be converted to concertina configuration by clipping alternate adjacent loops at 5 places about the circumference, continuous along the entire length of the coil. Clips shall be .375" by .065" and mechanically closed to withstand a minimum pull load of 200 pounds.

C. The barbed tape system shall be designed to be spread to a loop spacing of **(specify the spacing between loops)**, when fully deployed.

(For double coil BTO and BTC systems, add following:)

To ensure a uniform spacing for both inner and outer coils, they shall be fastened together by attaching a jacketed stainless steel wire rope, 7 by 7 strand, 3/64" by 5/64", at alternating loops throughout the double coil roll.

PART 3 - EXECUTION

3.01 PREPARATION

All new deployments shall be laid out by the contractor in accordance with the applicable project plans.

3.02 DEPLOYMENT

(For BTH and BTO systems, specify the following:)

The reinforced **(specify BTH helical or BTO concertina)** entanglement system is designed for use in a variety of permanent tactical deployment formations. Coils deployed in conjunction with standing fence systems or walls shall be firmly affixed using the fastening system specified in the manufacturer's instructions for the specific formation or combination of formations chosen. Each coil of barbed tape shall be extended a maximum of **(specify coil length in feet)** ± 1 foot. Adjacent coils shall be permanently spliced together by overlapping two barb clusters from each coil and splicing with steel tie wires placed around the shanks of the two coils between the barb clusters.

(For BTC systems, specify the following:)

The BTC flangeless reinforced concertina entanglement system is designed for use in a variety of permanent and temporary deployment tactical formations. Coils deployed in conjunction with standing fence systems or walls shall be firmly affixed using the fastening system specified in the manufacturer's instructions for the specific formation or combination of formations chosen. Coils running along ground surfaces shall have their free end pinned to the ground or tied to some other fixed point and then be spread until entirely deployed. Each coil of barbed tape shall be extended a maximum of 50' ± 1 foot. Adjacent coils shall be permanently spliced together by overlapping one cluster of each adjacent coil and splicing with two new steel tie wires placed around the shanks of the two coils between the barb clusters.

3.03 CLEANING

The contractor shall clear the deployment area of excess remnant materials upon completion of the deployment operation.