

METRIC

A-A-59857
11 January, 2010

COMMERCIAL ITEM DESCRIPTION

ANCHOR, SNOW

This commercial item description is approved for use by the Defense Supply Center, Philadelphia and is available for use by all Departments and Agencies of the Department of Defense.

1. SCOPE. This commercial item description covers the requirements for snow anchors which are used for protecting climbers on steep snow routes by pounding the anchor into the snow or using as a deadman.
2. CLASSIFICATION. The snow anchors will be furnished in the following types and will meet the size and physical requirements of Table I.

2.1 Types:

Type I – Picket

Type II – Fluke

2.1.1 Type I. The picket will be constructed and comply with the sizes and requirements in Table I.

TABLE I. Physical characteristics Type I (inches)

Picket Size	Length, ± .25 inches	Strength, kN	Weight, Grams, ±10%
I	24	6	389
II	36	6	525

2.1.2 Type II. The fluke shall be sized in accordance with International Mountaineering and Climbing Federation (Union Internationale des Associations d'Alpinisme) - UIAA -154 Standard.

2.2 Sizing. The sizes will be defined by Type in 2.1.1 and 2.1.2 while meeting the standards in this description

Comments, suggestions, or questions on this document should be addressed to: Defense Supply Center Philadelphia, Clothing and Textiles Directorate, Attn: DSCP Standardization Team, 700 Robbins Avenue, Philadelphia, PA 19111-5096. Since contact information can change, you may want to verify the currency of this address information using Acquisition Streamlining and Standardization Information System (ASSIST) online database at <http://assist.daps.dla.mil/>.

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3. SALIENT CHARACTERISTICS. The snow anchor design shall provide ease of use with typical combat gloves and be as lightweight as possible, while meeting the standards in this description.

3.1.1 Type I. The picket shall be a T-shaped bar with a flange for reinforcement (modified T shape). The center portion of the shaft shall include attachment points sized to fit all types of carabiners in A-A-59836. The holes shall be evenly spaced along the length of the picket every 3 (\pm .5) inches and reamed with no sharp edges. Both ends of the picket should be cut back in a slight V shape for ease of placement in snow.

3.1.2 Type II. The fluke shall be of a rectangular design with one end cut back in a V-shape. There shall be a wire sling for attaching carabiners to approximately center of mass on the body of the fluke. The wire sling should allow for a self-equalizing angle of inclination in the snow. The angle should not be fixed. The wire sling shall include a swaged loop for attaching all types of carabiners in A-A-59836. The fluke shall have holes in the body to provide "bite" on the snow. The wire sling shall extend between 60 centimeters and 120 centimeters. The fluke shall bend back away from intended direction of pull, along its vertical axis, to provide stability in the snow. The top of the fluke shall have a stainless steel strike plate for protection when being placed. All swages should be protected with a plastic coating or sleeve. The main body shall have recessed notches for wrapping the wire sling around for storage.

3.2 Color. The snow anchor shall be provided in a low reflectance, matte finish and provide low contrast with typical use terrain unless otherwise specified in the solicitation or contract order (see 7.2).

3.3 Materials.

3.3.1 Basic material The snow anchor shall be constructed of 6061-T6 aluminum.

3.3.2 Sling material. Type II only. The wire sling shall be 4 millimeter (7X19) galvanized wire.

3.4 Tests.

3.4.1 Type I. The picket shall support a load of 6kN or greater when tested as follows:

3.4.1.1 Support the picket on the load bearing, snow contacting surfaces (the underside of the top of the tee) with the gap between the supports equal to 15".

3.4.1.2 Position the picket so that one anchor hole is centered in the 15" opening.

3.4.1.3 Apply a load to the center hole perpendicular to the length of the picket using a 1/2" diameter pin through the hole.

3.4.2 Type II. The snow anchor shall meet International Mountaineering and Climbing Federation (Union Internationale des Associations d'Alpinisme - UIAA) Standard 154 design and strength requirements.

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3.5 Workmanship. The finished anchor snow shall conform to the quality of product established by this document. The occurrence of defects shall not exceed the contractors own quality assurance standards and the quality assurance standards defined in the technical data in the solicitation and/or contract.

3.6 Service life. The snow anchor shall have no unexpected material or component failures during a continuous one-year cycle. The snow anchor shall have no unexpected material or component failures during periodic use over a five year period.

3.7 Labels/barcoding/instruction slip. If applicable, all labeling, barcoding and instruction slip requirements shall be as specified in the solicitation or contract (see 7.2).

3.7.1 Labels. Each anchor, snow shall have identification label Class 5 conforming to Type VI of MIL-DTL-32075. The color of the label shall be white. The following information shall be included in the printing for the identification label for the anchor snow.

ANCHOR, SNOW
NSN: XXXX-XX-XXX-XXXX

The following instruction information shall be supplied:

- a. the name or trademark of the manufacturer, importer or supplier
- b. the meaning of any markings on the product
- c. the use of the product
- d. how to choose other components for use in the system
- e. how to maintain and service the product
- f. the lifespan of the product or how to assess it
- g. the effects of chemical reagents and temperature on the product
- h. the effects of storage and aging
- i. identification of the model, if more than one model is available

4. REGULATORY REQUIREMENTS. The offeror/contractor is encouraged to use recovered materials to the maximum extent practicable, in accordance with paragraph 23.403 of the Federal Acquisition Regulation (FAR).

4.1 Recycled, recovered, or environmentally preferable materials. Recycled, recovered, or environmentally preferable materials should be used to the maximum extent possible, provided that the material meets or exceeds the operational and maintenance requirements and promotes economically advantageous life cycle costs.

5. PRODUCT CONFORMANCE PROVISIONS.

5.1 Product conformance. The products provided shall meet the salient characteristics of this Commercial Item Description, conform to the producer's own drawings, specifications, standards, and quality assurance practices, and be the same product offered for sale in the commercial marketplace. The Government reserves the right to require proof of such conformance.

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5.2 Visual examination. Each snow anchor shall be examined for the following defects as listed in Table II:

TABLE II. End item examination

Examine	Defect Description
Finish	Not smooth and adherent
	Not low reflectance, matte finish
	Does not provide low contrast with typical use terrain
Construction	Not free of burrs, rough spots, slivers, flat areas or projections Any component loose, missing or not specified type
	Any component fractured, slit, punctured, dented, bowed, malformed or damaged Marking etched or indented, contains rough or sharp edges
Swage	Not swaged properly
Wire sling	Not sized properly
Labels/barcoding/instruction slip (if applicable)	Incorrect, illegible, omitted or misplaced.

5.3 Acceptance Criteria. Acceptance criteria shall be as specified in the contract or purchase order (see 7.2).

6. PACKAGING.

6.1 Preservation, packing and marking. The preservation, packing and marking shall be as specified in the contract or order (see 7.2).

7. NOTES.

7.1 Sources of documents.

7.1.1 Government documents. Copies of Government documents are available online at <http://assist.daps.dla.mil/quicksearch/> or from the Standardization Documents Order Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.

DRAWINGS

U.S. ARMY NATICK SOLDIER CENTER

3-3-0109 Anchor, Snow, Type I

3-3-0144 Anchor, Snow, Type II

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(Copies of drawings are available from the U.S. Army Natick Research Development and Engineering Center, Natick Soldier Center, ATTN: NSRDEC-RDNS-WPW-C, Natick, MA 01760)

7.1.2 Federal Acquisition Regulations are available online at <http://acquisition.gov/far/index.html> or by contacting the Superintendent of Documents at 202-512-1800.

7.1.3 Non-Government documents. Non-Government standards and other publications are normally available from the organizations that prepare or distribute the documents. These documents may be available in or through libraries or other informational services.

INTERNATIONAL MOUNTAINEERING AND CLIMBING FEDERATION
UNION INTERNATIONALE DES ASSOCIATIONS D'ALPINISME (UIAA)

UIAA Safety Standard 154 Mountaineering and Climbing Equipment, Snow Anchors

(Copies are available online at <http://www.theuiaa.org> or from the Union Internationale Des Associations D'Alpinisme (UIAA) Monbijoustrasse 61 Postfach CH-3000 Bern 23 Switzerland)

7.2 Ordering data. The contract or order should specify the following:

- a. Title, number, and date of this Commercial Item Description.
- b. Type, size and color required (see 2, 2.1, 2.2 and 3.2).
- c. When required, labeling, barcoding, and instruction slip (see 3.7)
- d. Acceptance criteria (see 5.3).
- e. Packaging requirements (see 6.1).

7.3 Key words.

Deadman
Fluke
Picket

MILITARY INTERESTS:

CIVIL AGENCY COORDINATING ACTIVITY:
GSA – FSS

Custodian:
Army - GL
Marine Corps – MC

PREPARING ACTIVITY:
DLA-CT

Project 8465-2009-015

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