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The following commercial specification is an original Parachute Industry Association specification.

WEBBING, TEXTILE, NYLON TUBE EDGE

The Parachute Industry Association makes this document available for the use by Industry and Government organizations that wish to apply this specification to their products.

1. SCOPE

1.1 **Scope.** This specification covers one type of nylon webbing used in the manufacture of critical use tubular edge webbing.

2. **CLASSIFICATION.** The nylon tube edge webbing shall be manufactured in a $\frac{3}{4}$ inch width.

3. **SALIENT CHARACTERISTICS.** The webbing shall be manufactured from nylon 6,6 on a shuttleless narrow fabric loom.

3.1 Materials

3.1.1 **Yarns.** The nylon yarn used in the manufacture of the webbing shall be a bright, high tenacity, light and heat resistant polyamide. Nylon 6,6 with a single polyester marker yarn shall be used as specified in the procurement document. The yarn shall not be bleached.

3.1.2 **Denier.** The nominal size of the warp, fill, lock stitch and pattern identification yarns shall be as specified in Table I.

3.1.3 Identification Yarn.

3.1.3.1 **Pattern Identification.** One green pattern identification yarn shall be continuously visible interwoven in the center of the webbing on one face only. The size of the yarn shall be similar to the natural warp yarns and shall be an approximate shade match to the Color Association of the United States standard for Emerald Cable #80063. The identification yarn shall be woven as detailed in paragraph 3.2.

3.1.3.2 **Shuttleless Loom Identification.** The webbing shall be woven with a knit edge containing a black lock stitch yarn as shown in Figure 1. The yarn shall be as specified in Table I.

- 3.2 **Weave.** The webbing shall be a double plain weave with tubular edges and textured nylon stuffers and woven as shown in Figure 2.
- 3.3 **Construction and Physical Properties.** The webbing shall conform to the construction and physical properties of Table I and II when tested as specified in 4.1.3.
- 3.4 **Color.** The color of the webbing and referenced color standard shall be as specified in the contract, purchase order or procurement document.

3.4.1 **Color matching.** If color is specified the color of the dyed webbing shall match the standard sample when viewed under filtered tungsten lamp which approximates artificial daylight having a correlated color temperature of 7500 ± 200K, with illumination of 100 ±20 foot candles, and shall be a good match to the standard sample under incandescent lamplight at 2300 ±200K.

3.5 **Colorfastness.**

3.5.1 **Dyed webbing.** The dyed webbing shall show fastness to light and laundering equal to or better than the standard sample. If no standard sample is referenced the webbing shall show a colorfastness to light and laundering as follows:

Characteristic	Rating, Min	Reference Scale
Light (Fade)	2-3	AATCC Gray Scale for Color Change
Laundering Color Stain	2-3	AATCC Gray Scale for Color Transference
Shade Change	2-3	AATCC Gray Scale for Color Change
Testing shall be as specified in 4.1.3		

3.5.2 **Identification yarns.** The pattern identification and lock stitch yarns shall show fastness to light and laundering equal to or better than the standard sample. If no standard sample is referenced the identification yarns shall show a colorfastness to light and laundering as follows:

Characteristic	Rating, Min	Reference Scale
Light (Fade)	2-3	AATCC Gray Scale for Color Change
Laundering Color Stain	2-3	AATCC Gray Scale for Color Transference
Shade Change	2-3	AATCC Gray Scale for Color Change
Testing shall be as specified in 4.1.3		

- 3.6 **Curvature.** The webbing shall show no more lateral curvature than ¼” within a yard when tested as specified in 4.2.3 and Figure 3.
- 3.7 **Finish.** The webbing shall be supplied treated with a combination of Resin, per Condition R of PIA-W-27265 and Dooley Chemical Company’s Lubricant ECQ or an equivalent approved by Natick Laboratories.