Parachute Industry Association
COMMERCIAL SPECIFICATION®

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**Superseding**
**PIA-C-3953E**
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The following commercial specification is originally adopted from the military document. Revision A includes all known accepted revisions, amendments, notices, and Department of Defense (DoD) engineering changes previously developed for this item. Revisions B and forward include changes adopted by DoD and Industry to reflect technology and design evolution.

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# CLOTH, DUCK, NYLON

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

## 1. SCOPE

1.1 Scope. This specification covers nylon duck cloth.

1.2 Classification. The nylon duck cloth shall be of the following classes, as specified (see 6.1).

Class 1 - Untreated
Class 2 - Melamine resin treated (extra stiff) (0.45-0.65 pounds warp/0.65-0.85 pounds filling)
Class 3 - Melamine resin treated (parachute procurement only) (0.3-0.4 pounds warp/0.4-0.5 pounds filling)

## 2. APPLICABLE DOCUMENTS

2.1. General. The documents listed in this section are specified in Sections 3 and 4 of this specification. This section does not include documents cited in other sections of this specification nor is it recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements of the documents cited in Sections 3 and 4 of this specification, whether or not they are listed.

2.2 Government publications.

2.2.1 Government publications. The following Government publications form a part of this document (see 2.4).

STANDARDS

FEDERAL

FED-STD-4 - Glossary of Fabric Imperfections
FED-STD-595 - Colors Used in Government Procurement

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(Unless otherwise indicated, copies of the above specifications and standards are available from the Standardization Documents Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094. Electronic copies of Military and Federal standards and specifications may be obtained from https://assist.daps.dla.mil/quicksearch/.)

FEDERAL TRADE COMMISSION (FTC)

16 CFR 303 - Rules and Regulations Under the Textile Fiber Products Identification Act

(Copies are available online at: www.ftc.gov or from the Federal Trade Commission, 600 Pennsylvania Avenue, Washington, DC 20580-001. Electronic copies may be obtained from www.access.gpo.gov/.)

2.3 Non-government publications. The following documents form a part of this document.

AMERICAN ASSOCIATION OF TEXTILE CHEMISTS AND COLORISTS (AATCC)

AATCC-16 - Colorfastness to Light
AATCC-61 - Colorfastness to Laundering: Accelerated
AATCC-81 - pH of the Water-Extract from Wet Processed Textiles
AATCC-96 - Dimensional Changes in Commercial Laundering of Woven and Knitted Fabrics Except Wool

AATCC Evaluation Procedures:

- 1 Gray Scale for Color Change
- 8 AATCC 9 -Step Chromatic Transference Scale
- 9 Visual Assessment of Color Difference of Textiles

(Applications for copies should be addressed to the AATCC National Headquarters, P.O. Box 12215, Research Triangle Park, NC 27709-2215. Electronic copies may be obtained from www.aatcc.org.)

AMERICAN SOCIETY FOR QUALITY (ASQ)

ANSI/ASQ Z1.4 - Sampling Procedures and Tables for Inspection by Attributes

(Applications for copies should be addressed to American Society for Quality, 600 North Plankinton Avenue, Milwaukee, WI 53203. Electronic copies may be obtained from www.asq.org.)

ASTM INTERNATIONAL (ASTM)

ASTM D 276 - Standard Test Method for Identification of Fibers in Textiles
ASTM D 1776 - Standard Practice for Conditioning and Testing Textiles
ASTM D 2261 - Standard Test Method for Tearing Strength of Fabrics by the Tongue (Single Rip) Procedure (Constant-Rate-of-Extension Tensile Testing Machine)