

MILITARY STANDARD
PROVISIONS FOR EVALUATING QUALITY
OF
CLOTH, WOOL, WORSTED AND WOOL BLENDS

TO ALL HOLDERS OF MIL-STD-655B:

1. THE FOLLOWING PAGES OF MIL-STD-655B HAVE BEEN REVISED AND SUPERSEDE THE PAGES LISTED:

NEW PAGE	DATE	SUPERSEDED PAGE	DATE
1	11 February 1981	1	10 March 1976
2	11 February 1981	2	10 March 1976
5	11 February 1981	5	10 March 1976
6	10 March 1976	(REPRINTED WITHOUT CHANGE)	

2. RETAIN THIS NOTICE AND INSERT BEFORE TABLE OF CONTENTS.

3. Holders of MIL-STD-655B will verify that page changes and additions indicated above have been entered. This notice page will be retained as a check sheet. This issuance, together with appended pages, is a separate publication. Each notice is to be retained by stocking points until the Military Standard is completely revised or cancelled.

Custodians:

Army - GL
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Preparing Activity:

Army - GL

Project No. 8305-0599

Review Activities:

Navy - MC
Air Force - 11
DLA - CT

User Activity:

Navy - AS

1. SCOPE

1.1 Purpose. The purpose of this standard is to provide standardized examination provisions for evaluating quality of woolen, worsted, and wool blended cloths that are the basic materials for quality uniform items.

1.2 Application. This standard will be made applicable to contracts by reference in the appropriate cloth specifications.

2. REFERENCE DOCUMENTS

2.1 The issues of the following documents, in effect on the date of invitation for bids, form a part of this standard to the extent specified herein.

STANDARDS

FEDERAL

FED-STD-191 - Textile Test Methods

MILITARY

MIL-STD-105 - Sampling Procedures and Tables for Inspection
by Attributes

MIL-STD-109 - Quality Assurance Terms and Definitions

(Copies of specifications, standards, drawings and publications required by suppliers in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

LAWS AND REGULATIONS

Rules and Regulations under the Wool Products Labeling Act of 1939

(Application for copies should be addressed to the Superintendent of Documents, Government Printing Office, Washington, DC 20402.)

3. DEFINITIONS

3.1 Fabric defects. The fabric defect definitions applicable to the standard are described as follows:

3.1.1 Barre. Bands, streaks or bars in the fabric characterized by texture, tension, color, luster or shrinkage differences.

3.1.2 Bias or bowed filling. Cloth in which the filling yarn does not run at right angles to the warp.

3.1.3 Broken or missing yarn. A yarn partially or entirely missing.

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3.1.4 Coarse or heavy yarn. A yarn larger in diameter than normally being used in the cloth.

3.1.5 Defective selvage. Selvage that is curled, folded, rolled, slack, tight, scalloped, wavy, stringy, beaded, loopy, cut or torn.

3.1.6 Excess material. Extra yarn or waste which has been woven into the cloth or spun into the yarn, or extra length of yarn that has not completely been woven into the cloth.

2.1.7 Fine yarn. A yarn smaller in diameter than normally being used in the cloth.

3.1.8 Finishing imperfections. Cloth which has not been uniformly sheared, does not have the same degree and character of finish throughout, has tenting marks or is streaked, blotched, spotted or otherwise marked.

3.1.9 Heavy or light place. A fillingwise band or bar either across the full width of the cloth or a portion of it containing more or less than the normal number of picks, or containing picks of larger or smaller diameter than normally being used in the cloth.

3.1.10 Hole. A place in the cloth where two or more contiguous yarns have been ruptured.

3.1.11 Knot. Self descriptive. To be scored when it exceeds the limits specified in the basic cloth specification.

3.1.12 Misweave. Any deviation from the specified weave pattern.

3.1.13 Mixed yarn. Yarn which differs from that normally being used in the cloth, such as wrong twist, wrong number of plies, wrong color or mixed yarns lots.

3.1.14 (Definition deleted)

3.1.15 Neppiness. A speckled condition of the cloth characterized by a number of definite fiber tangles (neps).

3.1.16 Open place. An open streak or crack which results in a clearly noticeable separation between the yarns.

3.1.17 Reed mark. A mark or line running warpwise in the cloth.

3.1.18 Slub. A thick place in the yarn. To be scored when it exceeds the limits specified in the basic cloth specification.

Defects on the selvage shall not be scored unless the body of the cloth is affected or the thickness of the selvage exceeds the thickness of the body of the cloth by an excessive amount $\frac{1}{4}$. No linear yard (increments of 1 yard on the measuring device of the inspection machine) shall be scored more than 4 points, however, all defects shall be recorded. The lot shall be unacceptable if:

- a. The point value per 100 square yards for the total yardage in the entire sample exceeds the applicable maximum limit (see table I).
- b. The point value per 100 square yards for the total yardage in any individual roll in the sample exceeds the applicable maximum limit (see table I).

Point value computation shall be as follows:

$$\frac{\text{Total points scored in sample} \times 3600}{\text{Contracted width of cloth (inches)} \times \text{Total yards inspected.}} = \text{Points per 100 square yards}$$

The following defects, when present, shall be scored four points for each yard in which they occur.

Width less than specified.

Edge of roll build-up, or softness of roll in body of cloth.

5.2.1 Examination for shade variation. During the yard-by-yard examination, each roll in the sample shall be examined for shade variation. Any roll in the sample containing uneven shade, shade variation side to side, side to center, or end to end, shall be cause for rejection of the entire lot represented by the sample.

5.3 Examination for length. During the yard-by-yard examination, each roll in the sample shall be examined for length.

5.3.1 Individual roll. Any length found to be less than the minimum length specified in the material specification or more than 2 yards less than the length marked on the ticket shall be scored as a defect. The lot shall be unacceptable if two or more rolls in the sample are defective in respect to length.

5.3.2 Total yardage in sample. The lot shall be unacceptable if the total of the actual length of the rolls in the sample is less than the total of the lengths marked on the roll tickets.

"1/ In case of dispute, the thickness of the selvage shall not exceed the thickness of the body of the cloth by more than 40 percent, when tested in accordance with Method 5030 of FED-STD-191."

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5.4 Examination for back marking and compliance with the Wool Products Labeling Act. During the yard-by-yard examination each roll in the sample shall be examined for defects listed below. The lot shall be unacceptable if two or more of the following defects are present in the sample:

Back stamping missing incorrect or illegible from either or both ends, or bleed through occurring.
Back stamping on wrong side.
Letters less than 1/2 inch in height.
Not labeled or ticketed in accordance with the Rules and Regulations under the Wool Products Labeling Act.

5.5 Examination for shade match and finish. The examination for shade match and finish shall be as specified in the applicable cloth specification.

5.6 Examination for defect marking (stringing of defects). During the yard-by-yard examination, each roll in the sample shall be examined for defect marking. Any roll having more than 2-three or four point fabric defects (red string) not strung, or more than 5 fabric defects (red or white strings) not strung shall be classified as a defective roll in regard to the defect marking requirement. The lot shall be unacceptable if more than two rolls in the sample are defective in regard to the defect marking requirement or if there are more than 10-three or four point defects (red strings), or more than 30 fabric defects (red or white strings) not strung in the sample.

6. INSPECTION

6.1 Inspection procedures, except for sampling plans, shall be as specified in MIL-STD-105, except where otherwise indicated in this document.

TABLE I. Maximum acceptable point values

Quality Level	Maximum Acceptable Point Values	
	Entire sample	Individual rolls
Normal Inspection	8	8 points per 100 sq. yd.
	10	10 points per 100 sq. yd.
	12	12 points per 100 sq. yd.
	15	15 points per 100 sq. yd.
		12 points per 100 sq. yd.
		15 points per 100 sq. yd.
		18 points per 100 sq. yd.
		23 points per 100 sq. yd.

7. NOTES

7.1 Table II may be used as a guide for computing individual roll quality.