



DEAS 253-1: 2016

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## DRAFT EAST AFRICAN STANDARD

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Code of practice for grading of textile materials — Part 1: Fabrics

EAST AFRICAN COMMUNITY

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## Foreword

Development of the East African Standards has been necessitated by the need for harmonizing requirements governing quality of products and services in the East African Community. It is envisaged that through harmonized standardization, trade barriers that are encountered when goods and services are exchanged within the Community will be removed.

In order to achieve this objective, the Community established an East African Standards Committee mandated to develop and issue East African Standards.

The Committee is composed of representatives of the National Standards Bodies in Partner States, together with the representatives from the private sectors and consumer organizations. Draft East African Standards are circulated to stakeholders through the National Standards Bodies in the Partner States. The comments received are discussed and incorporated before finalization of standards, in accordance with the procedures of the Community.

East African Standards are subject to review, to keep pace with technological advances. Users of the East African Standards are therefore expected to ensure that they always have the latest versions of the standards they are implementing.

EAS 253-1 was prepared by Technical Committee EAS/TC 061, *Textiles and Textile Products*.

This second edition cancels and replaces the first edition (EAS 253-1:2001), which has been technically revised.

## Introduction

The standard lists in the annex those factors to be taken into account in the manufacture of a garment that will affect its quality. These factors are linked to garment production. At each stage in production there is identified a group of standards relevant to quality and fitness for purpose for the materials or processes being used.

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## Code of practice for grading of textile materials — Part 1: Fabrics

### 1 Scope

This Draft East African Standard provides guidelines for grading of textile fabrics. This Draft East African Standard applies to both woven and knitted fabrics

### 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 2076, *Textiles — Man-made fibres — Generic names*

ISO 22198, *Textiles — Fabrics — Determination of width and length*

ISO 2424, *Textile floor coverings — Vocabulary*

ISO 4921, *Knitting — Basic concepts — Vocabulary*

ISO 6938, *Textiles — Natural fibres — Generic names and definitions*

ISO 8388, *Knitted fabrics — Types — Vocabulary*

ISO 8498, *Woven fabrics — Description of defects — Vocabulary*

ISO 8499, *Knitted fabrics — Description of defects — Vocabulary*

### 3 Terms and definitions

For the purposes of this standard, the terms and definitions given in ISO 2424, ISO 4921, ISO 2076, ISO 8498, ISO 8499, ISO 6938, and ISO 8388 shall apply.

### 5 Additional requirements

In addition to the requirements of this standard, textile fabrics shall also comply with the requirements of the relevant East African Standard.

### 6 Grading of piece goods

Piece fabrics shall be graded in accordance with the requirements of Table 1.



**Table 1 — Grading requirements**

Grade	Minimum piece		Defects permissible	Marking
	length (m)	Width	Woven/Knitted	
1	As declared ( $\pm 1$ % tolerance)	As declared ( $\pm 2$ % )	No major defect No more than 1 minor defect per 10 continuous metres No minor defect in a piece less than 10 metres	A
2	As declared ( $\pm 1$ % tolerance)	As declared ( $\pm 2$ % )	No major defects No more than 1 minor defect per 10 continuous metres No minor defect in a piece less than 6 metres	B
3	As declared ( $\pm 1$ % tolerance)	As declared ( $\pm 2$ % )	No major defects	C
<b>Test method</b>	ISO 22198		ISO 8498/ISO 8499	

## 7 Inspection and classification of defects

7.1.1 Defects in woven fabrics shall be inspected and classified in accordance with Annex A.

7.2.2 Defects in knitted fabrics shall be inspected and classified in accordance with Annex B. 7

## 8 Markings

8.1 In addition to other marking requirements relevant to a specific standard, each piece of fabric, shall be marked with its grade in accordance with this standard.

8.2 All defective areas in a fabric shall be flagged by a visible indicator on one of the selvages

## **Annex A** (normative)

### **Classification of defects in woven fabrics**

#### **A.1 Major Defects**

- A.1.1** One or more ends missing in the body of the material throughout its length, or more than one end missing at a place and running over 60 cm or double ends running throughout.
- A.1.2** undressed snarls running over a length exceeding 5 per cent the length of the piece.
- A.1.3** Smash
- A.1.4** Cut or tear.
- A.1.5** Any hole as a result of broken yarn.
- A.1.6** Reed Marks running over the length exceeding 5 per cent of length of the piece.
- A.1.7** Width inside defective selvages below specified tolerance.
- A.1.8** Slack selvages causing the fabric to bulge halfway across width or more.
- A.1.9** Warp or weft multiple float in the body of the fabric.
- A.1.10** Shading or listing in fabrics having gradual change in tone or depth of shade (excluding selvedge or border running parallel to the selvedge).
- A.1.11** Colour flecks, dye bar, patchy or streaky or uneven dyeing.
- A.1.12** Broken pattern and/or printing defect which mark the appearance of the fabrics.
- A.1.13** One or more warp or weft soiled or discoloured.
- A.1.14** Weft crack extending 1/3 or more the width of the fabric.
- A.1.15** Weft bar due to the difference in raw materials, count, twist, colour, shade or pick spacing of adjacent groups of weft yarns.
- A.1.16** Bad odour.

#### **A.2 Minor defects**

- A.2.1** Weft crack extending less than 1/3 the width of the fabric.
- A.2.2** Two or less adjacent ends or fillings running parallel or broken or missing and not extending beyond 10 cm.
- A.2.3** Oil or other stain in the fabric less than 10mm.
- A.2.4** Slub.

**A.2.5** Selvedge defect.

**A.2.6** Small hole as a result of separated yarns.

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## **Annex B** (normative)

### **Classification of defects in knitted**

#### **B.1 Major defects**

- B.1.1** Ladders more than 2.5 cm from fabric edges.
- B.1.2** Dropped stitches more than 10 mm.
- B.1.3** More than one needle line 2.5 cm from fabric edges.
- B.1.4** Cuts/holes exceeding 5 mm in size.
- B.1.5** Oil and/or other stains exceeding 10 mm in size.
- B.1.6** Misprints and bleeding of prints.
- B.1.7** Colour flecks, dye bar, patchy or streaky or uneven dyeing.
- B.1.8** Design distortion of more than 5 cm.

#### **B.2 Minor defects**

- B.2.1** Mixed threads.
- B.2.2** Curved edges.
- B.2.3** More than one needle line up to 15 cm length.
- B.2.4** Holes and/or cuts below 5 mm in size.
- B.2.5** Oil and/or other stains less than 10 mm in size.

## Bibliography

- [1] BS 6476:1984, Garment quality

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