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ICS ICS 59.080

DRAFT EAST AFRICAN STANDARD

Cotton Khanga — Specification

EAST AFRICAN COMMUNITY

Second Edition 2016

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

This second edition cancels and replaces the first edition (EAS 224:2001), which has been technically revised

Cotton Khanga — Specification

1 Scope

This Draft East African Standard specifies the requirements, sampling and test methods for cotton khanga.

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.

EAS 155-1, Cotton yarns — Specification — Part 1: Grading by appearance

ISO 3758: Textiles -- Care labelling code using symbols

ISO 5081: Textiles -- Woven fabrics -- Determination of breaking strength and elongation (Strip method)

ISO 3801: Textiles -- Woven fabrics -- Determination of mass per unit length and mass per unit area

EAS 248, *Methods for determination of threads per centimetre in woven fabrics*

ISO 105-B01: Textiles — Tests for colour fastness — Part B01: Colour fastness to light: Daylight.

EAS 237, *Methods for determination of colour fastness of textile materials to washing*

EAS 239, *Method for determination of colour fastness of textile materials to rubbing — Part 1: Dry and wet method*

ISO 3071: Textiles -- Determination of pH of aqueous extract

EAS 242, *Dimensional changes of fabrics by cold water immersion*

ISO 13937-1 Textiles -- Tear properties of fabrics -- Part 1: Determination of tear force using ballistic pendulum method (Elmendorf)

EAS 253-1, *Code of practice for grading of textile materials — Part 1: Fabrics*

3 Terms and definitions

For the purposes of this standard, the following terms and definitions shall apply

2.1
Khanga
a plain weave light weight piece of soft cotton fabric, printed with fast colours, visible on both sides with distinct border line separating one piece from the adjacent piece.

NOTE The khanga normally has a written message. See Figure 1

2.2
Dressing materials
materials applied to yarns during the warp preparation such as size, stiffening or softening agents, etc.

2.3
Filling materials
Non-substantive and generally insoluble materials, such as China clay, gypsum, etc. added to fabric together with starches or gums during finishing to add weight or to modify the appearance and handle of the fabrics.

2.4

Selvedges

edge of woven fabric finished so as to prevent raveling often in a narrow tape effect different from the body of the fabric

3 Requirements

3.1 Yarn

Cotton yarn used in the manufacture of the fabric shall comply with the requirements of EAS 155-1.

3.2 Fabric

3.2.1 The fabric used for the manufacture of khanga shall be woven in plain weave.

3.2.2 The selvedges shall be firm and well woven.

3.2.3 The fabric shall bear printed borders on all sides.

3.3 Prints on the fabric

The prints shall look the same or nearly the same on both sides (front and back) of the khanga. When tested in accordance with Annex A, the colour matching shall not exceed ΔE 3. The prints shall be free from printing defects such as uneven spread of prints paste, blurr and inclination.

3.3 Construction

Cotton khanga shall comply with the constructional requirements specified in Table 1 when tested in accordance with the methods specified therein.

Table 1 — Constructional details and breaking load of khanga

Characteristics	Requirements	Method of test
a) Mass in g/m^2 (min.)	90	ISO 3801
b) Breaking load in N on 50 mm × 200 mm strips (min.):		
Warp Weft	400 200	ISO 13934
c) Tearing strength, N		
Warp	30	ISO 13937-1

Weft	30	
* Titles of standards referred to are listed on the last page.		

3.4 Grading

3.4.1 The khanga shall be graded in accordance with EAS 253-1.

3.4.2 In addition, khangas which do not meet the ΔE 3 requirement in 3.2.4 shall not be graded as Grade A.

3.5 colourfastness

The colour of the printed cloth shall be fast to agencies in accordance with the requirements specified in Table 2.

Table 2 — Colour fastness requirements

AGENCY	NUMERICAL RATING (MIN)	METHOD OF TEST
Light	5	EAS 243
Washing: Colour change Staining	4 to 5	EAS 237
Rubbing Dry Wet	4 to 5	EAS 239 Part 1

Table 3 — Other requirements of khanga

Characteristic	Requirements	Method of test
pH value	6 to 8	EAS 261
Shrinkage or elongation (%), max. Warp Weft	 ±1.5 ±5	EAS 242
Size in cm, min.: Length Width	 165 115	Use a tape measure

NOTE 1 Length and width specified, relate to the specific state of finish in which the khanga is delivered.

NOTE 2 The figure for length quoted above is for one piece of khanga, but the figure should be doubled to give requirement for a pair of khanga.

4 Marking

4.1 Each piece

Each khanga shall be printed with the following:

a) Name of the manufacturer or registered trademark.

b) Country of origin.

c) Length and width in centimetres.

d) Grade in accordance with EAS 253-1

4.2 Each package

Each package of khanga shall be marked with the following:

a) Name of the manufacturer or registered trademark.

b) The inscription 'Cotton Khanga'.

c) Care instructions in accordance with ISO 3758.

d) Country of origin.

e) Length and width in centimetres.

5 Packaging

The khanga shall be securely packed to avoid soiling in storage as well as during transportation.

6 Sampling

6.1 Lot

6.1.1 The quantity of khanga of the same type and quality delivered to one buyer against one dispatch note shall constitute a lot.

6.1.2 The conformity of the lot to the requirements of this standard shall be determined on the basis of tests carried out on the samples selected from the lot.

6.1.3 Unless otherwise agreed upon between the buyer and the manufacturer, the number of pieces to be selected at random from a lot shall be in accordance with Table 4.

Table 4: Sampling size and permissible number of non-conforming pieces

Number of pieces in the lot	Sample size (No. of pieces to be selected)	Permissible no. Non-conforming pieces	Sub-sample size (No. of pieces to be selected)
Up to 25	3	0	2

26 to 50	5	0	2
51 to 150	8	0	3
151 to 300	13	1	3
301 to 500	20	1	5
501 to 1000	32	2	5
1000 and above	50	3	8

Note assistance with sampling plans can be obtained from ISO 2859-1 and ISO 3951.

Annex A
(normative)

Colour difference measurement by colorimetric method

A.1 Area of application

Colour difference measurements, for example difference in matchings between two pieces of fabrics or colour difference between the upper side and the underside of a fabric can be determined by use of a colorimeter to which a computer is attached and the results are expressed in values of Delta E (∆E)

A.2 Apparatus
- colorimeter – E1
- computer

A.3 Procedure
Set the equipments by including the specular components:
- UV light
- 10° standard observer (CIE) angle
- small/large aperture depending on the specimen sizes

Place your standard specimen on the aperture and read the tristimulus values *X,* Y and Z.

Place your standard specimen on the aperture and read the tristimulus values. The computer also automatically gives the ∆E value apart from other results.

NOTE Measurements can be done by use of the following standard sources of light and the relevant standard reported.

1. Philips TL 84 referred to cool white fluorescent (CWF) lamp. (Approximately 400 nm.)
2. D 65 Artificial Daylight (280 nm to 700 nm)
3. Tungsten lamp. (Approximately 300 nm)

Precautions
In case of very light fabrics, fold them several times to prevent external light interference.

Bibliography

[2] TZS 165: 2009, Textile – Cotton khanga - specification

[3]

[4]

