ICS nn.nnn.nn

# **DRAFT EAST AFRICAN STANDARD**

Textiles — Fabrics for household curtains and drapery — Specification

# **EAST AFRICAN COMMUNITY**

© EAC 2018 First Edition 2018

## **Copyright notice**

This EAC document is copyright-protected by EAC. While the reproduction of this document by participants in the EAC standards development process is permitted without prior permission from EAC, neither this document nor any extract from it may be reproduced, stored or transmitted in any form for any other purpose without prior written permission from EAC.

Requests for permission to reproduce this document for the purpose of selling it should be addressed as shown below or to EAC's member body in the country of the requester:

© East African Community 2018 — All rights reserved East African Community P.O. Box 1096, Arusha Tanzania Tel: + 255 27 2162100

Fax: + 255 27 2162190 E-mail: eac@eachq.org Web: www.eac-quality.net

Reproduction for sales purposes may be subject to royalty payments or a licensing agreement. Violators may be prosecuted.

## **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.

The Community has established an East African Standards Committee (EASC) mandated to develop and issue East African Standards (EAS). The Committee is composed of representatives of the National Standards Bodies in Partner States, together with the representatives from the public and private sector organizations in the community.

East African Standards are developed through Technical Committees that are representative of key stakeholders including government, academia, consumer groups, private sector and other interested parties. 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 Principles and procedures for development of East African Standards. XXXXXX.

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.

The committee responsible for this document is Technical Committee EASC/TC 061, Textiles, Textile products and Accessories.

Attention is drawn to the possibility that some of the elements of this document may be subject of patent rights. EAC shall not be held responsible for identifying any or all such patent rights.

## Textiles — Fabrics for household curtains and drapery — Specification

## 1 Scope

This draft East African Standard specifies performance requirements of fabrics for curtains and drapery. It covers all knit, lace, stitch-bonded, foam back and woven fabrics to be used in the manufacture of curtains and drapery. It is applicable to all fabrics except those made of glass. Except where otherwise indicated, these requirements also apply to fabrics for window blinds

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 237, Methods for the determination of colourfastness of textile materials to washing

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

EAS 243, Textiles — Tests for colour fastness — Colour fastness to light: Daylight

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

ISO 105-B02, Textiles — Tests for colour fastness — Colour fastness to artificial light: Xenon arc fading lamp test

ISO 105-C06, Textiles — Tests for colour fastness — Colour fastness to domestic and commercial laundering

ISO 105-D01, Textiles — Tests for colour fastness — Colour fastness to dry cleaning

ISO 105-X12, Textiles — Tests for colour fastness — Colour fastness to rubbing

ISO 3071, Textiles — Determination of pH of the aqueous extract

ISO 3175 (all parts), Textiles — Professional care, dry cleaning and wet cleaning of fabrics and garments

ISO 3758, Textiles — Care labelling code using symbols

ISO 3801, Textiles — Woven fabrics — Determination of mass per unit length and mass per unit area

ISO 6330, Textiles — Domestic washing and drying procedure for textile testing

ISO 6941, Textile fabrics — Burning behaviour — Measurement of flame spread properties of vertically oriented specimens

ISO 9073-1, Textiles — Test methods for nonwovens — Part 1: Determination of mass per unit area

ISO 9073-5, Textiles — Test methods for nonwovens — Part 5: Determination of resistance to mechanical penetration (Ball burst procedure)

ISO 9073-18, Textiles — Test methods for nonwovens — Part 18: Determination of breaking strength and elongation of nonwoven materials using the grab tensile test

ISO 10528, Textiles - Commercial laundering procedure for textile fabrics prior to flammability testing

ISO 12138, Textiles - Domestic laundering procedures for textile fabrics prior to flammability testing

ISO 13015, Woven fabrics — Widthway distortion — Determination of the skew percentage

ISO 13934-1, Textiles — Tensile properties of fabrics — Part 1: Determination of maximum force and elongation at maximum force using the strip method

ISO 13937-4, Textiles — Tear properties of fabrics — Part 4: Determination of tear force of tongue-shaped test specimens (Double tear test)

#### Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

ISO Online browsing platform: available at http://www.iso.org/obp

#### 3.1

#### flame resistance

property of materials or combinations of component materials that restricts flame propagation of the textiles

## 3.2

## crocking

rubbing off of colour as a result of improper dyeing, poor penetration, or poor fixation

#### 3.3

#### non woven fabrics

textile fabrics produced directly from webs or batts of fibres by mechanical entanglement or adhesive bounding, fusing or interlocking

## 3.4

#### lace

fine openwork fabric with a ground of mesh or net on which patterns may be worked at the same time as the ground or applied later, and which is made of yarns, by looping, twisting or knitting

#### 3.5

## drapery

cloth (hung) arranged in loose folds

#### 3.6

#### skew

cloth condition in which the warp and weft yarns, although they go straight are not at right angles to each other

#### 3.7

### bonded fabrics

non woven textile fabrics produced directly from one or more webs of fibres held together with a bonding material

#### 3.8

#### stitch bounded fabric

fabric produced by bonding together fibre batt or series of laid yarns by sewing or stitching along the length direction

## 3.9

## knitting

method of fabric manufacture by intermeshing of loops (interloping) of yarns

## 4 Requirements

## 4.1 General requirements

- **4.1.1** For a fabric to carry the claim that it is cleanable both by washing and by dry cleaning, it shall meet the washing and dry cleaning requirements for colour fastness and for dimensional stability. Where it is supplied with restrictions regarding cleaning, it need not meet the requirements excluded by such restrictions. Any restricted serviceability shall be indicated in the instructions concerning care.
- **4.1.2** The fabrics shall be of inherently flame resistant fibre or treated with a flame retardant, preferably by polymer formulations. The fabric shall comply with the requirements for flame resistance as specified in 4.2.2 and labelled in accordance with 5.2.

NOTE: The polymer formulations are aqueous treatments that are squeezed onto a fabric. They are more durable than saline treatments.

## 4.2 Specific requirements

**4.2.1** Fabrics intended for manufacture of curtains and drapery shall meet all of the requirements listed in Table 1.

Table 1 — Specifications

Characteristics	Specifications	Test methods
Colour fastness to artificial light (xenon arc) , min	5	ISO 105-B02
Colour fastness to dry cleaning, min		
Color change	4	
Staining	4	ISO 105-D01
Colour fastness to laundering, min		ISO 105-C06
Shade change	4	
Staining	3	
Colour fastness to crocking (rubbing), min		
• Dry	4	EAS 239-1
• Wet	3	ISO 105-X12
Dimensional change after 5 laundering (width and length) at 60 °C normal, %	Mean dimensional change ≤ 3	ISO 6330
Dimensional change after 3 dry cleaning (width and length), %	Mean dimensional change ≤ 3	ISO 3175 (all parts)
Breaking strength in both directions, N min		
• Woven	67	ISO 13934-1

Foam back, stitch bonded, (non-woven)	89	ISO 9073-18		
Tear strength (tongue tear), in both directions, N, min		ISO 13937-4		
Sheer (woven)	4.4			
Foam back, stitch bonded, (non-woven)	6.7			
Bursting strength (ball burst) – knit and lace only, kPa, min	138	ISO 9073-5		
Mass per unit area, g/m <sup>2</sup>				
Knit and lace	35			
Woven	75	ISO 3801		
Non-woven, (foam back, stitch bonded)	100	ISO 9073-1		
pH value	6 to 7.5	ISO 3071		
NOTE The requirements for dimensional stability do not apply to window blind materials.				

- **4.2.2** The requirement flame resistance shall be as follows:
  - a) ISO 6941 shall be used to evaluate flammability properties. In case a manufacturer claim an alternative method, the manufacturer shall demonstrate that such a method is technically equivalent or better to the one specified; and
  - b) When tested in accordance with ISO 6941, the average time to sever the upper trip thread for all specimens shall not be less than 10 seconds.

NOTE: Except where specified that testing after an approved cleansing or wetting procedure is unnecessary, all samples for the flammability test shall be subjected to the appropriate procedure specified in ISO 10528 or ISO 12138 as appropriate. It is unnecessary to test such samples before the cleansing procedure.

## 5 Labelling

- **5.1** Each roll of fabric shall have a label securely attached in such a way that it can be retained with the roll indicating the following information. For fabrics supplied against a certain pattern, the information shall be available with the pattern:
  - a) name and address of the manufacturer or distributor or other means of identification;
  - b) fibre content of the fabric;
  - c) dimensions or size (length and width);
  - d) the statement 'Flammability complies with the requirements of 4.2.2 of this standard';
  - e) lot number or batch number;
  - f) appropriate care labelling symbol for instructions concerning care, including cleansing of the curtain, drape or blind to be manufactured from the fabric in accordance with ISO 3758; and
  - g) any other marking as the contract or order may direct
- **5.2** The information on the nature of flame-retardant-treatment given shall be provided either in the form of a label or as a separate certificate accompanying each treated fabric. Because flame-retardant treatments can be removed either by dry-cleaning or laundering, the information on flame-retardant-treatment shall include the following:

- a) type of flame retardant treatment;
- b) specified period for flame resistance;
- c) certain laundering conditions; and
- d) specified number of dry cleanings.

## 6 Assessment of compliance

#### **6.1** Lot

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

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

**6.1.2** 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 2. The pieces shall be selected from at least 10 % of the bales, an equal number of pieces, as far as possible, being at random from each bale.

Number of pieces in a lot Sample size (number of Sub-sample (test samples) pieces to be selected) Up to 100 10 5 101 to 300 15 6 301to 500 25 7 501 to 800 8 35 801 to 1300 50 9 1301and above 75 10

Table 2 — Sample size

## 6.2 Test specimens

Where not prescribed in the relevant test method indicated against each parameter in Table 1, the test specimens shall be taken at points as widely dispersed as possible throughout the available test samples.

#### 6.3 Criteria of compliance

The lot shall be declared as conforming to specification for various characteristics referred in Table 1, if for each of the characteristics, the mean values of the test results on all the individual specimens are found to be within limits of the specification. Failing of a sample on account of any of the characteristics shall mean rejection of the full lot

# **Bibliography**

- [1] BS 5867 1980: Specifications for fabrics for curtains and drapes, Part 1, General requirements
- [2] ASTM D3691 /D3691M 09 Standard Performance Specification for Woven, Lace, and Knit Household Curtain and Drapery Fabrics
- [3] NFPA 701 Flame resistant textiles and fibres