
Textiles- Mattress Covers- Specification

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Foreword

This Ethiopian Standard has been prepared under the direction of Technical Committee for Textile-Fabrics (TC 70) and published by the Ethiopian Standards Agency (ESA).

In preparing this Ethiopian Standard reference has been made to the following:
KS 597: 2013 Mattress Covers- Specification; published by Kenya Bureau of Standard(KBS)

Acknowledgement is made for the use of information from the above publication.

DRAFT STANDARD

Mattress covers — Specification

1. Scope

This Ethiopian Standard specifies the construction and performance requirements of fabrics used for mattress covers. This standard applies to both woven and knitted fabrics used as foam mattress covers.

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.

ES 6583 Code of Practice for Grading of Textile Fabrics

ES ISO 3071: Method for determination of pH value of aqueous extracts of textile materials.

ES ISO 11827 Textiles-Composition-Identification of fibers

ES ISO 1833: Textiles-Quantitative chemical analysis

Part 1 General principles of testing

Part 2 Ternary fiber mixtures

Part 7 Mixtures of Polyamide and certain other fibers (method using formic acid)

Part 11 Mixtures of Cellulose and Polyester fibers (method using sulphuric acid)

ES 3744 Specification for industrial sewing threads made from linen (flax) or cotton

ES 2741 Textiles-industrial sewing threads made wholly or partly from synthetic Fibres

ES ISO 13938-1 Textiles-Bursting properties of fabrics- Part 1: Hydraulic method for determination of bursting strength and bursting distension

ES ISO 13938-2 Textiles-Bursting properties of fabrics- Part 2: Pneumatic method for determination of bursting strength and bursting distension

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

ES ISO 7211-2: Methods for determination of threads per centimeter in woven fabrics.

ES ISO 3579 Textiles-Preparation, Marking and measuring of fabric specimens and garments in tests for determination of dimensional change

ES ISO 6330:2012 Textiles-Washing and drying procedures for textile testing

KS ISO 5077:2007 Textiles-Determination of dimensional change in washing and drying

ES ISO 12934-2 Textiles-Determination of the abrasion resistance of fabrics by Martindale method-Part 2: Determination of specimen breakdown

ES ISO 105 C10:2006 Textiles-Tests for colour fastness-Part C10: Colour fastness to washing with soap and soda

ES ISO 105-D01 Textiles- Tests for colour fastness- Part D01: Colour fastness to dry cleaning using perchloroethylene solvent

KS ISO 105- X12 Textiles-Tests for colour fastness-Part X12: Colour fastness to rubbing

ES ISO 105-E04 Textiles –Tests for colour fastness, Colour fastness to perspiration

ES ISO 105 B01: Textiles-Tests for colour fastness to light. Part B01: Colour fastness to daylight

ES ISO 105 Textiles-Tests for colour fastness Part B02 Colour fastness to artificial light: Xenon arc fading lamp

ES ISO 3801 Textiles-Woven fabrics-Determination of mass per unit area

3. Terms and Definitions

For the purpose of this Ethiopian standard the definition in ES ISO 6938 shall apply.

4. Requirements

4.1. Fabrics Grade

Fabrics for mattress covers shall be of graded as specified in ES 6583

4.2. Dyeing and Finishing

Chemicals which are harmful to the skin or which can react with the rubber foam shall not be used in the finishing of the fabric. The pH of the finished fabric shall be between 6.0 — 8.5, when tested in accordance with ES ISO 3071.

4.3. Colour Fastness

The colour fastness of the dyed and/or printed fabric shall comply with the requirements of Table 2.

4.4. Fabric Width

The fabric width for all sizes of mattresses shall be such that when stitched, not more than three seams shall be on one side of the width of the mattress.

4.5. Fibre Type

4.5.1. Fibre type shall be determined using methods prescribed in ES ISO 11827

4.5.2. Fibre Mixtures the fabric made from mixtures of textile fibres shall have a tolerance of ± 5 per cent from the declared composition of each fibre. This shall be determined in accordance with ES ISO 11827 and ES ISO 1833 Parts 1, 2, 7&11

4.6. Stitching the fibre composition of the thread used for stitching the fabric on the mattress shall be the same as that of the fabric. The thread used for stitching shall comply with the requirements of ES 3744 and ES 2741

4.7. Other requirements of the fabric shall be as specified in Tables 1 and 2.

Table 1: Constructional requirements for woven and Knitted Fabrics

S.No		TYPE OF FIBRE			PARAMETER					
		Bursting strength KN/M2, Min,(Knitted Fabrics)	Breaking strength,N, min,(Woven Fabrics)		Threads per cm, min		ss in g/m ² , min	Dimensional changes after 5 washings, max in %		Abrasion resistance,10,000 cycles in mass loss in %, max
			warp	weft	warp	weft		warp	weft	
1	Polyester	202	600	200			63	3	3	
2	Nylon	202	600	200			63	3	3	
3	Cellulosic	157	580	160	20	15	115	3	3	
4	Polyester/Nylon Cellulosic blends	160	600	200			70	3	3	
	Test Method	ES ISO 13938-1&2	ES ISO 13934-1	ES ISO 7211-2	ES ISO 3801	ES ISO 3579, 330 & 5077	ES ISO 12934-2	Test Method	ES ISO 13938-1&2	ES ISO 13934-1

Table 2- Colour Fastness Requirements

S.No	Agency	Numerical Rating		Test Method
		Change colour, min	Staining, min.	
1	Washing	4	4	ES ISO 105 C10
2	Dry cleaning	4	4	ES ISO 105- D01
3	Rubbing	Dry	4	ES ISO 105 -X12 & X16
		Wet	3	
4	Perspiration (acid & alkali)	4	4	ES ISO 105- E04
5	Light	5		ES ISO 105 B01 & B02

5. Marking

Each roll shall be marked with the following:

- a) Name of manufacturer or trade mark;
- b) Fibre composition of the material;
- c) Width and length of the roll.
- d) Inscription 'Made in Kenya, or' country of manufacture'

6. Labeling

The fabric shall be labeled in accordance with ES ISO 3758

7. Packaging

The fabric shall be securely packed either in bales or in cases which shall prevent it from contamination with dust, water, moisture and gas fumes

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- ❖ Facilitate the country's technology transfer through the use of standards,
- ❖ Develop national standards for local products and services so as to make them competitive in the international market.

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More Information?

Contact us at the following address.

The Head Office of ESA is at Addis Ababa.

☎ 011- 646 06 85, 011- 646 05 65

☎ 011-646 08 80

✉ 2310 Addis Ababa, Ethiopia

E-mail: info@ethiostandards.org,

Website: www.ethiostandards.org



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