

KENYA STANDARD

KS 597:2013
ICS

Mattress covers — Specification (Second Edition)

KEBS 2013

Second Edition 2013

KS 597: 2013

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The following organizations were represented on the Technical Committee:

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Alpha Knits
Spinners and Spinners
Ken Knit
Kenya Industrial Research and Development Institute
Sumitomo Chemical
Vector Solutions
Achelis
Vestergaard Frandsen
Kenya Textile and Training Institute
Multifacet Consulting LTD
Rad bone Clark
Sunflag Textile and Knitwear Mills LTD
Consumer Information Network
Topserve
Department of Malaria Control
Vita foam
Foam mattress
Futons
Pest Control Board of Kenya

Kenya Bureau of Standards — Secretariat

REVISION OF KENYA STANDARDS

In order to keep abreast of progress in industry, Kenya Standards shall be regularly reviewed. Suggestions for improvements to published standards, addressed to the Managing Director, Kenya Bureau of Standards, are welcome.

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FORWORD

This draft Kenya Standard has been prepared by the Knitted Fabrics Technical Committee (KEBS TC 68) under the guidance of the Standards Projects Committee and is accordance with the procedures of the Kenya Bureau of Standards.

Fabrics which are used as mattress covers are a vital component of the foam mattress as a product.

In the second edition of this Kenya standard , references within the text and format of presentation have been updated and a clause on abrasion resistance introduced.

During the preparation of the second edition of this Kenya standard, the committee was guided by test results from samples taken from Kenyan manufacturers

Acknowledgement is made with thanks for the assistance received from these sources

PUBLIC REVIEW DRAFT

Mattress covers — Specification (Second Edition)**1 Scope**

This draft Kenya Standard specifies construction and performance requirements of fabrics used for mattress covers.

2 Application

This standard applies to both woven and knitted fabrics used as foam mattress covers.

3 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:

KS 08-697: Code of practice for grading of textile materials
Part 1. Fabrics.

KS 08-360: Method for determination of pH value of aqueous extracts of textile materials.

KS 08-376 Specification for flexible polyurethane foams.

KS 08-127: Methods for the quantitative chemical analysis of binary fibre mixtures.

KS ISO 1833 :2006 Textiles-Quantitative chemical analysis

Part 1 General principles of testing

Part 2 Ternary fibre mixtures

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

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

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

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

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

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

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KS ISO 3758:2012 Textiles-Care labelling code using symbols

KS 08-121: Methods for determination of threads per centimeter in woven fabrics.

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

KS 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

EAS EAS 238:2001 Textiles –Tests for colour fastness, Colour fastness to perspiration

KS ISO 105 B01:1994 Textiles-Tests for colour fastness to light. Part B01:Colour fastness to day light

KS ISO 105 B02:1994 Textiles-Tests for colour fastness Part B02 Colour fastness to artificial light: Xenon arc fading lamp

KS 479 Part 1 Specification for Sewing threads. Part 1:cotton sewing thread

KS 479 Part 2 Specification for Sewing threads. Part 2:Sewing threads made wholly or partly from synthetic fibres

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

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

KS ISO/TR 11827 Textiles-Composition-Identification of fibres

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

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

4 Requirements

4.1 Fabrics Grade

Fabrics for mattress covers shall be of grade two (2) and above as specified in KS 08-697: Part 1

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 KS 08-360.

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 (for mattress sizes see KS 03-376), 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 ISO /TR 11827 (To be discussed)

4.5.2 Fibre Mixtures

The fabric made from a 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 KS 08-127 and KS 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 KS 479 Parts 1 and 2

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

SL NO	TYPE OF FIBRE	PARAMETER								
		Bursting strength KN/M ² , Min,(Knitted Fabrics)	Breaking strength, N, min,(Woven Fabrics)		Threads per cm, min		Mass in g/m ² ,min,	Dimensional changes, after 5 washings ,min		Abrasion resistance, cycles, min
Warp	Weft		Warp	Weft	Warp	Weft				
1	Polyester	202	600	200			63			10,000
2	Nylon	202	600	200			63			
3	Cellulosic	157	580	160	20	15	115	3	3	
4	Polyester/Nylon/ Cellulosic blends	160	600	200			70	-2	-2	
Test Method		KS ISO 13938-1&2	KS ISO 13934-1	KS 121	EAS		KS ISO 3579,6330 Appendix B Table B1 Procedure 4M & 5077	KS ISO 12947-2		

Table 2- Colour Fastness Requirements

Agency	Numerical Rating		Test Method
	Change in colour, min.	Staining, min.	
(i) Washing	4	4	KS ISO 105 C10
(ii) Drycleaning	4	4	KS ISO 105- D01
(iii) Rubbing: Dry	4	4	KS ISO 105 -X12.
Wet	3	3	
(iv) Perspiration (acid and Alkali)	4	4	EAS 238
(v) Light	5		KS ISO 105 B01 & ISO 105 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 labelled in accordance with KS 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.