## SRI LANKA STANDARD 685:1984 UDC 677.21.064:645.483

# SPECIFICATION FOR COTTON BED SHEETS (HANDLOOM)

SRI LANKA STANDARDS INSTITUTION



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SLS 685:1984

Gr. 5

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SRI LANKA STANDARDS INSTITUTION

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This standard does not purport to include all the necessary provisions of a contract.

# SPECIFICATION FOR COTTON BED SHEETS (HANDLOOM)

#### **FOREWORD**

This Sri Lanka Standard was authorized for adoption and publication by the Council of the Sri Lanka Standards Institution on 1984-12-20, after the draft finalized by the Drafting Committee on Cotton Bed Sheets had been approved by the Textiles Divisional Committee.

The specification covers only handloom cotton bed sheets. A separate standard has been issued for powerloom cotton bed sheets and sheetings.

All quantities and dimensions in this specification have been given in SI units. Values in the Imperial System to which the industry has been accustomed, have also been given in brackets, wherever necessary.

For the purpose of deciding whether a particular requirement of this specification is complied with, the final value, observed or calculated, expressing the result of a test or an analysis shall be rounded off in accordance with CS 102. The number of significant places retained in the rounded off value shall be the same as that of the specified value in this specification.

In the preparation of this specification, the assistance obtained from the publications of the Indian Standards Institution is gratefully acknowledged.

#### 1 SCOPE

- 1.1 This specification prescribes the requirements and methods of sampling and test for handloom cotton bed sheets scoured, bleached or dyed.
- 1.2 Hemmed and unhemmed bed sheets are covered in this specification.

#### 2 REFERENCES

- SLS 41 Determination of the number of threads per centimetre in woven fabric (First Revision)
- CS 44 Determination of the count of yarn removed from fabric free from added matter
- SLS 45 Determination of length of woven or knitted fabrics (First Revision)
- SLS 46 Determination of width of woven or knitted fabrics (First Revision)
- CS 47 Method for shrinkage of fabrics: cold water immersion test
- CS 55 Determination of colour fastness of textile materials to washing at 95 °C for 30 minutes (Test 4)
- CS 62 Determination of colour fastness of textile materials to daylight
- CS 86 Determination of pH value of aqueous extracts of textile materials
- CS 87 Determination of scouring loss in grey and finished cotton textile materials
- CS 102 Presentation of numerical values
- CS 112 Cotton sewing thread
- CS 116 Principles of conversion
- SLS 137 Grey cotton yarns
  Part 2 Handloom (First Revision)
- SLS 428 Random sampling methods

#### 3 REQUIREMENTS

## 3.1 General requirements

#### 3.1.1 Yarn

- 3.1.1.1 The yarn used in the manufacture of cloth shall conform to SLS 137. The nominal count of warp and weft yarn is given in Table 1.
- 3.1.2 Cloth
- 3.1.2.1 The cloth shall be woven in plain weave.
- 3.1.2.2 The cloth shall be free from substances liable to cause subsequent tendering.
- 3.1.2.3 The cloth shall not contain any flaws discernible to the eye when it is looked at (as distinct from being looked through) under ordinary daylight conditions. The person examining the cloth shall observe it from his normal visual distance of distinct vision.

3.1.2.4 Each transverse end of hemmed bed sheets shall be hemmed to a depth of not less than 20 mm, the raw edges having a turn-in of 3 mm before the hem is formed. Cotton sewing thread conforming to variety No. 15 of CS 112 or better shall be used in hemming and the number of stitches shall be at least 39 per 10 centimetres. The stitches shall be firm and regular. The hemming shall be uniform throughout and pressed flat.

#### 3.2 Dimensions

- 3.2.1 Bed sheets shall be made up of the following sizes or as mutually agreed to between the buyer and the seller;
- a) 122 cm x 213 cm (48 in. x 84 in.)
- b) 122 cm x 229 cm (48 in. x 90 in.)
- c) 132 cm x 229 cm (52 in. x 90 in.)
- d) 137 cm x 229 cm (54 in. x 90 in.)
- e) 183 cm x 229 cm (72 in. x 90 in.)
- 3.2.2 A tolerance of  $\stackrel{+}{-} \stackrel{1}{0}$ .5 per cent shall be permissible for the width and the length when determined as in SLS 46 and SLS 45 respectively.

TABLE 1 - Constructional details

	Count of yarn in tex (Cotton count)		Ends per 10 cm	Picks per 10 cm
Туре	Warp	Weft	(per inch)	(per inch)
1	36 tex (16 <sup>S</sup> )	36 tex (16 <sup>S</sup> )	220 (56)	220 (56)
2	20 tex (30 <sup>s</sup> )	59 tex (10 <sup>8</sup> )	240 (60)	190 (48)
3	2 x 30 tex (2/20 <sup>S</sup> )	59 tex (10 <sup>8</sup> )	190 (48)	210 (52)
4	$2 \times 30 \text{ tex } (2/20^{\text{S}})$	59 tex (10 <sup>S</sup> )	190 (48)	190 (48)
5	$2 \times 30 \text{ tex } (2/20^{8})$	59 tex (10 <sup>S</sup> )	160 (40)	160 (40)
6	$2 \times 30 \text{ tex } (2/20^{\text{S}})$	36 tex (16 <sup>s</sup> )	210 (52)	180 (46)
7	$2 \times 20 \text{ tex } (2/30^{8})$	59 tex (10 <sup>s</sup> )	160 (40)	190 (48)
8	$2 \times 20 \text{ tex } (2/30^{\text{S}})$	36 tex (16 <sup>S</sup> )	180 (46)	190 (48)
9	$2 \times 20 \text{ tex } (2/30^{\text{S}})$	36 tex (16 <sup>S</sup> )	190 (48)	160 (40)
10	$2 \times 20 \text{ tex } (2/30^{8})$	36 tex (16 <sup>S</sup> )	200 (50)	180 (46)
Tolerance	± 5 per cent	± 5 per cent	± 3 per cent	± 5 per cent
Method of test	C	SLS 4	11	

#### 3.3 Construction

3.3.1 Bed sheets shall comply with the requirements specified in Table 1. The permissible tolerances for various requirements and the methods of test have also been prescribed in the table.

#### 3.4 Scouring loss

3.4.1 The scouring loss of the cloth shall not exceed 5 per cent when determined by the method prescribed in CS 87.

#### 3.5 pH value

3.5.1 The pH value of the aqueous extract shall be not less than 6.0 and not more than 8.5 when determined by the cold method prescribed in CS 86.

#### 3.6 Shrinkage or elongation

3.6.1 Shrinkage or elongation of cloth, warp way and weft way when tested in accordance with the method prescribed in CS 47 shall be not more than 4 per cent and 2 per cent respectively.

#### 3.7 Colour fastness

3.7.1 The colour fastness ratings shall be in accordance with the requirements specified in Table 2, when tested by the relevant methods.

Fastness (1)	Numerical ratings (2)	Methods of test (3)
Day light	5 or better	CS 62
Washing	4 or better	CS 55

TABLE 2 - Colour fastness requirements

#### 4 PACKAGING

4.1 Bed sheets shall be folded, wrapped and packed in bundles or cases in the manner agreed to between the purchaser and the supplier. Packing or wrapping materials shall be sound, strong moisture proof and non-staining. Such materials include polyethylene sheets, water proof kraft paper or any other suitable material.

#### MARKING

- 5.1 The following information shall be marked legibly and indelibly on a label securely attached to the bed sheet:
- a) Name of the material;
- b) Type;
- c) Name and address of the manufacturer;
- d) Registered trade mark, if any;
- e) Size of the bed sheet in cm (inches); and
- f) Batch number.
- 5.2 The following information shall be marked legibly and indelibly on a label securely attached to each bundle:
- a) Name of material;
- b) Type;
- c) Name and address of the manufacturer;
- d) Registered trade mark, if any;
- e) Size of the bed sheet in cm (inches);
- f) Quantity (for example: number of pieces); and
- q) Batch number.
- 5.3 Bed sheets may also be marked with the Certification Mark of the Sri Lanka Standards Institution Illustrated below on permission being granted for such marking by the Sri Lanka Standards Institution.



NOTE - The use of the Sri Lanka Standards Institution Certification Mark (SLS Mark) is governed by the provisions of the Sri Lanka Standards Institution Act and the regulations framed thereunder. The SLS mark on products covered by a Sri Lanka Standard is an assurance that they have been produced to comply with the requirements of that standard under a well defined system of inspection, testing and quality control, which is devised and supervised by the Institution and operated by the producer. SLS marked products are also continuously checked by the Institution for conformity to that standard as a further safeguard. Details of conditions under which a permit for the use of the Certification Mark may be granted to manufacturers or processors may be obtained from the Sri Lanka Standards Institution.

#### 6 SAMPLING

#### 6.1 Lot.

6.1.1 All bed sheets of the same type and dimensions, delivered to one buyer against one despatch note shall constitute a lot.

#### 6.2 Scale of sampling

- 6.2.1 The conformity of a lot to the requirements of this specification shall be determined on the basis of tests carried out on the samples selected from the lot.
- 6.2.2 The number of bed sheets to be selected from a lot shall be in accordance with Table 3.

Number of bed sheets in a lot	Number of bed sheets to be selected
Up to 50	03
51 to 100	04
101 to 150	05
151 to 300	06
301 to 500	08
501 to 1 000	09
1 001 and above	10

TABLE 3 - Scale of sampling

- 6.2.3 If the bed sheets are packed in bundles at least 10 per cent of bundles subject to a minimum of 3 shall be selected. As far as possible an equal number of bed sheets shall be drawn from each bundle selected to constitute the required sample specified in Table 3.
- 6.2.4 The bundles and bed sheets shall be selected at random. In order to ensure randomness of selection, random number tables given in SLS 428 shall be used.

#### 6.3 Number of tests

6.3.1 Each bed sheet selected as in 6.2.2 shall be examined for marking requirements.

- 6.3.2 Each bed sheet selected as in 6.2.2 shall be tested for requirements given below:
- a) Dimensions;
- b) Ends/10 cm and picks/10 cm;
- c) Count;
- d) Scouring loss;
- e) pH value;
- f) Shrinkage and elongation; and
- g) Colour fastness.

NOTE - Required test pieces shall be obtained in accordance with relevant test methods.

#### 7 CONFORMITY TO STANDARD

- 7.1 The lot shall be declared as conforming to the requirements of this specification if the following conditions are satisfied:
- 7.1.1 Each bed sheet examined as in 6.3.1 satisfies the marking requirements in 5.1.
- 7.1.2 Each bed sheet tested for dimensions satisfies the relevant requirements in 3.2.1.
- 7.1.3 The values of expressions  $(\bar{X} + 0.412)$  and  $(\bar{X} 0.412)$  calculated using test results on ends and picks, and count, lie within the limits specified in Table 1.
- 7.1.4 The values of the expression  $(\bar{X} + 0.412)$  calculated using test results on scouring loss and shrinkage or elongation, are less than or equal to the values specified in 3.4 and 3.6 respectively.
- 7.1.5 The values of expressions  $(\bar{X} + 0.412)$  and  $(\bar{X} 0.412)$  calculated using test results of pH value lie within the limits specified in 3.5.
- 7.1.6 The test results on colour fastness satisfy the relevant requirements specified in Table 2.



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The Sri Lanka Standards Institution is the owner of the registered certification mark shown below. Beneath the mark, the number of the Sri Lanka Standard relevant to the product is indicated. This mark may be used only by those who have obtained permits under the SLS certification marks scheme. The presence of this mark on or in relation to a product conveys the assurance that they have been produced to comply with the requirements of the relevant Sri Lanka Standard under a well designed system of quality control inspection and testing operated by the manufacturer and supervised by the SLSI which includes surveillance inspection of the factory, testing of both factory and market samples.

Further particulars of the terms and conditions of the permit may be obtained from the Sri Lanka Standards Institution, 17, Victoria Place, Elvitigala Mawatha, Colombo 08.



#### SRI LANKA STANDARDS INSTITUTION

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The principal objects of the Institution as set out in the Act are to prepare standards and promote their adoption, to provide facilities for examination and testing of products, to operate a Certification Marks Scheme, to certify the quality of products meant for local consumption or exports and to promote standardization and quality control by educational, consultancy and research activity.

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Printed at the Sri Lanka Standards Institution, 17, Victoria Place, Elvitigala Mawatha, Colombo 08.