SRI LANKA STANDARD 698:1985
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SPECIFICATION FOR
COTTON BED SHEETS AND SHEETINGS (POWERLOOM)

SRI LANKA STANDARDS INSTITUTION

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SLS 698:1985

Gr. 6

SRI LANKA STANDARDS INSTITUTION
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Sri Lanka.

SRI LANKA STANDARD

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FOREWORD

This Sri Lanka Standard was authorized for adoption and publication by the Council of the Sri Lanka Standards Institution on 1985-06-26, after the draft, finalized by the Drafting Committee on Cotton Bed Sheets, had been approved by the Textiles Divisional Committee.

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

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 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

This specification prescribes the requirements and methods of sampling and test for powerloom (non-flannelette type) cotton bed sheets and sheetings, scoured, bleached or dyed.

2 REFERENCES

SLS 41 Determination of the number of threads per centimetre in woven fabric (First revision)

CS 43 Determination of breaking load and extension of strips of woven textile fabric

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 1 : Powerloom (First revision)

SLS 428 Random sampling methods.

3 REQUIREMENTS

3.1 General requirements

3.1.1 *Yarn*

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 selvedges shall be firm and well woven and of minimum width 10 mm.

3.1.2.3 Each transverse end of the bed sheet shall be hemmed to a depth of not less than 20 mm, the raw edge having a turn in of 8 mm before the hem is formed. Cotton sewing thread conforming to variety No. 9 of CS 112 or better shall be used in hemming and the number of stitches shall be at least 39 per 10 cm. The stitches shall be firm and regular. The hemming shall be uniform throughout and pressed flat.

3.1.2.4 The white (bleached) cloth shall have a full bleached white finish free from blueing and optical whitening agents.

3.1.2.5 The cloth, when visually examined, shall be reasonably free from spinning, weaving and processing defects.

3.2 Specific requirements

3.2.1 *Construction*

Bed sheets and sheetings shall comply with the requirements of Table 1, when tested by the methods prescribed in the table.

TABLE 1 - Requirements for construction

Type No. (1)	Count of yarn in tex (Cotton count)		Ends per dm (per inch) (4)	Picks per dm (per inch) (5)
	Warp (2)	Weft (3)		
i	42 (14s)	42 (14s)	220 (56)	190 (48)
ii	36 (16s)	36 (16s)	220 (56)	205 (52)
iii	36 (16s)	36 (16s)	220 (56)	220 (56)
iv	30 (20s)	30 (20s)	220 (56)	215 (54)
v	30 (20s)	30 (20s)	235 (60)	215 (54)
vi	20 (30s)	20 (30s)	260 (66)	235 (60)
Tolerance	± 5 per cent	± 5 per cent	± 3 per cent	± 3 per cent
Method of test, ref. to CS/SLS	CS 44		SLS 41	

3.2.2 *Dimensions*

3.2.2.1 Bed sheets shall be made up of the following sizes or as mutually agreed between the buyer and the seller.

a) 122 cm x 213 cm (48 in x 84 in)

b) 137 cm x 229 cm (54 in x 90 in)

c) 183 cm x 229 cm (72 in x 90 in)

d) 229 cm x 274 cm (90 in x 108 in)

e) 229 cm x 229 cm (90 in x 90 in)

f) 305 cm x 305 cm (120 in x 120 in)

3.2.2.2 A tolerance of ± 2 per cent shall be permissible for the width when determined as in SLS 46. The length when determined as in SLS 45 shall not be less than the value specified or declared.

3.2.3 *Scouring loss*

Scouring loss of the cloth shall not exceed 2 per cent when determined by the method prescribed in CS 87.

3.2.4 *pH value*

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.

3.2.5 *Shrinkage or elongation*

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 3.0 per cent.

3.2.6 *Breaking strength*

Breaking strength of the cloth, when determined by the method prescribed in CS 43 shall be not less than 450 N warp way and 400 N weft way.

3.2.7 *Colour fastness*

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

TABLE 2 - Requirements for colour fastness

Fastness	Numerical ratings	Method of test Ref. to CS
Daylight	5 or better	62
Washing	5 or better	55
Dry rubbing	4 or better	63

4 PACKAGING

4.1 Bed sheets shall be suitably folded, wrapped and packed in bundles or as agreed to between the buyer and the seller.

4.2 Sheetings shall be rolled and suitably wrapped.

4.3 Packing or wrapping material shall be sound, strong, moisture proof and non-staining. Such material shall include polyethylene sheets, water proof kraft papers or any other suitable material.

5 MARKING

5.1 The following information shall be marked legibly and indelibly on a label securely attached to the bed sheet:

a) Name and address of the manufacturer;

b) Registered trade mark, if any;

c) Name of the material;

d) Type;

e) Size of the bed sheet in cm (inches); and

f) Batch or code number.

5.2 The following information shall be marked legibly and indelibly on a label securely attached to each bundle:

a) Name and address of the manufacturer;

b) Registered trade mark, if any;

c) Name of the material;

d) Type;

e) Size of the bed sheet in cm (inches);

f) Quantity (for example, number of bed sheets); and

g) Batch or code number.

5.3 The following information shall be marked legibly and indelibly on a label securely attached to each sheeting:

a) Name and address of the manufacturer;

b) Registered trade mark, if any;

c) Name of the material;

d) Type;

e) Width of the sheeting in cm (inches);

f) Length in cm (inches); and

g) Batch or code number.

5.4 The packages 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

All the bed sheets or sheetings 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 or sheetings to be selected from a lot shall be in accordance with Table 3 or Table 4 as the case may be.

TABLE 3 - Scale of sampling for bed sheets

Number of bed sheets in a lot	Number of bed sheets to be selected
Up to 100	2
101 to 300	3
301 to 500	4
501 and above	5

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 so selected to constitute the required sample specified in Table 3.

TABLE 4 - Scale of sampling for sheetings

Number of sheetings in a lot	Number of sheetings to be selected
Up to 100	2
101 to 300	3
301 to 500	4
501 and above	5

6.2.4 The bed sheets or sheetings shall be selected at random. In order to ensure randomness of selection random number tables as given in SLS 428 shall be used.

6.3 Number of tests

6.3.1 Each bed sheet or sheeting selected as in 6.2.2 or 6.2.3 shall be examined for packaging and marking requirements.

6.3.2 Each bed sheet or sheeting selected as in 6.2.2 or 6.2.3 shall be inspected for requirements given below:

a) Dimensions;

b) Ends and picks;

c) Count;

d) Scouring loss;

e) pH value;

f) Shrinkage and elongation;

g) Breaking strength; and

h) Colour fastness.

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

7 METHODS OF TEST

Tests for the requirements specified in 3.2 shall be carried out by the methods prescribed therein.

8 CONFORMITY TO STANDARD

A lot shall be declared as conforming to the requirements of this specification if the following conditions are satisfied.

8.1 Each bed sheet or sheeting examined as in 6.3.1 satisfies the relevant requirements.

8.2 Each bed sheet or sheeting tested for dimensional requirements satisfies the relevant requirements.

8.3 The values of the expression $(\bar{x} + 0.4R)$ and $(\bar{x} - 0.4R)$ calculated using test results on ends and picks, and on count, lie within the limits specified.

8.4 The values of the expression $(\bar{x} + 0.4R)$ calculated using test results on breaking strength, scouring loss and on shrinkage or elongation are less than or equal to the values specified.

8.5 The values of the expression $(\bar{x} + 0.4R)$ and $(\bar{x} - 0.4R)$ calculated using test results of pH value lie within the limits specified.

8.6 The test results on colour fastness satisfy the relevant requirements.

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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.*

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SRI LANKA STANDARDS INSTITUTION

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