SRI LANKA STANDARD 1062 : 1995

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SPECIFICATION FOR SHEETING FOR GENERAL PURPOSES

SRI LANKA STANDARDS INSTITUTION

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SLS 1062 : 1995

Gr. 5

SRI LANKA STANDARDS INSTITUTION
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Sri lanka

Sri Lanka Standards are subject to periodical revision in order to acccmmodate the progress made by industry. Suggestions for improvement will be recorded and brought to the notice of the Committees to which the revisions are entrusted.

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

Sri Lanka Standard
SPECIFICATION FOR SHEETING FOR GENERAL PURPOSES

FOREWORD

This standard was approved by the Sectoral Committee on Textiles, Clothing and Leather and was authorised for adoption and publication as a Sri Lanka Standard by the Council of Sri Lanka Standards Institution on 1995-07-20.

This standard covers the constructional details and performance requirements of sheeting produced from cotton or polyester cotton blends and intended to be used for the purpose of clothing, covering, sheeting or other similar supporting activities. These sheetings are suitable to be used for above purposes by any institution in connection with the hospitality industry such as hospitals, hotels etc. These sheetings are also suitable for household use. As these fabrics, specially cotton sheetings are treated with scouring and/or bleaching processes, it is meant that these fabrics are free of startch and sufficiently resistant to rot and mildew.

Guidelines for the determination of a compliance of a lot with the requirements of this standard based on statistical sampling and inspection are given in Appendix A.

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 sepcified value in this specification.

In the preparation of this standard, the assistance derived from the publications of Bureau of Indian Standards is gratefully acknowledged.

1 SCOPE

This standard prescribes the methods of sampling and tests for woven sheeting materials used for the purpose of clothing, covering, sheeting or any similar activity.

2 REFERENCE

BS 5811 Determination of the resistance to pilling and change of appearance of fabrics
CS 16 Standard atmospheres for conditioning and testing textiles
SLS 41 Determination of the number of threads per centimetre in woven fabrics (First revision)
SLS 42 Determination of mass per unit area of woven or knitted fabrics
CS 43 Determination of breaking load and extension of strips of woven textile fabrics
SLS 44 Determination of linear density of yarn removed from fabric (First revision)
SLS 45 Measurement of length of woven fabric (First revision)
SLS 46 Measurement of width of woven fabric (First revision)
CS 47 Shrinkage of fabrics : Cold water immersion test.
CS 53 Determination of colour fastness of textile materials to washing at 50°C (Test 2)
CS 62 Determination of colour fastness of textile materials to daylight
CS 63 Determination of colour fastness of textile materials to rubbing
CS 67 Determination of colour fastness of textile materials to perspiration
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 151 Method for quantitative chemical analysis of binary mixtures of polyester fibres with cotton or viscose rayon
SLS 428 Random sampling methods

3 REQUIREMENTS

3.1 Yarn

The yarn used in the manufacture of sheetings shall be made from cotton or polyester cotton blends conforming to the requirements given in 3.4. The yarn shall be reasonably free from neps, slubs, and other spinning faults.

3.2 Cloth

3.2.1 The cloth shall be of plain weave uniformly woven and scoured, bleached, dyed or printed. If dyed the shade of colour of sheeting or if printed the shades and design of prints used in the sheeting shall be agreed to between the purchaser and the supplier.

3.2.2 The selvedges of fabric shall be firm and straight and width of which shall be not less than 10 mm. The cloth shall be free from substances liable to cause subsequent tendering.

3.3 Defects

The cloth shall be free from noticeable fabric faults and other oil marks and stains, when visually examined.

3.4 Fabric composition

The composition of fabric when determined by the method prescribed in CS 151 shall be one of the following.

100 per cent cotton
65 per cent ployester/35 per cent cotton
50 per cent polyester/50 per cent cotton

± 5 per cent tolerance limit shall be permitted on the declared value.

3.5 Mass per unit area

The mass of fabric per square metre when determined by the method prescribed in SLS 42 shall be not less than 150 g.

NOTE: A guide for manufacturing sheeting fabrics is given in Appendix B.

3.6 Resistance to pilling

In case of polyester/cotton blended fabrics, the resistance to pilling of fabric when subjected to the method prescribed in BS 5811 shall be not less than pilling grade 3.

3.7 Dimensional change

The dimensional change of fabric for warp and weft directions shall be not more than 7.5 per cent for cotton fabrics and 5 per cent for polyester cotton fabrics when determined by the method prescribed in CS 47.

3.8 Colour fastness

The colour fastness ratings of fabric shall comply with the requirements specified in Table 1, when tested by the methods given therein.

TABLE 1 - Colour fastness requirements for fabrics

Sl. No.(1)	Fastness to (2)	Numerical rating (3)	Method of test (4)
(i)	Light	5 or better	CS 62
(ii)	Washing at 50°C	4 or better	CS 53
(iii)	Rubbing	4 or better	CS 63
(iv)	Prespiration	4 or better	CS 67

3.9 pH value

The pH value of aqueous extract of cloth shall be between 6.0 and 8.5 when determined by the cold method prescribed in CS 86

3.10 Scouring loss

The scouring loss of fabric when determined by the method prescribed in CS 87 shall be not more than 2 per cent.

3.11 Breaking strength

The breaking strength of fabric shall be not less than the values given in Table 2 for warp and weft directions when determined by the method prescribed in CS 43.

TABLE 2 - Requirements for breaking strength of fabrics

Sl.No. (1)	Type of fabric (2)	Warp direction, N, min. (3)	Weft direction, N, min. (4)
(i)	Cotton	470	390
(ii)	Polyester/cotton	600	550

3.12 Length of cloth roll

The length of roll of fabric unless otherwise agreed shall be not less than 25 m. The number of pieces in the roll shall be not more than 4 per 100 m unless otherwise agreed upon between the purchaser and the supplier.

The length of fabric shall be determined by the method prescribed in SLS 45.

3.13 Width of fabric

The width of fabric when determined by the method prescribed in SLS 46 shall be not less than 182 cm unless otherwise agreed to between the purchaser and the supplier.

4 PACKING

The number of pieces as agreed shall be rolled full width one after the other to form one package.

Each package shall be covered with suitable material to prevent dusting and deterioration effects during storage.

5 MARKING

5.1 Each package shall be marked at outer end of fabric with the actual length supplied.

5.2 Each package shall be marked legibly and indelibly on the wrapper with the following information:

a) Name of material as "sheeting" (cotton/(polyester/cotton) /scoured/bleached/dyed);
b) Actual length, in m;
c) Width in,cm;
d) Brand name and/or trade mark;
e) Manufacturer's/supplier's name and address;
f) Month and year of manufacture;
g) Batch or code number; and
h) Country of origin.

NOTE

Attention is drawn to the certification marking facilities offered by the Sri Lanka Standards Institution. See the inside back cover of this specification.

6 METHODS OF TEST

6.1 Test for the requirements given in Clause 4 shall be carried out as prescribed in the relevant Sri Lanka Standards given therein.

6.2 The conditioning and testing atmosphere shall be the standard atmosphere for conditioning and testing textiles as defined in CS 16 i.e. a relative humidity of 65 ± 2 per cent and a temperature of 27 ± 2°C.

APPENDIX A
COMPLIANCE OF A LOT

The sampling scheme given in this Appendix should be applied where compliance of a lot to the requirements of this standard is to be assessed based on statistical sampling and inspection.

Where compliance with this standard is to be assured based on manufacturer's control systems coupled with type testing and check tests or any other procedures, an appropriate scheme of sampling and inspection should be adopted.

A.1 LOT

In any consignment the number of packages of sheeting of same composition and same construction belonging to one batch of manufacture or supply shall constitute a lot.

A.2 SCALE OF SAMPLING

A.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.

A.2.2 The number of packages to be selected from the lot shall be in accordance with Table 3.

TABLE 3 - Scale of sampling

SL. No. (1)	No. of packages in the lot (2)	No. of packages to be selected (3)	Sub sample size (4)	Acceptance No. (5)
(i)	Up to 90	5	2	0
(ii)	91 to 150	7	2	0
(iii)	151 to 280	9	3	0
(iv)	281 to 500	10	4	0
(v)	501 and above	12	5	1

A.2.3 Packages shall be selected randomly in order to ensure randomness of selection. If necessary tables of random numbers as given in SLS 428 may be used.

A.3 NUMBER OF TESTS

A.3.1 Each package selected as in A.2.2 shall be examined for the requirements given in Clauses 3.3, 3.12, 3.13, 4 and 5.

A.3.2 A sub-sample of size as given in Column 4 of Table 3 shall be taken from the packages examined as in A.3.1. Three test pieces each of 1 metre in length shall be cut from each package at three different locations. Each test piece thus taken shall be tested for the requirements given in 3.5,3.7 and 3.11.

A.3.3 One test piece of length 1 metre shall be cut from each package tested as in A.3.2 and tested for the requirements given in 3.1, 3.2, 3.4, 3.6,3.8, 3.9 and 3.10

A.4 CRITERIA FOR CONFORMITY

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

A.4.1 Each package examined as given in A.3.1 satisfies the relevant requirements

A.4.2 The number of packages not conforming to any one or more requirements when tested as in A.3.2 is less than or equal to the corresponding acceptance number given in Column 5 of Table 3.

A.4.3 Tests carried out on each test piece as in A.3.3 satisfy the relevant requirements.

APPENDIX B

TABLE 4 - Manufacturing guide for sheeting fabrics

Sl No. (1)	Parameter (2)	Requirement (3)	Method of test (4)
(i)	Type of yarn	as given in 3.1	CS 151
(ii)	Weave	Plain	---
(iii)	Linear density of yarn, Tex	36	SLS 44
(iv)	Threads per cm,both ways	22	SLS 41

NOTE

The following tolerance limits may be applied subject to satisfying the requirement given in 3.5.

Linear density of yarn, Tex - ± 5 per cent
Threads per centimetre - Not less than the value given.

SLS CERTIFICATION MARK

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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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.

The Institution is financed by Government grants, and by the income from the sale of its publications and other services offered for Industry and Business Sector. Financial and administrative control is vested in a Council appointed in accordance with the provisions of the Act.

The development and formulation of National Standards is carried out by Technical Experts and representatives of other interest groups, assisted by the permanent officers of the Institution. These Technical Committees are appointed under the purview of the Sectoral Committees which in turn are appointed by the Council. The Sectoral Committees give the final Technical approval for the Draft National Standards prior to the approval by the Council of the SLSI.

All members of the Technical and Sectoral Committees render their services in an honorary capacity. In this process the Institution endeavours to ensure adequate representation of all view points.

In the International field the Institution represents Sri Lanka in the International Organization for Standardization (ISO), and participates in such fields of standardization as are of special interest to Sri Lanka.

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