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SRI LANKA STANDARD 284 : 1974

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SPECIFICATION ON PLAIN WOVEN HANDLOOM COTTON PYJAMA CLOTH

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BUREAU OF CEYLON STNDRDS

SPECIFICATION ON PLAIN WOVEN HANDLOOM COTTON PYJAMA CLOTH

S.L.S. 284 : 1974

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BUREAU OF CEYLON STANDARDS
53, DHARMAPALA MAWATHA,
COLOMBO 3

Sri Lanka Standards are subject to periodical revision in order to accommodate 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.

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SRI LANKA STANDARD SPECIFICATION ON PLAIN WOVEN HANDLOOM COTTON PYJAMA CLOTH

FOREWORD

This Sri Lanka Standard Specification was prepared by the Drafting Committee on Cotton Textiles. It was approved by the Textiles Divisional Committee of the Bureau of Ceylon Standards, and was authorised for adoption and publication by the Council of the Bureau on 28th August 1974.

All quantities and dimensions specified in this draft standard are given in the inch/pound system of units to which the industry is accustomed. In view of the Sri Lanka Government's decision to change over to the International System of Units (SI), the metric equivalents have also been given in brackets.

These equivalent values have been calculated in accordance with C.S. 116 : Ceylon Standard on Principles of Conversion and rounded off in accordance with C.S. 102 : Ceylon Standard on Presentation of Numerical Values. The equivalent tex values have been calculated in accordance with C.S. 18 : Ceylon Standard on yarn count systems and their conversions.

1. SCOPE

This specification prescribes constructional details and other requirements pertaining to plain woven handloom cotton pyjama cloth with stripes. This standard does not specify the general appearance, feel etc. of the cloth.

2. DEFINITIONS

2.1 Plain weave — A simple weave in which each yarn of the weft passes alternately over and under a yarn of the warp, and each yarn of the warp-passes alternately over and under a yarn of the weft.

3. GENERAL REQUIREMENTS

3.1 Yarn — The yarn used in the manufacture of cloth shall be such that the cloth produced complies with the requirements of this standard (see also approximate count of yarn indicated in Table 1).

3.2 Cloth — The cloth when visually examined, shall be reasonably free from any defects, and shall be free from blueing, and other substances that cause tendering.

4. SPECIAL REQUIREMENTS

4.1 Construction — The cloth shall comply with the requirements of any one of the types specified in Table 1. The permissible tolerances for the various requirements and methods of test shall be as prescribed in this table.

4.2 — Colour fastness — The cloth shall be fast to daylight, washing, bleaching and perspiration. The colour fastness rating shall be in accordance with the requirements of Table 2 when tested by the relevant methods given.

TABLE 1—CONSTRUCTIONAL DETAILS OF COTTON PYJAMA CLOTH

Type	Count of Yarn Cotton Count (Tex)		Ends per inch (10mm)	Picks per inch (10mm)	Mass in ozs. per sq. yd. (kg. per sq. m.)	Minimum breaking-load in lbf. (decanewton)	
	warp	weft				warp	weft
1	2/100s (2/6)	50s (12)	84 (33)	90 (35)	2.5 (0.08)	61.7 (27.4)	48.0 (21.4)
2	50s (12)	50s (12)	84 (33)	90 (35)	2.5 (0.085)	49.9 (22.2)	48.0 (21.4)
3	40s (15)	40s (15)	76 (29)	80 (31)	2.8 (0.09)	53.4 (23.8)	50.0 (22.2)
4	40s (15)	30s (20)	76 (29)	72 (28)	3.0 (0.10)	53.4 (23.8)	55.5 (24.7)
5	40s (15)	50s (12)	80 (31)	80 (31)	2.6 (0.08)	56.3 (25.0)	42.5 (18.9)
6	30s (20)	40s (15)	78 (30)	68 (26)	3.1 (0.11)	73.1 (32.5)	42.5 (18.9)
	Tolerance						
	±5%	±5%	±5%	±5%	±5%	—	—
Methods of Test			C.S. 44*	C.S. 41**	C.S. 42†	C.S. 43‡	

* C. S. 44 — Method for the determination of the count of yarn removed from fabric, free from added matter.

** C. S. 41 — Method for the determination of the number of threads per inch in woven fabric.

† C. S. 42 — Method for the determination of weight per unit length and per unit area of woven or knitted fabric.

‡ C. S. 43 — Method for the determination of breaking load and extension strips of woven textile fabric.

TABLE 2—COLOUR FASTNESS REQUIREMENTS

Fastness to	Numerical rating	Method
Daylight	5 or better	C.S. 62*
Washing	4 or better	C.S. 55**
Bleaching	4 or better	C.S. 88†
Perspiration	4 or better	C.S. 67††

4.3 Scouring loss

4.3.1 The scouring loss of cloth shall not exceed 2.5 per cent.

4.3.2 The percentage scouring loss of cloth shall be determined by the method described in C.S. 87. ‡

4.4 pH value

4.4.1 The pH value of the aqueous extract of the cloth shall be not less than 6 or more than 8.5.

4.4.2 The pH value of the aqueous extract of the cloth shall be determined by the cold method described in C.S. 86. ‡‡

4.5 Shrinkage

4.5.1 The shrinkage of cloth warp way or weft way shall not be more than 6 per cent of the unshrunk material.

4.5.2 The warp way and weft way shrinkage of cloth shall be evaluated by the method described in C.S. 47. §

4.5.3 The mean of all values obtained for warpway shrinkage (expressed as the percentage of warpway shrinkage shall be taken as the percentage of warpway shrinkage of the lot.

* C. S. 62 — Method for determination of colour fastness of textile materials to daylight.

** C. S. 55 — Method for the determination of colour fastness of textile material to washing at 95°c for 30 minutes (test 4).

† C. S. 88 — Method for the determination of colour fastness of textile material to bleaching with hypoclorite.

†† C. S. 67 — Method for determination of colour fastness of textile materials to perspiration.

‡ C. S. 87 — Method for the determination of scouring loss in grey and finished cotton textile materials.

‡‡ C.S. 86 — Method for the determination of pH value of aqueous extracts of textile materials.

§ C.S. 47 — Method for shrinkage of fabrics cold water immersion test.

4.5.4 The mean of all values obtained for weftway shrinkage (expressed as the percentage of the dimension before test) shall be taken as the percentage of weftway shrinkage of the lot.

4.6 Width

4.6.1 The width of types listed in Table 1 exclusive of selvedge shall be 27 in (690 mm), 36 in (910 mm) 50 in (1270 mm) or as mutually agreed between the buyer and the seller.

4.6.2 The selvedges shall be straight and evenly woven and at least 0.2 in (5 mm) in width.

4.6.3 The width of each piece in the sample under test shall not vary at any place by more than 2 per cent below or 4 per cent above the specified width.

4.6.4 Width of the cloth in a lot shall be determined according to the method described in C.S. 46*.

4.7 Length

4.7.1 The length of cloth in a lot shall be as specified in an agreement between the buyer and the seller, or, in the case of partial delivery as may have been declared or marked.

4.7.2 The length of each of the pieces constituting the sample under test (Clause 7.4) shall be determined according to the method described in C.S. 45**.

4.8 Skewness

4.8.1 The mean skewness of weft shall not exceed 6 per cent and the value at any part of the fabric shall not exceed 10 per cent.

4.8.2 The percentage of mean skewness shall be determined by the method described in C.S. 89†.

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* C. S. 46 — Method for the determination of width of woven or knitted fabrics when relaxed at zero tension.

** C. S. 45 — Method for determination of length of woven or knitted fabric when relaxed at zero tension.

† C. S. 89 — Method for the determination of bow and skewness in woven fabric.

5. PACKING

Cloth shall be packed in a manner acceptable to the purchaser in single pieces or in bales.

5.1 **Single pieces**— The fabric shall be completely wrapped in paper or synthetic sheeting which shall not contain any water soluble dyes capable of staining the fabric on wetting.

5.2 **Bales**— The pieces having the required yardage shall be completely wrapped with stout paper, water proof paper and jute hessian. Only pieces of the same variety and finish shall be packed together in the same bale or carton.

6. LABELLING AND MARKING

6.1 **Labelling**— The following information shall appear in legible and indelible marking on a label securely attached to the end of each piece.

(a) Manufacturer's name or trade mark or both
(b) Finish, where applicable
(c) Width in inches (c.m.)
(d) Length in yards (metres), and
(e) The number of the piece.

6.2 **Marking** — The following information if required by the purchaser shall appear in legible and indelible marking on the outside of each bale or carton.

(a) Package number and contents,
(b) Gross mass in ozs. (*g*)
(c) Finish, where applicable,
(d) Width in inches (c.m)
(e) Total length of pieces in yards (metres), and
(f) Number (quantity) of pieces.

7. SAMPLING

7.1 **Sealed Sample**

7.1.1 If, in order to illustrate or specify the general appearance, feel, etc., of cloth, sample has been agreed upon and sealed, the supply shall be in conformity with, the sample in such respects.

7.1.2 The custody of the sealed sample shall be a matter of prior agreement between the buyer and the seller.

7.2 **Lot** — The quantity of cloth of the same type and quality delivered to one buyer against one despatch note shall constitute a lot.

7.3 Unless otherwise agreed upon between the buyer and the seller, the number of pieces of cloth to be selected at random from a lot shall be in accordance with column 2 of Table 3. These pieces shall be selected from at least 10 per cent of the bales, an equal number of pieces, as far as possible, being drawn at random from each bale.

TABLE 3. SAMPLE SIZE AND CRITERIA FOR CONFORMITY

Number of pieces in the lot	Sample size (No. of pieces to be selected)	Permissible number of non-conforming pieces	Sub-sample size (No. of pieces to be selected)
(1)	(2)	(3)	(4)
Up to 100	10	0	5
101 to 300	15	1	6
301 to 500	25	1	7
501 to 800	35	2	8
801 to 1,300	50	3	9
1,301 and above	75	4	10

7.4 For evaluating (a) ends and picks, (b) mass, (c) width, and (d) length, the samples selected as in column 2 of Table 3, shall constitute the test sample.

7.5 For evaluating (a) breaking load, (b) colour fastness, (c) scouring loss, (d) pH value, (e) shrinkage or elongation, the number of pieces of cloth specified in column 4 of Table 3 shall constitute the test sample; these pieces may be drawn from the pieces selected for the purpose of Clause 7.4. The required test specimens shall be drawn from each of the pieces and subjected to corresponding tests.

7.6 **Criteria for conformity** — The lot shall be considered to be in conformity with the requirements of this standard, if the following conditions are satisfied.

(a) The number of non-conforming pieces with respect to (1) ends and picks, (2) mass, and (3) width, does not exceed the corresponding number given in Column 3 of Table 3.

(b) In the case of length, the length of each piece is not less than the specified, declared or marked length. If it is, the mean percentage of deficiency in length is determined and made applicable to the lot.

(c) From the observed values of the breaking load tests in respect of each piece in the test sample, the average breaking load value is calculated. From all such average values, the grand average $\bar{\bar{x}}$ and the range R_1 is calculated and the value of the expression : $\bar{\bar{x}} - 0{-}4R_1$ is found to be greater than or equal to the specified value.

(d) From the observed values of shrinkage or elongation, the average $\bar{x}$ and the range R are calculated and the value of the expression $\bar{x} + 0.4R$ is less than or equal to the specified value.

(e) From the observed pH values, the average $\bar{x}$ and the range R are calculated and the value of the expression $\bar{x} + 0.4R$ and $\bar{x} - 0.4R$ lie within the specified limits.

(f) From the observed value of scouring loss, the average $\bar{x}$ and the range R are calculated and the value of the expression $\bar{x} + 0.4R$ is less than or equal to the specified limit.

(g) The colour fastness ratings for various agencies obtained on tests satisfy the corresponding requirements.

NOTE 1 — The average breaking load value for a piece is the value obtained by dividing the sum of observed values in respect of the test specimens taken from the piece, by the number of test specimens. The grand average $\bar{\bar{x}}$ is the value obtained by dividing the sum of the average breaking load values in respect of all the pieces in the test sample, by the number of pieces tested.

NOTE 2 — The range R1 is the difference between the maximum and the minimum in a set of average breaking load values for the pieces tested.

NOTE 3 — Average $\bar{x}$ is the value obtained by dividing the sum of the observed values by the number of tests.

NOTE 4 — Range R is the difference between the maximum and the minimum in a set of observed values.

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