# भारतीय मानक ब्यूरो BUREAU OF INDIAN STANDARDS

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## भारतीय मानक मसौदा

# वस्त्रादि – हथकरघा सूती ब्लीडिंग मद्रास – विशिष्टि

( आई एस 1937 का दूसरा पुनरीक्षण )

Draft Indian Standard

# TEXTILES — HANDLOOM COTTON BLEEDING MADRAS — SPECIFICATION

(Second Revision of IS 1937)

#### ICS 59.080.30

Handloom and Khadi Sectional Committee,	Last date for receipt of comment is
TXD 08	27 April 2024

#### **FOREWORD**

(Formal clauses will be added later)

Handloom Cotton Bleeding Madras is a special type of fabric made using traditional methods in the Madras region of India, now called Chennai. The term bleeding refers to how the colors of the fabric slightly fade or blend when washed, giving it a charming appearance.

This fabric is usually crafted from light cotton and is famous for its colorful striped or checked designs. It feels soft and airy, perfect for making various clothing items like shirts, dresses, scarves, and sarees.

This standard was originally published in 1961 and subsequently revised in 1987. The standard has again been revised to incorporate the following changes:

- a) Marking clause has been modified;
- b) References to Indian Standards have been updated;
- c) Method of test for count of yarn along with its tolerance has been specified;
- d) Sampling clause has been modified; and
- e) Test method for identification of material has been incorporated.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2:2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

#### 1 SCOPE

- **1.1** This standard prescribes the constructional particulars and other requirements of handloom cotton bleeding Madras.
- **1.2** This standard does not specify the type of finish, general appearance, lustre and feel of cloth, nor does it specify the colour or colour combination in striped or checked cloth.

#### **2 REFERENCES**

The standards listed in Annex A contain provisions which through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated in Annex A.

#### **3 MANUFACTURE**

#### 3.1 Yarn

The cotton yarn used in the manufacture of handloom cotton bleeding Madras shall conform to the requirements of IS 171.

#### 3.2 Cloth

The cloth shall be free from substances liable to cause subsequent tendering.

#### **4 REQUIREMENTS**

**4.1** The constructional particulars of Bleeding Madras shall conform to those given in Table 1.

**Table 1 Constructional Particulars of Handloom Cotton Bleeding Madras** 

(*Clause* 4.1)

Sl No.	Variety	Count of Yarn	for Guidance	Ends/	Picks/	Mass	Length	Width	Weave
		Only		dm	dm	g/m <sup>2</sup>	m	cm	
		Warp Cotton	Weft Cotton						
		Count (tex)	Count (tex)						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
i)	Loomstate	60s (9.5)	40s ( 14.8)	330	330	90	0	107 or 115	
	Loomstate	008 (9.3)	408 ( 14.6)	330	330	90	or 40 r as ŗreed	or as agreed	plain
ii)	Washed	60s (9.5)	40s ( 14.8)	340	340	85	20 or 40 or as agreed	104 or 112	piaiii
	vv asiieu	008 (9.3)	408 ( 14.6)	340	340	65	2	or as agreed	
Tolerance,		± 5	. 5		± 5			- 2	
Percent		± 3	± 5		± 3			- Z	_
Method of									
Test, Ref		IS 34	142	IS 1	963	IS 1964	IS 19	54	Visual
to									
NOTE — The length shall not be less than the declared or marked value.									

**4.2** The other requirements of the cloth shall conform to those given in Table 2.

**Table 2 Requirements of Handloom Cotton Bleeding Madras** (Clause 4.2)

Sl No.	Characteristic	Requirement	Method of Test, Ref
		_	to
(1)	(2)	(3)	(4)
i)	Colour fastness to light	4 or better	IS/ISO 105-B01
			or
			IS/ISO 105-B02
ii)	Scouring loss, percent, <i>Max</i>		IS 1383
	a) Loomstate	8	
	b) Washed	2.5	
iii)	Dimensional change, percent, Max:		IS 2977
	a) Loomstate		
	1) Warp way	5	
	2) Weft way	2	
	b) Washed		
	1) Warp way	2.5	
	2) Weft way	1	
iv)	Fiber identification	100 percent cotton	IS 667

- **4.3** The colour of the cloth shall bleed when tested by the method prescribed in Annex B.
- **4.4** If, in order to illustrate or specify the type of finish, general appearance, lustre and feel, and colour or the colour combination in the striped or checked cloth, a sample has-been agreed upon and sealed, the supply shall be in conformity with the sample in such respects.
- **4.4.1** The custody of the sealed sample shall be a matter of prior agreement between the buyer and the seller.

#### **5 INSPECTION**

- **5.1** The cloth, when visually inspected, shall be reasonably free from following defects:
  - a) More than two adjacent ends running parallel, broken or missing beyond 20 cm;
  - b) Weft crack or more than two missing picks across the width of the material;
  - c) Prominently noticeable weft bar due to the difference in raw material, count, twist, lustre, etc:
  - d) Noticeable selvedge defects;
  - e) Noticeable warp or weft floats in the body;
  - f) Noticeable oil and other stains;
  - g) Noticeable hole, cut or tear up to 3 mm size;
  - h) Smash rupturing the texture of the fabric;

- j) Undressed snarls noticeable throughout the piece;
- k) Conspicuous gout due to foreign matter, usually lint or waste woven;
- m) Conspicuous broken pattern;
- n) Prominently noticeable dyeing defects; and
- p) Any other flaw which mar the appearance or affect the serviceability and/or durability of cloth.
- **5.1.1** A reference may be made to IS 14466 for details of these defects.

#### **6 SAMPLING**

- **6.1** The quantity of handloom cotton bleeding madras of the same variety delivered to a buyer against a despatch not shall constitute a lot.
- **6.2** To ascertain the conformity of the lot to the requirements of this standard, samples shall be drawn and inspected from each lot separately.
- **6.3** The number of pieces to be selected at random for inspection shall be in accordance with Table 3.

**Table 3 Sample Size and Permissible Number of Non-Conforming Pieces** (Clause 6.3)

Sl No.	Lot Size	Sample Size	Permissible No. of Non-Conforming Pieces	Sub Sample Size
(1)	(2)	(3)	(4)	(5)
i)	Up to 90	5	0	3
ii)	91 to 150	8	0	3
iii)	151 to 500	13	1	5
iv)	501 to 1200	20	1	5
v)	1201 to 10000	32	2	8
vi)	10001 to 35000	50	3	8
vii)	35001 to 500000	80	5	13
viii)	500001 and above	125	7	13

### 6.4 Number of Tests and Criterion for Conformity

Sl No.	Characteristic(s)	No. of Tests	Criterion for	
			Conformity	
(1)	(2)	(3)	(4)	
i)	Count of yarn, length, width,	According to co1 (3) of	Permissible number of	
	ends, picks, mass and weave	Table 3	non-conforming piece	
			does not exceed the	

			corresponding number given in co1 (4) of Table 3
ii)	Colour fastness, dimensional	According to co1 (5) of	All the test specimens
	changes, scouring loss, and	Table 3	meet the relevant
	fibre identification		requirements

#### 7 MARKING

- **7.1** The cloth shall be suitably marked or labelled with the following information:
  - a) Name of the material;
  - b) Manufacturer's name, initials or trade-mark;
  - c) Length and width;
  - d) Count of warp and weft yarn;
  - e) Indication of the source of manufacture; and
  - f) Other declarations required as per law in force.

#### 7.2 BIS Certification Marking

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act*, 2016 and the Rules and Regulations framed thereunder, and the product may be marked with the Standard Mark.

#### **8 PACKING**

Unless otherwise agreed upon by the buyer and the seller, the cloth shall be packed in bales or cases in conformity with the procedure laid down in IS 1347 or IS 293.

# ANNEX A

(Clause 2)

## LIST OF REFFERED STANDARDS

IS No.	Title
IS 171: 1993	Textiles — Ring spun grey cotton yarn for weaving — Specification (fourth revision)
IS 293: 1980	Code for seaworthy packaging of cotton yarn and cloth (third revision)
IS 667: 1981	Methods for identification of textile fibres (first revision)
IS 1347 : 1972	Specification for inland packaging of cotton cloth and yarn (first revision)
IS 1383 : 2023	Methods for determination of scouring loss in grey and finished cotton textile materials ( <i>second revision</i> )
IS 1954 : 1990	Determination of length and width of woven fabrics — Methods (second revision)
IS 1963 : 1981	Methods for determination of threads per unit length in woven fabrics (second revision)
IS 1964 : 2001	Textiles — Methods for determination of mass per unit length and mass per unit area of fabrics ( <i>second revision</i> )
IS 2977 : 1989	Fabrics (other than wool) — Method for determination of dimensional changes on soaking in water ( <i>first revision</i> )
IS 3442 : 2023	Textiles method for determination of crimp and linear density of yarn removed from fabric
IS 14466 : 1997/ ISO 8498 : 1990	Fabrics — Description of defects — Vocabulary
IS/ISO 105-B01 : 2014	Textiles — Tests for colour fastness — Part B01 Colour fastness to light: Daylight
IS/ISO 105-B02 : 2014	Textiles — Tests for colour fastness — Part B02 Colour fastness to artificial light: Xenon arc fading lamp test

#### ANNEX B

(*Clause* 4.3)

#### METHOD OF TEST FOR BLEEDING

#### **B-I TEST SPECIMENS**

**B-l.1** Cut from the sample under test two test specimens each measuring approximately  $10 \text{ cm} \times 10 \text{ cm}$ . Keep one of the test specimens as the control sample.

#### **B-2 PROCEDURE**

- **B-2.1** Immerse one test specimen in a mild soap solution (2 g/l), the liquor to specimen ratio being 50 : 1. Maintain the temperature of the soap solution at about 40 °C, Agitate the specimen every five minutes for a period of 20 minutes. Rinse the specimen in cold water and dry at room temperature.
- **B-2.2** Compare the colour of the treated test specimen with that of the untreated control sample. Bleeding is said to take place when the colour of the treated test specimen mute or blend on to the neighbouring colours to produce a mellowed and subdued shade effect.

NOTE — In case of washed cloth, which would have already been muted, there should only be a loss in the overall depth of the shade and muting will not be pronounce in character in comparison with the control sample.