# भारतीय मानक ब्यूरो BUREAU OF INDIAN STANDRADS

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# भारतीय मानक मसौदा

# वस्त्रादि – हथकरघा सूती केलिको, विरंजित या रंगीन – विशिष्टि

( आई एस 1241 का दूसरा पुनरीक्षण )

Draft Indian Standard

# TEXTILES — HANDLOOM COTTON CALICO, BLEACHED OR DYED — SPECIFICATION

(Second Revision of IS 1241)

## ICS 59.080.30

Handloom and khadi sectional committee,

TXD 08

Last date for receipt of comment is
14 April 2024

## **FOREWORD**

(Formal clauses will be added later)

Handloom cotton calico is a type of fabric that holds cultural significance and woven using traditional handloom techniques. Handloom cotton calico is lightweight and breathable, making it ideal for warm weather garments such as dresses, blouses, and skirts. Its softness adds comfort to the wearer, allowing for easy movement throughout the day. Handloom cotton calico represents a blend of tradition, craftsmanship, and practicality, making it a cherished fabric in various cultural contexts.

This standard was originally published in 1958 and subsequently revised in 1987. The standard has again been revised to incorporate the following changes:

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

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, shall be rounding 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 constructional particulars and other requirements of handloom cotton calico, bleached or dyed.
- **1.2** This standard does not specify the type of finish, general appearance, lustre and feel of cloth nor does it specify the degree of whiteness of bleached cloth or the colour of dyed 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 edition of the standards indicated in Annex A.

# **3 MANUFACTURE**

# 3.1 Yarn

The cotton yarn used in the manufacture of calico cloth shall conform to 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 calico cloth shall conform to those given in Table 1.
- **4.2** The calico cloth shall also conform to the requirements given in Table 2.
- **4.3** If in order to illustrate or specify the indeterminable characteristics such as general appearance, lustre, feel, and shade of the cloth, a sample has been agreed upon and sealed, the supply shall be in conformity with the sample in such respects.
- **4.3.1** 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, should be reasonably free from the following defects:
  - a) Weft crack or more than two missing picks across the width;
  - b) Prominently noticeable weft bar due to the difference in raw material, count, twist, lustre, colour, shade, etc;
  - c) More than two adjacent ends running parallel, broken or missing and extending beyond 15 cm:
  - d) Prominent selvedge defects;
  - e) Noticeable warp or weft float;
  - f) Noticeable oil or other stains;
  - g) Noticeable hole, cut or tear up to 3 mm in size;
  - h) Smash rupturing the texture of the fabric; and
  - j) Prominently noticeable dyeing defects (bars, streaks and patches, etc).
- **5.1.1** A reference may be made to IS 14466 for details of these defects.

**Table 1 Constructional Particulars of Handloom Cotton Calico Cloth, Bleached or Dyed** (Clause 4.1)

Sl No.	Characteristics	Requirement	Method of Test
(1)	(2)	(3)	(4)
i)	Count of yarn (for guidance only)		IS 3442
	Tex (cotton count)		
	a) Warp	23 tex (or 26 <sup>s</sup> )	
	Tolerance	± 5 percent	
	b) Weft	23 tex (or 26 <sup>s</sup> )	
	Tolerance	± 5 percent	
ii)	Number of threads, per dm		IS 1963
	a) Ends	270	
	Tolerance	± 5 percent	
	b) Picks	120	
	Tolerance	± 5 percent	
iii)	Weight of fabric, g/m <sup>2</sup>	120	IS 1964
	Tolerance	± 5 percent	
iv)	Dimension		IS 1954
	a) Length, m	As declared	
	Tolerance	(see Note)	
	b) Width, m Tolerance	90 or as declared -2 percent	
v)	Weave	Plain	Visual
NOTE — The length shall not be less than the declared length.			

## **6 SAMPLING**

- **6.1** The scale of sampling and criteria for conformity as given in IS 3919 shall be followed in respect of physical characteristics, namely, number of threads per decimetre, weight and dimension.
- **6.2** The scale of sampling and criteria for conformity as given in IS 5463 shall be followed in respect of chemical characteristics of colour fastness, dimensional changes, fibre identification and scouring loss.

#### 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) Month and year of manufacture;
  - d) Length and width of piece;
  - e) Indication of the source of manufacture; and
  - f) Other declarations required as per law in force.

# 7.2 BIS Certification Marking

The product 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 preferably be packed in bales or cases in conformity with the procedure laid down in IS 1347 or IS 293.

**Table 2 Requirements of Handloom Cotton Calico Cloth, Bleached or Dyed** (*Clause* 4.2)

Sl No.	Characteristics	Requirement	Method of Test
(1)	(2)	(3)	(4)
i)	Colour fastness rating to (for dyed		
	cloth only)		
	a) Light	5 or better	IS/ISO 105-B01 or
			IS/ISO 105-B02
	b) Washing Test 4:		IS/ISO 105-C10
	1) Change in colour	4 or better	
	2) Staining in cotton	4 or better	
	c) Bleaching:		IS/ISO 105-N01
	1) Change in colour	4 or better	
	2) Staining in cotton	4 or better	
	d) Perspiration:		IS/ISO 105-E04
	1) Change in colour	4 or better	
	2) Staining in cotton	4 or better	
ii)	Dimensional change, percent, Max	4	IS 2977

iii)	Scouring loss, percent, Max	2.5	IS 1383
iv)	Fibre identification	100 percent cotton	IS 667

# ANNEX A

(Clause 2)

# LIST OF RFERRED INDIAN 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
IS 667: 1981	revision)
	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 (second revision)
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 (second revision)
IS 2977: 1989	Fabrics (other than wool) — Method for determination of
	dimensional changes on soaking in water (first revision)
IS 3442: 2023	Textiles method for determination of crimp and linear density
	of yarn removed from fabric
IS 3919: 1966	Methods for sampling cotton fabrics for determination of
	physical characteristics
IS 14466: 1997/	Fabrics — Description of defects — Vocabulary
ISO 8498	
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
IS 5463: 2022	Methods for sampling of cotton fabrics for chemical tests first
	revision
IS/ISO 105-C10 : 2006	Textiles — Tests for colour fastness — Part C10 Colour
	fastness to washing with soap or soap and soda

IS/ISO 105-N01 : 1993 Textiles — Tests for colour fastness — Part N01 Colour

fastness to bleaching: Hypochlorite

IS/ISO 105-E04 : 2013 Textiles — Tests for Colour Fastness — Part E04 Colour

Fastness to Perspiration