भारतीय मानक
Indian Standard

IS 187 : 2022

वस्त्रादि — सूती लट्ठे का कपड़ा — विशिष्टि

(तीसरा पुनरीक्षण)

Textiles — Cotton Long Cloth — Specification

(Third Revision)

ICS 59.080.30

भारतीय मानक ब्यूरो
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September 2022 **Price Group 4**

Man-Made Fibres, Cotton and their Products Sectional Committee, TXD 31

FOREWORD

This Indian Standard (Third Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Man-Made Fibres, Cotton and their Products Sectional Committee had been approved by the Textiles Division Council.

Long cloth refers to a plain cotton cloth originally made in comparatively long pieces. It was used principally for underclothing and shirts. Variety 1 of this standard is based on IND/TC/0023 Long cloth, white or khaki, issued by the Ministry of Defence, Government of India.

This standard was originally published in 1957 and was subsequently revised in 1965 and 1978. The standard has again been revised to incorporate the following changes:

a) All Amendments have been incorporated.
b) BIS certification marking clause has been modified.
c) References to Indian Standards have been updated.

The composition of the Committee responsible for the formulation of this standard is given in Annex B.

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.

Indian Standard
TEXTILES — COTTON LONG CLOTH — SPECIFICATION
(Third Revision)

1 SCOPE

1.1 This standard prescribes constructional details and other particulars of two varieties of cotton long cloth, bleached or dyed. If agreed, man-made fibres may be blended with cotton.

1.2 This standard does not specify the general appearance, feel, etc, of the cloth (*see* also **4.3**).

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 the cloth shall be satisfactory in evenness and reasonably free from neps and spinning defects.

3.2 Cloth — The cloth shall be bleached or dyed. If bleached it shall have a full bleached finish. It shall be free from blueing or optical whitening agents. Chlorine bleach shall not be used for the purpose. The fabric, if dyed, shall be free from banned dyes, banned chemicals and heavy metals.

NOTE — The desired whiteness of cloth shall be achieved only by imparting full bleached finish free from any blueing or whitening agents, if desired by the buyer.

3.2.1 The cloth shall be free from dressing and filling materials and from substances liable to cause subsequent tendering.

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

4 REQUIREMENTS

4.1 Construction — The cloth shall comply with the requirements specified in Table 1 excepting the count of warp and weft which have been given only for guidance.

4.2 Chemical and other requirements of the cloth shall be as given in Table 2.

4.3 Sealed Sample — If, in order to illustrate, indeterminable characteristics such as general appearance, lustre, feel and shade of the cotton long 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 MARKING

5.1 The cloth shall be marked with the following:

a) Name of the material and variety no.;
b) Width and length of the piece;
c) Manufacturer’s name, initials or trade-mark, if any; and
d) Year of manufacture.

Table 1 Constructional Particulars of Long Cloth

(*Clause* 4.1)

Variety No.	**Approximate Count of Yarn** (Cotton Count (tex)		**Ends per cm**	**Picks per cm**	**Mass** g/m^2	**Breaking Strength on 5 × 20 cm Strip,** N (kgf), *Min*		**Length,** m, *Min*	**Width,** cm	**Weave**
	Warp	Weft				Warp	Weft			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	44s (13.5)	44s (13.5)	39	31	100	345 (35)	245 (25)	36 or as agreed	91	Plain
2	22s (27)	22s (27)	26	23	130	385 (39)	285 (29)	36 or as agreed	91	Plain
Tolerance, Percent	—	—	± 5	± 5	+ 5 percent − 2.5	—	—	—	± 2 cm	—
Method of Test	—	—	← IS 1963 →		IS 1964	←IS 1969 (Part 1)→		← IS 1954 →		Visual

Table 2 Chemical Requirements of Cotton Fabrics for Long Cloth
(*Clause* 4.2 *and* 7.2)

Sl No.	Characteristic	Requirement	Method of Test
(1)	(2)	(3)	(4)
i)	Colour fastness to light (Dyed fabrics only) (*see* Note)	4 or better	IS/ISO 105-B01 or IS/ISO 105-B02
ii)	Colour fastness to washing (Dyed fabrics only)	4 or better	IS/ISO 105-C10 [Test Number D (4)]
iii)	Scouring loss, percent, *Max*	2.0	IS 1383 (Mild method)
iv)	*p*H value	6.0 to 8.5	IS 1390
v)	Shrinkage or elongation, percent, *Max*	2.5	IS 2977
vi)	Residual starch, percent, *Max*	0.5	IS 1967
vii)	Water solubles, percent, *Max* (for bleached cloth only)	1.0	IS 3456
viii)	Ash content, percent, *Max* (after removal of water soluble matter)	0.5	IS 199
ix)	Blend composition (for blended fabrics), Percent	As agreed ± 3	IS 1564 IS 1889 (Part 4) IS 2005 IS 2176 IS 2177 IS 3416 IS 3421

NOTE — In case of dispute, the colour fastness to light shall be determined by the method prescribed in IS/ISO 105-B01.

5.1.1 *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(s) may be marked with the Standard Mark.

6 PACKING

The cloth shall be packed in bales or cases in conformity with the procedure laid down in IS 1347 or in IS 293, as required.

7 SAMPLING

7.1 For determining the conformity in respect of the physical characteristics, namely, ends and picks, mass per square metre, breaking load, width and length, the scale of sampling and the criteria for conformity as given in IS 3919 shall be followed.

7.2 For ascertaining the conformity in respect of chemical requirements (*see* Table 2), the scale of sampling and criteria for conformity as given in IS 5463 shall be followed.

ANNEX A

(Clause 2.1)

LIST OF REFERRED INDIAN STANDARDS

IS No.	*Title*
199 : 1989	Textiles — Estimation of moisture, total size or finish, ash and fatty matter in grey and finished cotton textile materials (*third revision*)
293 : 1980	Code for seaworthy packaging of cotton yarn and cloth (*third revision*)
1347 : 1972	Specification for inland packaging of cotton cloth and yarn (*first revision*)
1383 : 1977	Methods for determination of scouring loss in grey and finished cotton textile materials (*first revision*)
1390 : 2022	Textiles — Determination of pH of aqueous extract (*third revision*)
1564 : 1988	Method for quantitative chemical analysis of binary mixtures of cellulose triacetate and certain other fibres (*first revision*)
1889 (Part 4) : 1979	Method for quantitative chemical analysis of binary mixtures of regenerated cellulose fibres and cotton – Part 4 Sulphuric acid method (*first revision*)
1954 : 1990	Determination of length and width of woven fabrics — Methods (*second revision*)
1963 : 1981	Methods for determination of threads per unit length in woven fabrics (*second revision*)
1964 : 2001	Textiles — Methods for determination of mass per unit length and mass per unit area of fabrics (*second revision*)
1967 : 2022	Methods for estimation of residual starch in cotton fabrics after desizing (*first revision*)
1969 (Part 1) : 2018	Textiles — Tensile properties of fabrics — Part 1 Determination of maximum force and elongation at maximum force using the strip method (*fourth revision*)
2005 : 1988	Methods for quantitative chemical analysis of binary mixtures of nylon 6 or nylon 6,6 fibres and certain other fibres (*first revision*)
2176 : 1988	Textiles — Binary mixtures of cellulose acetate and certain other fibres — Methods for quantitative chemical analysis (*first revision*)
2177 : 1988	Textiles — Binary mixtures of cellulose triacetate and secondary cellulose acetate fibres – Methods for quantitative chemical analysis (*first revision*)
2977 : 1989	Fabrics (other than wool) — Method for determination of dimensional changes on soaking in water (*first revision*)
3416 : 1988	Method for quantitative chemical analysis of binary mixtures of polyester fibres with cotton or regenerated cellulose (*second revision*)
3421 : 1988	Textiles — Binary mixtures of acrylic, certain modacrylics and certain other fibres – Methods for quantitative chemical analysis (*first revision*)
3456 : 2022	Method for determination of water soluble matter of textile materials (*first revision*)

IS No.	*Title*
3919 : 1966	Methods for sampling cotton fabrics for determination of physical characteristics
5463 : 1969	Methods for sampling of cotton fabrics for chemical tests
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/ISO 105-C10 : 2006	Textiles — Tests for colour fastness Part C10 Colour fastness to washing with soap or soap and soda

ANNEX B
(*Foreword*)

COMMITTEE COMPOSITION

Man-Made Fibers, Cotton and their Products Sectional Committee,
TXD 31

Organization	*Representative(s)*
ICAR – Central Institute for Research on Cotton Technology, Mumbai	DR P. K. MANDHYAN (***Chairman***)
Ahmedabad Textile Industry's Research Association, Ahmedabad	SHRIMATI DEEPALI PLAWAT SHRI JIGAR DAVE (*Alternate*)
Association of Synthetic Fibre Industries, New Delhi	SHRI M. S. VERMA
AYM Syntex Ltd, Dadra and Nagar Haveli	SHRI ARNAB SAMANTHA SHRI SAUGATA DAS (*Alternate*)
Confederation of Indian Textile Industry, New Delhi	SHRI D. K. NAIR SHRI SHAJU MANGALAM (*Alternate*)
Consumer Guidance Society of India, Mumbai	DR SITARAM DIXIT DR M. S. KAMATH (*Alternate*)
Cotton Association of India, Mumbai	SECRETARY
Defence Materials and Stores Research and Development Establishment, Kanpur	SHRI ASHOK KUMAR YADAV SHRI BISWA RANJAN DAS (*Alternate*)
Grasim Industries Limited, Vadodara	SHRI AJAY SARDANA DR ROHITASVA KUMAR (*Alternate*)
ICAR – Central Institute for Research on Cotton Technology, Mumbai	DR SENTHIL KUMAR DR A ARPUTHARAJ (*Alternate*)
JCT Limited, Phagwara	SHRI KHUSHWINDER SINGH DHILLON SHRI ARWINDER SINGH (*Alternate*)
North India Textile Mills Association, Chandigarh	SHRI SANJAY GARG SHRI SIDHARTHA KHANNA (*Alternate*)
Northern India Textile Research Association, Ghaziabad	SHRI SANJEEV SHUKLA SHRIMATI NEHA KAPIL (*Alternate*)
Office of Textile Commissioner, Mumbai	SHRI SOURABH KULKARNI SHRI PRANAV PARASHAR (*Alternate*)

Organization	*Representative(s)*
Reliance Industries Limited, Mumbai	SHRI AJAY GUPTA SHRI KESHAV P PAAREEK (*Alternate*)
Textile Committee, Mumbai	SHRI J. D. BARMAN SHRI P. N. S. SIVAKUMAR (*Alternate*)
The Bombay Textile Research Association, Mumbai	SHRI R. A. SHAIKH SHRIMATI PRAGATI KULKARNI (*Alternate*)
The Cotton Corporation of India Ltd, Navi Mumbai	SHRI P. N. PILLEWAR SHRI V. K. SINHA (*Alternate*)
The Cotton Textile Export Promotion Council, Mumbai	SHRI SIDDARTHA RAJGOPAL
The Southern India Mills Association, Coimbatore	SHRI D. SURESH ANAND KUMAR
The Synthetic & Rayon Textile Export Promotion Council, Mumbai	SHRI S. BALARAJU
The Synthetic and Art Silk Mills Research Association, Mumbai	DR MANISHA MATHUR SHRIMATI ASHWINI A. SUDAM (*Alternate*)
Veermata Jijabai Technological Institute, Mumbai	DR (SMT) SURANJANA GANGOPADHYAY
In personal capacity (*D-618, Maruti Paradise, Sector - 15, CBD-Belapur, Navi Mumbai - 400614.Maharastra*)	SHRI A. SATHEESAN
BIS Directorate General	SHRI J. K. GUPTA, Scientist E and Head (Textiles) [Representing Director General (*Ex-officio*)]

Member Secretary
SHRI MAYUR KATIYAR
Scientist 'B' (Textiles), BIS

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Review of Indian Standards

Review of Indian Standards

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