

वस्त्रादि — हथकरघा सूती गदा  
कपड़ा — विशिष्टि  
( दूसरा पुनरीक्षण )

Textiles — Handloom Cotton Gada  
Cloth — Specification  
( Second Revision )

ICS 59.080.30

© BIS 2024



भारतीय मानक ब्यूरो  
BUREAU OF INDIAN STANDARDS  
मानक भवन, 9 बहादुर शाह ज़फर मार्ग, नई दिल्ली - 110002  
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG  
NEW DELHI - 110002  
[www.bis.gov.in](http://www.bis.gov.in) [www.standardsbis.in](http://www.standardsbis.in)

## FOREWORD

This Indian Standard (Second Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Handloom and Khadi Sectional Committee had been approved by the Textiles Division Council.

This standard was published in 1957 and subsequently revised in 1976. This revision has been brought out to incorporate the following changes:

- a) Test method for identification of material has been incorporated;
- b) Marking clause has been modified;
- c) Sampling clause has been incorporated;
- d) Amendment has been incorporated; and
- e) 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, 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.

*Indian Standard***TEXTILES — HANDLOOM COTTON GADA CLOTH —  
SPECIFICATION***( Second Revision )***1 SCOPE**

**1.1** This standard prescribes the constructional particulars and other requirements of ten varieties of handloom cotton gada cloth, grey.

**1.2** This standard does not specify the general appearance, feel, finish, etc of the gada 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 these standards.

**3 MANUFACTURE**

Gada cloth shall be woven in plain weave using yarn conforming to IS 171. The constructional particulars shall conform to those given in [Table 1](#).

**4 REQUIREMENTS**

Other requirements of gada cloth shall conform to those given in [Table 2](#).

**5 INSPECTION**

The gada cloth when visually inspected should be reasonably free from the following defects (*see* IS 14466):

- a) Weft crack of more than 2 missing picks across the width of the material;
- b) Prominently noticeable weft bar due to the difference in raw material, count, twist, or pick spacing of adjacent groups of weft yarn;
- c) More than two adjacent ends running parallel, broken or missing and extending beyond 15 cm;
- d) Prominent selvage defect;

- e) Noticeable warp or weft float in the body of the material;
- f) Noticeable oil or other stain in the material;
- g) Noticeable hole, cut or tear up to 3 mm in size in the body of the fabric; and
- h) Smash definitely rupturing the texture of the material.

**6 SAMPLING**

**6.1** The quantity of handloom cotton gada cloth 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](#).

**6.4 Number of Tests and Criterion for Conformity**

<i>Sl No.</i>	<i>Characteristic(s)</i>	<i>No. of Tests</i>	<i>Criterion for Conformity</i>
(1)	(2)	(3)	(4)
i)	Visual examination, ends and picks	According to col (3) of <a href="#">Table 3</a>	Permissible number of non-conforming piece does not exceed the corresponding number given in col (4) of <a href="#">Table 3</a>
ii)	Count of yarn, dimensional changes, scouring loss and fibre identification	According to col (5) of <a href="#">Table 3</a>	All the test specimens meet the relevant requirements

**Table 1 Constructional Particulars of Handloom Cotton Gada Cloth**

(Clause 3)

SI No.	Variety No.	Count of Yarn		Ends/cm	Picks/cm
		Warp	Weft		
(1)	(2)	(3)	(4)	(5)	(6)
i)	1	10 s (59 tex)	6 s (100 tex)	14	11
ii)	2	10 s (59 tex)	10 s (59 tex)	14	14
iii)	3	16 s (36 tex)	16 s (36 tex)	17	17
iv)	4	20 s (30 tex)	30 s (20 tex)	19	19
v)	5	20 s (30 tex)	20 s (30 tex)	20	19
vi)	6	30 s (20 tex)	30 s (20 tex)	24	21
vii)	7	34 s (17.5 tex)	34 s (17.5 tex)	24	22
viii)	8	40 s (14.5 tex)	40 s (14.5 tex)	25	24
ix)	9	60 s (10 tex)	40 s (14.5 tex)	34	38
x)	10	60 s (10 tex)	60 s (10 tex)	28	25
Tolerance	-	± 5 percent	± 5 percent	± 5 percent	± 5 percent
Method of Test, Ref to	-	IS 1315		IS 1963	

**Table 2 Other Requirements of Handloom Cotton Gada Cloth**

(Clause 4)

SI No.	Characteristic	Requirement	Method of Test, Ref to
(1)	(2)	(3)	(4)
i)	Dimensional changes, percent, <i>Max</i>	6.0	IS 2977
ii)	Scouring loss, percent, <i>Max</i>	5.0	IS 1383
iii)	Fibre identification	100 percent cotton	IS 667

**Table 3 Sample Size and Permissible Number of Non-Conforming Pieces**

(Clause 6.3)

SI No.	Lot Size	Sample Size	Permissible No. of Non-Conforming Blankets	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 1 200	20	1	5
v)	1 201 to 10 000	32	2	8
vi)	10 001 to 35 000	50	3	8
vii)	35 001 to 500 000	80	5	13
viii)	500 001 and above	125	7	13

## 7 MARKING

7.1 Gada cloth shall be suitably marked 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 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 either in IS 1347 or IS 293.

## ANNEX A

(Clause 2)

## LIST OF REFERRED STANDARDS

<i>IS No.</i>	<i>Title</i>	<i>IS No.</i>	<i>Title</i>
IS 171 : 1993	Textiles — Ring spun grey cotton yarn for weaving — Specification ( <i>fourth revision</i> )	IS 1383 : 2023	Methods for determination of scouring loss in grey and finished cotton textile materials ( <i>second revision</i> )
IS 293 : 1980	Code for seaworthy packaging of cotton yarn and cloth ( <i>third revision</i> )	IS 1963 : 1981	Methods for determination of threads per unit length in woven fabrics ( <i>second revision</i> )
IS 667 : 1981	Methods for identification of textile fibres ( <i>first revision</i> )	IS 2977 : 1989	Fabrics (other than wool) — Method for determination of dimensional changes on soaking in water ( <i>first revision</i> )
IS 1315:1977	Method for determination of linear density of yarns spun on cotton system ( <i>first revision</i> )	IS 14466 : 1997/ ISO 8498 : 1990	Fabrics — Description of defects — Vocabulary
IS 1347 : 1972	Specification for inland packaging of cotton cloth and yarn ( <i>first revision</i> )		

To access Indian Standards click on the link below:

[https://www.services.bis.gov.in/php/BIS\\_2.0/bisconnect/knowyourstandards/Indian\\_standards/isdetails/](https://www.services.bis.gov.in/php/BIS_2.0/bisconnect/knowyourstandards/Indian_standards/isdetails/)

## ANNEX B

*(Foreword)*

## COMMITTEE COMPOSITION

Handloom and Khadi Sectional Committee, TXD 08

<i>Organization</i>	<i>Representative(s)</i>
Weavers Service Centre, Delhi	SHRI VISHESH NAUTIYAL ( <b>Chairperson</b> ) SHRI VIKAS KUMAR ( <i>Alternate</i> )
Center of Excellence for Khadi (COEK) - NIFT, New Delhi	REPRESENTATIVE
Central Pollution Control Board, New Delhi	SHRI P. K. MISHRA SHRI RISHABH SRIVASTAV ( <i>Alternate</i> )
CRPF, New Delhi	SHRI D. P. UPADHYAY SHRI SANJEEV KUMAR SINGH ( <i>Alternate</i> )
Department of Handlooms & Textiles, Chennai	SHRI THIRU R. RAGHUNATH SHRI THIRU K. MUNUSAMY ( <i>Alternate</i> )
Fabindia, New Delhi	REPRESENTATIVE
Flag Foundation of India, New Delhi	SHRI ASHIM KOHLI
Gandhigram Rural Institute, Dindigul	DR B. SENTHIL KUMAR
Haryana Khadi Gramodyog Sangh, Karnal	SHRI PAWAN GARG SHRI R. S. YADAV ( <i>Alternate</i> )
ICAR – Central Institute for Research on Cotton Technology, Mumbai (CIRCOT)	DR SUJATA SAXENA DR A. S. M. RAJA ( <i>Alternate</i> )
Indian Institute of Handloom Technology (IIHT), Salem	DR P. THENNARASU
Indian Institute of Handloom Technology, Jodhpur	DR J. SIVAGNANAM
Indian Institute of Handloom Technology, Varanasi	DR AMIN HIRENBHAI NAVINBHAI SHRI JITENDER TAK ( <i>Alternate</i> )
Indian Institute of Technology, Delhi	DR BIPIN KUMAR DR WAZED ALI ( <i>Alternate</i> )
Indo Tibetan Border Police, New Delhi	SHRI UTTAM KUMAR SHRI ANAND KUMAR ( <i>Alternate</i> )
Jan Sewa Ashram, Aligarh	SHRI R. K. SHARMA SHRI AKHILESH KUMAR AWASTHI ( <i>Alternate</i> )
Karnatka Khadi Gramodyog Samyuktha Sangha, Hubli	SHRI K. V. PATTAR SHRI SHIVANANDA S. MATHAPATI ( <i>Alternate</i> )
Khadi and Village Industries Commission, Mumbai	SHRI VIJAYSRIDHAR DR SENTIL KUMAR C. B. ( <i>Alternate</i> )
Khadi Dyers & Printers, Mumbai	SHRI D. N. BHATT SHRI V. D. JOSHI ( <i>Alternate</i> )

<i>Organization</i>	<i>Representative(s)</i>
Khadi Gramodyog Mandal, Rampur	SHRI RAKESH CHAUDHARY SHRI PRINCE CHAUDHARY ( <i>Alternate</i> )
Kshetriya Khadi Gramodyog Samiti, Dausa	SHRI R. K. SINGH
Madhya Bharat Khadi Sangh, Gwalior	SHRIMATI NEELU MEKLE SHRI HARISH MEKLE ( <i>Alternate</i> )
Mahatma Gandhi Institute for Rural Industrialization, Wardha	SHRI MAHESH KUMAR DR TAPAN RANJAN KAR ( <i>Alternate</i> )
Metpalli Khadi Gramodyog Pratisthan, Metpalli	SHRI G. MADHAV
Ministries of Defence (DGQA), New Delhi	SHRI ARVIND COMPATHANE SHRI N. SENTHIL KUMAR ( <i>Alternate</i> )
Ministries of Health, New Delhi	REPRESENTATIVE
National Handloom Development Corporation Ltd, Gautam Budh Nagar	DR SAKTHIVEL PERUMAL SAMY SHRI JITENDRA TOLAMBIYA ( <i>Alternate</i> )
Northern India Textile Research Association, Ghaziabad	DR M. S. PARMAR SHRI SANJEEV SHUKLA ( <i>Alternate</i> )
Northern Railways, New Delhi	SHRI SANJEEV KUMAR JAIN SHRI RAJESH KUMAR ( <i>Alternate</i> )
Office of the Development Commissioner for Handlooms, New Delhi	SHRI SIDDHARTH SINGH SHRI VINAY KUMAR ( <i>Alternate</i> )
Orient Processes Pvt Ltd, Guwahati	SHRI ROBIN CHANDRA GOSWAMI SHRI RAJ BURAGOHAIN ( <i>Alternate</i> )
Rastriya Khadi Gramodyog Federation, Moradabad	SHRI ANIL KUMAR SINGH SHRI KULDEEP SINGH ( <i>Alternate</i> )
Swastik Gramodyog Samiti, Delhi	SHRI M. L. PATHAK SHRI ABHISHEK DIXIT ( <i>Alternate</i> )
The Cotton Textiles Export Promotion Council (TEXPROCIL) 	DR SIDDHARTHA RAJAGOPAL SHRI RAJESH SATAM ( <i>Alternate</i> )
The Handloom Export Promotion Council, Chennai	DR M. SUNDAR SHRI N. SREEDHAR ( <i>Alternate</i> )
The Tamil Nadu Handloom Weavers' Cooperative Society Ltd, Chennai	SHRI T. N. VENKATESH, I.A.S. SHRI K. KATHIRESAN ( <i>Alternate</i> )
BIS Directorate General	SHRI J. K. GUPTA, SCIENTIST 'E'/DIRECTOR AND HEAD (TEXTILES) [REPRESENTING DIRECTOR GENERAL ( <i>Ex-officio</i> )]

*Member Secretary*  
SHRI SWAPNIL  
SCIENTIST 'B'/ASSISTANT DIRECTOR  
(TEXTILES), BIS





## Bureau of Indian Standards

BIS is a statutory institution established under the *Bureau of Indian Standards Act, 2016* to promote harmonious development of the activities of standardization, marking and quality certification of goods and attending to connected matters in the country.

### Copyright

BIS has the copyright of all its publications. No part of these publications may be reproduced in any form without the prior permission in writing of BIS. This does not preclude the free use, in the course of implementing the standard, of necessary details, such as symbols and sizes, type or grade designations. Enquiries relating to copyright be addressed to the Head (Publication & Sales), BIS.

### Review of Indian Standards

Amendments are issued to standards as the need arises on the basis of comments. Standards are also reviewed periodically; a standard along with amendments is reaffirmed when such review indicates that no changes are needed; if the review indicates that changes are needed, it is taken up for revision. Users of Indian Standards should ascertain that they are in possession of the latest amendments or edition by referring to the website-[www.bis.gov.in](http://www.bis.gov.in) or [www.standardsbis.in](http://www.standardsbis.in).

This Indian Standard has been developed from Doc No.: TXD 08 (23974).

### Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

## BUREAU OF INDIAN STANDARDS

### Headquarters:

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002

Telephones: 2323 0131, 2323 3375, 2323 9402

Website: [www.bis.gov.in](http://www.bis.gov.in)

### Regional Offices:

	Telephones
Central : 601/A, Konnectus Tower -1, 6 <sup>th</sup> Floor, DMRC Building, Bhavbhuti Marg, New Delhi 110002	{ 2323 7617
Eastern : 8 <sup>th</sup> Floor, Plot No 7/7 & 7/8, CP Block, Sector V, Salt Lake, Kolkata, West Bengal 700091	{ 2367 0012 2320 9474
Northern : Plot No. 4-A, Sector 27-B, Madhya Marg, Chandigarh 160019	{ 265 9930
Southern : C.I.T. Campus, IV Cross Road, Taramani, Chennai 600113	{ 2254 1442 2254 1216
Western : 5 <sup>th</sup> Floor/MTNL CETTM, Technology Street, Hiranandani Gardens, Powai Mumbai 400076	{ 25700030 25702715

**Branches :** AHMEDABAD, BENGALURU, BHOPAL, BHUBANESHWAR, CHANDIGARH, CHENNAI, COIMBATORE, DEHRADUN, DELHI, FARIDABAD, GHAZIABAD, GUWAHATI, HARYANA (CHANDIGARH), HUBLI, HYDERABAD, JAIPUR, JAMMU, JAMSHEDPUR, KOCHI, KOLKATA, LUCKNOW, MADURAI, MUMBAI, NAGPUR, NOIDA, PARWANOO, PATNA, PUNE, RAIPUR, RAJKOT, SURAT, VIJAYAWADA.