

वस्त्रादि — हथकरघा सूती गाड़ा
कपड़े — विशिष्टि
(दूसरा पुनरीक्षण)

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

ICS 59.080.30

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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 co1 (3) of Table 3	Permissible number of non-conforming piece does not exceed the corresponding number given in co1 (4) of Table 3
ii)	Count of yarn, dimensional changes, scouring loss and fibre identification	According to co1 (5) of Table 3	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>)		

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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 (Chairperson) 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
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Ministries of Health, New Delhi	REPRESENTATIVE
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Northern India Textile Research Association, Ghaziabad	DR M. S. PARMAR SHRI SANJEEV SHUKLA (<i>Alternate</i>)
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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
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