भारतीय मानक ब्यूरो BUREAU OF INDIAN STANDARDS

Draft for comments only

Doc. No: TXD 08 (24018)

February 2024

(Not to be reproduced without permission of BIS or used as Standard)

भारतीय मानक मसौदा

वस्त्रादि - हथकरघा सूती मद्रास चेक - विशिष्टि

(आई एस 1247 का दूसरा पुनरीक्षण)

Draft Indian Standard

TEXTILES — HANDLOOM COTTON MADRAS CHECK — SPECIFICATION

(Second Revision of IS 1247)

ICS 59.080.30

Handloom and khadi sectional committee, TXD 08

Last date for receipt of comment is 22 April 2024

FOREWORD

(Formal clauses will be added later)

Cotton Madras check is a fabric from Madras, India, now called Chennai. It has a special checked pattern with bright colors and bold designs. People often use it to make shirts, dresses, skirts, and other light clothes, especially in the summer. Its colorful patterns make clothes and accessories look stylish and lively.

This standard was originally published in 1958 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) Test method for identification of material has been incorporated;

- d) Method of test for count of yarn along with its tolerance has been specified; and
- e) Sampling clause has been modified.

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 madras check.
- **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 of check.

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 madras check cloth 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 madras check shall conform to those given in Table 1.
- **4.2** The cloth shall also conform to the requirements given in Table 2.
- **4.3** If, in order to illustrate or specify the type of finish, general appearance, lustre and feel of cloth or to specify the colour or colour combination of check, a sample has been agreed upon and sealed, the supply shall be in conformity with the sample in such respect.
- **4.3.1** The custody of the sealed sample shall be a matter of prior agreement between the buyer and the seller.

Table 1 Constructional Particulars of Handloom Cotton Madras Check (Clause 4.1)

Sl	Characteristic	Requirement		Tolerance	Method of
No.		Loomstate	Washed		Test, Ref to
(1)	(2)	(3)	(4)	(5)	(6)
i)	Count of yarn (for				IS 3442
	guidance only)				
	Cotton count (Tex):				
	a) Warp	60s (9.8)	60s (9.8)	± 5 percent	
	b) Weft	40s (14.8)	40s (14.8)	± 5 percent	
ii)	Number of threads				IS 1963
	per decimetre:				
	a) Ends	330	340	± 5 percent	
	b) Picks	330	340	± 5 percent	
iii)	Mass, g/m ²	90	85	± 5 percent	IS 1964
iv)	Dimensions:				IS 1954
	a) Length, m	As ag	greed	Not less than	
				as declared	
				or marked	
	b) Width, cm	As ag	greed	- 2 percent	
v)	Weave	Pla	in		Visual

Table 2 Requirements of Handloom Cotton Madras Check (Clause 4.2)

Sl	Characteristic	Requirement	Method of Test,
No.			Ref to
(1)	(2)	(3)	(4)
i)	Colour fastness rating to:		
	a) Light	4 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 on cotton	4 or better	
	c) Bleaching		IS/ISO 105-N01
	1) Change in colour	4 or better	
	2) Staining on cotton	4 or better	
ii)	Dimensional changes, 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	
iii)	Scouring loss, percent, <i>Max</i>		IS 1383
	1) Loomstate	8	
	2) Washed	2.5	
iv)	Fiber identification	100 percent cotton	IS 667

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 and extending 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 float 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 would 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 madras check 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.

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	125	7	13
	above			

6.4 Number of Tests and Criterion for Conformity

Sl No.	Characteristic(s)	No. of Tests	Criterion for Conformity
(1)	(2)	(3)	(4)
i)	Length, width, 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, colour fastness, dimensional changes, scouring loss and fibre identification	According to co1 (5) of Table 3	All the test specimens meet the relevant requirements

7 MARKING

7.1 The cloth shall be marked with the following:

- 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 (first revision)
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
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