भारतीय मानक Indian Standard

> वस्त्रादि — हथकरघा सूती हॉलैंड कपड़ा, अनभिमार्जित — विशिष्टि

(दूसरा पुनरीक्षण)

Textiles — Handloom Cotton Holland Cloth, Unscoured — Specification

(Second Revision)

ICS 59.080.30

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October 2024

Price Group 5

Handloom and Khadi Sectional Committee, TXD 08

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 first published in 1957 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;
- d) References to standards have been updated; and
- e) Sampling plan has been modified.

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

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 — HANDLOOM COTTON HOLLAND CLOTH, UNSCOURED — SPECIFICATION

(Second Revision)

1 SCOPE

1.1 This standard prescribes constructional particulars and other requirements of handloom cotton holland cloth, unscoured.

1.2 This standard does not specify the general appearance, lustre, feel, finish, etc of the cloth.

2 REFERENCES

The standards listed in <u>Annex A</u> 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

3.1 Yarn

The cotton yarn used in the manufacture of cloth shall conform to IS 171.

The warp used in the manufacture of cloth shall be unbleached, and the weft, grandrelle yarn (*see* Note) and shall be such that the cloth produced complies with the requirements of this standard.

NOTE — Grandrelle yarn has been defined as a two-ply yarn composed of single yarns which differ from each other in colour or lustre (*see* IS 232).

3.2 Cloth

The cloth shall be free from substances liable to cause subsequent tendering.

4 REQUIREMENTS

4.1 The constructional particulars of cloth 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 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.

The custody of the sealed sample shall be a matter of prior agreement between the buyer and the seller.

5 INSPECTION

The cloth when visually inspected, should be reasonably free from 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, 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; and
- h) Smash rupturing the texture of the fabric.

A reference may be made to IS 14466 for details of the defects.

6 SAMPLING

6.1 Lot

The quantity of handloom cotton holland cloth of the same variety, width and colour delivered to a buyer at a time shall constitute a lot.

6.2 To ascertain the conformity of the lot to the requirements of this standard, sample 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 <u>Table 3</u>.

| Sl No. | Characteristic | Number of Tests | Criteria for Conformity |
|-----------|---|---|--|
| (1) | (2) | (3) | (4) |
| i) | Visual inspection, ends, picks, count, length and width | According to co1 (3) of <u>Table 3</u> | Number of non- conforming pieces shall not exceed the corresponding number given in col (4) of Table 3 |
| ii) | Dimensional change, weight, colour fastness, fibre identification and scouring loss | According to co1 (5) of <u>Table 3</u> | All the pieces shall meet the requirement |

6.4 Number of Tests and Criteria for Conformity

7 MARKING

7.1 The cloth shall be suitably marked or labelled with the following information:

a) Name of the material;

- Manufacturer's name, initials or tradeb) mark;
- Month and year of manufacture; c)
- d) Length and width of the 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(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 preferably be packed in bales or cases in conformity with the procedure laid down either in IS 1347 or IS 293.

| Sl No. | Characteristic | Requirements | Method of Test Ref to |
|--------|---|---|--------------------------|
| (1) | (2) | (3) | (4) |
| i) | Count of yarn (approx) (for guidance only) Tex (cotton count): | | IS 3442 |
| | a) Warp | 37 (or 16s) \pm 5 percent | |
| | b) Weft | 59 (or 10s) \pm 5 percent | |
| ii) | Number of threads, per dm: | | IS 1963 |
| | a) Ends | 200 ± 5 percent | |
| | b) Picks | 170 ± 5 percent | |
| iii) | Weight of fabric, g/m ² | 200 ± 5 percent | IS 1964 |
| iv) | Dimensions: | | IS 1954 |
| | a) Length, m | As declared or agreed (<i>see</i> Note) | |
| | b) Width, cm | 71, 76, 91 or as agreed (- 2 percent tolerance) | |
| v) | Weave | plain | visual |

Table 1 Constructional Particulars of Handloom Cotton Holland Cloth, Unscoured

(Clause 11)

| Sl No. | Characteristic | Requirements | Method of Test, 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 | 3 or better | |
| | 2) Staining on cotton | 3 or better | |
| ii) | Scouring loss, percent, Maximum | 10 | IS 1383 |
| iii) | Dimensional change, percent, Maximum | 5 | IS 9 |
| iv) | Fibre identification | 100 percent cotton | IS 667 |

Table 2 Requirements of Handloom Cotton Holland Cloth, Unscoured

(<u>Clause 4.2</u>)

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

(Clauses 6.3 and 6.4)

| 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 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 |

ANNEX A

(<u>Clause 2</u>)

LIST OF REFERRED STANDARDS

| IS No. | Title | IS No. | Title |
|--|--|-------------------------------------|--|
| IS 9 : 2019/ ISO 675 : 2014 | Textiles — Woven fabrics — Determination of dimensional change on commercial laundering | IS 1963 : 1981 | Methods for determination of threads per unit length in woven fabrics (<i>second</i> <i>revision</i>) |
| | near the boiling point (<i>third revision</i>) | IS 1964 : 2001 | Textiles — Methods for determination of mass per |
| IS 171 : 1993 | Textiles — Ring spun grey cotton yarn for weaving — Specification (fourth | | unit length and mass per unit area of fabrics (second revision) |
| IS 232 : 2020 | revision) Glossary of textile terms — Natural fibres (<i>third</i> <i>revision</i>) | IS 3442 : 2023 | Textiles — Method for determination of crimp and linear density of yarn removed from fabric |
| IS 293 : 1980 | Code for seaworthy packaging of cotton yarn and cloth (<i>third revision</i>) | IS 14466 : 1997/ ISO 8498 : 1990 | (second revision) Fabrics — Description of defects — Vocabulary |
| IS 667 : 1981 | Methods for identification of textile fibres (<i>first</i> <i>revision</i>) | IS/ISO 105-B01 : 2014 | Textiles — Tests for colour fastness: Part B01 Colour fastness to light: |
| IS 1347 : 1972 | Specification for inland packaging of cotton cloth | IS/ISO 105-B02 : | Daylight Textiles — Tests for |
| | and yarn (<i>first revision</i>) | 2014 | colour fastness: Part B02 |
| IS 1383 : 2023 | Methods for determination of scouring loss in grey and finished cotton textile | | Colour fastness to artificial light: Xenon arc fading lamp test |
| | materials (second revision) | IS/ISO 105-C10 : 2006 | Textiles — Tests for colour fastness: Part C10 |
| IS 1954 : 2024/ ISO 22198 : 2006 | Textiles — Fabrics — Determination of width and length (<i>third revision</i>) | | Colour fastness to washing with soap or soap and soda |

To access Indian Standards click on the link below: 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

Organization

Representative(s)

Weavers Service Centre, Delhi

Central Pollution Control Board, New Delhi

Center of Excellence for Khadi (COEK)-NIFT, New Delhi

CRPF, New Delhi

Department of Handlooms & Textiles, Chennai

Fabindia, New Delhi

Flag Foundation of India, New Delhi

Gandhigram Rural Institute, Dindigul

Haryana Khadi Gramodyog Sangh, Karnal

ICAR – Central Institute for Research on Cotton Technology, Mumbai (CIRCOT)

Indian Institute of Handloom Technology, Jodhpur

Indian Institute of Handloom Technology, Salem

Indian Institute of Handloom Technology, Varanasi

Indian Institute of Technology, Delhi

Indo Tibetan Border Police, New Delhi

Jan Sewa Ashram, Aligarh

Karnatka Khadi Gramodyog Samyuktha Sangha, Hubli

Khadi Dyers & Printers, Mumbai

Khadi Gramodyog Mandal, Rampur

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Khadi and Village Industries Commission, Mumbai

Madhya Bharat Khadi Sangh, Gwalior

Mahatma Gandhi Institute for Rural Industrialization, Wardha

Metpalli Khadi Gramodyog Pratisthan, Metpalli

Ministries of Defence (DGQA), New Delhi

Ministries of Health, New Delhi

National Handloom Development Corporation Ltd, Gautam Budh Nagar

Northern Railways, New Delhi

Northern India Textile Research Association, Ghaziabad

Office of the Development Commissioner for Handlooms, New Delhi

Orient Processes Pvt Ltd, Guwahati

Rastriya Khadi Gramodyog Federation, Moradabad

Swastik Gramodyog Samiti, Delhi

The Cotton Textiles Export Promotion Council (TEXPROCIL), Mumbai

The Handloom Export Promotion Council, Chennai

The Tamil Nadu Handloom Weavers' Cooperative Society Ltd, Chennai

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This Indian Standard has been developed from Doc No.: TXD 08 (23976).

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