

भारतीय मानक

वस्त्रादि – विद्युत प्रयोजनों के लिए कॉटन स्ट्रिपिंग टेप – विशिष्ट
(दूसरा पुनरीक्षण)

Indian Standard

**TEXTILES — COTTON STRIPPING TAPE FOR ELECTRICAL
PURPOSES — SPECIFICATION**
(*Second Revision*)

ICS 59.060.10

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भारतीय मानक ब्यूरो
BUREAU OF INDIAN STANDARDS
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FOREWORD

Cotton stripping tapes conforming to this specification are intended for binding the outsides of coils in electrical machinery before impregnation with suitable impregnating varnish and to be stripped off afterwards, so as to leave a clean, even surface on the coils.

This Indian Standard (Second Revision) was adopted by the Bureau of Indian Standards after the draft finalized by the Technical Textiles for Clothtech Applications including Narrow Fabrics and Braids Sectional Committee had been approved by the Textile Division Council.

This standard was first published in 1969 and subsequently revised in 1992. The current revision has been made in the light of experience gained since its publication and to incorporate the following major changes:

- a) Title of the standard has been modified.
- b) BIS certification marking clause has been modified; and
- c) References to Indian Standard given in Annex A has 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 STRIPPING TAPE FOR ELECTRICAL PURPOSES —
SPECIFICATION
(Second Revision)****1 SCOPE**

1.1 This standard prescribes the constructional details and other particulars for three varieties of cotton stripping tape suitable for electrical purpose.

2 REFERENCES

The standards listed indicated 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 The stripping tape shall be woven uniformly and firmly from unbleached cotton yarn. The selvages shall be uniform throughout the length of the tape.

4 REQUIREMENTS**4.1 Physical**

The cotton stripping tape shall comply with the requirements as specified in Table 1.

4.2 Length per Roll

The length of tape per roll shall be 50 metres or its multiple. Each roll shall be free from joints as far as possible. However, 5 percent of the rolls may be permitted to have one joint subject to the condition that each length shall not be less than 20 metres.

4.2.1 The length shall be measured by methods prescribed in IS 1954.

5 PACKING

5.1 The rolls shall be packed in such manner so as to avoid any damage during storage and transit or as per the agreement between the buyer and seller

6 MARKING

6.1 Each roll of tape shall be suitably marked with the following information:

- a) Name of the material,
- b) Variety number,
- c) Length of roll in metres,
- d) Width of tape in mm,
- e) Manufacturer's name, initials or trademark if any; and
- f) Any other information as required by the law in force.

6.2 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(s) may be marked with the Standard Mark.

7 SAMPLING AND CRITERIA FOR CONFORMITY

7.1 Lot

The quantity of stripping tape of the same type and delivered to a buyer against a despatch note shall constitute a lot.

7.2 The conformity of a lot to the requirements of this standard shall be determined on the basis of the tests carried out on the rolls selected from the lot.

Table 1 Constructional Particulars of Cotton Stripping Tape
(Clause 4.1)

Sl. No.	Variety No.	Thickness mm	Width mm	Ends/dm <i>Min</i>	Picks/dm <i>Min</i>	Breaking Load N/mm Thickness/cm Width <i>Min</i>	Weave
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
i)	1	0.125 ± 0.025	15, 20, 25, 30,	330	180	400	Plain
ii)	2	0.2 ± 0.05	40 or	300	160	400	Plain

iii)	3	0.4 ± 0.08	50	270	140	400	Herring Bone
Method of Test		IS 7702	IS 1954	IS 1963		IS 1969	Visual

7.3 The number of rolls shall be selected at random as per IS 4905 as given in Table 2.

7.4 For evaluating (a) width, (b) number of ends, (c) picks per decimetre, (d) thickness, and (e) length, the rolls selected according to **7.3** shall constitute the test sample.

7.5 For evaluating breaking load, the number of rolls specified in col 5 of Table 2 shall constitute the test sample. These rolls may be selected from those drawn for the purposes of **7.4**. One test specimen shall be drawn from each roll thus selected.

7.6 Criteria for Conformity

The lot shall be considered conforming to the requirements of this specification if the following conditions are satisfied:

- a) The number of rolls found defective for any one or more of the characteristics mentioned in **7.4** (except length) does not exceed the corresponding number given in col 4 of Table 2.

NOTE — In case of Length, the value obtained for the length of the each roll shall be compared with its specified, declared or marked length. The mean percentage deficiency in length, if any, shall be determined and made applicable to the lot.

- b) From the observed value for breaking load the average \bar{X} and the range R are calculated and the value of the expression $\bar{X} - 0.4R$ is greater than or equal to the specified value.

Table 2 Sample Size and Criteria for Conformity
(Clauses 7.3, 7.5 and 7.6)

Sl. No.	Lot Size (No. of Rolls)	Sample Size	Permissible No. of Defective Rolls	Sub-Sample Size
(1)	(2)	(3)	(4)	(5)
i)	Up to 100	8	1	5
ii)	101 to 300	13	1	6
iii)	301 to 500	20	2	7
iv)	501 to 1000	32	3	8
v)	1000 and above	50	5	10

Annex A
(Clause 2.1)

LIST OF REFERRED INDIAN STANDARDS

<i>IS No.</i>	<i>Title</i>
1954: 2024	Textiles — Fabrics - Determination of width and length (<i>Third Revision</i>)
1963: 1981	Methods for determination of threads per unit length in woven fabrics (<i>Second Revision</i>)
IS 1969 (Part 1) : 2018	Textiles — Tensile properties of fabrics — Part 1 Determination of maximum force and elongation at maximum force using the strip method (<i>Fourth Revision</i>)
4905: 2015	Random sampling and randomization procedures (<i>First Revision</i>)
7702: 2012	Textiles – Determination of thickness of textiles and textile products (<i>first revision</i>)

ANNEX B

(Foreword)

COMMITTEE COMPOSITION

Technical Textiles for Clothtech Applications including Narrow Fabrics and Braids Sectional
Committee, TXD 39

Organization

Additional Controller CQA (General Stores), DGQA, Ministry of Defence
ICAR - Central Institute for Research on Cotton Technology, Mumbai
Federation of Indian Chambers of Commerce and Industry
Indian Technical Textile Association, Mumbai
M K U Limited, Kanpur
Motilal Dulichand Pvt Ltd, Kanpur
National Textile Corporation, New Delhi
Ordnance Parachute Factory, Kanpur
Office of Textiles Commissioner, Mumbai
SGS Limited, Gurugram
S L Banthia Textiles Industries Pvt Ltd
Shipra International, Kanpur
Sky Industries Ltd, Navi Mumbai
Synthetic and Art Silk Mills Research Association, Mumbai
Thanawala & Co., Mumbai
The Bombay Textile Research, Association, Mumbai
U P Textile Technological Institute, Kanpur
Universal Yarn & Tex Pvt Ltd, Kanpur
BIS Directorate General

Representative(s)

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DR P JAGAJANANTHA
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SHRI ANU HANDA
DR ANUP RAKSHIT
SHRI VIKRAM JAIN (*Alternate*)
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SHRI HUMAYUN K (*Alternate*)
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SHRI SANTOSH KUMAR BANTHIA
SHRI ABHISHEK KUMAR AGRAWAL
SHRI KAPIL MEHROTRA
SHRI MICHAEL (*Alternate*)
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SHRI SHAIKH RIYAZ AHMED
DR PRASANTA KUMAR PANDA (*Alternate*)
DR PRASHANT VISHNOI
SHRI RAJIV K BHARTIYA
SHRI J. K. GUPTA, SCIENTIST 'E'/DIRECTOR and Head (Textiles)
[Representing Director General (*Ex-officio*)]

Member Secretary

SHRI TANISHQ AWASTHI
SCIENTIST 'B'/ASISTANT DIRECTOR
(Textiles), BIS

