

वस्त्रादि — मशीनरी कपड़े, ऊन —
विशिष्टि
भाग 3 साइज़िंग फ्लैनल
(पहला पुनरीक्षण)

Textiles — Machinery Fabrics,
Wool — Specification
Part 3 Sizing Flannel
(First Revision)

ICS 59.080.30

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FOREWORD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Industrial Fabrics Sectional Committee had been approved by the Textiles Division Council.

This standard was first published in 1975 which superseded IS 6055 : 1970 'Specification for sizing flannel.' The present 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) Amendment 1 and 2 have been incorporated in the standard.
- c) References to Indian Standards have been updated.

Sizing flannel is a plain/or twill woven fabric made of wool fibres only or blends of wool and man-made fibres. This cloth is imparted a soft finish on one side which partially conceals the weave. The term flannel refers to woven fabrics which have been fulled to make them denser. The fabrics are also brushed to raise a nap on one or both sides, which gives the fabric a soft, fuzzy texture. Sizing flannel fabric finds its applications in shirts, cardigans, sweaters, vests, sheets, blankets, industrial upholstery and machinery fabrics.

This series of standards on machinery fabrics is published in the following parts:

- Part 1 General;
- Part 2 Clearer cloth;
- Part 3 Sizing flannel;
- Part 4 Plaiding cloth; and
- Part 5 Lapping cloth.

Part 1 covers the general requirements and other particulars regarding marking, packaging, sampling and criteria for conformity of machinery fabrics.

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 — MACHINERY FABRICS, WOOL —
SPECIFICATION
PART 3 SIZING FLANNEL

(*First Revision*)

1 SCOPE

This standard (Part 3) prescribes the manufacturing particulars and other requirements of sizing flannel.

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 these standards.

3 MANUFACTURING PARTICULARS

The manufacturing particulars of sizing flannel are given in Table 1.

Table 1 Manufacturing Particulars of Sizing Flannel
(*Clause 3*)

SI No.	Particulars	Requirements	Methods of Tests
(1)	(2)	(3)	(4)
i)	Composition of yarn		IS 7610 (Part 1)
	a) Warp	All wool or blends of wool with synthetic fibres/flax containing wool content of not less than 80 percent.	
	b) Weft	All wool or blends of wool with synthetic fibres/flax containing wool content of not less than 80 percent.	
ii)	Nominal count of basic yarn (Warp and weft)	100 to 250 tex (Nm 4 to 10)	IS 1315
iii)	Threads per dm		IS 1963
	a) Ends	100 to 135	
	b) Picks	85 to 120	
iv)	Weave	Plain or twill	Visual
v)	Type of finish	Milled or raised (raising may be done on both or either side of the fabric as specified by the buyer).	-

NOTE — The constructional particulars of cloth are left to the choice of the manufacturer subject to the range specified for counts of yarn and number of ends and picks.

4 REQUIREMENTS

The sizing flannel shall conform to the

requirements given in Table 2 in addition to complying with the stipulations laid down in IS 7610 (Part 1).

Table 2 Requirements of Sizing Flannel*(Clause 4)*

Sl No.	Characteristic	Requirement	Method of Test
(1)	(2)	(3)	(4)
i)	Mass, g/m ² Tolerance	350 to 550 + 5 percent on the specified value	IS 1964
ii)	Breaking strength on 5 cm x 20cm		IS 1969 (Part 1) strips (kgf), <i>Min</i>
a)	For fabrics made of wool or blends containing at least 80 percent of Wool fibres in		
	1) warp yarn	60	
	2) Weft way	50	
b)	Other fabrics		
	i) Warp way	200	
	ii) Weft way	75	
iii)	Length, m, <i>Min</i>	25 or as agreed between buyer and seller	IS 1954
iv)	Width, cm	1 37 160 or as agreed between buyer and seller	IS 1954
	Tolerance		± 2.5 cm

ANNEX A
(Clause 2)

LIST OF REFERRED INDIAN STANDARDS

<i>IS No</i>	<i>Title</i>	<i>IS No</i>	<i>Title</i>
IS 1315 : 1977	Method for determination of linear density of yarns spun on cotton system (<i>first revision</i>)	IS 1964 : 2001	Textiles — Methods for determination of mass per unit length and mass per unit area of fabrics (<i>second revision</i>)
IS 1954 : 1990	Determination of length and width of woven fabrics — Methods (<i>second revision</i>)	IS 1969 (Part1) : 2018/ ISO13934- 1 : 2013	Textiles — Tensile properties of fabrics: Part 1 Determination of maximum force and elongation at maximum force using the strip method (<i>fourth revision</i>)
IS 1963 : 1981	Methods for determination of threads per unit length in woven fabrics (<i>second revision</i>)	IS 7610 (Part 1) : 2022	Textiles — Machinery fabrics, wool — Specification: Part 1 General (<i>first revision</i>)

ANNEX B
(Foreword)

COMMITTEE COMPOSITION

Technical Textiles for Industrial Fabrics Sectional Committee, TXD 33

Organization

Representative(s)

PSG College of Technology, Coimbatore	DR G. THILAGAVATHI (<i>Chairperson</i>)
Ahmedabad Textile Research Association, Ahmedabad	SHRIMATI DEEPALI PLAWAT SHRI JIGAR DAVE (<i>Alternate</i>)
Central Coir Research Institute, Alappuzha	DR ANITA JACOB SHRIMATI SUMI SABESTIAN (<i>Alternate</i>)
DKTE Centre of Excellence in Non Wovens, Kolhapur	SHRI ANIKET SBHUTE
Director General of Quality Assurance, Mumbai	SHRI PURUSOTTAM DE
Entermonde Polycoaters Limited, Nashik	DR K. M. S. REDDY SHRI AJEY GODBOLE (<i>Alternate</i>)
Garware Technical Fibres Limited, Pune	SHRI S. J. CHITNIS SHRI RAJENDRA GHADGE (<i>Alternate</i>)
ICAR- National Institute of Natural Fibre Engineering & Technology, Kolkata	DR MANIK BHOWMICK DR SANJOY DEBNATH (<i>Alternate</i>)
Indian Technical Textile Association, Mumbai	DR ANUP RAKSHIT SHRIMATI RUCHITA GUPTA (<i>Alternate</i>)
Kirti Filtration and Automation Pvt Ltd, Vadodara	SHRI KULIN MASTURLAL SHRIMATI KIRTI MASTURLAL (<i>Alternate</i>)
Kusumgar Corporates Pvt Ltd, Mumbai	SHRI Y. K. KUSUMGAR DR M. K. TALUKDAR (<i>Alternate</i>)
Masturlal Pvt Ltd, Mumbai	SHRI SHRAMIK MASTURLAL
Office of the Textile Commissioner, Mumbai	SHRI NAROTTAM KUMAR SHRI AMAR K. CHAPHPEKAR (<i>Alternate</i>)
Ordnance Equipment Factory, Kanpur	SHRI V. K. CHOUDHARY
Pacific Harish Industries Ltd, Mumbai	SHRI MUNJAL UDESHI SHRI S. VENKATESH (<i>Alternate</i>)
Patel Polypack, Ahmedabad	SHRI KALPESH PATEL
Plast India Foundation, Mumbai	SHRI SURENDER CHOUDHARY DR E. SUNDARESAN (<i>Alternate</i>)
PSG College of Technology, Coimbatore	SHRI V. MUTHUKUMAR
Reliance Industries Limited, Navi Mumbai	SHRI MAHESH C SHARMA SHRI RAJENDREN SUBRAMANIAN (<i>Alternate</i>)

<i>Organization</i>	<i>Representative(s)</i>
Salva Laminates Ltd, Vapi	SHRI NIMESH SALVA
SRF Limited, Gurugram	SHRI A. R. RAJESH SHRIMATI ANGELINA DIVYA (<i>Alternate</i>)
Textiles Committee, Mumbai	SHRI J. D. BARMAN SHRI GANESH P. BANGAR (<i>Alternate</i>)
The Bombay Textile Research Association, Mumbai	DR PRASANTA KUMAR PANDA DR SREE KUMAR (<i>Alternate</i>)
The Synthetic and Art Silk Mills Research Association, Mumbai	DR MANISHA MATHUR SHRIMATI ASHWINI SUDAM (<i>Alternate</i>)
Virendra Textiles, Noida	SHRI AMIT GUPTA
Welspun India	SHRI RAJEEV SHARMA SHRI BASUDEV BASU (<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 DHARMBEER
SCIENTIST 'C'/DEPUTY DIRECTOR
TEXTILES, BIS

Bureau of Indian Standards

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Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

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