AFRICAN STANDARD

DARS 1593:2025

First Edition 2025

Textiles — Cotton canvas — Specification

Reference No. DARS
ICS

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This African Standard was prepared by the ARSO/TC 53, Textiles, textile products and accessories.

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Textiles — Cotton canvas — Specification

1 Scope

This Draft African Standard specifies the requirements, sampling and test methods for cotton canvas.

This Standard is applicable to cotton canvas used in the manufacture of shoe uppers, raincoats, tarpaulins, tents, stretchers, back rest for hospitals, luggage bags, mail bags, laminating material, base fabric for PVC coated fabrics, soiled linen and bag for hospital.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3801, *Textiles — Woven fabrics — Determination of mass per unit length and mass per unit area*

ISO 13934-1, *Textiles — Tensile properties of fabrics — Part 1: Determination of maximum force and elongation at maximum force using the strip method*

ISO 22198, *Textiles — Fabrics — Determination of width and length*

ISO 13934-1:2013, *Textiles — Tensile properties of fabrics — Part 1: Determination of maximum force and elongation at maximum force using the strip method*

ISO 5077:2007, *Textiles — Determination of dimensional change in washing and drying*

ISO 15496:2018, *Textiles — Measurement of water vapour permeability of textiles for the purpose of quality control*

ISO 3071:2020, *Textiles — Determination of pH of aqueous extract*

ISO 105-B02:2014, *Textiles — Tests for colour fastness — Part B02: Colour fastness to artificial light: Xenon arc fading lamp test*

ISO 105-B03:2017, *Textiles — Tests for colour fastness — Part B03: Colour fastness to weathering: Outdoor exposure*

ISO 105-C10:2006, *Textiles — Tests for colour fastness — Part C10: Colour fastness to washing with soap or soap and soda*

ISO 1833-11, *Textiles — Quantitative Chemical Analysis Part 11: Mixtures of certain cellulose fibres with certain other fibres (method using sulfuric acid)*

ISO 15025, *Protective clothing — Protection against flame — Method of test for limited flame spread*

ISO 811, *Textiles — Determination of resistance to water penetration — Hydrostatic pressure test*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply. ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at http://www.iso.org/obp

3.1
canvas
strong, firm, plain woven cloth made with single or plied yarns

3.2
good manufacturing practice
system of processes, procedures, and documentation used to ensure that textile products, such as fabrics and garments, are consistently produced and controlled to meet defined quality standards.

4 Requirements

4.1 General requirements

4.1.1 Canvas fabric shall be:

a) free from starch, filling materials and any other materials that may affect the performance of the fabric;

b) woven in plain weave.

4.1.2 The selvedge shall be flat, straight and firm

4.1.3 Canvas shall be free from defects including but not limited to:

a) Missing threads

b) Float yarns appearing on the fabric surface;

c) tears, holes and cuts

d) Reed marks

e) Fibre fluff on the fabric surface

f) free from stains and uneven colours

4.1.4 The fabric should be made with good manufacturing practices

4.2 Specific requirements

4.2.1 Fibre composition

When tested in accordance with ISO 1833-11, canvas fabric composition shall be of 100 % cotton fibres

4.2.2 Dimensions of the fabric

When measured in accordance with ISO 22198, canvas fabric shall comply with the declared dimensions, subject to a tolerance of ± 2%

4.2.3 Cover factor

For guidance purposes, canvas (depending on the end-use) should comply with the cover factor in Annex 1.

4.2.4 Flammability

If the canvas is declared to have been given a flame-retardant treatment, it shall have no surface flash and ignition time greater than 20s when tested in accordance with ISO 15025.

4.2.5 Resistance to water penetration

If the canvas is declared to be water resistant, its resistance to water penetration shall not be lower than 22 cm H_2O, when tested in accordance with ISO 811

4.2.6 Physical and chemical properties

Canvas fabric shall comply with the physical and chemical requirements given in Table 1 when tested in accordance with the test methods given therein.

Table 1 — Physical and chemical requirements of canvas fabric

S/N	Parameter	Requirement	Test method
i.	Breaking strength (in either warp or weft direction), N, min.	200	ISO 13934-1
ii.	Mass per unit area, g/m^2, min.	100	ISO 3801
iii.	Water permeability (special treatment), g/m^2 Pa h(min).	15	ISO 15496
iv.	pH	6 - 8.5	ISO 3071
v.	Dimensional changes in either direction, after 3 washes, %, max. Grey Finished	 ±5 ±2.5	ISO 5077
vi.	Colour fastness to light, min.	4	ISO 105-B02
vii.	Colour fastness to washing, min	3-4	ISO 105-C10
viii.	Colour fastness to weathering, min.	5	ISO 105-B03

4.2.7 Pliability

For coated canvas, no cracks shall be observed when the canvas sample is conditioned to 0°C for 2 hours and immediately folded thereafter.

5 Packaging

Canvas shall be packaged in suitable material to protect it from damage during storage, transportation and handling.

6 Labelling

Canvas shall be legibly and indelibly labelled with the following information:

a) manufacturer's name and physical address
b) trademark (if any);
c) product name, such as "cotton canvas";
d) dimensions of the piece;

e) statement to indicate whether grey, dyed and/or any other treatment;
f) mass of bale or roll;
g) date of production or batch number; and
h) country of origin.

7 Sampling

Sampling shall be done in accordance with ISO 2859-1.

Annex A
(informative)

Recommended cover factor

General

Depending on proposed end-use, canvas should comply with the cover factor, mass per unit area and breaking load as given in Table A.1

Table A.1 — Recommended particulars of cotton woven canvas materials

Mass per unit area, g/m², min.	**Breaking load on a 50 × 200 mm strips**, N, min.		**Proposed end-use**
	Warp way	Weft way	
260	104	84	Heavy raincoats
474	160	145	Luggage and mail bags soiled linen and bag for hospital
510	178	165	Normal canvas material for tarpaulins, tents stretchers and back rest for hospitals
610	224	175	Heavy canvas material
305	120	90	Shoe uppers
274	85	72	PVC coating or laminating material

Note:

$$K = cn\sqrt{N_t}$$

Where:
K is the cover factor
c is the constant for tex = 0.04126
n is the number of threads per 2.54 centimetres
N_t is the Tex number of yarn

Mass and breaking load specified, relate to the specific state of finish in which the canvas materials are delivered.
The cover factor is for manufacturers guidance only

Bibliography

[1] KS 367:2003, Specification for cotton canvas

[2] TZS 663: 2013, Textiles – Cotton woven canvas materials – Specification

