
Duffle bags specification

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Foreword

This Ethiopian Standard has been prepared under the direction of Technical Committee for Leather and Leather Products(TC 74) and published by the Ethiopian Standards Agency (ESA).

Draft of the standard has been presented by Ethiopian Leather Industry Development Institute.

Acknowledgment has been made for the organization for its concern to contribute to the effort of national standardization.

DRAFT

Duffle bags specification

1. Scope

This Ethiopian standard specifies specification for duffle leather bags.

2. Normative reference

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.

ES ISO 5398-1, Leather - Determination of chromium as chromic oxide

ES ISO 4045, Leather - Chemical tests - Determination of PH

ES ISO 17075, Leather — Chemical tests — Determination of chromium(VI) content

ES ISO 17226, Leather — Chemical determination of formaldehyde content

ES ISO 3380, Leather Physical and Mechanical tests Determination of shrinkage temperature up to 100 C

ES ISO 2589, Leather - Physical and mechanical tests - Determination of thickness

ES ISO 13996, protective clothing -- mechanical properties -- determination of resistance to puncture

ES ISO 13997, protective clothing -- mechanical properties -- determination of resistance to cutting by sharp objects

3. Terms and Definitions

For the purpose of this standard the following terms and definitions shall apply.

3.1.

Duffle bags

a large cylindrical bags that are used to transport a large amount of items from one place to another.

3.2.

Design specification

a detailed document providing a list of point regarding product or process.

3.3.

Material specification

a detailed information regarding the composition, shipping, handling and storage gridlines.

4. Duffle bags Requirements

4.1. Design Description or requirements

- a) **Shape and dimension of duffle bag:** The external shape and dimension of duffel bags shall be measured with **Length x height x width** .
- b) **Large Capacity:** The main compartment should accommodate clothing, shoes, water bottle, books etc. The smaller pockets should be used for smaller things like charger, mouse, power bank etc. The bag has a front pocket for quick access to small items like keys, spare batteries etc.

c) **Flexible Versatility:** Shoulder strap shall be adjustable and wide. The shoulder strap has a shoulder drop of 25 inches. Padded handle and strap-pad should also be helpful to ease your fatigue.

d) **Color:** the colors of the bags shall be agreed to between the purchaser and supplier.

4.2. Material requirements

4.2.1. Material requirement for duffle bags

Various components of duffle bags shall be made from leather and non-leather materials.

The following material shall be considered for Heavy/luggage Leather Goods:

Duffle bags or travel bags, document cases, brief cases, attaché cases, Medical Bags, travel suite cases, sports kits, school bags, etc

4.2.1.1. **Leather Materials:** - The type of leather material shall be either of the followings: cow nubuck, cow softy, plain box, cow suede, cow embossed, patent leather, pull up leather, upholstery leather, cow aniline, cow waxy, cow smooth. The required leather thickness for making heavy/luggage leather goods is about 1.0 mm to 1.8 mm.

4.2.1.2. **Lining Materials:** - It shall be made of textile, leather, synthetic or fur materials

4.2.1.3. **Reinforcement Materials** - shall be shank board, leather fiber board, plastic board, triplex, texon board or dublex locks: - It shall be turn locks, magnetic lock or press/push lock Buttons: - It shall be snap buttons or press buttons.

4.3. Physical requirements

The leather goods shall conform to the requirements given below in table 1, when tested in accordance with the methods prescribed in table 1.

Table 1 duffle bag chemical and physical requirements

Characteristics	Requirements	Test method
Flammability – all textiles	Plain surface fabrics: 3.5sec. or more Raised-Fiber Fabrics: 4sec. or more if they exhibit ignition or fusion of their base fibers	ES 3982
Workmanship	No major defect	Visual
Tensile strength	Shell 178N min. Lining: 90N min. Vinyl: 44.5N min Textile: 4.4 N/mm min	ES ISO 3376 ES ISO 13934-1
Handle strength	11.3kg	ES 3983
Tear Strength	Lining: 1.1kg	ES ISO 13937-1
Attachment strength snaps, buttons, decorative	6.8kg/10sec	ES 3987
Zipper performance: Open/close	0.9N/mm Max.	ES 3985
Crosswise strength	9.0N/mm min.	ES 3984
Top/bottom stop holding	4N/mm min.	ES 3984
Scoop Pull strength/slider strength	2N/mm min.	ES 3984
Slider torque	0.4N/mm min.	ES 3984
Snaps:	Snapping 0.4N/mm min. Unsnapping max. 1.4N/mm	ES 3986
Surface abrasion	No removal of upper surface at 200cycle	ES ISO 12947-1
Resistance to corrosion metal parts	No tarnishing after 24 hrs in 1% saline solution	ES ISO 22775
Seam strength	4.4 N/mm min.	ES 3983
Attachment strength-snaps, buttons	6.8kg/10sec.	ES 3987
Buckle strength (Belt)	4.4N/mm min. pull	ES 3983
Stretch & Recovery	Recovery after 1 minute: 95% min. Elongation: Over 100%	ES ISO 13934-1 Extension and modulus test -1-15mm (elastic width): 1.5kg load -16-50mm: 4.5kg load -Over 50mm: 7.5kg load
Durability of Velcro, button, snap fastener & rivet	Velcro Peel strength, N/mm After 5,000 wear cycle min. 0.1 After 10,000 wear cycle min. 0.08 Shear strength, KPa After 5,000 cycle min 75 After 10,000 cycle min 65 Snap, Button, fastener, rivet Shall remain functional after opening & closing for 100cycle	ES ISO 22776/ES ISO 22777
Dimensional stability (if washable)		
- After 3 machine washings - After one dry cleaning	Knit: +/-5% Woven 3% max. Knit: +/-3% Woven 2% max.	ES ISO 5077
Water repellency (leather)	90 min.	ES 3997
Color fastness to Crocking (gray scale max.)	Dry 4 Wet 3	ES ISO 20433
Color fastness to light	Leather: 3 at 10hrs Silk: 3 at 10hrs Woven 3 at 20hrs	ES ISO 105B07
Colorfastness to laundering or dry cleaning	Staining 3 Color change 4 Self-staining 4	ES ISO 105 C06 ES ISO 105 D01
pH level	6-8	ES ISO 4045

4.4. Hazardous chemical requirements

The duffle bags shall conform to the requirements given below in table 2, when tested accordance with the methods prescribed in table 3.

Table 2 hazardous chemical requirements

Characteristic	Requirement	Method of test
Total lead (accessible components), ppm, by weight	Leather: 300 PVC: 200 Others: 300	ES ISO 17072
Lead in surface coating, ppm, by weight, max.	90	ES ISO 17072
Total Cadmium, ppm, max. by weight	75	ES ISO 17072
Phthalates (accessible components) PVC, PU, Synthetic, leather, soft plastics	Maximum 1000ppm (0.1% weight) (DEHP, DBP, BBP, DINP, DIDP, DNOP, DEP)	ES ISO TS 16181 GC-MS analysis
Formaldehyde Content (including in printed items), ppm, max.	300	ES ISO 17226
Hexavalent chromium, ppm, max.	3	ES ISO 17075

4.5. Sampling

Sampling representative in all their physical and functional characteristics to the production models shall be produced and used in proving the design. This provides a basis for traceability and proving production acceptance criteria.

4.5.1 The details attached to the leather goods Sample

After the confirmation of order, each sample sent to the buyer has the following details attached to it, with the help of a tag. It contains the details of both, what the buyer has demanded and what the supplier fabric/trim etc they have used.

- Ref no.
- Colour
- Leather & Fabric
- Composition
- Description
- Quantity
- Style no/ Size
- Store

4.6. tests

4.7. Marking

Each duffle leather bags shall be legibly and permanently marked with the following:

- a) Manufacturer's name or registered trade mark and
- b) Lot no or Batch number

4.8. Packing

The duffle leather bags shall be packed to ensure safe transportation. They may also be packed as agreed to between the purchaser and supplier

Organization and Objectives

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ESA's objectives are:-

- ❖ Develop Ethiopian standards and establish a system that enable to check whether goods and services are in compliance with the required standards,
- ❖ Facilitate the country's technology transfer through the use of standards,
- ❖ Develop national standards for local products and services so as to make them competitive in the international market.

Ethiopian Standards

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