

ICS 83.140.01

# **DRAFT EAST AFRICAN STANDARD**

Plastic table — Specification

# **EAST AFRICAN COMMUNITY**

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#### **Foreword**

Development of the East African Standards has been necessitated by the need for harmonizing requirements governing quality of products and services in the East African Community. It is envisaged that through harmonized standardization, trade barriers that are encountered when goods and services are exchanged within the Community will be removed.

The Community has established an East African Standards Committee (EASC) mandated to develop and issue East African Standards (EAS). The Committee is composed of representatives of the National Standards Bodies in Partner States, together with the representatives from the public and private sector organizations in the community.

East African Standards are developed through Technical Committees that are representative of key stakeholders including government, academia, consumer groups, private sector and other interested parties. Draft East African Standards are circulated to stakeholders through the National Standards Bodies in the Partner States. The comments received are discussed and incorporated before finalization of standards, in accordance with the Principles and procedures for development of East African Standards.

East African Standards are subject to review, to keep pace with technological advances. Users of the East African Standards are therefore expected to ensure that they always have the latest versions of the standards they are implementing.

The committee responsible for this document is Technical Committee EASC/TC 072, *Plastics and related products*.

Attention is drawn to the possibility that some of the elements of this document may be subject of patent rights. EAC shall not be held responsible for identifying any or all such patent rights.

# Plastic table — Specification

## 1 Scope

This Draft East African Standard specifies requirements, sampling and test methods for plastic tables intended for indoor and outdoor use.

#### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

EAS 1086, Plastics — Codes for resin identification on plastic products

ISO 7172, Furniture — Tables — Determination of stability

ISO 4122-3, Furniture — Tests for surface finishes — Part 3: Assessment of resistance to dry heat

ISO 4122-2, Furniture — Tests for surface finishes — Part 2: Assessment of resistance to dry heat

ISO 4122-1, Furniture — Tests for surface finishes — Part 1: Assessment of resistance to dry heat

ISO 4211-4, Furniture — Tests for surface finishes — Part 4: Assessment of resistance to impact

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

#### 3.1

# table

a plastic piece of furniture with a flat surface, typically supported by legs, used for holding, displaying or working on objects.

#### 3.2

#### legs

the vertical supports of the table.

#### 3.3

## table top

the flat uppermost part of the table where objects such as plates, cups are placed.

#### 4 Requirements

#### 4.1 General requirements

- **4.1.1** Plastic table shall be monobloc or modular.
- **4.1.2** Plastic table shall have a clean finish, free from any visible defects such as spots, bubbles, warping, holes, cracks, impurities, moulding flash, colour variations, peeling, raptures and surface scratches.

#### 4.2 Specific requirements

#### 4.2.1 Static load-bearing capacity

When tested according to the method given in Annex A, there shall be no cracking, deformation or breakage.

#### 4.2.2 Drop test

When tested according to the method given in Annex B, there shall be no cracking, deformation or breakage.

#### 4.2.3 Stability

#### 4.2.3.1 Stability with vertical force

When tested for stability with vertical force in accordance with ISO 7172, the test sample shall require a force of not less than 1472 N.

NOTE 1472 N (Calculated using  $g = 9.81 \text{ m/s}^2$ ) is the approximate equivalent of the 150 kg which is the minimum required loading capacity for a plastic table.

## 4.2.3.2 Stability with vertical forces and horizontal forces

When tested for stability with vertical forces and horizontal forces in accordance with ISO 7172, the test sample shall require a horizontal force of not less than 1472 N.

NOTE 1472 N (Calculated using  $g = 9.81 \text{ m/s}^2$ ) is 10% of the approximate equivalent of the 150 kg which is the minimum required loading capacity for a plastic table.

## 4.2.4 Resistance of surface to dry heat

The table top surface when tested in accordance with ISO 4211-3 shall have minor change or no change.

#### 4.2.5 Resistance of surface to wet heat

The table top surface when tested in accordance with ISO 4211-2 shall have minor change or no change.

#### 4.2.6 Resistance of surface to marking by liquids

The table top surface when tested in accordance with ISO 4211-1 shall show no visible changes.

#### 4.2.7 Resistance to impact

The table top surface when tested in accordance with ISO 4211-4 shall have a descriptive numerical rating code of 4 or 5.

#### 4.2.8 Flatness test

The table top surface when tested in accordance with Annex C shall have a deviation of  $\leq 2$  mm per metre.

# 5 Packaging

Plastic tables shall be suitably packaged to maintain their integrity during handling, storage and transportation

# 6 Marking

The plastic table shall be legibly and indelibly marked in English and/or any other official language with the following information:

- a) code of resin identification and symbol for recycling in accordance with EAS 1086;
- b) name of the manufacturer and/or trademark;
- c) batch or code number; and
- d) country of origin.

# 7 Sampling

Samples shall be drawn as given in Table 1.

Table 1 — Sampling scheme for plastic tables

S/No.	Size of batch	Number of samples	
i.	Up to 50	2	
ii.	For every extra 200 in a batch or part thereof	1	

# Annex A

(normative)

# Test for static load bearing capacity

# A.1 Testing conditions

Carryout the test at ambient temperature of 27 °C ± 2 °C.

# A.2 Procedure

- **A.2.1** Place the table on a rigid, horizontal and flat surface.
- A.2.2 Place a weight of 150 kg on the table top and maintain the load for 1 hour.

# A.3 Result

The table should not show any signs of deformation, cracking or breakage.

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# Annex B

(normative)

# **Drop test**

# **B.1 Testing conditions**

Carryout the test at ambient temperature of 27 °C ± 2 °C.

#### **B.2 Procedure**

- **B.2.1** Drop the table from a height of 1.5 m onto a rigid, horizontal and flat surface or a surface that simulates typical usage environments for the table.
- **B.2.2** Perform additional drops with the table in different orientations (e.g., on its sides, upside down) to simulate various impact scenarios.

#### **B.3 Result**

The table should not show any signs of deformation, cracking or breakage.

# Annex C (normative)

### Flatness test

# C.1 Apparatus

- **C.1.1** Straightedge (precision ruler), minimum 1.5 meters long.
- **C.1.2** Feeler gauges, for measuring gaps between the surface and the straightedge.
- **C.1.3** Spirit level, to ensure the table is on a level floor.
- C.1.4 Surface plate or flat reference plane, if available for more precise testing.

#### C.2 Procedure

- **C.2.1** Place the plastic table on a stable and level testing surface. Ensure the table is assembled correctly and no external forces (like uneven floor surfaces) affect the test. Clean the table top surface to remove dust or debris that may interfere with the measurements.
- **C.2.2** Position the straightedge along the length of the table. Repeat along the width and diagonal directions to check for deviations in multiple axes. Use feeler gauges to measure the maximum gap between the table surface and the straightedge.
- **C.2.3** Start from one edge and slowly slide the straightedge across the table. Observe gaps or deviations where the table surface does not meet the straightedge. Measure the largest gap using a feeler gauge. Conduct the test at room temperature (23 °C  $\pm$  2 °C) and avoid direct sunlight or heat sources that may warp the plastic.

# **Bibliography**

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