

KENYA STANDARD

DKS 2817:2023

ICS ##.###

First Edition

Furniture — Office Tables — Specification



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In order to keep abreast of progress in industry, Kenya Standards shall be regularly reviewed. Suggestions for improvements to published standards, addressed to the Managing Director, Kenya Bureau of Standards, are welcome.

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Furniture — Office Tables — Specification

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DKS 2817: 2023

Foreword

This Kenya Standard was prepared by the Furniture Technical Committee under the guidance of the Standards Projects Committee, and it is in accordance with the procedures of the Kenya Bureau of Standards

During the preparation of this standard, reference was made to the following document (s):

ECK 059: 2005: Wooden tables - Specification

Acknowledgement is hereby made for the assistance derived from this (these) source (s) |

Contents

Page

Foreword	iv
Introduction.....	vi
1 Scope.....	1
2 Normative references.....	1
3 Terms and definitions	1
4 Symbols (and abbreviated terms).....	2
5 Clause.....	2
5.1 Subclause (level 1)	2
5.1.1 Subclause (level 2)	2
5.1.2 Subclause (level 2)	Error! Bookmark not defined.
5.2 Subclause (level 1)	Error! Bookmark not defined.
6 Clause.....	Error! Bookmark not defined.
6.1 A level 1 subclause without a title.....	Error! Bookmark not defined.
6.1.1 A level 2 subclause without a title.....	Error! Bookmark not defined.
6.1.2 A level 2 subclause without a title.....	Error! Bookmark not defined.
6.2 A level 1 subclause without a title.....	Error! Bookmark not defined.
7 Special	Error! Bookmark not defined.
Annex A (normative) Annex title.....	8
A.1 General	8
A.2 Clause.....	Error! Bookmark not defined.
A.2.1 Subclause (level 1)	Error! Bookmark not defined.
A.2.2 Subclause (level 1)	Error! Bookmark not defined.
A.3 Clause.....	Error! Bookmark not defined.
Bibliography.....	9

Introduction

Kenya Bureau of Standards is a national standards body (NSB). The work of preparing Kenya Standards is normally carried out through national technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. National organizations, governmental and non-governmental, in liaison with KEBS, also take part in the work.

Kenya Standards are drafted in accordance with the rules given in the KS ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare National Standards. Draft Kenya Standards adopted by the technical committees are circulated to the technical committee members for balloting. Publication as a Kenya Standard requires approval by at least 2/3 of the members casting a vote.

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

This Kenya Standard was prepared by Technical Committee KEBS/TC 167, Furniture. Standards are reviewed every five years to ensure relevance in the marketplace and to keep up with current global trends. The second edition revises the first, with the following.....

During the preparation of this standard, reference was made to the following documents:

IS 3663: 1993: Dimensions of tables and Chairs for office purposes.

The assistance derived from these publications is hereby acknowledged.]

Furniture — Office Tables — Specification

1 Scope

This Draft Kenya Standard prescribes the requirements and methods of test for tables for office use.

2 Normative references

The following referenced documents 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.

KS 509: 1985	Synthetic resin adhesives for plywood phenolic and aminoplastic (first revision)
KS 02-302: 1983	Blockboards for general purposes — Specification
KS 94: 1985	Synthetic resin adhesives for construction work (non-structural) in wood (first Revision)
KS ISO 12466-1: 1999	Plywood for general purposes (second revision)
KS ISO 7172: 1988	Furniture — Tables — Determination of stability (Confirmed 2012)
KS ISO 4211-2	Furniture — Test for surfaces — Part 2: Assessment of resistance to wet heat.
KS ISO 4211-3	Furniture — Test for surfaces — Part 3: Assessment of resistance to dry heat.
KS ISO 4211-3	Furniture — Test for surfaces — Part 4: Assessment of resistance to impact.
KS ISO 4568-5	Decorative thermosetting synthetic resin bonded laminated sheets (first revision)
KS ISO 15482	Cross-recessed head drilling screws with tapping screw head
IS 12406: 1988	Medium density fibre boards for general purposes.

3 Terms and definitions

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

3.1

Table/Desk

a grouping of furniture items and components, providing a horizontal or slightly inclined work surface or work surfaces, either fixed or adjustable in height, that facilitates the performance of tasks in an office-like environment.

2.2

lip

solid strip of wood, PVC, or other relevant suitable materials, often decoratively cut, used to finish the edge of a large element such as a top or edge of drawers, etc; Lipping is the process of setting lip onto a surface.

Note. In cases where lipping is not used, the finishing shall be spray-, or hand-painted, or varnished, or moulded.

3.3

ergonomics

the study of the relationship between people and their environment, especially the science that seeks to adapt work and working conditions to the worker.

3.4 Horizontal surface definitions

3.4.1

Primary surface

a surface which has the apparent potential for the highest loading. In cases where more than one horizontal surface of a desk exists, there may be more than one primary surface.

3.4.2

Secondary surface

a surface used for storage (e.g. a shelf) or a dedicated surface located lower than the primary surface.

3.4.3

Dedicated surface

a surface located at heights different from the primary surfaces which is occupied exclusively by the equipment.

3.4.4

Adjustable keyboard surface

a moveable surface which is occupied primarily by the keyboard.

4 Footrest

4.1 The working position may need to include a footrest in which case the footrest shall comply with the following:

4.1.1 It shall be free standing.

4.1.2 It shall ensure sufficient space for the feet and allow changes in position. The top surface shall be flat.

4.1.3 Its dimensions shall be as specified in clause 3.2.

4.2 Dimensions (see Fig. 1)

The dimensions of footrests, if provided, shall be:

Length Q1: 450 mm, Min.

Width Q2: 350 mm, Min

Height Q3:

Fixed: front edge I1, 40 ± 5 mm
rear edge I2, 100 mm, Min

Adjustable: front edge I1, 35 mm, Min
slope 10° to 20°

5 Modesty panel

Wooden office tables shall be fitted with modesty panel. When a modesty panel is fitted it shall provide operator privacy under the work surface. The space between modesty panel shall not be greater than 400 mm from the floor when the work surface is in its highest position, and shall not interfere with work surface height adjustment.

6 MATERIALS

6.1 Tabletops

Tabletops shall be made from wood, MDFs, particle boards, chipboards and any other suitable material.

6.1.1 Block board

Block boards used in the manufacture of tabletops shall conform to the requirements of the latest edition of KS 302.

6.1.2 Solid wood

The solid wood used in the manufacture of tabletops shall conform to the requirements of KS 656-1:2006.

6.1.3 MDF Board. If MDF board (laminated or not) are used as finishing on tabletops, they shall meet requirements of clauses 6.2.1, 6.2.2, 6.2.3, 6.2.4 and 6.2.5.

6.1.4 Plastics. Decorative plastic laminate used for tabletop surface overlaid with plastic, or high pressure decorative laminates shall conform to KS ISO 4586-5:2015 and shall be of mat finish or glossy finish.

6.1.5 Veneer decorative laminates, if used, shall conform to the requirements of latest edition of ISO 18776:2008.

6.2 Adhesives

Adhesives used for joinery shall conform to the latest edition of KS 509.

6.3 Wooden Screws shall conform to the latest edition of KS ISO 15482.

6.4 Metal Components

The following requirements apply:

- (a) All metal components shall be finished to leave no sharp, rough or dangerous surfaces.
- (b) All exposed metal surfaces where a risk of corrosion exists shall be treated with a non-corrosive, durable coating prepared and applied in accordance with coating manufacturers recommendations. The finish shall have adequate resistance to wear.
- (c) Chromium plating and paint finish, where required, shall have surfaces prepared and plating or painting applied in accordance with sound trade practices.

7 DIMENSIONAL REQUIREMENTS

7.1 Nominal dimensions of the tabletops

7.1.1 Work surface area

- (a) The work surface area shall be adequate for the tasks to be performed at the table/desk. It shall be large enough to accommodate a screen, keyboard and associated equipment and leave sufficient room for writing and for the resting of hands and arms. The table/desk shall also be large enough to permit items used regularly to be within easy reach of the operator from the normal operating position (see Figure 2 (a))
- (b) For single task operations (e.g., Keyboard work), the work surface shall have minimum dimensions of 1200 mm x 750 mm. Special sizes may be allowed between purchaser and manufacturer.
- (c) For mixed tasks (e.g., Keyboard and clerical work), the work surface shall have minimum dimensions of 1500 mm x 750 mm (see Figure 2(a)).
- (d) Under the table/desk there shall be ample knee space, sufficient room to prevent a mobile unit from protruding beyond the front of the work surface and be of sufficient height to not impede a full work surface adjustment if storage facilities are located under an adjustable table/desk.

7.2.2 Height adjustable work surfaces

The following requirements apply:

- (a) Work surfaces with height adjustment capability in the vertical direction shall have a minimum travel of 150 mm (see Figure 1(c)).

Table 1: Dimensions of Office Tabletops

All dimensions in millimetres	
<i>Length</i>	<i>Width</i>
1200	600
1200	700
1500	900
1800	900
1800	1200

NOTE-Tolerance of length and width is ± 6 mm.

Note. For standing tables/desks the range shall be 700 to 1200 mm.

DKS 2817: 2023

(b) Where adjustable, the top of the work surface shall include a range of movement between 610 and 760 mm from the floor (see Figure 2(a)).

(c) If the desk height adjustment is provided in steps, they shall be not more than 25 mm apart.

NOTE: Continual adjustment of the desktop is preferable.

7.2.3 Mechanically assisted controls

The following requirements shall apply:

(a) All controls shall be easily operated from the seated position without requiring excessive physical effort or any special tools or equipment, and without risk of trapping the fingers.

(b) The control mechanism should be smooth and quiet in operation, and stable when the control is released, e.g., the height control shall not wind down under gravity alone.

(c) Control knobs, buttons or handles shall be smooth and comfortable to the hand and positioned to avoid personal injury and damage to clothing. They shall also be placed or shielded to avoid accidental operation. Knobs and handles shall not be easily removable.

(d) The function and direction of movement of each control shall be clearly marked or otherwise obvious. Mechanical and electrical controls shall comply with the conventions for directions of movement set out in KS IEC 447.

(e) Indicators shall also be provided so that the operator can readily see the position of the work surface within the adjustment range.

7.2.4 Fixed height work surfaces

NOTE: A fixed height desk fitted with an adjustable keyboard platform is an alternative to the preferred option of a height adjustable desk.

For fixed height work surfaces, the height of the work surface shall be not less than 680 mm and not greater than 800 mm with the keyboard platform being vertically adjustable within a 120 mm range below the work surface. The height should be 700 mm to 720 mm.

Note. This can be varied depending on the agreement between the purchaser and the seller.

7.2.5 Work surface thickness The minimum thickness of the work surface over the leg space including any supporting structure shall be 16 mm. For glass or other surfaces, the thickness shall be appropriate as to give a befitting strength.

7.2.6 Work surface finish

The work surface finish should be easy to clean and enable the user to write on a single sheet of paper without backing.

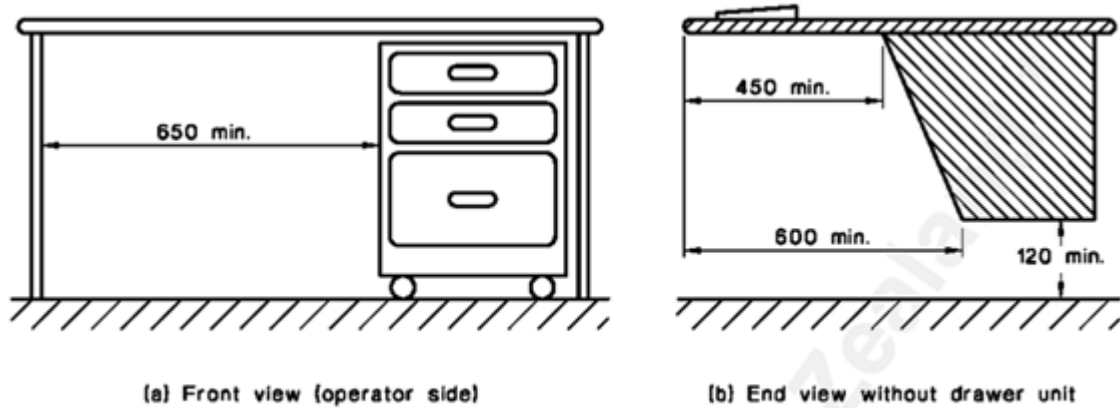
7.2.7 Leg space

The following requirements apply:

(a) Sufficient space should be provided under the work surface to allow free leg movement without obstruction.

(b) The minimum knee space shall be 650 mm wide and 450 mm deep (see Figure 3). For fixed height work surfaces the minimum height of the knee space shall be 645 mm.

(c) Leg space depth front to back, measured at a distance above the floor of 120 mm shall be a minimum of 600 mm (see Figure 3). Leg space depth should be available over a full 650 mm width.



DIMENSIONS IN MILLIMETRES

Figure 3. Leg space Dimensions

NOTES:

1 Leg space depth is measured horizontally from front to back. This criterion ensures users are able to sit at the desk without encountering restriction at knee level.

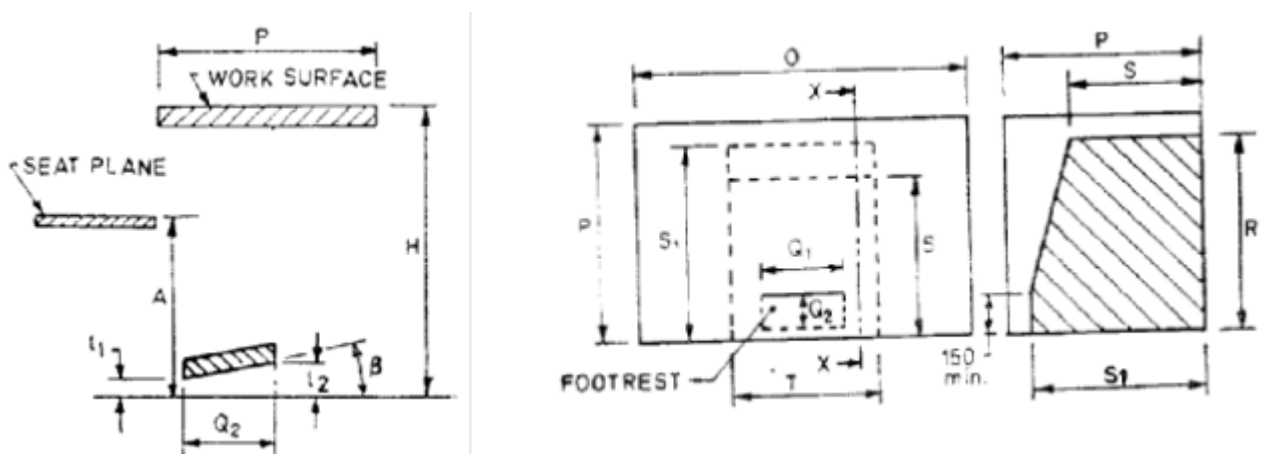
2 Leg space width is measured horizontally with any fixed or mobile storage unit or any other equipment in place. The minimum requirement is necessary to allow changes in leg posture and to facilitate chair swivel for reaching to the side or getting on and off the chair.

7.2.9 Standing desk Where a desk is not adjustable, the work surface shall be a maximum of 950 mm in height (preferred 900 mm). Where the work surface is adjustable in height, it should at least include the range of 900–1100 mm from the floor.

The nominal dimensions of the work surface or tabletop shall be in accordance with table 1. The following requirements shall apply: A subclause shall not be created unless there is at least one further subclause at the same level. For example, text in clause 10 shall not be designated subclause “10.1” unless there is also a subclause “10.2”.

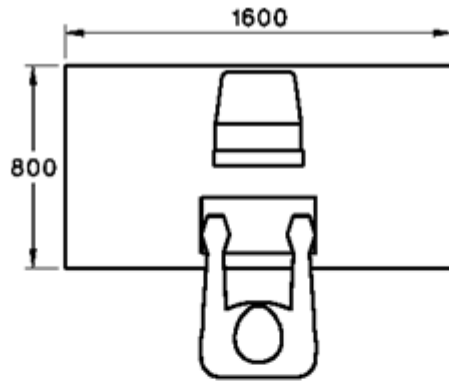
The nominal dimensions of the office tabletops shall be as given in table 2.

Figure 1. Ergonomic dimensions of table

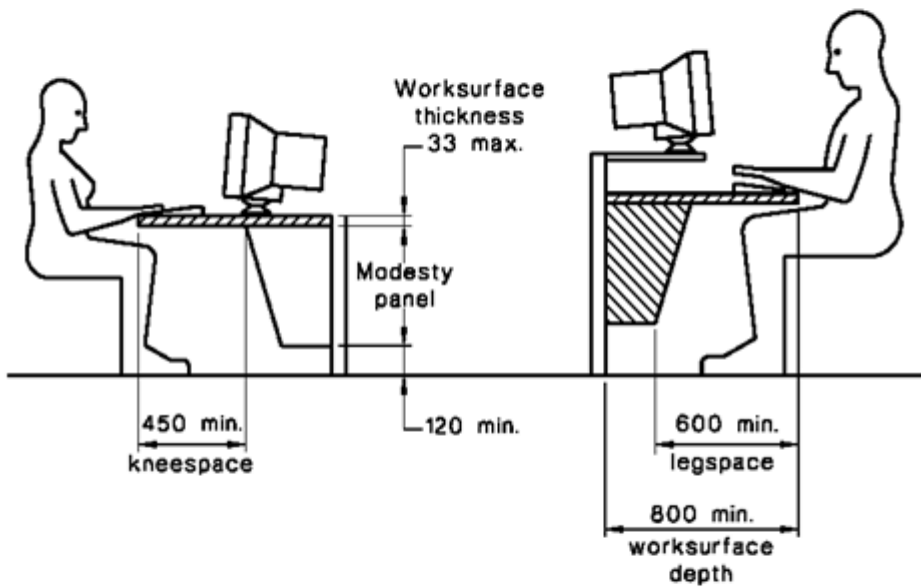


DIMENSIONS IN MM

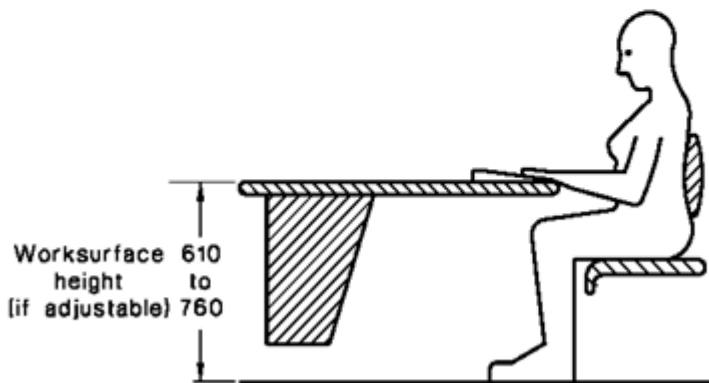
Figure 2. Dimensions for Office table/desk



(a) Work surface area



(b) Minimum leg space



(c) Minimum vertical movement for height adjustable desks

Figure 3. Leg Space Dimensions

8 Functional Safety

8.1 The corners/edges of the tabletop shall not have sharps and shall be well rounded. A minimum radius of 2 mm should be recommended.

8.2 All surfaces of the table including the underside of the tabletop, shall be free of projection and other hazards that could cause personal injury or damage to clothing.

8.3 Motors should not cause interference or damage to equipment memory.

8.4 Wiring and cabling shall comply with relevant Standards. A paragraph.

9 TESTS

9.1 **Tabletops** shall be tested as in accordance with KS ISO 19682:2023, Furniture — Tables — Test methods for the determination of stability, strength and durability

9.2 Dimensions

The samples shall be checked to conform to the dimensions and tolerances specified in table 1 and figures 2 and 3 above.

10 Marking instructions and reports

10.1 Marking Requirements and Instructions

All desks shall be supplied with full operating instructions and clearly marked with the following:

- (a) The manufacturer's/suppliers or importer's name and address.
- (b) Registered trademarks, if any;
- (c) KEBS mark of quality

10.2 Test Reports

Test reports shall be reproduced in full, be provided on request and include a summary of compliance with the functional requirements in this Standard.

NOTE: Manufacturers making a statement of compliance with this Kenya Standard on a product, packaging, or promotional material related to that product are advised to ensure that such compliance is capable of being verified.

Annex A
(normative)

Annex title

A.1 General

Bibliography

- [1] ISO #####-#, *General title — Part #: Title of part*
- [2] ISO #####-##:20##, *General title — Part ##: Title of part*

A **Bibliography**, if present, shall appear after the last annex.

The bibliography may include

- documents that are not publicly available,
- documents which are only cited in an informative manner, and
- documents which have merely served as bibliographic or background material in the preparation of the document.

For online referenced documents, information sufficient to identify and locate the source shall be provided. Preferably, the primary source of the referenced document should be cited, in order to ensure traceability. Furthermore, the reference should, as far as possible, remain valid for the expected life of the document. The reference shall include the method of access to the referenced document and the full network address.]

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