

**Kenya Standard  
Furniture – Test Methods  
Part 7:  
Drop Test**

## **TC Representation**

The following organizations were represented on the technical committee.

Directorate of Occupational Safety and Health Services (DOSHS)  
Galua Fabricators Ltd  
Kenya Industrial Research and Development Institute (KIRDI)  
Kenya National Federation of Jua Kali Association (KNFJKA)  
Shauri Moyo Furniture Association  
Village Furnitures  
Kenya Bureau of Standards (KEBS)

## **REVISION OF KENYA STANDARDS**

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.

*© Kenya Bureau of Standards, 2018*

*Copyright. Users are reminded that by virtue of section 6 of the Copyright Act, Cap. 130 of the laws of Kenya, copyright subsists in all Kenya Standards and except as provided under section 7 of this Act, no Kenya Standard produced by Kenya Bureau of Standards may be reproduced, stored in a retrieval system in any form or transmitted by any means without prior permission in writing from the Managing Director.*

**Kenya Standard  
Furniture – Test Methods  
Part 7:  
Drop Test**

**KENYA BUREAU OF STANDARDS (KEBS)**

**Head Office:** P.O. Box 54974, Nairobi-00200, Tel.: (+254 020) 605490, 602350, Fax: (+254 020) 604031  
E-Mail: [info@kebs.org](mailto:info@kebs.org), Web: <http://www.kebs.org>

**Coast Region**

P.O. Box 99376, Mombasa-80100

Tel.: (+254 041) 2229563, 2230939/40

Fax: (+254 041) 229448

E-Mail: [kebs\\_msa@swiftmombasa.com](mailto:kebs_msa@swiftmombasa.com)

**Lake Region**

P.O. Box 2949, Kisumu-40100

Tel.: (+254 057) 23549, 22392

Fax: (+254 057) 21814

E-mail: [kebs\\_ksm@swiftkisumu.com](mailto:kebs_ksm@swiftkisumu.com)

**North Rift Region**

P.O. Box 2138, Nakuru-20100

Tel.: (+254 051) 210553, 210555

Fax: (+254 051) 2210076

## **Foreword**

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 164, *Furniture*.

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

AS/NZS 4443, Office panel systems - Workstations

The assistance derived from these publications is hereby acknowledged.

---

**Kenya Standard**  
**Furniture – Test Methods**  
**Part 7:**  
**Drop Test**

---

### **1 SCOPE**

This Kenya Standard sets out a method of determining the ability of the desk to withstand impact on the legs or on closed base or plinth.

NOTE: KS 2817 specifies the compliance requirements.

### **2 PRINCIPLE**

The desk is raised and dropped in order to test its ability to withstand impact on the legs or base.

### **3 APPARATUS**

The following apparatus shall be required:

- (a) Floor consisting of concrete covered with vinyl tiles.
- (b) For the pull test-
  - (i) pulley;
  - (ii) cable;
  - (iii) weight sufficient to pull the drawer to full extension; and
  - (iv) load equivalent to 0.004 kg/cubic cm of drawer volume.

### **4 PROCEDURE**

- (a) If applicable set the adjustable features at the midpoint of adjustment.
- (b) Raise one end of the unloaded desk so that the bottom of the glides or castors are 250 mm off the floor or at the balance point, whichever is lower (see Figure 1).
- (c) Release the end of the long axis of the desk being tested and allow it to free fall to the floor.
- (d) Examine the desk. If the test meets the acceptance level, the other end of the desk shall be tested.

### **5 PROCEDURE-PULL TEST**

Measure the pull force individually on the top drawers and file drawer (if fitted) as follows:

- (a) Ensure all drawers and roll-out shelves are loaded uniformly with 0.0046 kg/cubic cm and secure the desk in place.
- (b) Attach a limp cable to the center of the pull area, extending in the same horizontal plane over a pulley on the test equipment.
- (c) Apply a weight to the loose end of the cable that will open the drawer or roll-out shelf to its full extension. If an anti-rebound is used, the weight to overcome the anti-rebound shall be recorded.
- (d) Apply the weight required to open the drawer to full extension with the drawer past the anti-rebound.
- (e) Record the weight (For Illustration of this pull test, see Part 1).

### **6 TEST REPORT**

The following information shall be reported.

- (a) Whether there was structural breakage or loss of serviceability particularly that could cause injury to a user.
- (b) Whether the pull force or weight to overcome the anti-rebound exceeded 4.1 kg
- (c) Type of desk tested.
- (d) Test equipment and test report must be reproduced in full.
- (e) The date of test.
- (f) The name and address of the testing authority.
- (g) Reference to this test method, i.e., KS 2819-7:2018, drop test.

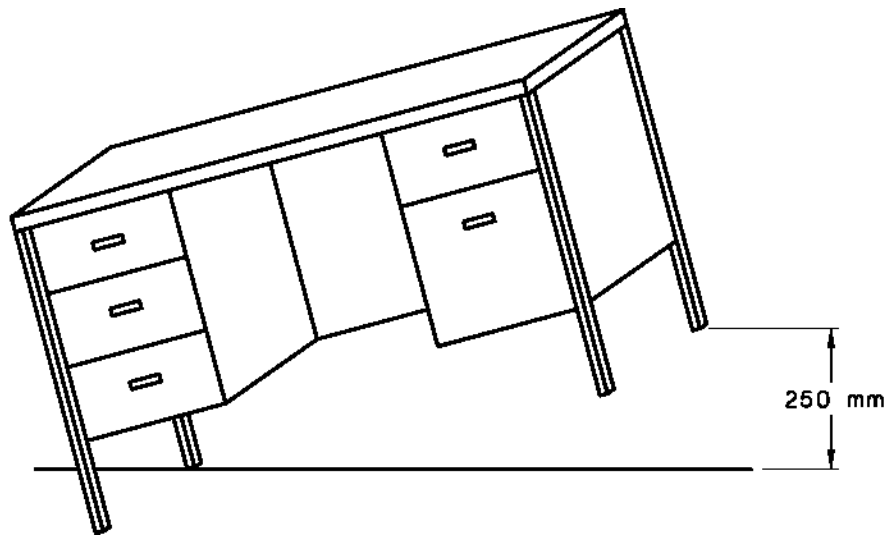


FIGURE 1 DROP TEST