

Office furniture — Tables and desks — Test methods for the determination of stability, strength and durability

ICS 97.140

National foreword

This British Standard is the UK implementation of ISO 21016:2007.

The UK participation in its preparation was entrusted to Technical Committee FW/0, Furniture.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Office furniture — Tables and desks — Test methods for the determination of stability, strength and durability

*Mobilier de bureau — Tables et bureaux — Méthodes d'essai pour
la détermination de la stabilité, de la résistance et de la durabilité*



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Documents

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO 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. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

ISO 21016 was prepared by Technical Committee ISO/TC 136, *Furniture*.

Office furniture — Tables and desks — Test methods for the determination of stability, strength and durability

1 Scope

This International Standard specifies test methods for the determination of the stability, the strength and the durability of all types of office tables designed for use in the seated and/or standing position, e.g. work tables, height-adjustable tables, meeting tables and desks. It applies to tables that are fully assembled and ready for use.

This International Standard does not contain test methods for storage elements, which can be found in ISO 7170.

The tests consist of the application, to various parts of the unit, of loads, forces and velocities simulating normal functional use, as well as misuse, that can reasonably be expected to occur.

With the exception of the deflection of table tops, the tests are designed to evaluate properties without regard to materials, design/construction or manufacturing processes.

The test results are valid only for the unit/component tested. These results can be used to represent the performance of production models provided that the tested model is representative of the production model.

Tests carried out according to this International Standard are intended to demonstrate the ability of the item to give satisfactory service in its intended environment. It is necessary to understand that such tests do not ensure that structural failure will not eventually occur as a result of habitual misuse or after an excessively long period of service. The tests have been developed for units/components that have not been in use. However, when properly justified, they can be used for fault investigation.

This International Standard specifies test methods only. It does not specify requirements. These should be specified in a requirements document. If this is not available, suggested forces and cycles can be found in Annex A.

Assessment of ageing and degradation is not included.

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 7619-2:2004, *Rubber, vulcanized or thermoplastic — Determination of indentation hardness — Part 2: IRHD pocket meter method*

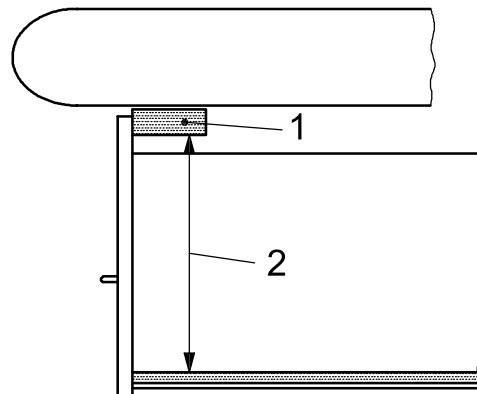
ISO 7170:2005, *Furniture — Storage units — Determination of strength and durability*

3 Terms and definitions

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

3.1
clear height
distance between the top of the extension element bottom and the lower edge of the extension element above, or the structure of the unit

NOTE See Figure 1.



Key

- 1 structure of unit
- 2 clear height

Figure 1 — Clear height

3.2
duty cycle
length of time the height-adjustable table's drive system can be operated without impairing its useful life

NOTE The duty cycle includes the amount of time the drive system can be operated and the amount of time it must not be operated to allow the drive system to cool sufficiently before it is activated again.

4 General test conditions

4.1 General

Forces, velocities, masses, dimensions, angles, time and temperatures given in this International Standard shall be targeted at the nominal values specified.

4.2 Preliminary preparation

Pre-assembled table(s) shall be tested as delivered. The unit(s)/component(s) shall be assembled and/or configured according to the instructions supplied with them. The most adverse configuration intended for use shall be used for each test. If mounting or assembly instructions are not supplied, the assembly method shall be recorded in the test report. Fittings shall be tightened before testing and shall not be retightened unless specifically required by the manufacturer. If it is necessary to change the configuration to produce the worst-case conditions, this shall be recorded in the test report.

The tests shall be carried out in indoor ambient conditions. If during a test the temperature is outside of the range of $20\text{ °C} \pm 5\text{ °C}$, the maximum and/or minimum temperature shall be recorded in the test report.