TECHNICAL REPORT

ISO/TR 24496

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Office furniture — Office work chairs — Methods for the determination of dimensions

Mobilier de bureau — Sièges de travail pour bureau — Méthodes pour déterminer les dimensions

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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.

In exceptional circumstances, when a technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example), it may decide by a simple majority vote of its participating members to publish a Technical Report. A Technical Report is entirely informative in nature and does not have to be reviewed until the data it provides are considered to be no longer valid or useful.

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/TR 24496 was prepared by Technical Committee ISO/TC 136, *Furniture*.

Introduction

The test methods in this Technical Report are based on the manner in which anthropometric measurements are measured.

Therefore, in order to be able to relate the dimensions of office seating to the anthropometric dimensions, a theoretical reference seating posture has been adopted. This posture does, however, not automatically correspond to the ideal or optimum seating posture.

The reference seating posture is as follows:

— the sole of the foot placed on the floor;

— the foot forms an angle of approximately 90° with the lower leg;

— the lower leg is approximately vertical;

— the lower leg forms an angle of approximately 90° with the thigh;

— the thigh is almost horizontal;

— the thigh forms an angle of approximately 90° with the trunk;

— the trunk is erect.

Further information on the anthropometric dimensions can be found in ISO 7250 (all parts) and ISO 14738.

This Technical Report is meant to be used in conjunction with requirements documents. Such documents will specify which of the dimensions must be measured. It is possible that not all of the measurements that can be taken by this Technical Report will be specified by the individual requirements document.

Office furniture — Office work chairs — Methods for the determination of dimensions

1 Scope

This Technical Report specifies methods for the determination of the dimensions of office chairs.

It does not contain dimensional specifications or requirements.

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.

Not applicable.

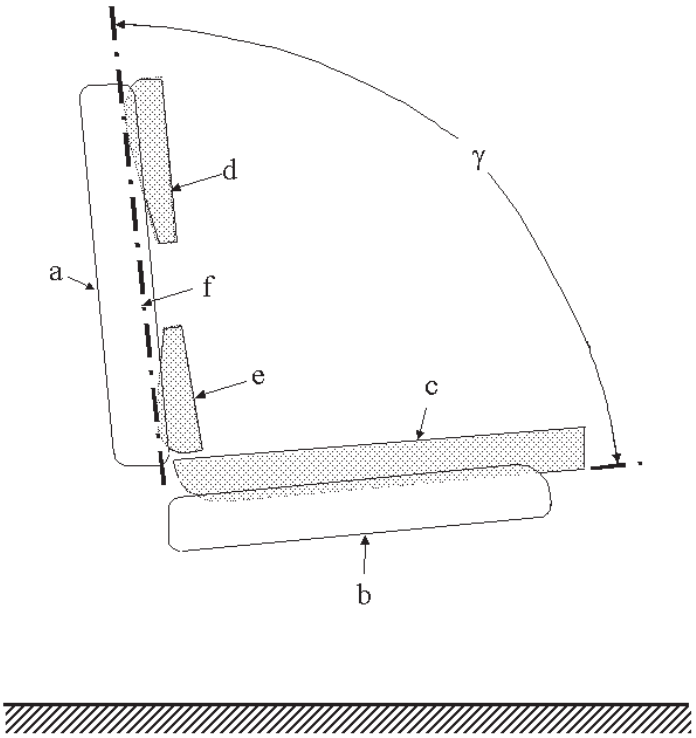
3 Terms and definitions

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

NOTE They do not describe measurement procedures. Measurement procedures can be found in Clause 6.

3.1
angle between backrest and seat
angle γ between the loaded backrest and the loaded seat

Note 1 to entry: See Figure 1.



Key

a backrest
b seat
c Chair Measuring Device (CMD) buttocks pad
d CMD thoracic pad
e CMD pelvic pad
f backrest line
γ angle between backrest and seat

Figure 1 — Angle between backrest and seat

3.2
angle – origin and sign convention
angle sign convention viewed from the right side of the chair is: clockwise angle rotation is positive (+); counter-clockwise is negative (–)

Note 1 to entry: See Figure 2.