

Fourth edition
2023-09

General requirements for establishing anthropometric databases

*Exigences générales pour la création de bases de données
anthropométriques*



Reference number
ISO 15535:2023(E)

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Published in Switzerland

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 159, *Ergonomics*, Subcommittee SC 3, *Anthropometry and biomechanics*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 122, *Ergonomics*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This fourth edition cancels and replaces the third edition (ISO 15535:2012), which has been technically revised.

The main changes are as follows:

- recommendation of tabulation for sex combined statistics in [9.4](#) has been removed;
- term “sex” has been replaced with “gender”;
- term “subject” has been replaced with “participant”;
- term “examination” has been replaced with “measurement”;
- [Annex A](#) has been revised to add another method for estimating a necessary sample size;
- [Table C.1](#) has been revised to correspond with dimension numbers in ISO 7250-1 and minor technical revisions have been made;
- former Annexes G and H have been removed.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Introduction

The well-being of people is very much dependent on their proportional and geometric relationship with several factors, such as growth, design principles for clothing, transportation, workplace and homes, as well as sporting and recreational activities. Implementation of databases on the body dimensions of a population supports essential health and safety requirements, as well as International Standards in the field of machinery safety and personal protective equipment and has acquired importance in the devising of computer-generated manikins of the human body.

One of the major difficulties in formulating international databases on anthropometry is that the numerous existing studies are rarely comparable in the strictest sense. Difficulties arise in comparing one study with another because either the methods used differ or they are not sufficiently well described. The anthropometric standards used for the data collection are fundamental to setting up any anthropometric databases.

This document is intended to be used in close conjunction with ISO 7250-1. The ultimate goal is that a database developed by one researcher can be easily used by other researchers. This would be in a form that is readily accessible by those responsible for developing standards in support of good design and health and safety requirements (e.g. the ISO 15534 series and ISO 14738). To achieve this goal, it has been necessary to develop an appropriate International Standard to ensure that anthropometric databases and their associated reports are internationally compatible.