
**Prosthetics and orthotics —
Vocabulary —**

**Part 1:
General terms for external limb
protheses and external orthoses**

Prothèses et orthèses — Vocabulaire —

*Partie 1: Termes généraux pour prothèses de membre et orthèses
externes*



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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.

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 documents 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).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 168 *Prosthetics and orthotics*.

This second edition cancels and replaces the first edition (ISO 8549-1:1989), which has been technically revised.

The main changes compared to the previous edition are as follows:

- definitions of foot orthotics, head orthosis and soft orthosis have been added to the list of areas of orthotic practise (see 3.1);
- a definition of the head has been added to the list of anatomical terms (see 3.2);
- definitions of foot orthotist, hand therapist and the clinic team have been added to the list of personnel involved in the prosthetic and orthotic supply process (see 3.3);
- the list definitions of anatomical terms (see 3.2) has been reduced to include only those essential for the definitions in 3.1 and the list of definitions of the stages of the prosthetic/orthotic supply process (see 3.3) has been removed as being outdated.

A list of all parts in the ISO 8549 series can be found on the ISO website.

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.

Introduction

Prior to the publication of the first edition of this document in 1989, no internationally accepted terminology to describe the various areas of prosthetic and orthotic practice, the categories of prosthetic and orthotic devices and the personnel involved in the supply of these devices existed. Consequently, the members of the clinic teams in different countries and working in different facilities had developed their own terminology to meet their own needs.

The terms and definitions provided in this document reflect the changes in the field of prosthetics and orthotics since the publication of the first edition of this document.

They will allow practitioners to describe, in a standardized manner, the devices they supply and the personnel involved in the supply process.

This document will also be of value to epidemiologists and national health officials.

Users of this document are also advised of the WHO International Classification of Impairments, Disabilities and Handicaps^[5].

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Prosthetics and orthotics — Vocabulary —

Part 1:

General terms for external limb prostheses and external orthoses

1 Scope

This document defines general terms used to describe external limb prostheses and orthoses, and the personnel involved in the practice of prosthetics and orthotics.

NOTE 1 The complete range of levels of limb amputation are listed and defined in ISO 8549-2. The complete range of classes of orthoses are listed and defined in ISO 8549-3.

This document does not apply to breast, ocular or other external prostheses used to replace other parts of the human body, nor to dental prostheses or orthoses.

NOTE 2 For the purposes of this document, the abbreviated term 'prosthetics' and its derivatives only apply to external limb prosthetics. The abbreviated term 'orthotics' and its derivatives only apply to external orthotics.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

NOTE An alphabetical index of terms is provided in [Annex A](#).

3.1 Prostheses and orthoses

3.1.1

prosthesis **prosthetic device**

externally applied device used to replace wholly, or in part, an absent or deficient limb segment

Note 1 to entry: It includes any such device attached to a component within the limb for structural or functional purposes, e.g. bone anchored prosthetic devices.

3.1.2

orthosis **orthotic device**

externally applied device used to compensate for impairments of the structure and function of the neuro-muscular and skeletal systems

3.1.3

prosthetics

science and art involved in treating persons by the use of *prostheses* ([3.1.1](#))

3.1.4

orthotics

science and art involved in treating persons by the use of *orthoses* (3.1.2)

3.1.5

foot orthotics

science and art involved in treating persons by the use of foot orthoses, orthotic footwear and adaptations to footwear

Note 1 to entry: ISO 21064 establishes a method for classifying and describing the devices that are used in the field of foot orthotics.

3.1.6

upper limb orthosis

orthosis (3.1.2) applied to the whole or part of the upper limb

3.1.7

lower limb orthosis

orthosis (3.1.2) applied to the whole or part of the lower limb

3.1.8

upper limb prosthesis

prosthesis (3.1.1) used to replace the whole or part of the upper limb

3.1.9

lower limb prosthesis

prosthesis (3.1.1) used to replace the whole or part of the lower limb

3.1.10

spinal orthosis

orthosis (3.1.2) applied to all or part of the head and spine

3.1.11

head orthosis

orthosis (3.1.2) applied to all or part of the head

3.1.12

soft orthosis

orthosis (3.1.2) whose soft interface materials apply pressure circumferentially and, if needed, locally to the surface of the body segments that they encompass

Note 1 to entry: ISO 21063 specifies the uses and functions of soft orthoses. It also classifies and describes the devices and their components.

3.2 Anatomical terms

3.2.1

lower limb

part of the body comprising the foot, the leg, the thigh, the pelvic girdle and the intermediate joints

3.2.2

upper limb

part of the body comprising the hand, the forearm, the upper arm, the shoulder girdle and the intermediate joints

3.2.3

spine

part of the body that includes the cervical, thoracic, lumbar and sacroiliac regions

3.2.4**head**

part of the body above the neck, including the cranium and the face

3.3 Personnel**3.3.1****prosthetist**

person who, having completed an approved course of education and training, is authorized by an appropriate national authority to assess persons referred for prosthetic treatment and to design, measure and fit prostheses

3.3.2**orthotist**

person who, having completed an approved course of education and training, is authorized by an appropriate national authority to assess persons referred for orthotic treatment and to design, measure and fit orthoses

3.3.3**prosthetist/orthotist**

person who, having completed an approved course of education and training, is authorized by an appropriate national authority to assess persons referred for prosthetic and orthotic treatment and to design, measure and fit prostheses and orthoses

3.3.4**foot orthotist**

person who, having completed an approved course of education and training, is authorized by an appropriate national authority to assess persons referred for orthotic treatment of the foot

3.3.5**prosthetics technician**

person who manufactures prostheses under the direction of a *prosthetist* ([3.3.1](#))

Note 1 to entry: In some countries, it can be necessary for prosthetics technicians to be approved by a national authority.

3.3.6**orthotics technician**

person who manufactures *orthoses* ([3.1.2](#)) under the direction of an *orthotist* ([3.3.2](#))

Note 1 to entry: In some countries, it can be necessary for orthotics technicians to be approved by a national authority.

3.3.7**hand therapist**

person who, having completed an approved course of education and training in occupational therapy or physiotherapy, is authorized by an appropriate national authority to assess persons referred for orthotic treatment of the hand

3.3.8**clinic team**

group of healthcare professionals who collaborate in the treatment and rehabilitation of persons receiving prosthetic and/or orthotic services

Note 1 to entry: The composition of the team can include surgeons, physicians, prosthetists, orthotists, therapists, psychologists, social workers and nurses.