



NSAI
Standards

Irish Standard
I.S. EN ISO 24415-1:2009

Tips for assistive products for walking - Requirements and test methods - Part 1: Friction of tips (ISO 24415-1:2009)

I.S. EN ISO 24415-1:2009

Incorporating amendments/corrigenda issued since publication:

| | | | |
|---|--|---|-------------------------|
| <i>This document replaces:</i> | <i>This document is based on:</i> EN ISO 24415-1:2009 | <i>Published:</i> 15 April, 2009 | |
| This document was published under the authority of the NSAI and comes into effect on: 7 July, 2009 | | ICS number: 11.180.10 | |
| NSAI 1 Swift Square, Northwood, Santry Dublin 9 | T +353 1 807 3800 F +353 1 807 3838 E standards@nsai.ie W NSAI.ie | Sales: T +353 1 857 6730 F +353 1 857 6729 W standards.ie | Price Code: F |
| Údarás um Chaighdeáin Náisiúnta na hÉireann | | | |

ICS 11.180.10

English Version

Tips for assistive products for walking - Requirements and test methods - Part 1: Friction of tips (ISO 24415-1:2009)

Embouts pour produits d'assistance à la marche -
Exigences et méthodes d'essai - Partie 1: Frottement des
embouts (ISO 24415-1:2009)

Puffer für technische Gehhilfen - Anforderungen und
Prüfungen - Teil 1: Reibung der Puffer (ISO 24415-1:2009)

This European Standard was approved by CEN on 16 March 2009.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

Foreword.....3

Foreword

This document (EN ISO 24415-1:2009) has been prepared by Technical Committee ISO/TC 173 "Technical systems and aids for disabled or handicapped persons" in collaboration with Technical Committee CEN/TC 293 "Assistive products for persons with disability" the secretariat of which is held by SIS.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2009, and conflicting national standards shall be withdrawn at the latest by October 2009.

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

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of ISO 24415-1:2009 has been approved by CEN as a EN ISO 24415-1:2009 without any modification.

This page is intentionally left BLANK.

I.S. EN ISO 24415-1:2009
INTERNATIONAL
STANDARD

ISO
24415-1

First edition
2009-04-15

**Tips for assistive products for walking —
Requirements and test methods —**

**Part 1:
Friction of tips**

*Embouts pour produits d'assistance à la marche — Exigences
et méthodes d'essai —*

Partie 1: Frottement des embouts



Reference number
ISO 24415-1:2009(E)

© ISO 2009

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.



COPYRIGHT PROTECTED DOCUMENT

© ISO 2009

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

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 24415-1 was prepared by Technical Committee ISO/TC 173, *Assistive products for persons with disability*.

ISO 24415 consists of the following parts, under the general title *Tips for assistive products for walking — Requirements and test methods*:

— *Part 1: Friction of tips*

The following part is under preparation:

— *Part 2: Durability of tips for crutches*

Introduction

A frictional performance of the tips attached to the bottom of assistive products for walking is a key concern ensuring user safety. Friction between the tips and the walking surface is an extraordinarily important factor by which a user can confirm his/her motion.

The tips are used on many different assistive products for walking, including canes, walking sticks, crutches, walking frames, rollators and walking tables and are produced in many different sizes and made of many different materials depending on the assistive products for walking to which they are applied. Tips with a variety of bottom shapes for a particular kind of assistive product for walking are also available on the market.

In the friction test method found in this part of ISO 24415, tips of original shape are used. In real situations, not only pure frictional characteristics but also the shape and pattern of the bottom surface against the walking surface can affect the locomotive performance.

This part of ISO 24415 specifies a test with which the frictional force is measured on tip products themselves in order to ensure that the tips with necessarily frictional characteristics are used and it helps to exclude the tips with unacceptably poor frictional characteristics.

Tips for assistive products for walking — Requirements and test methods —

Part 1: Friction of tips

1 Scope

This part of ISO 24415 specifies requirements and test methods for the friction between the tips for assistive products for walking and the walking surface. This part of ISO 24415 is not applicable to tips manufactured for special purposes. The requirements and test method are based on a usage of tips for ordinary gait on the dry and flat walking surface.

EXAMPLE 1 Examples of assistive products for walking are walking sticks, elbow crutches, forearm crutches, auxillary crutches, walking frames, rollators and walking tables.

EXAMPLE 2 An example of special purposes is ice and/or snow.

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 9999, *Assistive products for persons with disability — Classification and terminology*

3 Terms and definitions

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

3.1

tip

that part of the assistive product for walking, which is in contact with the walking surface

See Figure 1.

3.2

test track

surface against which the tip is to be tested

3.3

test velocity

relative velocity between the tip and the test track

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
 - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-