

**Tips for assistive products for walking - Requirements
and test methods - Part 1: Friction of tips**

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 24415-1:2009 sisaldab Euroopa standardi EN ISO 24415-1:2009 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 30.09.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 15.03.2009.

Standard on kättesaadav Eesti standardiorganisatsioonist.

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This standard is ratified with the order of Estonian Centre for Standardisation dated 30.09.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

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ICS 11.180.10

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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)

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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of an identical text or by endorsement, at the latest by October 2009, and conflicting national standards shall be withdrawn at the latest by October 2009.

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Endorsement notice

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

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