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**Pripomočki za hojo, ki se upravljajo z obema rokama - Zahteve in preskusne metode - 1. del: Sprehajalni okvirji (ISO/DIS 11199-1:2020)**

Assistive products for walking, manipulated by both arms - Requirements and test methods - Part 1: Walking frames (ISO/DIS 11199-1:2020)

Mit beiden Armen gehandhabte Gehhilfen - Anforderungen und Prüfverfahren - Teil 1: Gehrahmen (Gehböcke) (ISO/DIS 11199-1:2020)

Aides à la marche manipulées avec les deux bras - Exigences et méthodes d'essai - Partie 1: Cadres de marche (ISO/DIS 11199-1:2020)

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**Ta slovenski standard je istoveten z: prEN ISO 11199-1**

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**ICS:**

11.180.10	Pripomočki in prilagoditve za gibanje	Aids and adaptation for moving
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# DRAFT INTERNATIONAL STANDARD

## ISO/DIS 11199-1

ISO/TC 173

Secretariat: SIS

Voting begins on:  
2020-06-11Voting terminates on:  
2020-09-03

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## Assistive products for walking, manipulated by both arms — Requirements and test methods —

### Part 1: Walking frames

ICS: 11.180.10

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Published in Switzerland

# Contents

	Page
<b>Foreword</b> .....	<b>v</b>
<b>Introduction</b> .....	<b>vi</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Apparatus</b> .....	<b>6</b>
<b>5 Test conditions</b> .....	<b>7</b>
<b>6 General requirements and test methods</b> .....	<b>7</b>
6.1 Risk analysis.....	7
6.2 Walking frames that can be dismantled.....	8
6.3 Fasteners.....	8
6.4 User mass/Load limits.....	8
6.5 Structure requirements.....	8
6.6 Brakes.....	8
6.6.1 Requirements of brakes.....	8
6.6.2 Test method of brakes.....	9
6.7 Handgrip.....	9
6.8 Leg section and tip.....	9
<b>7 Materials</b> .....	<b>9</b>
7.1 General.....	9
7.2 Flammability.....	10
7.3 Biocompatibility and toxicity.....	10
7.4 Infection and microbiological contamination.....	10
7.4.1 General.....	10
7.4.2 Cleaning and disinfection.....	10
7.5 Resistance to corrosion.....	10
<b>8 Ingress of liquids</b> .....	<b>10</b>
<b>9 Temperatures of parts that come in contact with human skin</b> .....	<b>11</b>
<b>10 Safety of moving parts</b> .....	<b>11</b>
10.1 Squeezing.....	11
10.2 Mechanical wear.....	12
<b>11 Prevention of traps for parts of the human body</b> .....	<b>12</b>
11.1 Holes and clearances.....	12
<b>12 Folding, adjusting and locking mechanisms</b> .....	<b>13</b>
12.1 General.....	13
12.2 Folding mechanisms.....	13
12.3 Locking mechanisms.....	13
<b>13 Lifting and carrying handles</b> .....	<b>13</b>
13.1 General.....	13
13.2 Requirement.....	14
13.3 Test method.....	14
<b>14 Surfaces, corners and edges</b> .....	<b>14</b>
<b>15 Stability</b> .....	<b>15</b>
15.1 Requirements for static stability.....	15
15.2 Test method for static stability.....	15
15.2.1 Forward-direction stability test.....	15
15.2.2 Rearward-direction stability test.....	16
15.2.3 Sideway-direction stability test.....	17

## ISO/DIS 11199-1:2020(E)

<b>16</b>	<b>Static strength</b> .....	<b>18</b>
16.1	Static strength of walking frame.....	18
16.1.1	Requirements for static strength of walking frame.....	18
16.1.2	Test method for static strength of walking frame .....	18
16.2	Static strength for the legs with tip.....	19
16.2.1	Requirements for static strength of the legs with tip.....	19
16.2.2	Test method for static strength of the legs with tip.....	19
<b>17</b>	<b>Durability test</b> .....	<b>20</b>
17.1	Requirement for durability .....	20
17.2	Test method for durability .....	20
<b>18</b>	<b>Ergonomic principles</b> .....	<b>20</b>
<b>19</b>	<b>Packaging</b> .....	<b>21</b>
<b>20</b>	<b>Information supplied by the manufacturer</b> .....	<b>21</b>
20.1	General.....	21
20.2	Information marked on the product.....	22
20.3	Instruction manual.....	22
20.4	Test report.....	23
<b>Annex A</b> (informative)	<b>Consideration items for hazards when designing the products</b> .....	<b>25</b>
<b>Annex B</b> (informative)	<b>General recommendations</b> .....	<b>27</b>
<b>Annex C</b> (informative)	<b>Environmental and consumer-related requirements</b> .....	<b>30</b>
<b>Annex D</b> (informative)	<b>Cognitive impairment</b> .....	<b>35</b>
<b>Bibliography</b> .....		<b>36</b>

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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](http://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](http://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](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee 173, Assistive products for persons with disability.

This second edition cancels and replaces the first edition (ISO 11199-1:1999), which has been technically revised.

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

- corrected the definition of Walking frames to conform to the definition described in ISO 9999:2016 (classification no.: 12 06 03)
- added the clauses for relevant general requirements for assistive products for walking based upon ISO/DIS 21856, ISO 17966, and EN12182

Assistive products for walking manipulated by both arms are covered by the following International Standards:

- *ISO 11199-Part 1: Walking frames*
- *ISO 11199-Part 2: Rollators*
- *ISO 11199-Part 3: Walking tables*
- *ISO 19894: Walking trolleys*

These Standards 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](http://www.iso.org/members.html).

**ISO/DIS 11199-1:2020(E)****Introduction**

A walking frame, as defined in ISO 11199-1 can be used when a person needs assistance when walking. The walking frame can provide stability when walking and standing and reduce the risk of falling. Walking Frames are designed to support the user inside a frame to carry the user's full body weight. In addition to the requirements in this international standard, [Annex B](#) gives general recommendations

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# Assistive products for walking, manipulated by both arms — Requirements and test methods —

## Part 1: Walking frames

### 1 Scope

This part of ISO 11199 specifies requirements and test methods of walking frames being used as assistive products for walking, manipulated by both arms, without accessories, unless specified in the particular test procedure. This part of ISO 11199 also gives requirements relating to safety, ergonomics, performance and information supplied by the manufacturer including marking and labelling.

The requirements and tests are based on every-day use of walking frames as assistive products for walking for a maximum user mass as specified by the manufacturer. This part of ISO 11199 includes walking frames specified for a user mass of no less than 35 kg.

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 8191-2, *Furniture — Assessment of ignitability of upholstered furniture — Part 2: Ignition source: match-flame equivalent*

ISO 9227, *Corrosion tests in artificial atmospheres — Salt spray tests*

ISO 10993-1, *Biological evaluation of medical devices — Part 1: Evaluation and testing within a risk management process*

ISO 14971, *Medical devices — Application of risk management to medical devices*

ISO 15223-1, *Medical device – Symbols to be used with medical device labels, labelling and information to be supplied – Part 1: General requirements*

ISO 20417, *Information to be provided by the manufacturer*

ISO 7000, *Graphical symbols for use on equipment — Registered symbols*

ISO/IEC Guide 71, *Guide for addressing accessibility in standards*

EN 12182, *Assistive products for persons with disability. General requirements and test methods*

EN 614-1, *Safety of machinery - Ergonomic design principles - Part 1: Terminology and general principles*

EN 1041, *Information supplied by the manufacturer of medical devices*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions provided with the following sites apply in addition to the ones described in this clause.

## ISO/DIS 11199-1:2020(E)

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/>

### 3.1

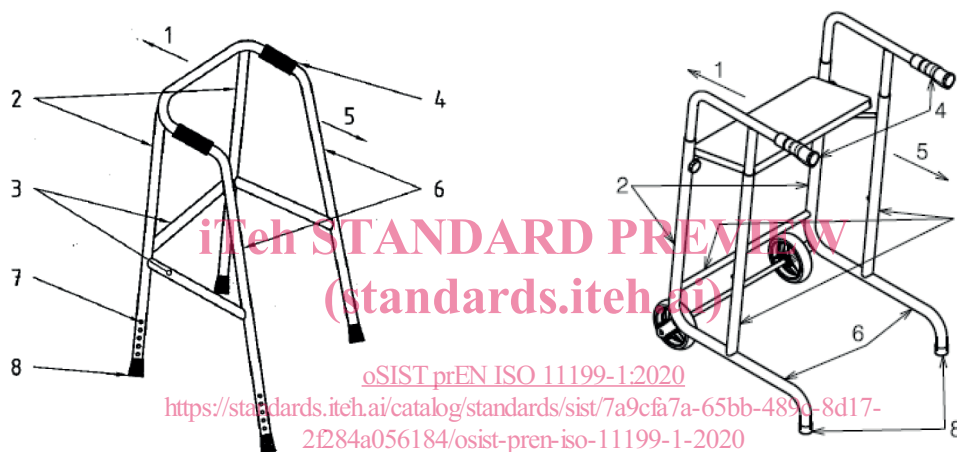
#### Walking frame

Frames which a person lifts to move, that enables to support full body weight and to maintain stability and balance while walking or standing with hand grips, without forearm supports and with either four tips or two tips and two castors/wheels. (See [Figure 1](#))

Note 1 to entry: Double or more castors/wheels used for one pivot position shall be counted as one castor/wheel.

Included are e.g., rigid or articulated walking frames assistive products for walking with two wheels combination with two rubber stick buffers/tips.

Note 2 to entry: ISO 9999 2016, Classification No. 12 06 03



#### Key

1	front	5	rear
2	front legs	6	rear legs
3	bracing members	7	head adjustment mechanism
4	handgrip	8	tips

**Figure 1 — Example of walking frame**

### 3.2

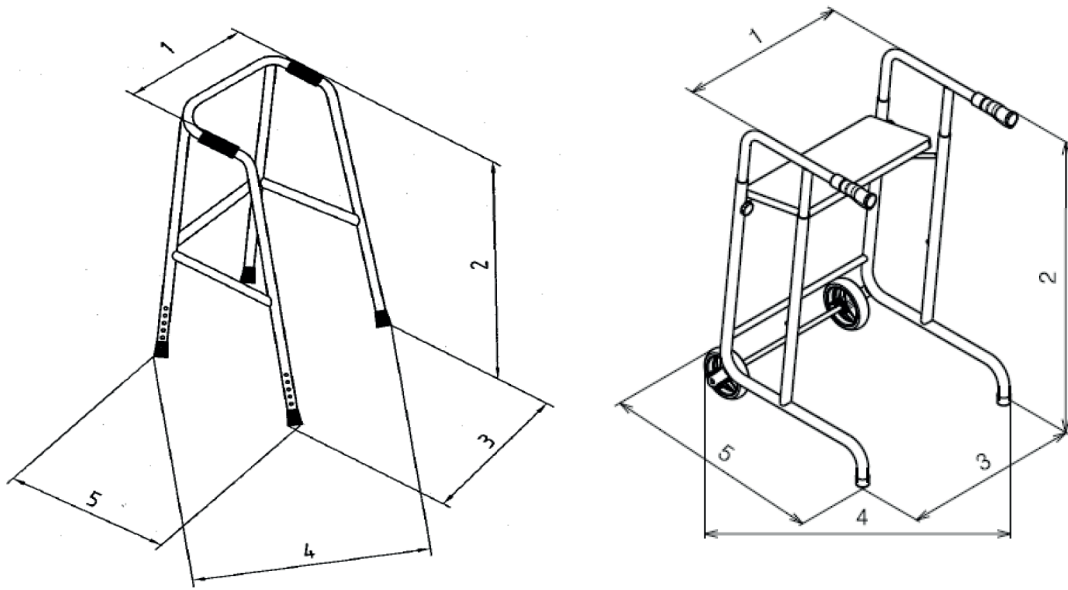
#### Folded dimensions

height, width and length of the walking frame measured with the frame folded together without the use of tools.

### 3.3

#### frame height

vertical distance from the highest point of the walking frame to the ground surface. See [Figure 2](#).



**Key**

- |                         |                    |
|-------------------------|--------------------|
| 1 width between handles | 4 turning diameter |
| 2 height                | 5 length           |
| 3 width                 |                    |

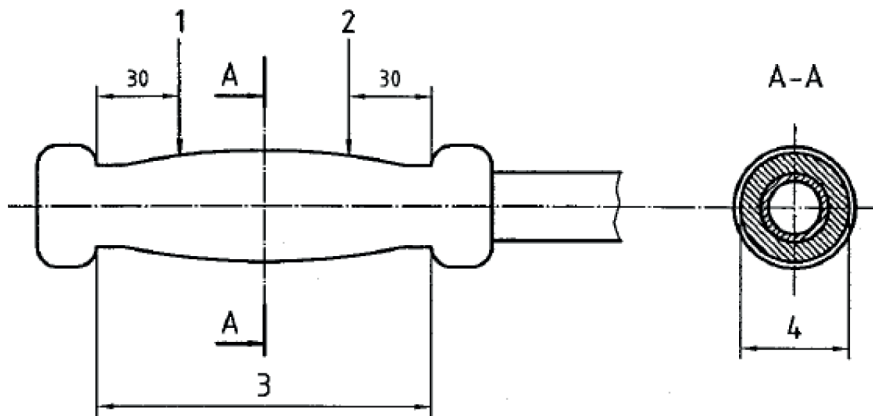
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**Figure 2 — Dimensions of a walking frame**

**3.4**

**front handgrip reference point**

that point on the upper surface of the handgrip located 30 mm from the front end of the handgrip length. See [Figure 3](#).



**Key**

- |                                  |                  |
|----------------------------------|------------------|
| 1 rear handgrip reference point  | 4 handgrip width |
| 2 front handgrip reference point |                  |
| 3 handgrip length                |                  |

**Figure 3 — Details of a handgrip**

## ISO/DIS 11199-1:2020(E)

### 3.5 handgrip

that part of the walking frame which is intended by the manufacturer to be held by the hand when the walking frame is in use.

### 3.6 handgrip length

dimension of the handgrip measured where the hand rests.

See [Figure 3](#).

Note 1: Where the front end or the rear end of the handgrip is not clear, the full length of the handgrip that can support the weight of the user is defined as the handgrip length.

### 3.7 handgrip width

outside dimension of the handgrip measured at the thickest point where the hand rests.

See [Figure 3](#).

### 3.8 handle

that part of the walking frame to which the handgrip is attached.

### 3.9 maximum length

maximum outside dimension of a walking frame when the adjustments are at their maximum. measured parallel to the direction of straight forwards movement when the walking frame is in normal use.

See [Figure 2](#).

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### 3.10 maximum width

maximum outside dimension of a walking frame when the adjustments are at their maximum. measured horizontally at right angles to the direction of movement when the walking frame is in normal use.

See [Figure 2](#).

### 3.11 rear handgrip reference point

that point on the upper surface of the handgrip located 30 mm from the rear end of the handgrip length.

See [Figure 3](#).

Note 1 to entry: If the grip protrudes further than the handle, the measurement is made from the end of the handle.

### 3.12 tip

that part of a walking frame which is in contact with the ground.

### 3.13 glide tip

that part of a walking frame which is in contact with the ground and are supposed to slide on the surface when the walking frame is moved.

### 3.14 turning diameter

diameter of the largest circle described by a walking frame when the adjustments are at their maximum and walking frame is turned through 360° about its own central vertical axis.

See [Figure 2](#).

### 3.15

#### maximum user mass

greatest permissible weight of the person using the product declared by the manufacturer.

### 3.16

#### parking brake

a brake that stays engaged after being activated.

### 3.17

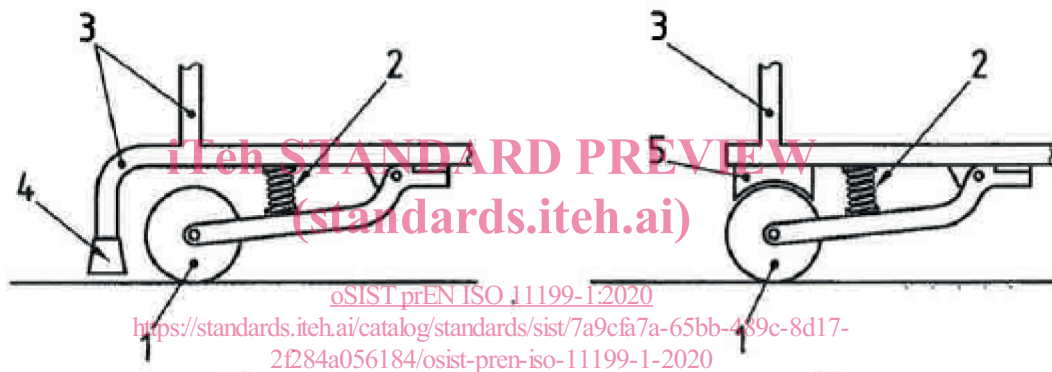
#### running brake

a brake that is operated by the user during walking and where the braking effect depends proportionally on the activation force applied.

### 3.18

#### pressure brake

a running brake that engages when a vertical load is applied on the handgrips or on supporting points of the walking frame. See [Figure 4](#).



#### Key

1	wheel	4	rubber tip (brake)
2	spring	5	brake pad
3	frame		

**Figure 4 — Two types of pressure brake with technical details**

### 3.19

#### wheel width

maximum dimension of the tyre of the wheel measured within 5 mm up from the walking surface when the walking frame is unloaded. See [Figure 5](#).