



BSI Standards Publication

Child care articles — Baby walking frames — Safety requirements and test methods

National foreword

This British Standard is the UK implementation of ISO 23645:2025.

The UK participation in its preparation was entrusted to Technical Committee CW/1, Safety of child use and child care products.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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Published by BSI Standards Limited 2025

ISBN 978 0 539 29466 8

ICS 97.190

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 July 2025.

Amendments/corrigenda issued since publication

Date	Text affected
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**International
Standard**

ISO 23645

**Child care articles — Baby walking
frames — Safety requirements and
test methods**

*Articles de puériculture — Chariots de marche pour bébé —
Exigences de sécurité et méthodes d'essai*

**First edition
2025-07**

Reference number
ISO 23645:2025(en)

Full document details: BS ISO 23645:2025

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Published in Switzerland

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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 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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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 310, *Child care articles*.

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

The purpose of this document is to reduce the risk of death and injury when using baby walking frames. It is stressed that this document cannot eliminate all possible risks to children using such a product and that carer control is of paramount importance.

Conformity to the requirements of this document will minimize potential hazards associated with using baby walking frames.

This document is largely based on the existing European standard EN 1273:2020+A1:2023. The differences between EN 1273:2020+A1:2023 and this document are as follows:

- chemical requirements in [Clause 6](#);
- product information requirements in [9.1](#) and [9.4](#).

Child care articles — Baby walking frames — Safety requirements and test methods

1 Scope

This document specifies safety requirements and test methods for baby walking frames into which a child is placed, and which are intended to be used from when the child is able to sit up unaided (around six months), until the child is able to walk independently or weighs more than 12 kg.

This document does not apply to:

- baby walking frames:
 - for therapeutic and curative purposes;
 - that rely on inflatable parts to support the child;
- toys (e.g. ride on toys and push-along toys usually intended for children able to walk unaided).

If a baby walking frame has several functions or can be converted into another function, then the relevant International Standards apply to it. For example, if a baby walking frame is equipped with toys, the requirements of the ISO 8124 series apply to the toys.

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 2439:2008, *Flexible cellular polymeric materials — Determination of hardness (indentation technique)*

ISO 2813, *Paints and varnishes — Determination of gloss value at 20°, 60° and 85°*

ISO 8124-2:2023, *Safety of toys — Part 2: Flammability*

ISO 8124-3:2020, *Safety of toys — Part 3: Migration of certain elements*

ISO 8124-6:2023, *Safety of toys — Part 6: Certain phthalate esters*

ISO 14184-1, *Textiles — Determination of formaldehyde — Part 1: Free and hydrolysed formaldehyde (water extraction method)*

ISO 14362-1, *Textiles — Methods for determination of certain aromatic amines derived from azo colorants — Part 1: Detection of the use of certain azo colorants accessible with and without extracting the fibres*

ISO 14362-3, *Textiles — Methods for determination of certain aromatic amines derived from azo colorants — Part 3: Detection of the use of certain azo colorants, which may release 4-aminoazobenzene*

ISO 17226-1, *Leather — Chemical determination of formaldehyde content — Part 1: Method using high-performance liquid chromatography*

ISO 17234-1, *Leather — Chemical tests for the determination of certain azo colourants in dyed leathers — Part 1: Determination of certain aromatic amines derived from azo colourants*

ISO 17234-2, *Leather — Chemical tests for the determination of certain azo colorants in dyed leathers — Part 2: Determination of 4-aminoazobenzene*

3 Terms and definitions

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

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

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

3.1

baby walking frame

structure with a seat in which a child is placed in a sitting or standing position, which allows the child to move around with the aid of the support offered by the frame

3.2

crotch strap

device which passes between a child's legs to prevent the child from slipping out of the seat

3.3

base

lower part of the frame where castors or wheels can be attached

3.4

parking device

device to maintain a *baby walking frame* (3.1) in a stationary position

3.5

placed in the mouth

portion of the *baby walking frame* (3.1) that is able to be brought to the mouth by a child so that it can be sucked and chewed

Note 1 to entry: If the portion can only be licked, it is not deemed able to be placed in the mouth. If one dimension of a portion is smaller than 5 cm, it can be placed in the mouth (e.g. surface of the tray).

Note 2 to entry: [Figure A.1](#) shows examples of what can be placed in the mouth.

4 Test equipment

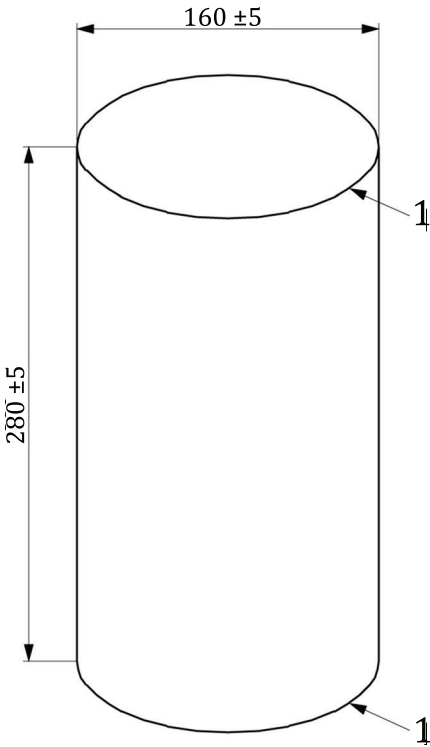
4.1 Test masses

4.1.1 Test mass A, comprising a rigid cylinder (160 ± 5) mm in diameter and (280 ± 5) mm in height, having a mass of $12_0^{+0,1}$ kg and with its centre of gravity in the centre of the cylinder. All edges shall have a radius of (20 ± 1) mm. See [Figure 1](#).

4.1.2 Test mass B, comprising a rigid cylinder (160 ± 5) mm in diameter and (280 ± 5) mm in height, having a mass of $7,65_0^{+0,1}$ kg and with its centre of gravity in the centre of the cylinder. All edges shall have a radius of (20 ± 1) mm. See [Figure 1](#).

4.1.3 Test mass C, comprising a rigid cylinder (160 ± 5) mm in diameter and (280 ± 5) mm in height, having a mass of $12,6_0^{+0,1}$ kg and with its centre of gravity in the centre of the cylinder. All edges shall have a radius of (20 ± 1) mm. See [Figure 1](#).

Dimensions in millimetres



Key

1 radius: (20 ± 1) mm

Test mass A	Mass 12 ₀ ^{+0,1} kg
Test mass B	Mass 7,65 ₀ ^{+0,1} kg
Test mass C	Mass 12,6 ₀ ^{+0,1} kg

Figure 1 — Test masses A, B and C

4.1.4 Test mass D, comprising a rigid cylinder of $3,6^{+0,1}_0$ kg with a flat bottom surface. See [Figure 2](#).

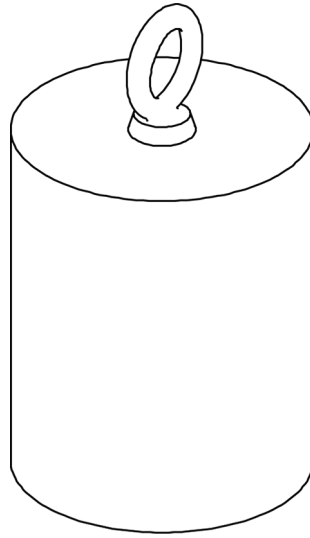


Figure 2 — Test mass D

4.2 Other equipment

4.2.1 Small parts cylinder, for the assessment of small components, with dimensions in accordance with [Figure 3](#).

Dimension in millimetres

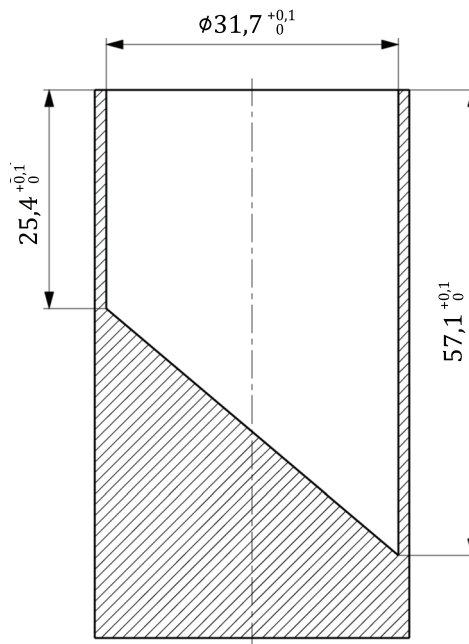


Figure 3 — Small parts cylinder

4.2.2 Feeler gauge, with a thickness of $(0,4 \pm 0,02)$ mm and an insertion edge radius of $(3 \pm 0,5)$ mm (see [Figure 4](#)).

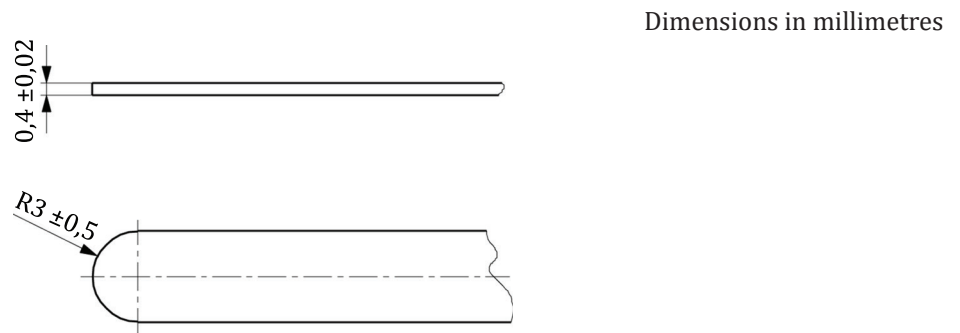


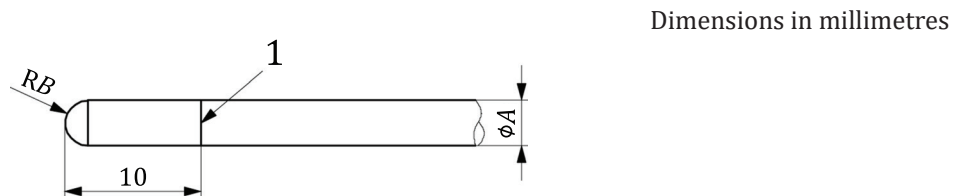
Figure 4 — Feeler gauge

4.2.3 Foam, comprising a polyurethane foam sheet with a thickness of (60 ± 5) mm, a bulk density of 35 kg/m^3 with a tolerance of 10 % or an indentation hardness index of (170 ± 40) N in accordance with ISO 2439:2008, A.40.

4.3 Test probes for finger entrapment

4.3.1 Test probes with hemispherical end, made from plastic or other hard, smooth material of diameters $7_{-0,1}^0$ mm and $12_0^{+0,1}$ mm with a full hemispherical end that can be mounted on a force-measuring device, see [Figure 5](#).

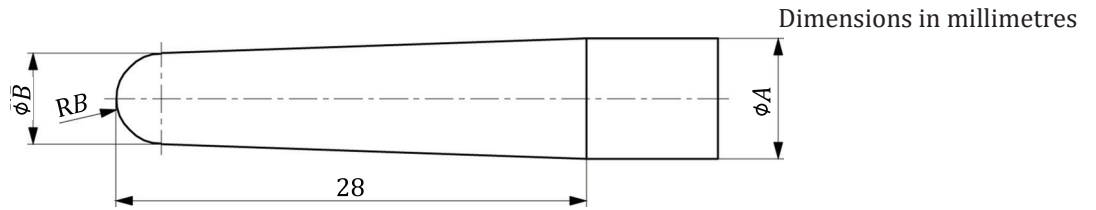
Mesh probe made from plastic or other hard, smooth material as shown in [Figure 6](#).



Key

Probe type	7 mm probe	12 mm probe
Diameter A	$7_{-0,1}^0$	$12_0^{+0,1}$
Radius RB	half of diameter A	half of diameter A
1	line scribed around circumference showing depth of penetration	

Figure 5 — Test probes with hemispherical end



Key

Probe type	mesh probe
Diameter A	$7^{0}_{-0,1}$
Diameter B	$5,6^{0}_{-0,1}$
Radius RB	half of diameter B

Figure 6 — Test probe for mesh

4.3.2 Shape assessment probe, made from plastics or other hard, smooth material, which can be mounted on a force-measuring device, with the dimensions shown in [Figure 7](#).

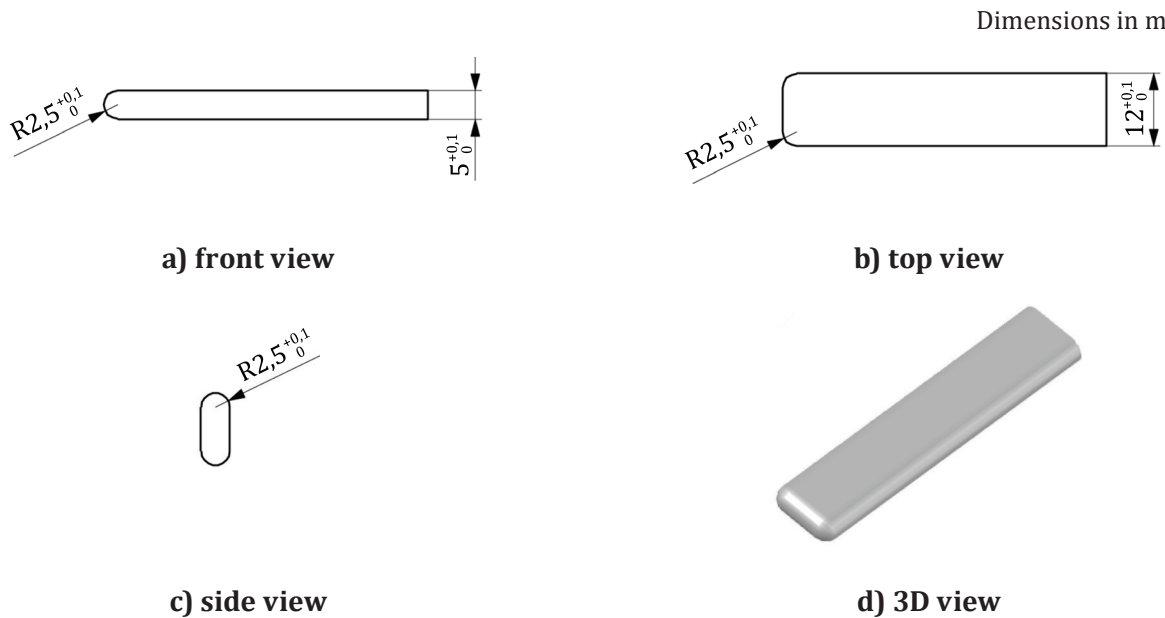
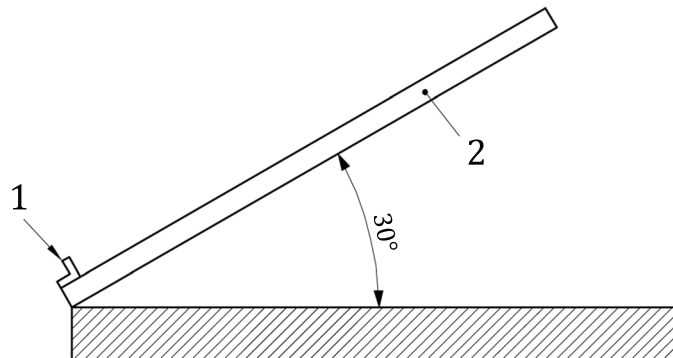


Figure 7 — Shape assessment probe

4.4 Test equipment for stability test

4.4.1 Test platform for stability test, comprising a sloping platform inclined at an angle of 30° to the horizontal with a 100 mm stop fitted to the lower edge of the slope ([Figure 8](#)).



Key

- 1 stop
- 2 platform

Figure 8 — Test platform for stability test

4.5 Test equipment for dynamic stability

4.5.1 Test platform, comprising the test platform of [4.6.1](#) with an aluminium stop with a height of 40 mm and thickness of at least 10 mm at its front edge.

4.5.2 Spacer, comprising a squared sectioned piece of aluminium 40 mm × 40 mm with a minimum length of 200 mm.

4.6 Test equipment for prevention of fall down steps test

4.6.1 Test platform, comprising a horizontal test platform as shown in [Figure C.1](#) with a flat smooth surface made of beech wood with a minimum thickness of 18 mm.

The front edge shall be straight cut, without any radius (see [Figure 9](#)).



Figure 9 — Front edge of the test platform

The grain of the wooden surface shall be orientated in line with the longitudinal axis of the test platform and there shall not be any joints perpendicular to the longitudinal axis of the test platform (see [Figure 10](#)).

The top shall be pre-finished with wood floor polyurethane varnish with a nominal gloss of (75 ± 5) gloss units measured with an angle of 60° in accordance with ISO 2813.

The wooden surface shall be fixed to the frame to avoid deformation of the wooden surface during the tests. If variations in temperature and/or humidity in the laboratory cause the wooden surface to deform, the fixing shall be adjusted to ensure the wooden surface is flat.